



# **TELETASK**

**Home Automation Systems**

## **Technical Handbook**

Systems features and software training book

**Version: September 1<sup>th</sup>, 2010**  
**PROSOFT Suite 3.2**





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# Introduction

## 1. The TELETASK domotics system

This guide provides an overview of how to configure a TELETASK Home Automation System (TDS). It is a complete guide to the PROSOFT -Suite configuration software and other TELETASK products with additions and tips for a state-of-the-art integration.

Prior to the configuration part you will find:

Capturing the requirements and wishes of the end-user, in close cooperation with the end-user, architect and/or interior designer.

The Lighting plan

Choosing the appliances, motors, etc which will be integrated by the TDS.

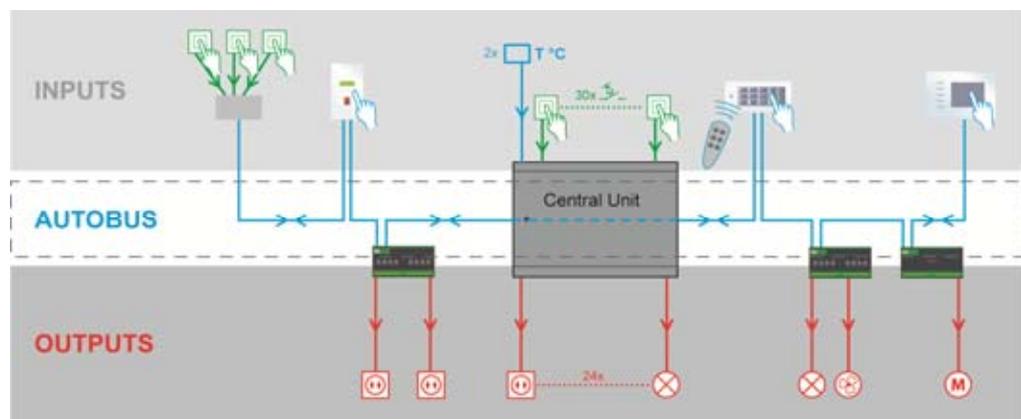
Choosing the appropriate heating/cooling system.

Choosing the appropriate security system.

Capturing the typical routes throughout the house, to be able to decide where to place touch panels or screens.

Once all this is done, you can start configuring (also called 'programming') the system.

Comfort and flexibility are not only important for the user, but also for the integrator. The simplicity and comfort for the installer of a TELETASK automation system is possible thanks to its unique construction. The specific structure is characterized by the strict separation of inputs and outputs in the system.



With this way of working there is still something missing because there is nothing which defines yet that the push button on the wall is for example going to control the ceiling light in the dining room. Therefore the system needs a relation which is to be defined between that particular input and the related output.

In the TELETASK domotics systems this relation will be defined in the central unit. This central unit becomes the heart of the system and is a far more powerful and reliable solution than working with a dé-centralised approach which has by definition a more complex configuration and a larger chance that information gets lost. In large installations you will learn that a multi-central unit approach will offer you both simplicity, highest reliability and distributed intelligence without the need of a master-slave setup like dé-centralised systems use. With a TELETASK system there is no central unit behaving like a master, so there are no such slaves either. In case of a failure, this guarantees no loss of functionalities except for the defect part itself. In a

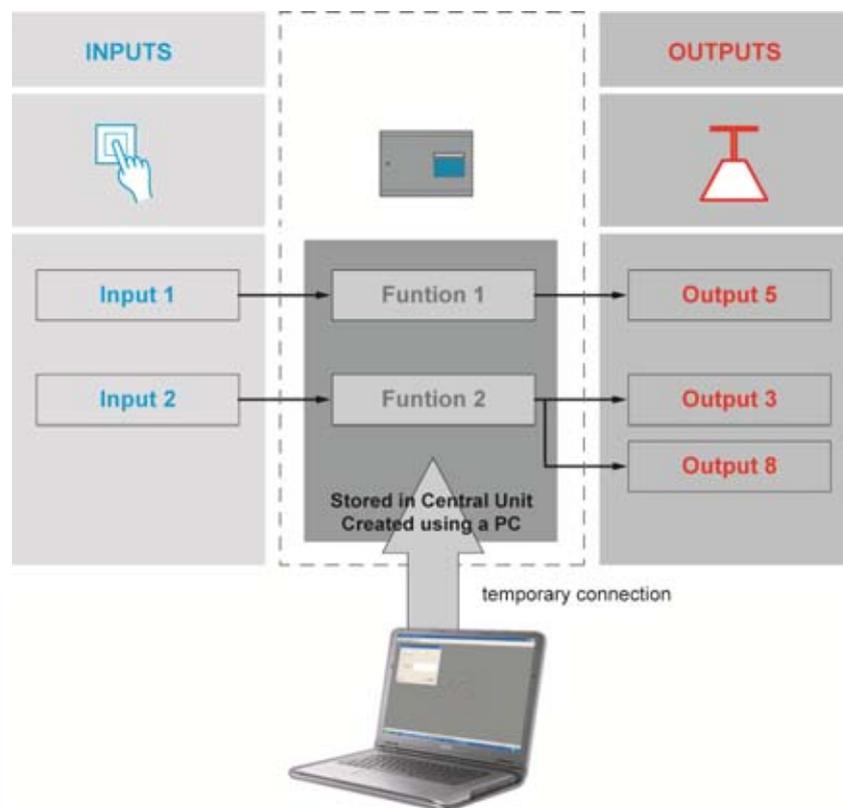


dé-centralised setup where a master can fail, the whole system may go down or at least lose a number of features which affect also non-defective parts of the system.

When using a TELETASK central unit (with power supply), there is only one main component which is to be taken care of. All inputs and outputs can communicate with this central unit and can be considered connected to it, although this may not be with a whole bunch of wires and cable but only via a small high-speed data cable which we call the 'AUTOBUS' cable.

This way all input-to-output relations become both simple and flexible, because they are not defined as in a traditional solution, but by the powerful and flexible TELETASK software relations. These relations are configured in the TELETASK PROSOFT-Suite. PROSOFT is offered free with any TELETASK system and can be downloaded from the website.

As a result of this, when for example pushing a wall mounted momentary push-button (= the input), the ceiling light in the dining room (= the output), can be switched (= the relation between the input and the output) on/off.



The relations can be defined by yourself, by means of PROSOFT software. PROSOFT was specially developed by TELETASK to make it possible that you can define all inputs, outputs and the relations between them on a standard MS Windows based PC. As soon as your relations are defined, they can be downloaded to the TELETASK central unit which will keep them in his non volatile memory, where they always remain after disconnecting the PC, even when power fails for short or long (unlimited) periods.

As soon as the relations are downloaded in to the central unit, the PC can be disconnected from the central unit and is no longer needed. You will than be able to control all integrated (= connected) lights, curtains, shutters, heating, cooling, audio, etc... as defined. You can control all these outputs by means of standard buttons and specific touch panels, sensors, touch screens or even by remote control, by mobile phone or on a PC, PDA/Webpad via Ethernet over LAN/WAN wired- or wireless connections.



## 2. Hardware and Software

You will have noticed that there are both hardware and software items to be distinguished.

*The hardware part* contains the different TELETASK components and the connection to the central unit(s). All hardware components have their own specific features and may behave as an input, an output or sometimes even both of them. To find out more details about the hardware and its hardware aspects, please refer to the TELETASK "datasheets".

*The software part* contains the creation of the relations between the inputs and outputs, defining extra functions, setting up integrations like heating/cooling, audio, setting clocks, defining access control, etc...

### 2.1. PROSOFT Suite

#### 2.1.1. Introduction

With PROSOFT SUITE you can define all integrations within your Home automation project. If you install and run PROSOFT, you will see it consists out of 5 different parts:

PROSOFT Suite	
	<b>PROSOFT</b> This is the main and the most important software part. All relations between inputs and outputs are defined in PROSOFT. The file which is generated by PROSOFT is also the basic file which is used in the other software packages from below.
	<b>TIMESOFT</b> In TIMESOFT you have an electronic calendar in which you can enter actions (for example switching a light or change the temperature at a certain time of the day) based on the internal clock of the central unit. Click the TIMESOFT icon to to open the calendar and configure the desired clock actions.
	<b>CARDSOFT</b> CARDSOFT is another part of te PROSOFT-Suite which is used to enter and edit the Chip cards- and Tags which are to be used at the integrated access control interfaces from TELETASK. Click the CARDSOFT icon to define the cards or tags for the actual project.
	<b>GUISOFT</b> GUISOFT is used to generate one or more GUI's (both for standard- PC and/or smaller mobile devices). With these GUI's you are able to control the TELETASK domotics system based on floor plans or menu's depending on the device you are using).
	<b>AV-SOFT</b> AV-SOFT is used to enter all needed parameters for the integration of any audio, video or home theatre system using the universal RS232 interface TDS14042. In AV-soft you can use existing protocols or add a custom protocol.



Beside of the PROSOFT -Suite there is also IR-SOFT as a separated software. IR-SOFT is only needed for changes on older projects where the TDS14042 IR-Learnable Interface or the TDS14045 Xantech Interface has been used.



### IR-SOFT

IR-SOFT is used to enter all needed parameters for the special audio integration interfaces TDS14041 (general learnable IR-generator) and TDS14045 (XANTECH audio interface)

For newer projects the TDS14042 RS232/IR learnable Interface is used in a combination with AV-SOFT, a fixed part of the PROSOFT Suite.

For older installations (before V3.0):

- PROSOFT Suite makes the file management for every project easier because all project data is stored in one file. The PROSOFT Suite '.nbt' contains all data that previously (existing installations) was stored previously in three different files ('.nbt', '.clk' and '.crt' files). The file generated by IR-SOFT (if used) stays a separate file.
- PROSOFT Suite is able to read with ease all your old '.nbt' files starting from PROSOFT V2.75. Files made in versions before PROSOFT V2.75 can be easily converted by opening them in PROSOFT V2.75 and save it with a new name in that software version. Save the .nbt file in this software version with a new name. Remarks: For this conversion you don't need upgrades (no new EEPROM chips).
- Your old TIMESOFT ('.clk') and CARDSOFT ('.crt') files can be imported in the TIMESOFT and CARDSOFT mode of PROSOFT Suite by clicking respectively 'File> Import clocks (old .clk)' or 'File>Import cards (old .crt)'.

In this technical handbook you will find all software aspects of your TELETASK domotics system treated in detail. Because the hardware and the software items are connected close to each other, we will regularly refer to the DATA SHEETS handbook where you can find any specific datasheet you may need.

You can always download the latest version of most of the documents from the TELETASK website [www.teletask.be](http://www.teletask.be). If you are using the latest version of the PROSOFT-Suite, you can also open this Technical handbook and the datasheets handbook via the Help menu.

-  **The PROSOFT Suite uses the .NET (read 'dotnet') surrounding. When installing PROSOFT from the supplied (CD-ROM) it will be installed when needed. More recent PC's contain .NET by default.**
-  **In exceptional cases it can be necessary to install this ".NET" separately. That's when the PC doesn't contain it and when PROSOFT was downloaded from the TELETASK website.**



# PROSOFT

## 3. Introduction

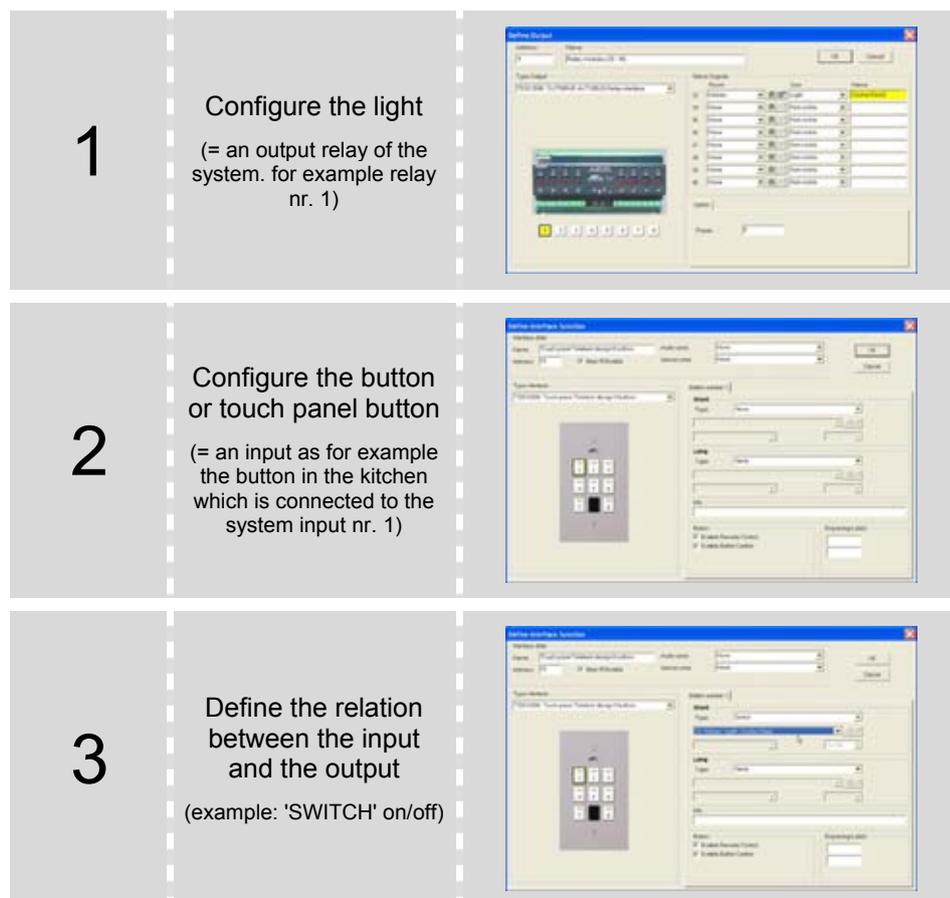
PROSOFT is the main software package to configure a TELETASK domotics installation. At the end In PROSOFT you will define all the relations between all earlier defined outputs and inputs of your system.

So Before you can start making relations, you must enter the hardware configuration of your installation. All used parts will have to be entered and given some or more extra parameters.

Although every TELETASK installation is different, there is some fixed road map to be followed step by step. The different steps are covered in the headings below.

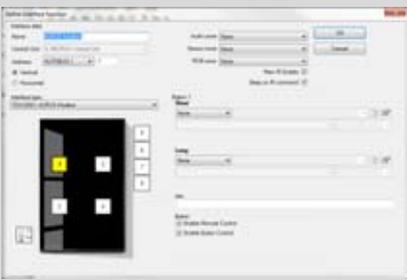
### 3.1. The basic flow diagram of a configuration session

Setting up the relation between an input and an output is basically very simple. There are only about three steps to be done to define that for example a certain light is switched on/off by means of a certain (momentary) push button on the wall:



Another very powerful relation can be the control of a number of outputs (loads) by only one button. This seems more complex, but you can define the relation between the button and the different outputs in only three steps.



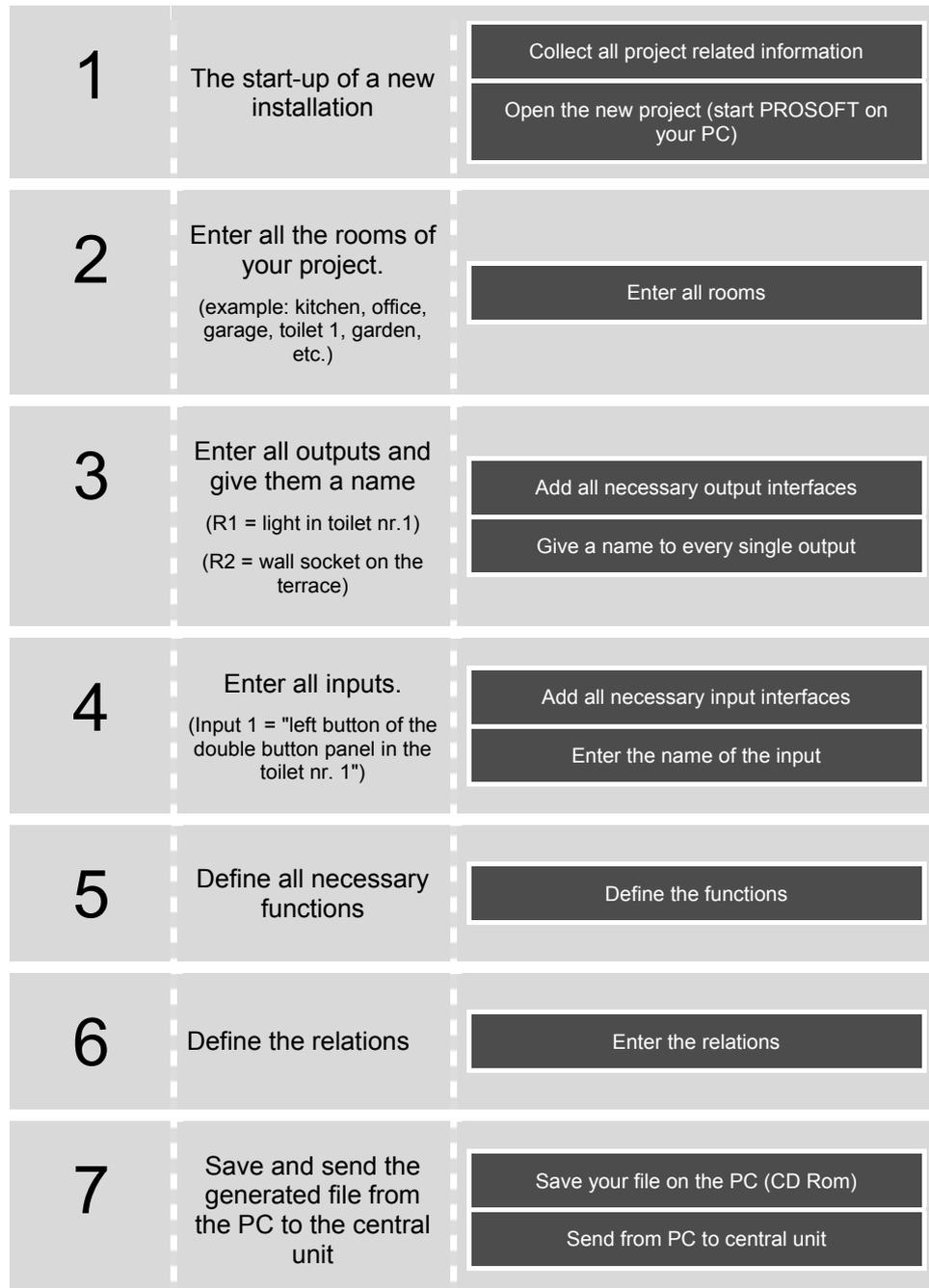
1	<p>Configure the connected lights (outputs)</p>	
2	<p>Configure the function which contains all the outputs (ex: list of all outputs which will have to be controlled at once)</p>	
3	<p>Define the necessary relation between a button and the custom made function (ex. 'local mood')</p>	

All relations which are defined between the inputs and the outputs are always based on one of the two flow diagrams above. It is the functionality of the chosen relation (sometimes this can be more than one function) between the inputs and the outputs which may increase the level of complexity of your work.



## 3.2. The full flow diagram

The basic flow diagram of above shows the simple basic task to be done in PROSOFT: defining relations between inputs and outputs. Because there is also the opening of the program, sending the configuration file to the central unit, etc... below there is the extended basic flow diagram which contains all necessary steps to be taken to complete a TELETASK / PROSOFT task from scratch to the end point where you can switch off you PC.



The different steps in this flow diagram will be explained in detail in the text below.

**IMPORTANT:** Don't forget to make a back-up of your .nbt file which is generated by the PROSOFT-Suite. It is important to keep this back-up file available over the full life-time of the installation.



## 4. Starting up a new project

### 4.1. Collecting the project information

Before starting up a new project, it is recommended to have all technical details of the TELETASK hardware components which are needed in the project. This information is to be given by the system integrator. The information is necessary to be able to use PROSOFT in a simple and straightforward way. The information will also result in a correct documentation print-out of the full custom project. Below there is an overview of the information you need before you can proceed with the next step.

#### 4.1.1. The TELETASK central unit

You will have to define which central unit is going to be used in the project. As this is one of the first items which is decided, you should easily find out which central unit is used for the project. Please refer to the data sheets of the available central units.

- The features and capacity of the NANOS and MICROS+ central units are equal. Also in configuration they are about the same.
- There is a mechanical difference: The NANOS central unit is DIN-rail mounted and may be more comfortable to use from a technical perspective, but MICROS+ is in most cases slightly more price effective. But this also depends on the labour cost and the available space in and around your electrical cabinet(s).
- When you need AUTOBUS 1 and 2 to be galvanically isolated from each other, NANOS is to be used with at least 2 power supplies. The MICROS+ has no galvanic isolation possible between AUTOBUS 1 and 2.

#### 4.1.2. The list of rooms

The 'list of rooms' contains an overview of all rooms in your project. Not only indoor rooms, but also outdoor areas will be needed to be divided in to 'rooms'. Rooms are best to be obtained from the architectural drawings. The room names you use are important as they are also to be well understood by the people living in the house. A simple 'bedroom' name will not be sufficient as name if there are more bedrooms in the house. We recommend adding the name of the person for which the room is planned to be occupied. For example 'bedroom parents' or 'bedroom Maria' is better than 'bedroom 2'. Using familiar names is better for a good communication with the occupants. It will save you time and it increases the quality of the solution you are offering with TELETASK.

 **PROSOFT makes no distinction between indoor and outdoor rooms.**

#### 4.1.3. The list of outputs

The 'list of outputs' gives an overview of all TELETASK output interfaces (for example relay interfaces), with an overview of which output interface and contact is connected to which load. This list is based on the electrical board information and is obtained from the electrical contractor. This list may be, depending on the project, several pages long and is absolutely needed before you can proceed. Please be sure that you have all information as listed below, before you proceed.

- Type of output:** depending on the connected load and the desired control:
  - Relay:** used to switch on/off (for example a switchable light)
  - Dimmer:** used to dim (for example a dimmable light)
  - Motor:** used to control AC or DC motors (for example: opening/closing a curtain of shutter).
- Type of output interface:** f.e. TDS13500: 4OUTO8RB' AUTOBUS Relay interface, TDS13524 for AC motors; TDS13525 for DC motors
- Output number:** for example Relay output nr. 1, or Dimmer nr. 10
- Extra Information:**



- Room:** This is the room where the connected load is installed (for example 'living room'; to be chosen out of the 'rooms' list).
- Icon:** describes which kind of load is connected: here you have the choice out of a list: light, device (wall socket or other ON/OFF loads), motor or mood.
- Name:** gives a more precise load description (for example work top, washing table; reading light...)

More information about these items can be found in heading 'O-interfaces: outputs'.

#### 4.1.4. The list of inputs

The list of inputs contains all TELETASK input interfaces and the names (with location indication) of the connected inputs such as window contacts, sensors, pushbuttons etc... Having this full list (from the electrical contractor) is necessary before you can proceed. Following information has to be available:

- Type of input:** depending the kind of signal, this input must be connected to a certain type of input of the TELETASK system (only one of the different types below can apply):
  - General type of input:** external (not in the MICROS+ central unit housing) interface like for example a touch panel AURUS ref. TDS12021xx.
  - Digital type of input:** this is an input for all kind of voltage free contacts. For example coming from a standard momentary push button, a window contact, a motion detector contact or similar.
  - Analogue type of input:** this is an input for an analog signal like coming from a TELETASK temperature sensor:
  - AV type:** for the integration of external A/V systems
- Type of input interface used:** this is the TELETASK interface type to which the concerning input signal is to be connected. For example TDS12125 (Cookie with feedback),
- Input number:** for example digital input- or button number 1
- Extra information:** custom note; for example 'push button in the kitchen next to the stove'.

#### 4.1.5. Information about the electrical contractor or system integrator.

To complete the report print-out, you need the name and the address of the electrical installer or system integrator.

Add this information in PROSOFT menu 'Extra' - 'Options' - 'System Setup'

#### 4.1.6. Information about the owner of the house

A project is always related to a house or building. Therefore you need to have the owners name and address to be filled in the dedicated area in PROSOFT.

## 4.2. Starting a project

As soon as all project details are available, you can start configuring your TDS (TELETASK Domotics System). This is by using the PROSOFT software.

### 4.2.1. Installing PROSOFT on a PC

PROSOFT -Suite (V3.2 and higher) runs on Windows XP/Vista and Windows 7.

You can find the installation package of the PROSOFT Suite on the CD-ROM, included with a DoIP Central unit or you can download it from [www.teletask.eu](http://www.teletask.eu) from the 'Downloads' menu.

Remark: You may have to 'register' first before you can start downloading.

Confirmation of your access may take 24 hours before you may be able to login and start downloading.

### 4.2.2. Starting PROSOFT the first time



- ☞ Click on the 'Start' button in the lower left corner on your screen.
- ☞ Select 'Programs' in the start menu.
- ☞ Select 'TELETASK' in the programs list.
- ☞ Click on 'PROSOFT Vx.xx' in the TELETASK program list (x.xx stands for the PROSOFT version).
- ☞ PROSOFT starts now.

#### 4.2.3. Select the central unit which will be used in your project

When PROSOFT has started, you will be asked if you want to start-up a new project or an existing project for a specific central unit.

#### 4.2.4. Saving project option on the PC

It is necessary to save the made .NBT file on you PC. Don't forget to save it when working on it, not only when you have finished it. TELETASK suggests to add a new file (version) number (example: MyProject V01.nbt) each time and increase this number every time you've made essential changes. This way you can easily go back to an older file version when the new version contains a mistake. It is also a handy tool to make a difference between older and newer back-up versions of the file. You can easily see which the old are and which the new files are.

##### ➔ Practical

- ☞ Click on 'FILE' in the PROSOFT menu.
- ☞ Click on 'SAVE' or 'SAVE AS' in the 'File' menu.
- ☞ Give the project a name and add V01 (f.e. JAMES V01.NBT if you save this file for the first time).
- ☞ When you will save a new version, use regularly 'SAVE AS' and higher up the version number V01 to V02, V03,... (f.e. JAMES V02.NBT,...)

##### ➔ REMARKS

- ☞ **Make regular backups backups of your .NBT file, save them on your CD ROM, DVD? USB-stick,.. and keep them safely for future use.**
- ☞ **As soon as the project is finished, make a back-up of the latest version and keep it safe (f.e. safe deposit box). The file can be very valuable because of all the efforts which were made and possible private information such as entrance code for the house, etc...**

#### 4.2.5. Project options (menu 'extra')

Click on 'OPTIONS' in the 'EXTRA' menu to fill in the project related details. The Option window will appear on the screen.

In this window all the options are grouped in different tab pages. We will describe them here:

##### ➔ System setup

In the tab window System Setup you can fill in the global project details: the details of the electrical installer and the details of the owner of the house/project.



Options

System setup | Option | Sensor | RGB Settings | Time settings | E-mail | Local settings

Principal/Site:

Name:

Address:

OK

Cancel

Installer:

Name:

Address:

### → Option

Options

System setup | Option | Sensor | RGB Settings | Time settings | E-mail | Local settings

Language:

OK

Cancel

Specials:

Relays Delay:

Interfaces (Bus), LONG press:

Feedback LED's blink on error

Service Options:

Auto Start Function:

No-Action timer:

No-Action alarm:

- ☒ **'Language'**: here you can select the necessary language version you prefer for PROSOFT Suite. You have to re-start the PROSOFT SUITE to activate changes. This setting is no setting in the .NBT file but will be kept globally by the PROSOFT Suite.
- ☒ **'Special'**:
  - Relay delay: here you can determine which time has to be elapsed between the switching of a relay (this to avoid problems with inrush current).
  - Press Long bus interfaces**: this determines how long you have to push on a button before it will be recognized as 'Press Long'.



- Feedback LED's blink on error:** if this option is checked the feedback led's of the touch panels will start to blink when the function behind is in 'error' (f.e. when an output interface could not be found on the AUTOBUS). This is very usefull during the start up of the installation.
- ☞ **Remark: older touch panels like the OCTO and PENTO series, TDS12127 do not support this function.**

### → Service:

- Auto start function:** this function will always be executed when the central unit is started (after sending from PROSOFT, after a voltage loss,) Thanks to this function you can assure that some 'critical' functions always will be executed/started (e.g. process functions).
- No Action timer:** This time determines after which period the 'No-Action alarm' will be executed. This timer can be put ON or OFF or RESET by the service function.
- No Action alarm:** Here you can define a function which has to be executed after the 'No-Action timer' has elapsed. A typical application is an emergency alarm in service flats.

### → Sensor

The screenshot shows the 'Options' dialog box with the 'Sensor' tab selected. The 'Temperature Settings' section includes:

- Heating system type: Standard (no cyclustime hyst 0.5°C)
- Cooling system type (air conditioning): Standard (no cyclustime hyst 0.5°C)
- Temperature / 10V or 100% time: 5.0 °C
- Delta Heat / Cool: 3.0 °C (with 'Enable Auto modus' checked)
- Frost protection temperature: 5.0 °C

The 'Others' section includes:

- Hysteresis Light sensor: 5
- Hysteresis Humidity sensor: 5%

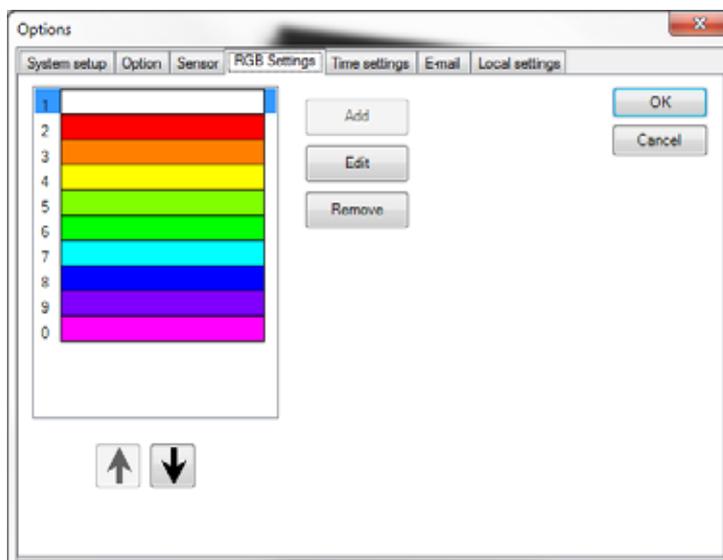
Buttons for 'OK' and 'Cancel' are visible on the right side of the dialog.

- 'Temperature settings':
  - Kind of heating:** Here you can set up the heating cycle (only applicable for sensor zones with control method 'relay', 'flag' or 'local mood'). Standard there is no cycle and hysteresis of 0.5C° used. In this case the heating is activated when the temperature is 0.5C° lower then the demanded temperature and turned of when the demanded temperature is reached. When you have activated a cycle, the heating will be periodical. On. How long there will be heated depends on the chosen cycle and the difference between the desired and measured temperature. Via this method the temperature can be kept more optimal and the energy consumption will be lower.
  - 'Kind of cooling: see':** 'Kind of heating'
  - Temperature / 10V or 100% time:** this parameter is only applicable for a heating system: with multistage control, analog control and other methods of control WITH regulated cycles. This parameter determines at which temperature difference between the measured and the regulated temperature the heating/cooling has to be controlled maximal. (high speed with multistage control, 10V for analog control and 100% cycle for the others).



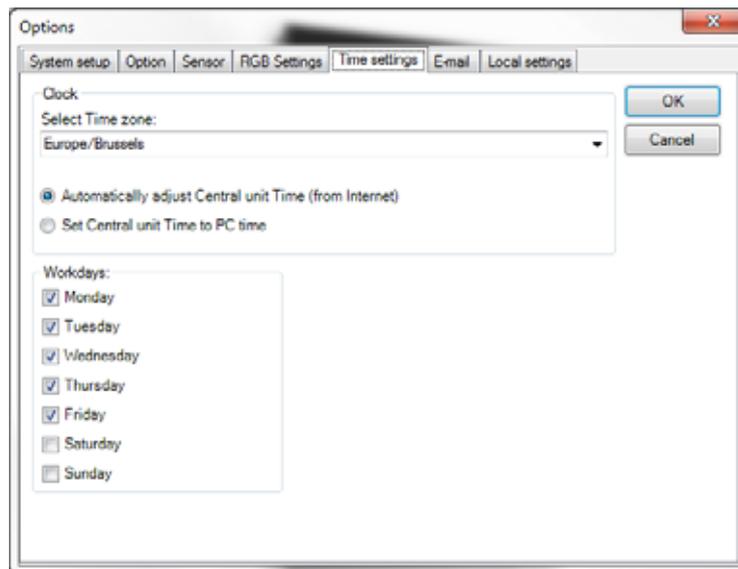
- Activate the 'AUTO' modus:** when this parameter is checked, the system will automatically be able to switch from heating to cooling or reverse, depending on the measured and regulated temperature. REMARK: if the 'AUTO' mode is activated it is still possible to select the mode HEAT or COOL for every zone, the system then will only heat or cool, it will never switch itself between them.
- Delta Hot/Cool:** when the measured temperature is higher then the regulated temperature + this value then the system will go in AUTO modus and start cooling. The regulated temperature for cooling for Day or Standby in a zone is the regulated temperature for heating in this zone + this value.
- Freeze protection temperature:** the temperature which has to be obtained minimally, even when the zone is "OFF" "OUT" or there is a window open in this zone, to avoid frost damage.
- 'Others':
  - Hysteresis light sensor:** the hysteresis which has to be used for a light sensor. Because Lux values are a logarithmic scale this is not stipulated in absolute values but in amount of steps.
  - Hysteresis humidity sensor:** the hysteresis for a humidity sensor

### → RGB settings



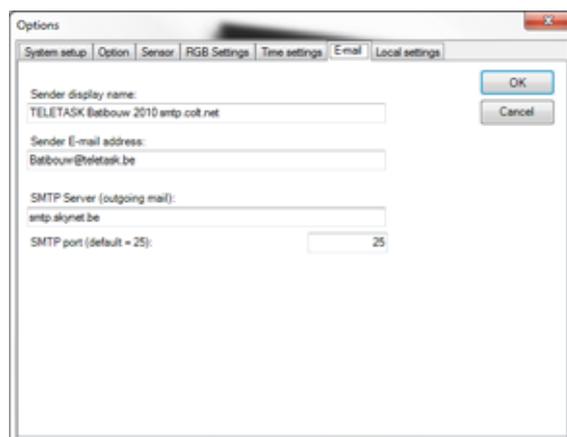
Here you can define maximum 10 basic colours for RGB functions as a kind of general color pallet. These values can be used with the TDS12502 (remote control) via the RGB button.

### → Time setting



- ☒ 'Clock':
  - ☐ **Time zone:** here you can define the time zone which has to be used by the central unit. This time zone also contains information about the use (or not) of summertime and when this starts and ends.
  - ☐ **Adapt time automatically (via the Internet):** this regulation is advised when you have a continuous connection with the internet. This way your central unit clock will be synchronised with the 'Time Servers' on the internet. This results in a very accurate clock which always will be correct in the whole project (all touch panels and screens).
  - ☐ **Synchronize de time of the central unit with the time of your PC:** with this regulation the clock of the central unit will be set even with the clock of your PC when synchronising (each time when sending the .NBT file).
- ☒ **'Workday':** Select all the days in a week which are 'Workdays' for you. This is important when the regime will be on 'Automatic'.

### → E-MAIL

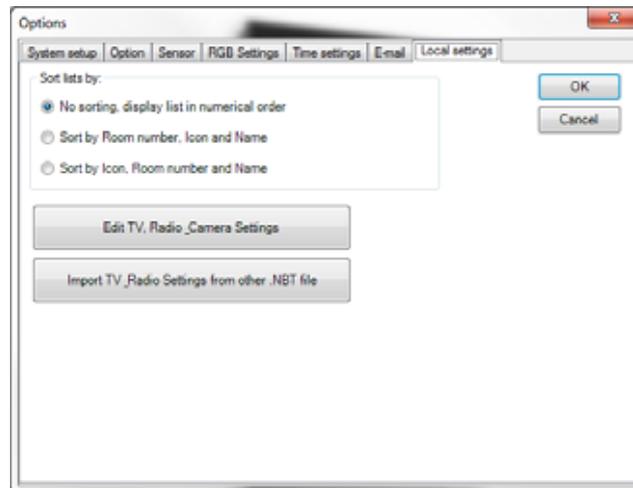


- ☒ Report sender's name: this name will be used as sender's name of an e-mail whenever the central unit will send an e-mail.
- ☒ Sender's e-mail address: this address will be used as sender of an e-mail whenever the central unit will send an e-mail. If the receiver of this e-mail replies at this message, the message will be sent to this address.
- ☒ SMTP Server (sent mails): the SMTP server address which has to be used for sending the e-mails. This address is depending on the internet provider and can be asked for at your internet provider.



- ☒ SMTP port: the port has to be used for the SMTP, normally this is port 25.

### → Local Settings



- ☒ Sort in lists: here you choose on which way the outputs and functions will be sorted in a PROSOFT screen list. This setting is no setting in the .NBT file but will be generally kept for PROSOFT Suite.
- ☒ TV, Radio, Camera settings: here you can regulate the frequencies for TV/Radio channels and cameras (for use on the SERVUS touch screens). Also the DTMF codes for the door opener and speech can be determined.
- ☒ Import TV/Radio settings of another .NBT file: if you have several installations in one region (same channel classification on the cable /antenna) you easily can import the Radio and TV settings from another existing .NBT file.



## 5. The rooms

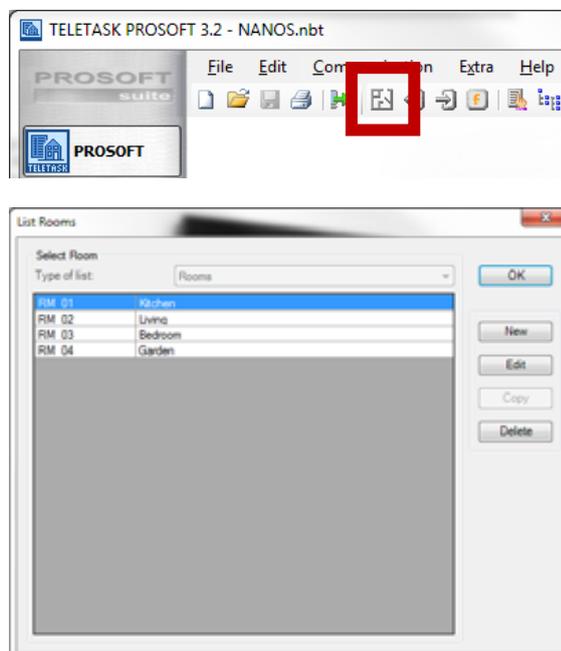
### 5.1. Introduction

Every home is divided in several rooms: the kitchen, living room, the office room, the bathroom(s), the different sleeping rooms, the garden, etc... Because this is a clear and logical approach for every home, PROSOFT also approaches your home by using the different rooms.

- ☞ **The defined rooms are also very important for the automatic generation program of some of the menu operated TELETASK user interfaces (mobile phone iSGUI interface). It is very important to insert the rooms correctly!**

### 5.2. Overview of the rooms

→ List of rooms



In the list of rooms you have an overview of all available rooms. Every room is substituted of the following information:

- ☒ **'Code'**: Every room gets automatically a code which is used by the system. This code is not changeable and is made out of:
  - ☐ **'RM'**: this is the abbreviation of 'Room'
  - ☐ **'Number'**: every room gets a number for internal system use. It starts with 01 and is incremented (+1) every time you enter an additional room.
- ☒ **'Name'**: contains the room name as entered in PROSOFT by the user.

When you want to change an existing room name, select the room in the list of rooms. It will turn blue. Then double click on it or click the 'edit' button. Now you are able to change the different parameters.

Possible actions in the list of rooms menu

- ☒ **'New'**: Click the 'New' button to add a room.



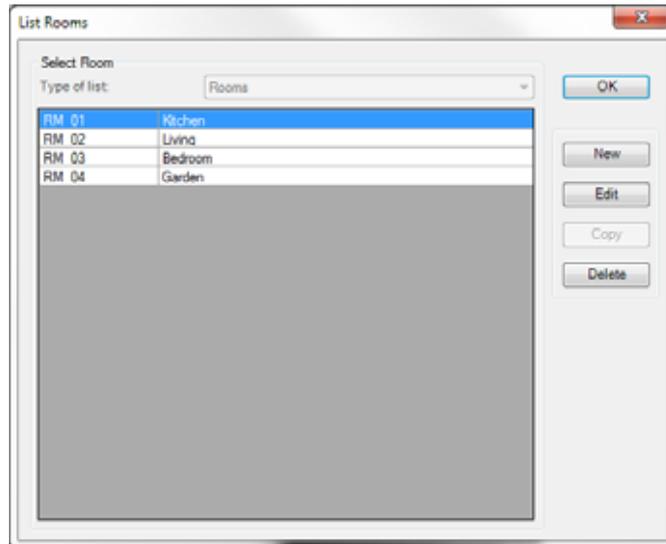
- ☒ **'Edit'**: Click the 'Edit' button to edit the parameters of a room
- ☒ **'Delete'**: Click the 'Delete' button to delete a room from the list of rooms.

### → In practice

- ☞ Click 'Edit' in the PROSOFT menu bar.
- ☞ Click 'Rooms'.
- ☞ The 'list of rooms' window appears on the screen

## 5.3. Adding rooms to the list of rooms

### → The different parameters for every room



- ☒ **'Name'**: Enter the name of the room (short and easy to understand and to locate name).
- ☒ **'Audio Zone'**: If you have an audio system integrated with your TELETASK system, you will have to connect the room to a specific audio zone (amplifier).
  - ☞ **You will have to select this audio zone later, after the audio interface and the audio zones on this interface have been defined. Please refer for more information in the 'Audio Interfaces' chapter, but we recommend not doing this right now.**
- ☒ **'Sensor Zone'**: If you are using TELETASK temperature sensors for heating and/or cooling control (recommended), select the applying sensor zones with which the room is to be related.
  - ☞ **The sensor zones are entered when the sensors are entered in PROSOFT. So please also come back here later, as soon as the sensors for your project are entered. For more information refer to the 'Analogue Input Interfaces' chapter.**

### → In practice

- ☞ Click 'Edit' in the PROSOFT menu bar.
  - ☞ Click 'Rooms'.
  - ☞ The 'List of Rooms' window appears on the screen. In this screen the standard rooms are reproduced.
  - ☞ Click the 'NEW' button to add a room to your project.
  - ☞ The 'Define Room' window appears on your screen. Set up the different parameters for this room.
  - ☞ Click 'OK': now a room is added to your TELETASK domotics project. The window 'Define Room' will disappear.
- In the 'List of Rooms' which is visible again, the added room is displayed.



## 6. 'O' Units: Outputs

### 6.1. General notes

#### 6.1.1. Output

An output connects one electrical load or circuit with the TELETASK system. Thanks to this connection, you can control this load out of the domotics system. There are three different groups of outputs.

- ☒ **'Relay'**: this output switches a load between the 'ON' (relay contact is closed) and the OFF (relay contact is open) status.
- ☒ **'Dimmer'**: this output varies an analogue output signal from 0 to 10Volt. This signal is mostly used to control a power dimmer. 0V output means the dimmer is at 0% (load is off). 10V on the output means the dimmer is at 100% (the load is ON). This means that a light or group of lights connected to the power dimmer are OFF or ON or dimmed somewhere between 0 and 100%.  
In stead of 0-10V, this may also be 1-10V, 0-100% (for example when using a DMX output interface).
- ☒ **'Motor'**: this output controls a motor rotating left or right during a limited number of seconds. The motor can also be stopped at any time. So this output can be set in the LEFT/ RIGHT or STOP status. LEFT/RIGHT can also be considered as UP/DOWN, depending on the connected motor (in most of the cases this is for control of electrical motorised curtains, sun blinds and shutters).

#### 6.1.2. Output unit

Outputs with the same functionality and the same technical specifications are brought in to groups per output unit. The output units can be divided in two different breakdowns:

- Based on their function (relays, dimmers, motors)
- Based on the system relation (integrated in the MICROS+ central unit, external but plug-in on the MICROS(+ upgrade version) central unit and externally connected via the AUTOBUS).

##### → Functional classification

- ☒ **'Relay Output units'**: groups of eight (8) relays of the same type
- ☒ **'Dimmer Output units'**: groups of eight (8) dimmer control outputs of the same type.
- ☒ **'Motor Output units'**: groups of four (4) motor control outputs of the same type.

##### → System related classification

The output units can also be grouped depending on the way they are connected with the TELETASK central unit. There are two system related categories:

- ☒ **'Standard Output units'**: these output units are integrated in the central unit (only in case of MICROS/PICOS central units). Refer to the data sheet of your central unit for more detailed information.
- ☒ **'AUTOBUS Output units'**: these types of output units are all output interfaces with an AUTOBUS connection. For example TDS13500, TDS13524, TDS13525, TDS13608...).

Remark: All AUTUBUS in- and output units are in general also called in- and output 'interfaces'.

#### 6.1.3. Output numbers

Every output which is defined in PROSOFT automatically gets an output number. Once an output has been given an output number, this number can not be changed



any more during the project, even if the address of an output interface (for addressing see later in this text) would change during the project.

The numbering starts for the three functional groups (relays, dimmers and motors) all starts with number '1'. Depending on the kind of output, PROSOFT will add in front of the number the abbreviation 'REL' for relay, 'DIM' for a dimmer and 'MOT' for a motor output.

When there are several central units connected, you will also have to add a letter which indicates to which central unit the output is connected. (from A to J, because there can be coupled up to 10 central units to each other over IP).

#### 6.1.4. 'O' Address (Output Address)

For all interfaces connected to the AUTOBUS, so also for the output interfaces on AUTOBUS, it is necessary to the system to be able to distinguish the different interfaces from each other. Therefore every AUTOBUS interface has a hardware address setting.

The address numbering starts at '00'. This address is reserved for the central unit. So in a practical situation, the address setting will always start with a higher number. This is also because the central unit has other predefined address settings for its internal (general) outputs. The number of predefined (reserved for the system) addresses, depends on the type of central unit you use and they will be reserved automatically in PROSOFT.

PROSOFT automatically assigns an address to every new defined output unit. You will have to set the same address on the hardware interface (connected on AUTOBUS) as the address given in PROSOFT. If the hardware AUTOBUS address of an interface has been set to a certain address already, you can change the address in PROSOFT.

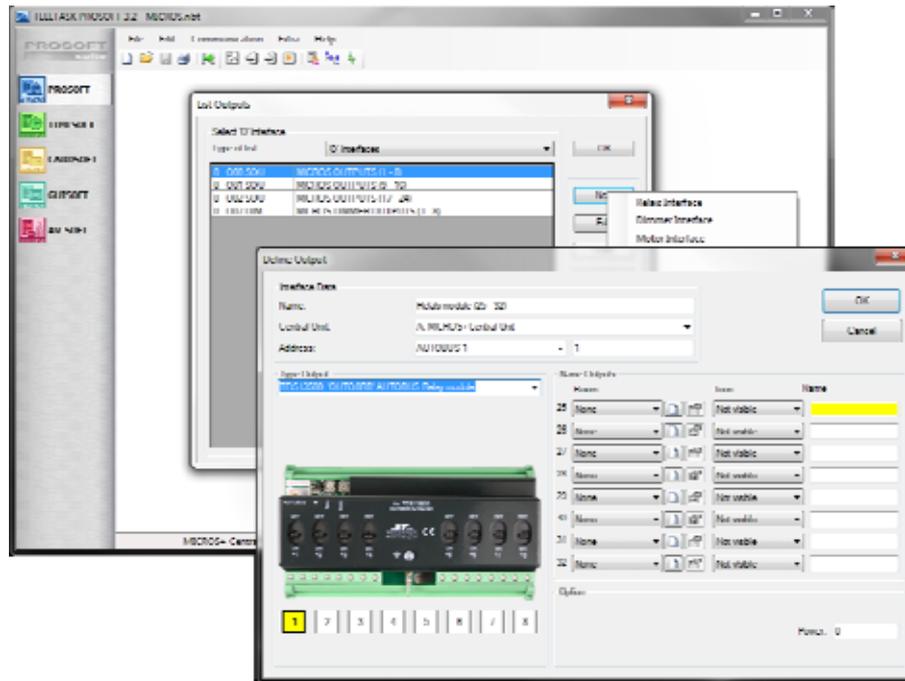
Additionally, PROSOFT assigns for internal use an 'O' letter to the address. This way it is clearly noted that this concerns an Output address on an Output interface. This is necessary because there are also AUTOBUS Input addresses. These 'I' addresses are freestanding of the 'O' addresses. This means that 'O16' and 'I16' can exist on the same AUTOBUS. Within the 'O' and 'I' addresses each address setting must be unique. So there may be no two 'O16' addresses because the system can not distinguish these two from each other and the system will not behave properly in such case. Hardware damage will not occur due to double addressing, but outputs behave unpredictable. Refer to the 'I interfaces' chapter for more information on 'I' addressing. The number of addresses available on the AUTOBUS is limited. The highest settable output address ('O' address) is defined by the limits of the concerning central unit you use. Please refer to the data sheet of your central unit for system limits.

 **IMPORTANT REMARK: Using double addresses is not allowed and can generated danger and non secure situations. So always check very carefully before powering your system if no double addressing occurs.**

## 6.2. Adding Output units

When you start-up a new TELETASK project, you will have to choose for a certain central unit. By selecting the central unit, PROSOFT automatically generates all standard available internal Output Units of the central unit. When you need more output units than the ones available in the central unit (MICROS+), you will have to add extra output units. the AUTOBUS output interfaces have to be added in PROSOFT by the user. When adding the output units, there are four parameters to be set:

### 6.2.1. The different available parameters



- ☒ New: Choose if the Output Unit which you want to add is a 'Relay output unit', a 'Dimmer output unit' or a 'Motor Output unit'.
  - 👉 **Be sure that you take the right functional group. Later it is not always simple to change an existing group to another functional group. You will have to delete the wrong group and add a new (correct) group. Settings of the deleted group will be lost.**
- ☒ **'Address'**: This setting is done automatically by PROSOFT, but you can always change the address if the concerned interface was already given another (available) hardware address setting.
 

*Tip:* It is always easier and faster to change the address setting of an interface in PROSOFT than changing it somewhere in an electrical cabinet or in a wall mounted panel.
- ☒ **'Type of Output'**: Select here the exact type of output, based on the concerning TELETASK reference (for example TDS13500).
- ☒ **'Name'**: enter in this field a short and understandable name for the output. In most of the cases you can just leave the name as it is given by PROSOFT. If you have more than one electrical cabinet at different locations in your project, we recommend to add to the output numbers (for example '25-32') the name of the floor of the electrical cabinet wherein the output unit is installed.

### 6.2.2. In practice

- 👉 Click 'Edit' in the PROSOFT menu bar.
- 👉 Click 'Outputs'
- 👉 The 'List of Outputs' window appears on the screen. In this screen the standard (internal) available output units are already there because they are automatically predefined by PROSOFT.
- 👉 Click the 'New' button to add an extra output unit.
- 👉 Select the desired 'Functional Output unit': 'Relay Interface', 'Dimmer Interface' or 'Motor Interface'.
- 👉 The 'Define Output' window appears on the screen. Enter the different parameters for this interface.
- 👉 Click 'OK': an additional Output unit is entered to your TELETASK domotics project. The 'Define Output' closes.
- 👉 In the 'List of Outputs' window which appears again, the output unit is added.

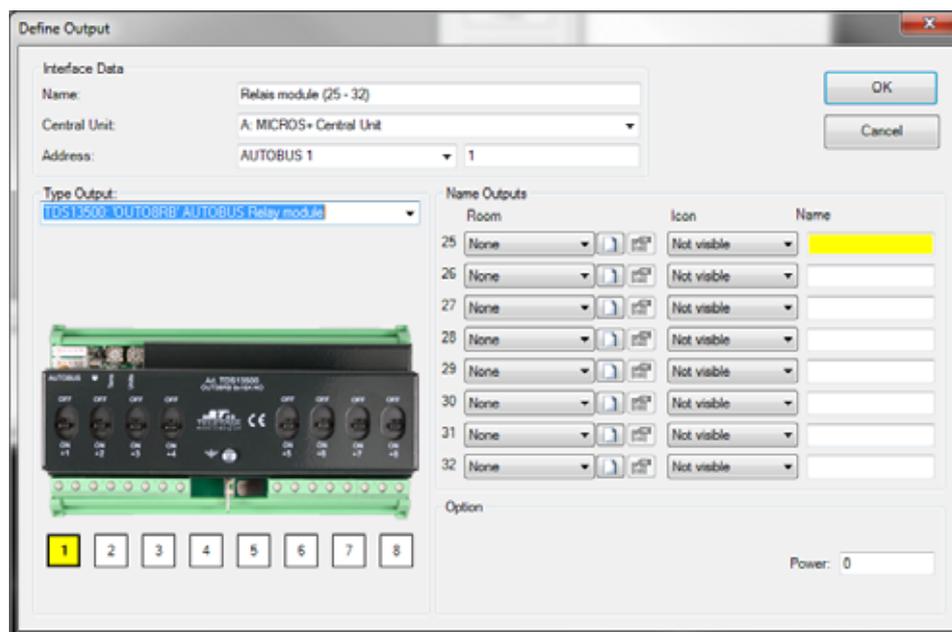


- Repeat this way of working for all TELETASK output units which are to be added to your project.

## 6.3. Assigning TELETASK Outputs.

An important step to fluently parameterise your project is the assignment of a name for all individual outputs (relays, dimmers, motors). In a later stage it will be a continuous job to use these assigned names when defining relations and functions. The assigned name of an individual output will always refer to the connected load or circuit. For example: 'main light' (in the kitchen), 'wall sockets' (in the home office) or 'left curtain' (in the living room).

### 6.3.1. The different available parameters:



In the 'Define Output' window of the concerned Output unit of which the output that has to be assigned is part of, you can enter the name of all individual outputs. The name exists out of three parameters which are to be defined:

- 'Room'**: Select the room where the load is installed.
  - ☞ **If the room is not in the list of rooms yet, you can directly enter a new room via the 'New' button.**
  - ☞ **If you have to change the characteristics of an existing room, you can use the 'Edit' button.**
- 'Icon'**: This is a way of grouping outputs on graphical TELETASK interfaces like the SERVUS and ILLUS touch screens, but also for TV-interface and other graphical user interfaces. The different 'icon' buttons are used on these interfaces and are a way of easily finding a specific load on a touch screen. The different available icons are:
  - 'Not visible'**: the output will not be visualised on graphical interfaces. This is to be used for all technical outputs which are not to be controlled by the user. For example: A water valve which is mostly controlled by timers and by the access control functions.
  - 'Wall sockets'**: Select this option for outputs which are controlling wall sockets (all general non dedicated wall sockets, cooker hood; micro wave, fans, coffee machine, ...) and other general on/off devices which are to be controllable by the occupants of the project, like there are garden sprinklers, etc...
  - 'Light'**: Select this option if the concerned output is controlling a light or a group of lights.



- 'Heat/cool'**: Select this option for all sensor related outputs (valves for heating/cooling, circulation pumps of your heating/cooling system)
  - ☞ These outputs will not be visualised on the graphical interfaces.
- 'Motor (Power)'**: Select this option when you control ('old' way of working without the dedicated motor interfaces from TELETASK) the output 'power' signal of a motor.
  - ☞ These outputs will not be visualised on the graphical interfaces
- 'Motor (Direction)'**: Select this option when the output is controlling the direction of a motor ('old' way of working without the dedicated motor interfaces from TELETASK)
  - ☞ Outputs, who are assigned to this Icon, will be visualised on graphical interfaces under this icon, to be able to control motors for curtains and shutters and similar up/down or left/right systems.
  - ☞ All motor outputs on the TELETASK dedicated motor interfaces (TDS13524, TDS13525) are automatically assigned to a 'motor' icon.
- 'Name'**: Enter a short name of the load/circuit which is connected to this individual output. Remember that this name will appear on the graphical interfaces (if there are any in your project) and there is a limited room on the screens to display this name. So keep the name length as short as possible.
  - ☞ Examples:
    1. 'light in the parents bedroom' is not a good name, because the room identification is already done in the 'room' section, so it would be better to use 'main light' or 'main', because the user already knows also that it concerns a 'light' because it has been assigned to this function also.
    2. 'Ambient light', 'left sockets', 'sprinklers left', 'staircase to cellar' are good names. 'Colour lights on staircase to first floor' is not good, because it is too long to be displayed. 'Staircase light' would be better.

### 6.3.2. In practice:

- ☞ Click 'Edit' in the PROSOFT menu bar.
- ☞ Click 'Outputs' in the 'Edit' pull down menu
- ☞ Select the desired Output unit by clicking on it. The selected output unit turns blue.
- ☞ Click the 'Edit' button. The 'Define Output' window appears.
- ☞ Click on the picture of the interface the desired individual output. The selected output turns yellow.
- ☞ Select/enter in the 'Output name' field one by one the 'Room' of the load, the related 'Icon' and enter the name you want to be displayed.
- ☞ Click 'OK', the selected individual output is ready for later use.

## 6.4. Overview of the available TELETASK Output units and their parameters

TDS ref	Functional	Address	Options
TDS13500	Relays	With rotary switch	Power*
TDS13501	Relays	With rotary switch	Power*
TDS13502	Relays	With rotary switch	Power*
TDS13603	Dimmer DMX	With rotary switch	Power*



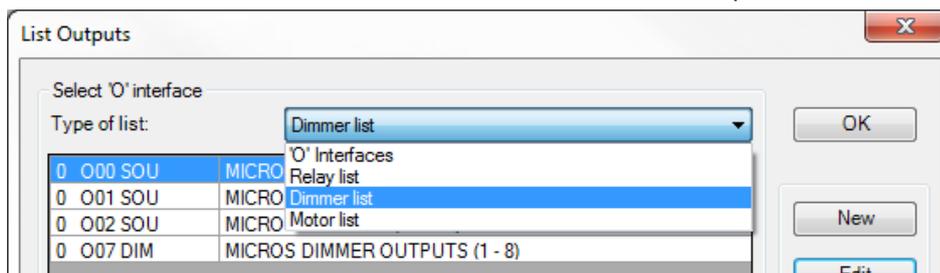
TDS13608	Dimmer	With rotary switch	Power*
TDS13610	Dimmer FLUORESCENTIE	With rotary switch	Power*
TDS13524	Motor	With rotary switch	Power*
TDS13525			Pulse time*

- \* **Power:** Information field. Can be entered for light bulbs so the information is printed on the printed documents and can be used by occupants as lamp replacement information. Values between 0 and 30000 can be entered in this field.
- \*\* **Pulse time:** See 'Functions'- 'Motors'

## 6.5. List of output units of your project.

### 6.5.1. Generating Lists on the screen of your PC

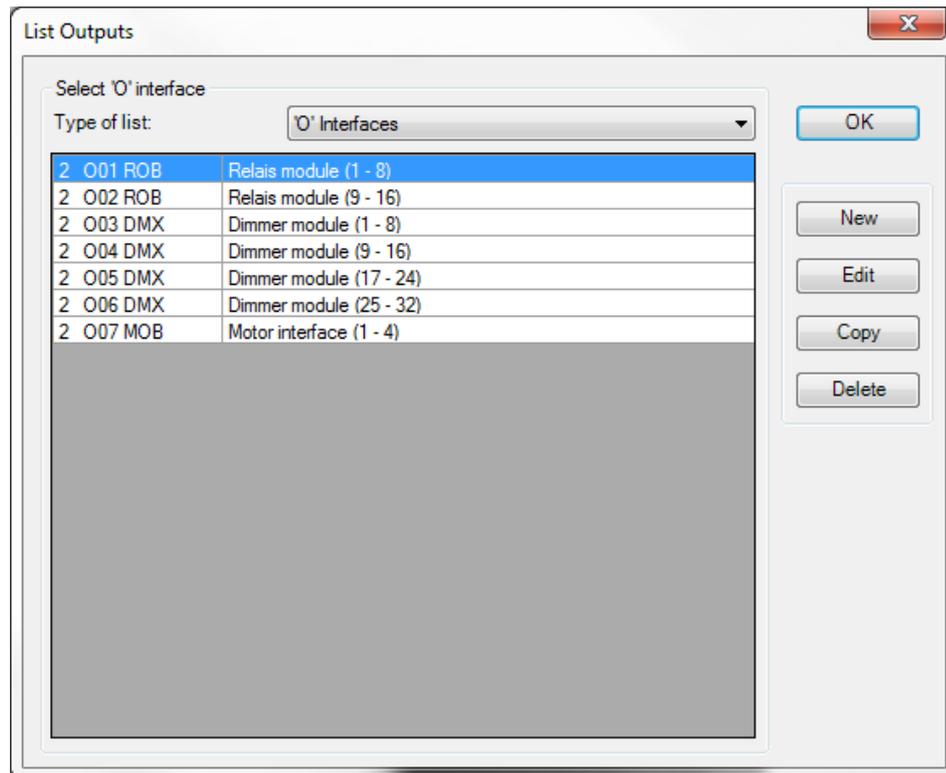
An overview of all output units and their individual output can be made in several sort modes. You can find the lists in the 'list of outputs' window.



There are four different list types for searching individual outputs.

#### → List type "O' Interfaces':

Content of the list



The TELETASK output units can be reviewed in the 'list of outputs' list. The following items are contained in this list:

- Output:** the 'O' reminds you that this line is concerning an Output unit.
- Address:** This is the software address of the concerning output unit.
- Abbreviation:** for internal use by the system.
- Description:** this is the name which you or the system gave to the output unit.

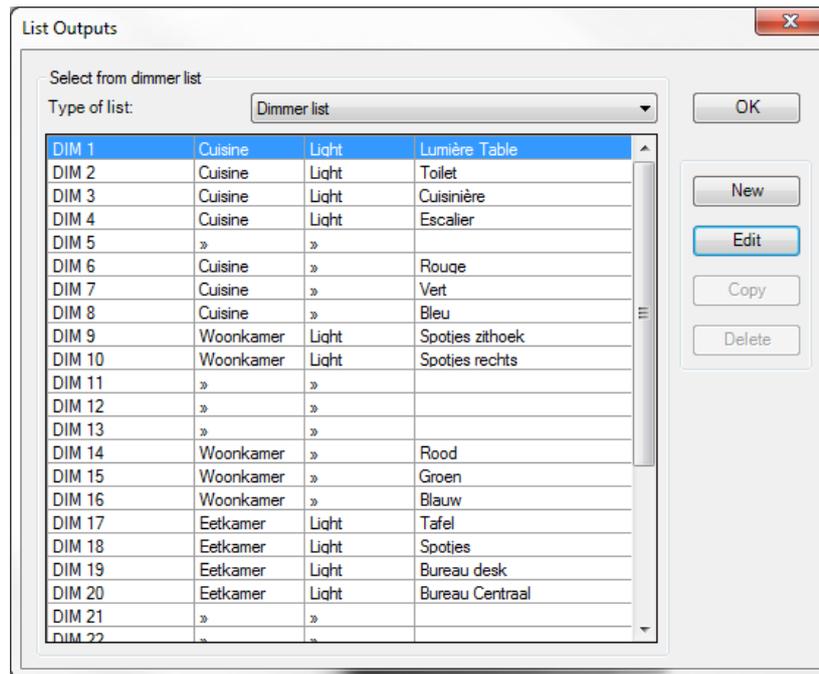
The available control buttons:

When you have selected the desired output unit (line turns blue), you have the possibility to select one of the following actions:

- 'New':** to add an extra output unit.
- 'Edit':** to edit the parameters of an existing output unit.
- 'Remove':** to remove an existing output unit and all its parameters.

→ **Types of list: 'Relay List', 'Dimmer List', 'Motor list'**

List information



- Functional Group:** indicates to which functional group the output belongs
  - 'REL':** a relay (classified in the 'Relay list')
  - 'DIM':** a dimmer (classified in the 'Dimmer list')
  - 'MOT':** a motor (classified in the 'Motor list')
- 'Output Number':** contains the output number which was automatically given by PROSOFT
- 'Room':** is the room to which the individual output is connected.
- 'Icon':** the icon to which the individual output is connected.
- 'Name':** the name of the individual output.

### Actions

When you have located the desired individual output, you can select it by simply clicking on it (turns blue). The following actions can be done from here:

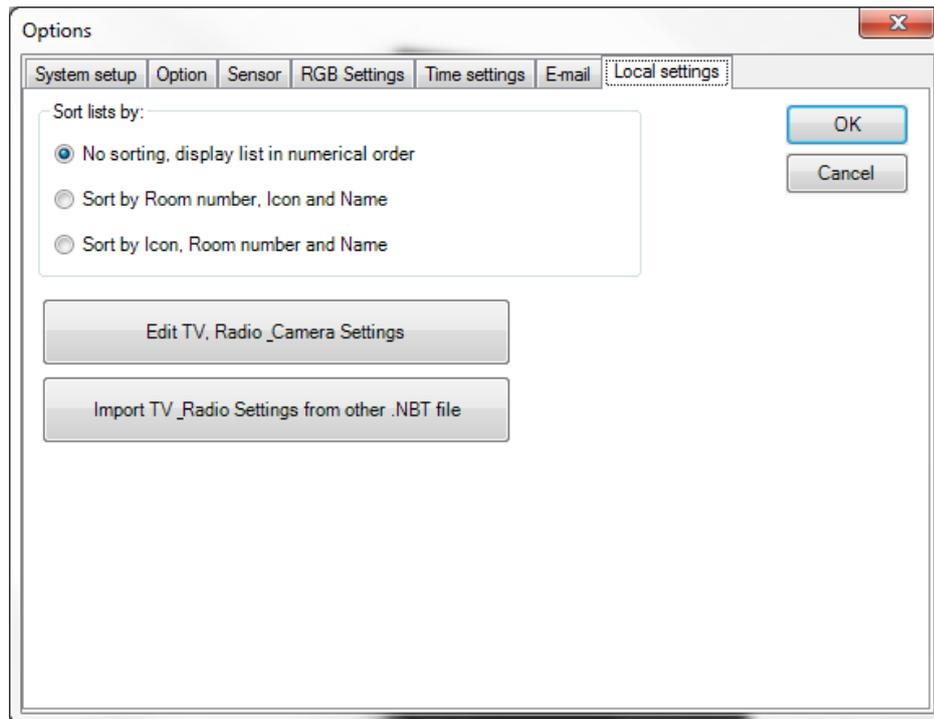
- 'New':** depending on the list wherein you are, there will be four motors or eight dimmers or eight relays added to the output list. They will get the numbers which are the smallest available in the system.
- 'Edit':** click 'edit' to open the 'define output' window. You can now edit the parameters of the selected individual output.
- 'Test Online':** when your computer is online (connected) to an operational central unit, you can control the selected output via this button. At the same time the actual status of the output is displayed.
  - Relay:** Select the desired status 'on' or 'off' and Click on the 'Switch' button to bring the output in the desired status.
  - Dimmer:** Select the desired status 'On' (= 100%), 'Off' (=0%) or a value in between and Click on the 'Switch' button.

### Remarks

- ☞ **The 'Test Online' option is only available when at least a powered TELETASK central unit is connected to your PC. If this is not the case, their will be a 'no connection' message in the 'Test Online' window.**
- ☞ **A motor can not be tested on line.**

### → Sorting of lists:

Possible list sorting



The list types of relays, dimmers and motors can be sorted as follows:

- 'No sorting, show in numerical order'**: Sorted on output number (numerical order). This is the default setting.
- 'Sort by room, icon and name'**: All outputs are now sorted by room and secondarily by icon and then by name (all in alphabetical order)
- 'Sort by icon, room and name'**: All outputs are now sorted by icon and secondarily by room and then by name (all in alphabetical order)

In practice:

- ☞ Click 'Extra' in the PROSOFT menu bar
- ☞ Click 'Options' in the 'Extra' pull down menu and the 'Options' window appears
- ☞ Click the 'Local Settings' tab.
- ☞ Select in the 'Sorting of the lists' the desired sorting mode.
- ☞ Click 'close' and the sorting mode is active. You can see the outputs sorted in the new mode now if you go to the list of outputs.



## 7. 'I' units: Inputs and other

### 7.1. General notions

Before you can enter all inputs and input units (= 'I' units) in to your TELETASK project, it is essential to have a good understanding of some basic items.

#### 7.1.1. 'I' interfaces: Inputs and other

In contrast with the 'O' interfaces, the 'I' interfaces are less conveniently arranged because there is a wider range of input units and input interfaces available. Additionally, interfaces which may be both input and output are added to the inputs list.

As with the 'O' units, the 'I' units are divided in a functional as well as in a system related way.

##### → Functional classification

There are four different types of input units.

- ☒ **'General inputs'**: these are all TELETASK (AUTOBUS connected) touch panels, touch screens, etc... (See more details in the overview list further in this text). When somebody pushes a button on a touch panel, a command is sent to the central unit, and the predefined action for this button is done.
- ☒ **'Digital Inputs'**: digital inputs are contact inputs for all kind of external on/off signals like there are from standard voltage free push buttons (any brand), motion detectors (often via a relay to be connected to the voltage free contact inputs of the TELETASK input). When the concerned external contact is closed, the input unit or interface generates the related command and the central unit processes this command just like it was coming from a touch panel and the predefined action is done.
- ☒ **'Analogue Inputs'**: analogue inputs are the connection between the TELETASK system and the three different kinds of TELETASK sensors. The sensors send their signal to the analogue input (internal in the central unit or external on AUTOBUS). This signal is continuously processed by the central unit and depending on the related function actions are taken at certain times.
- ☒ **'Audio/Video interfaces'**: This is a whole family of different general and dedicated (brand dependant) interfaces. All audio interfaces are AUTOBUS interfaces. By these interfaces it becomes simple to control connected audio systems with standard buttons and/or special touch panels and touch screens.

##### → System classification

Beside of the functional classification, the 'I' interfaces can also be classified based on the way they are connected with the TELETASK central unit.

There are two groups to be distinguished:

- ☒ **'Direct or Internal 'I' Interfaces'**: these 'I' interfaces are integrated in the central unit. Depending on the type of central unit you use, there may be different types of internal 'I' interfaces available in the central unit. Please refer to the concerning data sheet of your central unit for more details.
- ☒ **'AUTOBUS 'I' Interfaces'**: these 'I' interfaces are connected on the AUTOBUS. Most of the 'I' interfaces are of this kind (TDS12116, 16 digital inputs for voltage free contacts).

#### 7.1.2. 'I' Address:

The address setting is necessary for the system to be able to communicate with the individual interfaces and modules. Every 'I' unit and interface has its own address. All



external AUTOBUS connected 'I' interfaces have a hardware or software address setting on the interface itself (just like Output interfaces).

The address numbering starts with an 'AUTOBUS number'. Then PROSOFT adds for internal use an 'I' to the address. This way it will be very clear in PROSOFT that it concerns an 'I' interface. This is necessary because there are also TELETASK AUTOBUS 'O' interfaces which become an address (these are the output interfaces). These 'O' addresses are unrelated of the 'I' addresses. This means that there can be an 'O16' and an 'I16'. In the 'O' and 'I' address groups every address is unique. There can't exist 2 'O16' addresses or 2 'I16' addresses.

The actual 'I' address starts with '00'; these are the Master functions on the remote control. The first address which can be defined on an interface is '01'. PROSOFT automatically generates an address for every new 'I' interface which is added to the system. Be sure that this address is created for the 'I' interface or that the set-up in PROSOFT can be adapted to the set-up of the 'I' interface. Differences between the hardware (on the interface) address setting and the software (PROSOFT) address setting can result in erroneous and unpredictable behaviour of the system. Please check this before starting-up the TDS system.

-  **Some TELETASK interfaces use more than 1 address (f.e. the TDS12116 is a 16 input digital input interface, and occupies two AUTOBUS addresses. Only the first address of this input interface can be set-up in the hardware. The other addresses follow up this hardware set-up address and will automatically be assigned by PROSOFT.**
-   **To avoid errors in your configuration it is recommended to let PROSOFT decide what the addresses are. PROSOFT automatically takes care of multiple addressing and will avoid making errors about this.**
-   **The standard 'I' interfaces (f.e. TDS10012 MICROS+) start on AUTOBUS 0.**
-   **IMPORTANT REMARK: Using the same addresses twice on one bus is not allowed and can generate danger and non secure situations. So always check very carefully before powering your system if no double addressing occurs (two or more interfaces are set to the same hardware address).**

## 7.2. Adding TELETASK 'I' interfaces

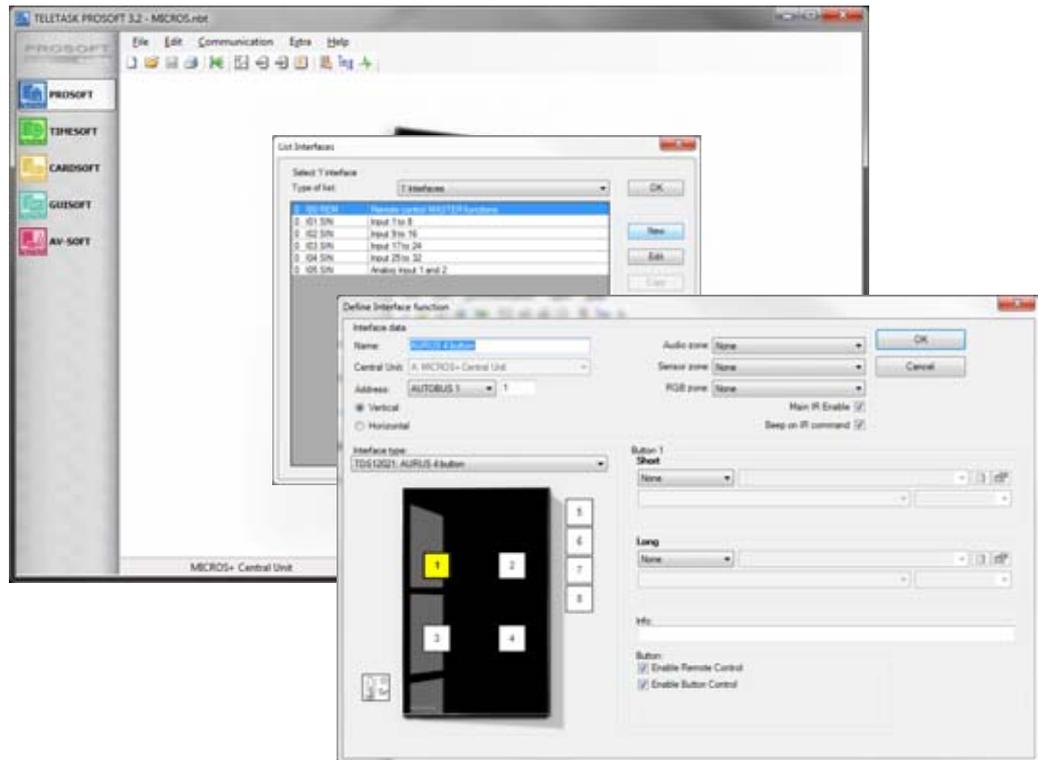
When you start a new TELETASK project you have been choosing the central unit. By doing this, PROSOFT automatically generates all standard in the central unit available (internal) digital and analogue inputs (and outputs).

PROSOFT also adds an input unit called 'Master' functions. These are the Master functions which can be allocated for extra eight functions on the TELETASK remote control.

When you need additional inputs (like in most of the cases) than the ones standard available at a central unit, you will have to add extra input interfaces.

When adding interfaces, there are four different parameters to be set:

### 7.2.1. Parameters for adding new 'I' interfaces:



- ☒ **'Group':** Choose the (functional) group to which the new 'I' interface belongs: 'General Interface', 'Digital Input Interface', 'Analogue Input Interface' or 'Audio Interface'.
  - ☞ **Be sure to choose the correct group, because it is not possible to change an interface from one group in to an interface of another group any more. In such case, you will have to delete the wrong interface first and then add the correct one.**
- ☒ **'Type of Input':** select the interface you want to be added. The interfaces are shown in the list sorted by their individual TDS reference.
- ☒ **New interface.** The address can be changed by the user at any time if you want. PROSOFT takes care of impossible or not allowed address settings. So if you change the address to a not allowed address, PROSOFT will not allow you to do any changes on the address setting.
- ☒ **'Name':** enter here a description of the location where the interface is installed together with the inputs numbers which are already entered by PROSOFT (if it is a contact input interface).

### 7.2.2. In practice:

- ☞ Click 'Edit' in the PROSOFT menu bar.
- ☞ Click 'Inputs and other'.
- ☞ The 'Interface list' window appears on the screen. The standard 'I' interfaces are displayed here.
- ☞ Click the 'New' button to add a new 'I' interface to your project.
- ☞ Click the desired functional group: 'General Interface', 'Digital Input Interface', 'Analogue Input Interface' or 'Audio Interface'.
- ☞ The 'Define Interface Function' window appears on the screen. Configure the parameters of the concerning interface (see below for more details).
- ☞ Click 'OK': the 'I' interface is added to your TELETASK project and the window 'Define Interface Function' is closed.
- ☞ The new interface is added in the 'Interfaces list' window.
- ☞ Repeat this way of working for all TELETASK 'I' interfaces which you want to appear in your project.

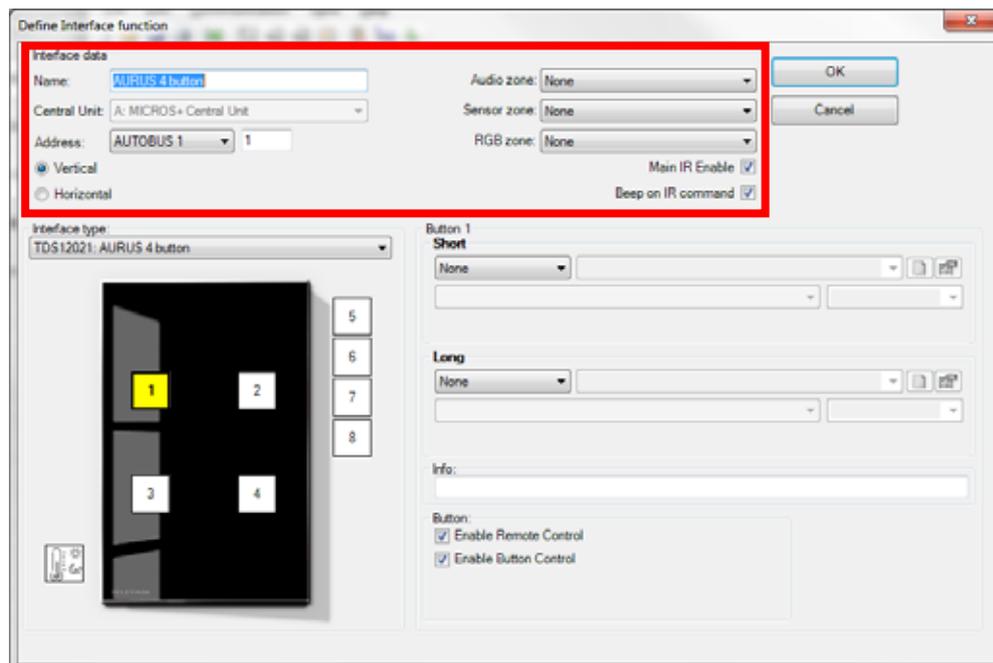


## 7.3. Configuring the parameters of 'I' Interfaces.

After all 'I' interfaces are added to your project, the different settable parameters of each of them are to be configured. The parameters are different for the four groups of 'I' interfaces:

### 7.3.1. General 'I' interfaces

→ **Configurable parameters which are available for every 'General interface':**



- ☒ **'Main IR enable':** By default, the 'Main IR enable' is on. When this parameter is marked ('V'), then every button can be controlled with the TELETASK infra red remote control. If you don't want the panel to be controllable by IR remote, remove the 'V' mark in this field.  
The IR control can also be individually disabled for each button. See for more details below at 'button' parameter settings.
- ☒ **'Beep on IR':** Marked 'V' by default. When a function is controlled by the TELETASK IR remote control, the panel buzzer will beep short when this parameter is marked with 'V'.  
This parameter is not yet available on all interfaces.  
☞ **For some of the older interfaces this setting is done by hardware (refer to the data sheet of the concerned interface). New interfaces support this 'Beep on IR' by software.**
- ☒ **'Audio Zone':** A 'General interface' can be related to a certain 'Audio Zone'. This is important when controlling audio functions on your TELETASK IR remote control (TDS12502). Example: when you click the 'CD' button on your remote control, the system needs to know in which audio zone the interface is installed, so it can start the correct CD and the correct audio zone power amplifier. Select the audio zone from the predefined zones. If you didn't yet entered the different audio zones in your project, please do so first (in the PROSOFT screen of the concerning audio interface which you are using in your project).
- ☒ **'Sensor Zone':** Familiar to the audio zone setting, you must connect the interface to a certain sensor zone. When using a temperature control function on your remote control (TDS12502), the interface (for example a touch panel) must be dedicated to a certain heating/cooling zone for the system to be able to change the correct temperature setting for you. Select the Sensor zone out of the sensor



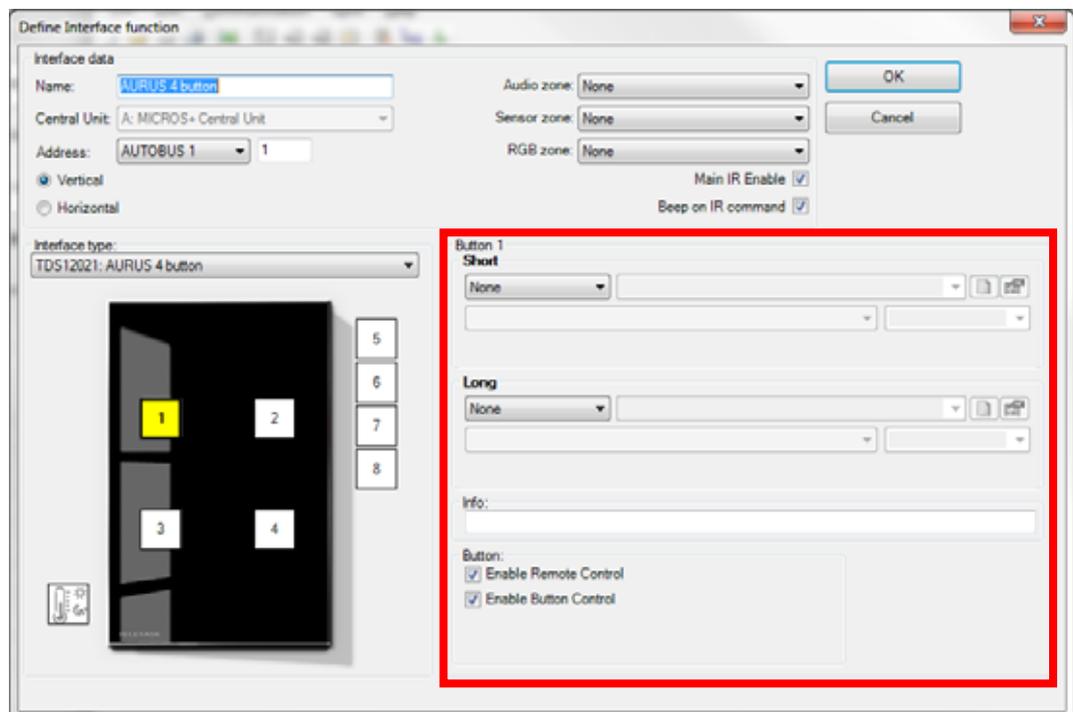
list which you have entered already or, if not, add the temperature sensors and their zone names first before proceeding here. Sensor zones are defined at the level of the analogue (sensor) input unit. Look also in the thematical chapter 'setting up a heating/cooling system' for more information on this subject.

- ☒ **'RGB Zone'**: in this field you can link a multi-colour lighting zone (RGB) to a 'General Interface'. This means that the selected RGB function will be controlled when you activate it with the remote control when pointing at the IR receiver of the General Interface. (when using the TDS12502)

### ➔ Parameter per individual button/input:

- ☒ **Relations**: The definition of the functional features of a 'General Interface' is mainly defined by the relations between the inputs (for example the buttons of a touch panel or contact inputs of a digital input interface) and the outputs (relays, dimmers, motors...) of the system. Due to the characteristics of a relation decide what the actions are to be done after pushing a button or closing an input contact of a general input interface. Additionally there may be two different relations for every input (button or contact). There is a possible relation for pushing 'short' and another relation for pushing 'long' on the concerned button / contact:

☒



- ☐ **'Short'**: the function behind the 'short' action will be used to be processed when the user pushes only briefly (by default less than 1.5 seconds) on the concerning button or when the concerned input contact is only closed briefly. Refer to the chapter 'Functions' for more detailed description of all possible functions which can be used.
- ☐ **'Long'**: the function behind the 'long' action will be used to be processed when the user pushes longer than 'short' (by default more than 1.5 seconds) on the concerning button or when the concerned input contact is closed for a 'long' time. Refer to the chapter 'Functions' for more detailed description of all possible functions which can be used.



**Refer to the 'Extra' - 'Options' menu in this handbook for custom setting of the 'short' time definition. TELETASK recommend not to change this setting.**



**There are two differences about time settings for short/long. The time on all inputs and buttons of general interfaces and the time setting for internal contact inputs in central units:**

- 'LONG push on general interfaces': This time can only have two settings: 1.5 or 3 seconds. This setting is automatically adapted to the value of the direct input Long push.
  - 'LONG pushing internal contact inputs': To be set between 1 second to 5 seconds in steps of 0.5 seconds. By default this time is 1 second. TELETASK recommends not changing any of these default settings.
- 'Button'**: In this field there are two more settings possible for each individual button/input:
- 'Enable Remote Control'**: when this parameter is marked 'V' (default), than you can control the individual button or contact input which is currently selected on the picture of the interface.
    - ☞ Buttons/contacts 1 to 8 are on the picture of the interface and can be selected by clicking on them with the mouse pointer. The IR remote control activates the same buttons as the ones on the wall panel or input interface.
    - ☞ The 'short' and 'long' pushing differences are the same on the IR remote control than the ones configurated on the 'I' interface (touch panel or input interface).
    - ☞ This item is marked by default.
    - ☞ If your 'I' interface has more than eight buttons or inputs, the IR remote control controls the first 8 of them. There may be exceptions on this rule. Please refer to the data sheets of the concerned interface.

☞ **IMPORTANT REMARK:** Remove the 'V' mark when you control a door opener or another security related item with that particular button. Otherwise anybody having a remoter control and standing outside may be able to open your door via a remote control which is transmitting trough a window or any other visual open surface. For security and safety reasons this is absolutely not allowed and must be avoided in any case! It is the responsibility of the programmer of the system that these and comparable actions are to be blocked.

- 'Enable Button Control'**: this parameter is working for the buttons on the touch panel or the inputs on the input interface. It is similar to the 'enable Remote Control'. By default this parameter is marked for all individual buttons/contacts. So when somebody pushes a button which is not marked at the 'Enable Button Control' nothing will happen. The relation of that button, although it is defined, will not be processed because the button activity is disabled.  
Disabling the button function is seldom used, but is for example usable if visitors are not allowed to control something in the house. The occupant can for example control that function with a remote control. Can be useful in public areas.
  - 'Couple Vertically/Horizontally'**: In some general interfaces it is possible to use two buttons to control only one function. For example, to control a dimmable light or a motorized curtain.
- 'Info'**: This is a text field for your information only (on screen and on paper). You can enter a specific description here about the location of the concerning interface.  
Example: 'touch panel in the bath room first floor' or 'interface mounted in electrical cabinet L101'



- ☒ **'Engraving':** If you want to order a custom engraving for one or more buttons on touch panels who apply to this, like TDS12005xx, TDS12008xx, TDS12016xx or TDS12017x, you can complete the engraving field (2 x 7 characters). Send the PROSOFT file to your TELETASK supplier and he will supply you the necessary buttons with custom engraving. Please do not forget to mention together with your order the colour of the button you want to be supplied (several colours are possible; white, black and grey are standard). (not applicable for the TDS12001/TDS12015/TDS12021/TDS12022).

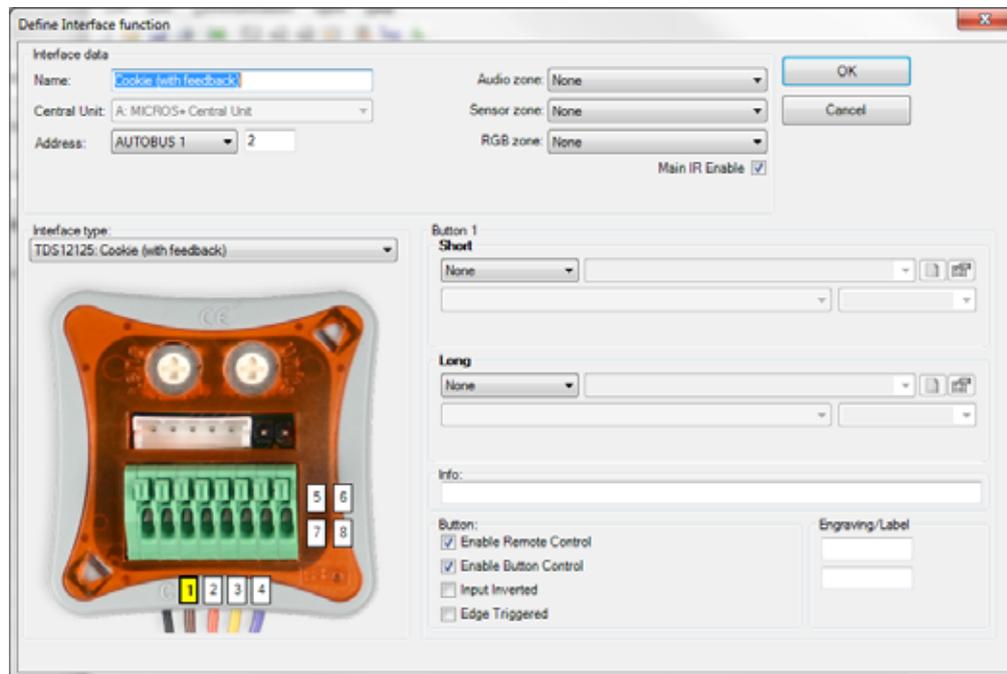
➔ **In practice:**

- ☞ Click 'Edit' in the PROSOFT menu bar.
- ☞ Click 'Inputs and other'.
- ☞ Select the desired 'general interface' by clicking on it
- ☞ Click the button 'Edit' and the 'Define Interface Function' window appears on the screen.
- ☞ Tune the 'General Interface' parameters 'Global IR', 'Audio Zone' and 'Sensor Zone'
- ☞ Select each individual button/input on the interface picture on your screen.
- ☞ Select in 'Short' and/or 'Long' the desired function type. Refer to the 'Functions' chapter for more details about the different available functions.
- ☞ Select the connected output or function for that relation for the short and/or long function.
- ☞ It may be necessary to enter extra function depending parameters.
- ☞ Do this for every individual button/contact of the interface.
- ☞ Click 'OK' until you are back in the main menu of PROSOFT.



### 7.3.2. Digital Input interfaces.

#### → The different available parameters



The adjustable parameters of the digital input interfaces are the same as those of the 'General Interfaces'. Depending on the selected interface, the following parameters can be added in the 'Button' field:

- 'Invert Input'**: when this parameter is marked with a 'V', the input will work inverted. So the central unit is not taking action when the contact is closed (for most of the functions) but when the contact opens. This is most often used when a NC (Normally Closed) contact is connected to the input.
- 'Edge triggered'**: when this parameter is marked with a 'V', the 'short' and 'long' names will change into 'on closing' and 'on opening'.
  - 'On closing'**: the coupled action is processed at the moment that the contact closes and for as long as the contact remains closed (or the button remains pushed in case of a normal open contact).
  - 'On opening'**: the coupled action is processed on the moment that the contact opens or the button is released (in case of a normal open push button contact).

#### → In practice

- ☞ Click 'Edit' in the PROSOFT menu bar.
- ☞ Click 'Inputs and other'.
- ☞ Select the desired 'digital interface' by clicking so it turns blue.
- ☞ Click the 'Edit' button. The 'Define Interface Function' window appears on the screen.
- ☞ Enter the different 'Digital Interface' parameters 'Global IR', 'Audio Zone' and 'Sensor Zone'.
- ☞ Select the desired individual input on the picture of the selected digital interface.
- ☞ Select the desired function type in the 'Short' and/or 'Long' field. Refer to the different available function type in the 'Functions' chapter.
- ☞ Furthermore select the output which is to be controlled or the function which is to be processed by the 'short' or 'long' button pressing.
- ☞ Define function specific parameters if necessary.

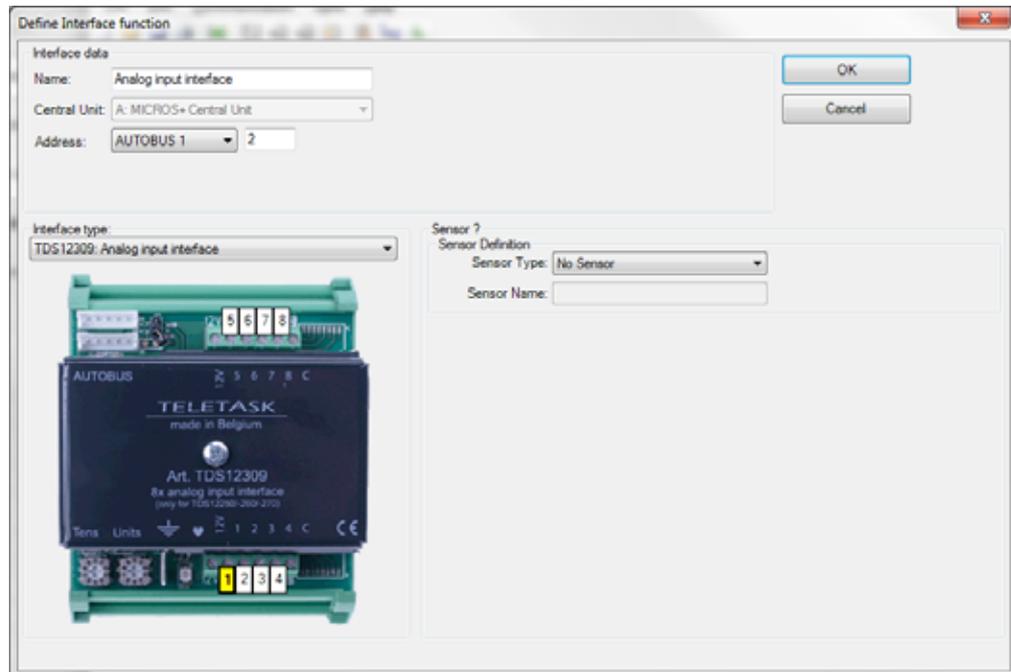


- ☞ Define other desired button specific parameters.
- ☞ Now the relation between the selected input and output(s) is defined.
- ☞ Click 'OK' until you are back in the main PROSOFT screen.

### 7.3.3. Sensor Heat/Cool interface

#### → The different available parameters

'Sensor definition' field



- ☒ **'Sensor Type'**: this parameter defines the type of sensor which is connected to the concerning analogue input. There are several different types of sensors which can be connected.
  - ☐ **'Temperature sens.'**: Select this sensor if you have connected a TELETASK temperature sensor TDS12250 to your analogue input.
    - ☞ By using a TDS12021/TDS12022 AURUS family touch panel the built-in temperature sensor will be configured the same way as another temperature sensor.
  - ☐ **'Humidity sens.'**: Select this sensor if you have connected a TELETASK humidity sensor TDS12260 to your analogue input.
  - ☐ **'Light sensor (dark)'**: Select this sensor if you have connected a TELETASK light sensor TDS12270 to your analogue input, which is set (hardware setting) as a 'dark' light sensor. Refer to the data sheet of the TDS12270 for details about this setting.
  - ☐ **'Light sensor (normal)'**: Select this sensor if you have connected a TELETASK light sensor TDS12270 to your analogue input, which is set (hardware setting) as a 'normal' light sensor. Refer to the data sheet of the TDS12270 for details about this setting.
  - ☐ **'Light sensor (sun)'**: Select this sensor if you have connected a TELETASK light sensor TDS12270 to your analogue input, which is set (hardware setting) as a 'sun' light sensor. Refer to the data sheet of the TDS12270 for details about this setting.
    - ☞ **Remark**: the hardware settings of the light sensor are to be done by setting the appropriate jumpers like described in the TDS12270 data sheet.
  - ☐ **'DAIKIN, Airzone, Mitsubishi Electric sensor'**: These sensors are only available on the specific interface.

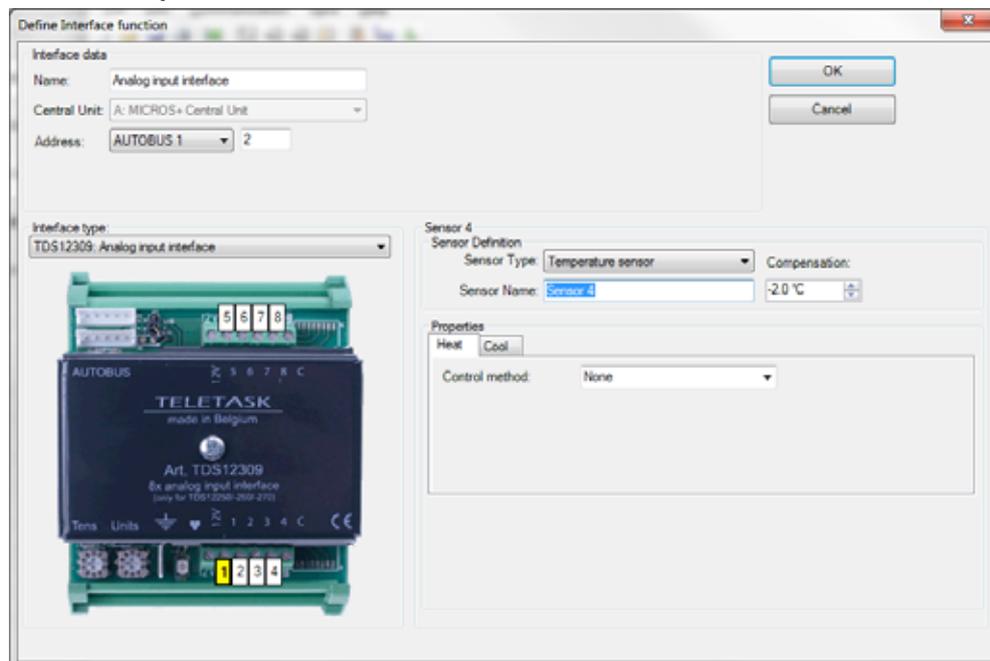


- 'General linear sensor'**: these sensors are only available on the TDS12310. With this every type of linear sensors can be read with a standard analogue output signal (0-10V, 4-20mA,...) This sensor gives an average value (=sudden changes are not directly noticed)
- 'Wind sensor'**: These sensors are only available on the TDS12310. With this every type of linear sensor can be read by an analogue output signal (0-10V, 4-20mA,) this sensor reports advanced changes immediately! (f.e. by measuring blasts of wind)
- 'Sensor Name' or 'Sensor zone'**: In this field you can enter the name of the sensor. This should be the temperature / light or humidity zone for this sensor. Example: 'ground floor', 'bath room', 'bedroom Lucas', 'South sensor', 'Twilight East'. If it concerns a temperature sensor which controls only the temperature of the room where the sensor is installed, then the name is the room name. If the T sensor controls several rooms, than the name may be 'ground level' or 'sleeping area' or something similar. Keep the name short, because this name is to be displayed on the LCD/VFD displays and touch screens which have a limited number of characters available for the name of the sensor zone.
- 'Compensation'**: This parameter is only available when you selected a temperature sensor in the sensor type field. The content of the compensation field defines an offset to the measured temperature value. The TELETASK system can work with compensation temperatures between -5°C and +5°C in steps of 0.5°C. This compensation is default set to -2°C and is advised not to be changed.

The 'Properties' field

After selecting a 'sensor type', different fields appear in the 'properties' window. The possible parameters for this field are: The following parameters can be entered:

#### When a temperature sensor has been selected



- 'Heat – Control method'**: this parameter defines what kind of heating control method is to be used. You have the following choices:
  - Standard relay control method**: this is a traditional ON/OFF control. It means that the concerned Temperature sensor will control the heating system by means of one output relay of the TELETASK system. When the room has to be warmed up, the relay (contact) will close and when the target temperature is reached the relay contact is opened. This is to control a valve, a circulation pump or a fan or similar item.



- 'On/off': select the relay which you want to use to control the connected heating system. For example the relay that switches the electrical valve of the heating zone 'ground floor'
- Analog control:** this is when your heating system is to be controlled by a 0 to 10 V analog output.
  - 'On/off': Select here the relay which is to be switched (when necessary).
  - 'Analogue Output (5°C difference=100% heat/cool)': Select here the analogue (dimmer-) output which is to be used as the Analogue control output for this Temperature zone.
- 4 speed (OR) control:** To be used for multi speed (off/low/medium/high) fan motors. This option is about an OR system, so it means that only one of the controlled relays will be on at the same time.
  - 'Low speed (at -0.5°C)': Select the relay which is to be activated (close the contact) for low speed of the evolved fan.
  - 'Medium speed (at -2.5°C)': Select the relay which is to be activated for medium speed of the fan.
  - 'High speed (at -5°C)': Select the relay which is to be activated for high speed setting of the fan.
- 4 speed (AND) control:** To be used for multi speed (off /low/medium/high) fan motors. Same as for the 4 speed 'OR' control, but the lower speed output relays will stay on if a higher speed setting is set.
  - 'Low speed (at -0.5°C)': Select the relay which is to be on for low fan speed.
  - 'Medium speed (at -2.5°C)': Select the relay which is to on together with the low speed relay, when medium fan speed is needed.
  - 'High speed (at -5°C)': Select the relay which should be on together with the low and medium speed relay, when high fan speed is needed.
- Local Mood control:** only for special applications.
  - 'On/off': Select the local mood which is to be switched on/off when temperature control is done.
- Flag control:** only for special applications
  - 'On/off': Select the flag which is to be controlled when temperature control is done.

More information about the control of a heating system can be found in the thematical applications chapter in the heading 'how to integrate a heating/cooling system' further in this document and at the chapter about the 'extra menu' earlier in this handbook.

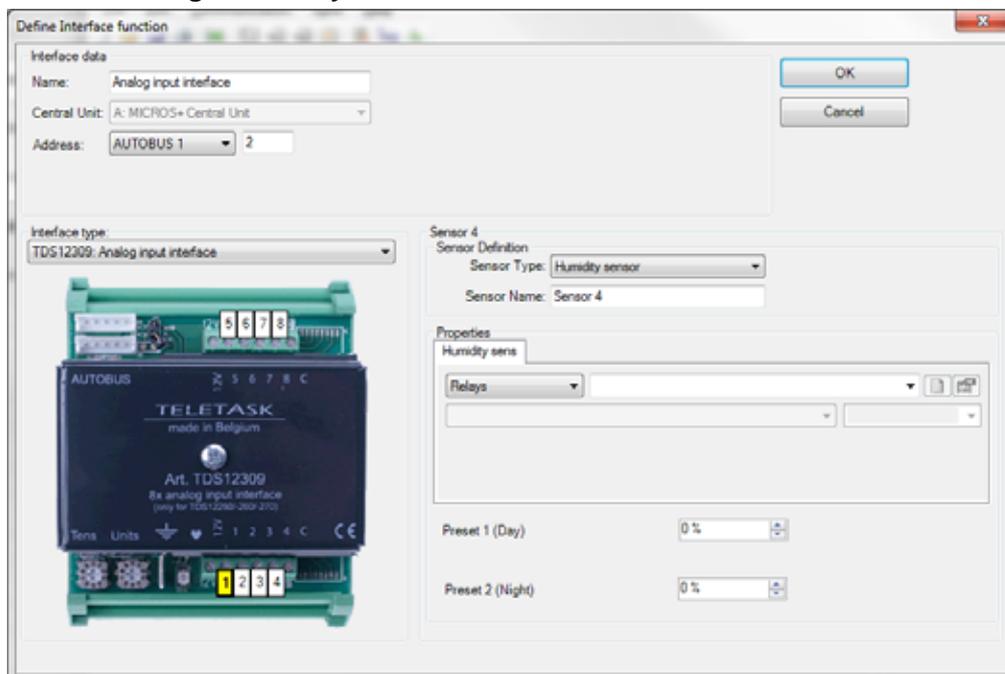
- 'Cool – control method':** this parameter defines which type of cooling control is to be used. At the selection of the control method, there are some extra parameters available. You have the choice out of the same systems as for the heating control.
- 'Day Temperature':** This parameter is the threshold value of the sensor as set by the 'Day' preset temperature. This parameter can be set from 5°C to 30°C in steps of 0.5°C. By default, the 'day temperature is set by the system to 20°C. The 'Day Temperature' is used by the TELETASK home automation system as a threshold for the 'heat' system. The 'Day' temperature for the cooling algorithm is x °C higher than the 'day' temperature parameter. The difference is defined by the 'Delta Heat/Cool' parameter. In PROSOFT this 'day' temperature for the 'cool' system is displayed in grey beside of the set 'Day' temperature which is shown at the left of 'Heat'.  
The 'Delta Heat/Cool' is changeable in the 'Extra' - 'Options' menu under the 'sensor' tab.
- 'Stand-by Temperature' (economic energy saving preset):** the 'Stand-by' temperature is derived from the 'Day' temperature. Therefore the 'stand-by' parameter is not the effective temperature but contains the difference to the 'day' temperature. The 'stand-by' parameter can be set from 0.5°C to 5°C in steps of 0.5°C. Default the 'stand-by' parameter is set to 5°C.



- ☞ The 'Day/Stand-by Temperature' is used by your system as a threshold for the 'heat' system. The 'Day/Stand-by' temperature for the 'cool' system is a changeable number of °C ('Delta Heat/Cool') plus the stand-by temperature parameter higher. (For Stand-by this is the Day preset plus the stand-by temperature plus the 'Delta hot/cool'). This 'Day/Stand-by' temperature of the 'cool' system is in PROSOFT displayed in grey beside to the 'stand-by' preset before 'heat'. The 'delta heat/cool' parameter is changeable in the 'extra' 'options' menu, under the 'sensors' tab.
- ☒ **'Night Temperature'**: this parameter defines the threshold value of the sensors as set in the 'night temperature' parameter. This parameter can be set from 5°C to 30°C in steps of 0.5 degrees Celsius. By default the 'night temperature' is set to 5°C.

  - ☞ The 'Night Temperature' is used by the TELETASK system as a direct threshold for the 'heat' system. In the 'cooling' system, there is an individual 'Night' value available. This value can be set-up between 20 and 30°C but can never be less then the set-up Night temperature for heating plus Delta Heat/Cool.

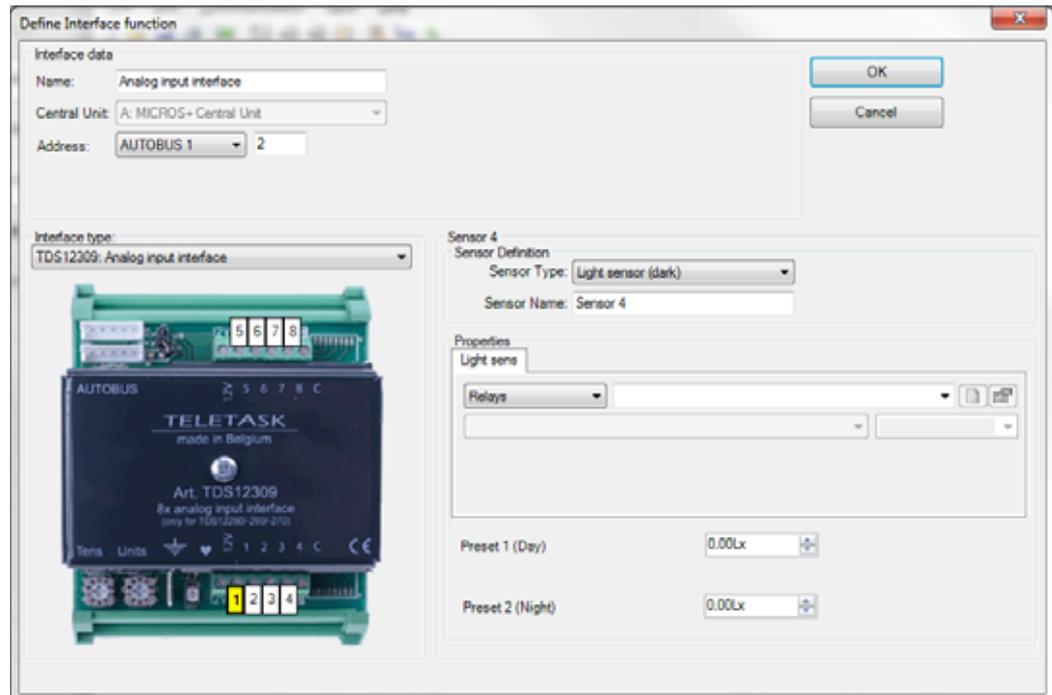
When selecting a humidity sensor:



- ☒ **'Humidity sensor'**: this parameter defines the function which is to be used at the moment that the humidity sensor function has to be executed. Depending on the integrated function, there will be more or less parameters to be set. Refer to the explanation of the specific functions which can be used here in the 'functions' chapter of this handbook. These are: 'Switch', 'Dim', 'Local Mood' and 'Flags' + 'process function'. These functions are activated, whenever there is measured a value that is lower then the set-up value (air is too dry!) For 'Moistening' you have to reverse it by hardware.
- ☒ **'Preset 1 (=day)'**: this parameter defines the 'day' threshold preset which is to be used to control the related function. This parameter can be set from 0% humidity to 100% humidity in steps of 1%. By default this preset is set to 100%.
- ☒ **'Preset 2 (=night)'**: this parameter defines the 'night' threshold preset which is to be used to control the related function. This parameter can be set from 0% humidity to 100% humidity in steps of 1%. By default this preset is set to 100%.

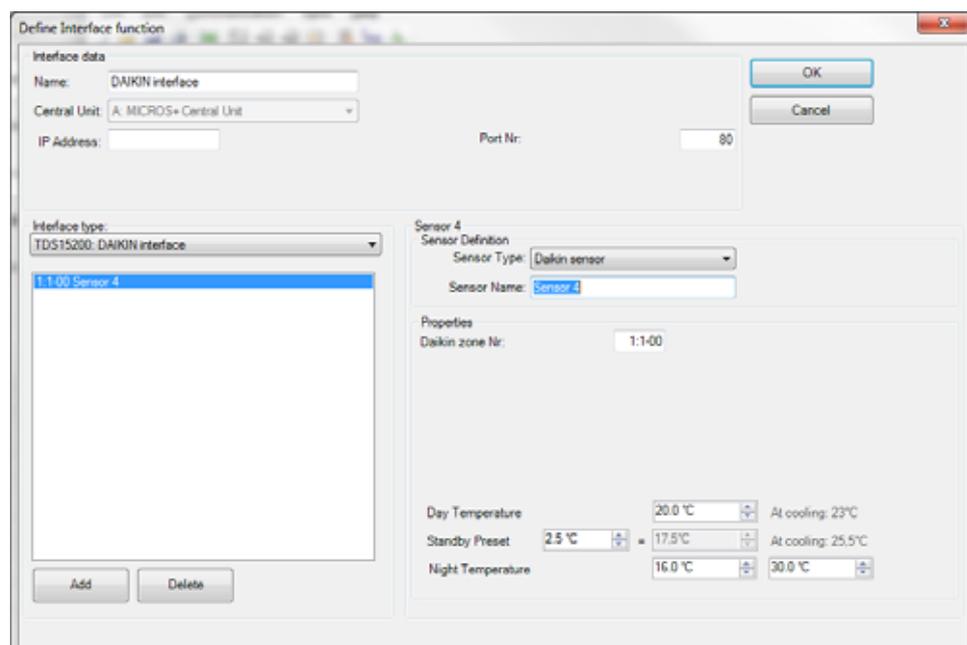


### When selecting a light sensor ('dark', 'regulating' or 'sun' sensor is set):



- ☒ **'Light'**: this parameter defines the function which is to be executed on the moment that the sensor function is activated. Depending on the function which has been chosen, there are more or less parameters to be set. Refer to the description of the specific functions in the 'functions' chapter. You can choose here between the functions 'Switch', 'Dim', 'Local Mood' and 'Flags'.
- ☒ **'Preset 1 (=day)'**: this parameter defines the threshold for the 'day' preset. This parameter can be set from 0 to 944060 Lux, according to a non-linear scale. By default this sensor is set to 0 Lux.
- ☒ **'Preset 2 (=night)'**: this parameter defines the threshold for the 'night' preset. This parameter can be set from 0 to 944060 Lux, according to a non-linear scale. By default this sensor is set to 0 Lux.

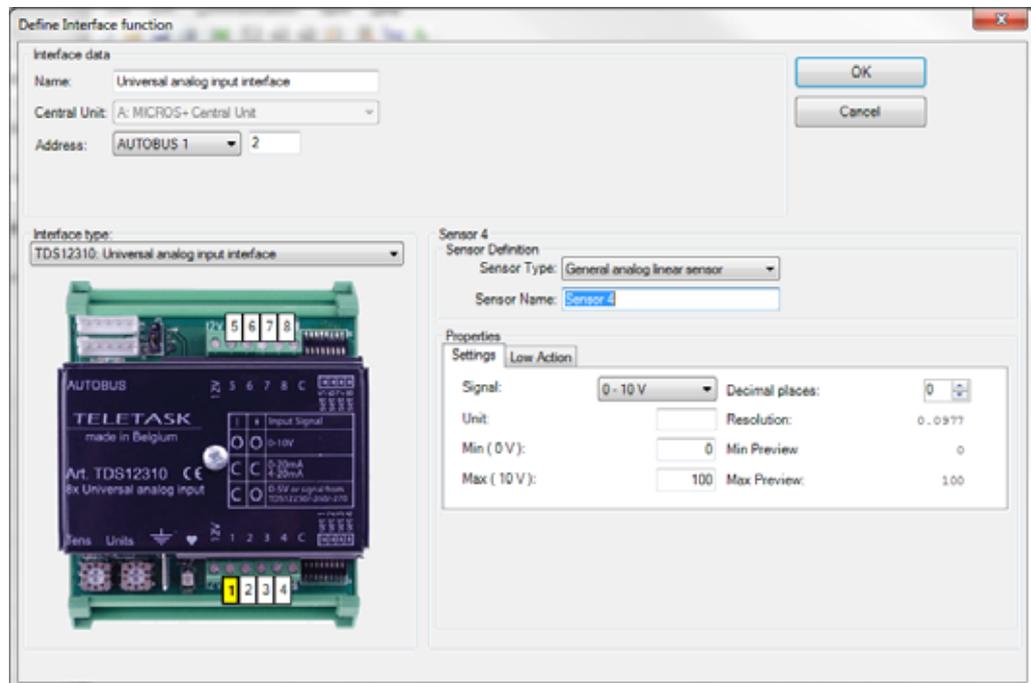
### When selecting a non-TELETASK humidity sensor (DAIKIN, AIRZONE, Mitsubishi Electric):





- ☒ **'Properties'**: here is made a link between the TELETASK addresses and the addresses of the concerned system. See the manual of the concerning TELETASK interface/licence for more information. Here also the set-up 'Day/Night/Stand-by' presets are similar to the TELETASK temperature sensor.

**When selecting a general linear sensor/Wind sensor:**



- ☒ **'Settings'**: here you chose the type of signal, the unity which has to be used, the precision, and the minimum and maximum values depending on the Properties of the sensor.
- ☒ **'Low action'**: here you can, just like for other sensors, couple a function which will be executed when the measured value is too low.
  - 'Preset 1 (=day): this parameter defines the 'day' preset threshold value.
  - 'Preset 2 (=night): this parameter defines the 'night' preset threshold value.

### ➔ In practice

- ☞ Click 'Edit' in the PROSOFT menu bar.
- ☞ Click 'Inputs and other'.
- ☞ Select the desired analogue input interface. The selected 'I' interface turns blue.
- ☞ Click the 'Edit' button. The 'Define Interface Function' window appears on the screen.
- ☞ Select the desired input on the picture of the selected analogue input interface.
- ☞ Select the desired sensor and set the different parameters depending on the needs of your project.
- ☞ Click 'OK' until you are back in the main PROSOFT screen. The analogue input is defined. Don't forget to save your work regularly. TELETASK recommends having an incremental counter in the file name you use. This way you can easily go back to an older version if you think you have made an error in one of your last saved versions.

## 7.3.4. Audio Interfaces

### ➔ The different available parameters

- ☒ **'Audio Zone'**: the audio zone is a room or a group of rooms wherein the audio can be listened coming from one audio power amplifier. Following to this, the volume

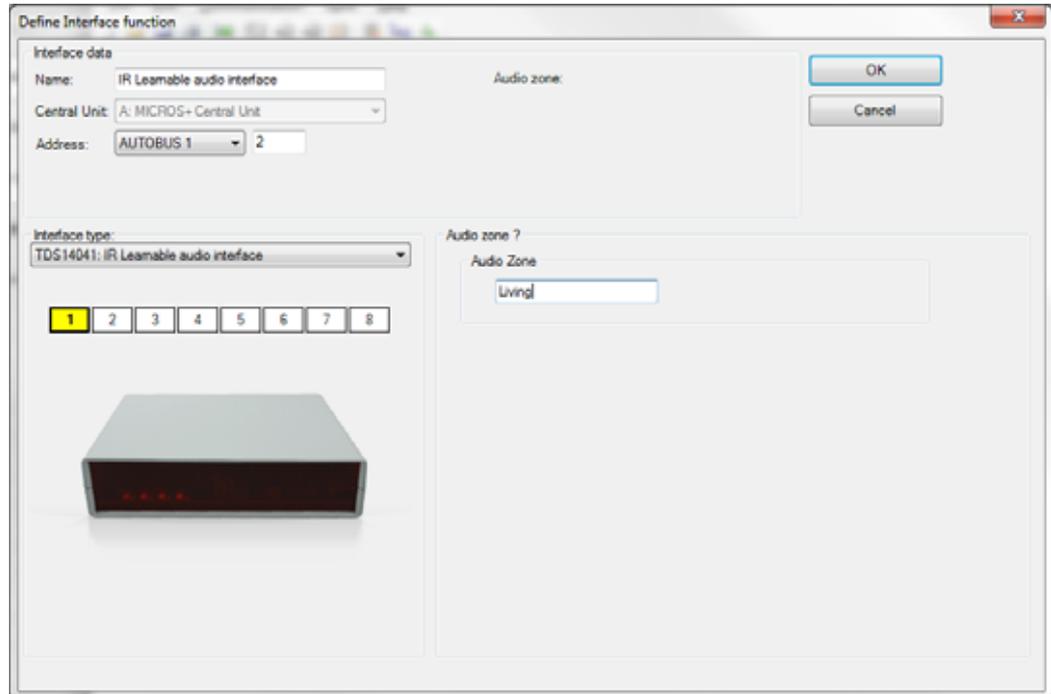


level of the rooms in the same audio zone are depending on each other. As soon as you have been entering a name in the 'audio zone' field, the audio functions for this audio zone are released for use in PROSOFT.

Audio zone example names: 'Bath room', 'Kitchen', 'Office', 'Bathroom parents and dressing', 'bath rooms ground floor', 'outdoor', etc...

Add as much audio zones as the used audio interface is able to control. See for more details in the data sheet of the specific audio interface.

- For TDS14042, see chapter AV-SOFT.



### → In practice

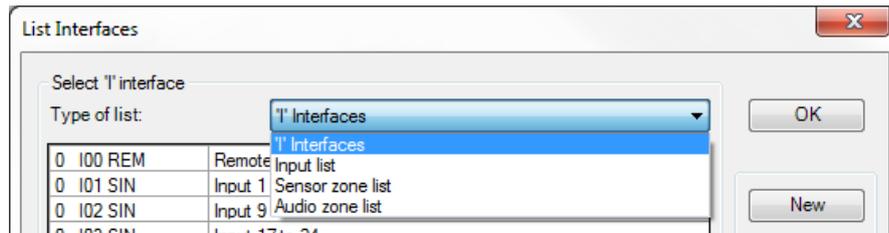
- Click 'Edit' in the PROSOFT menu bar.
- Click 'Inputs and other'.
- Select the desired audio interface by clicking on it.
- Click the 'Edit' button. The 'Define Interface Function' window appears on the screen.
- Select the desired audio zone on the picture of the audio interface.
- Enter the name of the audio zone.
- Click 'OK' until you are back in the main PROSOFT screen. The audio zone(s) is (are) defined now.

### → Overview of the available Audio Interfaces

- H = hardware setting
- Extension Interface = the extension interface is only to be selected if the former address is also the address of the related basic audio interface.
- System Number = to be used for some specific parameters of your audio installation. Refer to the data sheet and the installation manual of the concerned audio interface.

## 7.3.5. Overview list of 'I' Interfaces of your domotics project.

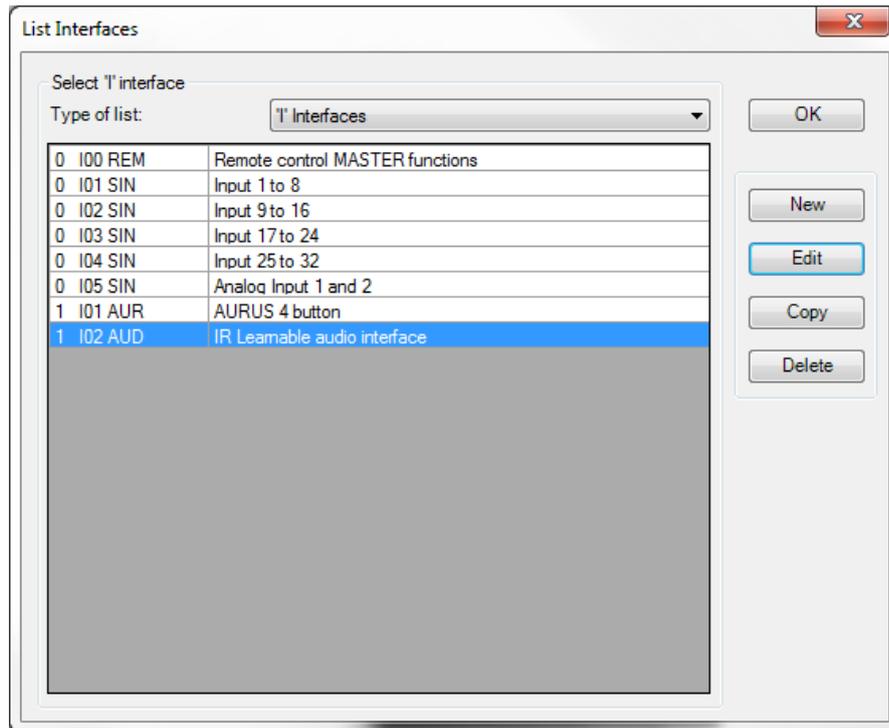
An overview list of the 'I' interfaces, the different inputs, sensors and the audio zones in your project are easily overviewed in the different available lists. These lists are shown in the 'list interfaces' window. Click in the main PROSOFT menu 'Edit', 'Inputs and others' and select the desired on-screen overview list.



There are different lists which can be displayed:

### → List type 'I' Interfaces:

The list contains:



This list gives you an overview of the 'I' interfaces of your TELETASK project, conveniently arranged. In this list the next items are displayed:

- ☒ 'Address': In the first part of the first column there is the software address of the concerned 'I' interface. PROSOFT adds the letter 'I' to remark that it concerns an input interface.
- ☒ 'Group': In the second part of the first column the input interface group abbreviation is displayed.
- ☒ 'Description': the name which you have been giving to the interface.

### Actions:

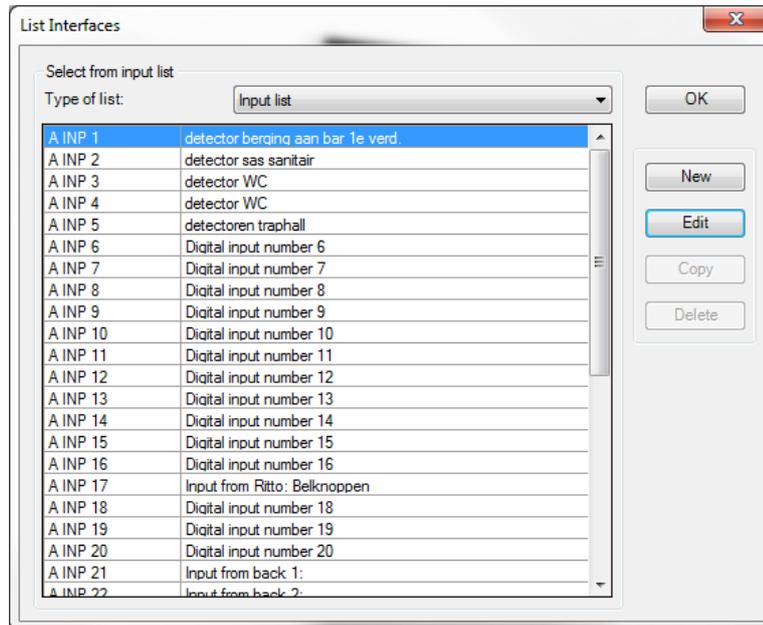
When the desired 'I' interface is found, you can select it and the line becomes blue when selected. The following actions can be taken starting from this list:

- ☒ 'New': Click on the 'New' button to add an extra 'I' interface to your project.
- ☒ 'Edit': Click on the 'Edit' button to open the 'Define Interface Function' window where you can change the settings of that interface.
- ☒ 'Copy': there will be made a copy of the selected interface. All settings, except for the address, are kept.
- ☒ 'Remove': Click to remove the interface from your project. Be careful, there is no undo button for this action, but PROSOFT will ask for a confirmation before it is finally removed.



### → List type 'Input list'

The list contains:



This list gives an overview of the TELETASK individual digital inputs used in your project. Next items are displayed in this list:

- ☒ 'INP': this abbreviation defines that the item displayed on that line is an input.
- ☒ 'Number': the input number is divided in to two parts. The first part is the AUTOBUS address of the digital input interface. The second part is the individual input number on that input interface (for example '4' is the fourth input of 8 or 16).
- ☒ 'Description': contains the name you have been giving to this individual input...

Actions:

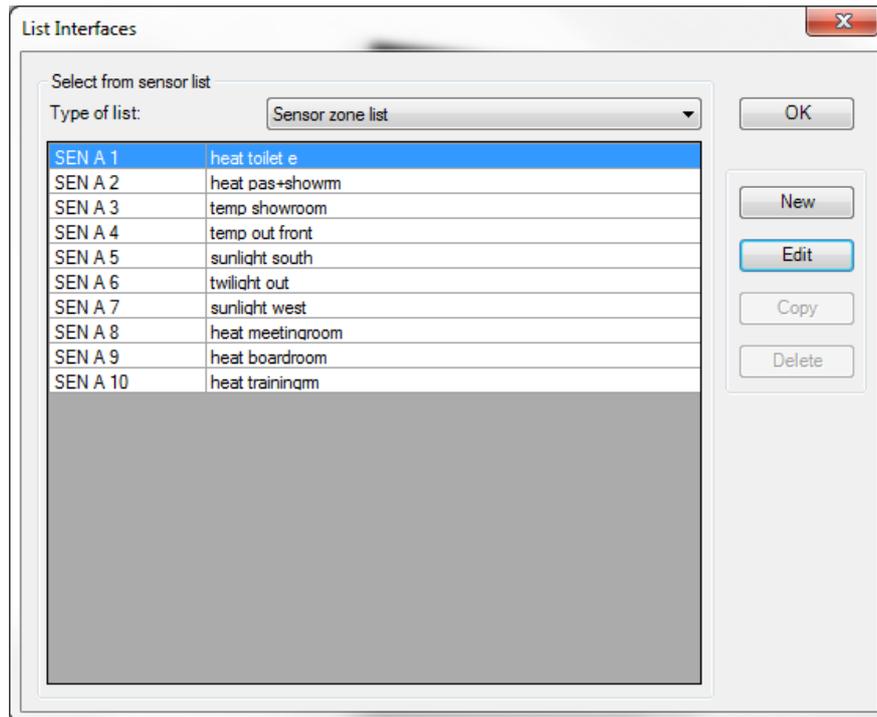
When the desired input is found, you can select it by clicking on it and it will turn blue. The following actions can be done after selecting the input:

- ☒ 'New': to add an extra input to the project.  
 ☞ **It will be necessary to add a new 'I' interface here before you can add an individual input.**
- ☒ 'Edit': Click on the 'Edit' button to go to the 'Define Interface Function' window to be able to change the parameters of the individual input.

### → List type 'Sensor Zone' and 'Audio Zone'

The list contains:

These two lists give you an overview of all sensors and audio zones in your TELETASK domotics project. You can find the following information in both these lists:



- ☒ 'Type': defines whether it concerns a sensor zone ('SEN') or audio zone ('AZN').
- ☒ 'Number': shows the number which was given to the sensor or the audio zone.
- ☒ 'Description': contains the name you have been giving to the sensor or audio zone.

### Actions

When the desired sensor or audio zone is located, you can select it by clicking on it and it will turn blue to confirm that you have selected that line. The following actions can be done in this case:

- ☒ 'New': to enter an additional sensor or audio zone.  
 ⤴ **It will also be necessary to define a new 'I' interface here.**
- ☒ 'Edit': Click on the 'Edit' button to change the parameters of a sensor or audio zone.



## 7.4. TDS12022 AURUS-OLED

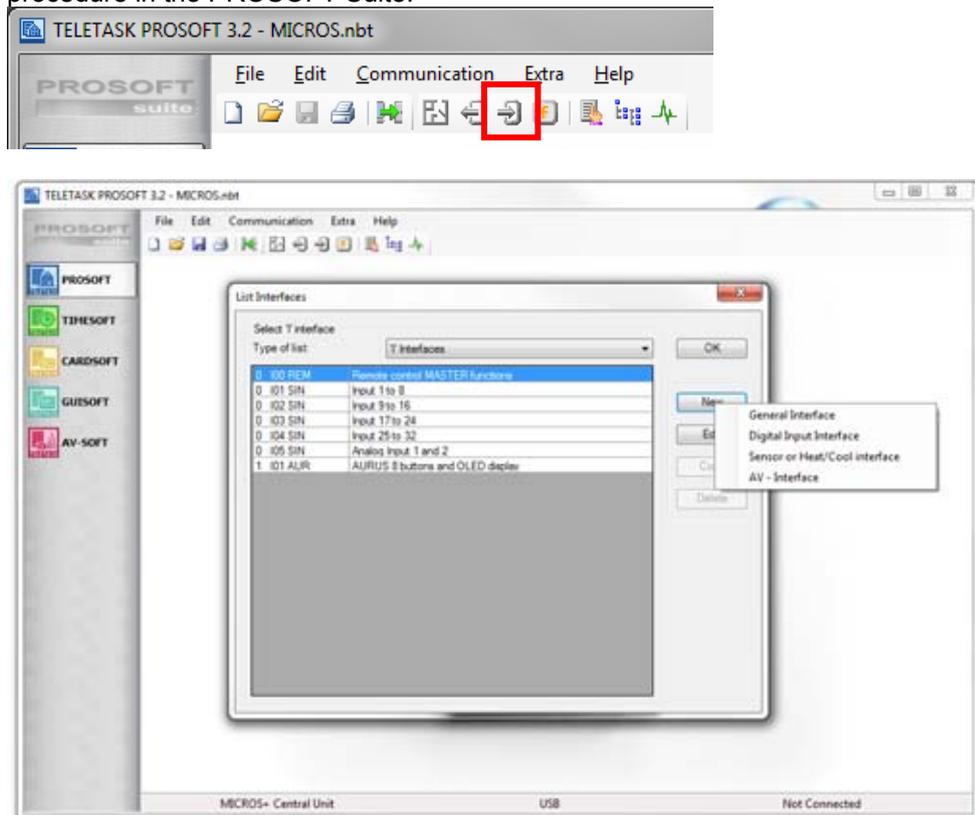


An AURUS-OLED (TDS12022) differs not very much with the other TELETASK touch panels. Here follows a complete overview with special attention to the specific possibilities which are the result of the AURUS-OLED design.

The AURUS-OLED is available from PROSOFT Suite Version 3.2. This version of PROSOFT or a newer version is downloadable on [www.TELETASK.eu](http://www.TELETASK.eu).

### 7.4.1. Add an AURUS-OLED

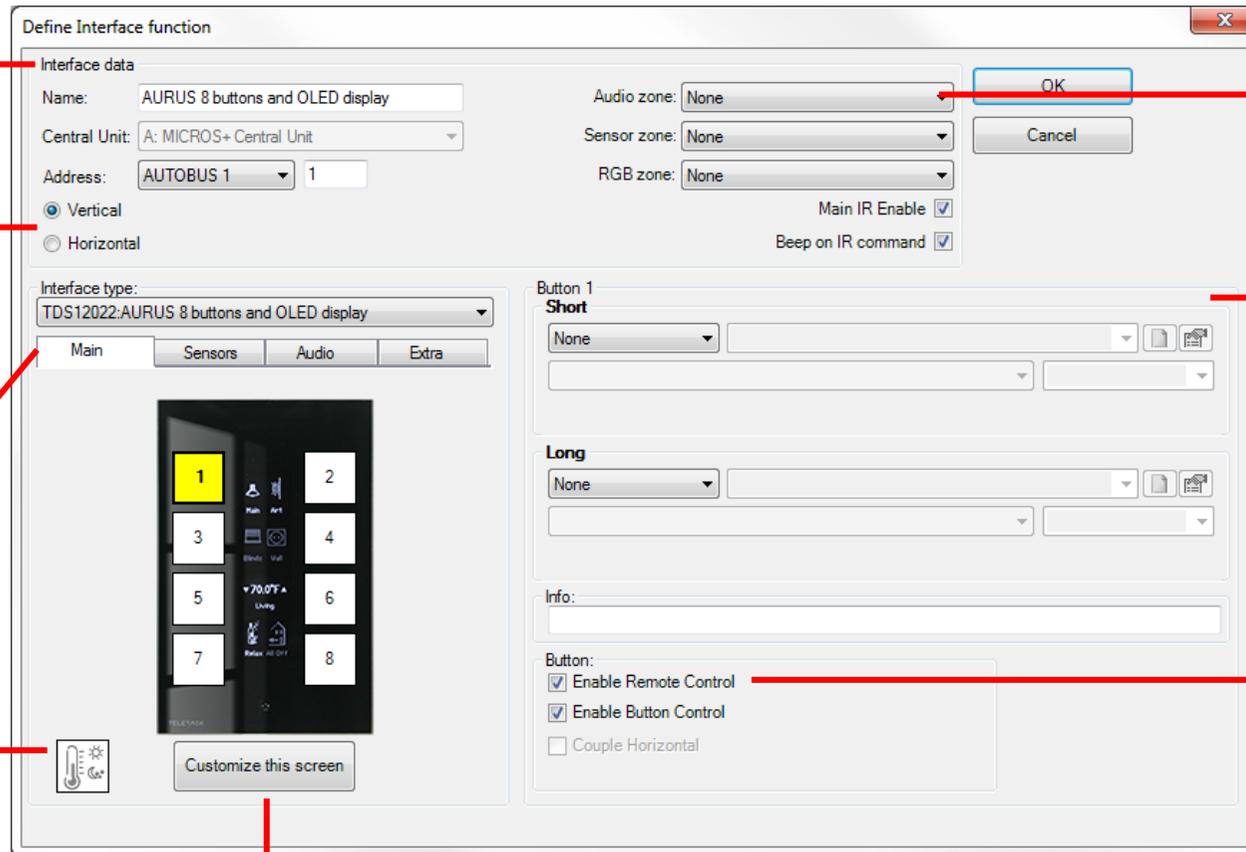
To add an AURUS-OLED to the domotics project, please follow the standard procedure in the PROSOFT Suite.



- ☞ Click in PROSOFT on the icon of the 'I' input interface or choose 'edit inputs and others'.
- ☞ Then click on 'new' and select 'General Interface'.
- ☞ Choose the TDS12022: AURUS OLED out of the list 'Type Interface'.



### 7.4.2. Overview



Settings apply on the complete interface.

Select the orientation of the AURUS-OLED.  
You can change it later on.

Navigate through the different pages on the AURUS-OLED.  
A complete empty page will be displayed in PROSOFT but NOT on the AURUS-OLED.

The built-in temperature sensor.

"Edit this screen": Change the icons and text of the buttons or draw your own icon!

Which zones are applicable for the remote control.

Settings per BUTTON: click in the drawing of the AURUS-OLED on 1 of the 8 buttons and configure the functions for this button.

Settings per button for use by the remote control.



### 7.4.3. Interface data (horizontal/vertical)

For the AURUS (TDS12021) and the AURUS-OLED (TDS12022) there was added an extra option in the 'Interface data' namely the choice between 'horizontal' and 'vertical'. This way you determine how you will mount the touch panel horizontally or vertically.



This setting can always be changed. The configured functions of the buttons won't be deleted.

- ☞ **Pay attention: Always check if the notes are displayed completely on the AURUS-OLED. By turning the AURUS-OLED the positions of the icons and the notes will change.**
- ☞ **Check this in the 'Edit this screen'-menu.**

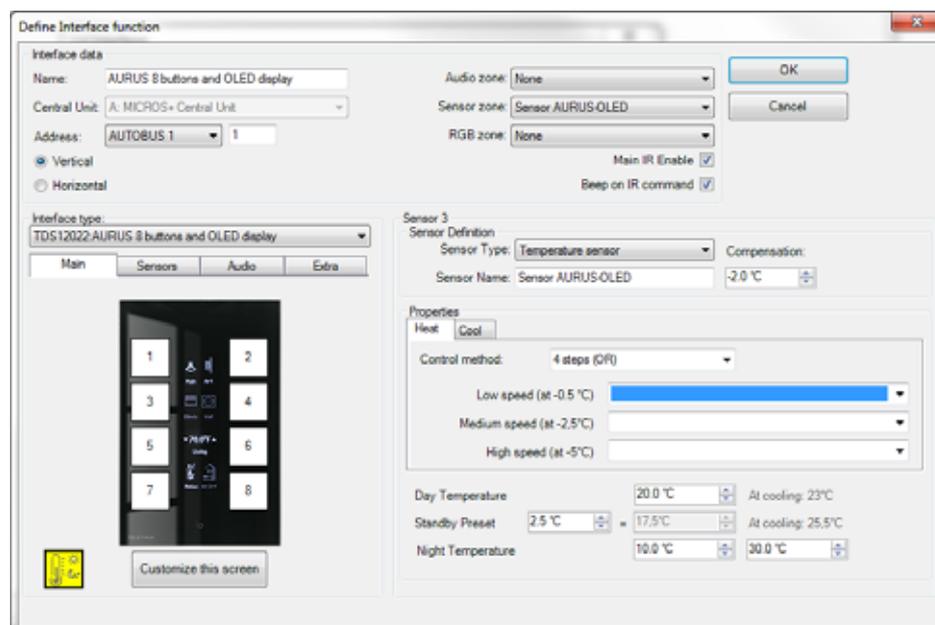
### 7.4.4. Built-in temperature sensor.

The AURUS-OLED contains a built-in temperature sensor. This can be used as sensor zone through the complete Domotics project.

The built-in temperature sensor of the AURUS-OLED isn't activated by default. To activate, follow the following instructions:

Practical:

- ☞ Click on the sensor icon 
- ☞ Choose 'Temperature sensor' as Sensor type and give the sensor a proper name: e.g.: Sensor AURUS-OLED Living.
- ☞ If the sensor will be used to control a heating/cooling system, complete the settings at 'Properties':





## 7.4.5. Pages

### → Main page and general notions.

The AURUS-OLED contains four pages with each eight different buttons. You can thumb through these pages by turning them in a virtual manner. Just stroke with your finger on the hidden buttons to thumb to the next or previous page.

As soon as the AURUS-OLED has been tipped, the main page will illuminate. The eight functions which are defined on the main page must be the functions that the end user needs the most.

In contrast with the sensor- and audio pages, there are no predefined buttons on the main page. The Sensor- and Audio pages contain already all needed settings to regulate the temperature or audio on a user-friendly way. The main page on the other hand will always depend on the domotics project. It is possible to define a sensor or audio function on this page when this function will be used very often.

- ☞ **PAY ATTENTION: there is a difference between an audio-/sensor function and a LCD/VFD (DISPLAY) FUNCTION!**
- ☞ **A sensor- or audio function is always linked to one sensor- or audio zone.**
- ☞ **A LCD/VFD (display) function regulates the sensor- and audio functions depending on the selected zone on the display. Here you always have to foresee a zone-selection button (e.g. 'Display function: sensor: next zone').**
- ☞ **TIP: Program on the first page a coupled sensor function 'preset down' and 'preset up', for the built-in sensor of the AURUS-OLED. This way you will have an easy read out of the temperature in the room where the AURUS-OLED will be placed.**

### → Sensor Page

The sensor page can, just like the main page, be adapted to the customers' wishes. As the AURUS-OLED is extremely suitable for the display and regulation of heating-, cooling-, or fan systems, TELETASK already predefined the functions. The functions on these pages are all LCD/VFD (display) functions. This means that they are depending on the 'zone' button (by default button 7)! A long press on the 'zone' button will lead the user to the page to predefine the temperature presets. The functions on this page are all LCD/VFD (display) functions. This means that they are depending on the 'zone' button (by default button 7)! A long press on the 'zone' buttons leads the user to the page to predefine the temperature.

### → Audio page

The audio page can also be adapted to all the wishes of the end user, just like the main page. As the AURUS-OLED is extremely suitable for the display and control of audio- and video systems, TELETASK already predefined these functions. The functions on this page are all LCD/VFD (display) functions. This means that they are depending on the 'zone' button (by default button 7)!

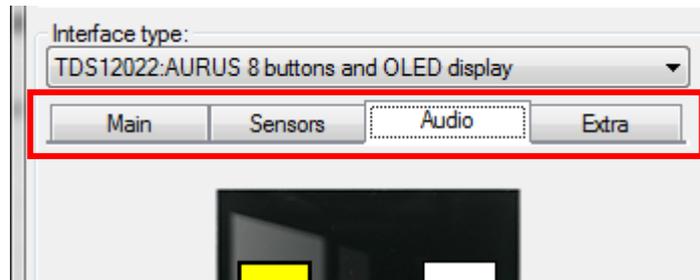


### → Extra page

The fourth and last page is completely adjustable to the wishes of the end user, just like the main page. This page contains no predefined functions.

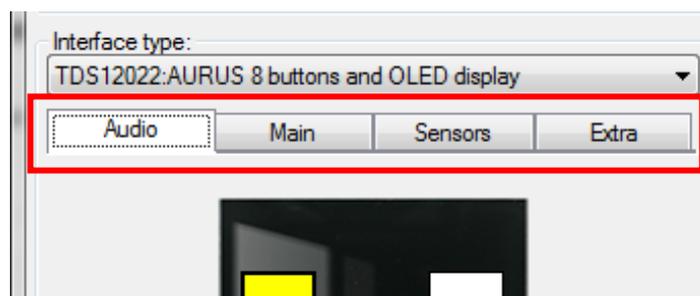
### → Delete or adapt order

It is always possible to adapt the order of the pages or to restrict the number of pages on the AURUS-OLED to only three, two or even one page.



To move a page:

- ☞ Click on the page you want to move and keep the mouse pressed.
- ☞ Move the page to the new place.



When deleting a page, all functions on the page will be deleted and the page will be moved at the back. A page on which no function is predefined and which is not followed by a page with functions, will not be displayed on the AURUS-OLED.

- ☞ **PAY ATTENTION: this page will be displayed in the PROSOFT Suite. It doesn't disappear completely.**

## 7.4.6. Buttons

### → General

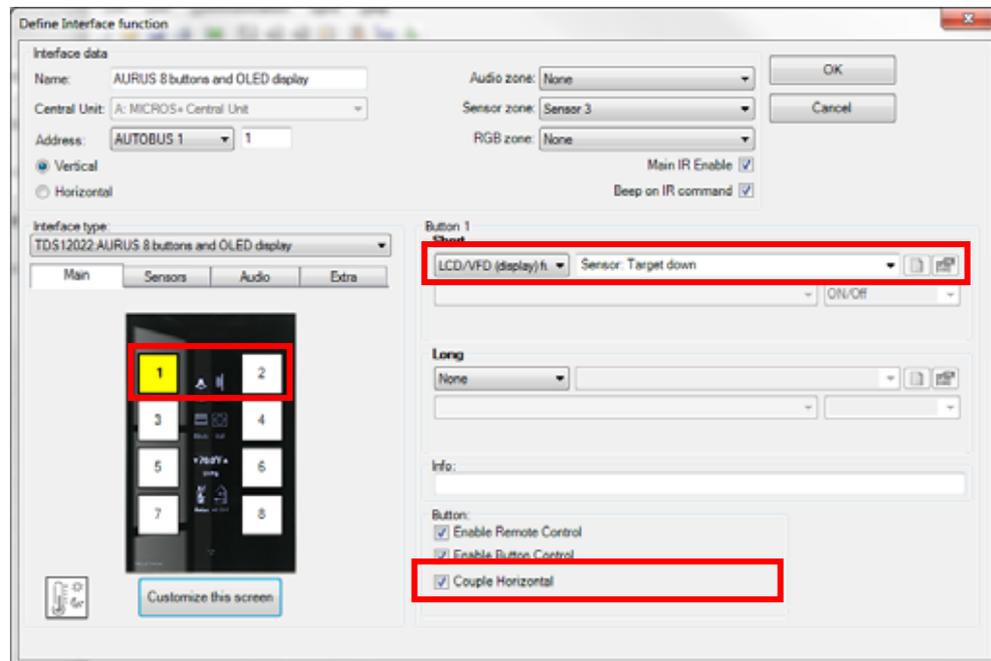
Similar to all the other general interfaces of TELETASK you can program a specific domotics function on every button. An overview of all possible functions, see chapter 'functions'. Next to the 'press short' and 'press long' the AURUS-OLED adds an extra, namely the coupling of the buttons.

### → Coupling buttons

The AURUS-OLED offers the possibility to couple buttons with each other. When mounting vertically the buttons can be coupled horizontally and when mounting horizontally the buttons can be coupled vertically.



- ☞ **Coupling buttons is only suitable for functions where it makes sense to split the control over two buttons, e.g. control of a curtain/shutter, the control of a dimmable light, the control of a temperature setting.**
- ☞ **TIP: always consider the correct way or direction for these functions: up/down, open/close, less/more, in the 'Edit this screen' menu the corresponding arrows can be selected!**



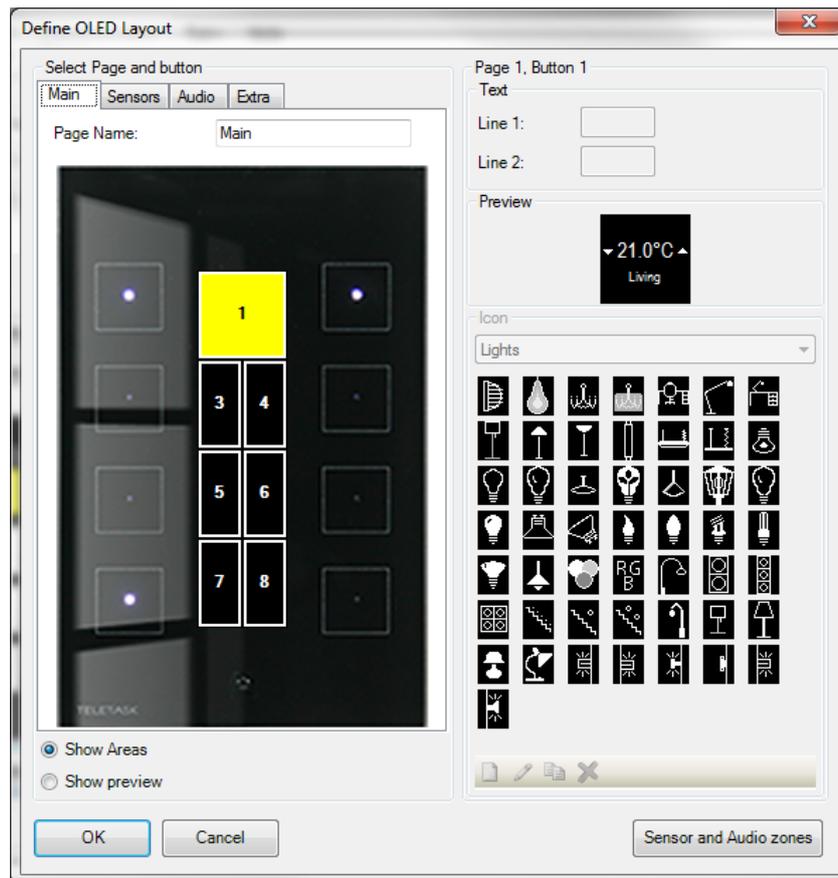
Practical:

- ☞ Click on the first of the two buttons you want to couple. E.g.: button 1.
- ☞ Select under 'short' the first half of the double button combination, f.e. a dimmer or a Display function like 'sensor down'.
- ☞ Click on 'Couple horizontally'.
- ☞ Check the functions which will be automatically defined on this coupled button. In this example = button 2.
- ☞ Click on 'Edit this screen' to finish the details of the coupled buttons: icon, note.

#### 7.4.7. Edit this screen-menu

In this 'Edit this screen'-menu you can adapt the visual details of the touch panels. You can:

- ✓ Change the page name.
- ✓ See a realistic preview of the AURUS-OLED screen.
- ✓ Change or create icons.
- ✓ Adapt the notes.
- ✓ Adapt the sensor- and audio zones.



- ☒ **Page name:** the page name is only for use within the PROSOFT Suite.
- ☒ **Show Areas:** this way you can see which buttons are coupled and which button you are editing.
- ☒ **Show preview:** you will see a visual example of the AURUS-OLED screen.
- ☒ **Text:** Every button is provided with an icon and two lines of text (note). The length of the text is limited to the width of the icon. With coupled buttons there is more place for notes. For some functions the second line will be reserved for the indication of the status; e.g. a dimmer where the dim value is displayed in %.
- ☒ **Icon:** depending on the type of function which is coupled to a button, PROSOFT will suggest an icon. If you want to change this icon you can choose out of the TELETASK library with existing icons (ranked in different categories) or you can draw your own icon!
- ☒ **Sensor and audio zones:** in the underlying screen you can select and reorder the sensor- and audio zones which have to be displayed on the AURUS-OLED. All available zones are selected by default.



### → Draw an icon.

The AURUS-OLED offers the possibility to draw a personalised icon.

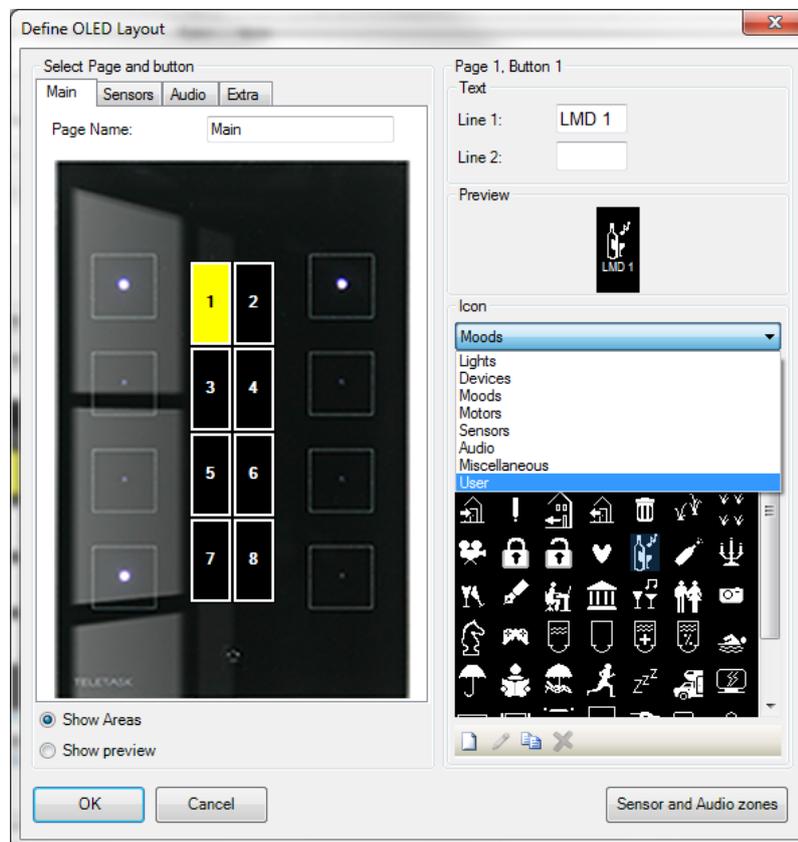
☞ Click on the work bar beneath the list of icons:



☞ Here you can choose respectively 'new icon' - 'edit present icon' - 'copy present icon' and 'delete present icon'.

☞ A new icon is always added to the list 'user'. Only the self drawn icons can be changed and/or deleted.

☞ The TELETASK icons can be copied. They will be copied to the list 'users' with a new name which was entered in the draw screen.



☞ **TIP: the icons of the AURUS-OLED are saved in the .NBT file. They aren't lost when the file is opened on another PC.**

☞ **Also the self drawn icons are kept in the .NBT file.**

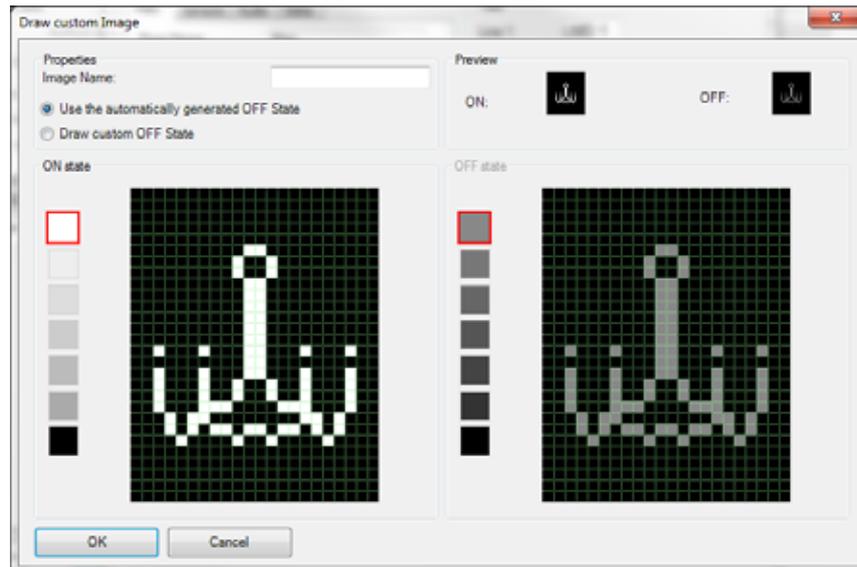
Practical:

☞ Click on 'new icon'

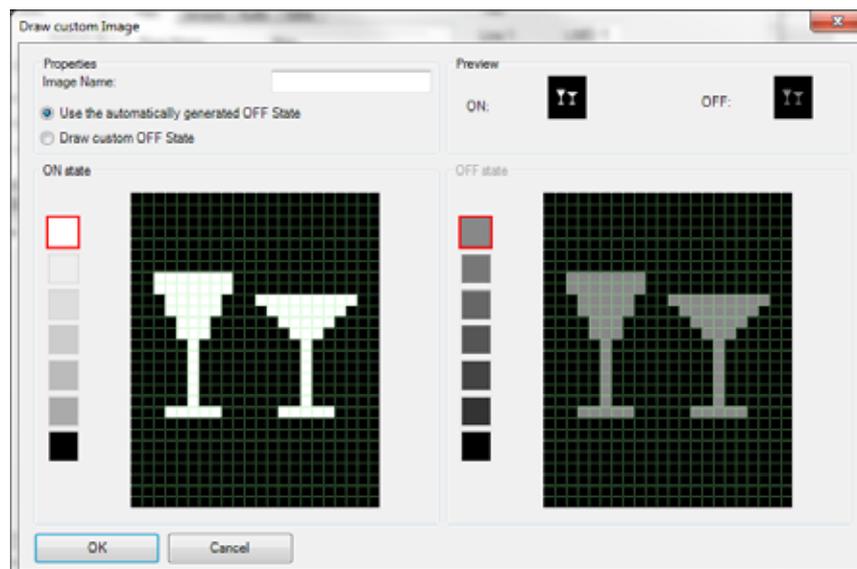


☞ Give a name to the new icon.

☞ Draw the new icon in the left drawing field:



- ☒ ON and OFF State: Every icon knows two states: 'ON' and 'OFF'. Normally the 'OFF' status is automatically built based on the 'ON' status. This means: the 'OFF' status is identical to the 'ON' status but less clear!
- ☒ 'Draw a custom OFF status'. When this is selected the 'OFF' status won't be built automatically. Now you can provide an adapted 'OFF' status. Example:

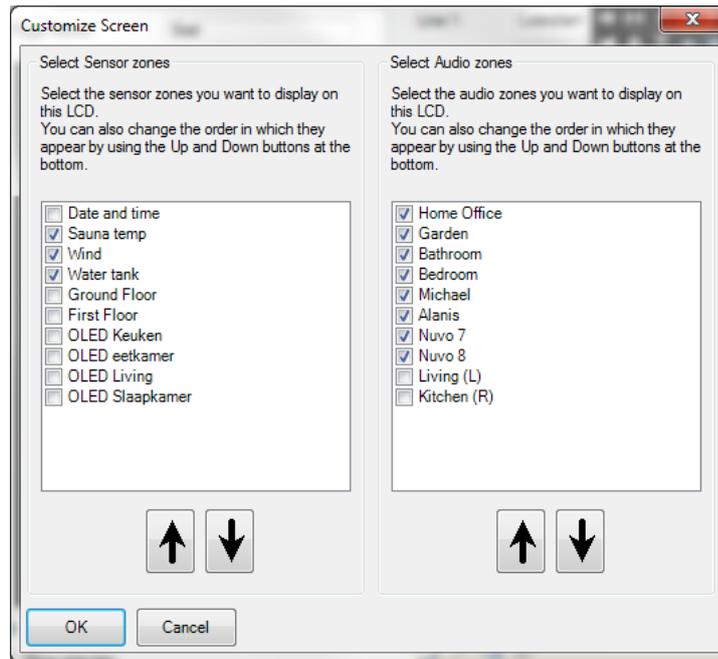


- ☞ **TIP: by clicking a field with the left mouse button, you give the selected pixel the selected colour (always 7 colours available).**
- ☞ **When clicking this field with the right mouse button you erase the color of this pixel!**

#### 7.4.8. Displaying the Sensor and Audio zones.

In the 'edit this screen'-menu, you can, just like all the other control panels with a display, adapt the displayed sensor- and audio zones. Check the selection field out if you don't want to display the sensor or audio zone.

To change the order you have to select a zone and then click on the large arrow 'up' or 'down'.



#### 7.4.9. Delete the AURUS-OLED memory & demand the version number.

When the AURUS-OLED screen isn't built-up correctly, you can 'delete' this (the icons will be saved in the intern memory of the AURUS-OLED by starting up or after sending the NBT to the Central Unit):

Push LONG simultaneously on the two hidden 'thumb'-buttons until the screen turns black and is re-built.



- ☞ When re-starting the AURUS-OLED, the version number of the intern software of the AURUS-OLED will be displayed
- ☞ and the configuration data will be reloaded automatically.



## 8. Functions

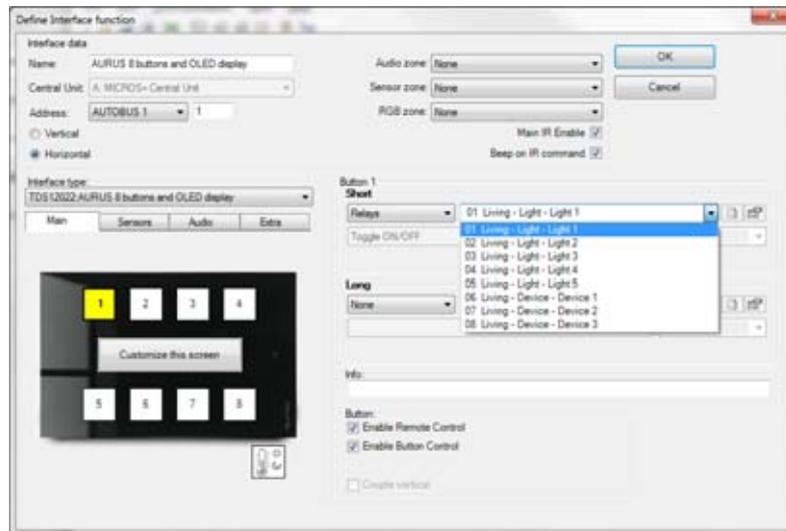
### 8.1. Overview of the different functions

#### 8.1.1. The Relay functions

##### → Description

Relay functions modify the status of a relay between on and off. When somebody pushes a button, the connected relay is switched (the status is changed from OFF to ON or if already ON it is changed to OFF).

##### → The functioning of an interface:



- 'Relay':** this parameter defines the relay which is being switched by this function.

##### Option 'Switch On/Off' (standard)

- 'Short':** with a short push the relay is being switched. In particular this means that the light switches ON when it was OFF and vice versa.
- 'Long':** with a long push the relay is being switched. In particular this means that the light switches ON when it was OFF and vice versa.

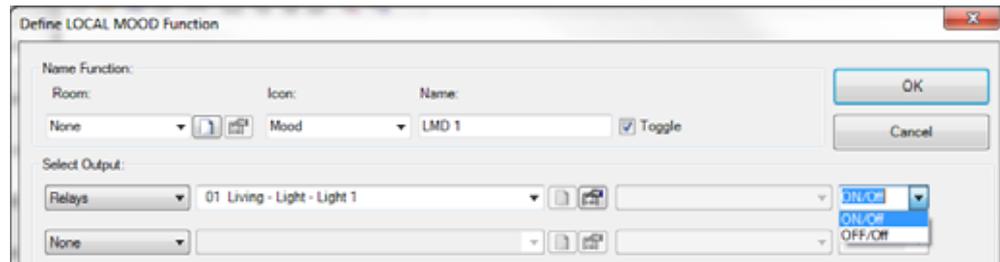
##### Option 'Switch On'

- 'Short':** with a short push the relay is being switched on. In particular this means that the light switches ON.
- 'Long':** with a long push the relay is being switched on.

##### Option 'Switch Off'

- 'Short':** with a short push the relay is being switched off. In particular this means that the light switches off.
- 'Long':** with a long push the relay is being switched off.

##### → Behaviour when the function is used in another function



### 'Relay' type

When the relay is called from another function, the functioning depends on the set target value. Following possibilities can occur:

- 'On'**: the relay switches ON when it was OFF and remains switched ON when it was switched ON.
- 'Off'**: the relay switches OFF when it was switched ON and remains switched OFF when it was switched OFF.
- 'On/Off'**: the relay switches ON or remains switched ON when activating the function and switches OFF when the function is switched OFF.
- 'Off/Off'**: The relay switches OFF and remains switched OFF when the function is switched ON. If the function is switched OFF, then the relay remains switched OFF.

☞ **Not every function can be switched off. Consult for this matter the description of the respective function.**

### → General Remarks

- ☞ **If the function is used from an interface or from another function, if the direction relay of a motor function is activated, then the respective motor function is being executed. Consult the description of the motor function for more information.**
- ☞ **If several relays are being switched simultaneously, then the central unit will switch the different relays consecutively with an adjustable time delay between the two actions. This time delay is adjustable in the 'Extra' 'Options' 'Specials' 'Relays delay' menu and is set by default to 50 msec.**

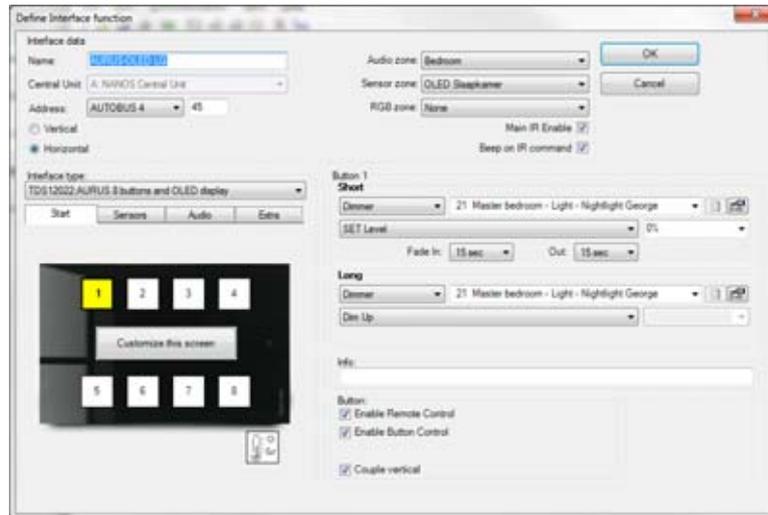


## 8.1.2. The Dimmer functions

### → Description

The dimming functions modify the status of the dimmer output between 0% (= 0V = off) and 100% (= 10V = on) or an intermediate value

### → The functioning of an interface:



- ☒ **'Dimmer'**: this parameter defines the dimmer which is being controlled by the function.

Type 'Switch between LAST level/OFF'

- ☒ **'Short'**: after a short push on the button, the dimmer will switch between 0% and the last active status of the dimmer. When the light is burning at 40%, then with a short push the light will go out (dimming to 0%). Again short pushing switches the light to 40%.
- ☒ **'Long'**: functioning is identical to 'Short'.
  - ☞ **Under 'Long' this function is seldom used, only if due to lack of buttons from one and the same button 2 dimmers can be controlled**

Type 'Switch between: put level/OFF':

- ☒ **'Short'**: after a short push on the button, the dimmer will switch between 0% and a predefined state of the dimmer.
- ☒ **'Long'**: working identical to 'Short'.

Type 'Define Level':

- ☒ Short: The dimmer will be switched to the predefined level.
- ☒ Long: working identical to 'Short'.

Type 'Define last level':

- ☒ Short: the dimmer will be switched to the last level when the dimmer is out.
- ☒ Long: working identical to 'Short'.

Type 'Define last level/100%.'

- ☒ Short: the dimmer will be set on the last level, when the dimmer is out. Otherwise the dimmer will be set to 100%.
- ☒ Long: Working identical to 'Short'.
  - ☞ **This is usable when controlling a dimmer on the TDS12022 AURUS-OLED. See chapter AURUS-OLED for more information.**



### 'Continuously dimming' type

- 'Short'**: This function type can not be selected under 'Short'.
- 'Long'**: when long pushing on the button, the dimmer will make a continuous linear movement between 0% and 100%. With this function the light intensity can be adjusted completely to your needs.
  - ☞ **When you are selecting under 'Short' a 'Switch between LAST level/OFF' type for a particular dimmer, PROSOFT automatically selects under 'Long' the 'Continuously dimming' type for that dimmer. If afterwards the selected dimmer is being modified under 'Short', then the dimmer will follow under 'Long'.**
  - ☞ **If you want to operate another function under 'Long' then this automatic suggestion can always be modified. Thus the automatic following is cut off.**

### 'Dimming Up' type:

- 'Short'**: This function type can not be selected under 'Short'.
- 'Long'**: when pushing long on a button, the dimmer will increase from the active status till 100%.

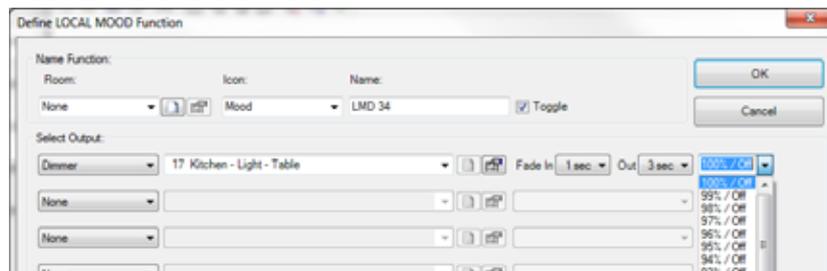
### 'Dimming Down' type:

- 'Short'**: this function type can not be selected under 'Short'.
- 'Long'**: when pushing long on a button, the dimmer will decrease from the active status till 0%.

### Remarks:

- ☞ **For optimal ease of use it is recommended to control only one dimmer for each button.**
- ☞ **When the dimmer output has been set on a small value (smaller than 10%), then when being reactivated with a short push, your TELETASK domotics system, will set the status of the dimmer automatically at 10%. From this value on most light points are softly lit, so that the 'on' status is visible.**

### → Behaviour when the function is used in another function



- 'Target Value'**: this parameter defines the desired dim status. The Parameter can be set from 0% till 100%. The target value is standard set On 100%. Following settings are possible:
  - "xx%": when a function is activated the dimmer will go to the set target value (0-100%).
  - "xx%/Off": when a function is activated the dimmer will go to the set target value (0-100%). When the function is switched off the dimmer goes out (0%).

### Remarks:

- ☞ **Not every function can be switched off. Consult for this matter the description of the respective function.**

### → Parameters

- 'Fade in'**: this parameter defines the needed time to bring the dimmer output from 0% to 100%. The 'Fade in' can be set on 16 fixed predefined times: 0,5 sec;1 sec;



2 sec; 3 sec; 4 sec; 7 sec; 10 sec; 15 sec; 30 sec; 1 min; 2 min; 5 min; 15 min; 30 min; 1 hour. Standard 'Fade in' is set on 1 sec.

- ☒ **'Fade out'**: this parameter defines the needed time to bring the dimmer output from 100% to 0%. The 'Fade out' can be set on 16 fixed predefined times (identical to 'Fade in'. Standard 'Fade out' is set on 3 sec.
- ☒
  - ☞ **At an increase towards the desired status the dim speed is calculated in accordance with the set 'Fade in': The dim speed amounts to 20% of the 'Fade in' when the difference between the desired and the active status of the dimmer is 20%.**
  - ☞ **At a decrease towards the desired status the dim speed is calculated in accordance with the set 'Fade out': The dim speed amounts to 20% of the 'Fade out' when the difference between the desired and the active status of the dimmer is 20%.**

### 8.1.3. The Motor functions

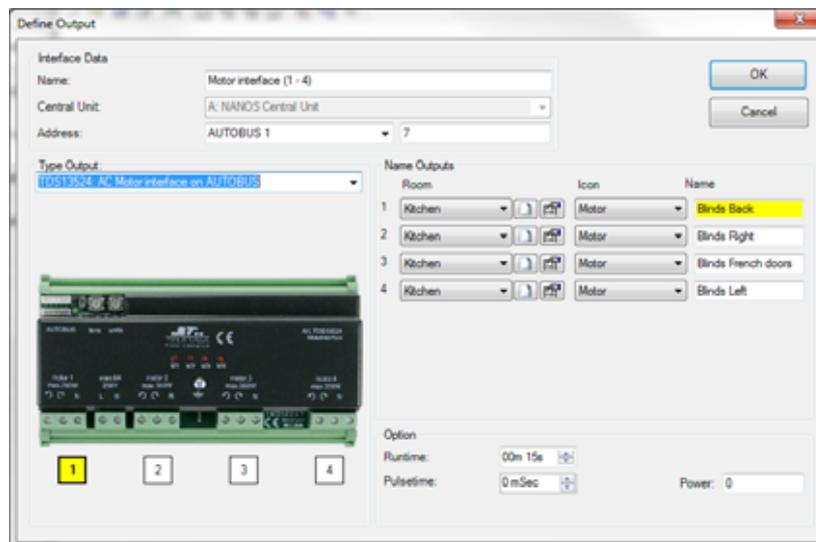
#### → Description

The motor functions are used to control AC and DC motors as used in electrical curtains, shutters, drapes, sun blinds, sub screens, etc...

The function can control the motor rotating left, right and in stop position. This paragraph considers the Motors which are controlled by a Motor Interface (TDS13524, TDS 13525). For Motors controlled by 2 independent relays, please consult 'the motor function'.

#### → The different available parameters

Within the function:



- ☒ **'Name'**: The name giving of a 'Motor' function is separated in 3 parts:
  - ☐ **'Room'**: The room where the motor is situated.
  - ☐ **'Icon'**: Invisible of Motor icon.
  - ☐ **'Description'**: Introduce here a short and clear description of the Motor function.
- ☒ Is determined by the direction of rotation of the motor.
- ☒ **The run time**: This time determines the duration of the active status of the power relay. When the set run time has elapsed the power relay (and the motor with it) will be switched off. The run time can be set from 0 sec. till 250 sec. in steps of 1 sec. The run time of a motor function is set standard at 60 sec.
- ☒ **Direction**: Define the status of the direction relay.



- 'Up'**: the direction relay is switched on; this corresponds with the arrow turning right on the TDS13524 and TDS13525 interfaces.
  - ☞ The direction 'Up' is often being identified with an opening movement.
- 'Down'**: the direction relay is switched off, this corresponds with the arrow turning left on the TDS13524 and TDS13525 interfaces.
  - ☞ The direction 'Down' is often being identified with a closing movement.
- Power**: Define the status of the power relay.
  - 'Start'**: the power relay is switched on, the motor is active.
  - 'Stop'**: the power relay is switched off, the motor is not active.
- 'Pulse time'**: the pulse time can make the motor moving pulsing with little shocks. You can set the pulse time between 0 msec. and 600msec. in steps of 40 msec. Standard there is no pulse time set. This option is mostly used for tipping over f.e. sun blinds.
  - ☞ **'Cabling'**: In order to set the parameters of your TELETASK domotics system in a logical and user friendly way, it is suggested to cable all motors in accordance with the associative meaning of 'Up' and 'Down' ('Up' = open, 'Down'= close). If the motor functions differently, it is advisory to turn around the direction cabling of the respective motor.

### → Working of an interface

#### Type 'START/STOP'

- 'Short'**: With a short push on the button the motor is activated, opposite the last direction. If the shutters were opened the last time, then when being pushed 'short' the shutters will close. The motor will switch off when the run time has elapsed. If you push 'short' on the button when the motor is activated, then the motor will stop immediately.
- 'Long'**: working identical to 'Short'.

#### Option 'UP/STOP'

- 'Short'**: With a short push on the button the motor is activated in the 'up' direction. The motor will switch off when the run time has elapsed. If you push 'short' on the button when the motor is activated, then the motor will stop immediately.
- 'Long'**: working identical to 'Short'.

#### Option 'DOWN/STOP'

- 'Short'**: With a short push on the button the motor is activated in the 'down' direction. The motor will switch off when the run time has elapsed. If you push 'short' on the button when the motor is activated, then the motor will stop immediately.
- 'Long'**: working identical to 'Short'.

#### Option 'START/STOP continue'.

- 'Short'** this type of function is not available under 'Short'.
- 'Long'**: when pushing the button long the motor will be activated reverse to the last executed direction. The motor remains active during the long push. When you stop pushing, the motor will be switched off. The motor also switches off after a predefined time.
  - ☞ **When there was set a pulse time for the motor, it will move in little shocks when pushing the button long.**

#### Option 'UP/STOP continue'

- Short**: this type of function is not available under 'Short'.
- Long**: when pushing long on the button, the motor in the 'UP' direction will be activated. The motor remains active during the long push. When you stop pushing the motor is switched off immediately. The motor also switches off after a run time.

#### Option 'Down/Stop continue'.

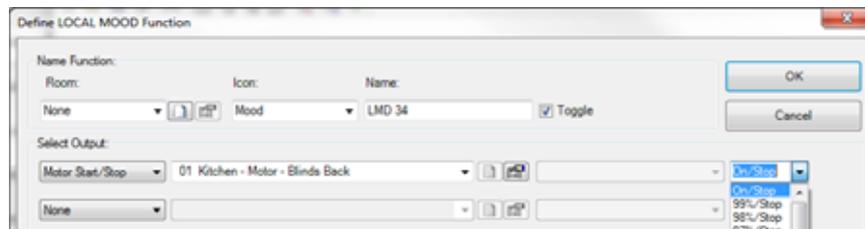
- Short**: this type of function is not available under 'Short'.
- Long**: when pushing the button long the motor in the 'DOWN' direction will be activated. The motor remains active during the long push. When you stop



pushing, the motor is switched off immediately. The motor also switches off after a run time.



### → Function behaviour when used in another function



- Target value: this parameter defines the state of the direction relay or the power relay.

#### 'Motor START/STOP' type

When the function is switched on the 'START/STOP' will act in accordance with the status as described in the target value. Following target value is available:

- 'xx%'**: The motor is active for a certain operation time. The operation time is deducted in percentage from the end of run time. With a target value of 50%, the operation time will amount to 50% of the end of run time. This target value can only be set with a function which can not be switched off.
- 'xx%/Stop'**: When the function is switched on the motor will be active for a certain operation time. The operation time is deducted in percentage from the end of run time. With a target value of 50%, the operation time will amount to 50% of the end of run time. When the function is switched off the motion of the motor will stop.
  - ☞ **Be aware that function can be switched off, only when is active. This is true during the run time of the motor.**
  - ☞ **Normally the direction of the motor depends on the set target value.**
  - ☞ **When the 'Local mood' controls several motors, the direction will be set by the first motor. All following motors will be activated in the same direction.**
  - ☞ **When the target values are set at 20% or less, then the motor movement will occur in little shocks when a pulse time has been put in for the respective motor.**

#### 'Motor UP/DOWN' type

When the other function is switched on the 'motor UP/DOWN' behaves in accordance with the target value as described in the status. Following target values are available:

- 'Up'**: During the set run time the motor is activated in the direction 'Up'.
- 'Down'**: During the set run time the motor is activated in the direction 'Down'
- 'Up/Down'**: During the set run time the motor is activated in the 'Up' direction, when the other function is activated. When the other function is switched off the motor will be activated during the set run time in the 'Down' direction. This functioning implies that when the function is switched off during the 'Up' movement of the motor, the motor will become active immediately in accordance with the 'Down' movement.
- These target values are available only with functions which can be switched off.
- 'Down/Down'**: When the function is switched on the motor will be activated for the set time in the 'Down' direction. When the function is switched off the motor remains inactive, since the motor was already 'Down'.
- Remarks:
  - ☞ **Not every function can be switched off. Consult for this matter the description of the respective function.**

## 8.1.4. The Motor functions.

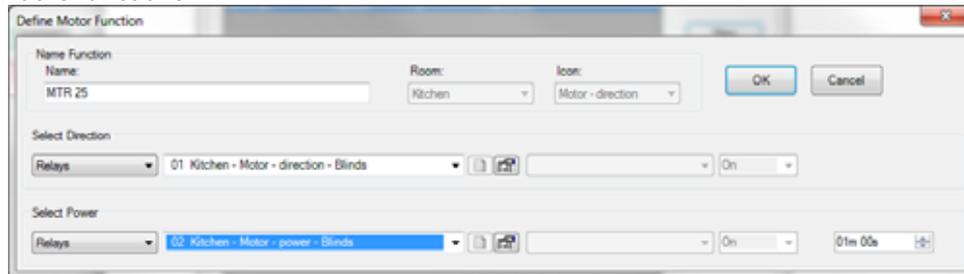
### → Description



The motor functions are used to control the AC and DC motors of e.g. electrical sun blinds, curtains, shutters, The function can activate the motor turning left- or right and stop it on every moment. This paragraph considers the motors which are controlled by 2 independent relays. For motors controlled by a Motor Interface (TDS13524, TDS13525) please consult 'Motors'.

### → Parameters

At the functions



- 'Name': the naming of a 'Motor' function is divided in 3 parts:
  - Space: this parameter is automatically set similar to the value input of the direction relay.
  - Icon: this parameter is automatically set similar to the value input of the direction relay.
  - Description: enter here a short and clear description for the Motor function.
- The direction relay: the status of this relay determines the rotation of the motor.
- The power relay: this relay activates the motor.
- The run time: this time determines the duration of the active status of the power relay. When running out of the predefined run time the power relay (and the corresponding motor) is switched off. The run time is adjustable form 0 sec. to 250 sec. in steps of 1 sec. Standard the run time of a motor function is set on 20 sec.
- Working: the working is identical to the working of the Motor, with exception of the Pulse time. This is not supported for the motor function.



## 8.1.5. The Timer functions

### → Description

The timer functions switch another function during a predefined time to the desired status.

### → Parameters

Within the function



- ☒ **'Name':** Introduce here a short and clear name for the 'Timer' function.
- ☒ **'Select Output':** this parameter defines the de function which has to be activated for a certain time. Depending on the function which is being integrated, more or less parameters will be defined. Consult for this matter the description of the specific functions. The functions which can be operated in accordance with a timer function are : 'Relay', 'Dimmer', 'Local Mood', 'Fan', 'Flags', 'If-Then-Else' and 'Process'
  - ☞ **Use in a timer function only functions which can be switched off.**
- ☒ **'Status':** this parameter defines the wanted status into which the function has to be brought for a certain time. The status can be set at 'On', 'Off', or any applicable intermediate value (e.g. for dimmers)
- ☒ **'Duration':** this parameter determines how long the selected function will have to remain active in the wanted status. When the duration has elapsed the function switches off (if possible).

When calling from another function



- ☒ **Target value:** This parameter determines the wanted status of the 'Timed' function when it is called from another function.

### → Standard function behaviour on an interface

'Timed' type

- ☒ **'Short':** With a short push on the button the selected function is activated for the whole duration, e.g. the lamp is switched on. When the duration has elapsed, the 'Timed' function will switch off the selected function.
- ☒ **'Long':** With a long push on the button the selected function is activated for the whole duration. When the duration has elapsed, the 'Timed' function will switch off the selected function (if this can be switched off).
  - ☞ **A 'Timed' function can not be switched off. This switches off automatically when the duration has elapsed.**
  - ☞ **Activating the 'Timed' function when the previous duration has not yet elapsed, will activate the 'Timed' function again without taking into**



account the previous duration. Consequently the duration will be run through completely.

- ☞ **When the function controlled by the timed function is switched by another function to the state as described in the timed function while the timed function is active (time runs), then the state of the function will not change when the time has elapsed.**  
I.e. when the light is on during the timed function and that light is again switched on by a local mood during the timed function, then the light stays on after the time has elapsed.

#### 'Motion Detector' type

When a 'Motion Detector' function is selected then the names 'Short' and 'Long' are modified into 'When closing' and 'When opening'. This happens because the option 'edge triggered' with a 'Motion Detector' function is set automatically. Consult for this function part \*\*\*\*

- ☒ **With motion ('On closing'):** When the motion detector detects a movement, the selected function will be activated in accordance with the wanted status. As soon as no movement is detected any more the respective output remains active for the set duration to switch off afterwards.
  - ☞ **When the selected function was already in the wanted status before the movement was detected, then the function will not be switched off after the duration has elapsed.**
  - ☞ **A 'Motion Detector' function can only be selected in the 'When closing' mode of a digital input.**
  - ☞ **The 'On opening' mode can still be set independently, but is used very seldom used.**
  - ☞ **A motion detector has always to be connected to a 'Motion Detector' function. Connecting another function to a motion detector, will result in an unwanted or faulty functioning of the motion detector.**
  - ☞ **When the function controlled by the motion detector function is switched by another function to the state as described in the motion detector function while the timed function is active (time runs), then the state of the function will not change when the time has elapsed.**  
I.e. when the light is on because of the motion detector function and that light is again switched on by a local mood during the timed function, then the light stays on after the time has elapsed.

#### ➔ Function behaviour when used in another function

##### 'Timed' type

The 'Timed' function can be selected from another function. When the other function is switched on the 'Timed' function will behave as described in the target value:

- ☒ **'On':** The 'Timed' function is activated. When the duration has elapsed the 'Timed' function will switch off. Activating the function during the duration, switch on again the 'Timed' function, without taking into account the time which has already elapsed.
- ☒ **'Off':** No action with the 'Timed' function is executed.
- ☒ **'On/Off':** The 'Timed' function is activated. When the duration has elapsed, the 'Timed' function switches off automatically. When the function is switched off no action is taken with the 'Timed' function. This implies that the 'Timed' function after the set duration switches off automatically.
- ☒ **'Off/Off':** When the function is switched on or off, the 'Timed' function takes no action.
  - ☞ **The other function can be switched off only when all functions in the other function are 'true'. For the 'Timed' function this implies that the timer has to be active.**
  - ☞ **Not every function can be switched off. Consult for this matter the description of the respective function.**



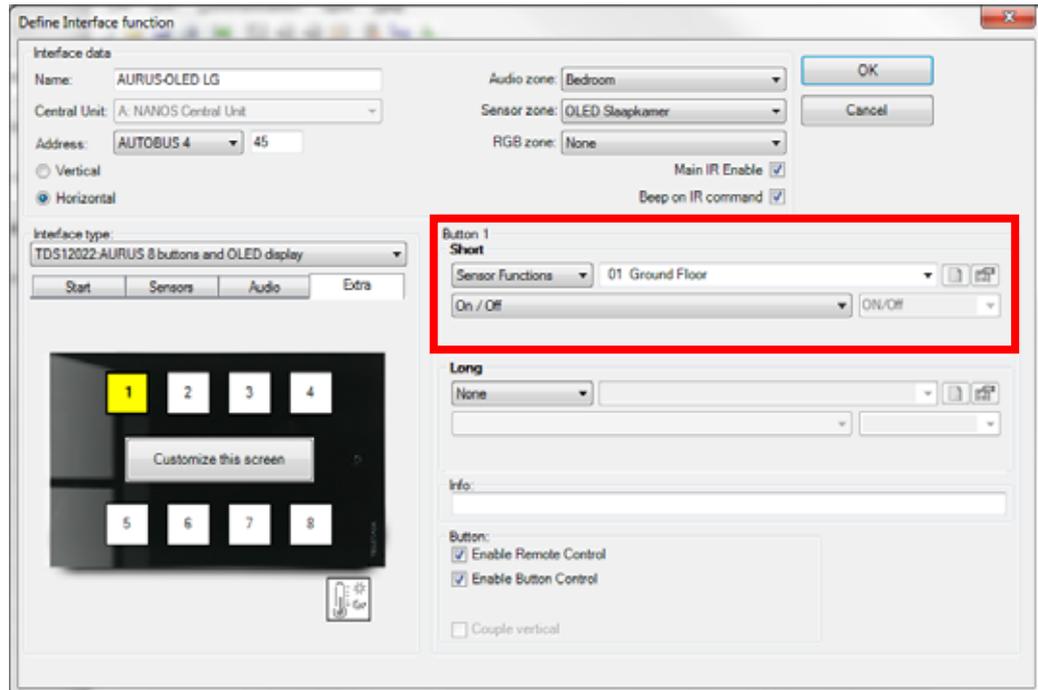
## 8.1.6. The Sensor Functions

### → Description

The sensor functions activate (sensor) threshold values which your TELETASK domotics system will use to execute certain actions. When the measurements of the TELETASK temperature, humidity or light sensor exceed (below or beyond) these values, a suitable action is taken.

### → Parameters

The function itself



- ☒ **'Sensor'**: this parameter defines the sensor or sensor zone, for which the different sensor functions have to be represented. In this field you can only select the sensors to which there was already coupled a control method.
- ☒ **'Sensor functions'**: select the sensor function depending on the wanted threshold value.
  - ☐ **'Temperature sensor'**: when the temperature sensor is selected, the following sensor functions are available.
    - **'On/Off'**: this function toggles the temperature measurement for the corresponding zone between on/off. When off the zone is inactive which means that no heat or cool action will take place.
    - **'Preset: Day'**: this function selects the 'Day' preset as active threshold value.
    - **'Preset: Night'**: this function selects the 'Night' preset as active threshold value.
    - **'Preset: Standby'**: this function selects the 'Standby' preset as active threshold value.
    - **'Preset: Frost protection'**: this function selects the 'Frost protection' as active threshold value.
    - **'Preset: Up'**: this function lowers the valid threshold value with 1 step = 0.5°C.
    - **'Preset: Down'**: this function raises the valid threshold value with 1 step = 0.5°C.
    - **'Preset: Toggle Day/Night'**: this function switches the threshold value between 'Day' (on) and 'Night' (off).



- **'Preset: Toggle Day/Standby'**: this function switches the threshold value between 'Day' (on) and 'Standby' (off).
  - **'Preset: Toggle Standby/Night'**: this function switches the threshold value 'Standby' (on) and 'Night' (off).
  - **'Window open: Set frost protection'**: this function activates the 'Frost protection' as active threshold value, when a window is opened. When the window is closed then this function will activate the latest active preset 'Day', 'Night' or 'Standby'.
  - This function is developed specifically to be used with a window contact.
  - **'Mode: Auto'**: This function activates the mode in which the integrated cool/heat system will cool or heat when needed. This is done automatically.
    - ☞ This function is only available when both the 'Heat' and 'Cool' parameters of the TELETASK sensor is defined or when an Airzone system is integrated.
    - ☞ Because of the complex functioning of the 'Mode: Auto', it might useful to switch of this functionality. This can be done in the menu 'Extra>Options'. In the sensor window you can switch the 'Mode: Auto' off.
  - **'Mode: Cool only'**: This function activates the mode in which the integrated cool/heat system will only cool when needed.
    - ☞ This function is only available when both the 'Heat' and 'Cool' parameters of the TELETASK sensor is defined or when an Airzone system is integrated.
  - **'Mode: Heat only'**: This function activates the mode in which the integrated cool/heat system will only heat when needed.
    - ☞ This function is only available when both the 'Heat' and 'Cool' parameters of the TELETASK sensor is defined or when an Airzone system is integrated.
  - **'Mode: Heat+'**: This function activates 'Heat+' mode as described by the Airzone heat/cool system.
    - ☞ This function is only available when an Airzone system is integrated. Use the optional available TDS14060 Airzone Interface for this integration.
    - ☞ **'Mode: Ventilation'**: This function activates the concerned temperature zone in the ventilation function when needed. (AIRZONE, DAIKIN,)
  - **'Mode: Stop system'**: This function switches the complete Airzone system off. No action will be taken caused by a measurement of any sensor in a sensor zone.
    - ☞ This function is only available when an Airzone system is integrated. Use the optional available TDS14060 Airzone Interface for this integration.
    - ☞ 'Mode: Speed: SLOW': puts the speed of the Heat/Cool system at 'SLOW', only when applicable (TELETASK Sensor with multi step control, DAIKIN,).
    - ☞ 'Mode: Speed: MEDIUM': puts the speed of the Heat/Cool system at 'MEDIUM', only when applicable (TELETASK Sensor with multi step control,).
    - ☞ 'Mode: Speed: FAST': puts the speed of the Heat/Cool system at 'FAST', only when applicable (TELETASK Sensor with multi step control, DAIKIN,).
    - ☞ 'Mode: Direction X': puts the air valve of the airco system towards a certain direction or 'SWING', only applicable (DAIKIN,).
- ☐ **'Humidity and Light sensor'**: when the humidity or light sensor is selected, the following sensor functions are available.
- **'Preset: Off'**: the sensor value is switched off. The connected function is not switched; manual operation of this function is possible.
  - **'Preset: Day'**: this function selects the 'Day' preset as active threshold value.



- **'Preset: Night'**: this function selects the 'Night' preset as active threshold value.
- **'Preset: Up'**: this function lowers the valid threshold value with 1 step = 1% (humidity), non linear Lux value (light).
- **'Preset: Down'**: this function raises the valid threshold value with 1 step = 0.5°C.
- **'Preset: Toggle Day/Night'**: this function switches the threshold value between the 'Day' value (on) and the 'Night' value (off).
- **'Preset: Toggle Day/Off'**: This function switches the threshold value between the 'Day' value (on) and no threshold value (off).

☞ **The sensor functions for the selected sensors are only available when all parameters with the analogue interface have been defined correctly.**

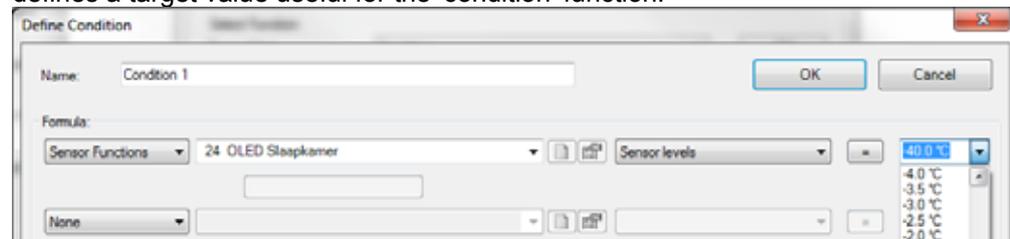
When called from another function

#### All functions (i.e. Local Mood)

The sensor functions are selectable in other functions as i.e. a local mood. The function of the sensor functions stays as described above.

#### The 'Condition' function

The sensor functions as described above are not available in the condition function. For the proper working of the condition, the sensor level is selectable. This parameter defines a target value useful for the 'condition' function.





## 8.1.7. The Fan function

### → Description

The Fan function switches a function and leaves a relay in active mode for a preset time after the first function has been switched off.

### → Parameters

- ☒ **'Name':** Put in here a short and clear name for the 'Fan' function.
- ☒ **'Select Light':** this parameter defines the first function which is called when the 'Fan' function is activated. 4 functions can be selected: 'Relay', 'Dimmer', 'Local Mood' and 'Flags'. Depending on the selected function several specific function parameters have to be put in. Consult for this matter the description of the specific function.
- ☒ **'Select Motor':** this parameter defines the 2nd function which becomes or remains active for a set duration when the first function is switched off. For this purpose the 'Relay' function is the only function which can be selected.
- ☒ **'Duration':** this parameter is defined on the right hand side in the 'Select Motor' field. The 'Duration' determines how long the 2nd function (motor) remains active after the 1st function (light) has been switched off. This parameter can be set from 0 sec. till 7200 sec. in steps of 1 sec. Standard the duration is set at 120 sec.
- ☒ **'Options - Setting':** This parameter determines when the 2nd function (motor) has to be activated. In this case 2 settings are possible:
  - ☐ **'Ventilator ON when lights are switched off':** with this setting the 2nd function (motor) is activated when the light is switched off. The 2nd function is active only for the set duration.
  - ☐ **'Ventilator ON when light is switched':** with this setting the 2nd function (motor) is activated simultaneously with the 1st function, when the 'Fan' function is switched on. When the 1st function (light) has been switched off the 2nd function (motor) remains active for the set duration.

### → Standard function behaviour on an interface

- ☒ **'Short':** With a short push on the button the 1st function (light) is switched as defined in the 'Fan' function. If set like that the 2nd function (motor) will be switched as well.  
When the function is switched off the 1st function (light) will be switched off and the 2nd function will remain active for the set duration.
- ☒ **'Long':** The functioning is the same as described under 'Short'.

### → Function behaviour when operating in another function

'Fan' type

The 'Fan' function can be selected from another function. When the other function is switched on, then the 'Fan' function will work as described in the selected target value.



- ☒ **'On'**: The 'Fan' function is activated. The 1st function is switched in accordance with the settings and if set, the 2nd function will be activated as well.
- ☒ **'Off'**: The 'Fan' function is switched off. This means that the 2nd function (relay) will be activated during the set duration. If the 1st function (light) is switched on, then this function is switched off. If the function was switched off, it will remain switched off.
- ☒ **'On/Off'**: The 'Fan' function is activated: the 1st function and (if set like that) the 2nd function is switched. When the function is switched off, the 'Fan' function will switch off as well: the 1st function is switched off and the 2nd function remains active for the set duration.
- ☒ **'Off/Off'**: The 'Fan' function is switched off. The 2nd function is activated for the set duration. The 1st function is switched off or remains switched off. When the function is switched off, the 'Fan' function will be switched off again. The 2nd function will be activated again for the set duration. The 1st function remains switched off.
- ☒
- ☒ Remarks:
  - ☞ **Not every function can be switched off. Consult for that matter the description of the respective function.**

### → Application Example

- ☒ In a bath room, shower or toilet, a fan is activated when the light is switched on and stays on for a number of minutes after the light is switched off again.
- ☒ In the lavatory of a company every toilet has his own light but the fan is for all the toilets. (there are several fan functions made with another light but with the same motor). The fan function is so 'intelligent' to switch off the fan only when the 'run time' of all fan functions are finished.
- ☒



## 8.1.8. The Local Mood function

### → Description

A 'Local Mood' describes the desired status of maximum 10 functions. When the 'Local Mood' is activated the integrated functions in the local mood list will be executed in the selected sequence in accordance with the set target status.

### → Parameters

- ☒ **'Name':** The definition of a 'Local Mood' name is divided in 3 parts:
  - ☐ **'Room':** select here the room in which the Local Mood is to be activated
  - ☐ **'Icon':** select here whether the Local Mood has to be represented on a TELETASK touch screen and if yes, under what icon.
  - ☐ **'Description':** Introduce here a short and clear description of the Local Mood.
- ☒ **'Select Output':** in this field up to 10 functions can be defined which will be executed when the 'Local Mood' is switched on. Depending on the selected function for each function some function specific parameters have to be put in. Consult for this matter the individual function descriptions above in this document.
- ☒ **'Toggle':** this parameter determines whether the 'Local Mood' function can be switched off (reversible), when it is switched on. When this parameter is ticked, the 'Local Mood' will 'toggle'. This means that the 'Local Mood' can be reversed.

### → Function behaviour when used on an interface

- ☒ **'Short':** With a short push on the button the 'Local Mood' is activated. This ensures that all selected functions are switched to the wanted status. When the 'Local Mood' is switched off, the selected functions will be switched off as described in the respective function.
- ☒ **'Long':** The functioning is the same as described under 'Short'.
  - ☞ **A 'Local Mood' can only be switched off when the parameter 'toggle' is on.**
- ☒
- ☒
- ☒

### → Function behaviour when operating in another function



A 'Local Mood' can be selected in another function. When the other function is switched on, the Local Mood will switch in accordance with the set target value.

- ☒ **'On'**: The 'Local Mood' is activated: all functions within the 'Local Mood' switch to the set status.
  - ☒ **'Off'**: The 'Local Mood' is switched off: all functions within the 'Local Mood' switch off.
  - ☒ **'On/Off'**: When activating the other function the 'Local Mood' will be activated. When switching off the other function the 'Local Mood' will be switched off.
  - ☒ **'Off/Off'**: When activating the other function the 'Local Mood' is switched off. When the other function is switched off, the 'Local Mood' will remain switched off.
- ☞ **Not every function can be switched off. Whether or not a function can be switched off, is described with the different functions.**
- ☞ **A 'Local Mood' can only be switched off when the parameter 'reversible' is checked.**



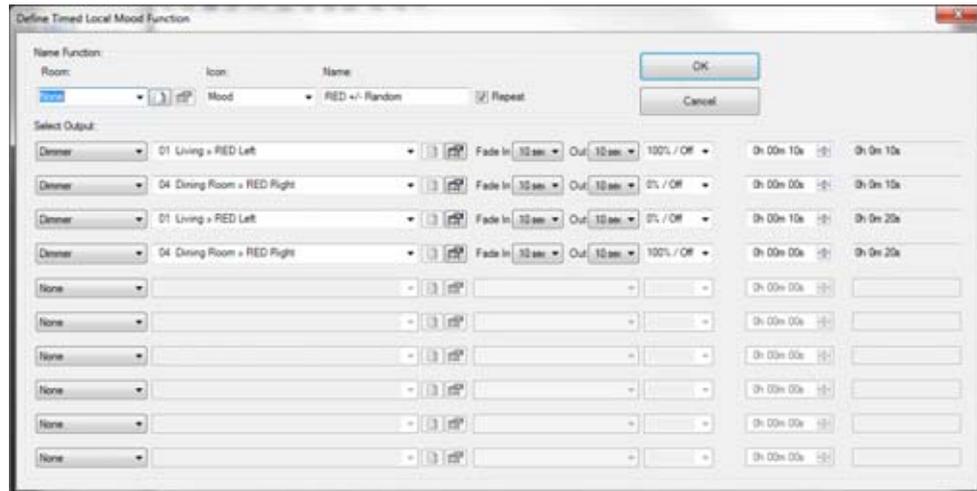
## 8.1.9. The Timed Local Mood function

### → Description

A 'Timed Local Mood' describes the wanted status of maximum 10 functions. When activating a 'Timed Local Mood' the described functions will be switched to the set target status in accordance with a set time pattern.

### → Parameters

Within the function



- ☒ **'Name':** The name giving of a 'Timed Local Mood' is divided in 3 parts:
  - ☐ **'Room':** select here the room from which the Timed Local Mood will be activated
  - ☐ **'Icon':** select here whether the Timed Local Mood has to be represented on a TELETASK touch screen and if so, under which icon.
  - ☐ **'Description':** Introduce here a short and clear description of the Timed Local Mood.
- ☒ **'Select Output':** in this field up to maximum 10 functions can be defined which will be operated when the 'Timed Local Mood' is switched on. Depending on the selected function for each function some function specific parameters have to be put in. Consult for this matter the description of the respective function
- ☒ **'Waiting time':** this parameter determines how much time after the previous function has been activated the respective function will be switched to the wanted status. This parameter is put in at the right hand side in the function window. The waiting time can be put in for each function from 0 sec till 7200 sec. in steps of 1 sec. By default the waiting time for each function is set at 0 sec.
  - ☞ **Next to settable waiting time, the cumulative waiting time is indicated. This is the waiting time for the respective function as from the moment the 'Timed Local Mood' is switched on.**
- ☒ **'Repeat':** This parameter determines whether or not the 'Timed Local Mood' will have to be executed repeatedly. If this parameter is ticked, then the 'Timed Local Mood' will start again and run through the described trajectory.

### → Function behaviour when used on an interface

#### Option 'On/Off' (standard)

- ☒ **'Short':** With a short push (switch on) the timer of the 'Timed Local Mood' is started. The selected function in the 'Timed Local Mood' will be switched consecutively in accordance with the set waiting time to the wanted status. When the 'Timed Local Mood' is switched off the active functions will be switched off as described in the respective function.



- ☒ **'Long'**: The functioning is the same as under 'Short'.
  - ☞ A 'Timed Local Mood' can only be switched off when its timer has not expired. This means before the function which was last selected was activated. If the 'repeat' parameter is ticked, then the 'Timed Local Mood' can always be switched off.
  - ☞ When the 'Timed Local Mood' is no longer active, and you want to switch off the different functions quickly, then activate the 'Timed Local Mood' in order to switch it off immediately afterwards (only when the 'On/Off' option is selected).

#### Option 'On'

- ☒ **'Short'**: With a short push the timer of the 'Timed Local Mood' is started. The selected function in the 'Timed Local Mood' will be switched consecutively in accordance with the set waiting time to the wanted status.  
When it was already switched on
- ☒ **'Long'**: The functioning is the same as under 'Short'.
  - ☞ **In this option it is not possible to switch off the 'Timed Local Mood' during the time it is active.**

#### Option 'Off'

- ☒ **'Short'**: With a short push the 'Timed Local Mood' is switched off. All the active functions will be switched off as described in the respective function. If it was already switched off, no action will happen.
- ☒ **'Long'**: The functioning is the same as under 'Short'.
- ☒

#### ➔ Function behaviour when operating in another function

A 'Timed Local Mood' can be selected from another function. When the other function is switched on the 'Timed Local Mood' will function as determined in the target value.

- ☒ **'On'**: The 'Timed Local Mood' is activated: the timer is started and the functions are selected consecutively in accordance with the set time path.
- ☒ **'Off'**: The 'Timed Local Mood' is switched off: each active function is switched off as described under the respective function description.
- ☒ **'On/Off'**: The 'Timed Local Mood' is activated when the other function is switched on. When the other function is switched off, the 'Timed Local Mood' will switch off.
- ☒ **'Off/Off'**: When the other function is switched on, the Timed Local Mood will switch off. When the other function is switched off the 'Timed Local Mood' will remain switched off. Nothing happens.
  - ☞ **When the 'Timed Local Mood' is switched on while it is active, the 'Timed Local Mood' will be restarted from the beginning.**
  - ☞ **When the 'Timed Local Mood' has run through the set time path, then the active status of the function in which the 'Timed Local Mood' is located, will be automatically 'Not True' or 'Off'.**
  - ☞ **Not every function can be switched off. Consult for this matter the description of the respective function.**

#### ➔ Application example:

- ☒ Controlling garden sprinklers is done in timed phases (not all sprinklers can be on at the same time). The first group(s) is/are activated immediately, the second group after 30 minutes (and the first is switched off first), the next group thirty minutes later, etc...

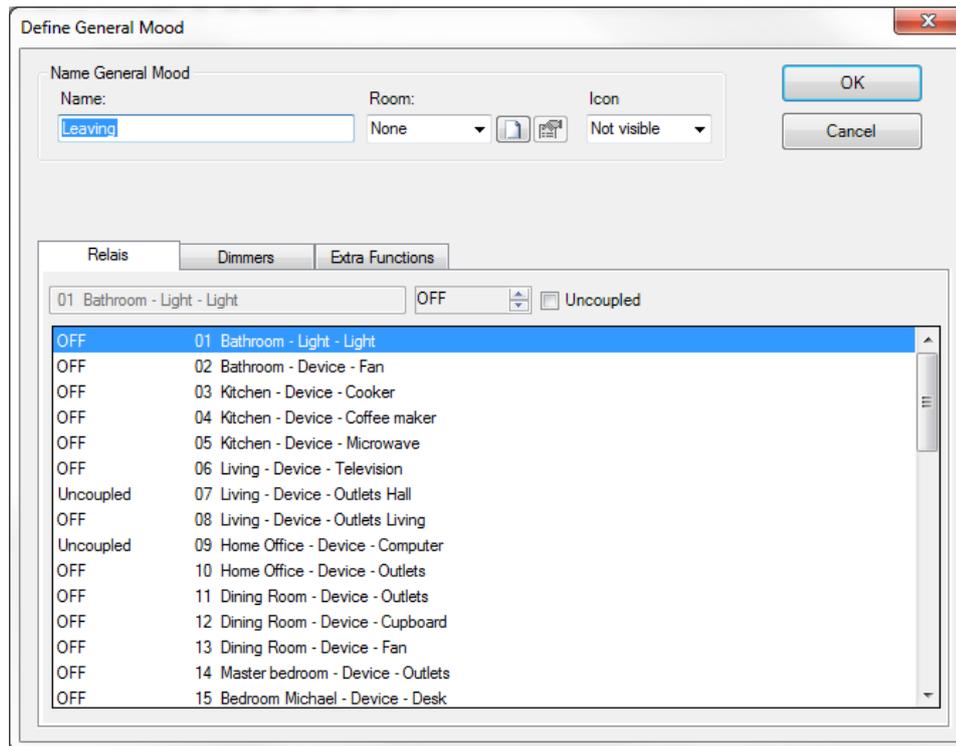


## 8.1.10. The General Mood function

### → Description

A 'General Mood' describes the wanted status of all relay and dimmer outputs in a certain wanted situation. Next to that up to maximum 5 additional functions can be called. A 'General Mood' function can only be activated and remains active as long as no modification occurs to the status of an included output.

### → Parameters



- ☒ **'Name':** The name giving of a 'General Mood' is divided in 3 parts:
  - 'Room':** select here the room in which the General Mood will be activated
  - 'Icon':** select here whether the General Mood has to be represented on a TELETASK touch screen and if so, under what icon.
  - 'Description':** Introduce here a short and clear description of the General Mood.
- ☒ **'Relay':** In the relay tab page every relay can be selected and the wanted status can be put in, to which the relay, when the 'General Mood' is activated, has to switch.
  - 'Not Controlled':** if this parameter is selected, then the relay will not be included in the 'General Mood'. This means that the status of the relay remains unchanged when the 'General Mood' is activated. On top of that the relay can be switched on and off, thus not influencing on the active status of the 'General Mood'.
  - 'On':** if this parameter is selected, then the relay will be switched on when the 'General Mood' is activated.
  - 'Off':** if this parameter is selected, then the relay will be switched off when the 'General Mood' is activated.
- ☒ **'Dimmers':** in the dimmers tab page each dimmer can be selected and the wanted status to which the dimmer has to move, can be set when the 'General Mood' is activated.
  - 'Not Controlled':** if this parameter is selected, then the dimmer is not included in the 'General Mood'. This means that the status of the dimmer



remains unchanged when the 'General Mood' is activated. On top of that the dimmer can be controlled autonomously, thus not influencing the active status of the 'General Mood'.

- 1% till 100% (on):** if this parameter is selected, then the dimmer will be brought to the set target value when the 'General Mood' is activated.
- 0% (off):** if this parameter is selected, then the dimmer will be switched off when the 'General Mood' is activated.
- 'Additional Functions':** In a 'General Mood' up to maximum 5 additional functions can be selected which will be switched to the set target value when the 'General Mood' is activated.
- Select the function:** Select here up to maximum 5 functions which will be controlled when the 'General Mood' is activated. Following functions can be selected: 'Timed', 'Motor UP/DOWN', 'Local Mood', 'Timed Local Mood', 'Messages and Alarms', 'TP buzzer', 'Audio', 'Sensor functions', 'Flags', 'Clock functions', 'If-Then-Else functions', 'Process functions' and 'Service functions'. Depending on the selected function for each function some function specific parameters have to be put in. Consult for this matter the description of the respective function.

#### → Function behaviour when used on an interface

- 'Short':** With a short push, the 'General Mood' is activated. This means that all relays and dimmers are brought to the status as defined in the 'General Mood'. Next to that possible additional functions will be switched in accordance with the set target value. When the function is switched off (push short again) nothing happens, since a 'General Mood' can not be switched off.
- 'Long':** The operation is the same as described under 'Short'.

#### → Function behaviour when called from another function

A 'General Mood' can be selected in another function. When the other function is switched ON the 'General Mood' will be switched as determined in the target value. When the other function is switched OFF, this will not occur to the 'General Mood' because this function can not be switched off.

#### → Remark

- A 'General Mood' can not be switched off because this function brings the house into a certain status for a longer period, which is often due to a human activity typified by a significantly modified living pattern for several hours. Examples are: going to bed, leaving the house, coming home, party, alarm, etc.
- For that reason, in most of the cases, a 'General Mood' will have a counter part bringing the house in a status of opposite activity. (Going to bed – Getting up; Coming home – Leaving the house; etc.)
- When using several Central Units, the General Mood also will be extended with a 'Global Mood' part. For more info, see 'Several Central Units'.

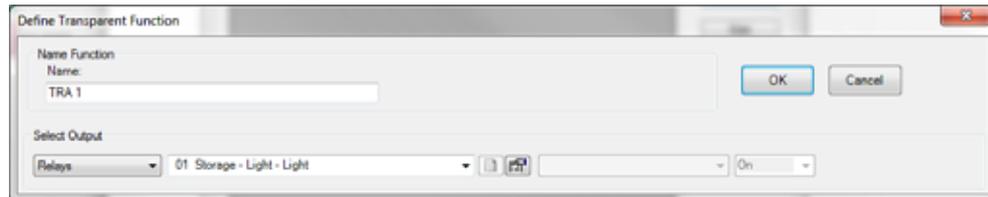


### 8.1.11. The Transparent function

#### → Description

The 'Transparent' function connects the status of the input directly to the status of the selected function (if input is ON, the output is ON; when the input is OFF, the output is OFF).

#### → Parameters



- ☒ **'Name':** Introduce here a short and clear name for the 'Transparent' function.
- ☒ **'Select Output':** this parameter defines the function which has to be connected with an input in a transparent way. Depending on the function which is being integrated, some function specific parameters have to be set. Consult for this matter the description of the individual function which you use. The functions which can be controlled by 'Transparent' function are : 'Relays', 'Dimmer', 'Local Mood', 'Fan', 'Flags', 'If-Then-Else Functions' and 'Process Functions'

#### → Function behaviour when used on an interface

When a 'Transparent' function is selected, then the names 'Short' and 'Long' modify into 'When closing' and 'When Opening'. This is because the option 'Edge Triggered' is set automatically with a 'Transparent' function. Consult for this function part 'Digital Input Interfaces'.

- ☒ **'On closing':** When a connected button is pushed or a contact is closed, the selected function is immediately activated. When the button is released or the contact is opened the function is immediately switched off. Consequently the function is activated immediately and lasts as long as the button is pushed.
- ☒ **'On opening':** (= in case of a push button contact 'on releasing') Not applicable. The transparent function can not be selected in 'on opening'.

Also due to the specific function characteristics a 'Transparent' function is not available under the 'Long' push mode.

☞ **The 'On opening' mode can still be set autonomously, but is very seldom used.**

#### → Function behaviour when called from another function

Not applicable: a 'Transparent' function can not be called from another function due to specific function characteristics.

#### → Remark

☞ **The 'Transparent' function can be selected only under the 'On closing' mode of an input.**

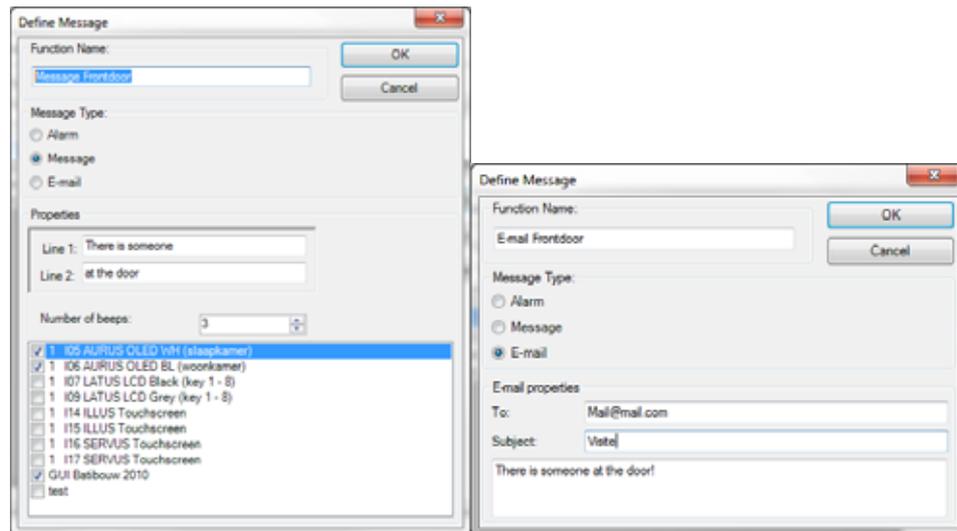


## 8.1.12. The Messages and Alarms functions

### → Description

The functions 'Messages and Alarms' contain text messages and/or beep tones which inform that a certain situation has occurred. The 'Messages and Alarms' function is only to be used on TELETASK interfaces with a display, on the GUI+ (TDS15105) and via e-mail or sms-service.

### → Parameters



- ☒ **'Name':** Introduce here a suitable short reference name for the real display text which is to be entered below in the 'Data' field. Due to the short 'name' when working in PROSOFT, you should be able to quickly find back the text message you are looking for.
- ☒ **'Data':** Here the text message is put in which will be announced when a certain situation will have occurred or at a certain moment. The text message can contain no more than 2 text lines ('Line 1' and 'Line 2') of 16 characters each. It is recommended to keep the text messages short and concise.
- ☒ **'Alarm':** Choose this parameter when dealing with an alarm. When an alarm occurs, then the introduced text message will appear on the selected interfaces with display/GUI+ and all interfaces will beep with the pre set number of beep tones.
  - ☞ **An alarm always has to be switched off manually. Take care first that the cause of the alarm is taken away. The alarm is deleted from the different interfaces as follows.**
    - Touch Screen: push the 'clear' button.
    - TV interface: push the 'F2' of the TELETASK remote control
    - LCD or VFD touch panel: push the arrow 'Up' or arrow 'Down' button.
  - ☞ **For the working of an alarm on the AURUS-OLED (TDS12022), see chapter 'AURUS-OLED'.**
- ☒ **'Message on interface':** Choose this parameter when the introduced text message has an informative value. With this parameter you indicate as well on which interfaces with display/GUI+ the message has to be shown when the situation occurs.
  - ☞ **A message disappears automatically as soon as a new action occurs on the respective interface. A new action can be activating a function, receiving another message or alarm.**
- ☒ **'E-Mail':** by activating this function, there will be sent an automatically e-mail to the predefined e-mail addresses.



- ☞ **This functionality requires a continue connection of the Central Unit with the internet and that the e-mail settings were correctly imported (see also 'Extra'-Options-'E-mail').**
- ☒ 'Data' (Messages/alarm): here you enter the text message which will be communicated when a certain situation will appear or on a certain moment.
- ☒ 'Text lines': the text message can contain 2 text lines at the most ('Line 1' and 'Line 2'). Line 1 can contain 16 characters at the most, Line 2 can contain 50 characters at the most (only the first 16 of the 50 characters will be shown on the older touch panels (see the data sheet for the concerned application). We suggest keeping the messages short and to the point.
- ☒ '**Number of beep tones**': Select here the number of beep tones which have to accompany the text message.
  - ☞ '**Interfaces**' Select here the Interfaces/GUI+ on which the messages have to be displayed.
  - ☞ '**Data e-mail**': here you enter the e-mail that will be sent when occurring of a specific situation or on a specific moment.
  - ☞ '**To**' enter here the e-mail addresses to which the message has to be sent. Several mail addresses have to be separated by ';':
  - ☞ '**Subject**' contains the subject of the e-mail.
  - ☞ '**Message**' the length of the message is restricted to 140 characters.

#### Remarks

- ☞ **With the SERVUS the number of pre set beep tones takes care of an appropriate representation of the alarm or message.**
  - '0': the message or the alarm are spoken, but are not shown on the screen.
  - '1'till '10': the message or the alarm are announced and expressed and shown on the screen. The announcement which precedes depends on the pre set number of beep tones:
    - 1 = 'Excuse me'
    - 2 = 'Hello'
    - 3 = 'I am sorry'
    - 4 = 'Please, Excuse me'
    - 5 = 'Good day'
    - 6 = 'Attention please'
    - 7 = 'One moment please'
    - 8 = 'An instant please'
    - 9 = 'Hello everybody'
    - 10 = 'Just listen'
  - '11' or more: the pre sent number of beep tones is generated and the message appears on the screen. Nothing is said.
- ☞ **Sending 255 beep tones to the TELETASK TV interface, causes the TV interface to beep until the user executes an action on the TV interface.**

#### → Function behaviour when used on an interface

##### 'Message' type

- ☒ '**Short**': With a short push the text message appears on the selected interfaces accompanied with the pre set number of beep tones. When you push short again on the button, the message is sent again to the interfaces. The previous message is over written.
- ☒ '**Long**': The operation is the same as described under 'Short'.
  - ☞ **A message can not be switched off, it disappears automatically in the following circumstances: after a predefined time or by executing an action on the touch panel or by a new message/alarm.**
  - .

##### 'Alarm' type



- ☒ **'Short'**: With a short push on the button the introduced text message appears on all selected interfaces with a display/GUI+ accompanied with the pre set number of beep tones. With a new short push on the button, the alarm is switched off.
- ☒ **'Long'**: The operation is the same as described under 'Short'.
  - ☞ **An alarm is never over written. The latest alarm is always shown on the interfaces. All preceding alarms can be checked by means of the 'following' button. For more information consult the manual of the respective interfaces.**
  - ☞ **An alarm is deleted either by switching off the alarm with the button or by means of the 'delete' button on the respective interfaces. For more information consult the manual of the respective interfaces.**
- ☒ Type 'e-mail'
- ☒ 'Short' when pushing short on the button the e-mail will be sent to all the predefined e-mail addresses. When pushing again the e-mail will be re-sent.
- ☒ 'Long' the working is the same as described under 'Short'.

### ➔ Function behaviour when operating in another function

#### 'Message' type

A 'Message' can be selected in another function. When another function is activated the message functions as follows:

- ☒ **'On'**: The message appears on the selected interface with the accompanying number of beep tones.
- ☒ **'On/-'**: The message is sent with the accompanying beep tones to the respective interface. When the function is switched nothing happens with the message.
  - ☞ **Since a message can not be switched off, a target value can not be put in. The target value is indicated in pale grey to indicate the behaviour of the message in the other function.**
  - ☞ **The status of a message is always 'true (on)'. Therefore every function which only contains a message(s) will also always be 'true (on)'.**

#### 'Alarm' type

An 'Alarm' can be selected in another function. When that other function is called the alarm functions in accordance with the target value:

- ☒ **'On'**: The alarm is show non all selected interfaces with a display/GUI+. All concerned interfaces beep the pre set number of times.
- ☒ **'Off'**: The alarm is switched off.
- ☒ **'On/Off'**: When the function is switched on the alarm is shown on all respective interfaces with a display/GUI+ (pre set number of beep tones included). When the function is switched off the alarm will switch off.
- ☒ **'Off/Off'**: When the function is switched on the alarm is switched off. When the function is switched off nothing happens or if the alarm became active again in the mean time, the alarm will be switched off again.

- ☒ 'E-mail' type
- ☒ 'ON': the e-mail will be sent to all predefined e-mail addresses.
- ☒ 'ON/-': the e-mail will be sent to all predefined e-mail addresses.
- ☒ When switching off this function there will be no e-mail sent.
  - ☞ **Since an e-mail can not be switched off, a target value can not be put in. The target value is indicated in pale grey to indicate the behaviour of the e-mail in the other function.**
  - ☞ **The status of an e-mail is always 'true (on)'. Therefore every function which only contains an e-mail will always be 'true (on)'.**

### ➔ Application examples

- ☒ A 'message' (disappears after a short time): when at home and late in the evening there is somebody detected in the garden (motion sensor), not only the garden light is automatically switched ON, but also a message appears on the display in the living room 'somebody in the garden'.



- ☒ An 'alarm' (stays on the display until you clear the message): When the heating system fails, the central heating unit goes into alarm status. Normally it will take a long time (when it's getting cold in the house) before the occupants detect that the heating system has failed. When using a sort message like 'heating system alarm – call technician', it is easy for everybody to see immediately what is happening, long before it gets cold in the rooms.
- ☒ In this last case you can also send a direct e-mail to your electrical contractor.



### 8.1.13. The TP Buzzer functions

#### → Description

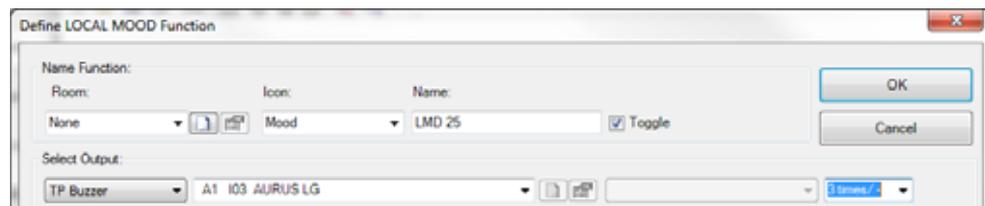
The 'TP buzzer' function sends from another function an adjustable number of beep tones to an adjustable interface.

#### → Parameters

Within the function

The function is only available in another function.

When called from another function



- Interface:** This parameter defines the interface which has to beep. This setting is only necessary with the 'TP Buzzer' type.
- Target value:** Put in the number of beep tones which is sent to the selected interface.

#### → Function behaviour when used on an interface

Not applicable

#### → Operation in another function

'TP Buzzer' type

A 'TP Buzzer' can only be selected in another function. This function sends a pre set number of beep tones to a selected interface, when the other function is selected. The number of beep tones is adjustable in the target value. Following target values are available:

- 'XX times':** Select here the number of beep tones that the selected interface has to produce, when the function is activated. XX can swing for each unit between 1 till 255. By default the number of beep tones is set at 1.
- 'XX times/-':** Select here the number of beep tones that the selected interface has to introduce, when the function is activated. XX can swing for each unit between 1 till 255. By default the number of beep tones is set at 1. When the function is switched off nothing happens.
  - ☞ **Not every function can be switched off. Consult for that matter the description of the respective function.**
  - ☞ **When 255 beep tones are sent to the TELETASK TV interface, then the image of the TV interface will switch to the externally connected camera.**

#### → Application examples:

- Every time that somebody rings at the entrance, one or more touch panels in the house are beeping a predefined number of times.
- Every time when the front-door is opened the touch panels in the house are beeping once. Every time when the back door is opened the beepers are beeping twice... just to let you know.
- Every time when a message appears on a display (touch panel), the beeper of the touch panel is activated. When it concerns an alarm, you can use a timed



local mood function, which is calling the beeper function to (for example) beep 5 times every 30 seconds, until the alarm is cleared by the user.



### 8.1.14. The 'If-Then-Else' function

#### → Description

Depending of the status of a 'If -Then-Else' condition, the 'If-Then-Else' function or the 'Then' function will be activated.

- ☞ **The 'If-Then-Else' function controls the status of the 'If' only when activating the 'If-Else-Then' function. To have a continue control on the status of a condition; use a 'Process' function.**

#### → Parameters

- ☒ **'Name':** Introduce here a short and clear name for the 'If-Then-Else' function.
- ☒ **'If Condition (TRUE)':** Select here the function which is controlled when the 'If-Then-Else' function is switched on. Following functions can be selected: 'Condition', 'Flags', 'Relays', 'Dimmers', 'Local Mood', 'Timed Local Mood' and 'General Mood'. Depending on the selected function some function specific parameters have to be put in. Consult for this matter the description of the specific function.
- ☒ **'Status value of the conditional function':** Select here the status on which the 'If-Then-Else' function has to control the conditional function. 2 statuses are possible:
  - 'On':** If the status of the conditional function is 'on', then the 'Then' function will be switched.
  - 'Off':** If the status of the conditional function is 'off' is, then the 'Then' function will be switched.
- ☒ **'Select 'THEN''':** Select here the function which is switched when the conditional function is true (on). Depending on the selected function some function specific parameters are put in. Consult the description of the specific function.
- ☒ **'Select 'ELSE''':** Select here the function which is switched when the conditional function is not true (off). Depending on the selected function some function specific parameters are put in. Consult for this matter the description of the specific function.
- ☒
  - ☞ **The active status of the 'If-Then-Else' function is connected to the status of the 'Then' function.**
  - ☞ **For the calculation of the status of the 'If-Then-Else' function, there are following possibilities:**
    - ☞ There is a 'Then' and an 'If' configured. When the 'If' is true, the status will be set through the status of the 'Then'. When de 'If' is NOT true, the status will be set through the status of the 'Else'.
    - ☞ There is only a 'Then' or an 'Else' configured. The status of the 'If-Then-Else' function will always be set through the status of the one available 'Then' or 'Else'.



### → Function behaviour when used on an interface

#### Option 'On/Off'

- ☒ **'Short'**: With a short push on the button the 'If-Then-Else' function checks what is the actual status of the conditional function. If this is true (on), then the 'Than' function will be activated in accordance with the pre set status. If the conditional function is not true (off), then the 'Else' function will be switched in accordance the pre set status.
- ☒ **'Long'**: The operation is the same as described under 'Short'.

#### Option 'On'

- ☒ **'Short'**: With a short push on the button the 'If-Then-Else' function checks what is the actual status of the conditional function. If this is true (on), then the 'Than' function will be activated in accordance with the pre set status. If the conditional function is not true (off), than no action will be activated.
- ☒ **'Long'**: The operation is the same as described under 'Short'.

#### Option 'Off'

- ☒ **'Short'**: the 'If-Then-Else' function will be switched off; the status of the conditional function will be controlled. Depending on this status the 'Then' or 'Else' function will be activated according to the 'out' status of the set target value. When the function which will be switched is already 'out', nothing will happen with this function.
- ☒ **'Long'**: The operation is the same as described under 'Short'.



**The functioning of the 'Then' and 'Else' function depends on the selected function. Consult the description of the respective function to know the correct functioning.**

### → Function behaviour when operating in another function

An 'If-Then-Else' function can be selected in another function. Depending on the pre set target value the functioning will be as follows:

- ☒ **'On'**: The 'If-Then-Else' function is activated: the status of the conditional function is checked. Depending on this status the 'Than' or 'Else' function will be activated in accordance with the 'on' status of the pre set target value. If the function which will be switched is already 'on', nothing will happen with the function.
  - ☒ **'Off'**: The 'If-Then-Else' function is switched off: the status of this conditional function is checked. Depending on this status the 'Than' or 'Else' function will be activated in accordance with the 'off' status of the pre set target value. If the function which will be switched is already 'off', nothing will happen with the function.
  - ☒ **'On/Off'**: When the other function is activated, then the 'If-Then-Else' function is activated. When the other function is switched off, then the 'If-Then-Else' function is switched off.
  - ☒ **'Off/Off'**: When the other function is activated then the 'If-Then-Else' function is switched off. The status of the conditional function is checked. Depending on the status the 'Than' or 'Else' function is switched in accordance with the 'off' status of the pre set target value. If the respective function at that moment is already 'off', than nothing will happen. When being switched off, this operation is repeated.
- ☞ **Not every function can be switched off. Consult for this matter the description of the specific function.**

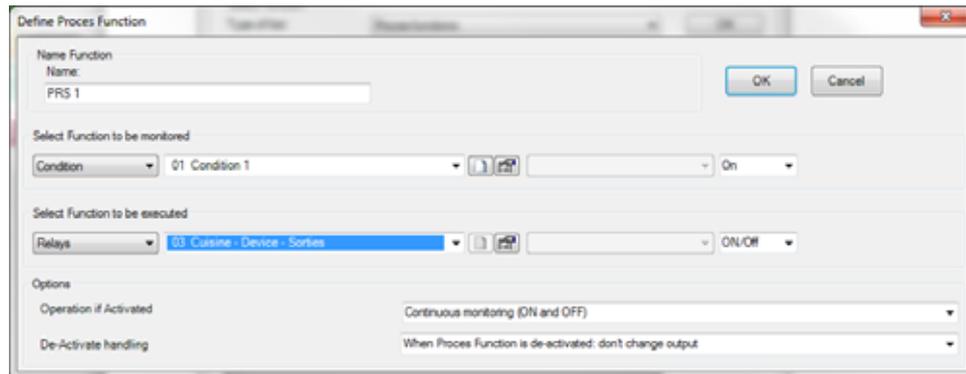


## 8.1.15. The Process functions

### → Description

The 'Process' function monitors during the active status the status of an adjustable function. This is the conditional function. Depending on the status of the conditional function an adjustable function is switched. This is the active function. Since the 'Process' function continuously monitors the status of the conditional function, the 'process' function can be called an automating function.

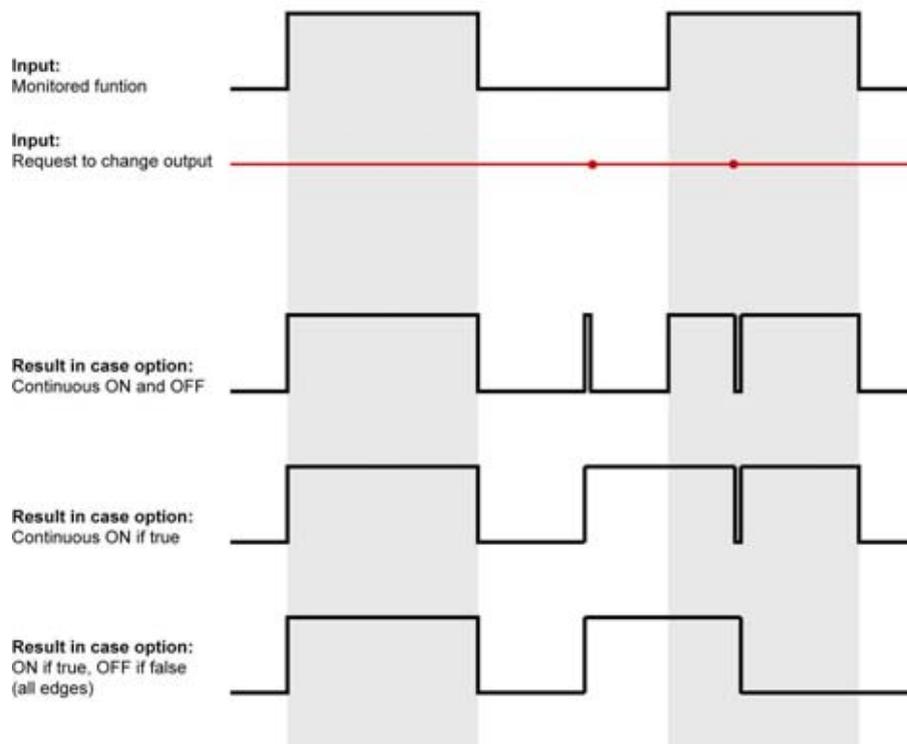
### → Parameters



- ☒ **'Name':** Introduce here a short and clear name for the 'process' function which is being generated.
- ☒ **'Select function to be monitored':** Select here the function which has to be monitored during the active status of the 'process' function. This is the conditional function. Depending on the selected functions some function specific parameters have to be put in. Consult for this matter the description of the selected function.
- ☒ **'Status value of the conditional function':** Select here the status on which the 'Process' function has to monitor the conditional function. 2 statuses are possible:
  - 'On':** If the status of the conditional function is 'on', then the active function will be switched 'on'.
  - 'Off':** If the status of the conditional function is 'off', then the active function will be switched 'on'.
- ☒ **'Select the function to be executed':** Select here the function which has to be switched depending on the status of the conditional function. Following functions can be selected: 'None', 'Relays', 'Dimmers', 'Timed', 'Motor START/STOP', 'Motor UP/DOWN', 'FAN', 'Local Mood', 'Timed Local Mood', 'General Mood', 'Flags', 'Audio', 'Sensor Functions', 'If-Then-Else functions' and 'Process Functions'. Depending on the selected function some function specific parameters have to be put in. Consult for this matter the description of the selected function.
- ☒ **'Operation when the function is switched on':** This parameter determines in which way manual control stays possible, next to the process function. Here 3 possibilities can be selected:
  - 'Continuous monitoring (ON and OFF)'**: the 'Process' function switches the status of the active function always equal to the wanted status of the conditional function. Manual control to execute the function is here NOT possible.
  - 'Continuously on if TRUE'**: the 'Process' function switches the status of the active function only when the status of the function to guard is equal to the set status. Manual control is possible when the guarding function is NOT true.
  - 'ON if TRUE & OFF if NOTTRUE (all flanks)'**: In this case the active function can be switched at any moment independent of the status of the conditional function. The 'Process' function however will switch 'ON' the status of the active function automatically if the conditional function becomes 'TRUE' or switch 'off' if the conditional function becomes 'NOT TRUE'.

**PROCESS FUNCTION:**

Different results dependent on chosen option.



☞ See the examples for more information about the process functions!

- ☒ **'Action when switching off function'**: this parameter determines what has to happen with the function which has to be executed, when the 'Process' function is switched off. Here 2 settings are possible:
  - ☐ **'When the process function is switched off: switch off output'**: this setting switches off the connected function.
  - ☐ **'When the process function is switched off: not change output'**: this setting conserves the status of the connected function when the 'Process' function is switched off.

### ➔ Function behaviour when used on an interface

- ☒ **'Short'**: With a short push on the button the 'Process' function is switched on. From that moment on the conditional function will be monitored. Depending on the status the active function will be switched in accordance with pre set parameters. When switched off (again a short push) the process function will be switched off. The conditional function will not be monitored any more. The status of the active function will be switched off depending on the setting and is no longer monitored by the 'process' function.
- ☒ **'Long'**: The operation is the same as described under 'Short'.

### ➔ Operation in another function

The 'Process' function is selected in another function. Depending on the pre set target value the operation will be as follows:

- ☒ **'On'**: The 'Process' function is switched on. The conditional function is being monitored continuously and the active function is switched in accordance with selected settings.



- ☒ **'Off'**: The 'Process' function is switched off. The conditional function is no longer monitored. The active function is switched off, if it was pre set, and is no longer controlled by the 'Process' function.
  - ☒ **'On/Off'**: When the other function is activated the 'Process' function is switched on. When the other function is switched off the 'Process' function is switched off.
  - ☒ **'Off/Off'**: When the other function is activated the 'Process' function is switched off. When the other function is switched off the 'Process' function remains switched off.
- ☞ **Not every function can be switched off. Consult for that matter the description of the function.**

➔ **Example: protect sun blinds against wind damage when manual control stays possible.**

To protect sun blinds against wind damage, a process function can be set. As 'guarding function' you can set a 'condition (e.g. named 'lot of wind') where the measured results of an anemometer are checked.

When there is too much wind, the process function will raise all the sun blinds. When using the option 'continue control (on&off)', the process function will drop the sun blinds when there is less wind. This is not wanted. We want to have the choice ourselves to decide when the sun blinds will drop.

Therefore we use the option 'continue on when 'TRUE'! When there isn't a lot of wind, the process function won't execute any action and the sun blinds can be controlled manually.



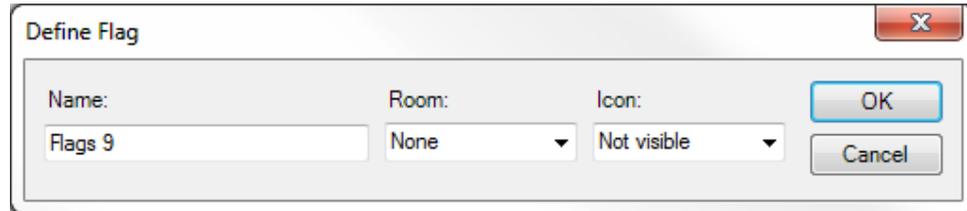
## 8.1.16. The 'Flag' function

### → Description

The 'Flags' function signals the status of a situation by his 'on' or 'off' status. It is only used as a condition whether or not to execute certain actions.

### → Parameters

Within the function

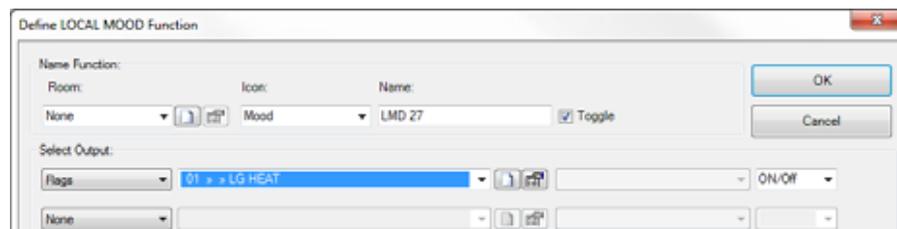


- ☒ **'Name':** Put in here the name of the 'Flag'. Take care that the description you are putting in clearly describes the situation which is occurring, when the flag is raised.
  - ☞ **When a SERVUS, ILLUS or TV interface has been put in PROSOFT, then 2 additional parameters will appear next to the 'Name': 'Room' and 'Icon'. At that moment a Flag can be assigned to a room and an icon. Next to the 'Icon' 'Control' the flag is shown in the 'motor' menu, but it can not be operated upon. Consult the respective interface for more information about that matter.**

### → Function behaviour when used on an interface

Not applicable

### → Function behaviour when operating in another function



A 'Flag' can be selected in another function. Depending on the pre set target value the operation will be as follows:

- ☒ **'On':** The 'Flag' is on. The situation as described by the flag is 'On' or 'True'. If the 'Flag' was already 'On', then it remains 'On'.
- ☒ **'Off':** The 'Flag' is out. The situation as described by the flag is 'Off' or 'Not True'. If the 'Flag' were already 'Off', then it remains 'Off'.
- ☒ **'On/Off':** When activating another function the 'Flag' will be set 'on'. When the other function is switched off, the 'Flag' will be set 'off'.
- ☒ **'Off/Off':** When the other function is activated the 'Flag' will be set 'off'. When the other function is switched off the 'Flag' remains switched off.
  - ☞ **Not every function can be switched off. Consult for that matter the description of the respective function.**



### 8.1.17. The Condition

#### → Description

The function 'Condition' describes the status of several functions (up to maximum 5f) and the mutual relationship between the functions. When the status and the relationship of the function(s) correspond with what has been described in the 'Condition', then the condition is 'on'. Such 'Condition' never results in an action. She will only be used as condition to execute certain actions. The status of the condition is CONTINU adapted.

#### → Parameters

- 'Name':** put in here a clear name for the condition. Take care that the name clearly describes the situation which occurs when the condition is active.
- 'Conditional functions':** Select here up to 5 functions which have to be monitored. Depending on the selected functions some function specific parameters have to be put in. Consult for that matter the description of the selected function.
- Comparison:** This parameter determines how the conditional function has to relate to the adjustable comparison value. This parameter can take different levels.
  - '=': the conditional function has to be equal to the pre set comparison value.
  - '>': the conditional function has to be greater than the pre set comparison value. This level is meaningful only with numerical comparison values.
  - '<': the conditional function has to be smaller than the pre set comparison value. This level is meaningful only with numerical comparison values.
  - '>=': the conditional function has to be greater than or equal to the pre set comparison value. This level is meaningful only with numerical comparison values.
  - '<=': the conditional function has to be smaller than or equal to the pre set comparison value. This level is meaningful only with numerical comparison values.
- Comparison value:** This parameter determines the status or value with which the conditional function is compared. The comparison value can take following shapes:
  - Status:** This shape determines a 'on' or 'off' status with which the conditional function is compared.
  - Numerical:** This shape determines a number or percentage with which the conditional function is compared. This shape occurs only with the functions 'Dimmers' and 'Sensor Levels'.
- Relationship:** This parameter determines the mutual relation between the functions. Following levels can be adjusted:



- **'AND'**: Both functions between which an 'AND' relation is defined, have to be 'true' in order to transmit the 'Condition OK' signal.
- **'OR'**: One of both functions between which an 'OR' relation is defined, have to be 'true' in order to transmit the 'Condition OK' signal.
- ☞ **At least 2 functions have to be selected before the 'Relation' parameter can be set.**
- ☞ **When more than 2 functions are present in the 'Condition', than first the relation between the first and the second function is reasoned. The result of this is reasoned with a third function etc. This logic is very important when the different 'Conditions' are defined. In particular when the 'AND' and 'OR' relations are applied.**

#### → Function behaviour when used on an interface

Since a 'Condition' monitors the status and the mutual relations of one or more functions, this function can not be called from an interface.

#### → Operation in another function

A condition is integrated in another function only as conditional function. This means that the other function uses the 'Condition' as a condition in order to execute an action or otherwise.

A condition can only be integrated in following functions: 'Condition', 'Process' and 'If-Then-Else'. Consult the description of the different functions about the operation and the specific parameters within the function.



## 8.1.18. The Service functions

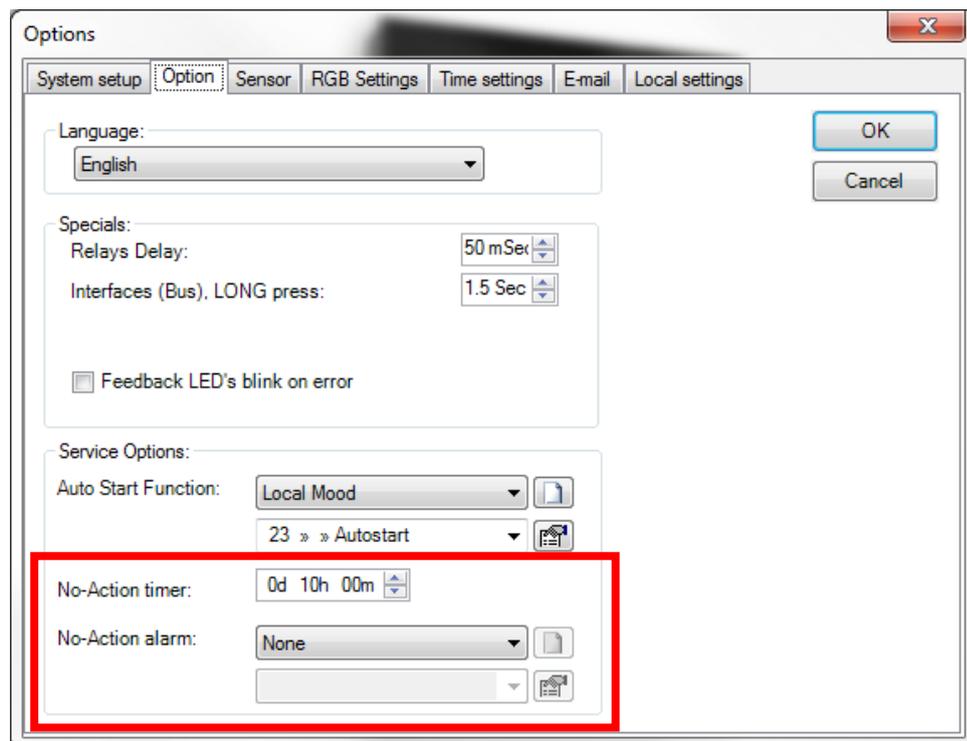
### → Description

The 'Service' function control a timer ('No-Action Timer') which starts as soon as no action in the house is detected. When the timer has expired, an alarm ('No-Action Alarm') is activated.

### → Parameters

Within the function

The parameters for the Service functions are set in the PROSOFT 'option' menu. Under the tab page 'Option', you will find in the 'Service field' following parameters:



- ☒ **'No-Action Timer'**: This parameter sets the duration before the 'No-Action Alarm' is activated. The 'No action Timer' is adjustable per 15 min from 00h 00min till 48h 00min. By default the time is set at 10h00min.
- ☒ **'No Action Alarm'**: Select here the function which has to be activated when during the 'No-Action Timer' no movement was recorded. Following functions can be selected: 'Switch', 'Local Mood', 'Timed Local Mood', 'General Mood' and 'Process Functions'. Depending on the selected function some function specific parameters are necessary. Consult for this matter the description of the selected function.

### → Operation from another interface

'No-Action Control ON/OFF' type

- ☒ **'Short'**: With a short push on the button the 'No-Action Control' is switched on when the function was 'OFF'. When the function is 'ON', the function is switched off. The 'No-Action Control' activates the 'No-Action Timer'.
- ☒ **'Long'**: The operation is the same as described under 'Short'.

'No-Action Reset Timer' type



- ☒ **'Short'**: With a short push on the button the 'No-Action Timer' is set back to the pre set time. The timer starts running again from the beginning.
- ☒ **'Long'**: The operation is the same as described under 'Short'.
  - ☞ **When the 'No-Action Timer' was not started by the 'No-Action Control ON/OFF', then the 'No-Action Reset Timer' will have no implications.**

### ➔ Operation in another function

#### 'No-Action Control ON/OFF' type

Depending on the pre set target value the 'No-Action Control ON/OFF' will be controlled as follows:

- ☒ **'On'**: When the other function is switched on the 'No-Action Control ON/OFF' will be switched on: the 'No-Action Timer' starts.
- ☒ **'Off'**: When the other function is switched on the 'No-Action Control ON/OFF' will be switched off: the 'No Action Timer' stops.
- ☒ **'On/Off'**: When the other function is switched on the 'No-Action Control ON/OFF' will be switched on. When the other function is switched off the 'No-Action Control ON/OFF' will be switched off.
- ☒ **'Off/Off'**: When the other function is switched on the 'No-Action Control ON/OFF' will be switched off. When the other function is switched off the 'No-Action Control ON/OFF' will be switched off.

#### 'No-Action Reset Timer' type

With the 'No-Action Reset Timer' the target value is not adjustable. For information purposes the target value is indicated in pale grey. Following target values are visible:

- ☒ **'Reset'**: When the other function is activated the 'No Action Timer' is set again at the initially introduced starting time. Said differently the actively running timer is deleted.
- ☒ **'Reset/Reset'**: When the other function is activated and as well when it is switched off the 'No Action Timer' is set again at the initially introduced starting time. Said differently the actively running timer is deleted.
  - ☞ **Not every function can be switched off. Consult the description of the respective function.**



### 8.1.19. The clock functions

#### → Description

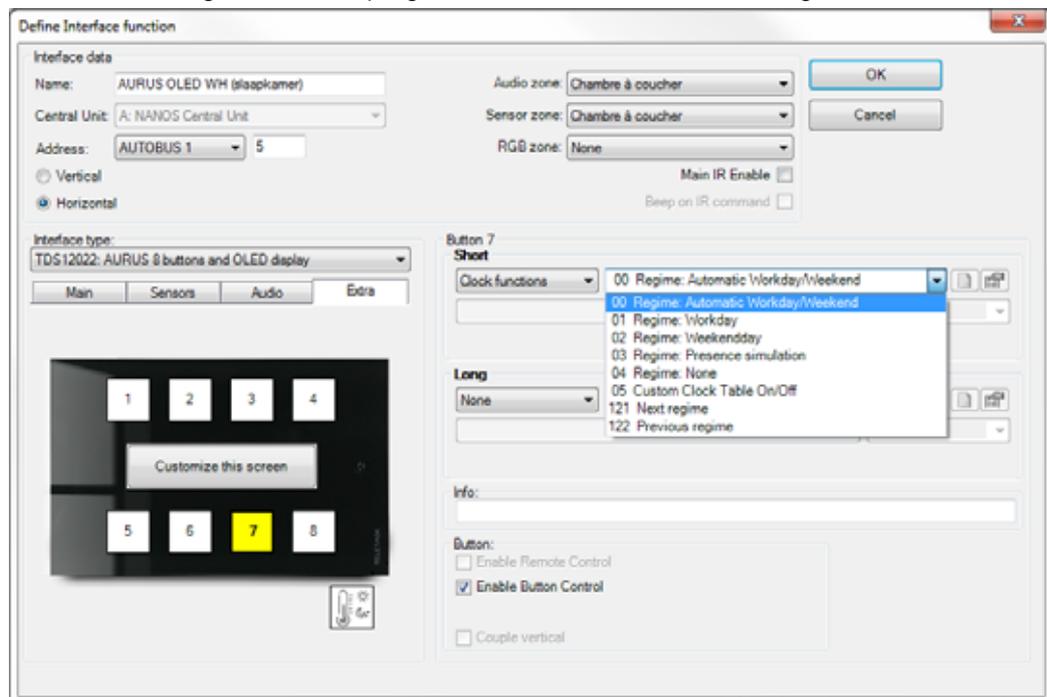
'Clock' functions activate the appropriate clock programs which are set in TIMESOFT.

#### → Parameters

Within the function

**'Clock Functions'**: Select here the wanted clock function to activate the appropriate clock program. Following clock functions are standard available in PROSOFT :

- 'Regime: Automatic Workday/Weekend day'**: This clock function automatically activates the clock workday or weekend day.
  - ☞ This regime or clock program is the standard active setting.



- 'Regime: Workday'**: This 'Clock' function activates the clock 'Workday' even if the active moment in PROSOFT (options) is defined as weekend day. When the clock 'Work day' is active, the clock 'Weekend day' or 'Simulation' can not possibly be active.
- 'Regime: Weekend day'**: This 'Clock' function activates the clock 'Weekend' even if the active moment in PROSOFT (options) has been defined as week day defined. When the clock 'Weekend day' is active, the clock 'Workday' or 'Simulation' can not be possibly active.
- 'Regime: Presence simulation'**: This 'Clock' function activates the simulation program of your house. This clock is used in case of lengthy absence, to create an impression of presence. When the clock 'Simulation' is active, the clock 'Weekend day' or 'Workday' can not be possibly active.
- 'Regime: None'**: This 'Clock' function switches off the clocks 'Weekend day', 'Workday' and 'Simulation'. The clock 'Custom' however remains unchanged.
- 'Custom clock table on/off'**: This 'Clock' function will switch on or off the clock 'Custom'. This clock can be activated independently of the other clocks. Consequently the 'Custom' clock can run simultaneously with the clock 'Weekday' or the clock 'Weekend' or the clock 'Simulation'.
- 'Next regime'**: switches to the next regime. The order of the regimes is: Auto → workday → weekend → simulation → none → auto → ...



- 'Last regime': switches to the last regime.
- Next to these clock functions which are standard available no other clock functions are available or need to be generated.**
  - The clock functions are directly connected to the different clock programs in TIMESOFT. When no actions in the different clock programs are defined, then it makes no sense to use the clock functions. Consult the TIMESOFT description for more information about the clock programs.**

### → Function behaviour when used on an interface

#### 'Clock functions: Regime'

- 'Short'**: With a short push on the button the selected clock program is activated. When switched off (again a short push), the standard active setting 'Regime: automatic Weekday/Weekend day' is activated.
- 'Long'**: The operation is the same as described under 'Short'.

#### 'Clock functions: Custom' type

- 'Short'**: With a short push on the button the 'Custom' clock program is activated when it was 'off'. It will be switched off when it was 'on'.
- 'Long'**: With a long push on the button the 'Custom' clock program is activated when it was 'off'. It will be switched off when it was 'on'.
- 
- Type 'Clock functions: Next/Previous'.
- 'Short': with a short push on the button the next/previous clock program is activated. At the next push on the button the next/previous regime will be activated.
- 'Long': the operation is the same as described under 'Short'.

### → Function behaviour when operating in another function

#### 'Clock functions: Regime' type

The target value is not adjustable for the 'Regime' clock functions. When the other function is switched on the selected clock program will be activated. When the other function is switched off, the standard active setting 'Regime: automatic Weekday/Weekend day' will be activated.

#### 'Clock functions: Custom'

The target value can be set for the 'Custom' clock function. Depending on the selected target value the operation is as follows:

- 'On'**: The 'Custom' clock program is activated.
- 'Off'**: The 'Custom' clock program is switched off.
- 'On/Off'**: When the other function is activated the 'Custom' clock program is activated. When the other function is switched off the 'Custom' clock program is switched off.
- 'Off/Off'**: When the other function is activated and when it is switched off the 'Custom' clock program is switched off.
  - Not every function can be switched off. Consult the description of the respective function.**



## 8.1.20. The audio functions

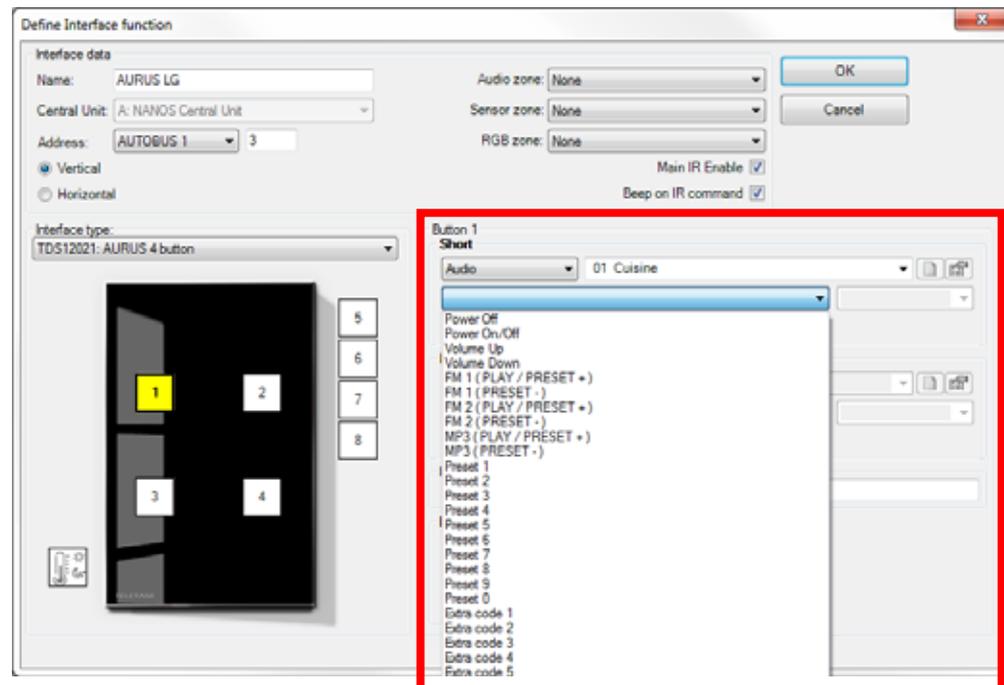
### → Description

The 'audio' functions describe the actions which your audio installation has to execute. 'Audio' functions are standard available in PROSOFT, but are released only when the TELETASK audio interface has been defined.

### → Parameters

Within the function

- ☒ **'Audio zone'**: this parameter defines the audio zone for which the different available audio functions have to be represented. In this field you can select a value when an audio zone has been defined with a TELETASK audio interface.



- ☒ **'Audio function'**: Select here the wanted audio function which has to be activated. Following audio functions are available for each audio zone:

- Zone Out
- Out extra (all zones out)
- ON/OFF
- Volume up
- Volume down
- Mute
- Source 1 to 8 (Play/Preset)
- Source 1 to 8 (Preset)
- Preset 1 to 9
- Preset 0
- Extra code 1 to 10

- ☒  **In the most situations not all codes will be available. Only the codes which are learned or put in in AV-Soft are here available.**

### → Function behaviour when used on an interface

- ☒ **'Short'**: With a short push on the button the selected function is activated. If you push again short on the button, then the function will be activated again.



- ☒ **'Long'**: The operation is the same as described under 'Short'.
  - ☞ **'Volume Up': when pushed 'Long' the volume of the current status will increase until the maximum value.**
  - ☞ **'Volume Down': when pushed 'Long' the volume of the current status will decrease until the minimum value.**

### ➔ Function behaviour when operating in another function

When the other function is activated the audio function will be switched as indicated for information purposes in the non-adjustable target value. Following target value can occur:

- ☒ **'On'**: The selected audio function is activated.
- ☒ **'Off'**: The 'OFF' audio function is activated.
- ☒ **'On/Off'**: When the other function is activated then the selected audio function will be activated. When the other function is switched off then the 'OFF' audio function will be activated.
- ☒ **'On/-'**: When the other function is activated the selected audio function will be activated. When the other function is switched off, no action is taken.
- ☒ **'Off/Off'**: When the other function is activated the 'OFF' audio function is activated. When the other function is switched off the 'OFF' audio function is activated.
  - ☞ **For more information about controlling audio systems, please see chapter AV-Soft.**
  - ☞ **Not every function can be switched off. Whether a function can be switched off, is described in the different functions.**

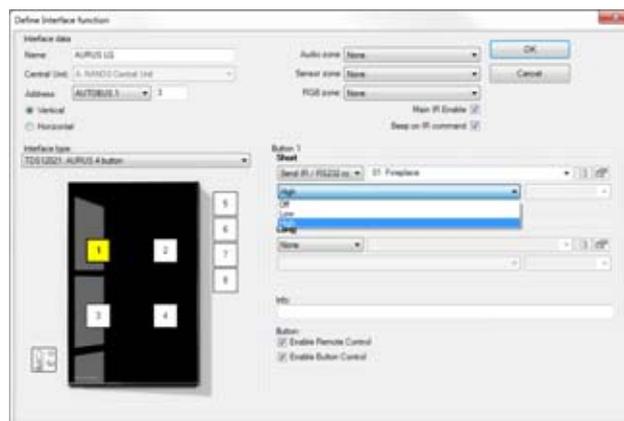
## 8.1.21. Send IR/RS232 Code

### ➔ Description

This function permits to control a non-audio appliance with infrared or RS232. Examples of such appliances are: jacuzzi's, gas fires. With this function you can also control the extra codes on our audio source, independent of zones!

### ➔ Parameters

'Send IR/RS232 code': selects the appliance that has to be controlled by IR or RS232. 'Function'; selects the specific code which has to be sent to the appliance.



### ➔ Function behaviour when used on an interface

'Short': with a short push on the button the selected function will be activated. When pushing shortly again, the function will be re-activated.  
 'Long': The operation is the same as described under 'Short'.



### → Function behaviour when operating in another function

When activating the other function the IR/RS232 code will be sent. When switching off the function, nothing will happen.

#### Remarks

- ☞ **For more information about controlling IR/RS232 systems, please see chapter AV-Soft.**
- ☞ **Not every function can be switched off. Whether a function can be switched off, is described in the different functions.**

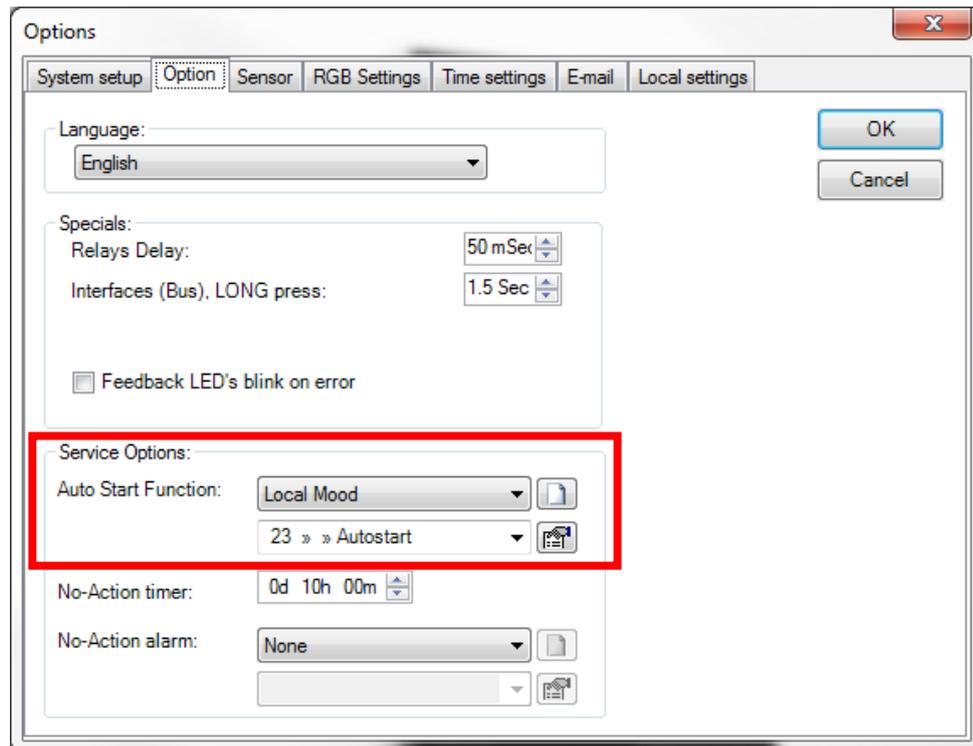


## 8.1.22. The Auto start function

### → Description

The auto start function is a particular function which activates a selectable function which is automatically executed when the power supply is switched ON or after a send from PC to central unit.

### → Parameters



The parameters for the Auto start function are set in the PROSOFT 'option' menu. Under the tab page 'Option', you will find following parameters in the 'Service field':

- ☒ **'Auto start Function':** Select here the function which has to be started up automatically when the tension is again put on your TELETASK central unit. Following functions can be selected: 'None', 'Switch', 'Local Mood', 'Timed Local Mood', 'General Mood' and 'Process Function'. Depending on the selected function some function specific parameters have to be put in. Consult for this matter the description of the specific function.

☞ **There is only one auto start function present in PROSOFT. Several functions can be started up automatically through a 'Local Mood', a 'Timed Local Mood or a 'General Mood'.**

### → Operation

When the power of the central unit is restored after a power failure, the function which was defined in the auto start function will automatically be executed. Also after sending an .nbt file to the central unit, the 'auto-start-function' will be executed.



## 8.1.23. The Display Functions

### → Description

The display functions are some predefined special functions for i.e. menu selection etc. on the touch panels equipped with a display. The displays can be different, depending of the type of touch panel with display.

### → Overview

#### Type 'Menu'

With a push on a button the next sensor zone of the corresponding touch panel with VFD/LCD display is selected.

#### Type 'Up'

If the menu is active, the next menu item will be selected with a short push on a button.

If the menu is inactive, the wanted sensor value is increased with one step (i.e. 0.5°C in case of a temperature sensor).

#### Type 'Down'

If the menu is active, the previous menu item will be selected with a short push on a button.

If the menu is inactive, the wanted sensor value is decreased with one step (i.e. 0.5°C in case of a temperature sensor).

#### Type 'Preset: Day'

With a push on the button the sensor function 'Preset: Day' for the linked sensor zone is activated. The active preset setting is visible on the VFD/LCD display. Check out the user manual of the touch panels for more information.

#### Type 'Preset: Night'

With a push on the button the sensor function 'Preset: Night' for the linked sensor zone is activated. The active preset setting is visible on the VFD/LCD display. Check out the user manual of the touch panels for more information.

#### Type 'Preset: Standby'

With a push on the button the sensor function 'Preset: Standby' for the linked sensor zone is activated. The active preset setting is visible on the VFD/LCD display. Check out the user manual of the touch panels for more information.

☞ **This function is only useful when a temperature sensor zone is linked to the touch panel.**

#### Type 'Zone: On/Off'

With a push on the button the sensor function 'On/Off' for the linked sensor zone is activated.

☞ **This function is only useful when a temperature sensor zone is linked to the touch panel.**

#### Type 'Toggle: Mode'

With every push on the button the mode of the integrated cool/heat system will toggle between the available modes. The mode can toggle between: 'Mode: Auto', 'Mode: Cool Only', 'Mode: Heat Only', 'Mode: Heat+', 'Mode: Ventilation', 'Mode: Stop system'.

#### Type 'Toggle: Speed'

With every push on the button the speed of the integrated multi step cool/heat system will toggle between the available speeds. The speed can toggle between: 'Speed: Auto', 'Speed: Slow', 'Speed: Medium', 'Speed: Fast'.

#### Type 'Menu Extra'



With a push on the button the extra menu of the corresponding touch panel with display is selected. In this menu you can set the several settings such as preset values, time, etc. See the user manual of the different touch panels.

Type 'Sensor: Target value Up/Down':

With a push on the button the target value of the selected sensor zone will be increased or reduced.

Type 'Sensor Next/Previous Preset':

With a push on the button the next/previous preset (day/night/standby) of the selected sensor zone is activated.

Type 'Sensor: Next/Previous Mode':

With a push on the button the next/previous mode (Heating/Cooling/Automatic/...) of the selected sensor zone is activated (only for temperature sensors).

Type 'Sensor: Speed Up/Down':

With a push on the button the speed of the selected sensor zone increases or reduces (only for temperature sensors with multi step control).

Type 'Sensor: Next/Previous Zone':

With a push on the button the next/previous zone is selected.

Type 'Sensor: On/Out':

The functioning is identical to the working of the 'Zone On/Off'.

Type 'Audio: Next/Previous source':

With a push on the button the next/previous source (FM/CD/MP3/...) of the selected audio zone is activated.

Type 'Audio: Volume Up/Down':

With a push on the button the volume of the selected audio zone increases or reduces.

Type 'Audio: Next/Previous Preset':

With a push on the button the next/previous preset (channel/track/..) of the active source of the selected audio zone is activated.

Type 'Audio: Next/Previous Zone':

With a push on the button the next/previous zone is selected.

Type 'Audio: Mute':

The 'mute' code for the selected zone will be sent. If the zone was already in 'mute', the 'mute' will be removed otherwise it will be set in 'mute'.

☞ **Only when the codes 'mute on' and 'mute out' are the same for the selected audio appliance!**

Type 'Audio: On/Off':

The selected audio zone will be switched on or off.



## 8.1.24. The step function

### → Description

A 'Step' function contains up to 10 different functions. Each time the 'step' function is called, the next step will be executed.

For example: switching between the 10 different RGB colours by using just one button.

### → Parameters

- ☒ 'Name': the naming of a 'Step' function is divided in 3 parts:
  - ☐ Space: select here the space where the 'step' function will be activated.
  - ☐ Icon: select here if the 'step' function has to be reproduced on a TELETASK touch screen and if so, with the use of which icon?
  - ☐ Fill in a short but clear description of the 'step' function.
- ☒ 'Select output': in this field you can define up to 10 functions which will be controlled step by step when activating the 'step' function. Depending of the selected function, per function you have to put in some function specific parameters. See the description of the chosen function.
- ☒ 'Add 'OFF' step': this parameter determines if after the last step the first step will be repeated or if an 'OFF' step follows. If the 'OFF' step is used, all functions within the 'step' function will be switched off.

### → Function behaviour when used on an interface

Type 'Step'

- ☒ 'Short': with a short push on the button the 'Step' function is activated. This means that the first function of the desired status will be switched. A next push will activate the next step. The previous step won't be switched off explicit.
- ☒ 'Long': The operation is the same as described under 'Short'.

Type 'Out'

- ☒ 'Short': with a short push on the button the 'Step' function will be switched off. All steps have to be switched of explicitly.
- ☒ 'Long': The operation is the same as described under 'Short'.



### → Function behaviour when operating in another function

A 'Step' function can be selected in another function. When activating the other function, the 'Step' function will connect according the predefined target value.

- 'STEP': when activating the function the next step will be executed.
- 'OFF': when activating the function the 'step' function will be switched off. All steps will be switched off explicitly.
- 'STEP/OFF': when activating the function, the next step will be executed, when switching off the function, the 'step' function will be switched off. All steps will be switched off explicitly.
- 'OFF/OFF': when activating or switching off a function the 'step' function will be switched off. All steps will be switched off explicitly.

Remarks:

- ☞ **Not every function can be switched off. If a function can be switched off is marked at the different functions.**
- ☞ **When another function switches off the current step of the 'step' function, the 'step' function will be considered as switched off. This means that the 'step' function later on will re-start at step 1 (the other steps are not switched off explicitly).**

## 8.1.25. The RGB function.

### → Description

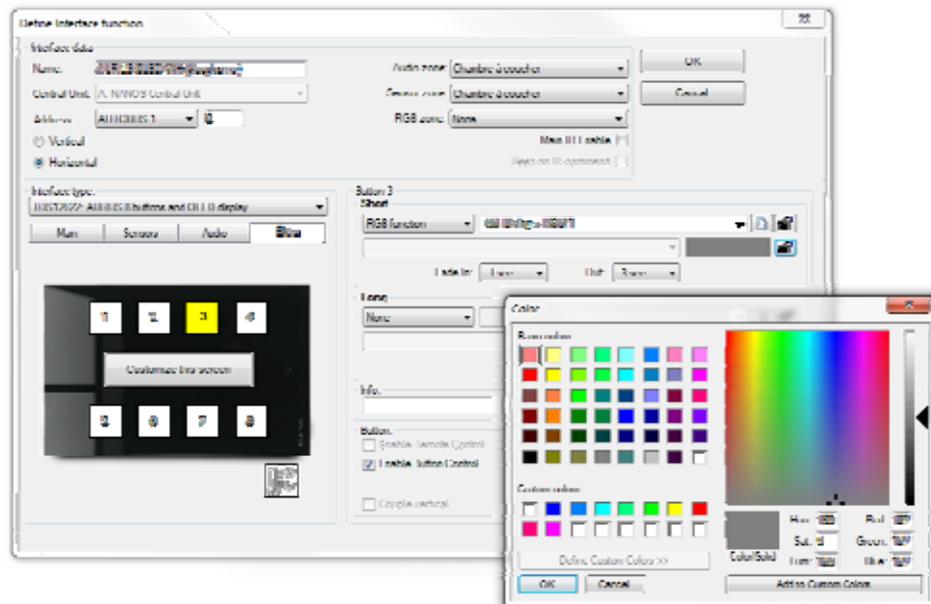
The 'RGB' function combines 3 dimmers for controlling multi colour lighting.

### → Parameters

'Name': the naming of a 'RGB' function is divided in 3 parts:

- Name: insert here a short and clear description of the 'RGB' function.
- Space: select here the space in which the 'RGB' function is activated.
- Icon: cannot be selected
- 'Select dimmers': in this field you can select the three dimmers which will control the multi colour lighting. We foresee always 1 dimmer for the colour red, 1 for the colour green and 1 for the colour blue.

### → Function behaviour when used on an interface



- ☒ 'Short': with a short push on the button the 'RGB' function will be set on the defined colour. If the 'RGB' function was already set on this colour, it will be switched off (all dimmers will be switched off).
- ☒ 'Long': The operation is the same as described under 'Short'.
- ☒

#### ➔ Function behaviour when operating in another function

- ☒ When activating the other function the 'RGB' function will be controlled to the defined colour.
- ☒ When switching off the other function, the 'RGB' function will be switched off.
- ☒ Remarks:
  - ☞ **Not every function can be switched off. If a function can be switched off is marked at the different functions.**
  - ☞ **We suggest working with bright colours for the 'RGB' function (you find them in the upper side of the colour chart)**



## 9. Communication

### 9.1. Connecting your PC with the central unit

For sending/receiving from PROSOFT to the DOIP central unit, there are two possible ways:

#### 1. USB Connection (Short cable; temporary use)

With a USB cable (standard USB-B to USB-A, not included with the central unit) you can connect the DOIP directly to the PC with USB 2.0 and USB1.1 compatible ports. This is typically used for temporary connections (communication with PROSOFT and testing I/O's). Remember that USB is not able to use long cables (about 5 meters).

#### 2. Ethernet Connection (Long cables possible – up to 100 meter; temporary or permanent connection)

Through the RJ45-Ethernet connector on the DOIP central unit you can connect to your LAN (Local Area Network). This is typically used for a permanent connection with a PC, GUI-Device (touch screen PC) or any LAN application

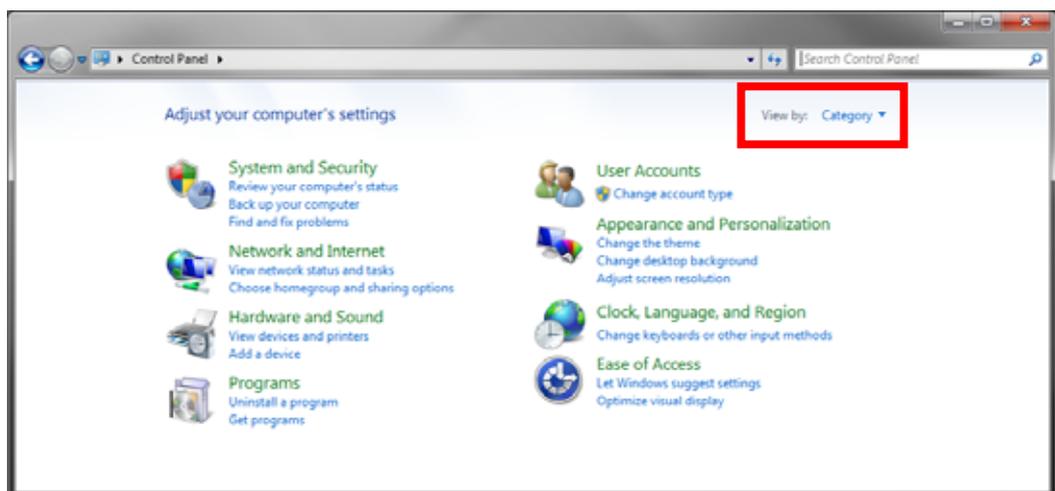
#### → Before you start:

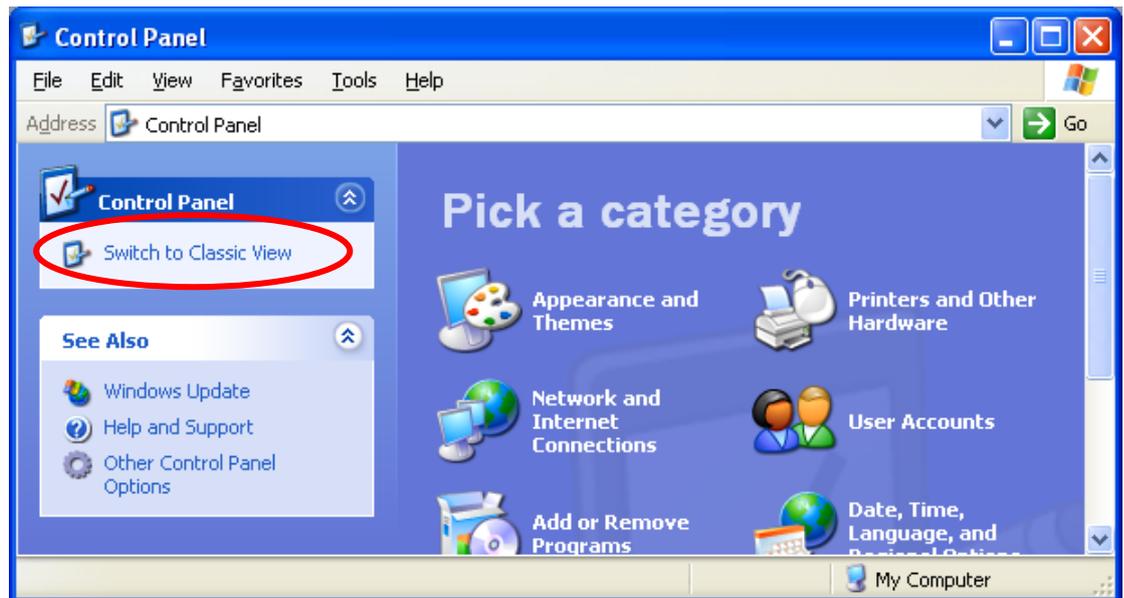
Windows 7, XP and Vista:

This guide to communicate with the DOIP central unit is written for Windows 7. For Windows XP/Vista the procedures are largely the same. Where needed, there will be extra screen shots/Information for Windows Vista/XP.

Control Panel:

For some parts in the guide you will be asked to go to the control panel. We assume that the control panel is set to the 'Classic view'. In Windows 7 you find this in the right upper corner of the control panel. In both Vista and XP you can find button 'Classic view on the left part of the control panel'. If the button is labelled 'Switch to category view' you are already working in the classic view.





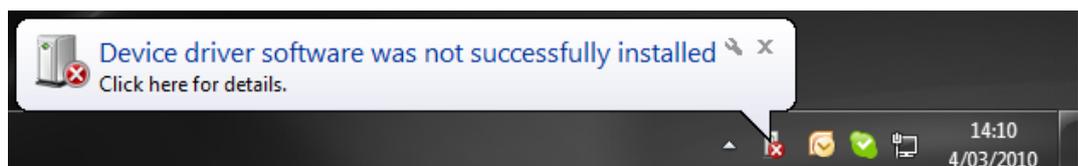
### 9.1.2. USB Communication

- ☞ **To avoid possible problems it is recommended always to use the same USB-port on your PC. Some PC's tend not to recognize the DOIP central unit if connected to another port!**

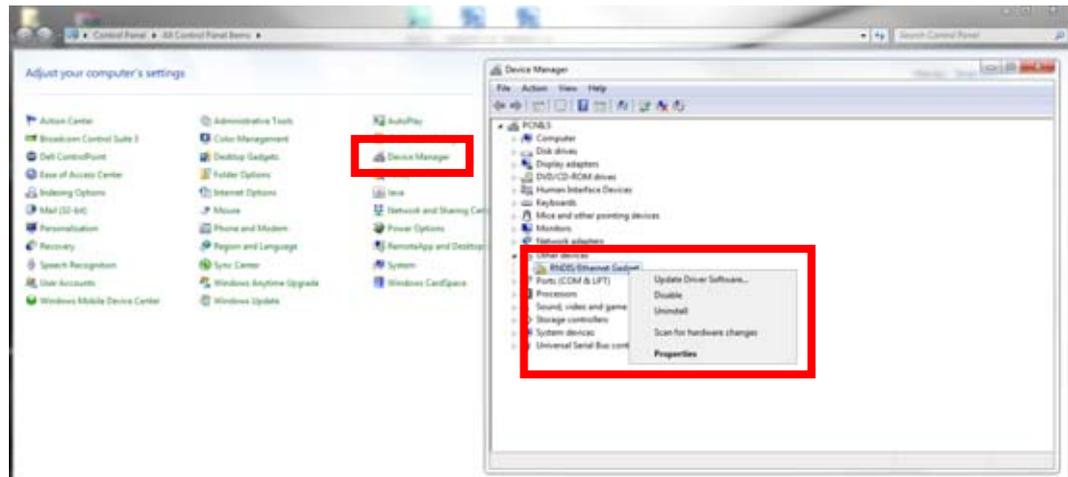
USB is the easiest way to connect your PC to the DOIP central unit. To be able to use this way of communication, a specific USB driver should be installed first. Follow the steps below to prepare your PC:

#### ➔ Installing the necessary USB driver (Windows 7)

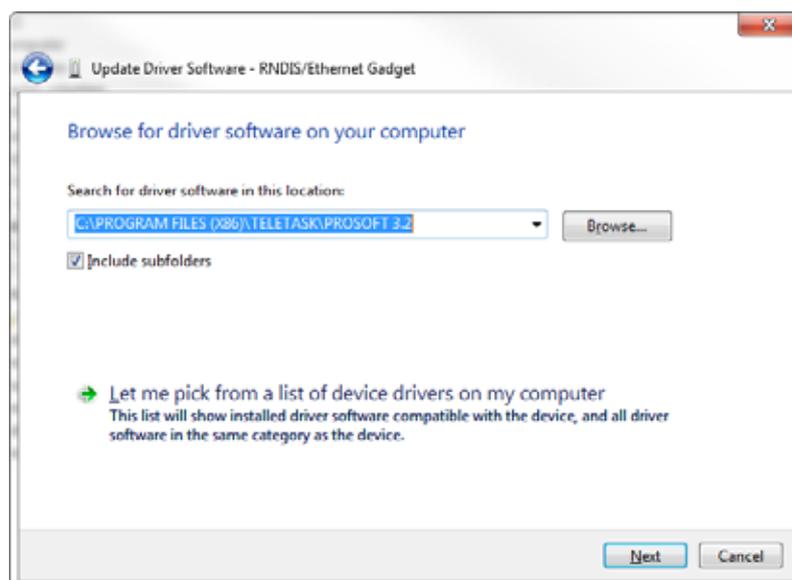
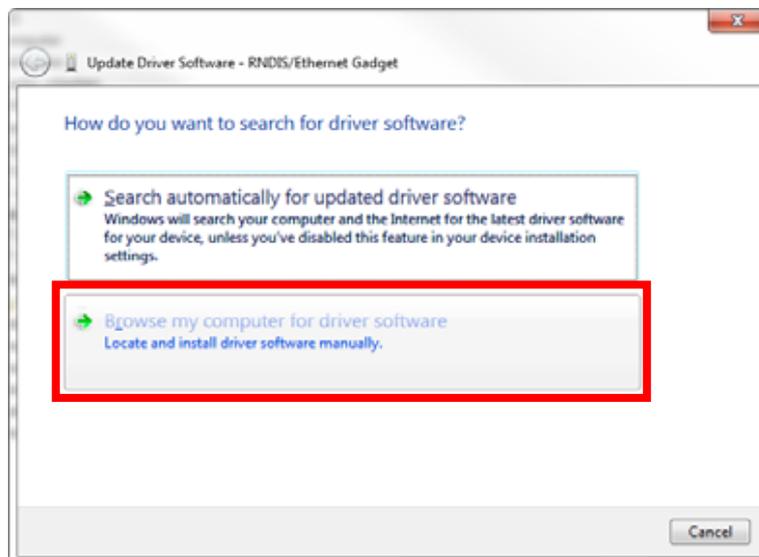
- ☞ Make sure that the correct PROSOFT Suite version is installed on your PC.
- ☞ Connect your PC to the DOIP central unit using a standard (A to B type) USB cable
- ☞ Windows will give a short message that the hardware couldn't be installed.



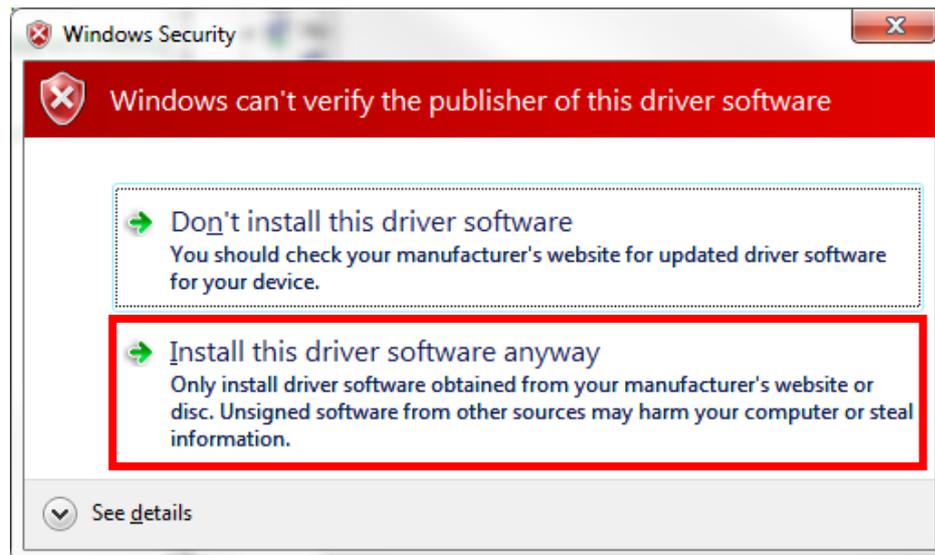
- ☞ Go to the Control panel
- ☞ Click on Device Manager
- ☞ Look for the RNDIS/Ethernet Gadget (has a yellow triangle)
- ☞ Click with the right mouse button on this item and choose update driver software.



☞ Select in the next screen: 'Browse my computer for driver software'.



☞ Now give the location where the PROSOFT Suite is installed.



- ☞ Windows will give a warning about the installation of the driver, click 'Continue anyway'
- ☞ Windows will now install the correct driver for the DOIP central unit (this may take some time)
- ☞ Click Finish in the last screen of the 'Find New Hardware Wizard'.
- ☞ Your computer is now ready for communication with the DOIP.

#### Remark

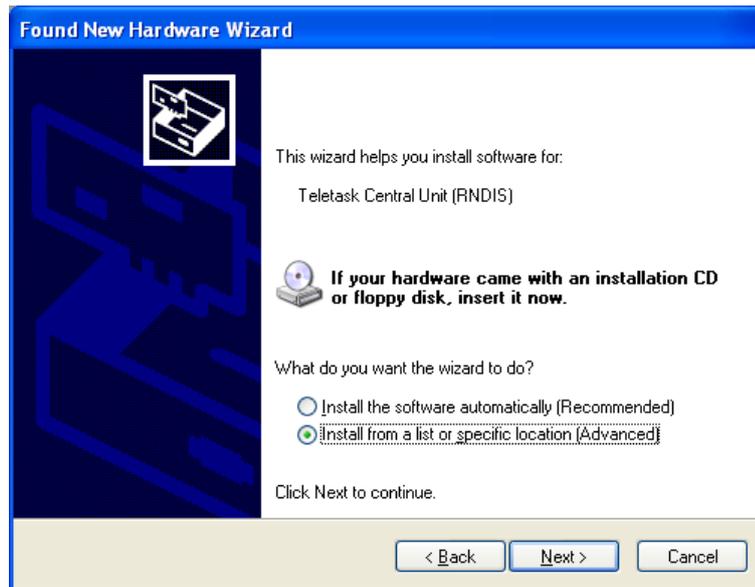
- ☞ **Drivers are installed for each USB port separately, so if you use another USB port of your PC (notebook) the next time you want to communicate with the DOIP you will need to repeat this procedure.**

#### ➔ Installing the necessary USB driver (Windows XP)

- ☞ Make sure that the correct PROSOFT Suite Version is installed on your PC.
- ☞ Connect your PC with the DOIP Central Unit by a standard (A to B type) cable.
- ☞ Windows will automatically start the 'New Hardware Wizard'.
- ☞ Choose 'Not this time' and click on next.



- ☞ Choose 'Install from a list or specific location (Advanced)' and click next



- ☞ In the next screen, select 'Search for the best driver in these locations' check 'Include this location in the search', click the browse button and select the location of the PROSOFT Installation folder.
- ☞ Windows will give a warning about the installation of the driver, click 'Continue anyway'



- ☞ Windows will now install the correct driver for the DOIP central unit (this may take some time)
- ☞ Click Finish in the last screen of the 'Find New Hardware Wizard'.



☞ Your computer is now ready for communication with the DOIP.

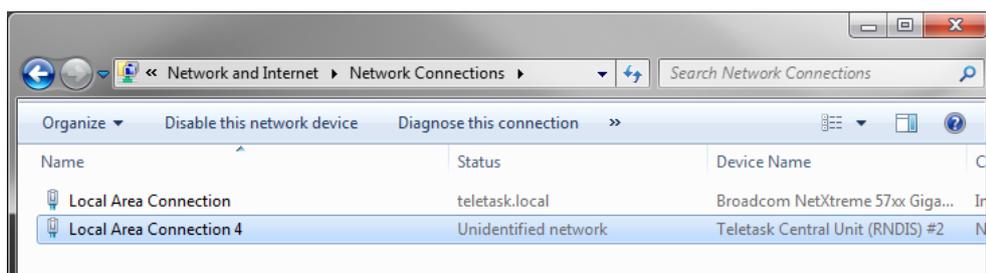
#### Remark

- ☞ **Drivers are installed for each USB port separately, so if you use another USB port of your PC (notebook) the next time you want to communicate with the DOIP you will need to repeat this procedure.**

### ➔ Checking the connection

You can check if the USB cable is correctly connected to the TELETASK Central unit:

- ☞ Go to Start, Control Panel, Network and sharing centre, Manage network connections (in the bar on the left, 'Change Adapter Settings'). For XP is this Control Panel, Network connections.
- ☞ There must be a connection with Device Name; **TELETASK Central Unit (RNDIS)...**



**Troubleshooting:** If you have problem communicating with the DOIP via USB you can check the following

- ☞ **Check if the USB port is working properly with another device (e.g. mouse, keyboard,)**
- ☞ **Check if you can communicate via USB to another DOIP central unit (if available), if this works, there might be a problem with the central unit, contact your TELETASK supplier.**
- ☞ **Make sure your Windows is updated (Service Pack 2 is necessary on XP)**

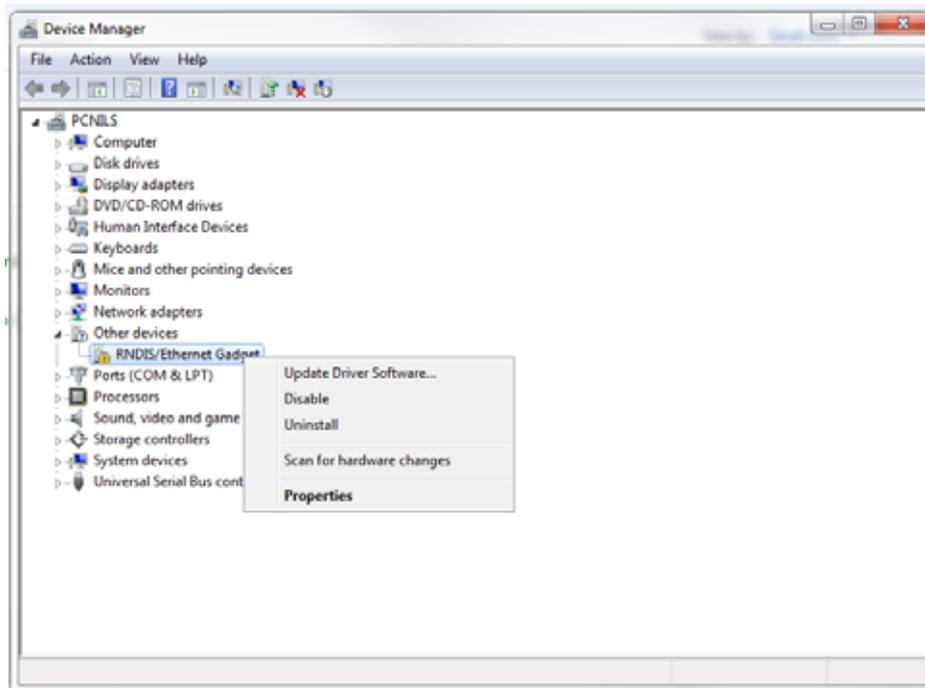


- ☞ **Check if it is possible to communicate to the DOIP using another USB port/Computer. If this works there might be a problem with your USB port / computer, contact you PC distributor.**

### ➔ Reinstall the driver

Following section describes how you can install the driver when you cancelled the normal procedure.

- ☞ Make sure your PC is (still) connected to the DOIP with USB
- ☞ Go to Device Manager (Start/Control Panel)



- ☞ Probably you will find a device there with an exclamation mark (this means: not correctly installed)
- ☞ Right click on that item and choose 'uninstall'
- ☞ Press OK to confirm the removal of the driver.
- ☞ Remove the USB cable from the PC
- ☞ Now you can go back to section A. Installing the driver



### 9.1.3. Ethernet Communication

Ethernet communication looks a bit more complex than USB communication. In most cases however setting up the Ethernet communication is as easy (or even easier) as setting up a USB connection. This is the case when you have a simple LAN network to which your computer is already connected.

You can connect the DOIP to your Network (switch/router) with a standard Ethernet patch cable.

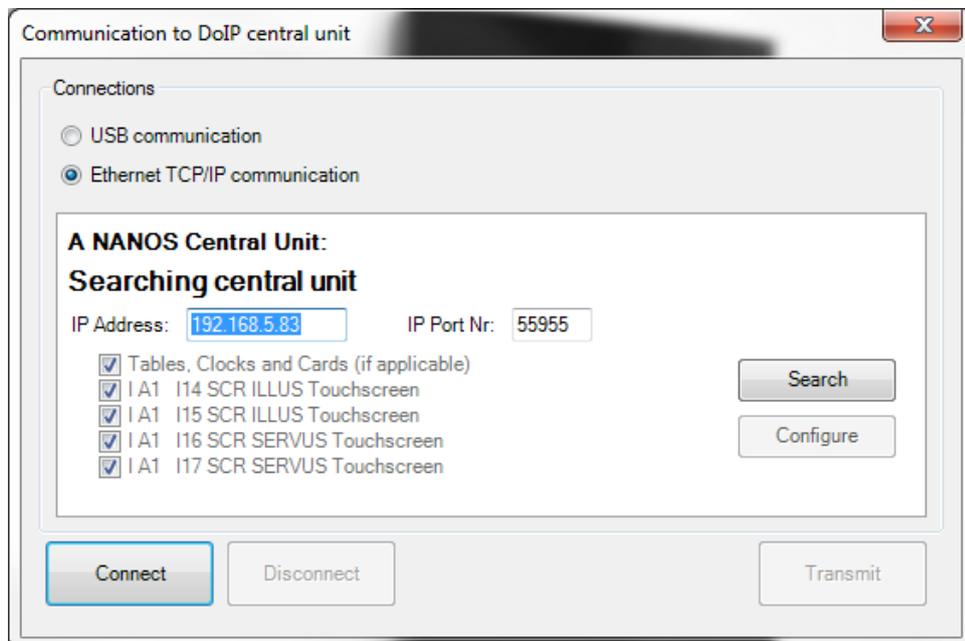
From the moment this cable is connected correctly, the Communication LED (LEDLINK) on the DOIP printed circuit board will be on. If this LED is blinking continuously there is possibly something wrong with the cable (The LED will blink only when there is data-communication)

If your network is a 100Mbit network or more the 100Mb detection LED (LED100MB) will be lit as well.

#### → Ethernet communication through LAN

The best way to connect a PC to the Central Unit through Ethernet is by using a hub, switch or router. Most likely you already have a local network connected to your PC. Connect the DOIP, and if necessary your computer to the LAN. In order to establish a communication between your computer and the Central Unit, follow these steps:

- ☞ Restart the Central Unit once it is connected to the LAN (press the 'Restart' button or remove the power for ten seconds).
- ☞ Start Prosoft SUITE V3.1 (or higher); open the .NBT file you want to use (or create a new one if required.)
- ☞ Go to the menu 'Communication' and select 'Send'.
- ☞ Within the communication window select 'Ethernet'



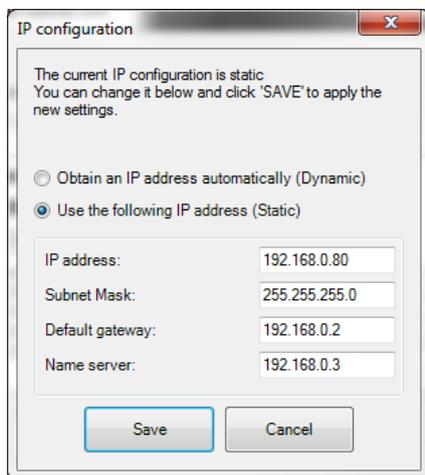
- ☞ Click the 'Search button' and a Message box will appear asking you to press 'SW2' on the central unit. (The 'SW2' button on the DOIP is located at the right side of the printed circuit board, above the battery. Press and release, this button.)
- ☞ To make sure that this functionality works your FIREWALL must allow that PROSOFT can accept connections from the network, if you use 'Windows Firewall' you will automatically get a 'Security Alert', you have to choose 'Unblock' there. If you use another Firewall on your PC (ex. Norton Internet Security)



please look at the documentation of that software what to do (you can also temporary disable the Firewall)



- ☞ A new window will appear in PROSOFT in which you can set the communication parameters. In most cases, the new window will look like this:



- ☞ The text on the top describes the IP settings as they are at the moment, at the bottom you can change the settings. For a new DOIP (or a DOIP on which the IP-address is dynamically assigned) PROSOFT will make a proposal for new settings. It is advised to accept the settings PROSOFT suggests. There are two types of assigning an IP address: Dynamic or Static. With Dynamic the TELETASK central unit will ask for an IP address on the network, the switch or router will provide the IP address automatically. With a Static IP address the central unit will always have the same IP address. New DOIP central units always use 'Dynamic' so that they receive all necessary information (IP address, Subnet Mask, Gateway and Name Server) from the network. The disadvantage of this system is that the IP-address can change. Therefore it is advisable to change it to a 'Static' IP-address, like PROSOFT suggest. In this way the IP-address of the central unit will not change, which is easier for sending, necessary for connecting GUI's, ..
- ☞ If needed make changes to the settings, and click save to apply. (You can always return to this screen to change the settings again).
- ☞ The IP information is now inserted in your .nbt file (save the file to keep the settings for further usage).
- ☞ Your PC is now ready for communication with the DOIP (using the saved .nbt file)
- ☞ In the communication screen of PROSOFT you can now connect to your central unit.



**Remark:** when you are connected to the central unit, the 'Search' button, changes to a 'Configure' button. When you click this button you immediately get the IP configuration screen, and you can change your settings (if this is needed).

**Trouble shooting:** It is possible that procedure above will not work, this is the case if:

- ☞ **The central unit is 'Static' set to an IP address in another network range than the range of the LAN network. For most small networks IP addresses are in a different range when the first three numbers are not the same (e.g. 192.168.0.10 and 192.168.0.11 are in the same range, 192.168.0.10 and 192.168.1.11 are not).**
- ☞ **There is no DHCP server on the LAN (the DHCP server is responsible for giving IP addresses to devices that ask for it, in most cases the Switch or router is also the DHCP server.). In this case the DOIP will use the default IP address (192.168.0.200) and it is possible that this IP address is in wrong network range for your LAN**
- ☞ **It is not possible to connect devices in a different IP range, so in both these cases you can not configure your central unit using Ethernet, use USB to set the IP settings of the central unit to 'Dynamic', reset the central unit and restart this procedure.**
- ☞ **Alternatively you can push in SW1 and SW2 during 10 second. Herewith the Ethernet settings of the DOIP central unit are brought back to factory settings (DHCP).**
- ☞ **PAY ATTENTION: it will also delete possible NBT information from the DOIP Central Unit.**

#### → Ethernet communication using a Crossed cable (not recommended)

**WARNING:** In this procedure we will change the IP configuration of your computer. So it is possible that your computer will no longer be able to connect to your network or Internet (you will need to set your PC settings back to what they were before you started this procedure in order to be able to connect again).

TELETASK does not advise this procedure, we recommend using USB or Ethernet using a LAN connection. However there can be situations where this procedure is needed to communicate with the central unit (e.g. if there is no LAN, and you do not have a USB cable with you).

The connection between the PC and the DOIP is normally done with a 'crossed CAT5' cable. (Most recent network-cards of the PC's have an 'auto-cross/straight' detection, then you can also use a straight patch cable)

The steps to set up a connection are:

- ☞ Find the IP-Address of your central unit
- ☞ Give the PC to an appropriate IP address

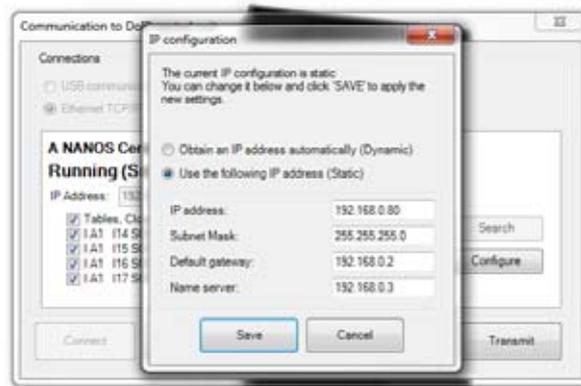
#### → Find the IP Address of your central unit

The default IP-Address of a new DOIP is 192.168.0.200. If you just unpacked your DOIP you can skip this section

- ☞ Connect the central unit and your PC
- ☞ Open TELETASK PROSOFT Suite software, go to the communication screen, click on the search button and press 'SW2' on the TELETASK central unit (see Ethernet communication using LAN for a more detailed description of this step).
- ☞ There are two different possibilities of the result by pressing the SW2 switch



1. You get the IP configuration box:



- ☞ Press 'Cancel'
- ☞ The IP Address is automatically filled in
- ☞ You can now press 'Connect' and then press 'Transmit' to send your PROSOFT file
- ☞ You can skip the rest of this document

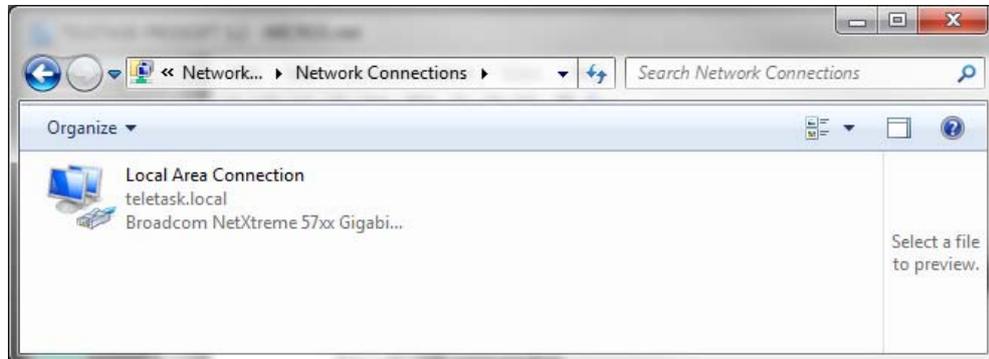
2. You are in the wrong IP subnet:

- ☞ PROSOFT Suite gives a message that it can't be connected with the Central Unit.
- ☞ Press 'OK'
- ☞ The IP Address is automatically filled in
- ☞ Note this IP address of the central unit
- ☞ Close the PROSOFT Suite

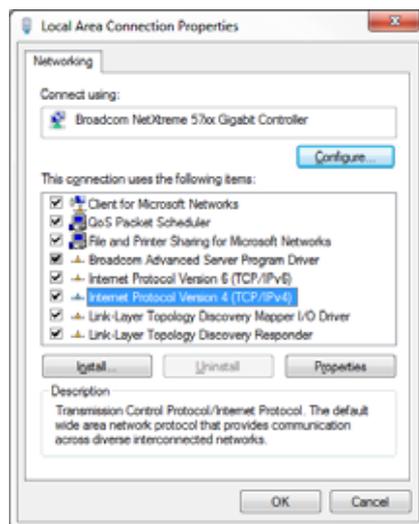


## → Give the PC an appropriate IP address (Windows 7).

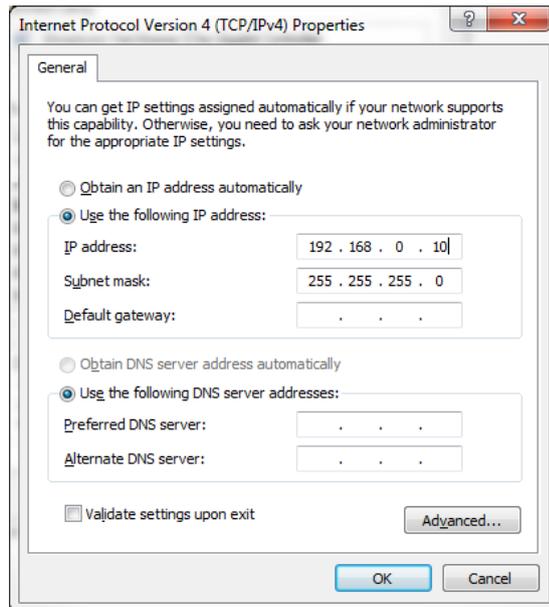
- ☞ Go to Start, Control panel, Network and sharing- change adapter settings). You will have a window looking like this:



- ☞ There might be more than one connection (Wireless connection, 1394 Connection,); you need to find the normal wired connection (not the wireless, nor the 1394 connection).
- ☞ 'Right click' on the Local area connection and choose properties
- ☞ In the new window, select 'Internet Protocol (TCP/IP)' Version 4 connection in the list and click 'Properties'.



- ☞ Now you will get a window where you can set the IP configuration for your computer. Change the settings so it looks like this (Assuming that the IP address of the Micros is 192.168.0.200. If not, make sure that the 3 first numbers are the same as from the IP address of the DOIP and that the last number is different).  
**Warning:** Note the settings. Before changing them you might need them in order to reconnect your computer to a network or Internet afterwards.



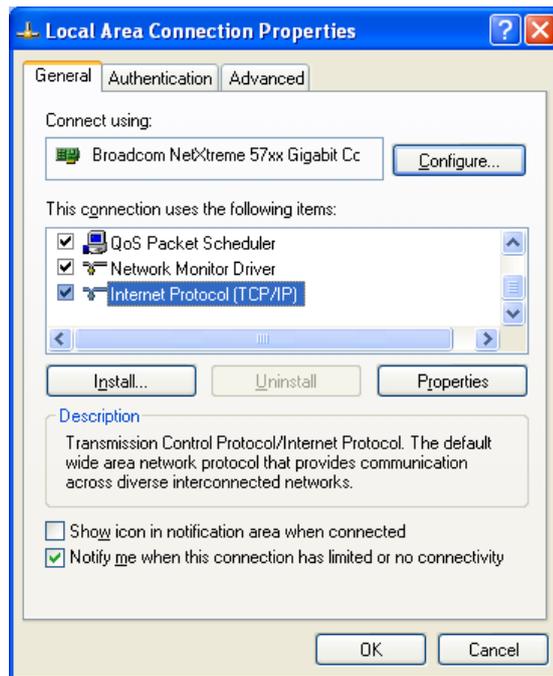
- ☞ Click OK to save the new settings. Wait until MSWindows has applied the new settings (this may take some time).
- ☞ Open PROSOFT Suite, go to the communication screen, enter the IP address of the DOIP and click 'Connect'.
- ☞ Now you can press 'Transmit' to send your PROSOFT file to the DOIP central unit.

### ➔ Give the PC an appropriate IP address (Windows XP)

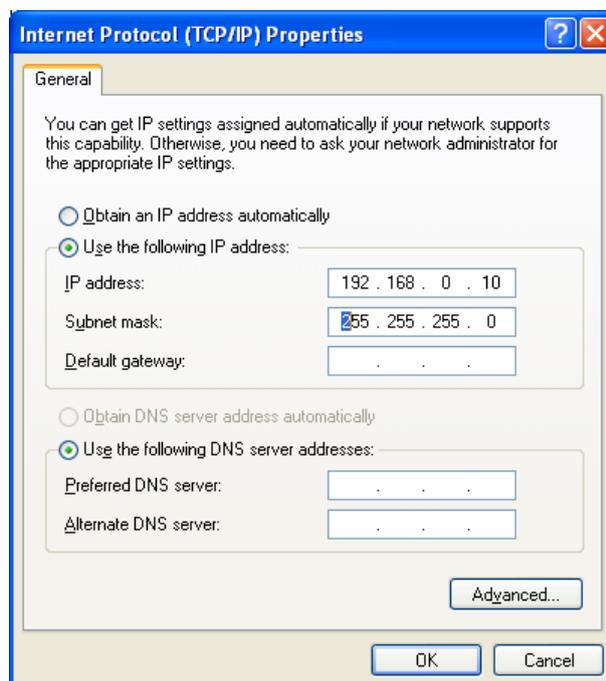
- ☞ Go to Start, Control panel, Network connections. You will have a window looking like this:



- ☞ There might be more than one connection (Wireless connection, 1394 Connection,); you need to find the normal wired connection (not the wireless, nor the 1394 connection).
- ☞ 'Right click' on the Local area connection and choose properties
- ☞ In the new window, select 'Internet Protocol (TCP/IP)' connection in the list and click 'Properties'.



- ✎ Now you will get a window where you can set the IP configuration for your computer. Change the settings so it looks like this (Assuming that the IP address of the Micros is 192.168.0.200. If not, make sure that the 3 first numbers are the same as from the IP address of the DOIP and that the last number is different). Warning: Note the settings. Before changing them you might need them in order to reconnect your computer to a network or Internet afterwards.



- ✎ Click OK to save the new settings. Wait until MS Windows has applied the new settings (this may take some time).
- ✎ Open PROSOFT Suite, go to the communication screen, enter the IP address of the DOIP and click 'Connect'.
- ✎ Now you can press 'Transmit' to send your PROSOFT file to the DOIP central unit.



## 9.2. Connection trouble shooting

Follow this procedure when you lost your connection with the DOIP central unit. Don't worry if the heartbeat LED on your central unit stopped blinking. This means a problem has been detected, not that your central unit is down.

### 9.2.1. In practice

- ☞ When using a LAN connection, trouble could not be related to the Central unit. Try to connect with the Central unit using an USB connection.
- ☞ Reset the central unit by pushing the RESTART button or by disconnecting the central unit from the main voltage. Wait up to 1' before the central unit has started up completely.
- ☞ Start the PROSOFT Suite and open new file by selecting 'file' 'new' in the menu.
- ☞ Connect the PC with the central unit using a proper USB cable.
- ☞ In PROSOFT, go to communication and select USB. If this fails, one of the following error might occur:
  - ☞ USB on your PC is not working properly.
  - ☞ USB is not properly connected (and installed).
  - ☞ The Central Unit is defect.
- ☞ If the connection succeeded, it should show 'connected' at the bottom of the window.
- ☞ Send the empty file you just created, towards the central unit.
- ☞ It might happen that an error is show: 'Central unit did not start up correctly'. This means there was a problem with the previous file sent tot the central unit.
- ☞ RESTART the central unit a second time. This time the central unit will be completely cleared and will be ready to be configurated. Check if the heartbeat LED on the central unit blinks.
- ☞ Now you can open and send a new file towards the central unit.
- ☞ If the error occurs again, it means there is a problem with the file you try to send.
- ☞ If your central unit is not responding, even when you send an empty file, it might be defect.

### 9.2.2. Remark

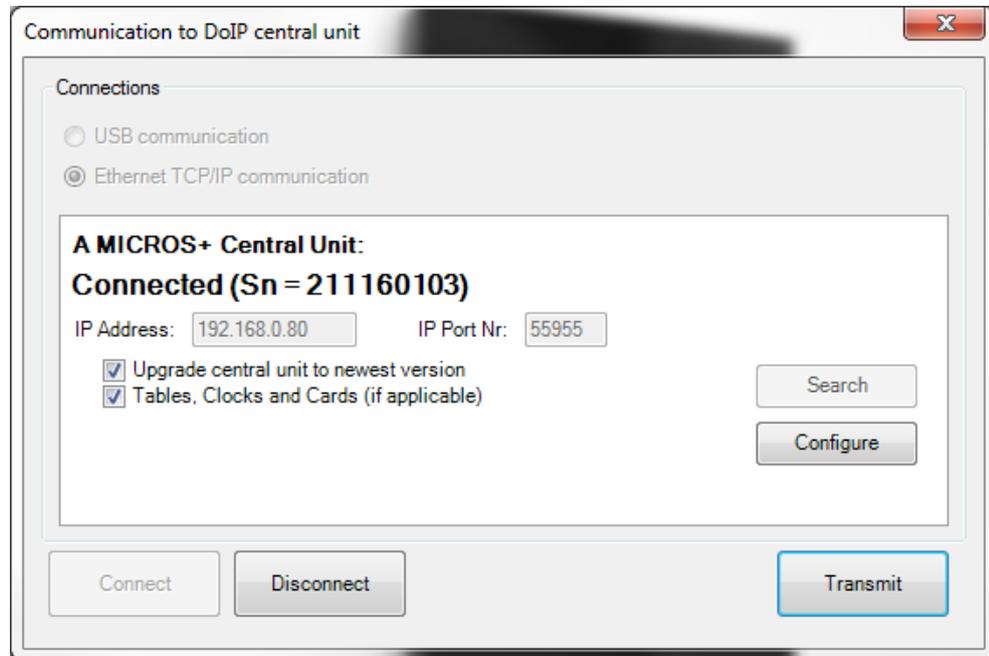
- ☞ **Problems in the nbt-file could make the central unit to stop, even after some time. This means the central unit is working properly but you will have to make a new nbt-file.**



## 9.3. Communication with the DOIP central unit

### 9.3.1. Send

This section explains how to send your .nbt file to the DOIP, if the connection to the central unit is already working (USB or Ethernet).



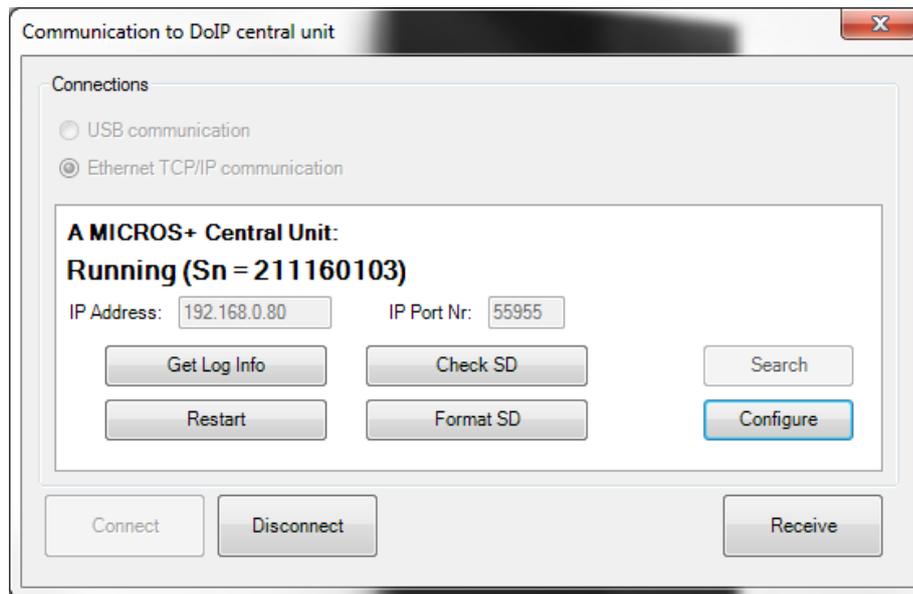
- ☒ **'Tables to send':** Select in this field, the different tables which are to be sent to the central unit.
  - ☐ **'Central unit:** upgrading to the newest version': This option is automatically marked if the central unit needs to be upgraded to a newer software version. The new software is send together with the .nbt file.
  - ☐ **'Basic':** this option is marked 'V' by default and makes you send every change to the TELETASK central unit. This table contains all relations between the different inputs and outputs.
  - ☐ **'Tables, Clocks and Cards':** this option is standard V-marked and sends all data to the central unit.
  - ☐ **'Displays':** Mark the displays whereto you want to re-send the data. The NOT sending of these data can shorten the duration time of the sending.
- ☞ **If the central unit needs to be upgraded, you cannot send the displays along. You can do this, if needed, after the upgrade of the central unit.**

#### ➔ In practice:

- ☞ Click 'Communication' in the PROSOFT menu bar
- ☞ Click 'transmit... ' and the 'Communication' window appears on the screen
- ☞ Set the communication settings.
- ☞ Select the desired information which has to be sent to the central unit.
- ☞ Click 'OK'. Immediately the data file(s) is (are) sent to the central unit.
- ☞ The progression bar/label identifies the status of the communication.



### 9.3.2. Receive



A special function in the communication menu is 'Receive'. When pushing this button, you can read all the different relations in the TELETASK central unit. This may be a useful tool when you lost the original PROSOFT file with the project data.

☞ **Beware: Uploading of an .nbt file out of the central unit can only be used as an emergency tool when you have lost the .nbt file! If the central unit is defect this file also will be lost. Make sure you have ALWAYS an external back-up of your files on a CD ROM or Memory Stick.**

- ☒ 'Get Log Info': here you can see the history of the use of the central unit. This info can be very useful for rare software problems. Depending on the size of the history, the getting of the log info can take a long time.
- ☒ 'Restart': the software restarts the Central Unit. This can proceed eventually when you are not near the Central Unit.
- ☒ 'Check SD': Check of the SD Card. For more info, please see the 'support & release notes' document.
- ☒ 'Format SD': Formatting of the SD Card. For more info, please see the 'support & release notes' document.
- ☒ 'Receive': receiving the .NBT file.



## 10. Overview of your domotic project

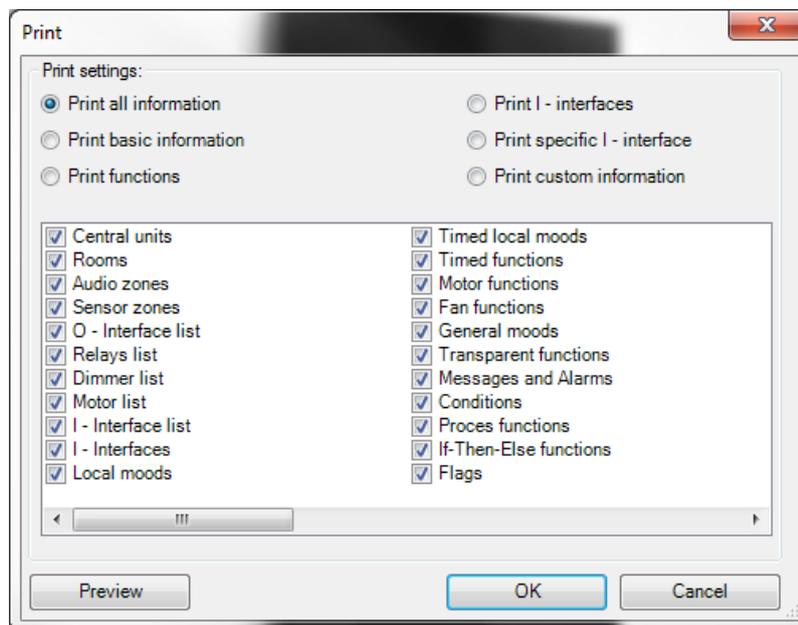
### 10.1. Print your project

When you want to have a quick look at a certain function or setting in your home automation project, it is easy to have a paper version of your project in the electrical board, stored together with the other electrical drawings. In PROSOFT there is a print feature to create a paper version of your home automation project. Beside the general project settings as the filename, the settings from the installer and the house itself... You are able to print an extended resume from your project. The subjects you can print are settable and are divided in four groups:

- Print all information: all available information will be printed.
- Print basic information: All information concerning the Central Unit, the rooms, the Audio Zones, the Sensor zones, the O-interfaces list, the I-interfaces; the Relays outputs, the Dimmer outputs and the Motor outputs.
- Print functions: Print all available functions.
- Print I-interfaces: print the list of the I-interfaces + a detailed overview per I-interface.
- Print specific I-interface: print the details of one or some of the chosen I-interfaces. (handy to update your file).
- Print adapted information: choose which info you want to print.

#### → Practical

- ☞ Click 'File' in the PROSOFT menu.
- ☞ Click 'Print'
- ☞ The 'Print .NBT File' window appears



- ☞ Select the data to be printed.
- ☞ Click 'OK'. Here you can change the printer on which you want to print the file.

### 10.2. Hierarchic List

The list you can print with the data of your domotic project, offers a good overview of the used and available outputs. The hierarchic list shows an overview of every relay,



dimmer, motor, sensor, audio zone, flag, clocks, service functions and messages/alarm functions combined with the coupled relations.

☝ **Only when an output or a function of this kind is defined in PROSOFT will this function appear in the hierarchic list.**

Using the hierarchic list you can read that relay 1 is used in the local mood 'cooking' and that this relay is also switched by touching button 1 on the touch panel located in the kitchen.

Thanks to hierarchic list you can search what happens when an output is acting strange or not as you thought it would work. When you have found the problem in the hierarchic list you can easily solve it in PROSOFT Suite by changing the function.

### ➔ In Practice

- ☞ The hierarchic list is made by clicking the short key .
- ☞ Click this short key again to switch of the hierarchic list.



# TIMESOFT

## 11. Actions based on time programs

### 11.1. Introduction

Timed actions need to be very flexible. TIMESOFT is the perfect tool if you want to have a fast overview and if you need a powerful edit tool for the flexible clock system in your home automation project.

### 11.2. The different clock tables.

To adapt reoccurring actions to your life pattern there are five time tables which we call 'clock tables' available. Every clock table has its own typical use and can contain several TELETASK outputs or executable PROSOFT functions. Due to the TIMESOFT application, in the remaining part of this chapter these outputs and functions are called 'clock actions'.

The 'Continuous' clock table:



This table is always active. All clock actions entered in this table will be executed at the defined time of the day without any exception. This 'continuous' clock table is particularly suitable for clock actions which are not depending of your possible presence in the house or day of the week.  
Typical application: every day 11pm, close all the curtains.

The 'Working day' clock table:



This clock table is only active (actions in it are processed) on the days which you have defined as working days. The working day clock table has an OR relation with the 'weekend clock table and the 'presence simulation' clock table. If one is activated, the other two are always deactivated automatically.

The 'Weekend' clock table:



This clock table is only active (actions in it are processed) on the days which you have defined as weekend days (not working days). The weekend-day clock table has an OR relation with the 'working day' clock table and the 'presence simulation' clock table. If one is activated, the other two are always deactivated automatically.

The 'Presence simulation' clock table:



This clock table is only active (actions in it are processed) when the system is in presence simulation status. The presence simulation clock table has an OR relation with the 'weekend clock table and the 'working day' clock tables. If one is activated, the other two are always deactivated automatically.

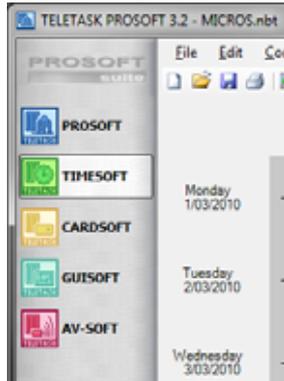


The 'Special' clock table:

This clock table can be activated and deactivated when you want with any button or even with a clock action. When active, the clock actions in this table are executed and when not active, no actions are taken.

### 11.3. Start TIMESOFT.

Simply click the TIMESOFT icon in the PROSOFT Suite menu bar.



### 11.4. Visualisation

Every action which is added in one of the clock tables appears with a symbol on the weekly display of your PC (main TIMESOFT window) and it is also displayed in the table overview at the left of the TIMESOFT window. In some cases the clock action can be numerous and therefore there are extra table selection buttons on top of the main window. Use the visualization buttons to get a good overview of the actions in the tables. The clock table is shown in the overview when the button is highlighted in orange.

When a clock table is not displayed, the corresponding clock action will not be displayed in the weekly display and in the overview table. However these actions are not displayed, they are still in the clock table.

In the clock action table overview it is very easy to see to which clock table a certain clock action belong due to the coloured square in front of the clock action.



Click to visualise the actions (for the shown week) in the 'continuous' clock table

Colour: Black



Visualisation of the Work day clock table

Colour: Red



Visualisation of the Weekend clock table

Colour: Blue



Visualisation of the Presence Simulation clock table  
Colour: Green



Visualisation of the Special clock table  
Colour: Yellow

- ☞ **When you add a clock action which is repeated every x minute or x hour(s), than the actions will only be displayed once a day at the moment the action takes place for the first time that day. At the other hand it is not recommended to add such fast repetitions, because they may block the system or the actions may be executed with a delay.**
- ☞ **A maximum of 300 actions will be displayed on the main window. If necessary, depress not to be visualized clock tables to have a better overview on the screen.**
- ☞ **When a clock action is selected (by clicking on it in the calendar overview or in the table overview) you will see that the clock action symbol on the calendar overview is filled (little triangle near the timeline). The calendar view will always switch to the first appearance of the action starting from the current active week.**
- ☞ **Not visualised actions are although not see, normally executed by the system.**



## 12. Defining a clock action

### 12.1. Adding a new clock action

#### 12.1.1. Add a clock action

##### → Using the 'Edit'-menu

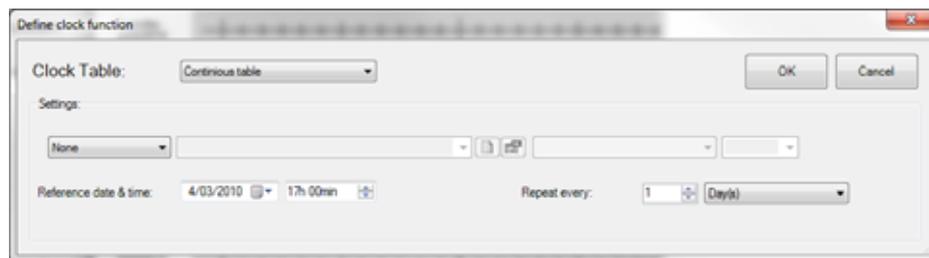
You make a new continuous clock action by clicking the option 'New Continuous Clock' in the 'Edit' menu. Make every new clock action for the other clock tables in the similar way.

##### → Using the short keys

You also can add a new clock action by clicking the 'new clock action' short keys in the TIMESOFT menu bar. For every clock table (Continuous, workday, weekend day, simulation and special) is a 'new action clock available.



#### 12.1.2. The different available parameters

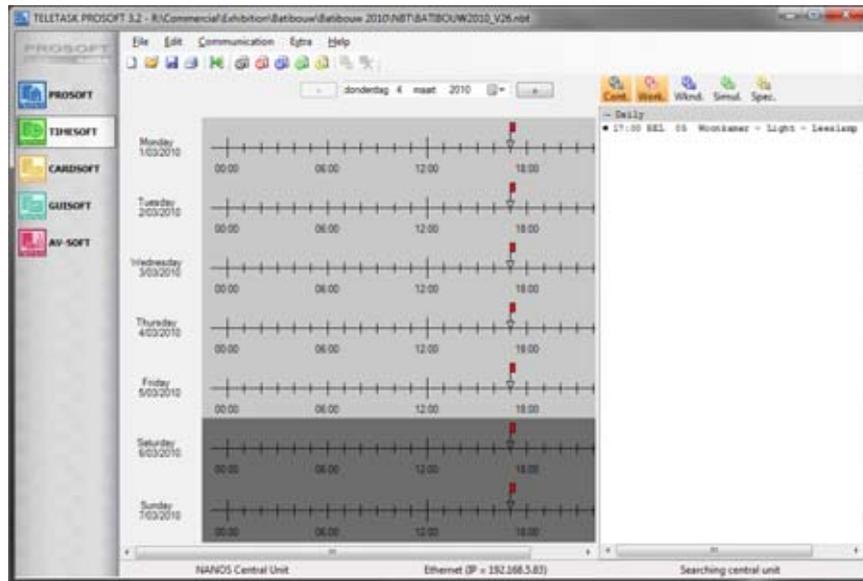


- ☒ Clock table: In this drop down you can change the clock table for the clock action. The action will only be executed when this clock table is active. Only the 'continues' clock table is always active. Refer for more information to the 'clock functions' in the 'Functions' chapter in this handbook.
  - ☐ Depending on the selected clock table, the following parameters are available:
    - ☐ Continuous, Presence Simulation and Custom clock table's:
      - ☞ 'Repeat every': define here with which repetition the action has to be executed
      - ☞ 'Reference date': enter the reference (starting) date for the first action of this repetition.
    - ☐ Workday and Weekend clock table:
      - ☞ No extra parameters to be set
- ☒ Function: Select here the function which is to be executed at the set time of the day. For more information about the different functions which can be selected and how they work, refer to the 'Functions' chapter in this handbook.
- ☒ Target value (below the OK button): Select the desired status to which the selected output or functions is to be set at the desired time.
- ☒ Time: defines the time when the selected action (output or function) should be executed.



## 12.2. Editing a clock action

- Select the clock action you want to change by clicking on it in the right overview table.



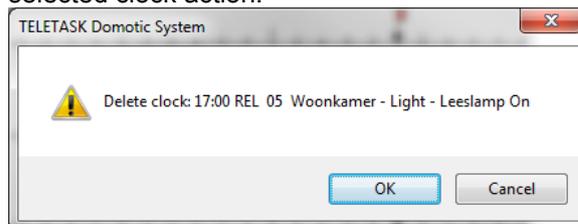
- Click the 'Edit action' short key in the TIMESOFT menu bar . The window with the parameters of the selected action appears on the screen.

**Shortcut: double click the action you want to change in the right overview table.**

- Edit the desired parameters
- Click 'OK', and the clock action is changed in the PC.

## 12.3. Remove a clock action

- Click the clock action you want to be deleted in the overview table.
- Click the 'Delete action' short key in TIMESOFT menu bar . On the screen appears a window asking for your confirmation to delete the selected clock action.



After clicking 'OK' the action is deleted from the clock table.

## 12.4. The 'Communication' menu in TIMESOFT

To send the adjusted Clock information to the Central Unit, you have to send the .NBT file to the Central Unit. Refer to the PROSOFT communication chapter for more information.

- Before you send the data to the central unit it is recommended to save the project first.**



# CARDSOFT

## 13. Access Control

### 13.1. Introduction

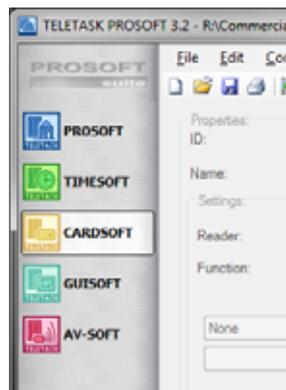
If access control is more than just opening a door to you, TELETASK may have the right solution to fulfil your needs. TELETASK is not only offering an access control system, but a fully integrated solution which is reliable, safe, powerful and easy to use. Yes you can open the door and switching the lights, the heating/cooling, switch on the water supply, the gas supply, lower the curtains and set the audio system in the bath room and the kitchen to you favourite radio station... without even touching a button. Only a small tag hanging at your car keys or a proximity chip card in your handbag is needed. As soon as the TELETASK system recognizes you or your beloved ones being at the front door, the house is at your service. When its dark the lights are dimmed to 'welcome' you, etc...

Not only comfortably opening a gate, a door or a garage door, is the result, but the TELETASK solutions avoid that people can copy you door keys or some access tag/card can have limited or full access. The gardener can only open the main gate at the street level, open the garage door and activate the water supply (for a limited time). The cleaning wife is only allowed to enter the house on Wednesday and Friday mornings between 7am and 11 am, etc...

To be able to set the appropriate settings for these possibilities, TELETASK developed the CARDSOFT package to be used on any standard PC. The settings for access control items like chip cards, tags and proximity cards are easily done in CARDSOFT.

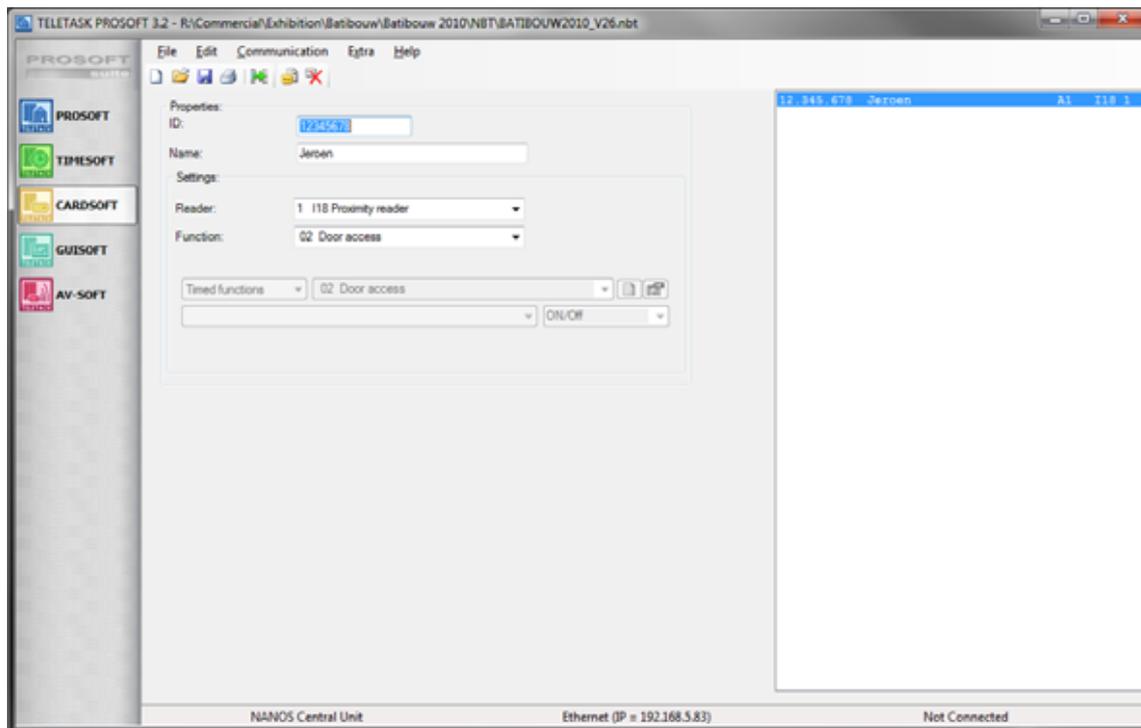
### 13.2. Starting CARDSOFT

Just click on the CARDSOFT button in the PROSOFT Suite menu bar and it starts up.





## 13.3. Configuring an intelligent card or tag



### 13.3.1. Adding an intelligent card or tag

#### → General parameters

- 'ID' or 'ID Nbr': every TELETASK card or tag has a unique reference code. This code is marked on the card or tag. When CARDSOFT asks for this parameter, just enter this code.
- 'Name': enter here the name of the owner/user of the card or tag.

#### → Parameters when the integrated solution with central unit is used

- '**Reader Add.:**' every access control interface has been given an 'I' interface address in PROSOFT. Select here if the card/tag will have access at only one or at all readers.
- '**Function:**' in your .NBT file you have been selecting at least one function which is activated when a valid card/tag is presented at the reader unit. Select here for this particular card or tag which function (1 to 8) is to be used when the card/tag is presented at the reader unit. Depending from this the function which is under the number 1 to 8, the functionality and possible conditions of the card will be defined.
  - ☞ **Below the place where the function is assigned a small declarative description of the function is visualized.**
  - ☞ **If you want to grant a card access at several proximity readers, you will have to add the card again (as many times as you have readers).**

#### → In practice

- ☞ To add a new card, click the 'New Card' short key in the CARDSOFT menu bar .
- ☞ Enter the 'ID' parameters of the card/tag (number on the card/tag).
- ☞ Click 'OK'
- ☞ Enter the 'name' of the user in
- ☞ Select the system specific parameters



### 13.3.2. Editing an intelligent card or tag

- ☞ Select the card or tag by clicking on it. The selected card/key line turns blue.
- ☞ Change the desired parameters

### 13.3.3. Remove an intelligent card/tag.

- ☞ Select the card/tag by clicking on it. A selected card/key turns blue.
- ☞ Click the 'Delete Card' short key in the CARDSOFT menu bar .
- ☞ CARDSOFT asks for confirmation to delete.
- ☞ Click 'Yes' to confirm that the card/tag should be deleted from the system
- ☞ The card / tag is now deleted.

## 13.4. The Communication menu in CARDSOFT

To send the adjusted access information to the Central Unit, you have to send the .NBT file to the Central Unit. In this case check out the PROSOFT communication chapter.

- ☞ **Before you send the data to the central unit it is recommended to save the project first.**
- ☞



# GUISOFT

## 14. Personalised graphical control

### 14.1. Introduction

#### 14.1.1. Graphical User Interface (GUI)

GUI is the new TELETASK Graphical User Interface, running on a target device to control your domotic system. The software can run on most PC devices: a desktop computer, a tablet PC build in the wall (GUI/GUI+) but also on a Smartphone, an iPhone, iPod Touch, iPad (iSGUI),...

The GUI/GUI+ software allows you to control your entire TELETASK system in an intuitive way based on the floor plans of your home or office. Each floor plan represents a part of your house. This part can be a room, an entire floor, the entire house, or any other part.

With the GUI/GUI+ you can control all TELETASK domotic functions of your home and you have the possibility to include IP-Camera's, dynamic HTML pages. The different functions are divided in eight categories: 'Lights', 'Devices', 'Moods', 'Motors', 'Sensor', 'Audio', 'URL or IP Camera' and 'All'.

The iSGUI has the same functionalities as the GUI/GUI+ but offers you the possibility to create automatically a complete and personal application for your Smartphone or iPhone. Even the iSGUI can integrate IP Camera's.

### 14.2. Glossary

#### 14.2.1. GUISOFT

The GUISOFT is a part of the TELETASK PROSOFT Suite software. Using the GUISOFT you will create one or more GUI's for your '.nbt project'.

#### 14.2.2. iSGUI/GUI(+)

iSGUI/GUI is the visualization of the different control screens on your target device. A GUI is created in GUISOFT by creating the 'GUI files' containing all the data for the concerned GUI. The data contains images of the floor plans, used icons...

#### 14.2.3. GUI Runtime (GUI/GUI+)

GUI runtime is the software that needs to be installed on the target device. Without this installation, the GUI will not work on the target device. The GUI runtime creates an environment in which the GUI data is displayed on the target device.

#### 14.2.4. iGUI/SmartGUI (= iSGUI)

Similar to the GUI Runtime. The iGUI can be downloaded from the Apple Application Store. The SmartGUI can be downloaded from the TELETASK website.

#### 14.2.5. Target Device

The target device is the PC, SmartPhone, iPhone, iPod Touch, iPad on which the GUI will run.



## 14.3. System Requirements

The target device can be a PC, a laptop, a tablet PC, on which you create the GUI using GUIISOFT. The target device should run on MS Win XP., Vista, 7 (GUI/GUI+) or Apple OS X (only GUI) or LINUX (only GUI).

For the GUI the Java Runtime Environment 1.5 (JRE 1.5) or a better version should be installed on the PC. If the JRE 1.5 is not installed on your PC, you can easily download it for free from the internet and install it on your PC: <http://www.java.com/>

For the GUI+ there need to be installed a .NET framework v4.0 (or higher) on the target device. You can download it from the internet: <http://www.microsoft.com/.NET/>

The target system does not have to be the PC on which the GUI in GUIISOFT was made.

For iSGUI the target system can be a Smartphone with Windows mobile 6.0 (or higher) on which the Compact.NET framework v2.0 (or higher) is installed or an iPhone/iPod Touch/iPad with iPhone OS 3.0 (or higher).

## 14.4. Schematic Configurations

There are different possibilities to connect the target system on which the GUI runs with the TELETASK central unit. Furthermore you have the possibility to connect more than one GUI to the central unit. In this way you can control the house from several GUI's. The below drawn schematic drawing explains the different configurations.

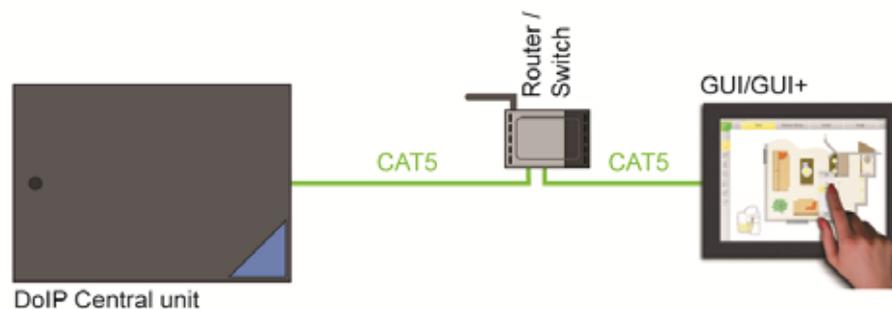
### 14.4.1. Connect one target system with the domotics

When you connect only one GUI target system with your domotic system the connections between the target system and the central unit can be made in several ways.

#### → Via LAN

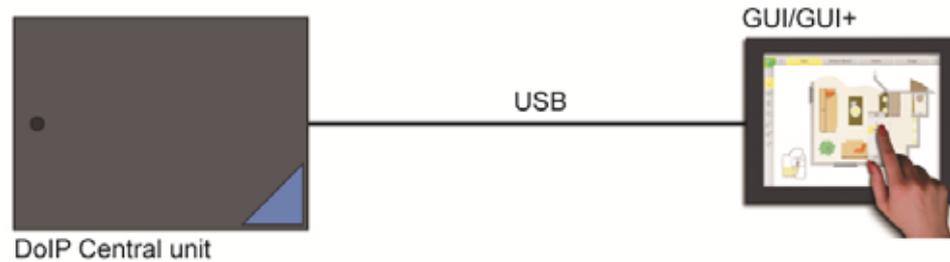
Connecting one target system with a GUI/iSGUI over the Ethernet with the central unit is very simple.

Similar to a PC, we use an Ethernet patch cable (CAT5) or a wireless network to connect the target system with a switch or router of the LAN. Connect also the TELETASK central unit with an Ethernet patch cable to the LAN.



#### → Via USB (only supported in combination with Windows)

For Demo or testing you can connect the target system GUI/GUI+ with the domotics system via a USB. We do not recommend this for a permanent connection.

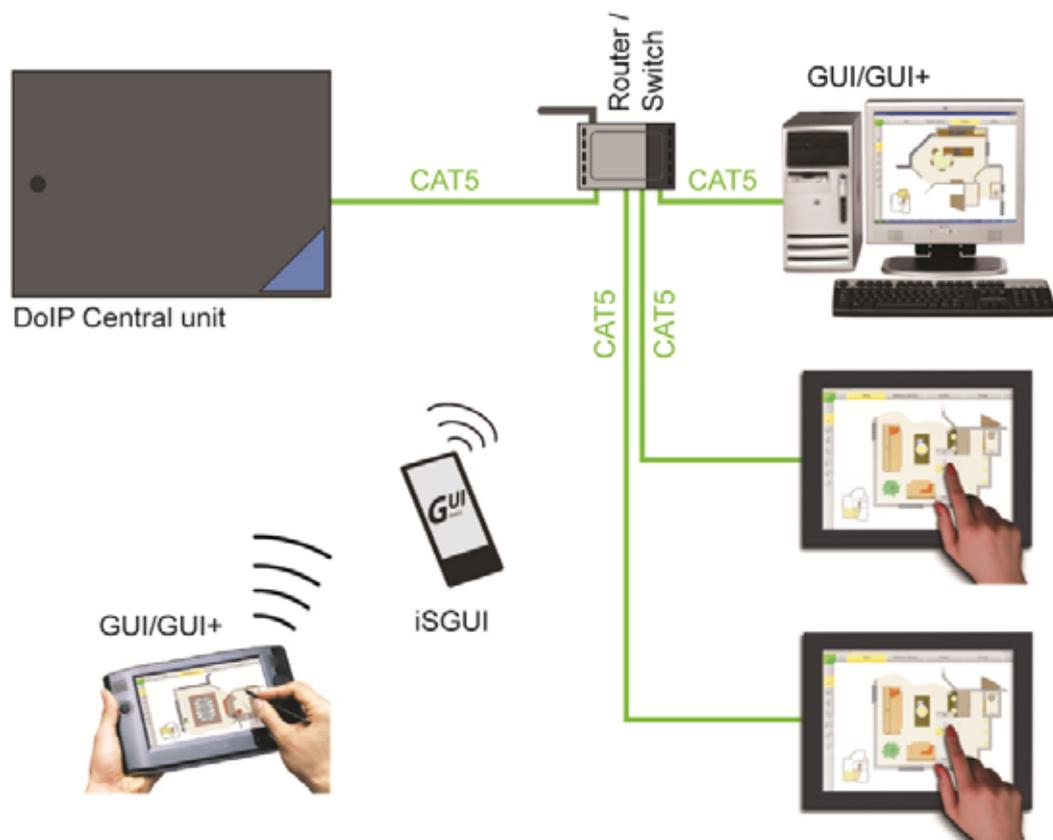


#### 14.4.2. Connect two or more target systems with the domotics.

Connecting 2 or more target systems with your DoIP Domotics Central Unit can be done similar to 1 target system, if you have applied the correct LAN method for every target system.

Attention: all target systems, just like the DoIP Central Unit have to be coupled within the same network. This means that the IP address of all systems have to start with the same first numbers. The last numbers have to be different!

e.g. 192.168.0.100, 192.168.0.101 and 192.168.0.102,



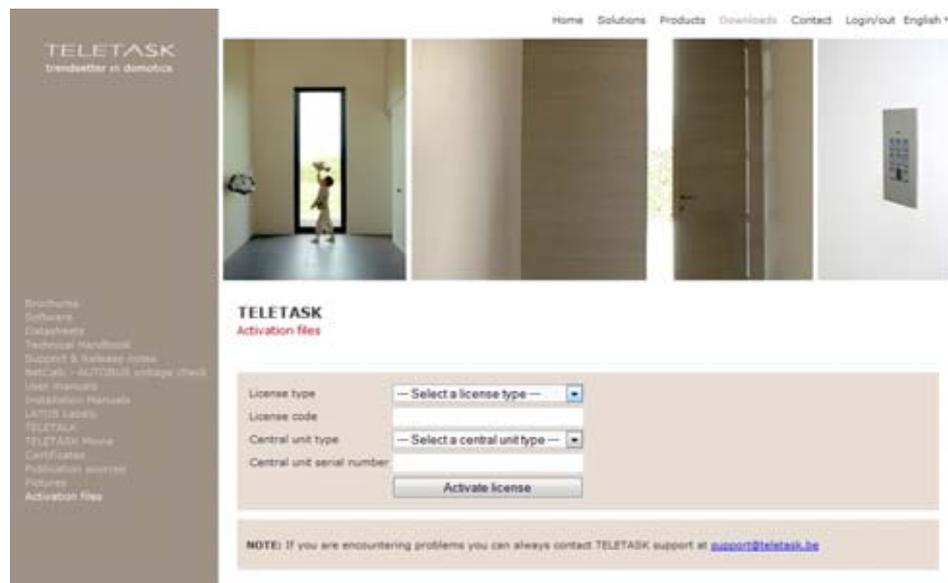


## 14.5. GUIISOFT Licence

The GUI/GUI+/iSGUI have to be activated before you can use them.

When you buy a GUI/GUI+/iSGUI license, you will receive a 'license code'. With this license code and the serial number of your Central Unit, you can activate the GUI/GUI+/iSGUI.

There go to [www.teletask.eu](http://www.teletask.eu) and log in to you TELETASK account.



How to activate a license:

- ☞ Go to [www.teletask.eu](http://www.teletask.eu)
- ☞ Choose 'Login/Out' (header menu).
- ☞ Log into your account or in case you don't have an account, create one (Warning: an end-user account is made with a few clicks, to get an professional account it will take somewhat more time).
- ☞ You are automatically redirected to the 'download' section. Choose 'activation files' (left hand menu).
- ☞ Fill out the form correctly and click 'Activate license'
- ☞ Your activation file will pop up. Download it and save it in your Project folder.
- ☞ Import the activation file into your PROSOFT project: choose 'extra' - 'licenses'.

TELETASK licence system: For every **simultaneous working** GUI/GUI+ you need an activated license. This means that the GUI/GUI+ can be installed on an unlimited number of target systems. However, there can only run as much GUI/GUI+ applications as there are licences installed.

For example: with 1 licence you can activate 1 built-in touch screen with GUI/GUI+ continuously. At the other hand the licence which is used for the GUI/GUI+ on your Desktop PC, can easily be used on your laptop on the road.

This means that when purchasing a new computer/touch screen PC you don't need a new licence!

For testing purposes you can use an GUI/GUI+/iSGUI for three days, without activation.



## 15. Making a GUI/GUI+

The GUI is made with the help of the option GUIISOFT in the PROSOFT Suite V2.80.1 or higher.

We suggest to make the GUI/GUI+ only after you have configured the complete domotics project in PROSOFT. The GUIISOFT will copy all the defined rooms, functions, outputs,

### 15.1. Requirements Session workflow

When you want to install a GUI application, there are a number of steps to be taken. Below you find a diagram with the different steps and in the next chapters they are described in detail.





6

Install the GUI on the target device

Download the GUI runtime from [www.TELETASK.eu](http://www.TELETASK.eu) (GUI/GUI+/SmartGUI) or through the Apple App Store (iSGUI)

7

Copy the 'Gui data' directory and its content to the TELETASK GUI directory on the target device (only for GUI and iSGUI for Smartphone =SmartGUI)

Copy paste the 'GUI Data' folder into the TELETASK GUI installation foldermap (on the target device!).

8

Connect the target device with the TDS central unit (LAN / exp. USB)

9

Start the GUI on the target device by clicking the 'Start GUI' icon on your desktop or in the 'Start' menu.

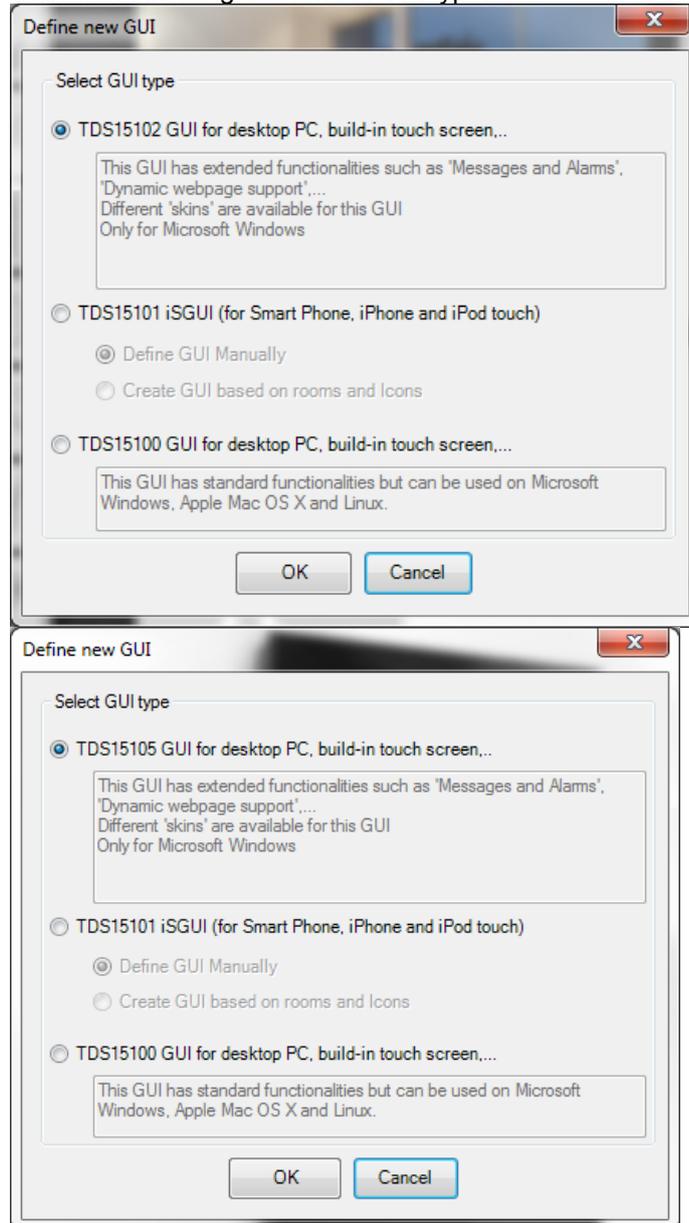


## 15.2. CREATING A GUI/GUI+

Click on the GUI SOFT button in the PROSOFT Suite-bar on the left. If you have not yet created a GUI for this specific '.nbt' file you will be asked whether you want to create a new GUI. Click 'OK' to proceed. The GUI properties window will appear on the screen.

## 15.3. GUI Selection

Start with selecting the correct GUI type.



'TDS15105' GUI+: choose this GUI type for use on a Windows PC.  
Special features of this GUI+ are:

- Support of the dynamic HTML pages
- Messages and alarms
- Availability of different types of skin.



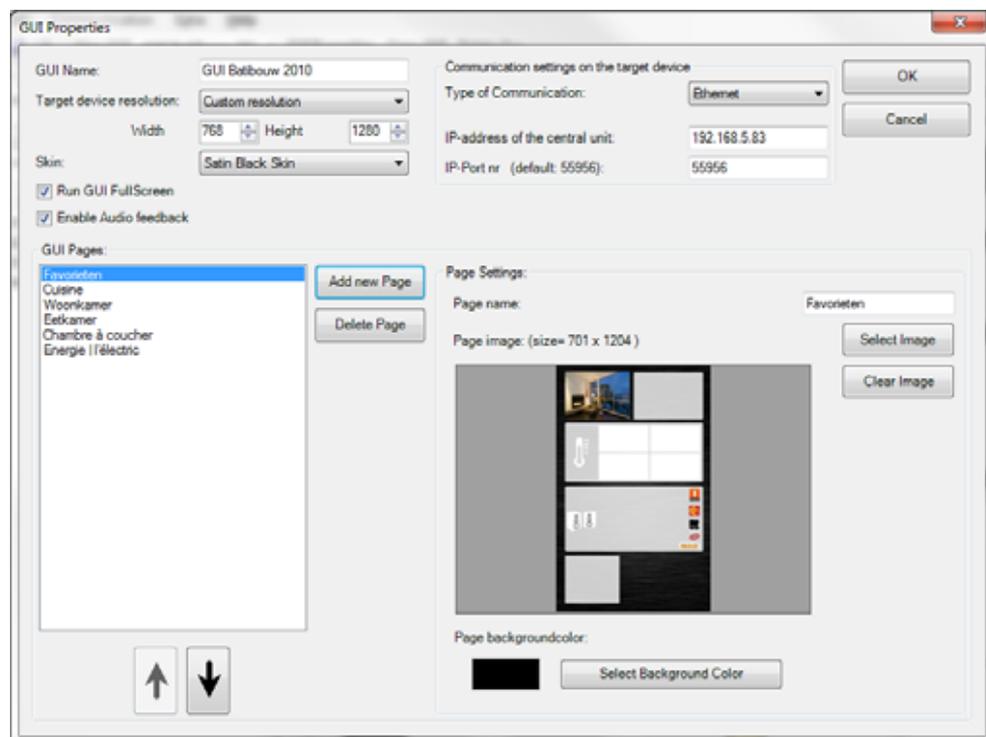
- ☒ 'TDS15101' iSGUI: choose this GUI type for use on a SmartPhone or iPhone, iPod Touch, iPad. For more information about creating an iSGUI, please see next chapter.
- ☒ 'TDS15100' GUI: choose this GUI type for use on an Apple or Linux (or windows) PC.

After you have selected the GUI type, you can start the configuration. In GUISOFT you need to start with determine the necessary features for the new GUI, based on the target system: resolution, connection, skin,

- ☞ **Once the GUI type is selected, this cannot be changed!**
- ☞ **The GUI type has to correspond with the licence type that's available.**

## 15.4. GUI Properties

In this start-up screen you will define the resolution of the screen on which the GUI will be displayed (target device), you will create the different pages of the GUI, import the needed floor plans etc. The GUI properties start-up window looks like shown in the picture below.



The different GUI parameters that need to be set are:

- ☒ GUI Name: The name for the GUI e.g. 'GUI' First Floor, 'GUI' Living room, 'GUI' Office... You need to enter a name before you can edit the GUI.
- ☒ Target device resolution: Select the screen resolution of the target device.
- ☒ Skin: choose the wanted skin. A skin determines the unity of the colour and presentation of the GUI (only available at GUI+. GUI always works with Classic skin).
- ☒ Run GUI full screen: Check this parameter if you want to run the GUI as a full screen application without any borders around the application. This will be typically used for a dedicated PC with a touch screen. Uncheck this option if you want the GUI to run like any other application on your PC. Choose this option when you want to use the GUI on your standard home office PC.
  - ☞ **This item only disables the window borders. The size of the GUI is still determined by the 'Target device resolution'**



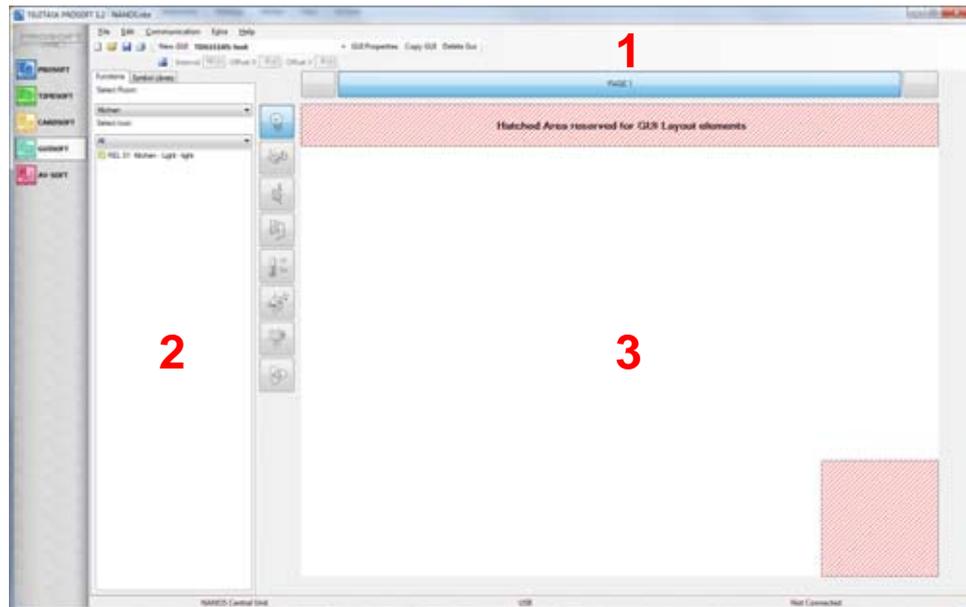
- Enable Audio Feedback: Select this option if you want an auditive feedback when you push a button.
  - The target device need to be equipped with a speaker and sound volume must be on.**
- Type of Communication: Select here the type of connection between your TELETASK central unit and the target device.
  - Ethernet: the connection between the central unit and the PC runs over the LAN network. You will us this typically when your PC is connected to your network or when you want to run the GUI on several PC's.
    - IP-address Central unit: (only selectable with the Ethernet communication). Insert here the IP-address of the Central Unit.
      - IP-Port nr: (only selectable with the Ethernet communication) Insert the IP-Port nr of the Central Unit which is connected.
  - USB: the connection between the central unit and the PC is done directly between the USB port of the TELETASK central unit and the PC on which the GUI is active. This way you can connect maximum 1 GUI on your TDS (only for temporary connections).
- Define new page: this button will add a new page to your GUI. A page can contain anything you want. Still we suggest you to work with rooms, floors, the pages do not have to correspond with the rooms you defined earlier in PROSOFT, and it is possible to create a 'favorite' page in which you combine the most used functions (moods, lights,) with the available camera pictures.
- Page Name: the name for the page, this name will be displayed in the GUI
- Select Image: this button allows you to import a background image for the page (the floor plan of the part of the house this image refers to, a photo,). Depending on the resolution and the full screen option the optimized image size for the page is indicated at the left side of this 'Select Image' Button.
  - The image file needs to be a .jpg, .gif, .png or .bmp file.**
- Select background colour: this button allows you to set the background colour for the selected page. TELETASK advises to use this option only when the background colour of the image is other then white.
- Arrow up or Arrow down: using the arrow up or arrow down buttons below the list of available GUI pages you can change the sorting position of the selected GUI page in the list.

As soon as you have defined all pages and the communication settings are correct, click 'OK' to continue. The GUIISOFT screen will now appear on your screen.

- You can always return to this screen to edit the page and or communication settings later by clicking the 'GUI properties' button.**

## 15.5. GUIISOFT Screen

The GUIISOFT screen can be divided in three zones: the GUIISOFT menu, the functions and symbols library and the GUI preview area.



### 15.5.1. The GUIISOFT menu

Using the GUIISOFT specific menu you create a new GUI, select the GUI you want to change, change the GUI properties of the selected GUI or delete the selected GUI.

- ☒ **New GUI:** It is possible to create more than one GUI for one '.nbt' project. This is typically done when you want to control your domotic functions from several target devices with different specifications (other resolution, other location in the house etc.).  
When you want to create a new GUI, click the 'New GUI' button in the GUIISOFT menu. The GUI properties start-up window for the new GUI will appear on the screen.
- ☒ **Select GUI:** When you have more than one GUI created in a project you have to select the correct GUI before editing anything at the GUI. In the 'Select GUI' drop down list you can select the GUI you want to edit.
- ☒ **GUI properties:** To change the properties of the selected GUI, click the GUI properties window. The GUI properties window will appear on the screen in which you can change different setting as the GUI name, type of communication etc.
- ☒ **Delete GUI:** Clicking this button the selected GUI will be deleted. Before deleting it definitely a remark will appear on the screen asking for your confirmation.

☞ **The GUIISOFT menu remains equal, independent to the GUI/GUI+/iSGUI you are working in.**

### 15.5.2. The functions and symbols library

#### ➔ The functions library

Using the functions library you can browse in the different domotic functions which you have made earlier in the PROSOFT session of the .NBT project.

#### ➔ The symbols library

Using the symbols library you can choose a GUI icon to drop on the GUI preview.

### 15.5.3. The GUI Preview



In the GUI preview (permanent displayed on your PC screen) you can partly see your GUI as it will look like in daily use. The areas where fixed items of the GUI will be placed are shaded. You can not position anything else in these areas.

Depending on the resolution/skin of the screen a limited number of page buttons are displayed. Choose the page in which you want to work, just like you would do when controlling the GUI. At the left side of the preview area the different icons as known in PROSOFT are displayed. Clicking on these buttons shows the corresponding functions dropped on the page. The different icons are:

- Light: displays only the dropped lights of the selected page.
- Devices: displays only the dropped devices of the selected page.
- Moods: displays only the dropped moods of the selected page
- Motors: displays only the dropped motors (curtains, shutters, gates etc) of the selected page.
- Sensors: displays only the dropped sensor functions of the current page
- Audio: displays only the dropped audio zone in the current page
- Camera's and URL pages: displays only the dropped camera and URL functionalities of the current page
- All: displays all the dropped functions of the current page

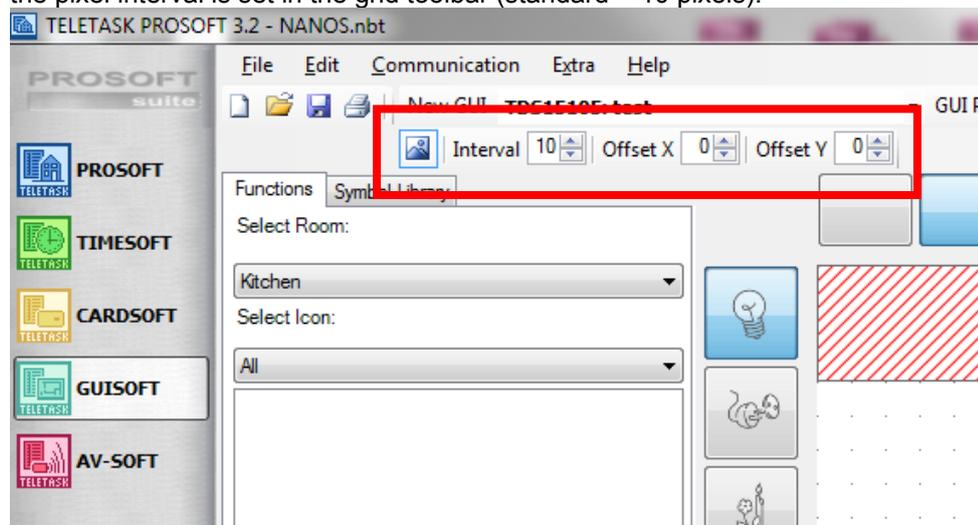
## 15.6. Adding items to the GUI

### 15.6.1. Drag and drop

After the GUI pages have been defined, you can add several domotic functions you have earlier defined in PROSOFT in the GUI SOFT screen using the easy and user friendly drag and drop concept: drag the domotic functions out of the functions or symbols library and drop them on the preview of the preview area.

### 15.6.2. Positioning (grid)

To position the different items on the GUI screen, a positioning grid can be used. To activate/show the grid, click the grid icon in the grid toolbar just below the standard toolbar. If the grid is activated the icons you drag onto the GUI screen, will 'snap' to the grid points. The grid can be adjusted to any interval of pixels preferred. Herefore the pixel interval is set in the grid toolbar (standard = 10 pixels).



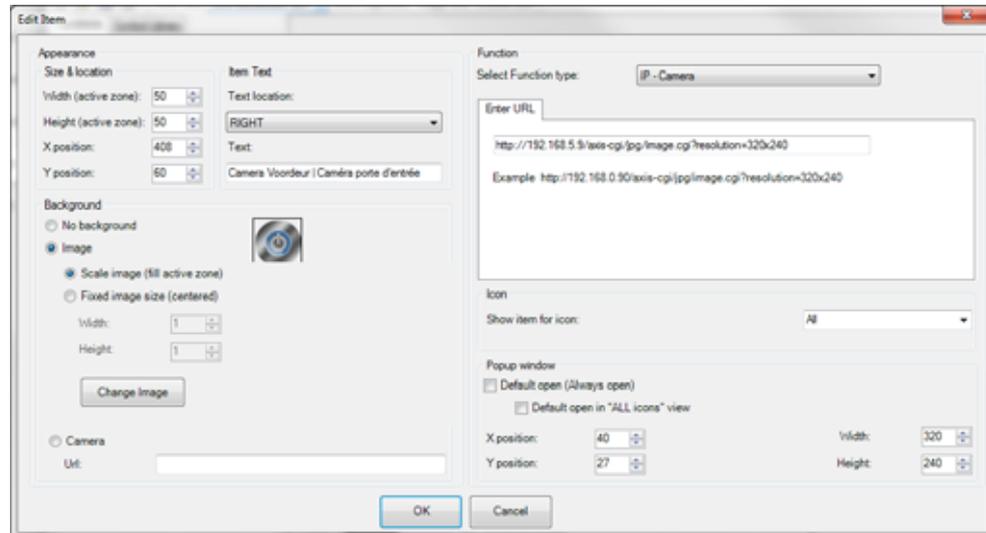
### 15.6.3. Edit the GUI Icon

When you have dragged the function out of the functions library, a standard GUI icon is assigned to the function on the GUI preview. However you can change the icon image settings. Right click the GUI icon in the preview and select 'Edit GUI Icon' from the drop down list. The 'Edit Item' window will appear on the screen.



When you have dragged the symbol out of the symbols library and dropped it on the GUI preview the 'Edit Item' window will appear automatically so you can assign the desired function to the symbol.

In the 'Edit Item' window you can change some properties of the image and/or the function. In the left part of the 'Edit Item' window you can define the appearance settings of the icon. In the right part of the 'Edit Item' window the function of the GUI item can be changed.



### → Appearance:

#### 'Size & location'

The size of the touch sensitive zone (active zone) of the GUI item is defined by the 'Width' and the 'Height' parameter. Both parameters are defined in pixels. TELETASK advises to set the width and height parameter at 32 pixels for an optimal user friendly finger control on a standard 15" touch screen (resolution: 1024x768).

The location of the GUI icon describes the place of the GUI icon on the devices screen using the 'X' and 'Y' coordinates.

#### 'Item Text'

Every GUI item can be accompanied by a declarative text. Define both the 'Text location' and the 'text' to add a text to a GUI item.

- Text Location: This parameter defines the position of the text around the GUI item.
- Text: Enter here the text that appears near the GUI item. By default the name given in PROSOFT will appear in this field.

#### 'Image'

Every GUI item has a default image. However you can replace the default image of the GUI item with an image out of the TELETASK image library.

- Change Image: Click this button to change the image with an image out of the TELETASK image library.
  - ☞ **The 'Change Image' option can also be selected directly from the drop down menu when you right click the GUI Icon.**
- Scale Image (fill active zone): When this option is checked, the image will be scaled to fit the 'active size'
- Fixed Image Size (centred): This option allows you to enter a custom size for the image in pixels. The fixed image size can only have the same or a smaller size than the active size. When the image size is smaller than the active size, the image will be placed in the centre of the active zone/size.



- No Image: Select this option when you don't want to display an image for an item (transparent button).
- Camera: if you would like to display an IP Camera as background by default, this can be created. The camera image will become a button, f.e. to open the door!

### → Function:

#### 'Select Function Type'

This option allows you to choose or change the type of function you want to be coupled to the (dragged) GUI Item. You can choose out of different function types:

- Standard PROSOFT function: Use this function to make the GUI item to control a specific domotic function on your TELETASK central unit. The function you select needs to be configured in PROSOFT. Examples: switching a light, activating a motor, change the sensor preset of the heating...
- IP-Camera: This function takes the URL of an IP camera's MJPEG file to be displayed on the GUI screen, when you click the GUI item.
  - ☞ **Note that this functionality needs a camera that support MJPEG file stream. Not all IP-Camera's support MJPEG file stream.**
- URL or Image: Using this function type the GUI item will display a pure html page or an image. The URL in the lower tab page has to be completed and can refer to a location on the Internet (start the URL with 'http:// ...') or to an image (start URL with 'file:/// ...') which is located on the PC on which the GUI is active.(note 3 times the '/' character, e.g. file:///c:/My documents/image.jpg).
  - ☞ **A dynamic HTML page is only available on the GUI+.**
- Go-To GUI Page: Using this function type, the GUI item will switch to another page when it is touched.

#### 'Icon'

- Here you can set up the categories under which the GUI item must be visible. The category is chosen by default from the coupled PROSOFT function. Camera's and URL's arrive by default under the 'Camera' icon. The 'Go-To-GUI-Page' arrive by default at the 'All' icon.
  - ☞ **!!!!Items of the category 'All' will always be displayed at the ALL category.**

#### 'Popup Window'

For some of the function types a 'Control Panel' will be displayed on the screen when you touch the GUI item.

A 'Control Panel' popup appears when the GUI item is defined as a URL or Camera function or when the PROSOFT function is a dimmer, a RGB control, an audio zone or a sensor zone. In the 'Control Panel' popup some function type related information is displayed.

- URL/Camera function: the webpage/camera will be displayed on the screen
- PROSOFT function type: the control panel displays additional control buttons for the advanced control of the audio system, the dimmer, the heating/cooling system...are displayed.

Normally you will need to touch the GUI item to display this 'Control Panel'. When you want to have the control panel standard on the screen enable the 'Default Open' check box in the 'Popup Window' area. Additionally you can set for Camera's and URL the width and the height of the 'popup window'/ 'control panel'.

In the category 'All' the 'Default Open' items will only appear as icons, unless also the option 'Default open at 'All' view' is marked.

- ☞ **This option is only available in GUI+ (GUI will 'default open 'items always present as icons!).**





For the 'Default Open' popup a popup position also needs to be entered. For the other pop-up panels this is not mandatory. If you don't set up the position (position = auto); the GUI will choose the most appropriate location.

- ☞ **Only in the GUI+ you can position the not 'default open' panels manually.**



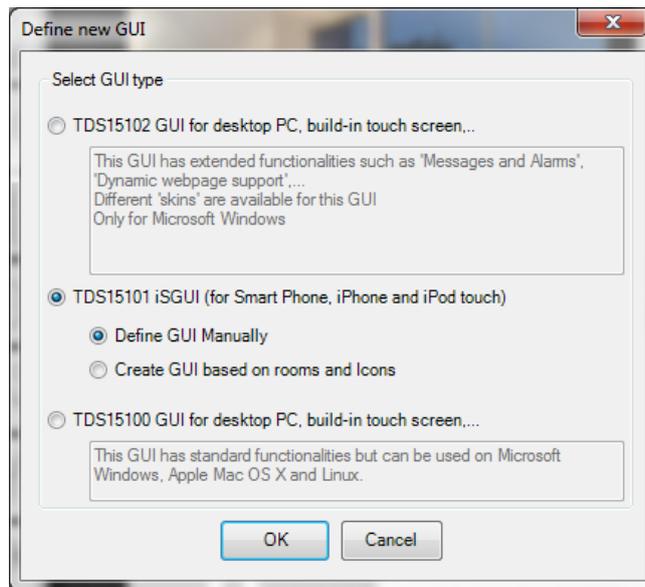
## 16. Creating a iSGUI

### 16.1. Start with the GUIISOFT

Click on the GUIISOFT button in the PROSOFT Suite bar at the left in the PROSOFT Suite window. If you haven't created a GUI for this .NBT project, you will be asked to create a new GUI. The GUI Selection screen will appear.

### 16.2. GUI Selection

- Start with choosing the correct GUI type.
- 



- 'TDS15105' GUI+: choose this GUI type for use on a Windows PC.
- 'TDS15101' iSGUI: choose this GUI type for use on a SmartPhone or iPhone, iPod Touch, iPad. For more info concerning creating an iSGUI, see next chapter.
- 'TDS15100' GUI: choose this GUI type for use on an Apple or Linux (or windows) PC.

For the iSGUI you can choose between:

'Define the GUI manually': just like the GUI/GUI+ for PC, you can define the different pages to your wishes. But for the iSGUI there is a quick and easy-to-use alternative.

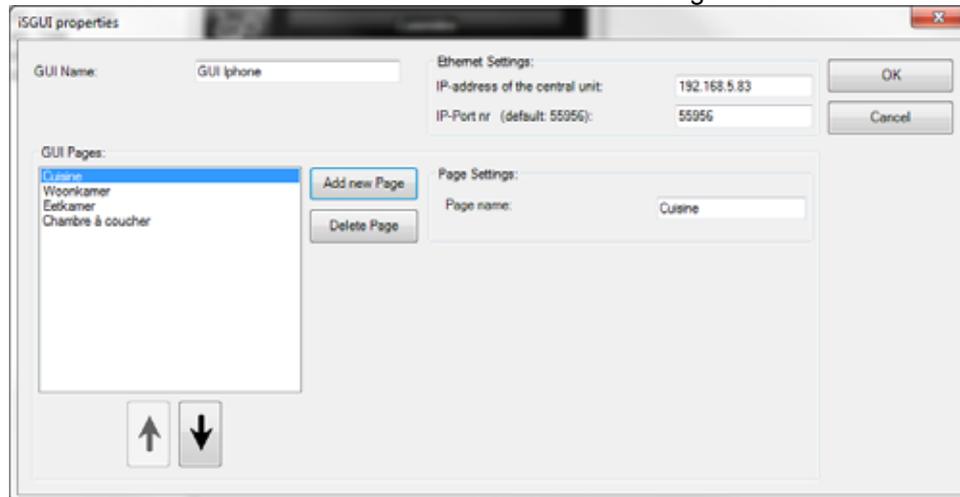
- 'Create the GUI based on the rooms and icons: ': GUIISOFT will by default define all available domotic elements and organize them in the correct categories and rooms. This is all based on the configuration in PROSOFT! After the automatic generation, you are still able to change things about the configuration of the iSGUI.

- ☞ **Once the GUI type is selected, it can't be changed!**
- ☞ **The GUI type has to correspond with the activated Licence type.**
- ☞ **The adjustments you make afterwards in PROSOFT are not automatically implemented in the iSGUI configuration.**



## 16.3. iSGUI Features

In this start screen you can define the different pages of your iSGUI and you set up the connection data. The GUI start screen looks like the figure here below:



The different iSGUI parameters which are defined are:

- GUI Name: give in a clear name for the iSGUI e.g. 'iSGUI Parents', 'iSGUI Children'; you have to give a name for the GUI.
- Ethernet: the physical connection between the central unit and the iSGUI is done by LAN.
  - IP-address Central Unit: give in the IP-address of the Central Unit
  - IP-Port number: give in the IP-Port number of the Central Unit (by default: 55956).
- Define the new page: using this button you can add a new page to the iSGUI. A page can be any part of the house (a room, a floor, the garden, the complete house). The pages do not have to correspond with the rooms you defined earlier in the PROSOFT session.
- Page Name: give in the name of the page. This name will be visualised on the GUI.
- Arrow up and Arrow down: by using the arrow up or down you can change the order of the selected GUI page.
- 

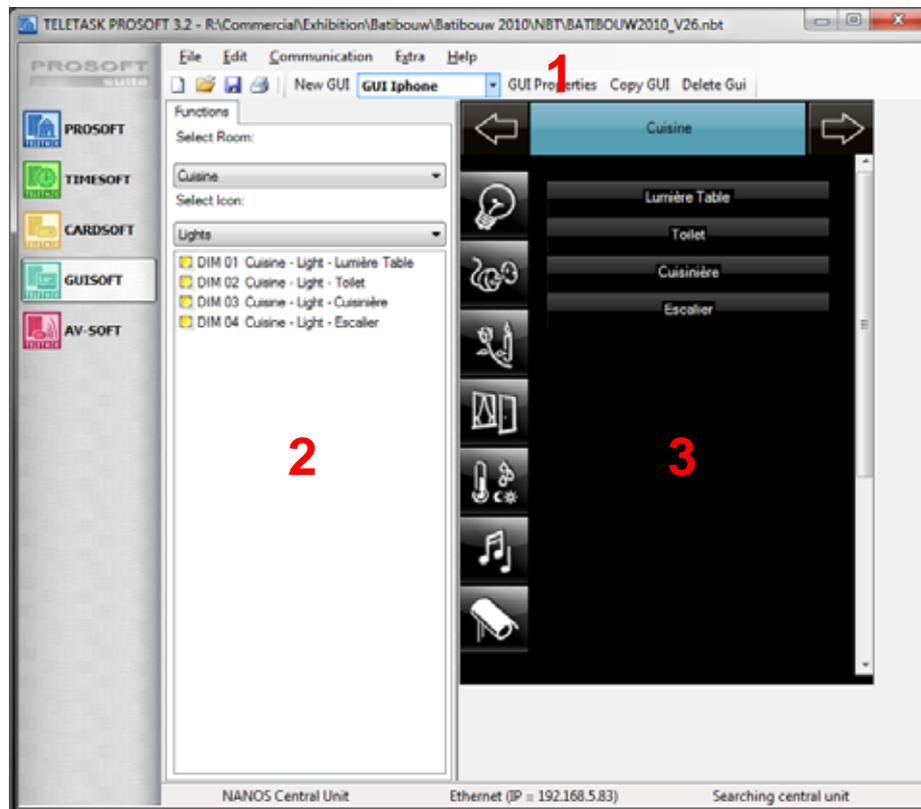
When you have defined all pages and set up all the communications settings correctly according to the specific situation, click 'OK' to continue defining the iSGUI. The GUIISOFT will appear on the screen.

- ☞ **You can always call the iSGUI property screen to change the page and communication settings.**
- ☞



## 16.4. GUIISOFT Screen

The GUIISOFT Screen is divided in 3 zones: the GUIISOFT menu, the functions and the iSGUI preview.



### 16.4.1. The GUIISOFT menu

See the GUIISOFT menu in the chapter concerning the GUI/GUI+.

### 16.4.2. The Functions

In the function library you page through the different domotic functions which were earlier created in the PROSOFT session of the .NBT project. With the drop down menus of the rooms and icons you can create search criteria to quickly find the wished function in the library.

### 16.4.3. The iSGUI preview

In the GUI preview you can see how the GUI would look like during daily use.

At the top of the GUI preview you see the actual page you have made earlier. When there are more pages available, you can thumb through them by using the arrow left or arrow right. At the left side of the GUI preview the different categories as known in PROSOFT are shown. When you push these buttons the corresponding functions on this page are visualized. The different icons are:

- Light: shows the lights of the active page
- Devices: shows the devices of the active page
- Moods: shows the moods of the active page
- Motors: shows the motors (curtains, shutters, gates, etc.) of the active page
- Sensors: shows the sensor functions of the active page



- Audio: shows the audio zones of the active page
- Camera's: shows the camera's of the active page

## 16.5. Adding items to the iSGUI.

### 16.5.1. Drag and drop.

After the iSGUI pages have been defined, you can add several domotic functions you have earlier defined in PROSOFT in the iSGUIISOFT screen using the easy and user friendly drag and drop concept: drag the domotic functions out of the functions or symbols library and drop them on the preview of the preview area.



## 17. Get the GUI ready for use.

### 17.1. Importing an activation file.

For each GUI/GUI+/iSGUI you need to buy a license. You can buy a license from your local distributor.

- ☞ One you have received the activation file for the licence, you have to import this in the .NBT file. See Chapter 'Licences'.
- ☞ Send the .NBT file to the Central Unit. See chapter 'Send' in PROSOFT.

### 17.2. Exporting the GUI files (NOT necessary for the GUI+ or iGUI for iPhone/iPod Touch)

When the GUI is completed you need to create the GUI files. These GUI files need to be copied to the target device on which the GUI will run. To create the needed GUI files follow the steps below:

- ☞ Save the '.nbt' project
- ☞ Select 'Communication' in the menu.
- ☞ Select 'Create GUI files (active GUI only)' in the drop down menu.
- ☞ You will be asked to choose a location where the GUI files will be saved. At this location a folder with the name of the GUI will be made. This folder needs to be copied to the target device on which the GUI will run.
  - ☞ **Exporting of the GUI files is not needed when you use an iPhone, iPod Touch, iPad, here the iGUI will download the data straight from the Central Unit.**
  - ☞ **Exporting of the GUI files is not needed when you use an GUI+. Here the GUI+ will download the data straight from the Central Unit.**

### 17.3. Install 'GUI Runtime'

Before you can use the GUI on the specified target device, you have to install the 'GUI Runtime'. You can download the latest version from [www.teletask.eu](http://www.teletask.eu).

#### 17.3.1. GUI/GUI+

- ☞ Download the latest version of the GUI/GUI+ installation program on [www.TELETASK.eu](http://www.TELETASK.eu)
- ☞ Start the installation program (setup.exe) on the target device and go through the complete installation.

#### 17.3.2. SGUI (SmartPhone)

- ☞ Download the latest version of the SmartGUI installation program on [www.TELETASK.eu](http://www.TELETASK.eu)
- ☞ Connect your SmartPhone with your PC via a USB and check if your SmartPhone is recognised by the 'Windows mobile device center' (Windows 7 / Vista) or 'Active Sync' (Windows XP).
- ☞ Take the files out of the downloaded ZIP file.
- ☞ Start the installation program (setup.exe).
- ☞ Go through the installations program.

#### 17.3.3. iGUI (iPhone, iPod Touch, iPad)

- ☞ Download the TELETASK iSGUI application by using the Apple App Store.



## 17.4. Copy GUI Files to the GUI SOFT directory

### 17.4.1. GUI

After the GUI Runtime installation on the target device, a folder 'TELETASK GUI' will be added at 'C:\' (or another location if you have specified it during the installation of the program).

- ☞ To this 'GUI SOFT' directory you need to copy the 'GUI data' folder of the concerned GUI which you have created in PROSOFT Suite (See export GUI files).

### 17.4.2. SGUI (Windows Mobile)

- ☞ Connect your SmartPhone with your PC via a USB and check if your SmartPhone is recognised by the 'Windows mobile device centre' (Windows 7 /Vista) or 'Active Sync' (Windows XP).
- ☞ Choose 'Explore' in 'Windows mobile device centre' or 'Active Sync'.
- ☞ Search the folder 'GUI data' and replace the files in this folder by the files in the 'GUI data' folder you have earlier exported on your PC.

### 17.4.3. iGUI (iPhone, iPod Touch, iPad)

- ☞ Connect your iPhone/iPod Touch /iPad with the network which is connected with the Central Unit. (See features of the device).
- ☞ Start the iSGUI application
- ☞ The iSGUI will ask for the IP address of the Central Unit. Make sure you put in the correct IP address.
- ☞ The GUI data files will automatically be installed on the device.

### 17.4.4. GUI+ (MS Windows)

- ☞ Connect your target device with the network, connected to the Central Unit. (See features of the device).
- ☞ Start the GUI+ application
- ☞ The GUI data files will automatically be installed on the device.

## 17.5. Problem Solving

### 'GUI/GUI+'

- When a message box appears with the remark that no license is available for the device
  - Check the license codes in GUI SOFT or buy a GUI license.
  - Check whether you have copied the 'GUI data' directory to the correct location on the target device.
- If the GUI does not start up and only a small black screen appeared very fast on the screen you probably have not the correct Java Runtime Environment (JRE). To run the GUI, you need JRE 1.5 or later on the target device to run the GUI properly. (only applicable for the GUI, not for the GUI+).
-



# AV-SOFT

## 18. Multi-Room Multi-Source

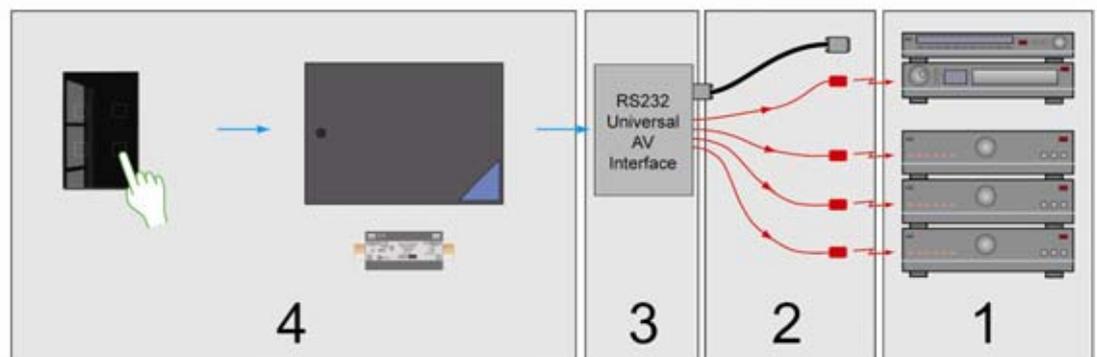
### 18.1. Introduction

Making a multi-room multi-source system with full flexibility in quality, budget and features. From a few rooms with back-ground music to the perfect and fully integrated home theatre.

To realize the integration of audio/video with the RS232 universal AV interface in a fast and correct way, it is necessary to use a phased set-up. The different phases may look different than you would expect at first sight. Start at the right with '1' on the figure below and step to the left to finalise the installation process.

There are four phases to be distinguished:

1. **Define the desired audio configuration:** In this phase you will have to define the used audio/video sources and amplifiers and how audio/video source signals are connected to the amplifiers
2. **Assigning the RS232 port and the IR flashers** (infrared transmitters: 8 flasher outputs/interface): In this phase each IR flasher is granted to an audio/video component (sources and amplifiers).
3. **Configuring the RS232 universal AV interface:** In this phase, the interface is configured to be able to control the multi- room multi- source audio system.
4. **Configuring the audio/video buttons of the domotics installation:** In this phase, the different audio/video functions are defined on the necessary buttons in the TELETASK system.

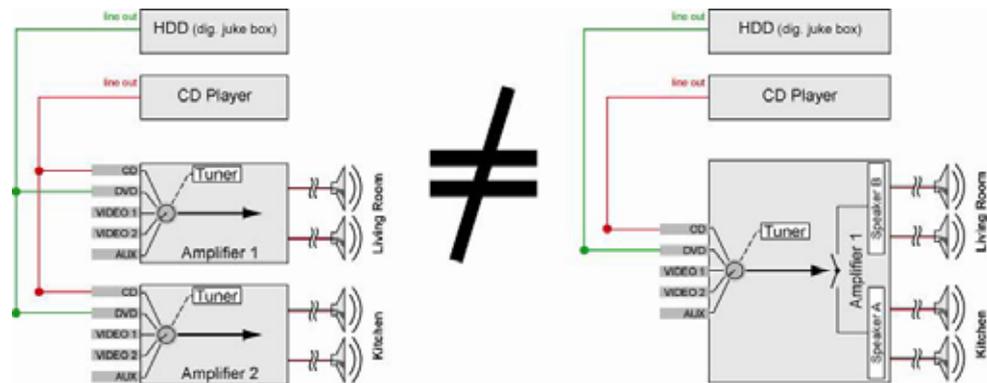


The four different phases from above are explained one by one in the text below, but first we give some explanation about multi-room and multi-source

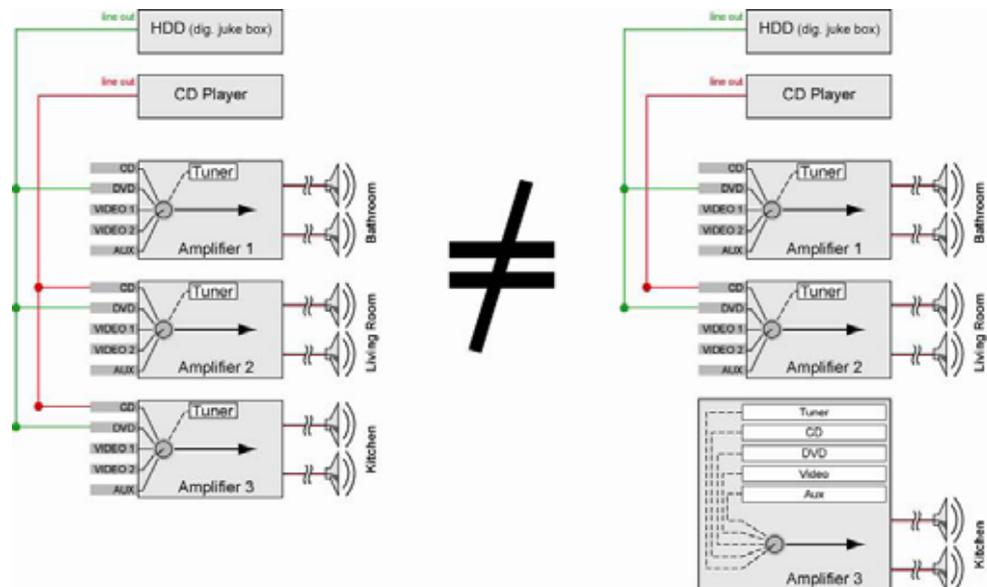


## 18.2. Multi-room/Multi-source: the differences

When you want to listen to different audio sources (tuner, CD, MP3, ...) in different rooms at the same time, you will need a power amplifier for every room (or better: 'audio zone'). This is called a 'multi source – multi room' system. If you always have the same source in the different rooms at the same time, this is called a 'multi room' system. The difference between these two kinds of audio installations is shown in figure below.



Today there are several power amplifiers with built-in audio sources. In small tower systems you have all common sources built-in, but even some higher range power amplifiers may have a built in radio tuner or hard disk. The most important and typical feature of such systems, is that the built-in sources are not to be shared with other power amplifiers. You can find a comparing illustration in figure 5.



Depending on the requirements of the user and the available budget, there is to be chosen for internal, external or a mix of internal/external audio sources.

- ☞ **Remark: The tuner is a typical source where different persons listen to different broadcasting stations at the same time. That is why it is particularly interesting to have several tuner sources available at the same time. A good combination is to have every power Amplifier (for every audio zone or room) equipped with a built-in tuner. This kind of amplifier/tuner combination is easy to find and available at most of the brands.**

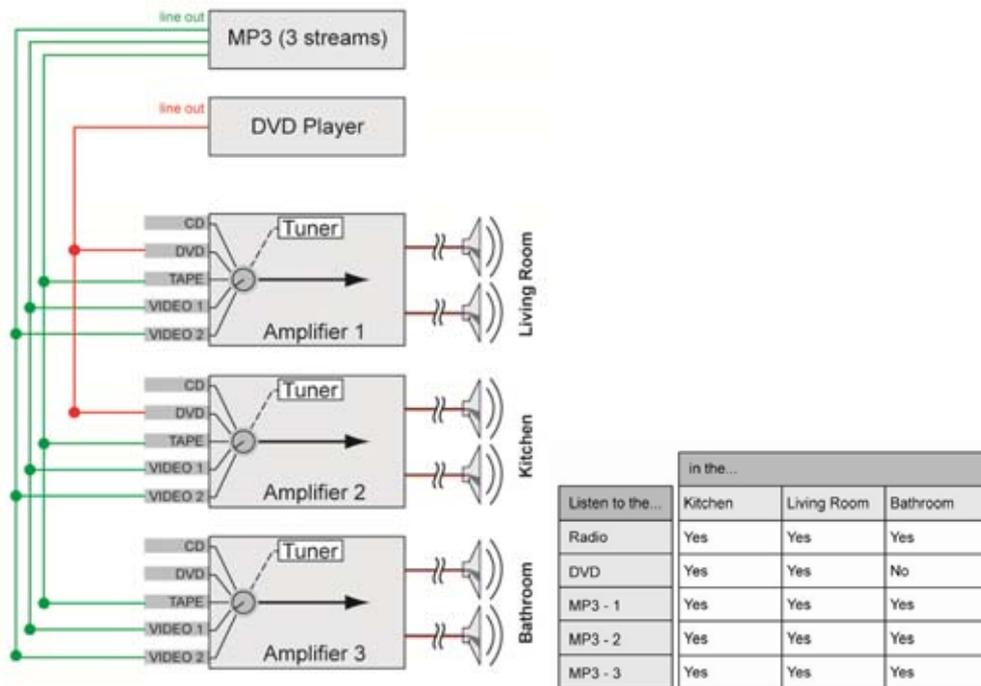


## 18.3. Phase 1: Choose the wanted audio/video configuration

### 18.3.1. Define the requirements

The RS232 universal AV interface is able to control about all audio/video systems available on the market.

Example: A TELETASK client wants music in the kitchen, the living room and the bath room. He wants to be able to listen to the radio in the different rooms. In the living room and in the kitchen, he wants to listen to the DVD player and he also plans to buy a MP3 player with three streams (= up to three songs played at the same time).



The requirements of the user can be summarized in the table.

Based on the requirements of the user, the necessary audio components can be defined and brought into a configuration drawing. For the used example, the schematic drawing should be like in the figure above.

#### ➔ When you select the components which you want to integrate through IR with the domotics system, you need to take care about:

- The frequency can be between 36 – 38 KHz (most common) or 455 KHz.
- !!! The used audio components must support the so called 'discrete on/off codes'. A discrete ON code, switches the audio component to ON. When the component is already ON, when sending the discrete 'ON' code, the system stays in the ON status. A discrete OFF code, switches the component to the OFF status. When the system was already in the OFF status, it remains in that status.

☞ **VERY IMPORTANT: Not all brands support these 'discrete ON/OFF' codes and within a brand there are components which support these codes and other components which do not. Therefore always ask your supplier if the device can process the controllable infrared 'discrete ON- and OFF' codes. Also ask if these codes can be generated by the remote control, so you can learn them to the RS232/learnable IR**



interface which needs these codes for obvious reasons or if the HEX codes are available.

→ **When you select the components which you want to integrate through RS232, take care about:**

- ☒ The serial communication of the devices should work on one of the following Baudrates = 9600 / 19200 / 38400 / 57600.
- ☒ The interface is always working with no parity, no handshaking, 8 data bits and 1 stop bit.
- ☒ Like for the IR codes there should also be support for 'discrete on/off commands' The protocol of the device should have a different string for ON and for OFF.

In our example the configuration drawing leads to the next set of audio components:

- ☒ **3 separate power amplifiers with each having their own internal tuner:** these amplifiers are used to be connected with the speakers in the living room, the kitchen and the bath room. The TELETASK RS232 universal AV interface will control the different sources and amplifiers. In every room it is possible to listen to any tuner frequency, independent from the other rooms.

☞ **Remark: Although the user asked to be able to listen to the radio, you can offer him an unlimited and independent radio choice. This solution is to be preferred, because most home audio amplifiers for background music applications are only a limited percentage more expensive with an included tuner. The final cost of this may even be less expensive when compared to three power amplifiers with one separate tuner. Nevertheless, you may not forget to provide the necessary antenna amplifier / splitter to provide the necessary tuner signal to the different tuner inputs of every amplifier/tuner unit. In this example case, you need an antenna amplifier/splitter with at least 3 antenna outputs.**

- ☒ **1 x DVD player:** This one is external and is connected to the audio signal inputs of both power amplifiers, to be able to listen in the different rooms to the DVD player source.
- ☒ **1 x RS232 MP3 player with 3 streams:** This one is also an external audio source, to be connected to every power amplifier. These can contain a huge number of music tracks.

As soon as you have selected the necessary audio components, you can start setting up the configuration drawing.

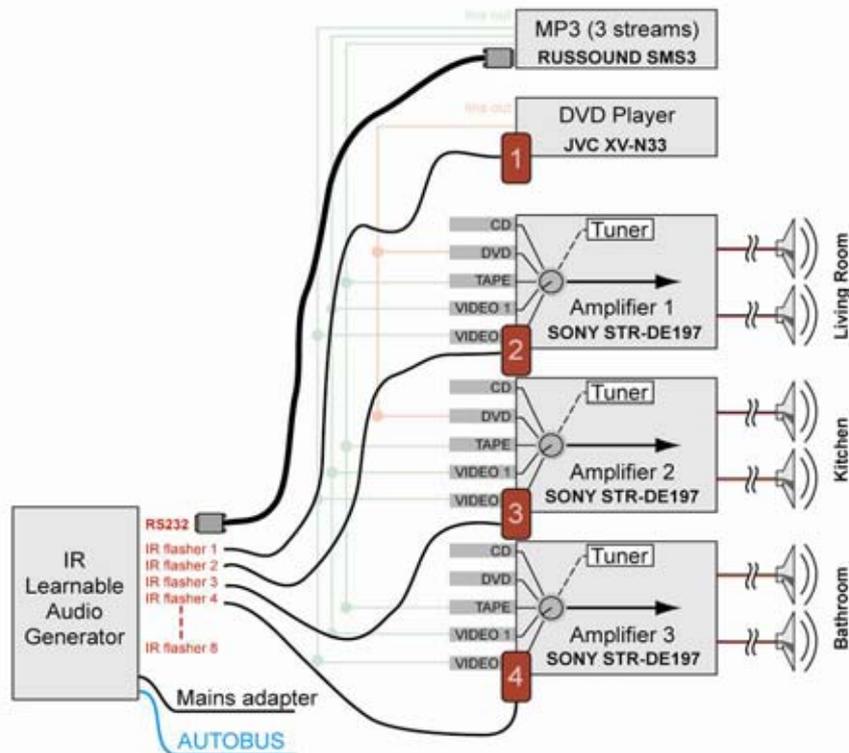
It is absolutely necessary to take good care for the making of this drawing. This will become an important tool to obtain the final solution smoothly. Optionally you can add the brand and type of the audio component to the drawing.

As soon as the audio configuration reaches its final version, half of the work is done. Only with an excellent drawing in your hands, you can go for the next step.

This drawing is also necessary to guarantee the support of TELETASK support service.



## 18.4. Phase 2: Assigning the RS232 Port and the IR flashers.



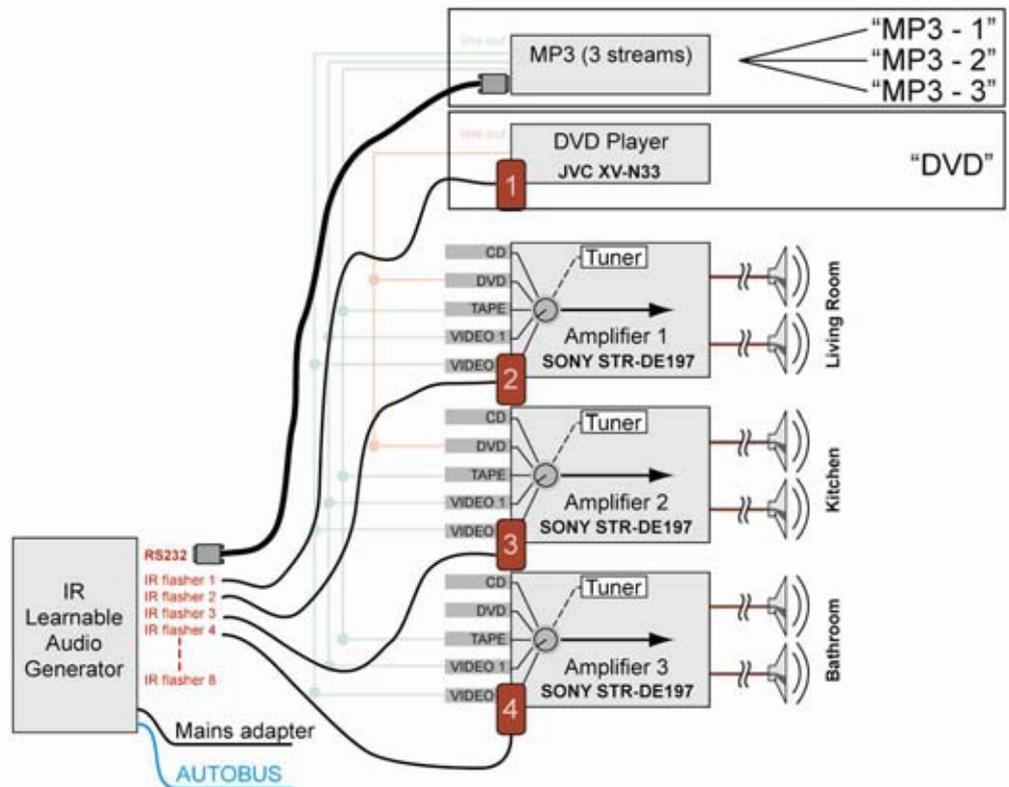
With only the audio configuration, the audio system is not yet integrated. Therefore a connection must be made with the TELETASK home automation system by interfacing the audio components with the TELETASK RS232 universal AV interface. The pluggable IR flashers will generate the necessary infra red signals for the audio components to be controlled.

Every audio component should get one IR flashers to transmit to his built-in IR receiver. Indicate the flasher numbers on the configuration drawing.

Alongside of the IR flasher numbers, it is necessary to write down the audio related terms on the drawing. Because of the evolution in the audio world, there can be confusion between traditional audio terms like 'TAPE', 'CD', 'TUNER'; these are mentioned on the amplifier inputs and on the concerned components sources which are connected to them. As an example, the MP3 player source is connected to the VIDEO 1 input on the audio power amplifier.

Because audio integration was already possible at the beginning of domotics age, the traditional audio terms are used. This may cause confusion. Therefore it is possible that the BLU-RAY drive is controlled with the 'CD' button on the TELETASK remote control. Therefore it is necessary to clean-up these confusions right from the beginning.

You will understand that the printed audio functions on the TELETASK remote control are fixed, so the traditional audio source names are to be used 'FM' 'CD' 'HDD' 'MP3' 'DVD' 'VID' 'SAT' 'AUX'. You find our clarifying example here below.



Sources	REMOTE CONTROL	PROSOFT & Touch Screens
SRC 1	FM	FM
SRC 2	CD	DVD
SRC 3	HDD	MP3-1
SRC 4	MP3	MP3-2
SRC 5	DVD	MP3-3
SCR 6	VID	
SCR 7	SAT	
SCR 8	AUX	

The name on the Remote Control can't be changed.  
 But in PROSOFT you can choose the name you want to use for each source, a big advantage is the fact that this name also will appear on your screen, your GUI and even your iSGUI. PROSOFT will use your chosen name in the whole program.

With the assigning of the IR flashers and the RS232 Port and the clarification of the possible confusion between audio terms, the schematic drawing is now finalised. In the next phase, this schematic is used to integrate the whole installation in to the TELETASK 'AV-SOFT' software.



## 18.5. Phase 3: Configuring the Universal RS232 AV interface.

After the two first phases, now is the time to program the RS232 universal AV interface with AV-SOFT. With the configuration drawing at hand, it should be easy to walk through this third phase. The configuring phase is divided in the following steps:

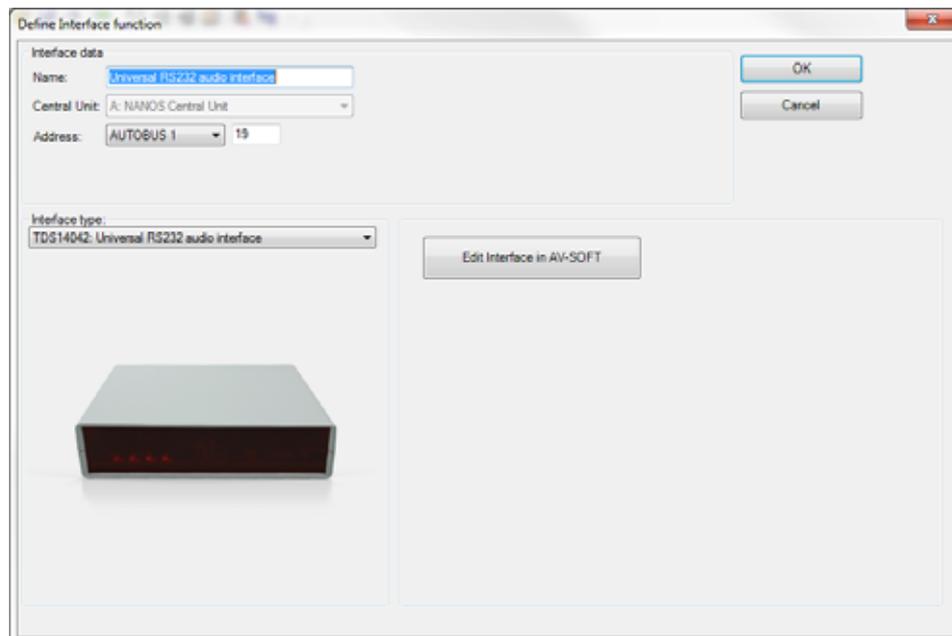
### 18.5.1. Assigning IR codes or RS232 strings

Assigning IR code or RS232 strings to the different components and their functions.

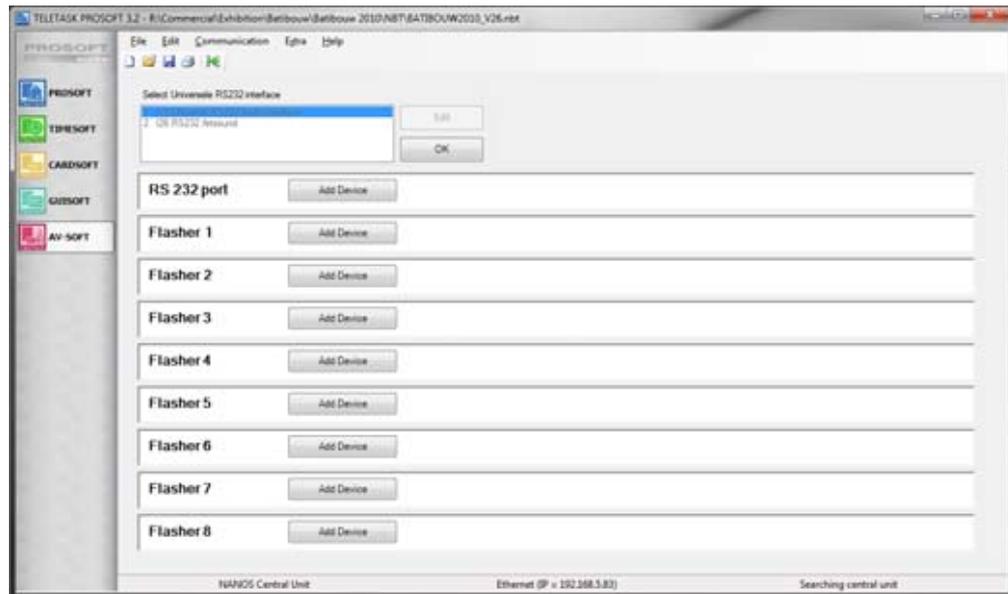
- ☞ Start PROSOFT and go to AV-SOFT.
- ☞ Select 'Edit' - 'Edit AV-SOFT Library'.
- ☞ You now see a list of pre-configured audio devices. If your device is listed go to the next step.
- ☞ If not, add the new device(s) you need. For detailed information on how to do this, see the chapter 'Edit AV-SOFT Library'.

### 18.5.2. Entering the audio configuration in AV-SOFT

- ☞ Return to PROSOFT and go to 'Inputs & Others'.
- ☞ You are in the 'List of interfaces', choose 'NEW', and select 'A/V - Interface'.



- ☞ A new window: 'Define interface function' appears. Here you can give the device a personalised name (which will appear similar in the 'List of interfaces'); you give it the correct address, choose the type of interface (e.g. RS232 universal A/V interface) and then click on 'Edit interface in AV-SOFT'.
- ☞ A new window appears with the RS232 interface and the possible 8 connected IR-flashers.

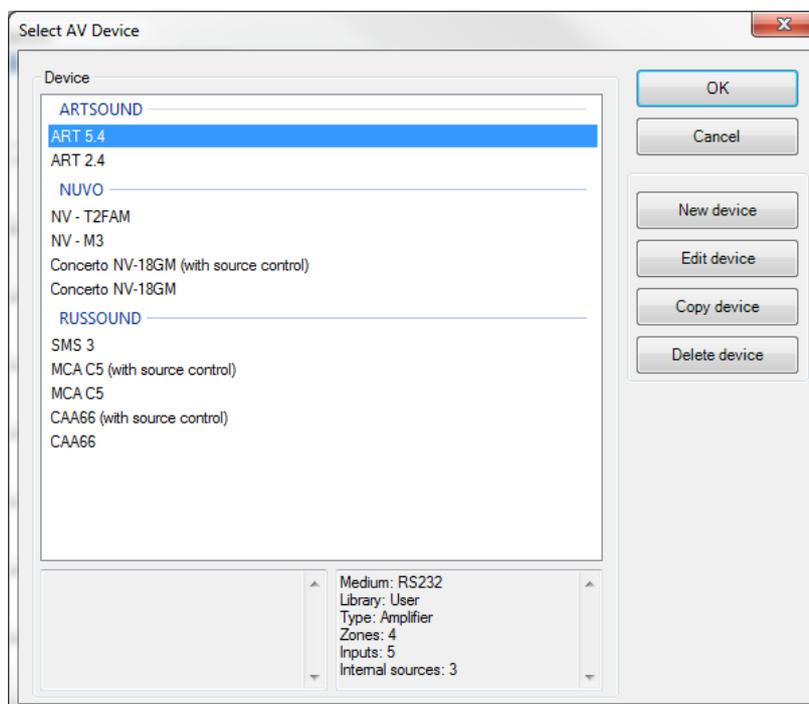


When you see this screen (above) you have entered AV-soft automatically.

### 18.5.3. Assigning Sources.

We strongly recommend to start with assigning the **sources** of the AV devices (multi-source), followed by assigning the zones where these devices have to be active (multi-room).

- ☞ Click on the button 'ADD DEVICE' at the RS232 port.
- ☞ There will be a pop-up screen, named: 'Select audio device'. In this library you chose the brand and type of audio device you want to connect with the RS232 universal AV interface. (e.g. Russound – SMS3). Click OK.



- ☞ Now you can give the different sources a name: MP3-1, MP3-2, MP3-3



Then you can go to the correct flasher and do the same exercise for the JVC DVD (flasher 1 was assigned to the JVC-DVD player).

**DON'T forget to save your files!**

#### 18.5.4. Assigning Zones:

After having configured the different sources, you can now add the devices with different AV zones.

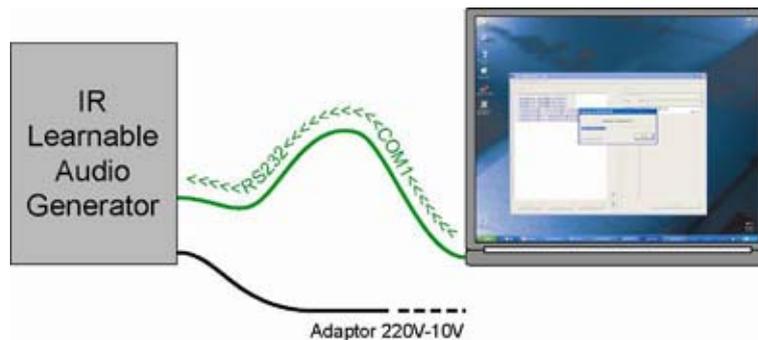
- Choose a flasher and add the correct device to this flasher as you have done with the sources.
- You can now enter a name for the audio zone, the internal tuner, connects the sources to the correct input (example below shows the configuration for the bathroom, as decided in phase 2, no source is connected to the second input).

#### 18.5.5. Configuring the RS232 universal AV interface.

As soon as all IR codes are assigned to the total configuration, the memorized information can be transmitted from the PC to the TELETASK RS232/IR learnable audio interface.

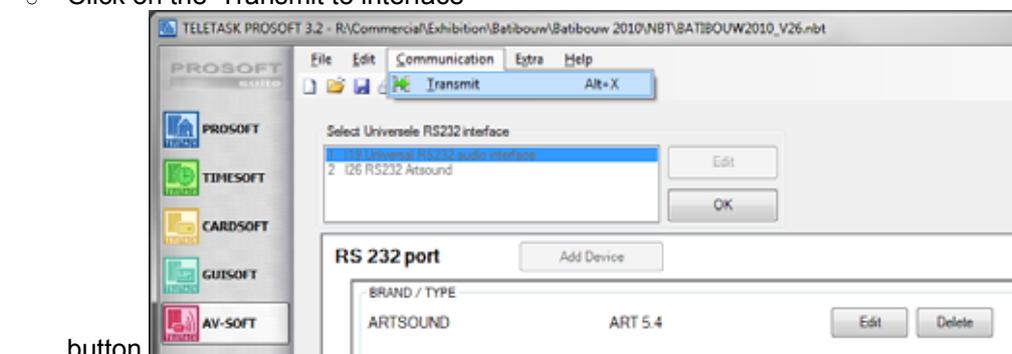
Therefore the RS232 universal AV interface should stay connected with the PC through the RS232 connection.

If you don't have an RS232 COM-port on your PC, you can use the USB to RS232 interface from TELETASK (TDS10117) to connect to the PC (USB). Be aware that the RS232/learnable IR interface is powered through the applied mains adapter. In the figure below you can find the schematic set-up.

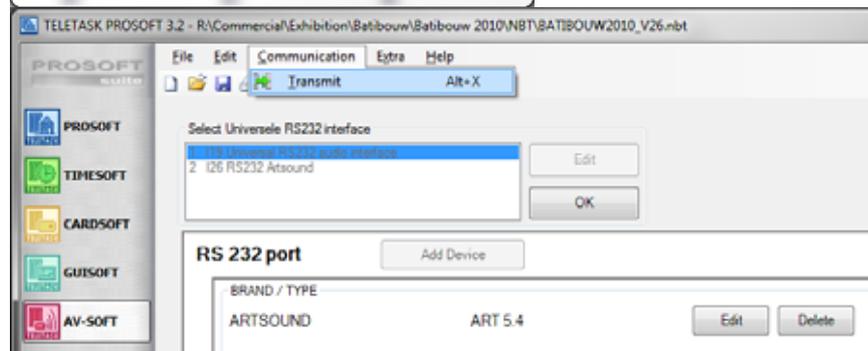
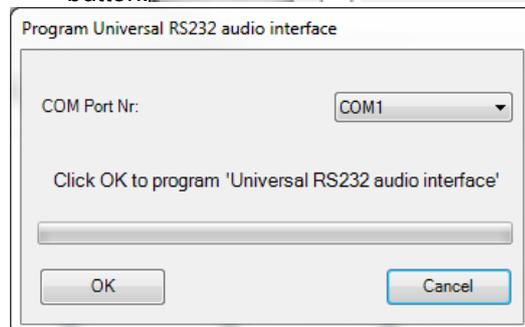


If the connection is properly done, you can send the necessary AV-SOFT data which is stored in the PC memory, to the interface:

- ☞ Click on the 'Communication' button in the main menu bar of AV-SOFT.
- ☞ Click on the 'Transmit to interface'



button.





- ☒ As soon as the communication is completed, the interface is ready to be disconnected from the PC and to be connected to the AUTOBUS.
- ☒ The data in the RS232/IR interface is stored in non volatile memory, so even if the interface is disconnected from the power supply it will still have the correct data when it is connected again.

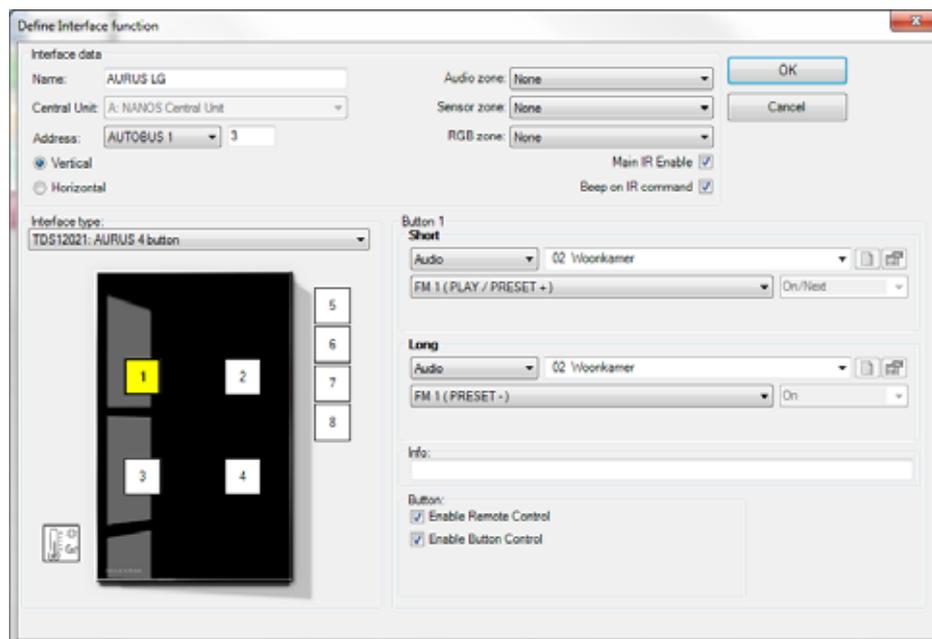


## 18.6. Phase 4: Configuring the audio buttons of the domotics installation.

You can assign the buttons or inputs to the required audio function.

If needed, assign an audio zone for this interface in the 'Audio zone' field. If you use the Audio buttons on your TELETASK remote control (TDS12502) with this interface, the selected Audio zone will be controlled.

Next click on the button which you want to use and choose the 'audio' function as the type of function, plus the audio code you want to be generated (for example) 'start CD' (if available; the list is based on your list of learned codes).



- ☞ **REMARK: if you configure a button like this, you will always control an AUDIO ZONE not an AUDIO SOURCE, if needed the zone will relay the information to the correct source. Example: if you select 'Living' and 'DVD', the Central Unit will relay the necessart commands: 'SWITCH ON to zone living' + 'SELECT INPUT DVD to zone living' + 'PLAY to source DVD'.**
- ☞ **In some rare cases you may want to control the source itself, this can be obtained with the 'Send IR/RS232 code' function (for normal use this is NOT recommended!)**

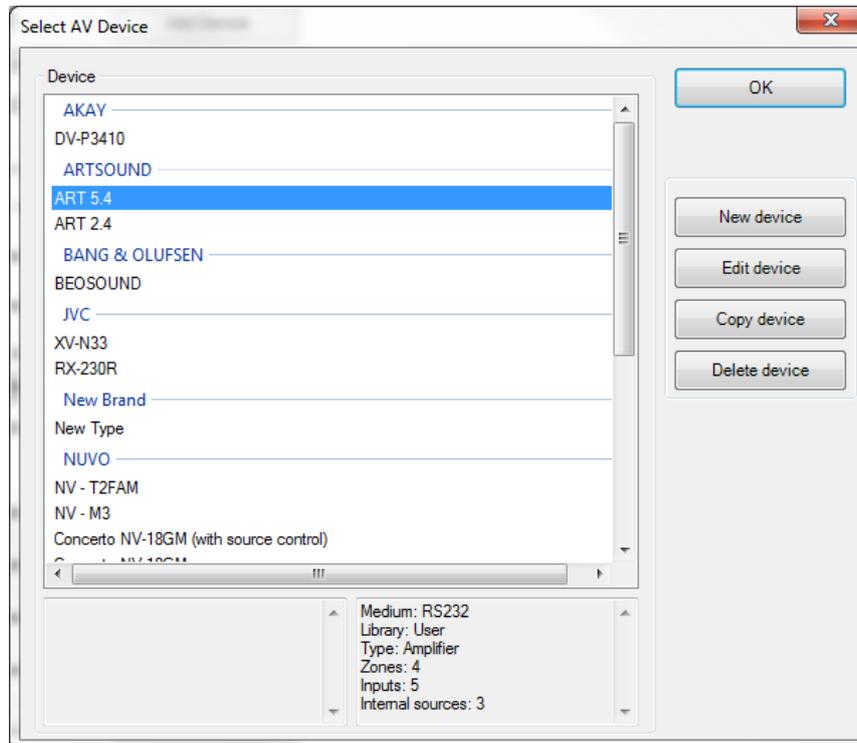


## 19. Edit library

### 19.1. Add and edit devices into the library.

When you want to add or edit a device in the library, follow the next procedure:

- ☞ Click on the Menu: 'Edit', 'Edit AV-SOFT Library'



- ☒ You will see the list of devices of the TELETASK library. On the right side of this screen you find four buttons: NEW, EDIT, COPY and DELETE. The functions of these buttons are:
  - ☐ **NEW:** you want to add a device which isn't in the list
    - Here you can insert the Brand and the Type of the device.
    - You have to choose between two possibilities:
      - Serial RS232, for devices connected trough the serial port
      - IR, for devices controlled trough an Infra Red flasher
  - ☐ **EDIT:** you can edit the devices you have added yourself.
    - Editing of a device out of the TELETASK library is NOT possible!
    - Instead of that you can save a copy of a device of the TELETASK library with a new name and then edit this device.
  - ☐ **COPY:** you can copy a device and just modify the wanted features
  - ☐ **DELETE:** you can delete a device you have made.
- ☒ On the bottom you can also see the features and some comments of the chosen device for your information.



- ☒ After choosing the wanted device and code you arrive in the screen: 'Define AV device'.

- ☒ In this screen you can add or adjust your personal comments for the chosen device in the box: Comment. This information will be stored and you will see it each time you chose to add this device.
- ☒ Then you have to choose which type of device you want to configure:
  - Amplifier: If the device is an amplifier (or more than one);
  - Source: If the device is a source (or more than one);
  - Other (for non audio devices);
  - When you choose to add or edit an amplifier you have to check the following options:
    - Number of amplifiers
    - Amplifier controls sources
- ☞ **This means that the device has his own system to control the connected sources (the sources will not need to be entered in AV-SOFT).**
- ☞ **When you check this box you get following extra options: PLAY-STOP-PRESET+-PRESET- PRESET 0 -10 for each zone.**
  - Device has internal sources (e.g. a tuner)
- ☞ **If so, check the box and give the number of internal sources.**
- When you choose to add or edit a source you have to enter the number of sources (e.g 1 for a normal tuner, 3 for an MP3 player with three audio outputs)
- REMARK: you will not be able to change these settings later, if you want to change it you will have to make a copy of the device.
- ☒ Depending the kind of device, you have to enter RS232 strings or record IR codes.

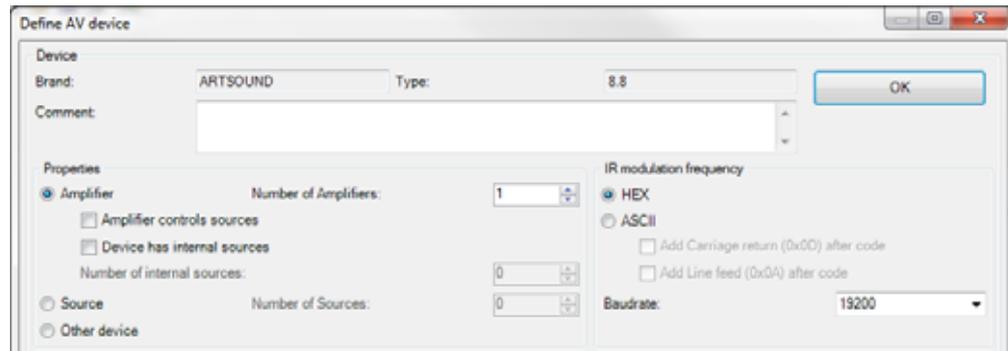


## 19.2. Entering RS232 strings

For an RS232 device you have to choose whether you will enter the codes in HEX or in ASCII-code. If you select ASCII you can also select if a code should end with a Carriage return and/or a Line feed.

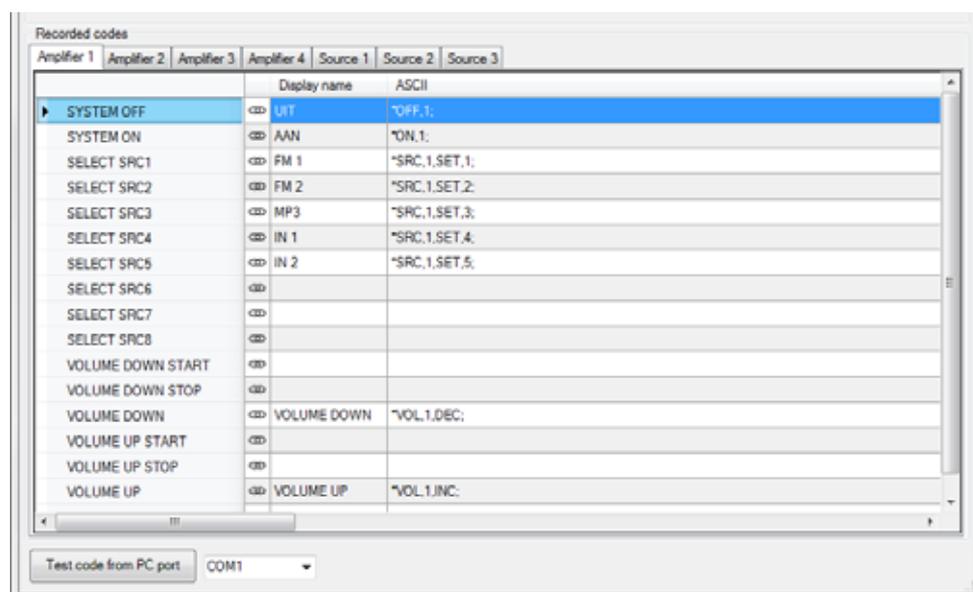
You also have to select the Baudrate: 9600, 19200, 38400 or 57600.

☞ **All these settings are depending on the brand and type of device you are adding, refer to the documentation of the manufacturer of the device.**



In the main part of the window you will have as much tab-buttons as you have chosen amplifiers or sources or others. Click on the tab-button of the device where you want to enter the RS232 code. You will see that every device has his standard set of functions;

Amplifier functions	Source functions	Other functions
<i>ON</i>	<i>PLAY</i>	<i>Code 1-40</i>
<i>OFF</i>	<i>STOP</i>	
<i>SELECT SOURCE 1-8</i>	<i>NEXT</i>	
<i>VOLUME</i>	<i>PREVIOUS</i>	
<i>MUTE</i>	<i>PRESET 0-9</i>	
	<i>EXTRA 1-10</i>	





- ☒ In the field display name you can enter a name (optional) you will see this name when configure the device in PROSOFT.
- ☒ For the functions 'SELECT SRC X' it is advised to enter the name of the input of the device (if there is printed on the device AUX2 the type 'AUX2')
- ☒ Then enter the HEX-codes or ASCII, which are described in the protocol of the device.
- ☒ It's possible to copy similar codes, then you only have to adjust the values where needed.
- ☒ Next to the function you will see a 'chain-symbol'; if you click on it you can add a second code to the chosen function. You can add up to 10 codes to one function. (e.g. to add waiting time between 2 codes).

At the bottom of this screen you can test the code by clicking on 'Test code from PC port': There will be a test between your PC and the device without any interfering of the TELETASK hardware.

After testing, click ok.

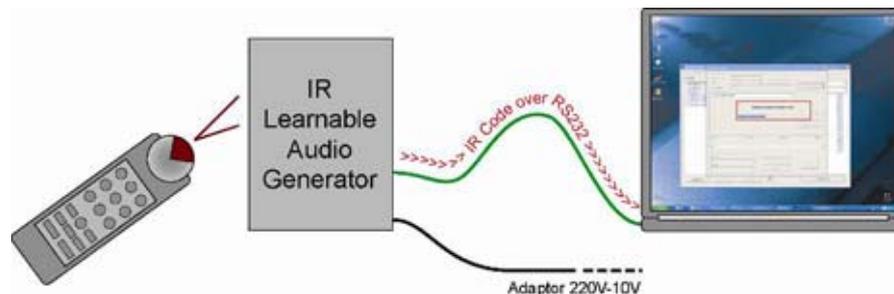
Your codes will be automatically saved in the 'custom.irdb' file in the installation folder of PROSOFT.

### 19.3. Record IR codes

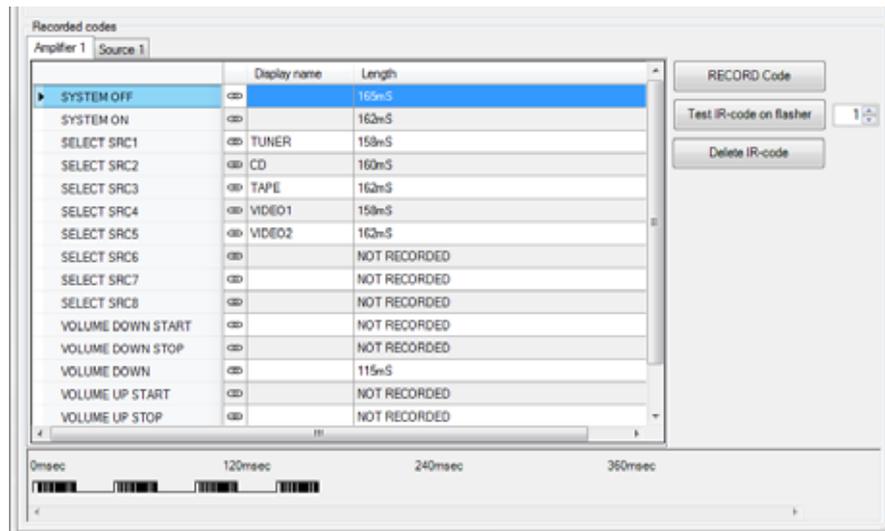
As we will give in the codes by using a remote control, we don't have to type protocol codes of the devices. Just check the box Carrier (36-38 kHz or 455 kHz) and follow the procedure below.

Learning new IR codes is done in the following way:

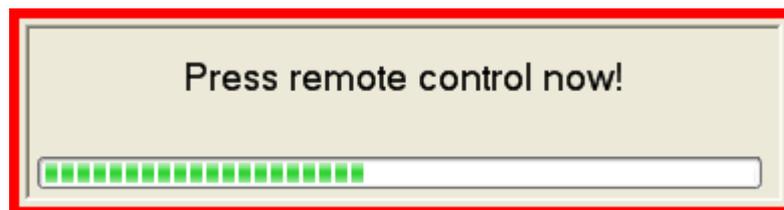
- ☒ To be able to learn the IR-codes to the RS232/learnable IR generator unit, the unit should be connected to the PC trough an RS232 cable. Alternatively this can be done to the USB port of your PC. Therefore you will need the TELETASK RS232-USB convertor.



- ☒ You are ready to record the IR-code. Make sure that both the audio remote control and the TELETASK RS232/learnable interface are close at hand.



- ☞ Select the correct function and then click the 'RECORD Code' button on your PC screen.
- ☒ AV-SOFT will display a window with the 'connecting to interface' message. Prepare to activate the button of the appropriate audio function on your audio remote control.



- ☞ Hold the remote control about 30 cm (1 foot) away from the (dark red) transparent front plate of the TELETASK interface.
- ☒ The 'Connecting to interface' screen changes into a window displaying 'Press remote control now!' Then (you will see that the 4 led indicators on the interface front panel are blinking) press on the remote control button you want to record in the TELETASK interface. Only during the blinking of the 4 led's a code can be captured. When you are too late you will have to try again.
- ☒ When the code is recorded, a message appears on the PC screen. Click on the OK button.

If something is not correct, a message will indicate that no code was recorded. In this case, you can click on the 'Record code' again to try once more.

- ☒ After the code is properly recorded, the new code is added to the chosen function. E.g. function SELECT SOURCE 3 corresponds with HDMI on the remote control. Please fill in HDMI in the name field of this function.
- ☒ At the bottom of this screen: 'Recorded codes' a graphical representation of the learned IR-code is displayed. This visualization has two purposes:
  - ☞ **It gives a visual control of the recorded code. When a non expected pattern is displayed, there may have been a disturbance while recording the IR signal and the code will have to be recorded again.**



**Remark: Even a minor error in the code can disturb the working of the recorded code. If the pattern is not looking 'normal', we advise to learn the code again.**

- When you move the Mouse pointer over the graphical code pattern on the PC screen, the pointer will become scissors. You can also see that a part of the pattern becomes red. If you click on the left mouse button, the recorded IR-code will be cut (the red part will disappear). This function is particularly useful to tune codes to each other. This is important for functions like 'VOLUME UP' and 'VOLUME DOWN'. When arranging with the cut function you can make sure that there is an equal number of IR blocks (for example 3), for both the volume up – and volume down function so there will be the same volume level change for up and down. This results in a better control as if the number of IR-blocks would be different.
- Repeat the former steps for every Infra Red code which is to be learned.
- When you need two or more infrared codes for one command click the 'chain' symbol next to the name of the function. You will see a menu where you can add a new code or a time to wait between two codes.
- To test if a code was recorded correctly select the code and press the 'Test IR code on flasher' button. The code will now be send to the selected flasher and your device should respond as expected. If your device does not do anything or does something other than expected there may be something wrong with the IR code, please record it again. If you have chained more than one function (and waits) all chained codes will be sent to the device in the correct order and the wait times will be respected.

When all new infrared codes are memorized in the system, you can close the 'Record IR Codes' window by clicking on the 'X' button in the upper-right corner. Now you are back in the main window of AV-SOFT. This is the way to learn every infrared code. It makes the TELETASK RS232/IR generator a unique interface at an affordable price level.

## 19.4. Paste IR codes

On the internet there are several libraries with IR codes in standard HEX format. You can copy these codes there and paste them in the corresponding field of AV SOFT. This is very convenient when certain codes can't be sent out by the remote control (e.g. discrete ON/OFF codes).

## 19.5. BACK-UP the AV-SOFT Library

It is advised to back-up your library in case you want to install your PROSOFT to another PC. The complete library is stored in de 'appdata' folder of your PC.

- For WINDOWS Vista/7: 'C:\ProgramData\TELETASK\PROSOFT\custom.irdb'
- For WINDOWS XP: 'C:\Documents and Settings\All Users\Application Data\TELETASK\PROSOFT\custom.irdb'

After installing PROSOFT on a other PC, copy the 'custom.irdb' file to the same folder on the new PC. Alternatively, if the 'custom.irdb' hasn't been back-upped, the RS232/IR codes can be extracted from a .NBT file in which they have been used!

-  Open an .NBT file containing the device. The device will automatically be added to your current 'custom.irdb' file.

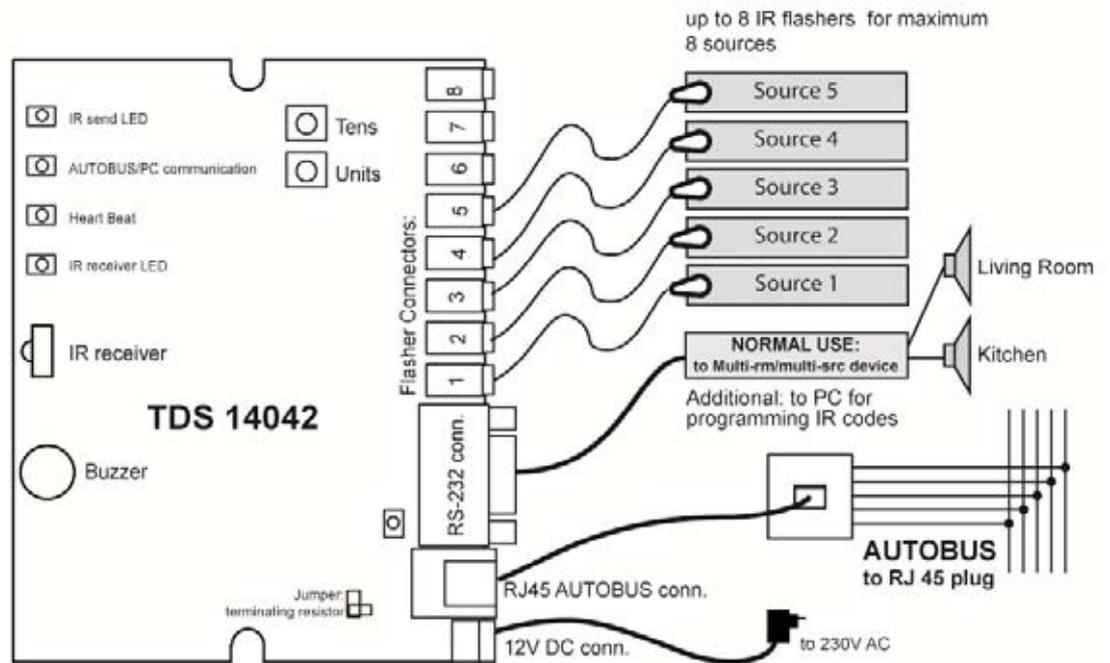
To send the RS232/IR Codes to someone else, create an empty .NBT file, add an Universal RS232/IR Learnable interface and save the .NBT file.



## 20. Connection to the RS232 UNIVERSAL AV INTERFACE

There are several connections that need to be made between the learnable RS232 UNIVERSAL AV INTERFACE, the TELETASK domotic system and the audio system.

In the schematic drawing below all connection are shown.



Because the learnable RS232 UNIVERSAL AV INTERFACE is a set top box, TELETASK has chosen for a more aesthetical connection to the AUTOBUS. This connection runs over a short CAT5 patch cable to a RJ45 plug in the wall. Behind the wall plug the AUTOBUS is available. In the table below you can see how the pinning of the CAT5 cable corresponds with the AUTOBUS wires.

AUTOBUS to RJ45 connection table			
	RJ45 pin	RJ45 Cable Color	AUTOBUS
	Pin 1	White/Orange	-
	Pin 2	Orange	green wire
	Pin 3	White/Green	white wire
	Pin 4 + 7	Blue + White/Braun	red wire
	Pin 5 + 8	White/Bleu + Braun	black wire
	Pin 6	Green	blue wire
			B
			12V
			0V
			A



## 20.1. RS232 connection

In most cases, the connections between the third-party audio device en the Universal A/V interface is done, using a **null-modem type RS232 cable**.

In some case though, the third party audio device requires a **straight type RS232 cable** to connect to the Universal A/V interface! Both types of RS232 cable are included with the Universal RS232 interface.

To know which cable you need you can follow the next rule of thumb:

IF you need a straight cable to connect your device to the PC - a null-modem cable is required between the audio device and the A/V interface.

IF you need a null-modem cable to connect your device to the PC - a straight cable is required between the audio device and the A/V interface.

## 20.2. Splitter Cable for audio system

When you set up an audio integration with the TDS14042 RS232 UNIVERSAL AV INTERFACE you will notice that the cabling between the different audio components and audio amplifiers is not that simple. In the drawings you have made during the setup, you will notice that one audio source is connected to several amplifiers etc. To make these connections you need special splitter cables. These splitter cables are optional available with the ref. TDS90160. Below you can find a picture of such a cable in a practical situation.

For more information about the splitter cable, please check out the TELETASK datasheets.



# Multiple DoIP Central Units

## 21. Coupling of multiple Central Units.

With one TELETASK DoIP Central Unit you can control a large number of in- and outputs. For very large installations or installations where there exists a logical and/or physical division between the different parts of the building/complex it can be necessary/desirable to work with several Central Units.

Examples:

- Very large villa's ( several central units for the needed in- and outputs)
- Professions (one central unit for the house and one for the practice).
- Hotels
- Company buildings
- ...

Up to ten DoIP central units can easily be connected to each other. It is recommended to situate the central units on a separate part of the network, so the communication between the central units will not be interrupted through internet traffic, copying of files from/to a network hard disk, printing to a network printer,

The number of in- and outputs and the number of functions which can be controlled with a system with several central units is simple the number of one central unit multiplied with the number of central units.

For example: for one central unit max. 500 local moods, 2 central units: 1.000 local moods, 3 central units: 1.500 local moods, 5 central units: 2.500 local moods, 10 central units: 5.000 local moods.

The split up of the intelligence of the several central units increases also the reliability of the system. If one central unit drops out, the other central units can continue functioning, only the hardware (in- and outputs) which are coupled with the defect central unit can not be controlled any more.

## 22. PROSOFT SUITE

For an installation with several central units, only one .NBT file has to be created which contains all information of all central units.

### 22.1. PROSOFT

To create a file for several central units you start with a normal file for one central unit.

- ☞ Adding a central unit: via 'Extra', 'Central units', 'Add'.
- ☞ The added central unit gets automatically a letter (A-J) you can also choose a name and type (NANOS/MICROS+) for this central unit.
- ☞ Additional central units can be added as described here above (with a maximum of 10 central units).
  - ☞ **Remark: Once the type (NANOS/MICRO+) is chosen, it can't be changed afterwards.**
  - ☞ **Remark: you can use different types of central units in one installation with several central units. (e.g. two MICROS+ central units and three NANOS central units).**
  - ☞ **Remark: the button Import is meant to merge two files from existing installations in one new file.**

### 22.1.1. Central Unit bounded

In- and outputs are bounded through hardware to a specific central unit. Either they are direct in- and outputs of a MICROS+ central unit or they are located on a bus of a certain central unit. Yet, all outputs can be controlled from any central unit. The address of an interface will be preceded by the letter (A-J) of the central unit on which the interface is connected:

- A1 I24 (Central unit A, bus 1, input interface at address 24)
- C3 O05 (Central unit C, bus 3, output interface on address 5)
  
- In- and outputs are also preceded by the letter of the corresponding central unit:
  
- REL A23 (relays 23 at central unit A)
- REL B23 (relays 23 at central unit B)
- DIM C1(dimmer 1 at central C)

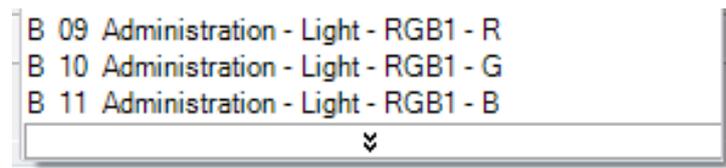
Contrary to the interfaces and in- and outputs, the functions are mostly not centrally bounded. A local mood can perfectly control the outputs of different central units and also a local mood can be controlled from any central unit.

Exceptions on this rule are **the Motor function and the RGB function**, these functions are closely bounded with the hardware (2 relays or 3 dimmers) and are linked to a specific central unit (the central unit on which the relays or dimmers are defined). Nevertheless these functions can be controlled by every central unit.

☞ **In PROSOFT one central unit will always be active. The active central unit can be changed in the menu bar of the main screen of PROSOFT.**

### 22.1.2. Interfaces

If you go to the in- or outputs, you will only see the interfaces which are defined on the active central unit. If you want to couple a relays to an input/function, you will only see the relays of the active central unit (= same central unit as the central unit of the input). If wanted, you can extend this list to a list of all relays by selecting the bottom item double arrow.



### 22.1.3. General moods

Using Moods in a multiple Central Unit project, a new function is added: **the global mood**. A global mood can control all outputs of all central units. A general mood can only control outputs of one central unit; While a general mood is bounded to one central unit, a global mood is not. Similar to all functions general and global moods can be controlled from every central unit. The number of global moods is restricted to 10.

### 22.1.4. Touch Panels

- All simple touch panels: TDS12116, cookie's, LATUS, LATUS LCD, AURUS, AURUS-OLED, proximity readers... can control every output of every central unit.
- SERVUS and ILLUS touch screens can control outputs/functions of all central units if the touch screen has a 3.x software version.
- The TV-Interface is limited to the outputs of the central unit on which it is coupled.

## 22.2. TIMESOFT

Every central unit has his own clock tables. From a clock table on a central unit you can control outputs on another central unit. For editing clock tables of a specific central unit, this central unit must be, similar as in PROSOFT, activated.

☞ **The active clock table (Automatic / Workday / Weekend / Simulation / None / Custom) is always true for all central units!**

## 22.3. CARDSOFT

Similar to the working of one central unit.

## 22.4. GUISOFT

A GUI/iSGUI always connects to one central unit, but it is possible to control all functions of all central units.

## 22.5. AV-SOFT

Similar to the working of one central unit.

## 22.6. Communication

PROSOFT Suite sends the needed information to the different central units. For every central unit there is a connection needed and therefore an Ethernet connection is needed when you want to work with several central units.

# Application Examples

## 23. Real examples

### 23.1. Introduction

In this chapter you can find a clarification concerning the use of different TELETASK components and the corresponding software settings/program of a specific theme.

### 23.2. How to integrate a heating/cooling system

Thanks to the TELETASK solutions, the control of a heating/cooling system is much more intelligent than with a conventional system. A TELETASK installation offers powerful integration for heating, cooling and ventilation. Thanks to this integration it becomes simple to automatically switch off the heating/cooling in a room when somebody opens a window or the access control system detects that people are coming home and the heating/cooling system is set to the comfort level...

TELETASK possibilities are only limited by your own fantasy.

Because there are so many different cooling and heating systems on the market, it is not always easy to integrate these systems with a general home automation system. TELETASK developed several products and solutions which allow to integrate close to every system available on the market. Thanks to a wide product range, the user can control the integrated system automatically, from standard push buttons, special touch panels, special touch windows, prestigious touch screens, by remote control, by mobile telephone, via local computer on wired or wire-less Ethernet or even remote through the internet.

The user interfaces are not described in this chapter, but below, the different steps to set up this integration are described more in detail.

Details of the different components are also to be found in the data sheet of the concerning components or elsewhere in this handbook in the 'Sensor Functions' in the 'Functions' chapter.

- 👉 **Important: the explanation below is done for one temperature zone. Your project may have several heating and/or cooling zones. Example: If you have different temperature settings in room x and in room y, you will have two temperature zones. The basics of temperature control explained below are to be considered per zone. You can have as many temperature zones as the maximum available on the central unit in your project.**

#### 23.2.1. De basic operation of a heating/cooling control

When you have a heating and/or cooling system integrated in your TELETASK domotics system, the basic operation is always the same:

1

The TELETASK system measures, with its temperature sensor, the actual temperature in a room.

2	In the TELETASK system the measured actual temperature is compared with the temperature which was set (is the target) by the user.
3	If the actual temperature is lower than the target temperature, than the internal TELETASK heating control system will control the heating system to increase the temperature in the room. (Closing the Relay of the Heating system is the simplest way of control, but TELETASK has more intelligent control algorithms available).
4	Time after time, the actual temperature is measured. The TELETASK system decides as soon as the target temperature is reached, to open its output contact again, so the heating system is deactivated.

In case of cooling, the control works the same way, but than about decreasing the temperature in stead of increasing.

Any how, the basic operation is always like above. It only differs in controlling the output. The output control algorithm may be more complex (pulse with modulated output control with predictive algorithm, analogue control, multi-speed fan control...), but the basic operation is always about comparing the actual temperature with the set temperature.

## 23.2.2. The available internal temperature control algorithms

### → Heating

There are five different control algorithms defined in the TELETASK domotics system. Depending on the type of heating system, you will have to select one of the available algorithms in the control menu.

- ☒ "Standard": this is the most basic algorithm for temperature control. The heating output relay is switched on/off when the actual temperature and the set temperature become equal: the output relay contact is opened. When the actual temperature becomes lower than the set temperature: the output contact is closed again. This output contact can be used to control a valve, a fan or a circulation pump.
- ☒ '**Air**': this control algorithm is selected when you want to integrate a fan controlled heating system in a more intelligent way. In this case the TELETASK system uses a pulse width modulation method to control the connected fan. A cycle time of 10 minutes is used. Depending of the difference between the actual and the set temperature, the fan will be activated longer or shorter. This time is also depending on the Temperature. 10Volt = 100% time setting. Example: The parameter is set to 5°C/10V and the difference between actual and set T is 3°C. Than the heating time will be 6 minutes (3/5 of 10 minutes). After 10 minutes, the difference in temperatures is measured again and a new cycle time is calculated and will be used in the next cycle.
- ☒ '**Radiators 15min**': this algorithm is to be selected when you use a heating system with wall mounted (water) radiators of the 'high yield' type. The algorithm works like the 'Air' algorithm, but with a cycle time of 15 minutes.
- ☒ '**Radiators 20min**': this algorithm is to be selected when you use a heating system with traditional cast iron (water) radiators. The algorithm works like the 'Air' algorithm, but with a cycle time of 20 minutes.
- ☒ '**Floor heating**': This is to be used when the output has to control a floor heating system. The algorithm is the same as above, but with a cycle time of 30 minutes.



enter the names of the four zones in the relay name fields (relay 1: 'ground floor valve', etc...

- ☞ Define the relay which is to control the circulation pump (for example R 5) and add the name 'main circulation pump'.
- ☞ Go to the analogue input interface on which the T sensors will be connected and define a first T sensor and give him the name 'Ground floor'.
- ☞ In the Properties menu under the tab 'Heat' enter as control method 'standard relay'.
- ☞ Select in the On/off field the relay for valve control of the ground floor (R1 in this case).
- ☞ Enter the temperature settings for day, night and standby preset. These can always be changed by the user.
  - ☞ **Remark: The frost protection is a general parameter which is the same for all temperature zones. You can set this parameter in the 'Extra' 'Options' 'Sensors' menu. Standard this parameter is set to 5°C.**
- ☞ Repeat this for the other three temperature sensors.
- ☞ Now make a condition function 'Heating ON' wherein the valves of the different T zones (R1, R2, R3 and R4) are all noted with an 'OR' relation between them.
- ☞ Make a process function which guards the condition function 'Heating ON' (=ON) 'continuous monitoring (ON and OFF)' and which controls the circulation pump (R5).
- ☞ Select this process function in the 'auto start' function: in PROSOFT main window, select 'Extra' 'Options' 'Option' and you will find the 'automatic start function' field there in the 'Service options'.
- ☞ The whole heating system is now integrated and ready to be started.

## 23.3. How to integrate a light sensor

A light sensor can be used for several reasons. Depending on the application, you can use the 'day' and 'night' thresholds which can be set for every light sensor. In other applications these thresholds can not be used and the light sensor data is to be used in another way. In other words, the use of the light sensor and the setting of its parameters are strongly related to the application.

### 23.3.1. How to add a light sensor to your project

Adding a light sensor is comparable to adding a temperature or humidity sensor. Also refer to the chapter 'Analogue Input Interfaces'. In PROSOFT it is done as follows:

- ☞ Click 'Edit' 'Inputs' in de PROSOFT menu bar.
- ☞ Select an analogue input unit or interface or add a new input interface to the system (AUTOBUS).
- ☞ Select the desired individual analogue input and select the desired light sensor which will be connected to it. Three different types can be selected: 'dark', 'normal' and 'sun' light sensor.

Specify the different available parameters depending on the type of the selected light sensor. Below, there are two different applications described more in detail:

#### → Switching a light in twilight situations (often used case)

To be able to control a light point when it gets dark, there are no specific sensor settings. The light sensor should be set (jumper settings on the sensor circuit board) to a 'dark' (twilight) sensor.

- ☞ Make a condition function which you can call 'dark', wherein the sensor value is set to '< 100 Lux'.
- ☞ Make a process function 'light ON when dark', wherein the condition 'dark' (ON if TRUE & OFF if FALSE (all edges)) is controlled and the desired light point is switched when the condition is TRUE and switched OFF when the process function is switched OFF.
- ☞ Optional: In TIMESOFT you can switch ON the process function for example every day at 5pm and switch it off again at 11pm.

#### → Control of motorised sun shields and sun screens

To control electrical sun shields, the light sensor must be set to 'sun' type (jumper settings and sensor settings in PROSOFT). In this case, there are extra sensor parameters to be set.

- ☞ Go back to the sensor ('Inputs & Others' - 'Analog input interface').
- ☞ Put the Sensor type to: 'Light sensor (sun)'
- ☞ Below, select 'Flags' from the dropdownbox and add a flag. Call it 'No sun'.
- ☞ Set the 'Preset 1 (day)' preset to 7078 Lux.
- ☞ Go to 'Extra' - 'Options' - 'Option' and add a 'General Mood' to the 'Autu Start Function'. In this 'Local Mood' and add the sensor function for this light sensor. Set the 'Preset: Day' to 'on'.
- ☞ Make a process function 'activated sunshields' wherein the flag 'no sun' (=OFF) is under the 'continuous ON if TRUE' guarded and the desired sunshield motor output closes the sunshield (be careful, direction may be necessary to b changed afterwards if wrong). To control more than one sunshield together, you can use a local mood.
  - ☞ **Extra parameters which are influencing the sunshield control can be added trough extra process functions combined with flags and clocks.**

### 23.3.2. The argument 'Hysteresis'

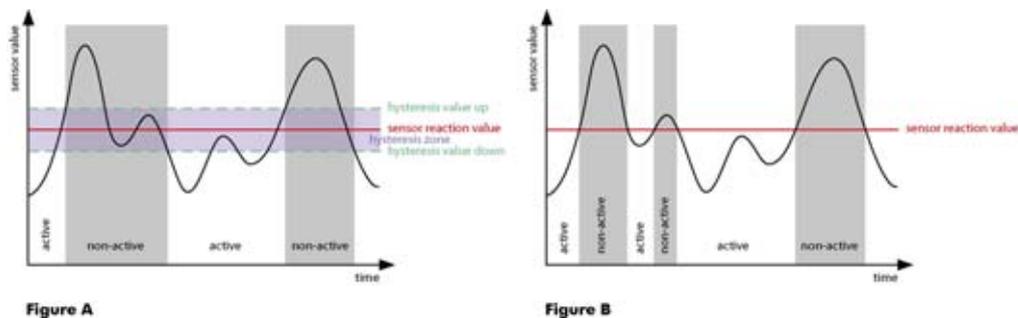
When exceeding the 'day' threshold value, the light sensor will activate the function which is related with it. When the sky is fleeced with clouds, the light values will differ from one moment to another and the system may cross very frequently the preset Lux-threshold. In such case the controlled lights or shields will constantly open/close. This is not what we expect from such system. To solve this problem, the 'hysteresis' was introduced.

Hysteresis means some kind of Lux- window wherein nothing happens. Some kind of zone wherein no threshold is crossed back as soon as it was crossed already.

Both the 'day' and 'night' thresholds are provided with a hysteresis.

This means in our applications:

- ☒ The function or action which was selected in the data field is switched OFF when the measured value is larger or equals the set value + the hysteresis value.
- ☒ The function or action which is selected in the data field is switched ON when the measured value is smaller or equals the set value – the hysteresis value.



The result of using a hysteresis is that in case of balancing Lux values (in the Light sensor case) around the threshold value doesn't result in a constant changing control of the connected output (light, motor...). In practice this means that your light is not switching ON/OFF all the time and the sun shields are not opening and closing all the time (refer to the figures above).

- ☞ **The function which is switched by the light sensor is switched OFF when the following errors occur (errors are also displayed on the display when selecting the concerned sensor):**
  - **'Data?'** the sensor is in initialising mode or the central unit is waiting for sensor information (lasts no longer than maximum a few minutes).
  - **'Sensor?'** there is no sensor signal coming in to the analogue interface of the TELETASK system. This may be caused by a defect sensor or a cabling error.
- ☞ **The hysteresis is only active on the set 'day' and 'night' thresholds. When a sensor value is called for in another type of function (example: in a condition), then the hysteresis is not used there.**
- ☞ **The hysteresis is to be set in general for all light sensors in the PROSOFT 'Extra' > 'Options' > 'Sensor'. The hysteresis is to be set in steps (max. 10). In the TELETASK LUX-table you can find all top and bottom values by using the number of steps you have set.**
  - Example: The hysteresis is set to 5 steps and the set 'day' threshold is 840 Lux. In the TELETASK Lux table you can see that the bottom hysteresis value, which is in this example 5 steps below, is 630 Lux and the top hysteresis level will be 5 steps up and is 1121 Lux.

### 23.3.3. The TELETASK Lux-values table

In this table you can find the working area of the different light sensor types (dark, normal and sun). Beside of this, as a result of the hysteresis setting in PROSOFT, you can use the table to find out about top- and bottom Lux values which are applicable in your case. For more details about hysteresis, see the text on top of this.

D ↓ - D ↑	Work area of the 'dark'						
N ↓ - N ↑	Work area of the 'normal' mode; rarely used						
S ↓ - S ↑	Work area of the 'sun' mode						

Step	Lux value	Step	Lux value	Step	Lux value	Example		Step	Lux values		
						Hysteresis	Effective %				
1	0,06	D ↓	51	17,80	101	334,00		151	5956,00		
2	0,12		52	19,00	102	354,00		152	6309,00		
3	0,19		53	20,10	103	375,00		153	6682,00		
4	0,26		54	21,00	104	397,00		154	7078,00		
5	0,33		55	23,00	105	421,00		155	7498,00		
6	0,41		56	24,00	106	446,00		156	7942,00		
7	0,50		57	26,00	107	472,00	-10	43,8 %	157	8413,00	
8	0,58		58	27,00	108	500,00	-9	40,5 %	158	8912,00	
9	0,68		59	29,00	109	530,00	-8	36,9 %	159	9440,00	
10	0,78	N ↓	60	29,00	110	561,00	-7	33,2 %	160	9999,00	
11	0,88		61	31,00	111	595,00	-6	29,2 %	161	10592,00	
12	1,00		62	32,00	112	630,00	-5	25,0 %	162	11219,00	
13	1,10		63	34,00	113	667,00	-4	20,6 %	163	11884,00	
14	1,20		64	37,00	114	707,00	-3	15,8 %	164	12588,00	
15	1,40		65	39,00	115	749,00	-2	10,8 %	165	13334,00	
16	1,50		66	41,00	116	793,00	-1	5,5 %	166	14124,00	
17	1,70		67	46,00	117	840,00	Threshold	Threshold	167	14961,00	
18	1,80		68	49,00	118	890,00	+1	5,9 %	168	15848,00	
19	2,00		69	52,00	119	943,00	+2	12,3 %	169	16787,00	
20	2,20		70	55,00	120	999,00	D ↑	+3	18,9 %	170	17782,00
21	2,30		71	59,00	121	1058,00	+4	25,9 %	171	18835,0	
22	2,50		72	62,00	122	1121,00	+5	33,4 %	172	19952,00	
23	2,80		73	66,00	123	1188,00	+6	41,4 %	173	21134,00	
24	3,00		74	70,00	124	1258,00	+7	49,7 %	174	22386,00	
25	3,20		75	74,00	125	1333,00	+8	58,7 %	175	23713,00	
26	3,50		76	78,00	126	1412,00	+9	68,0 %	176	25118,00	
27	3,70		77	83,00	127	1495,00	+10	78,0 %	177	26606,00	
28	4,00		78	88,00	128	1584,00			178	28183,00	
29	4,30		79	93,00	129	1678,00			179	29853,00	
30	4,60		80	99,00	130	1777,00			180	31622,00	
31	5,00		81	105,00	131	1883,00			181	33496,00	
32	5,30		82	111,00	132	1994,00			182	35480,00	
33	5,70		83	118,00	133	2112,00			183	37583,00	
34	6,10		84	125,00	134	2238,00			184	39810,00	
35	6,50		85	132,00	135	2370,00			185	42169,00	
36	6,90		86	140,00	136	2511,00			186	44667,00	
37	7,40		87	149,00	137	2660,00			187	47314,00	
38	7,90	S ↓	88	157,00	138	2817,00			188	50118,00	
39	8,40		89	167,00	139	2984,00			189	53087,00	
40	9,00		90	177,00	140	3161,00			190	56233,0	
41	9,60		91	187,00	141	3349,00			191	59565,00	
42	10,20		92	199,00	142	3547,00			192	63095,00	
43	10,90		93	210,00	143	3757,00			193	66833,00	
44	11,60		94	223,00	144	3980,00			194	70794,00	
45	12,30		95	236,00	145	4216,00			195	74988,00	
46	13,10		96	250,00	146	4466,00			196	79432,00	
47	14,00		97	265,00	147	4731,00			197	84139,00	
48	14,80		98	281,00	148	5011,00			198	89124,00	
49	15,80		99	298,00	149	5308,00			199	94405,00	
50	16,80		100	315,00	150	5622,00			200	99999,00	
										S ↑	

### 23.3.4. The meaning of a Lux value; practical approach.

When using a light sensor, the Lux values are very important. Everybody knows the 'Lux' argument but for many among us, it is not clear what a certain value stands for. Therefore we supply the table below for your information. Reference examples are included as a practical approach.

Lux values area	Light source	Application field
20-50	General	Cinema room, a shaded museum...
50-100	General	Bed room, warehouse, not illuminated exhibition hall ...
100-200	General	Indoor at home on a clouded day
200-500	Spot	Work top in the kitchen, office desk, PC table, ... Tasks: cutting vegetables, writing a letter, computer work...
500-1000	Spot	Reading a book in a chair with a reading light on, well lighted work top, PC table, hobby area, lighting on a piece of art ... Tasks: reading a book, fine kitchen work, sewing, measuring, PC work...
1000-2000	Spot	The hobby table, fine mechanical work. Tasks: model- building, pot seedlings, fine graphical work...
2000-5000	Spot + general	Blue sky on a spring day
5000-10000	Spot + general	Sun reflected on white walls

Based on this table you can decide the settings of your light sensors and the thresholds depending on the application. For the control of a sun shield, the threshold value should be set to 7000 Lux. The light sensor ten should be set to 'sun' (jumper setting).

In twilight situations, a threshold of 100 Lux should be good to control an in- or outdoor ambient light. The sensor should be set to 'dark'.

## 23.4. How to setup an access control system

To setup an access control system which is integrated with the home automation system, the different TELETASK software packages are used in combination with each other. In this chapter, we will use a case study where PROSOFT, TIMESOFT and CARDSOFT are used together.

### 23.4.1. Description of the case study example

IN a family with four persons (mother, father, and two children), all of them can enter the house, front door and back door, by using a TELETASK TAG. Every person has its own TAG unit, hanging together with its car keys. When coming home, the front or back door is opened by having the TAG in front of a proximity reader. At the same time the heating in the living room is set to 'day' level. The gardener and the cleaning women both have a TAG to, but they are only allowed to enter the house at the backdoor and only on Thursdays between 7:00 am and 07:00 pm. In this case, the heating is not switched to 'day' when they enter the house.

### 23.4.2. Needed products:

- 1 x TELETASK domotics central unit MICROS+ (for example: TDS10012)
- 1 x the necessary parts for the heating control: TELETASK temperature sensors, output relays to control the door openers and the heating pump and valves.
- 2 x Proximity card reader (TDS12142)
- 2 x Electro magnetic door opener unit which are controlled from a TELETASK relay contact from the central unit.
- 6 x Tag TDS12203.

### 23.4.3. In practice

#### → in PROSOFT:

- ☞ **Define the two magnetic door openers on relay 1 and relay 2**
  - ☞ Click 'Edit' in the PROSOFT menu bar.
  - ☞ Click 'Outputs' and the 'List of Outputs' window appears
  - ☞ Select 'MICROS+ OUTPUTS (1-8)'
  - ☞ Select Relay 1 and define 'Room', 'Icon' and 'Name' (example: hall – motor – front door). Do the same for the relay number 2.
  - ☞ Click 'OK' until you are back in the main PROSOFT menu.
- ☞ **Add the two proximity card reader interfaces and set their AUTOBUS address with the addresses 15 and 16.**
  - ☞ Click 'Edit' in the PROSOFT menu bar.
  - ☞ Click 'Inputs'. The 'Inputs list' window appears.
  - ☞ Click the button 'New'.
  - ☞ Select 'General interface'
  - ☞ Select 'TDS12142: Proximity Reader'
  - ☞ Add the AUTOBUS address to the interface: '15' and enter a name for the reader: 'Proximity reader Front door'
  - ☞ Click 'OK' and repeat for the second proximity reader with address 16.
- ☞ **Make two 'Timer functions': 'front door opener' and 'back door opener'.**
  - ☞ Click 'Edit – Functions' in the PROSOFT menu bar.
  - ☞ Select 'Timer functions'.
  - ☞ Click 'New'.
  - ☞ Add the 'Name': 'front door opener' in, Select relay 1 and add the opener activation time in. For example: 3 seconds.
  - ☞ Click 'OK' and Repeat for 'back door opener'.
- ☞ **Make a 'Flag' function and call it: 'Thursday 7am-5pm'.**

- ☞ Click 'Edit – Functions' in the PROSOFT menu bar.
- ☞ Select 'Flag' functions.
- ☞ Click 'New'.
- ☞ Enter the 'Name': 'Thursday 7am-5pm'
- ☞ Click 'OK' until back in the main PROSOFT menu
- ☞ **Make two 'Local Mood' functions: 'occupants access front door' and 'occupants access back door'**
  - ☞ Click 'Edit – Functions' in the PROSOFT menu bar.
  - ☞ Select 'Local Mood' functions.
  - ☞ Click 'New'.
  - ☞ Enter the 'Name': 'occupants access' and eventually other parameters
  - ☞ Add in the local mood the 'timed' function 'door opener front door' and the 'sensor' function 'day'
  - ☞ Click 'OK' and Repeat for:
    - 'occupants access back door' with 'timed' function 'back door opener' and sensor function 'Day'
- ☞ **Make a 'If-Then-Else' function: 'Employess limited access back door'**
  - ☞ Click 'Edit functions' in the PROSOFT menu bar.
  - ☞ Select 'If-then-else' functions.
  - ☞ Click 'New'.
  - ☞ Enter the name 'Employess limited access back door'.
  - ☞ Select for the 'IF Condition (True)': 'Flags', 'Thursday 7am-5pm'.
  - ☞ Select 'THEN': the timer function 'back door opener'.
- ☞ **Connect the three functions to the two proximity reader units.**
  - ☞ Click 'Edit – Inputs' in the PROSOFT menu bar
  - ☞ Double click the proximity reader with address 15 (front door)
  - ☞ Select function button 1
  - ☞ Select the 'Local Mood' function 'occupants access front door'.
  - ☞ Click 'OK', Repeat for proximity reader with address16 (back door)
    - Function button 1: 'occupants access back door'
    - Function button 2: Select 'If-Then-Else' function 'back door opener'.
- ☞ **Save this file and send it to the central unit.**

### → In TIMESOFT

Go to TIMESOFT.

- ☞ **Make a 'continuous' clock action 'Flag' 'Thursday 7am-5pm', which is activated every week on Thursdays 7am.**
  - ☞ Click 'Add action'
  - ☞ Select the 'Continuous' clock table
  - ☞ Select the 'Flag' 'Thursday 7am-5pm'
  - ☞ Select the 'Target value' 'ON'
  - ☞ Select 'time of action' 7am
  - ☞ Define the repetition of every Thursday
  - ☞ Click 'OK'
- ☞ **Make a 'continuous' clock action 'Flag' 'Thursday 7am-5pm', which is deactivated every Thursday at 5pm.**
  - ☞ Click 'Action Add'
  - ☞ Select the 'Continue' clock table
  - ☞ Select the 'Flag' 'Thursday 7am-5pm'
  - ☞ Select the 'Target Value' 'OFF'
  - ☞ Enter time of action as 5pm.
  - ☞ Set repetition to every Thursday
  - ☞ Click 'OK'
- ☞ **Save the TIMESOFT file.**

### → In CARDSOFT

- ☞ **Add the parameters of the occupants Tags**
  - ☞ Click 'Add' and enter the 'ID' nr. of the TAG.

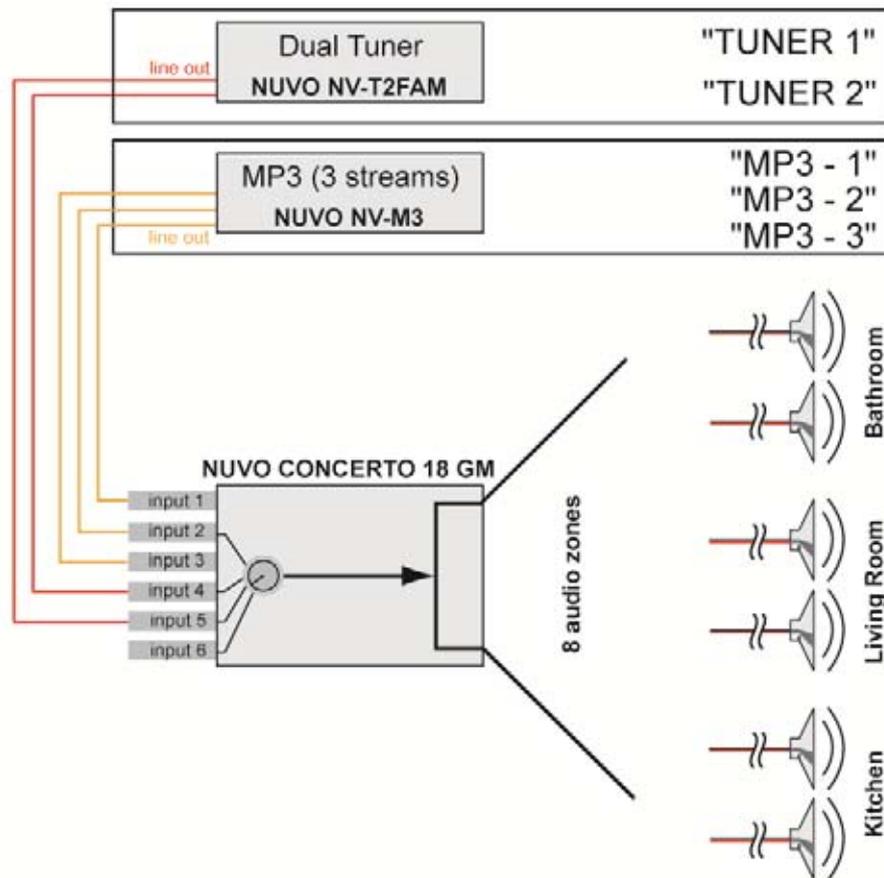
- ☞ Enter the name of one of the occupants
- ☞ Select the parameters:
- ☞ 'Reader Add.': ALL
- ☞ 'Function': 1
- ☞ Repeat this for 'Reader Add.': 16; 'Function: 1'
- ☞ **Enter the parameters of the TAG for the employees**
- ☞ Click 'Add' and enter the 'ID' number of the employees Tags.
- ☞ Enter the name of the employee
- ☞ Select the parameters:
- ☞ 'Reader Add.': ALL
- ☞ 'Function': 2
- ☞ **Save the data on your PC and send it from PC to the connected central unit.**

When these steps are done and all data is send to the central unit, the access control is integrated and everything will work as described.

## 23.5. Configuring a NUVO installation with three RS232 interfaces.

We also want to give you an example of an installation with three RS232 interfaces without the use of IR-flashers. In this example we will use NUVO devices.

### 23.5.1. Phase 1: Define the desired audio/video configuration:



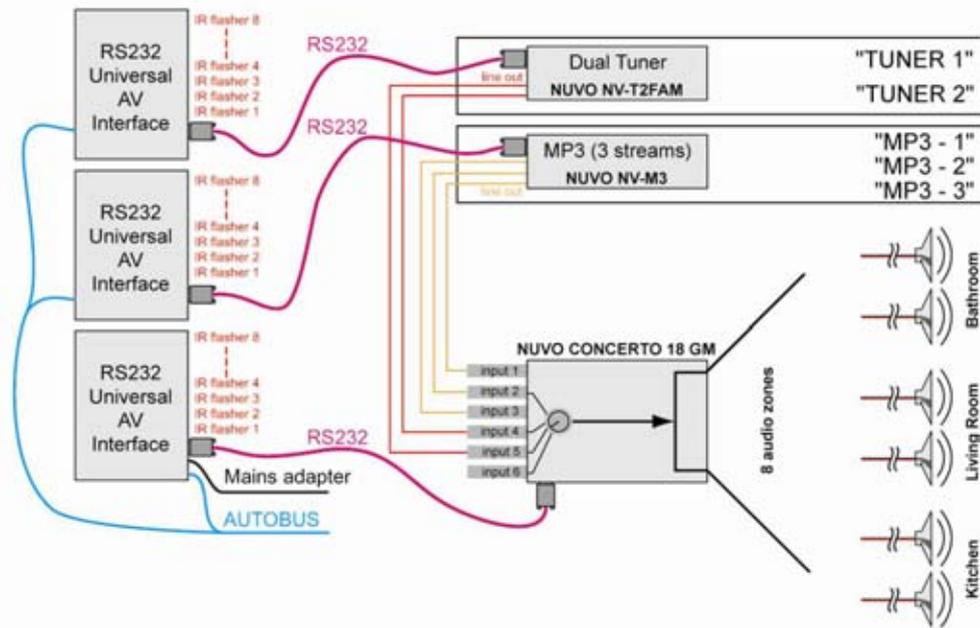
The schematic structure of the audio configuration.

In this example the configuration drawing leads to the next set of audio components:

- NUVO Concerto with built-in tuner. Has 8 zones
- NUVO 3M with built-in tuner which has 3 sources
- NUVO T2-FAM having 2 tuners.
- All the above NUVO devices will need a RS232 UNIVERSAL AV INTERFACE so you can control them with your domotics installation.

### 23.5.2. Phase 2: Assigning the RS232 Port (s).

With only the audio configuration, the audio system is not yet integrated. Therefore a connection must be made with the TELETASK home automation system by interfacing the audio components with the TELETASK RS232 universal AV interfaces. For each NUVO device their will be needed a RS232 interface.



With the assigning of the RS232 Port and assigning names to the sources, the schematic drawing is now finalised. In the next phase, this schematic is used to integrate the whole installation in to the TELETASK 'AV-SOFT' software.

### 23.5.3. Phase 3: Configuring the RS232 universal AV interface.

After the two first phases, now is the time to program the RS232 universal AV interface by means of AV-SOFT. With the carefully prepared configuration drawing at hand, it should be easy to walk through this third phase. Because the devices from our example (the NUVU devices) are already in the TELETASK library we can continue directly with the configuration.

The configuring phase is divided in the following steps:

#### → Entering the audio configuration in AV-SOFT (from PROSOFT V3.2).

- Start PROSOFT and go to 'Inputs & Others.
- You are in the 'List of interfaces', choose ADD, Audio Interface.
- A new window: 'Define interface function' appears. Here you can give the device a personalised name (which will appear similar in the 'List of interfaces').
- We do this 3 times and give our devices the following names:  
RS232 NUVO 3M  
RS232 NUVO T2FAM  
RS232 NUVO CONCERTO  
Then you give it the correct address, choose RS232 universal audio interface and then click on 'Edit interface in AV-SOFT'.

#### → Dedicating Sources:

- Click on the button ADD DEVICE of the RS232 port
- There will be a pop-up screen, named: 'Select audio device'. In this case we first select the NUVU NV-T2 FAM to connect with the RS232 universal AV interface. Click OK
- Now you can give the different sources a name: TUNER 1 and TUNER 2
- Then you repeat this above procedure for the NUVU NV-3M.
- Don't forget to save your work!

→ Dedicating zones:

Repeat the above procedure also for the NUVO CONCERTO NV-18GM.

The screenshot shows a configuration window titled "RS 232 port" for a device named "Concerto NV-18GM". The "INPUTS (for AV - SOURCES)" section has six dropdown menus: 1: MP3-1, 2: MP3-2, 3: MP3-3, 4: TUNER 1, 5: TUNER 2, and 6: NONE. The "OUTPUTS (AV - ZONES)" section is a table with columns for MP3-1, MP3-2, MP3-3, TUNER 1, and TUNER 2, and rows for Zone name 1 through 8. Each cell contains a checkbox, all of which are checked.

	MP3-1	MP3-2	MP3-3	TUNER 1	TUNER 2	
Zone name 1: Living	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 2: Kitchen	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 3: Garden	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 4: Bath room	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 5: Master Bedroom	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 6: Zone 54	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 7: Zone 55	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Zone name 8: Zone 56	<input checked="" type="checkbox"/>	<input type="checkbox"/>				

- ☒ In this window you will be able to dedicate the wanted sources in the specific rooms/zones.

Finally you will have to follow the steps as written down in:

- ☒ Phase 4: configuring the audio buttons of the domotics installation.