MANUAL AND TUTORIAL

For VelbusLink 6.x

NOTE: there can be small differences between the shown screenshots and the actual screen.

Manual history:
V1.0 Initial release
V1.1 Project use added
V1.2 USB install added on P7
V1.3 Improved project interface and add VMBRSUSB

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INTRODUCTION

VelbusLink is free software to control and configure your Velbus Home Automation system

Works with:

- VMB1USB, USB interface module
- VMB1RS, RS232 interface module
- VMBRSUSB, RS232 and USB 2din module

Features:

- Create different Velbus installation projects
- Backup and restore of your configuration
- Create a custom label for each module
- Custom label for each input/output channel
- Label editor for LCD panel
- Output module linking with push button(s)
- Week-Timer set-up for LCD panel module
- Push button simulation
- Velbus traffic log information

This manual will guide you step by step through the use of the VelbusLink software
After this tutorial you will be able to set-up your home automation system using this software.
After going through this manual you will be able to:

- Install the software
- Create a project for your or other installations
- Backup and restore your Velbus system
- Customize the channel names
- Customize the module names
- Customize the LCD panel labels
- Assign relay outputs to push buttons
- Operate the relay outputs using the computer
- Assign a timer relay output to a button
- Assign multiple functions to one button
- Make week-timer operations using the LCD panel
- Automate the LCD panel backlight

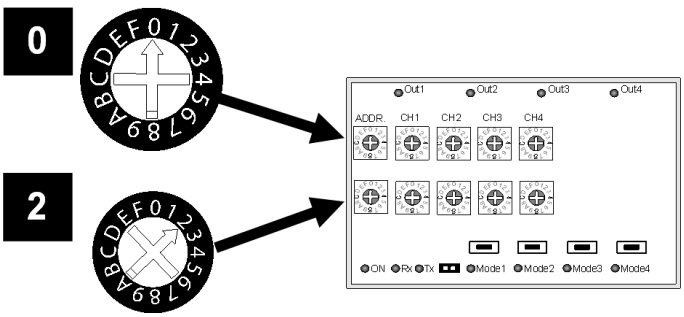
What we need?

For this tutorial we will use the demo panel VMBDEMO1 as a reference.

This tutorial can be used without the demo panel, but at least you will need:

Setting the address for the relay module:

- VMB4RY set at address 02 to correspond with the tutorial

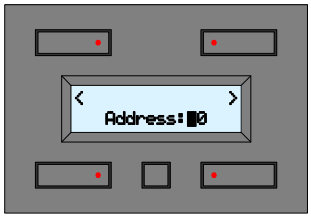


- VMB4PD set at address “01” to correspond with the tutorial

(You could also use a VMB8PB, but then LCD button labels can not be set)

Setting the address for the push button module:

Go to the second configuration menu (long press the small button, then press again)
Press the upper right “Address” button to display the address menu. (Note: after 30 seconds of inactivity, the module exits' the menu)



Press the upper buttons left or right button to select the address digit (blinking digit).
Keep the lower left button pressed, press the lower right button to modify the selected address digit. Select an address between “00” and “FE”. (00= lowest address, FE = highest address)
In this example select “01”
Press the small configuration button to quit the address menu.

- VMB1USB or VMB1RS for PC communication

- Interconnect the 4 velbus wires

Connect a 12 to 18Vdc / 500mA power supply to the + and – of the Velbus supply

VERY IMPORTANT:
MAKE SURE THE ADDRESS SETTINGS ON YOUR MODULES ARE SET LIKE INDICATED ABOVE.
IF NOT, IDENTIFICATION IN THE SOFTWARE WILL NOT BE CORRECT AND BACKUP / RESTORE WILL NOT FUNCTION!

INSTALLING THE SOFTWARE

- Download the latest 5.x software from:
  http://www.vellemanprojects.com/be/en/download/files/

  Or on www.velbus.be

- Run the VelbusLinkInstaller.exe
- Follow the on screen instructions

Note: the language selection is only for the installer.
By default VelbusLink is installed in:
C:\Program Files\Velleman\VelbusLink

- Connect the USB or RS232 cable to your system, using a VMB1RS or VMB1USB interface module.

If it is the first time that the USB interface is connected, install the USB driver!
Install the USB driver from a location that you specify, do not let windows search for an USB driver. By Default the USB driver can be located in:
C:\Program Files\Velleman\VelbusLink\Driver

Running the software:

IMPORTANT before running the software:
Make sure all your Velbus modules have a unique address setting.
in order to operate, a Velbus system MUST be connected to the computer

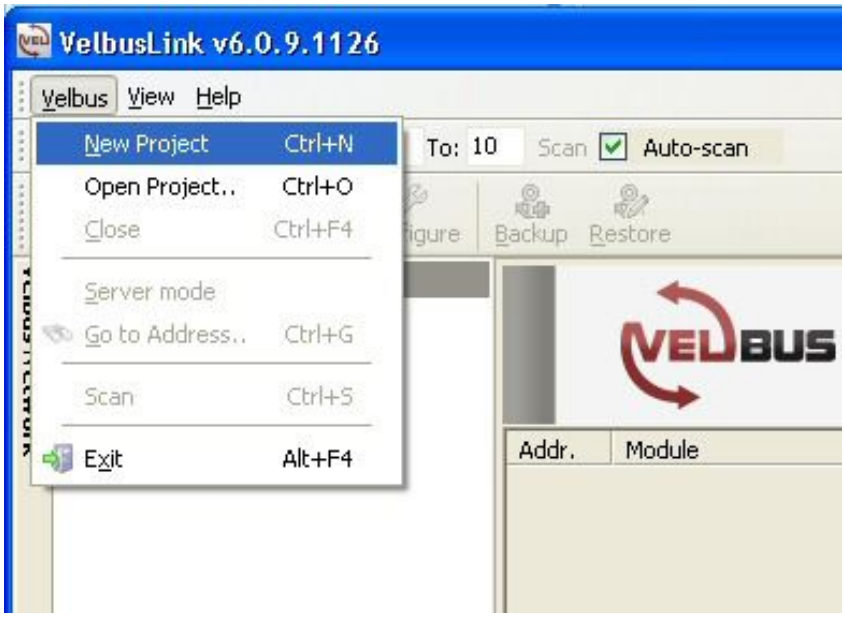
- Start the software, locate the shortcut on your desktop or start the “Velbuslink.exe” in the Velbuslink folder, located in C:\Program Files\Velleman\VelbusLink

Creating a project

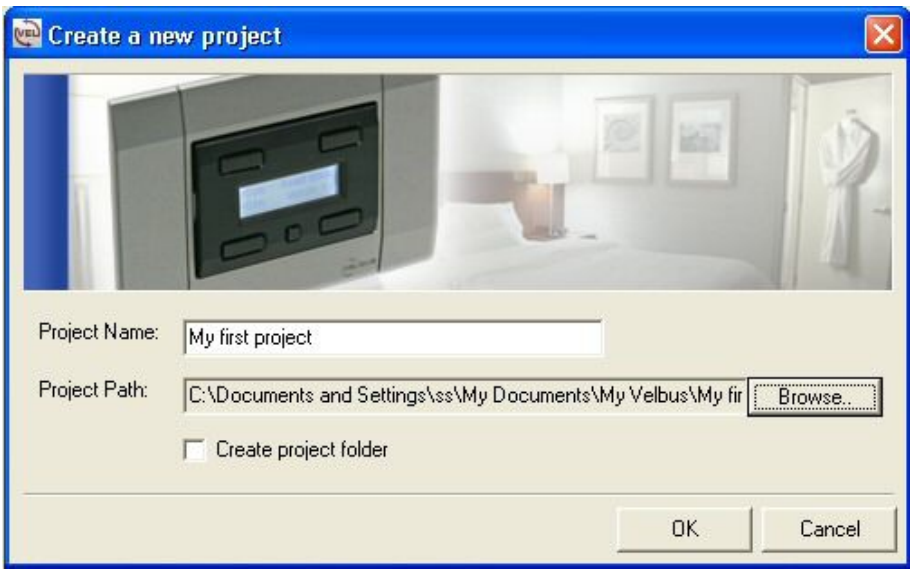
It is possible that you have different Velbus installations (or different houses). Therefore it is necessary to create a “project” for each installation.
If you are an installer, then it is recommended to use an address name for your project, or to store each project into a specific folder

Before you can connect your installation it is necessary to create a new project, or to open an existing project.

- Open the Velbus Project menu:



- Type an appropriate name for your project and save it by preference in the “my Velbus” folder.

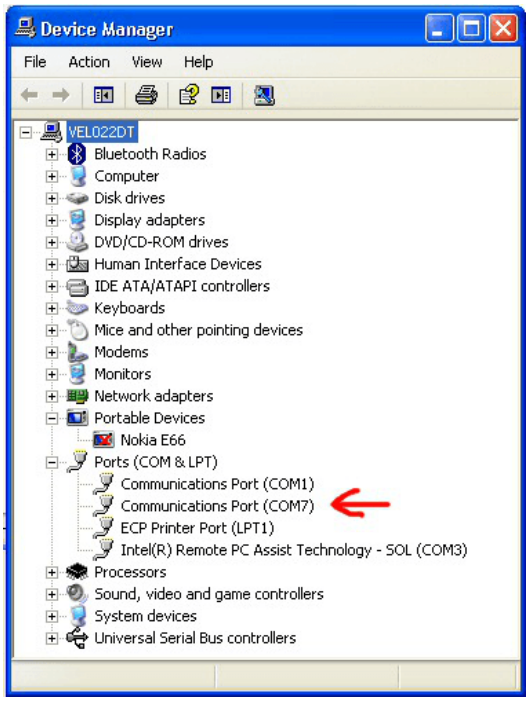


Here we use the name “my first project”

- Click “OK”

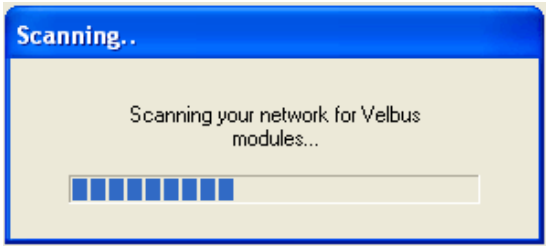
- Now you can connect to the Velbus system
- Select the appropriate COM port, that is used by the USB or RS232 interface

Note: it can take a moment before the available COM ports are scanned. If needed, check the Windows control panel for the exact COM port. It is possible that the complete “COM**nr**” label must be entered

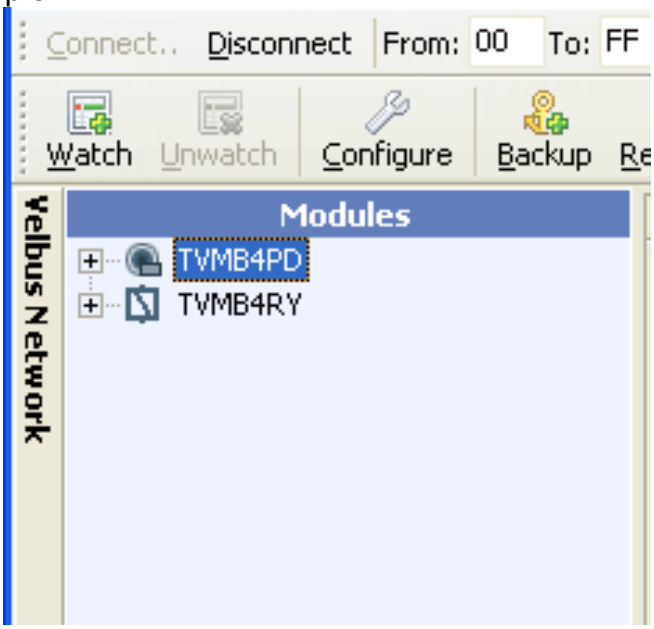


- Press **OK**

Now the software is scanning your system for connected modules

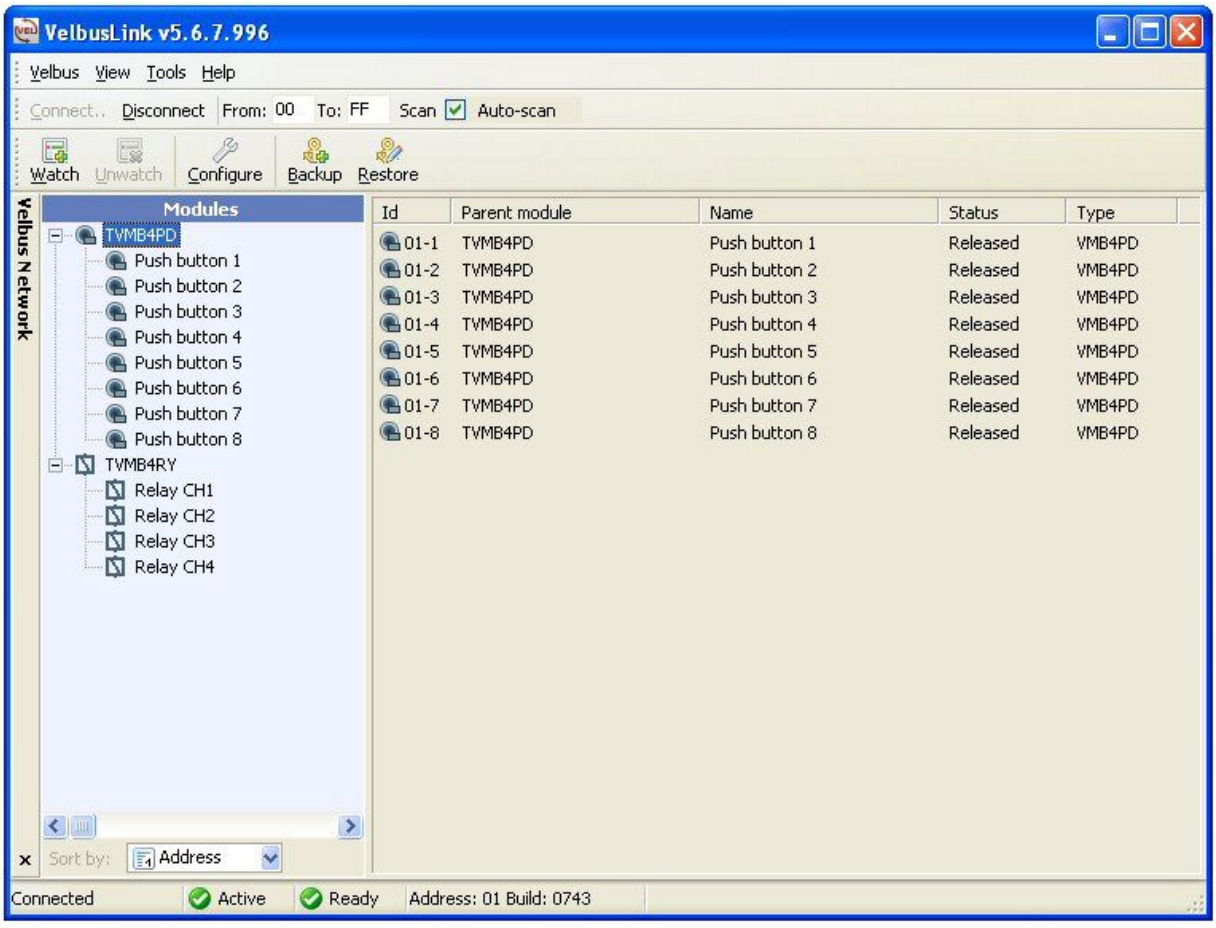


You should see your modules
Example:

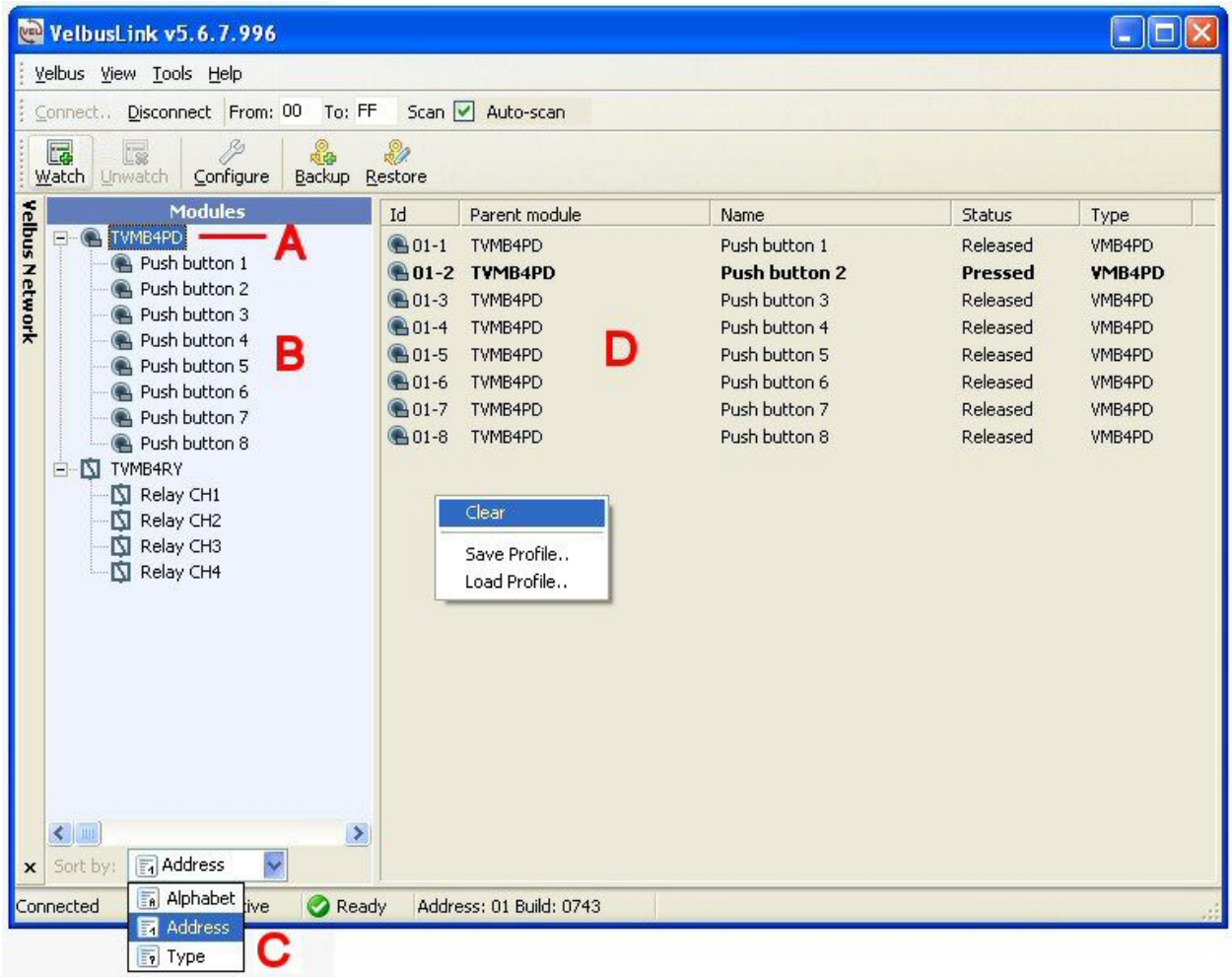


- Click the “+” sign next to the modules, to expand the channels or buttons
- Select a module example “TVMB4PD” or a name that has been given to the module.
- Click the “Watch” button, then you see some detailed info on the right screen

This can be done for a complete module or for a single channel. It is an easy way to watch only the detail of channels and modules that you want.



What do we see in the main window?



A. The standard module name, or the name that you typed for this module
B. The button names in case of push buttons or channel names in case of output modules
C. A drop down option to sort the modules in different ways
D. The information panel, here we see:

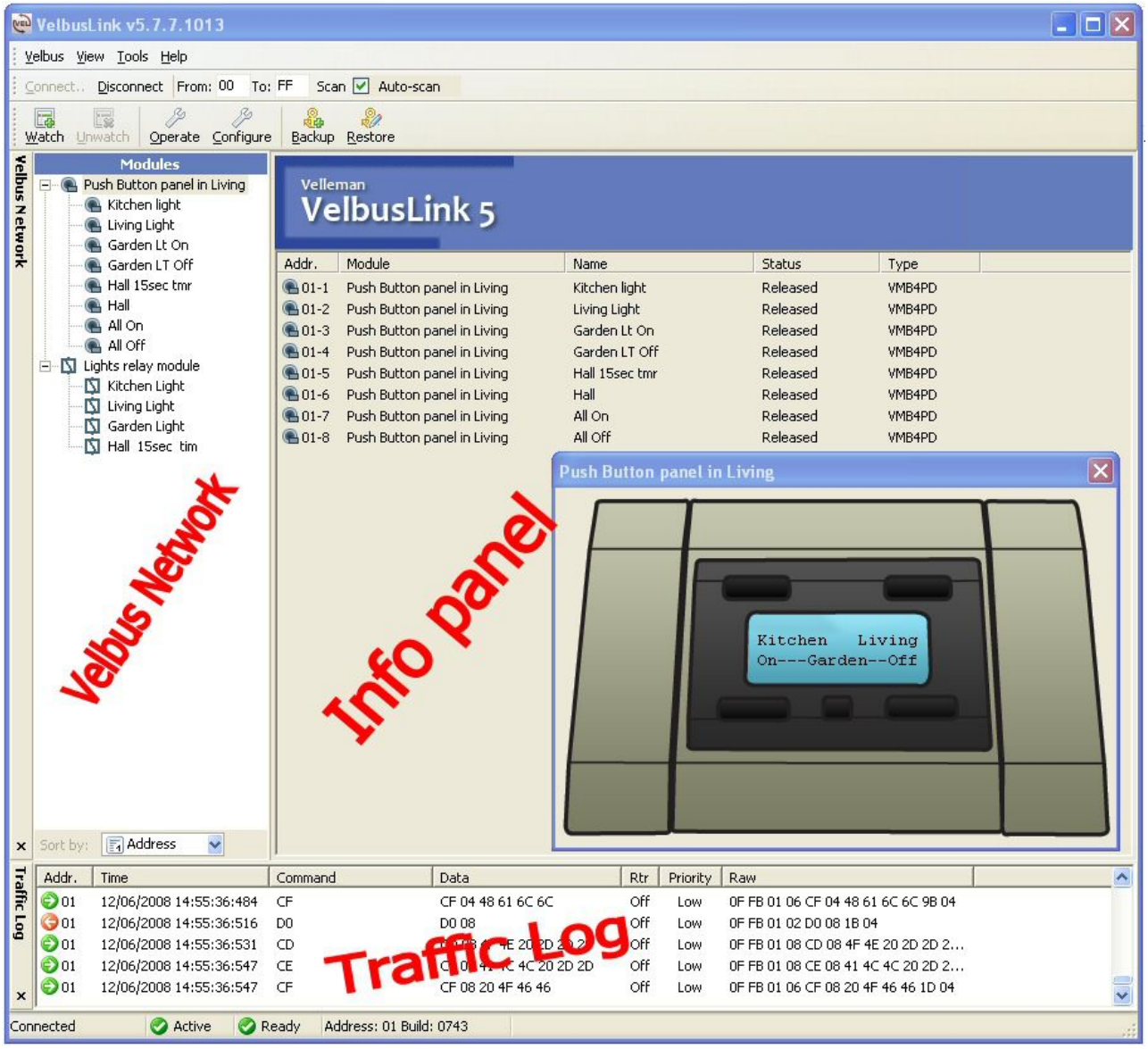
Id: The address and channel number of the push button or output
Parent module: The module name
Name: The push button name or output name you have given
Status: For a push button “pressed” or “released”, in case of an output “Off” or “On”
Type: The original module name or type
If you “right click” the mouse in this panel, you get an option:
Clear the complete panel
Save the current panel configuration profile
Load a previously saved panel configuration profile

Here you see how the complete screen can look like, if all windows are open and custom names are given.

- Click > View > Windows > to see more information windows.
- Make sure at least the “Velbus network” window is open:

> View > Windows > Velbus Network

Example what we could see after the modules and channels have a name:



STANDARD SET-UP / TUTORIAL

Before starting the tutorial we will clear all the module names and configurations.
For that an “empty” backup file for both modules is available for download.

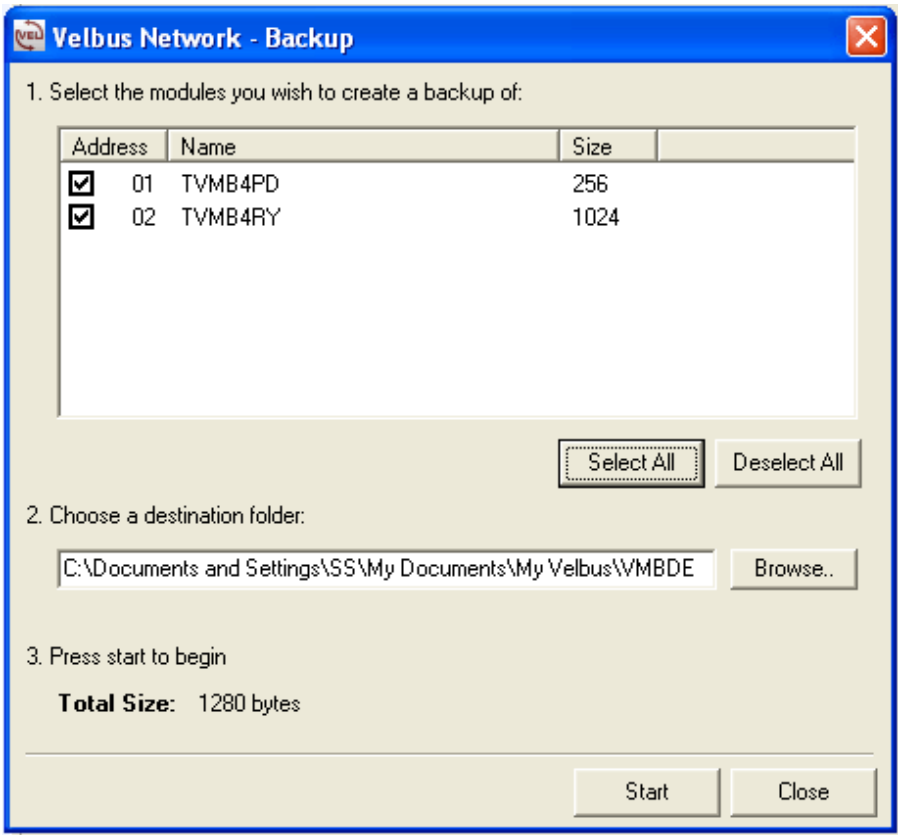
First create the folders:
C:\...My Documents\My Velbus\EmptyVMBDEMO1
And
C:\...My Documents\My Velbus\VMBDEMO1

Copy the empty backup files “01.mod” and “02.mod” in:
C:\...My Documents\My Velbus\EmptyVMBDEMO1

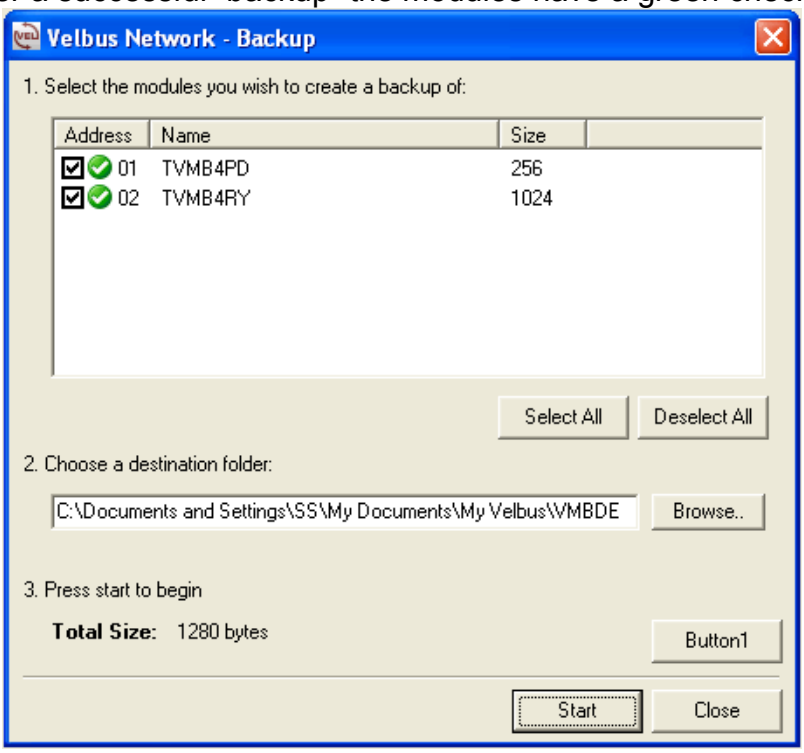
Backing up your system

Before clearing the modules, we will make a backup of the current set-up
NOTE: You can omit this step if new clear modules are used.

- Press **“backup”**
- Choose a destination folder and name
- C:\...My Documents\My Velbus\VMBDEMO1
- Select all modules (or checkmark all modules)
- Press **“Start”** then the backup starts



After a successful “backup” the modules have a green check mark

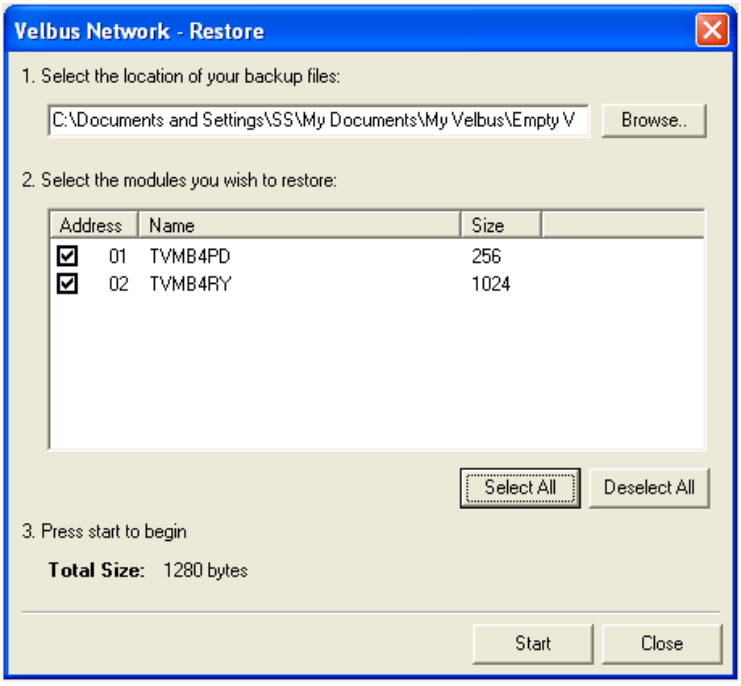


- Press “Close”

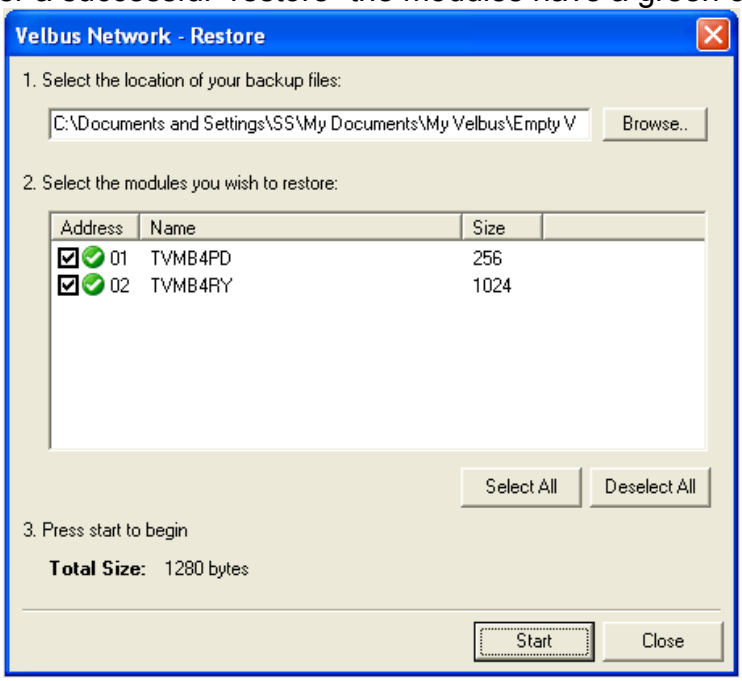
Restore a clean system

In this example we will restore a “clean” module set-up
(for a “normal” restore, use the folder from the backup you made above)

- Press **“Restore”**
- Browse to the “Empty VMBDEMO1” folder
- C:\...My Documents\My Velbus\EmptyVMBDEMO1
- Select all modules
- Press **“Start”** now the modules are restored with an empty settings to start the tutorial



After a successful “restore” the modules have a green check mark

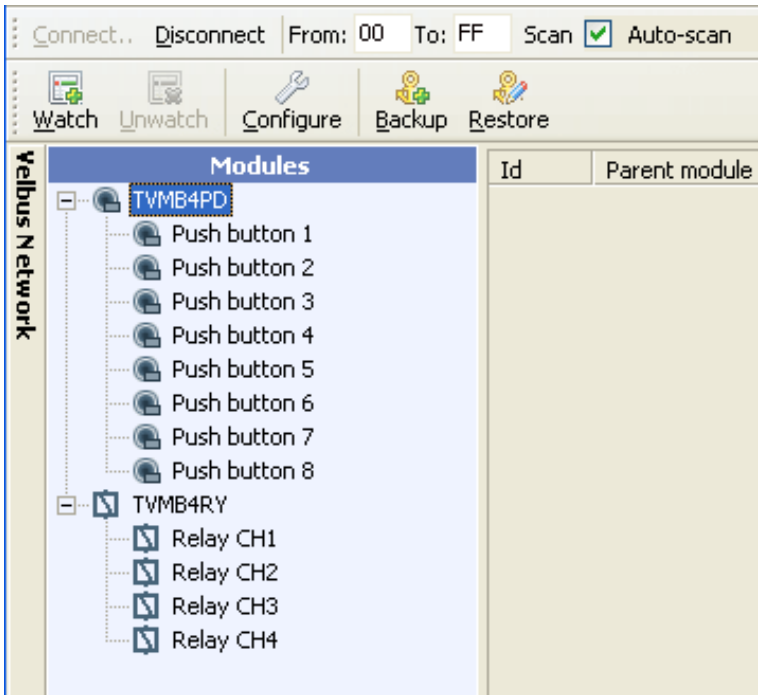


Channel and Push button names

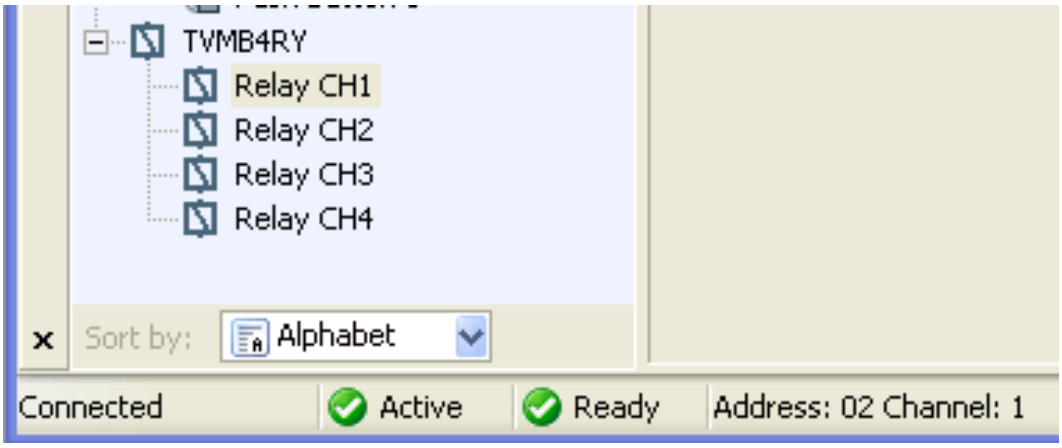
For your convenience, rename the module and channel names to “real life” names
Name the modules, channels and buttons as logic as possible, making it easy to recognize them in the system

Channel names

- Press the “**+**” sign next to your modules, to display the standard channel names.

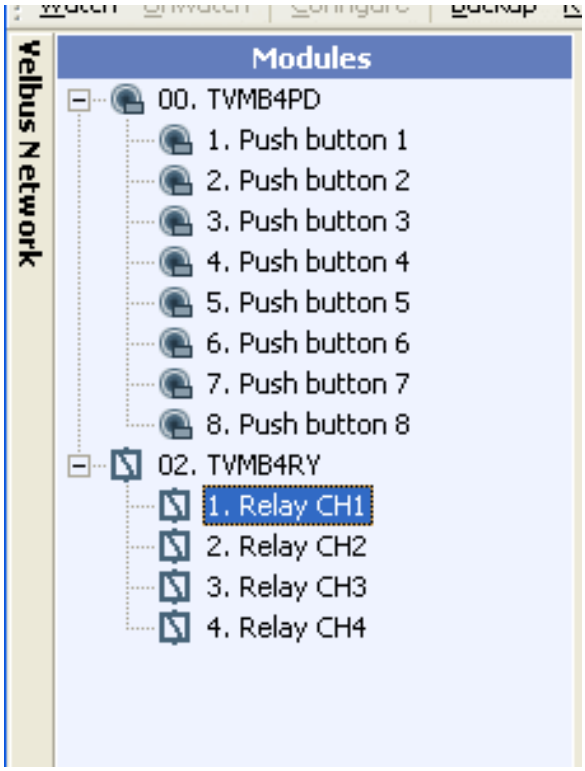


If your overtyped the channel names, it is still possible to view the channel number, below in the status bar. Here you see that the VMB4RY relay module has address 02 and Relay CH1 is Channel 1:

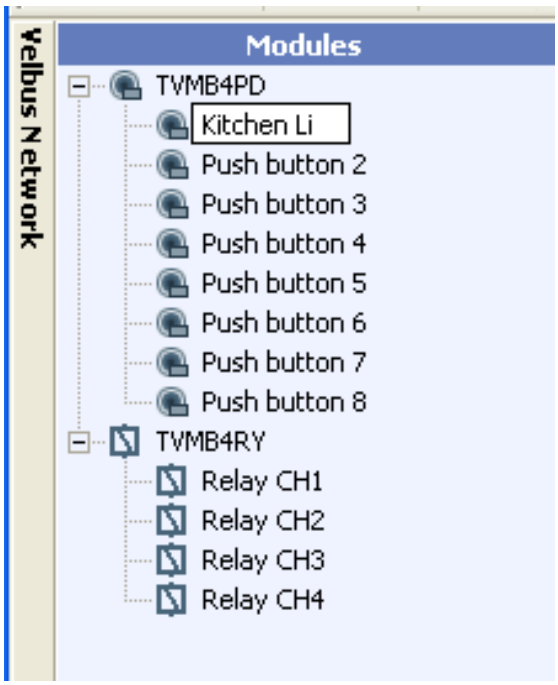


NOTE: It is also possible to view an address and channel overlay, but then it is not possible to edit the names.

- Press **"View"** > Address overlay
- Now you see the address and channel number next to the modules and channels or buttons.



- Click inside the name label and retype the channel or button name
- A relay channel can have up to 16 characters;
- A button name can have up to 15 characters. The names are stored inside each module memory.



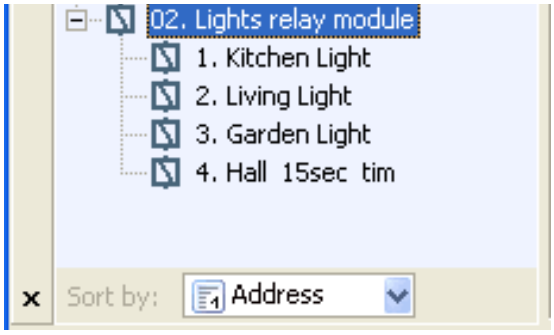
NOTE: These names can be different then the button labels in an LCD push button module (VMB4PD)

Here the results after all the push buttons and relay output channels have been named. If you continue the tutorial, use the names like displayed here. These names are also used in the VelBus demo panel (VMBDEMO1)

Module names

It is possible to name the module itself, unlike the channel names, this name is stored in your computer, NOT in the module. Therefore it can have a longer name.
Rename the modes:
TVMB4PD into “Push Button panel Living”
TVMB4RY into: “Lights relay module”

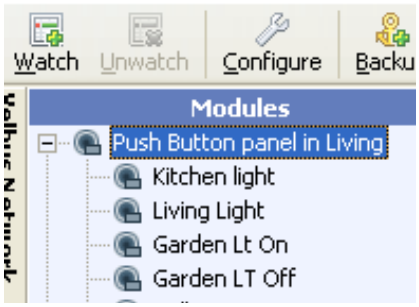
In the bottom of the screen it is possible to sort the list by “Address”, “Alphabet” or “Type”. Here shown with address overlay:



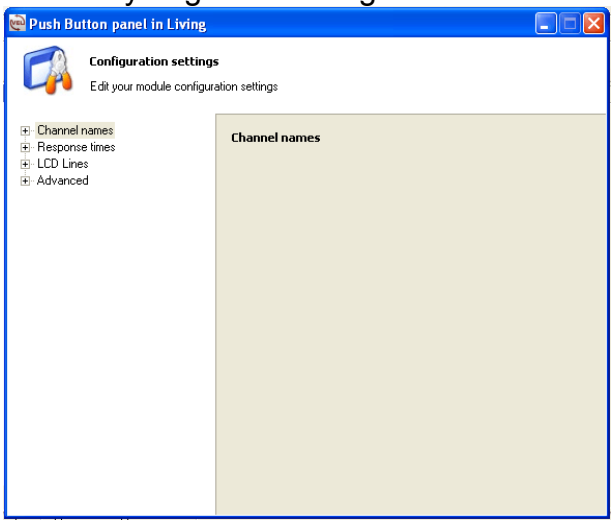
Changing the standard labels on an LCD push button panel

Now we will name the labels inside the push button and timer panel VMB4PD

- Select the button panel you want to edit:
-

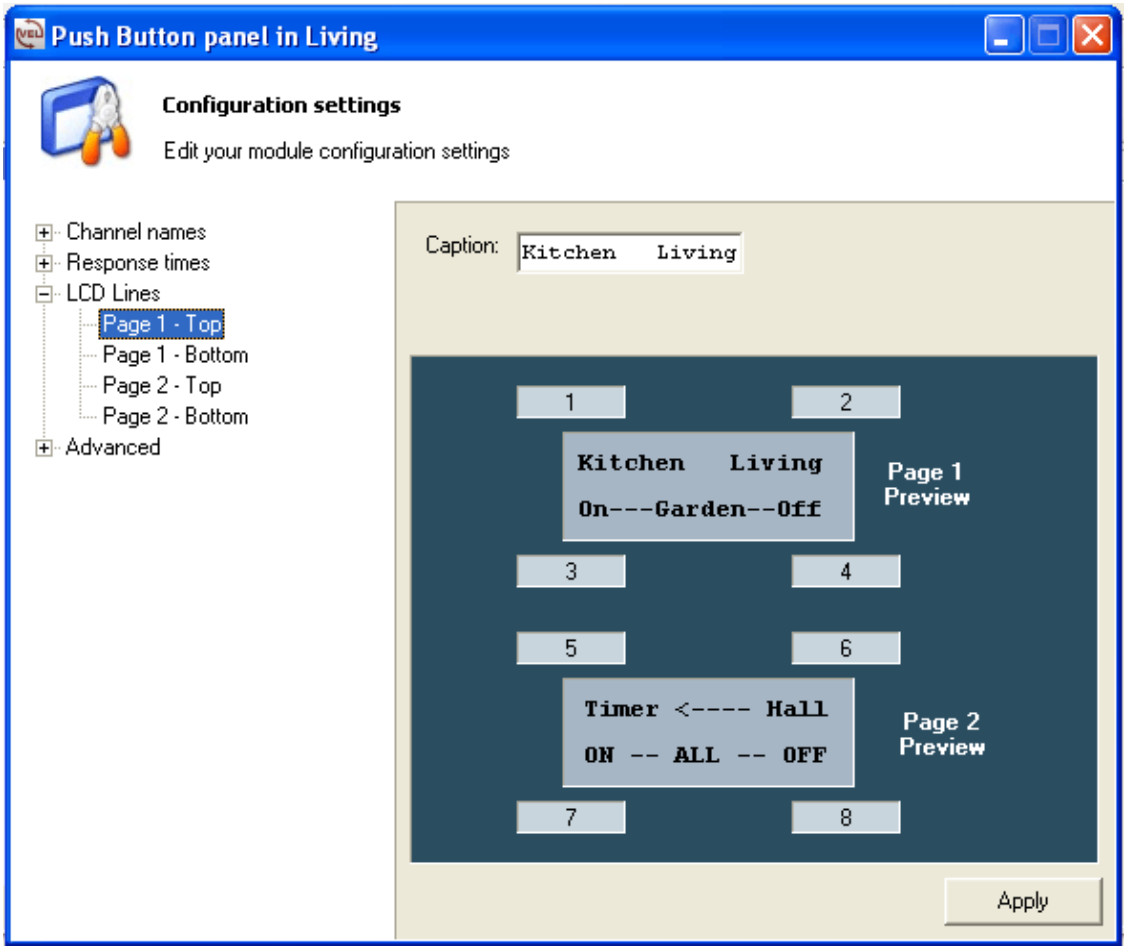


- Press the **“Configure”** button
- Now you get the configuration screen:



Expand the “LCD lines” (only if your have VMB4PD connected, not for VMB8PB)
Now you get a screen to type the name for each button, two times 1 line of 16 char.
You can see page 1 and page 2 of your panel

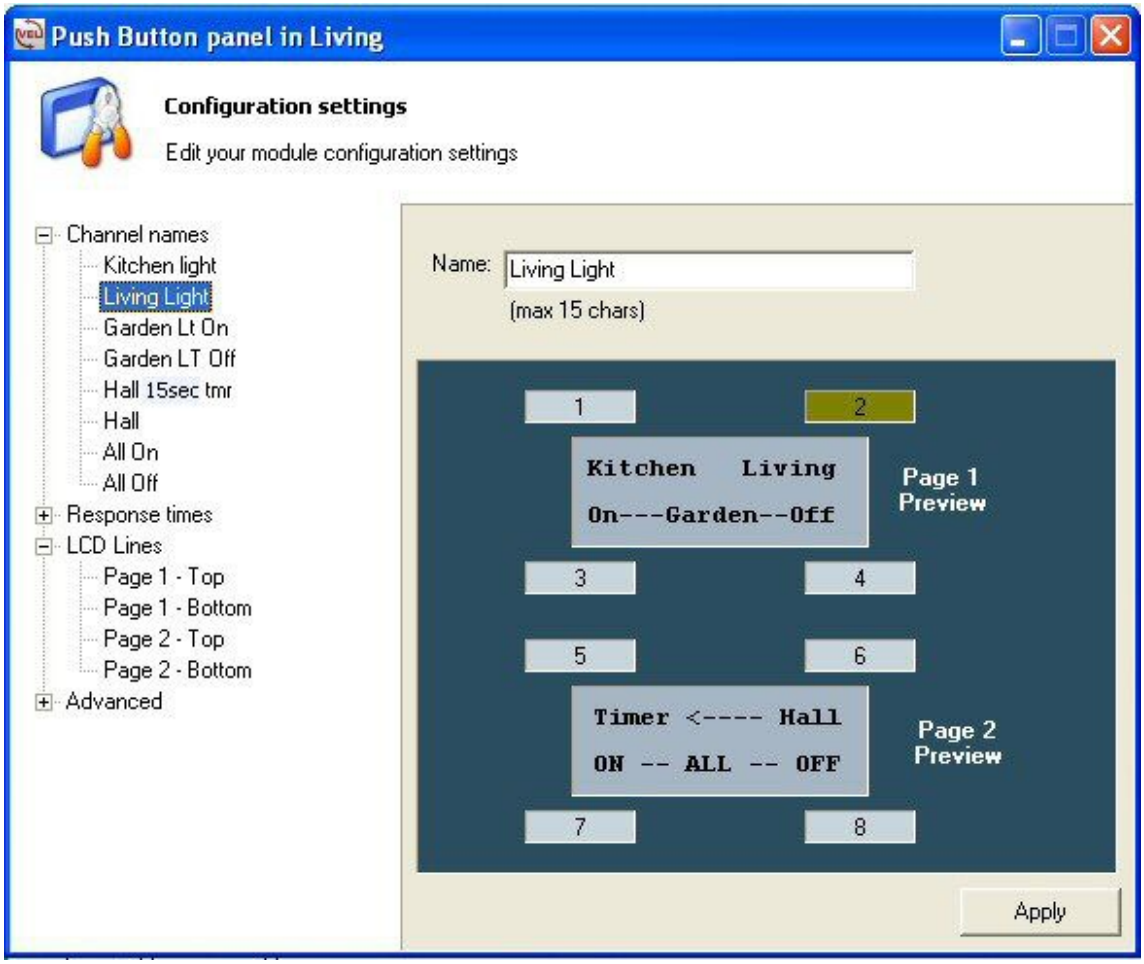
- Type the names corresponding to the function of your buttons.
- Select **“Page 1 – Top”** to edit the first line on the first page
- Select **“Page 1 – Bottom”** to edit the second line on the first page
- Continue for page 2…, just copy the text like in this example. More info will be given in the advanced set-up section later.



PRESS APPLY, OR NO CHANGES WILL BE MADE!

The moment you pressed APPLY, the names on the LCD panel are changed

If you expand the tab “channel names” you will see the names you have given earlier to each button, select a name to see his position on the LCD push button panel.
Normally their function should correspond to the labels on the LCD lines. If not, edit your LCD lines or your channel names.



PRESS APPLY, IF YOU CHANGED CHANNEL NAMES.

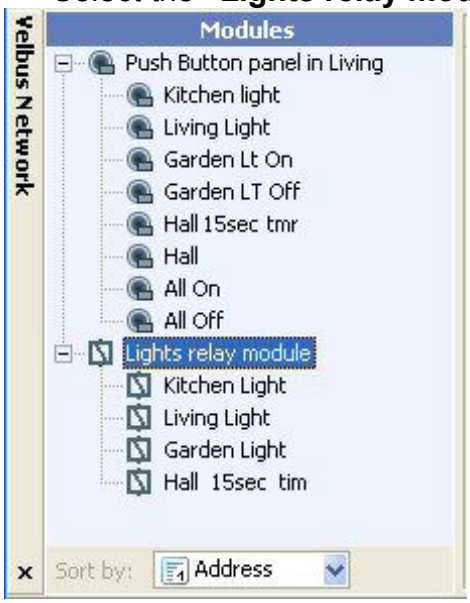
Assigning relay outputs to push buttons

In order to create an action on an output module like relay, blind or dimmer, it is necessary to “connect” or register push buttons to output modules.

In next example we will:

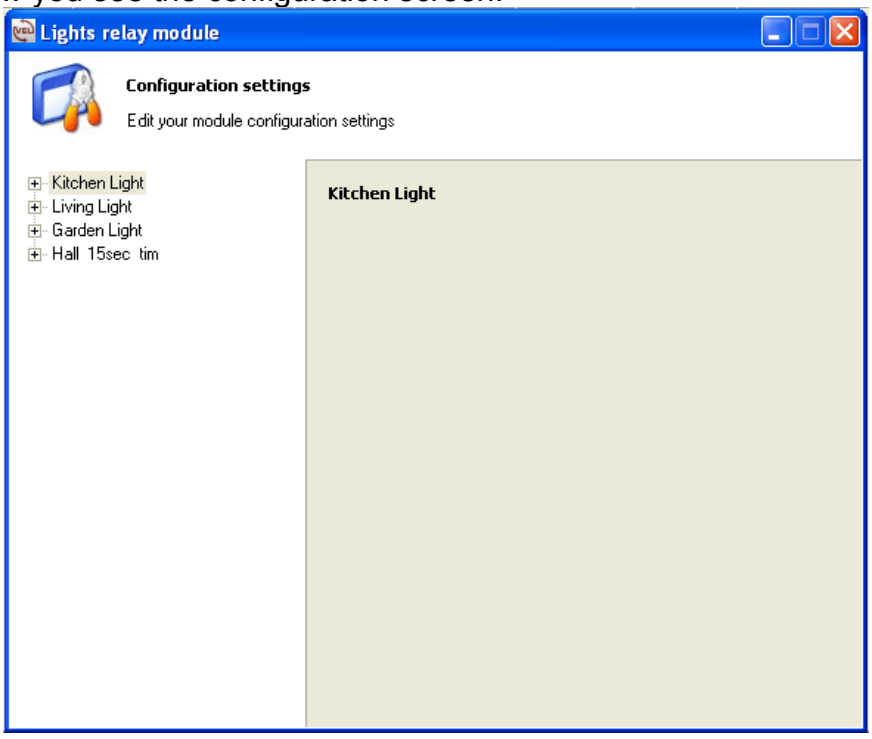
- Register a toggle (on/off) function on the Kitchen lights
- Register a toggle (on/off) function on the Living lights
- Register separate ON and OFF buttons for the Garden lights

- Select the **“Lights relay module”**

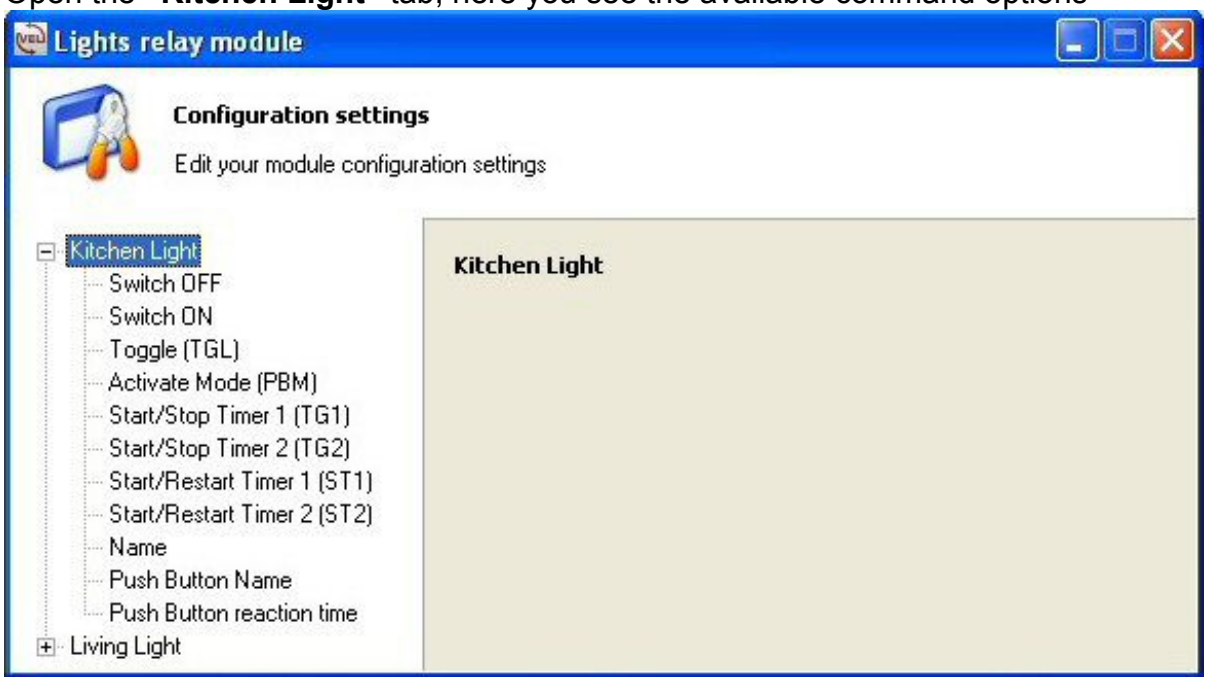


- Click **“Configure”**

Now you see the configuration screen:



Open the **"Kitchen Light"** tab, here you see the available command options



Available configuration options (available for each output):

NOTE: This info is not needed for the tutorial, you can go to next page

Switch OFF: command that switches OFF the output at each press.
Switch ON: command that switches ON the output at each press.
Example, if you want a separate button for OFF and a separate button for ON.
Interesting if you want switch Off or On a group of outputs. Also advised if week-timers are used with an LCD push button panel (VMB4PD)

Toggle (TGL): command that switches the output ON or OFF at each press.
Example, if you want to simulate a regular On/Off switch. Use this function only if from different places the SAME output(s) are switched, otherwise outputs can be "out of sync".

Activate Mode (PBM): Push button mode, the output is ON when the switch is. Simulation of a simple push button. Used for various applications.

Start/Stop Timer 1 (TG1): Command to start or stop a timer from table 1, set on the output module.

Start/Stop Timer 2 (TG2): Command to start or stop a timer from table 2, set on the output module. Used with long press of the button, used for special timer functions.

Start/Restart Timer 1 (TG1): Command to start or restart a timer from table 1, set on the output module. Example for staircase light.

Start/Restart Timer 2 (TG2): Command to start or restart a timer from table 2, set on the output module. Used with a long press of the button. Example if used in combination with the above "start/restart Timer 1": a short press will start timer 1 (TG1), a long press will start this timer 2 (TG2).

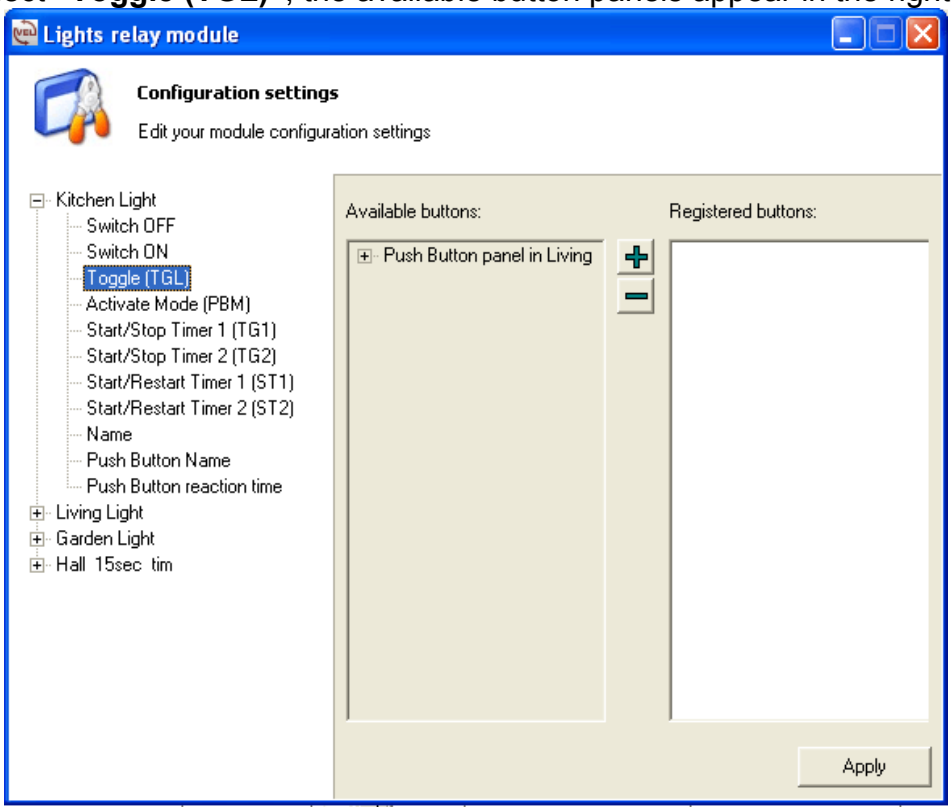
Name: Here the name of the module is stored (in this example "Kitchen Light")

Push Button Name: Here the name for the local bush button is stored, this is the LOCAL button ON the module, not a Velbus button.

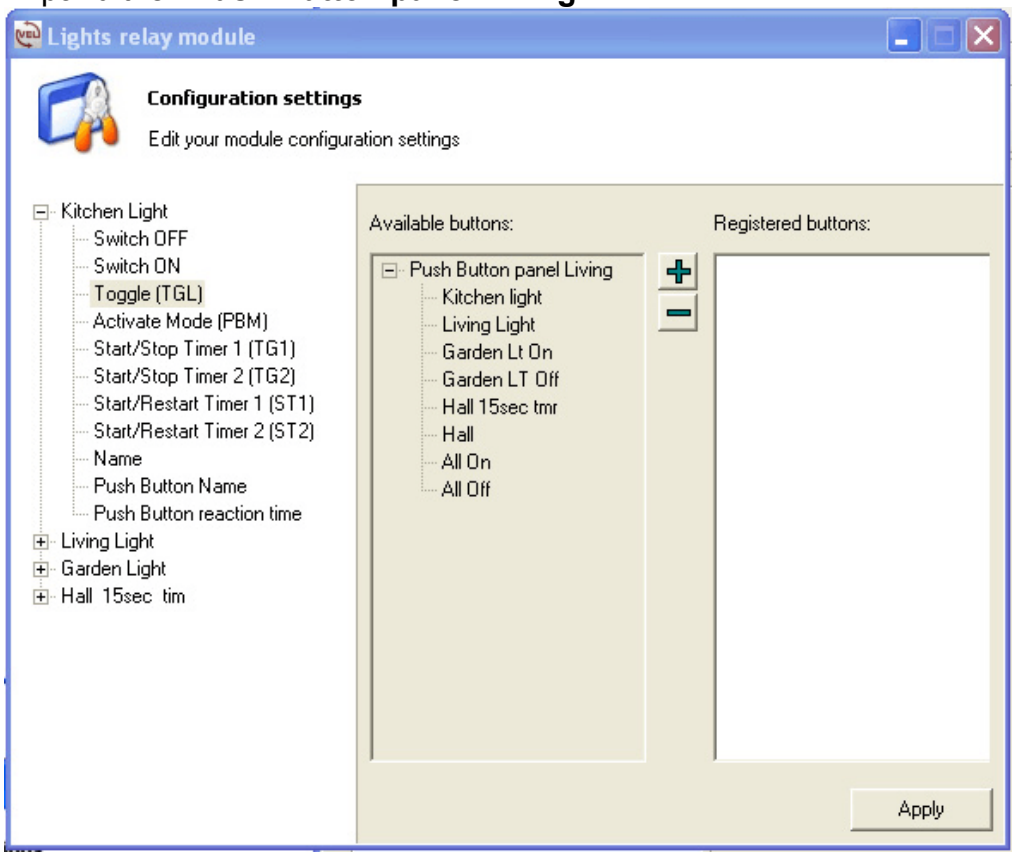
Push Button reaction time: Here it is possible to select different reaction times for the LOCAL push button on the module, not a Velbus button.

NOTE:
Reaction times for push buttons on the Velbus system must be set in the button panel itself.

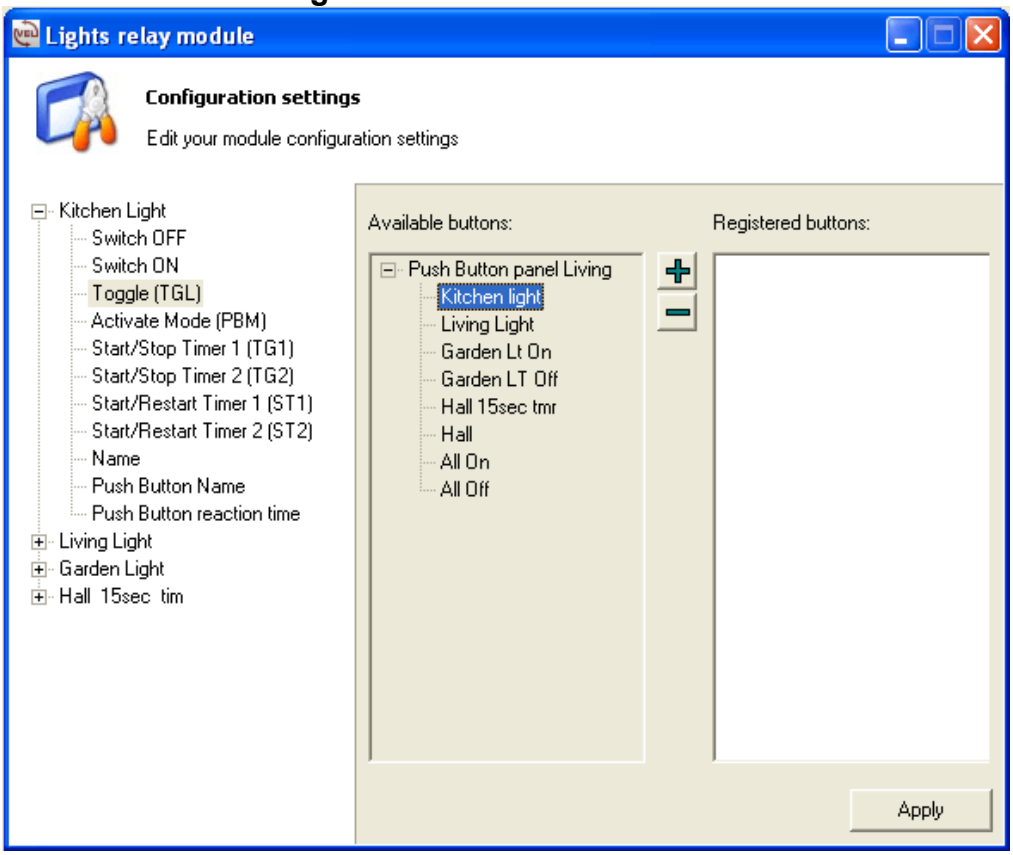
Select **“Toggle (TGL)”**, the available button panels appear in the right screen



- Expand the **“Push Button panel Living”**

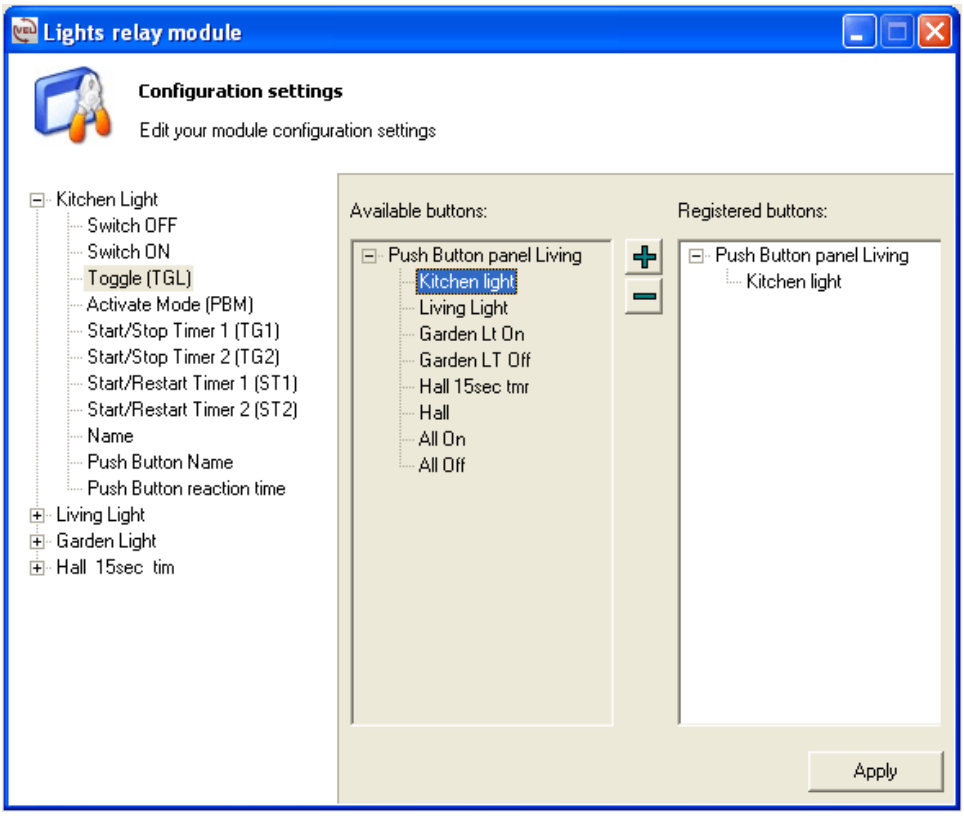


- Select **“Kitchen Light”**



- Press the “**+**” button, then you note that this button is a “Registered button”

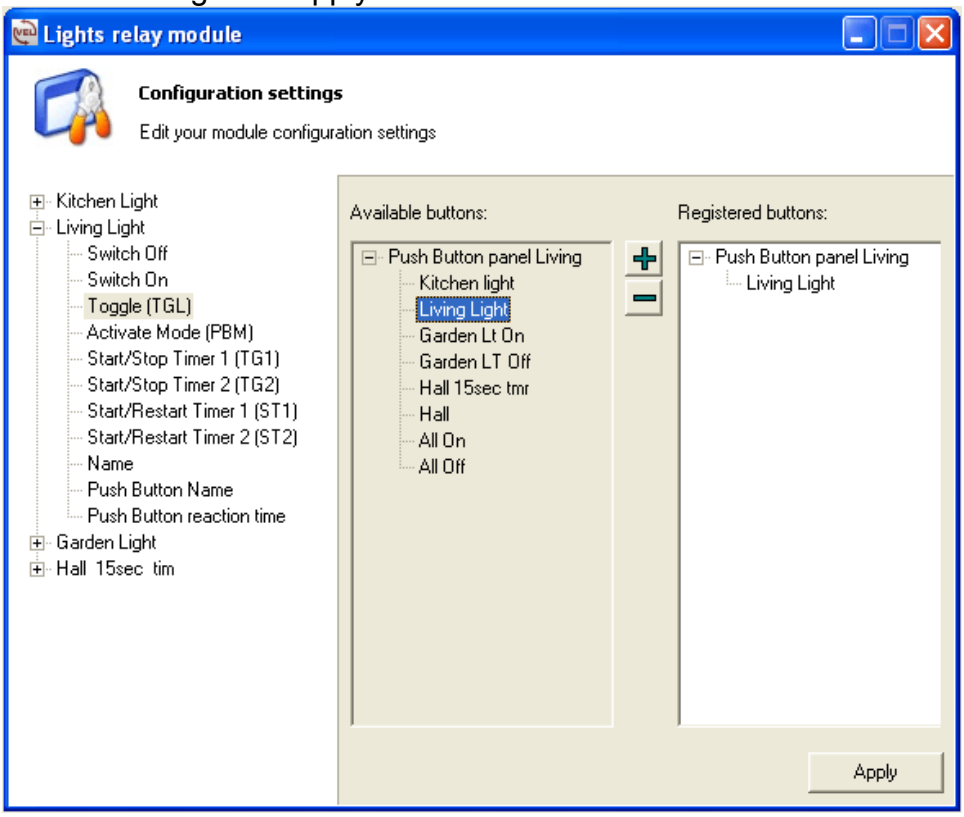
- If you made a mistake, you can also press “**–** “ to remove a selected registered button



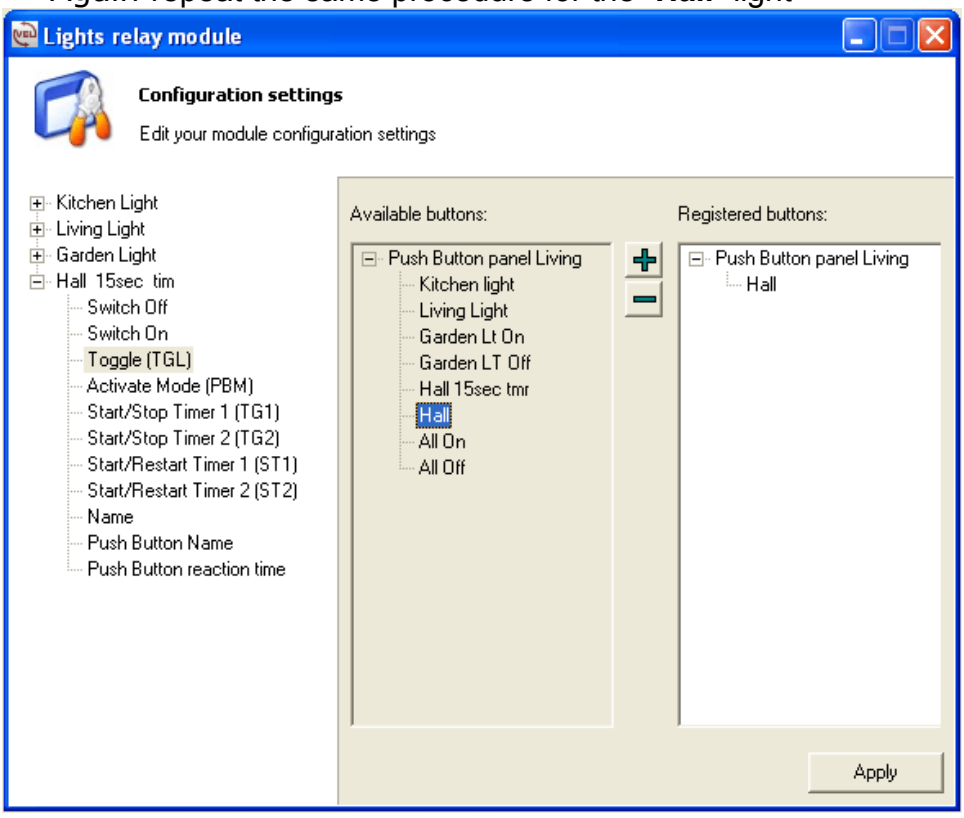
PRESS APPLY, OR NO CHANGES WILL BE MADE!

- Close the Kitchen light tab by pressing the “**-**“ sign

- Repeat the exact same procedure for the “**Living Light**”
- Do not forget to “Apply”

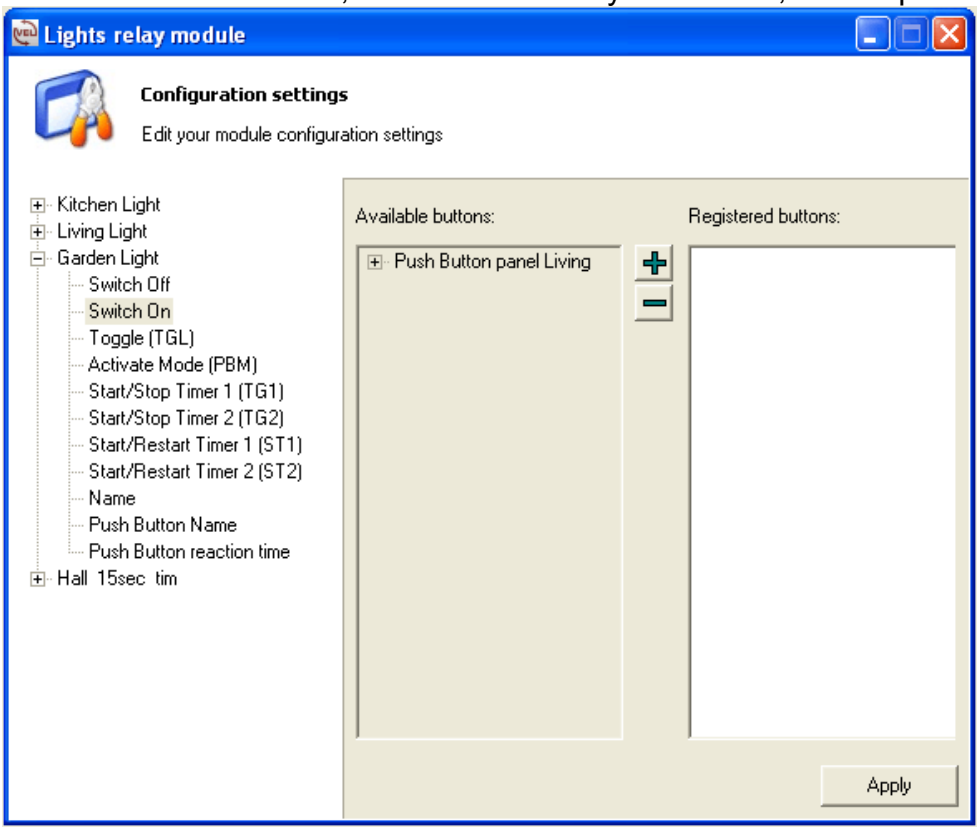


- Again repeat the same procedure for the ”**Hall**” light

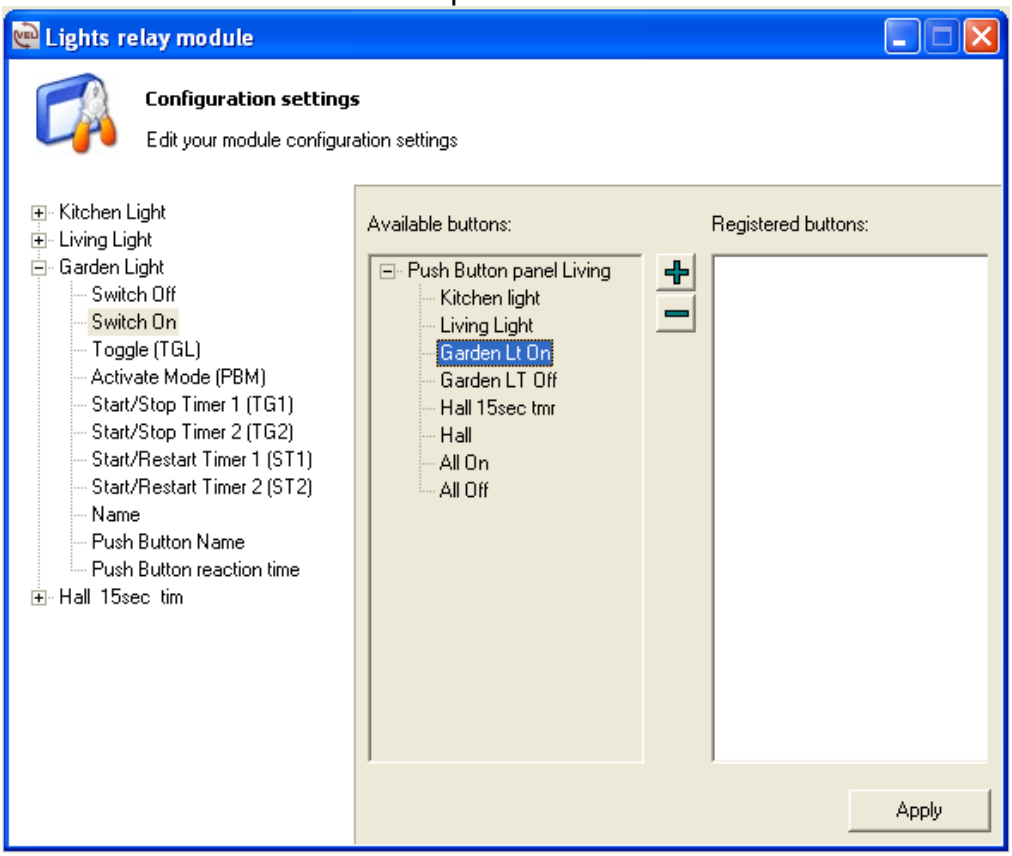


Next we will register the garden lights

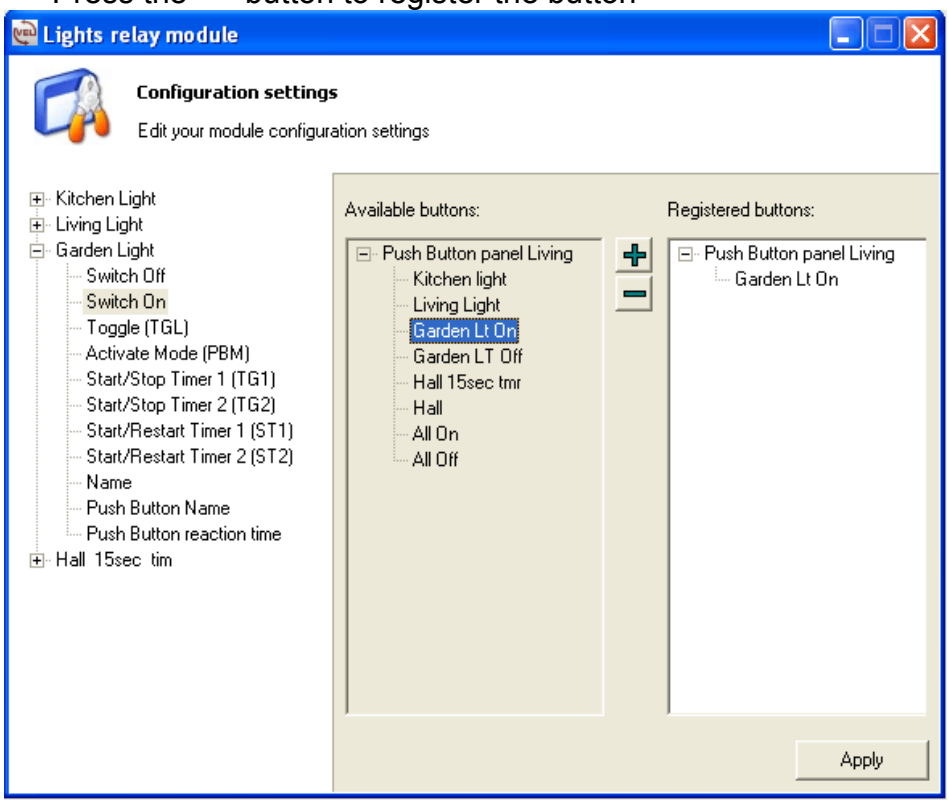
- Expand the **“Garden Light”** tab, here you see the available command options
- Select **“Switch ON”**, this action will only switch ON, even if pressed twice or more



- Select the **“Garden Lt ON”** push button

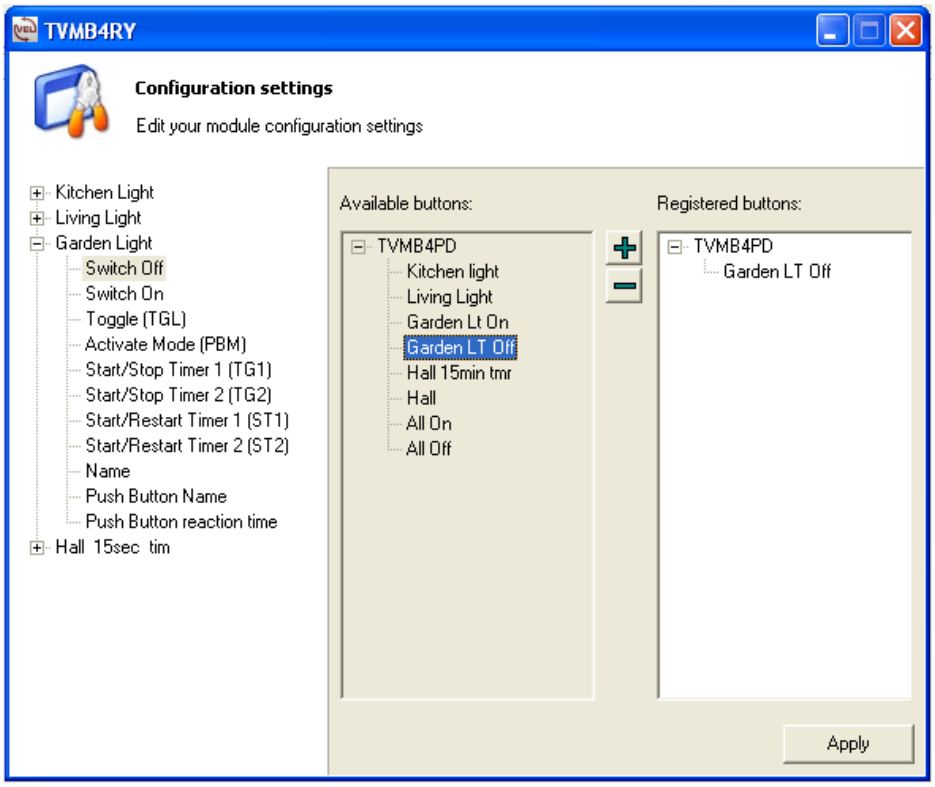


- Press the “**+**” button to register the button



PRESS APPLY, OR NO CHANGES WILL BE MADE!

Repeat the exact same procedure for the Garden Light, but select “**Switch Off**” and register the button “**Garden LT Off**” by pressing the “**+**” button

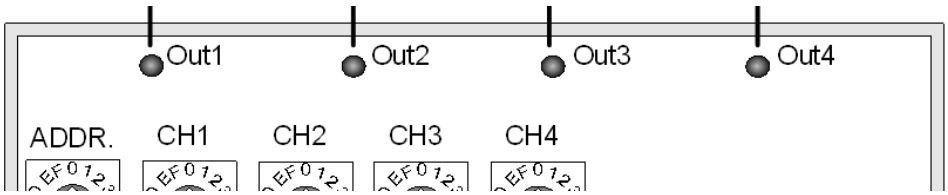


PRESS APPLY, OR NO CHANGES WILL BE MADE!

Press the Close Window button “X”

Congratulations
You have configured 5 buttons of the LCD button panel. Four on the main page, one “Hall” on the second page (press the small button).
It should be possible to test these buttons on the (LCD) button panel.
(Or five buttons of your choice if you used a VMB8PB interface module)

The corresponding output relay and LED should be activated.

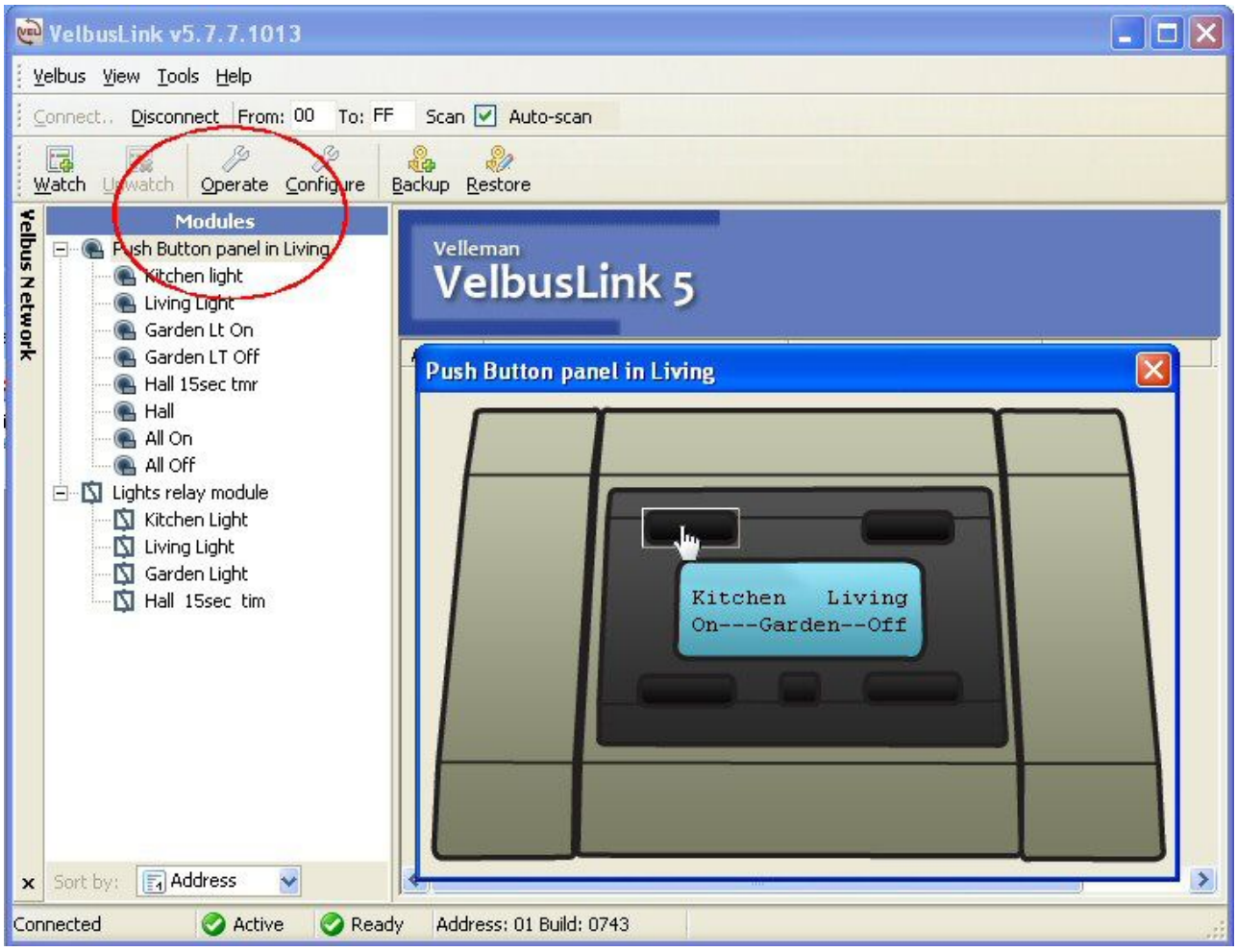


Manual “computer” operation

It is possible to operate the buttons, using the PC.

- Select the “Push Button panel in Living”
- Press the “Operate” button

Now you see a screen that simulates a push button panel, simply press the buttons:



ADVANCED SET-UP

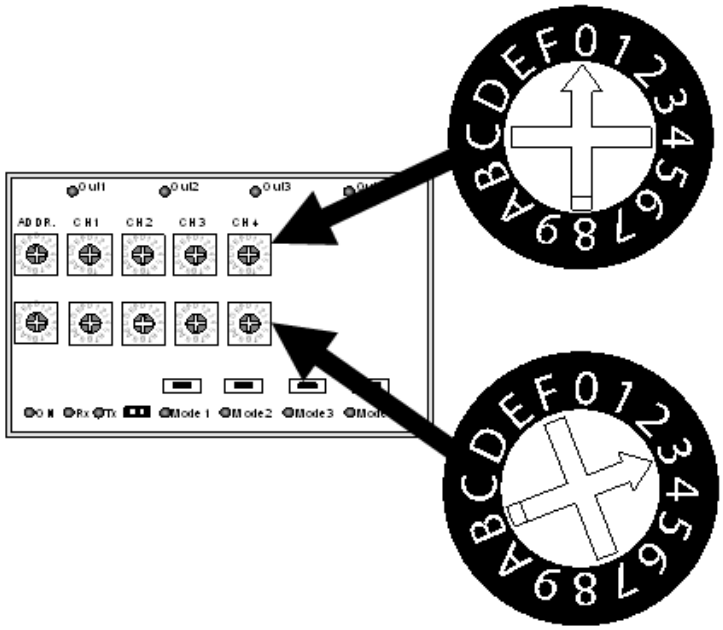
In the above example we learned standard On/Off and toggle functions.
Result in a simple one button one action result.
Here we will explain some more advanced functions.

Assigning a timer relay output to a button

Here we will learn to assign a timer function to the Hall light.
After the button is pressed, the light will remain on for 15 seconds, at each press the 15sec. timer will restart.

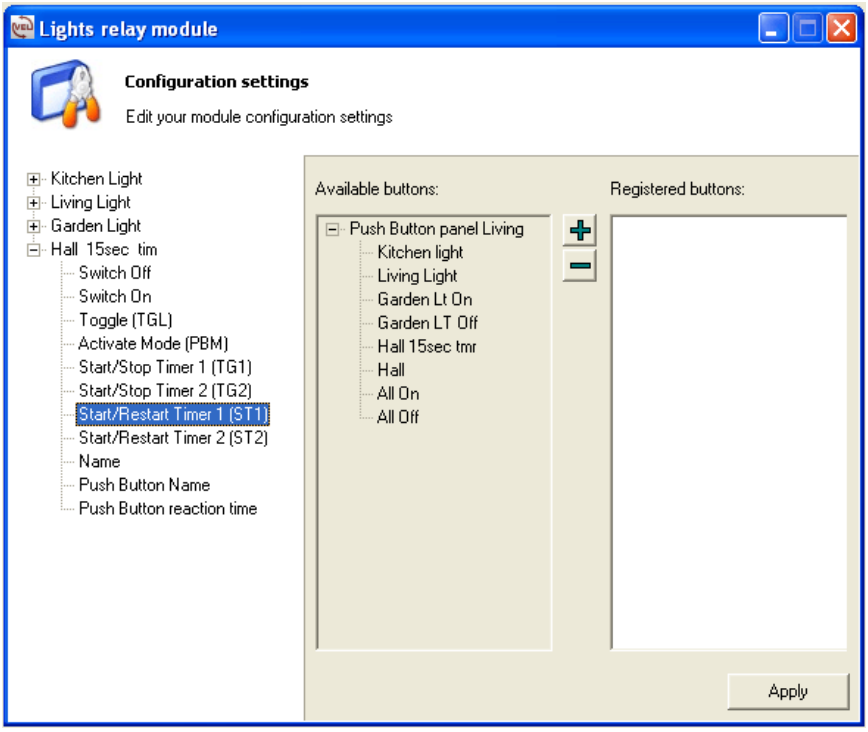
First we must set a timer function to the relay output.
Output 4 is used for the “Hall” and we want a 15 sec timer

The mode switch remains at “0”, the time switch is set to “3”
Time switch setting 3 corresponds to 15 seconds.

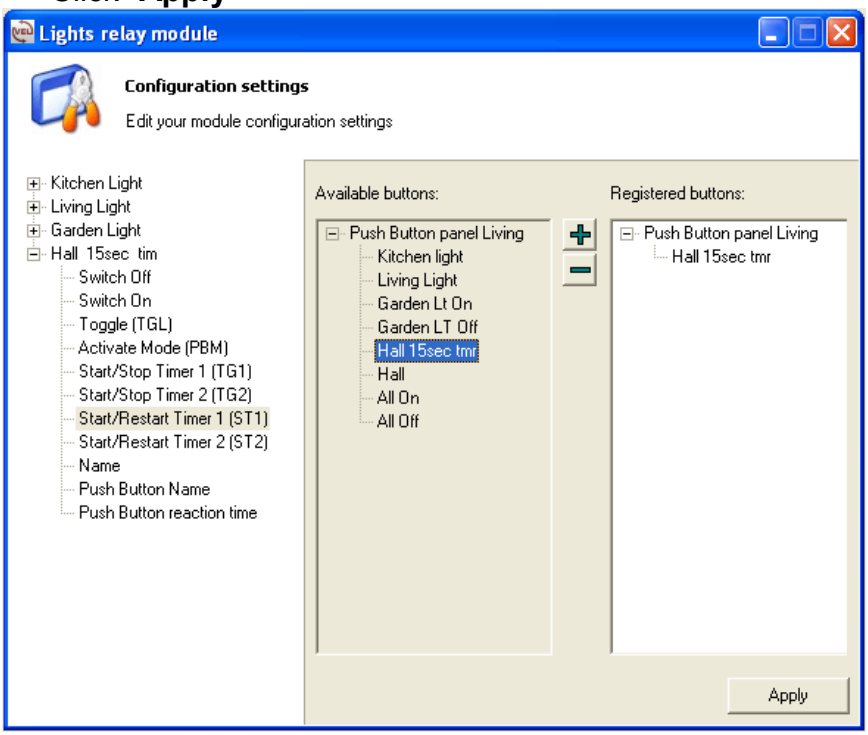


- Select the “**Lights relay module**” and click “**configure**”
- Expand the “**Hall 15sec tim**” tab
- Select **“Start/Restart Timer (ST1)”** mode. This mode will restart the timer at each button press.

HINT: you could also select **“Start/Stop Timer (TG1)”** then you can start or stop the timer at each button press.



- Select the button “**Hall 15sec tmr**” and register it by pressing “**+**”.
- Click “**Apply**”



Now the “Timer” button on the second page of the LCD button panel will start and restart the timer of output 4

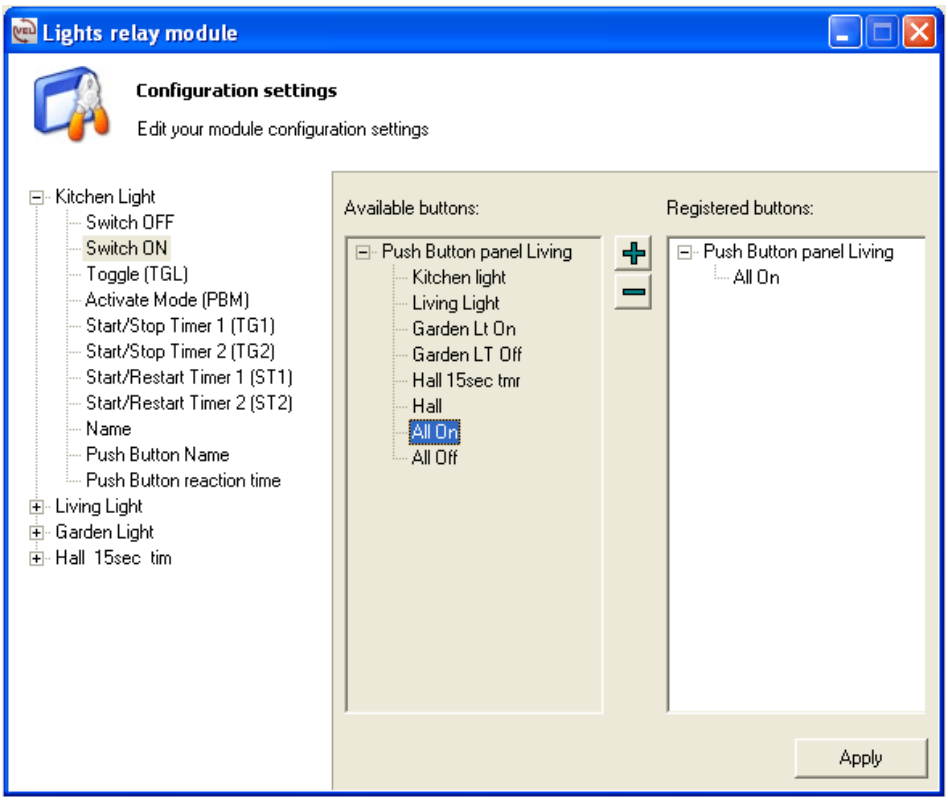
Assigning multiple functions to one button

In this example we learn the possibility to switch ALL outputs ON using one button and also to switch all outputs OFF using one button.

In the next examples we will only show one screen for each button registration.

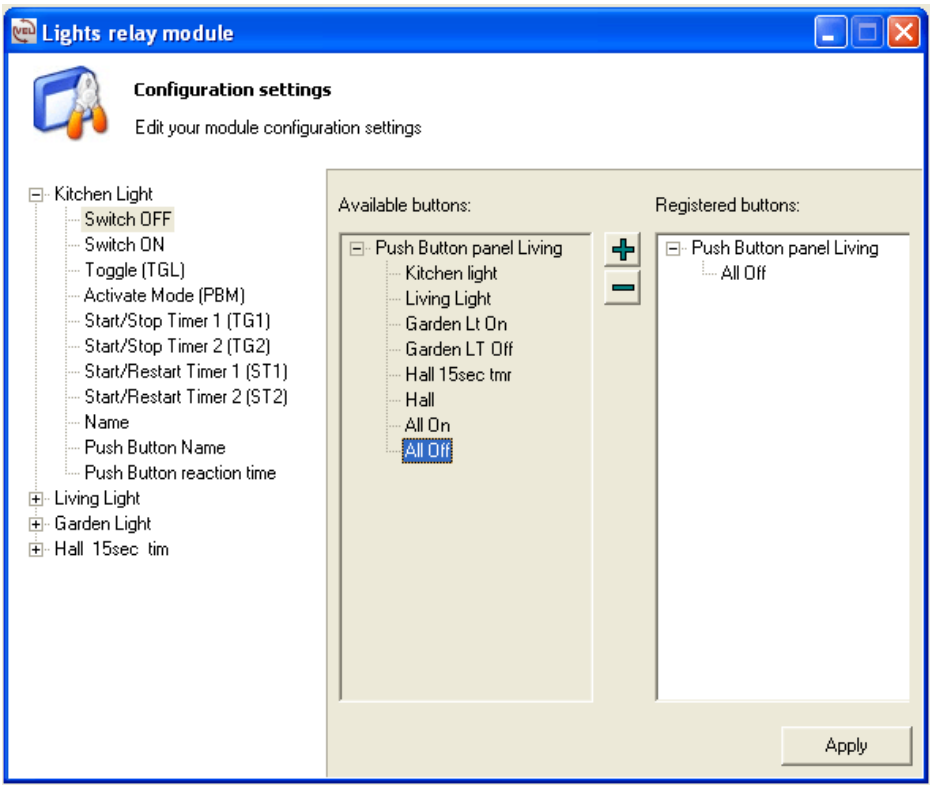
First we will assign the "**All On**" button to the kitchen light

- Select the "**Lights relay module**" and click "**configure**"
- Expand the "**Kitchen Light**" tab
- Click "**Switch ON**" tab
- Expand the "**Push Button panel Living**" tab
- Select the "**All On**" button
- Click "**+**" to register
- Press "**Apply**"

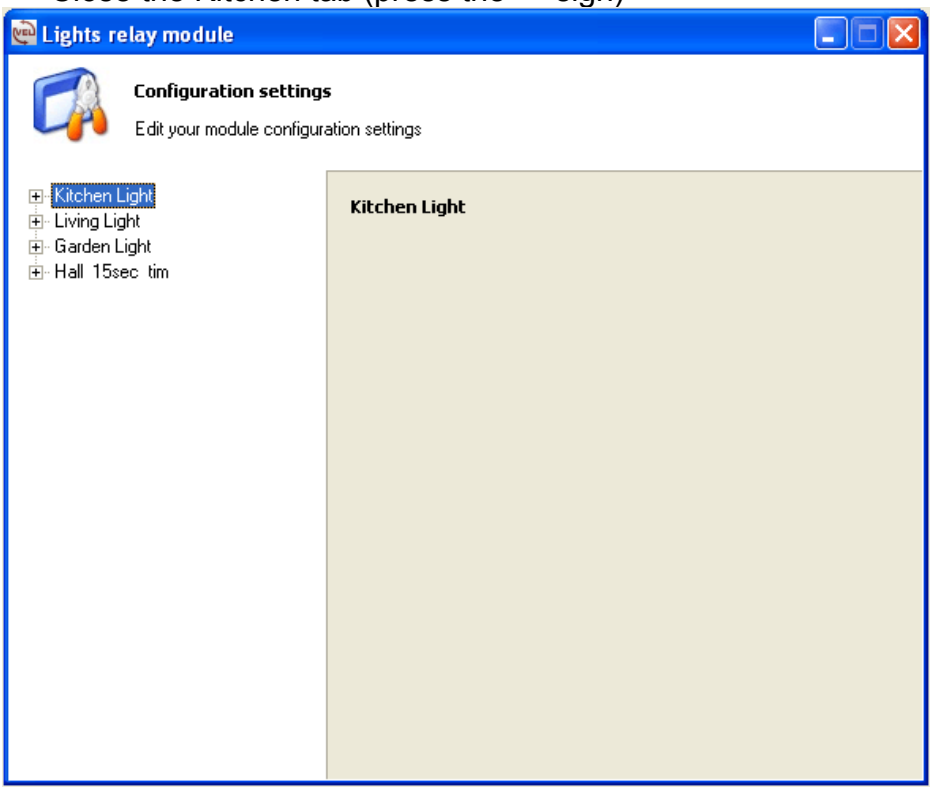


Now we will assign the “**All Off**” button to the kitchen light

- Click “**Switch OFF**” tab
- Select the “**All Off**” button
- Click “**+**” to register
- Press “**Apply**”

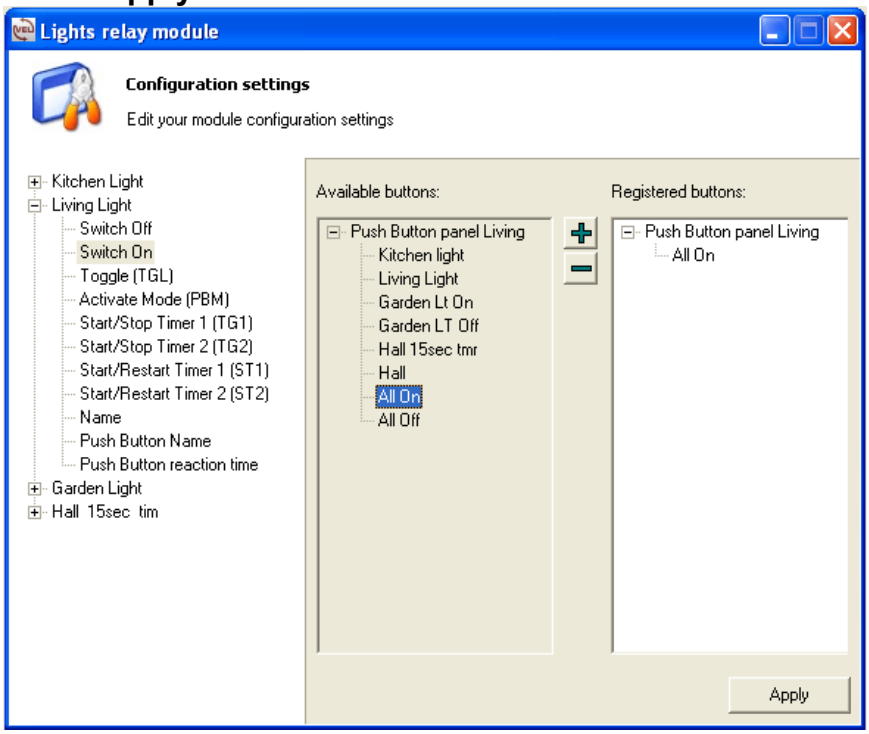


- Close the Kitchen tab (press the “**-**“ sign)



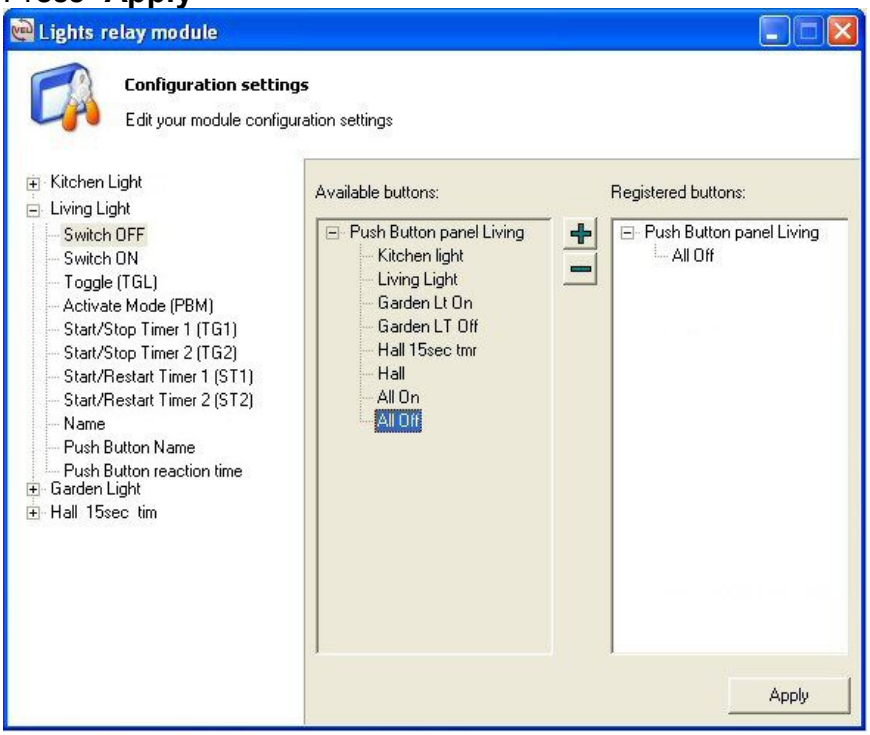
Now we continue for the “Living light”

- Expand the “**Living Light**” tab
- Click “**Switch ON**” tab
- Expand the “**Push Button panel Living**” tab (if not already)
- Select the “**All On**” button
- Click “**+**” to register
- Press “**Apply**



Now we will assign the “**All Off**” button to the Living light

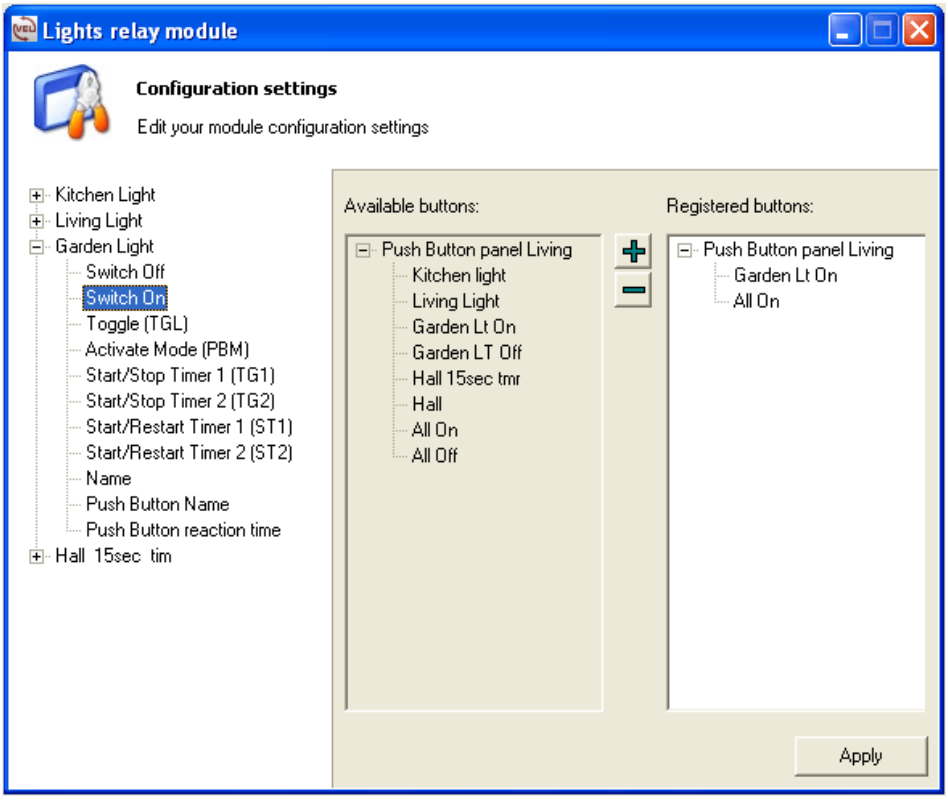
- Click “**Switch OFF**” tab
- Select the “**All Off**” button
- Click “**+**” to register
- Press “**Apply**



- Close the “**Living Light**” tab (press the “**-**“ sign)

Now we continue for the “Garden light”

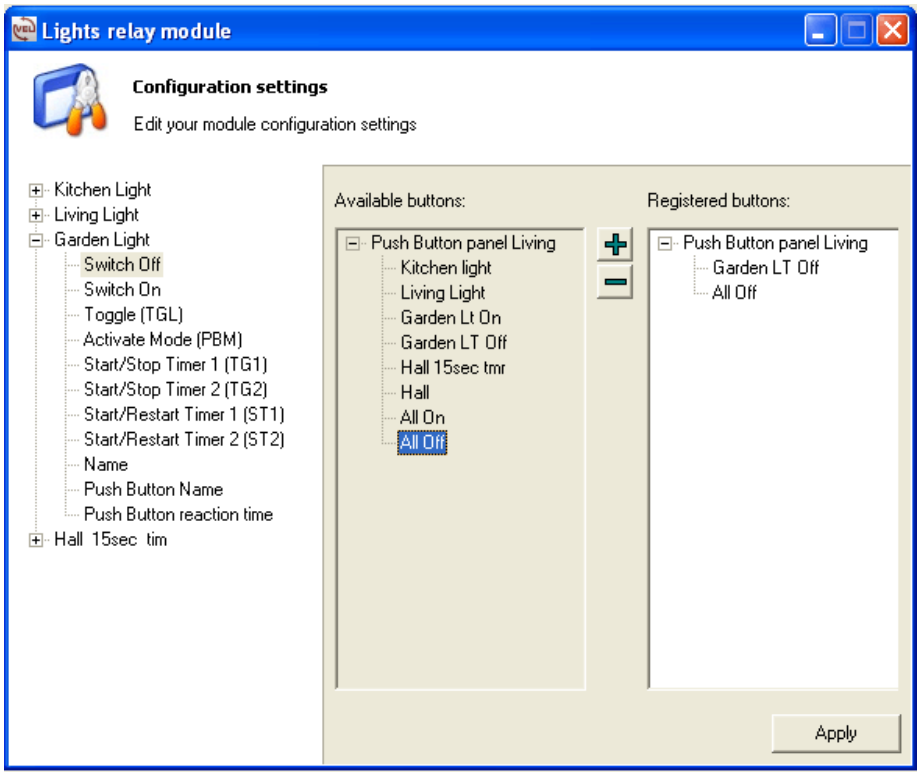
- Expand the “**Garden Light**” tab
- Click “**Switch ON**” tab
- Expand the “**Push Button panel Living**” tab (if not expanded already)
- Select the “**All On**” button
- Click “**+**” to register
- Press “**Apply**



NOTE: Here you see that previously we assigned a **switch ON** function to the same output, using the **Garden Lt ON** button.

Now we will assign the “**All Off**” button to the Garden light

- Click “**Switch OFF**” tab
- Select the “**All Off**” button
- Click “**+**” to register
- Press “**Apply**

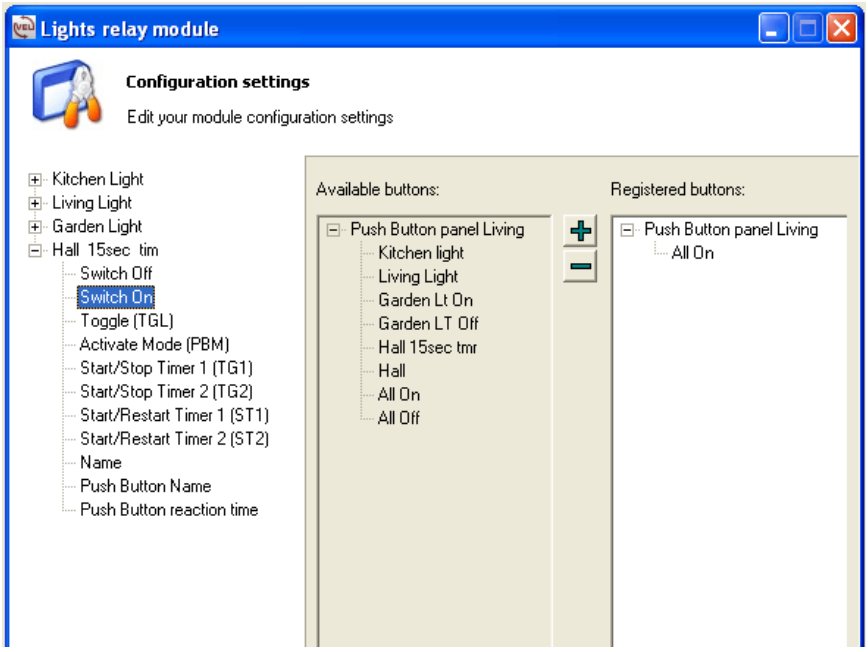


NOTE: Here you see that previously we assigned a **switch OFF** function to the same output, using the **Garden LT Off** button.

- Close the “**Garden Light**” tab (press the “**-**“ sign)

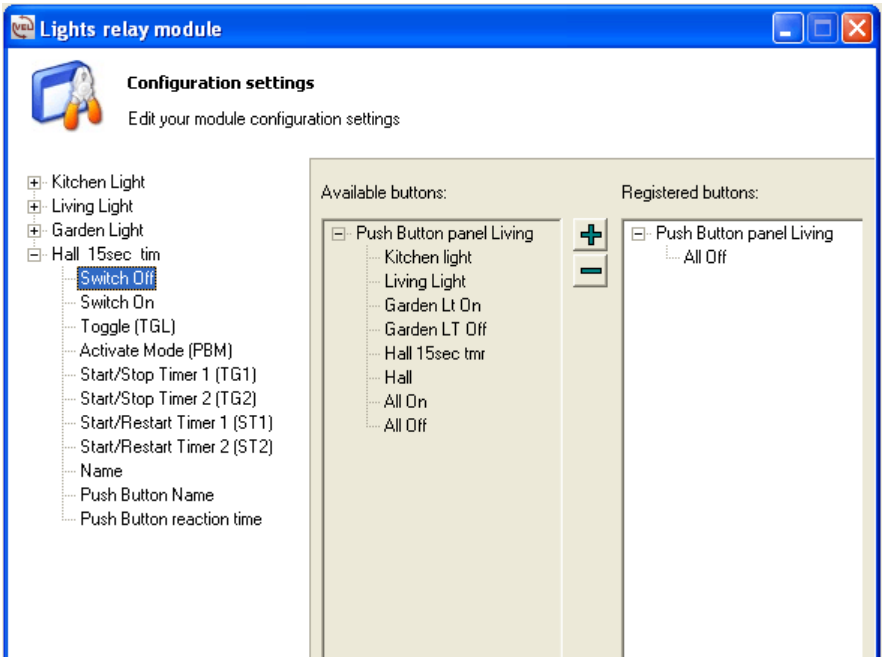
Now we continue for the “Hall light”

- Expand the “**Hall 15sec tim**” tab
- Click “**Switch On**” tab
- Expand the “**Push Button panel Living**” tab (if not expanded already)
- Select the “**All On**” button
- Click “**+**” to register
- Press “**Apply**



Now we will assign the “**All Off**” button to the Hall light

- Click “**Switch OFF**” tab
- Select the “**All Off**” button
- Click “**+**” to register
- Press “**Apply**

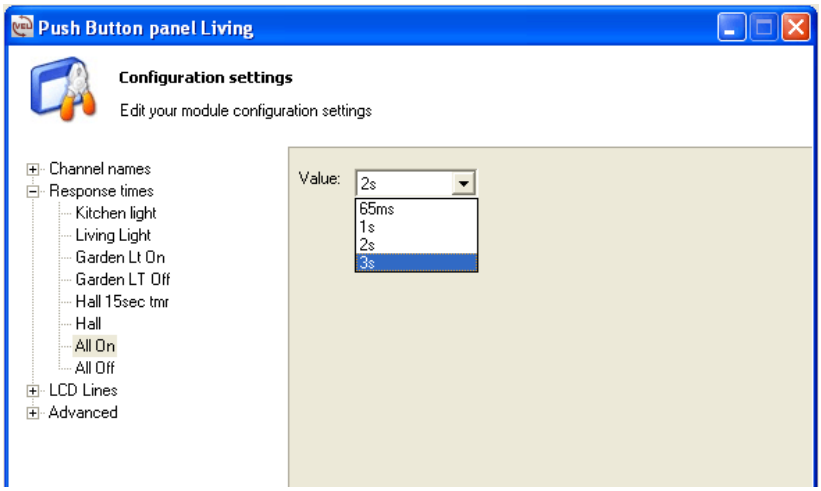


Press the Close Window button “X”

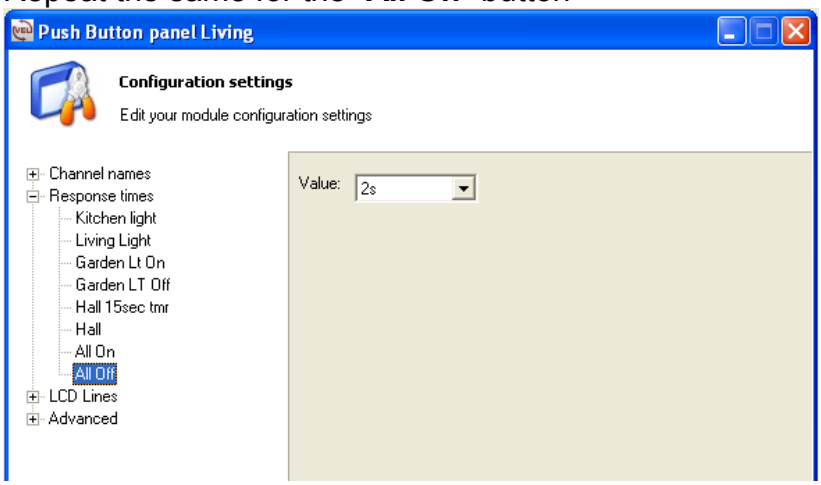
FINE TUNING THE LCD PUSH-BUTTON PANEL

Now we have created an ALL-OFF and ALL-ON function on the push button panel.
To prevent accidental operation of these buttons, we will assign a reaction time to these buttons.

- Select the “Push Button panel Living”
- Press “Configure”
- Expand the “Response times” tab
- Select the “**All On**” button
- Select in the drop down menu, 2 or 3 seconds for the response time
- Press Apply



Repeat the same for the “**All Off**” button



Now you can test all the buttons on the LCD button panel.
Note that for the timer function of the Hall, the indication LED on the panel will blink

Setting the LCD panel week-timer functions

In this example we will create week-timer functions on the VMB4PD LCD panel.

Think of this function like an “automated” push button press.

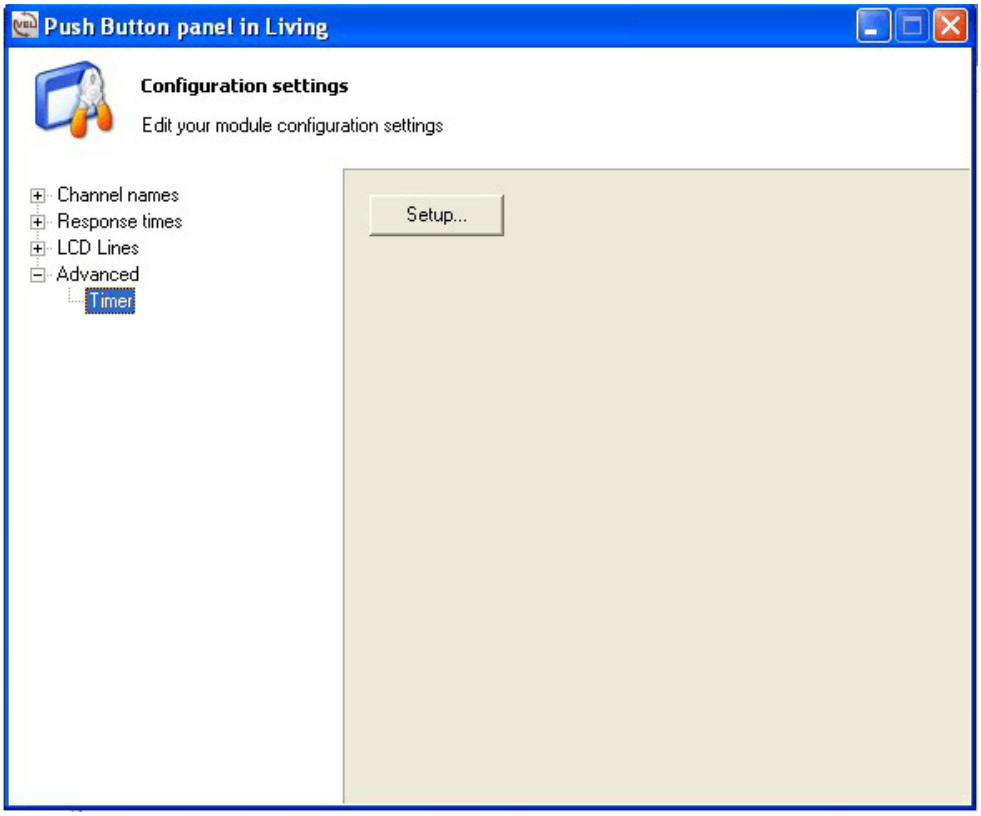
It is not advised to use a timer on a “toggle” button, since the previous state of the toggle function is unknown to the timer.

Therefore, if you plan to have timer functions for some outputs, use separate ON and OFF buttons.

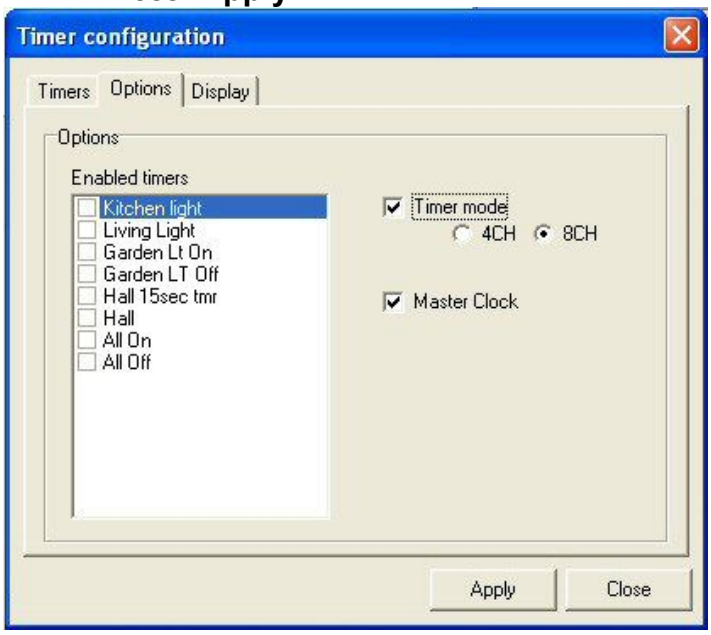
<u>In this example we will:</u>

- Turn on the garden light every day at 8 PM (20.00)
- Turn off the garden light every day at 11.30 PM (23h30)
- Turn off ALL the lights at 1.00 AM (01h00) during the working days.

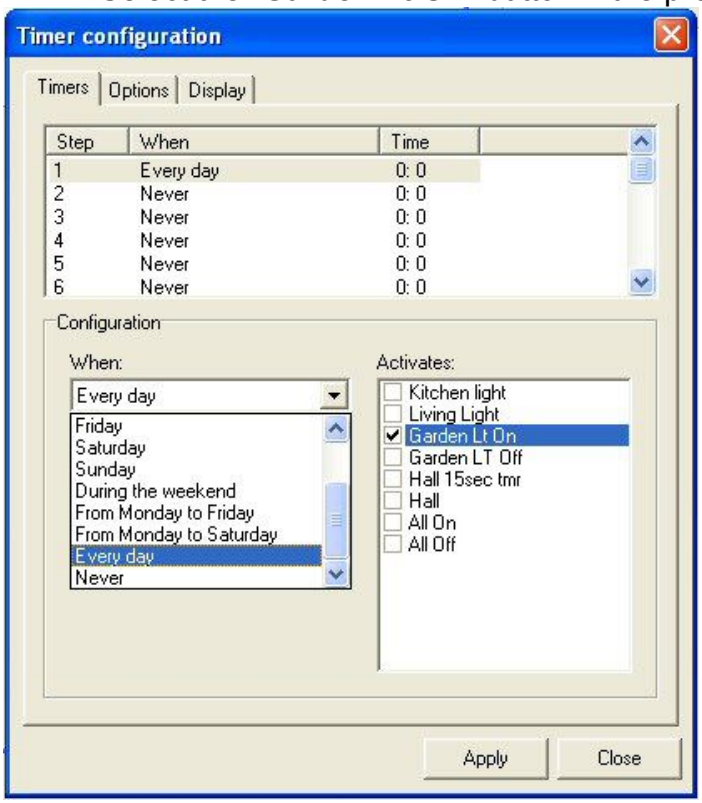
- Select the “**Push Button panel Living**” panel
- Press “**Configure**”
- Expand the “**Advanced**” tab
- Select “**Timer**”
- Now you get the timer setup panel



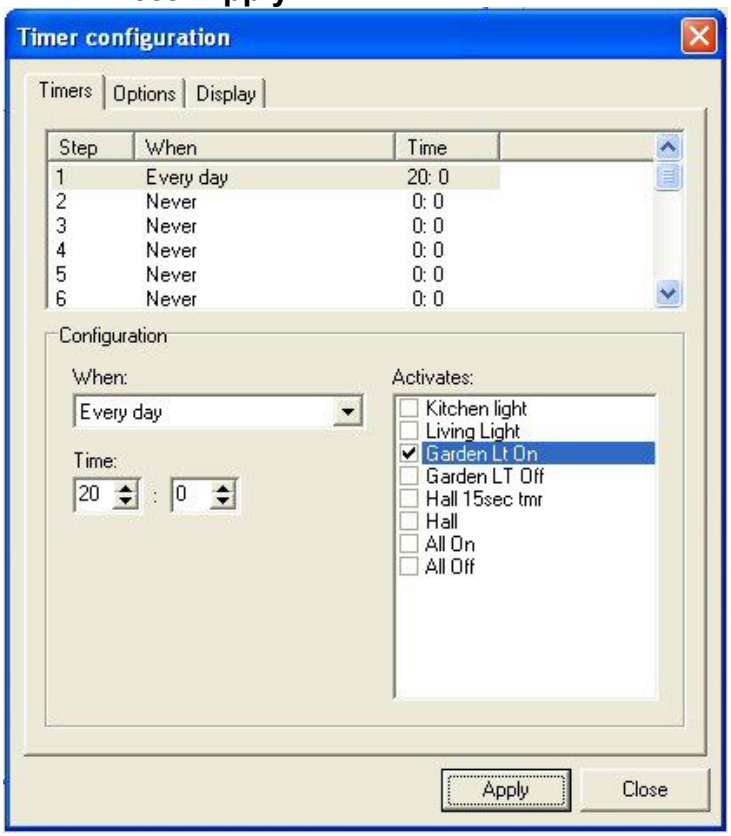
- Press “**Setup**” to open the timer configuration window
- Select “**Options**” window
- Activate the “**Timer mode**”
- Activate the “**8CH**” timer mode, then all buttons from page 1 and page 2 can have a timer. In 4CH timer mode only the buttons on page 2 can have a timer.
- Optional: Activate the “**Master clock**” (this panel will serve as master clock for all panels in your system)
- Press “**Apply**”



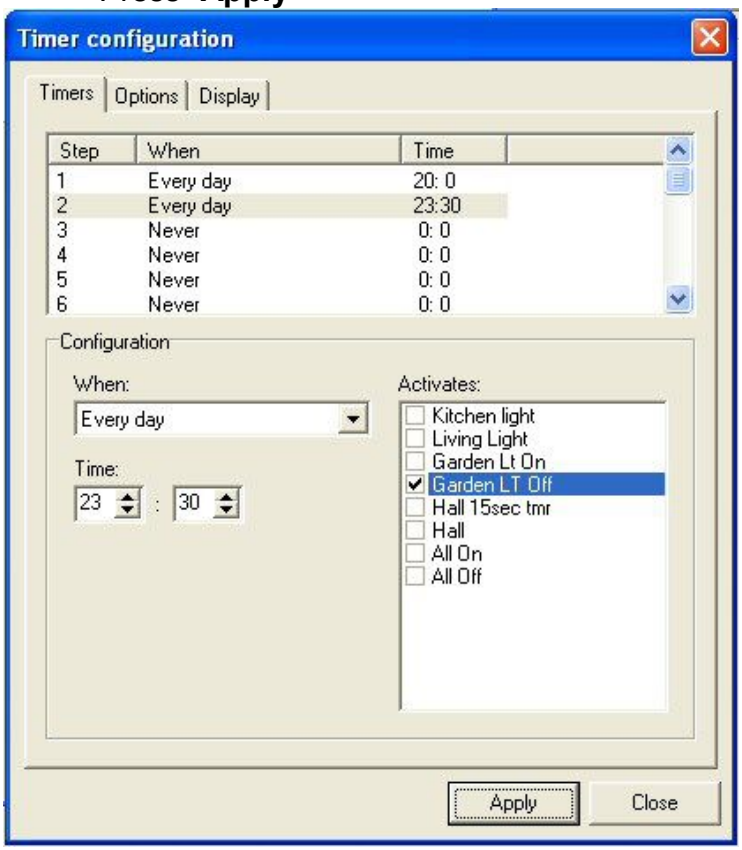
- Open the “**Timers**” window
- Select step 1 (20 steps are available)
- Select “**Every day**” in the drop down window > step will be performed every day.
- Select the “**Garden Lt On**” button > the program step will active this button.



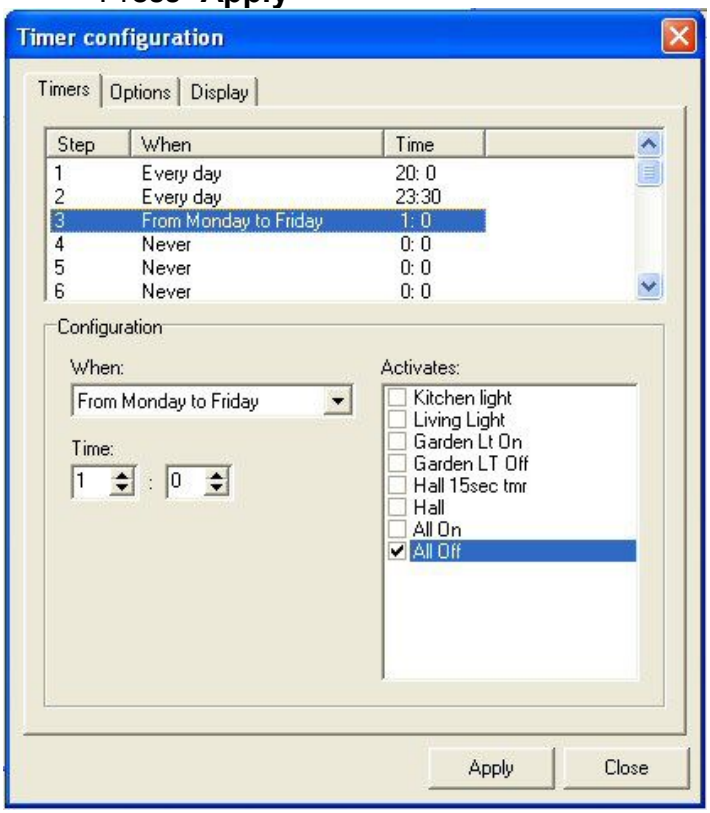
- Set the time for this step at 20:00 (8:0 PM)
- Press “**Apply**”



- Repeat above actions for step 2, except:
- Select “**Garden LT Off**” button
- Set time at 23:30 (11:30 PM)
- Press “**Apply**”

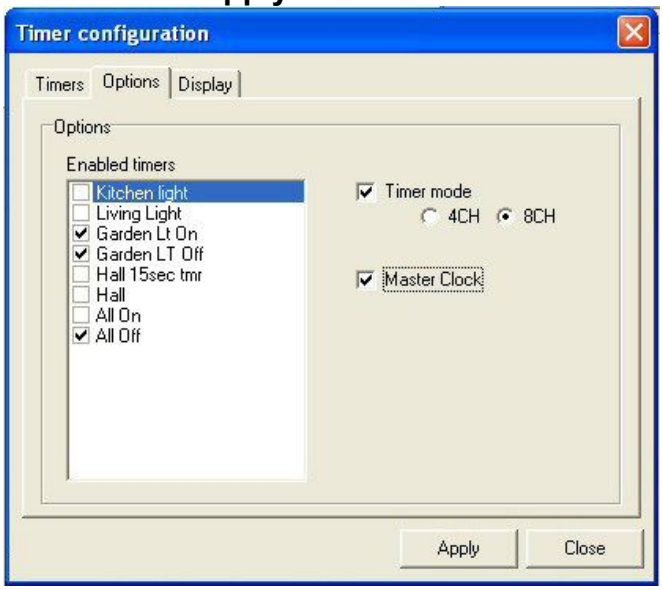


- Repeat above actions for step 3, except:
- Select “**All Off**” button
- Select “**From Monday to Friday**” (“All off” will not be activated during the week end)
- Set time at 1:0 (1:0 AM)
- Press “**Apply**”



So far we only created the program steps, but they will not be executed.
In order to activate the program steps:

- Open the “**Options**” window
- Set the buttons that must follow the program
- Press “**Apply**”



This option makes it simple to activate or deactivate programs

Setting the LCD panel backlight options

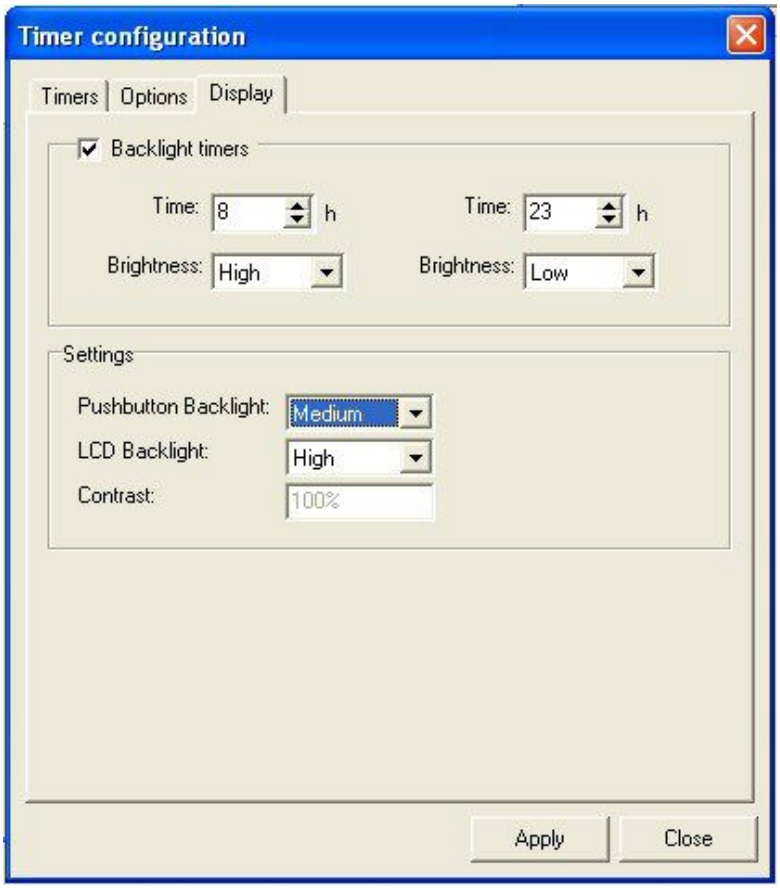
In the “**Display”** window it is possible to set the backlight timer.
Sometimes it can be advised to dim the LCD backlight during the night (example if the panel is mounted in the bedroom)

In this example we set the backlight in “low” (dim) condition at 23h00 (11:00PM) and back in “High” (Bright) condition at 8:00h in the morning.

Do not forget to press “**Apply**”

Note that these settings will only execute when the set time is crossed.

In the “**Settings**” panel it is possible to manually set the push button backlight and the LCD panel backlight.



- Now you can close the Timer configuration window.

- You could now backup your system (see beginning of tutorial)
- Exit the software by pressing “Disconnect” and then by closing the window.

Notes:

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