Dynadimmer User Manual

- Software Installation

- Preparing Dim Schedule

- Dynadimmer Programmer

1   Software Installation

1.1   Installation by a downloaded executeable

The software can be downloaded from www.philips.com/dynadimmer

Use the following procedure to install the Dynadimmer software on a computer:
- ▶ Click on line "Dynadimmer Programming Software"on webpage
- ▶ Click on <Open>
- ▶ Double click on *DynadimmerSetup.msi*
- ▶ Click on <Run>

1.2   Procedure if .NET Framework 2.0 has not yet been installed

The application uses .NET Framework 2.0. This Microsoft® software package also needs to be installed. If this software has already been installed on your computer, go to next section.

The Dynadimmer software setup program will automatically install .NET Framework 2.0 on the computer. This may take a few minutes depending on the computer capabilities. When the installation has finished, the installation of the Dynadimmer software will continue automatically.

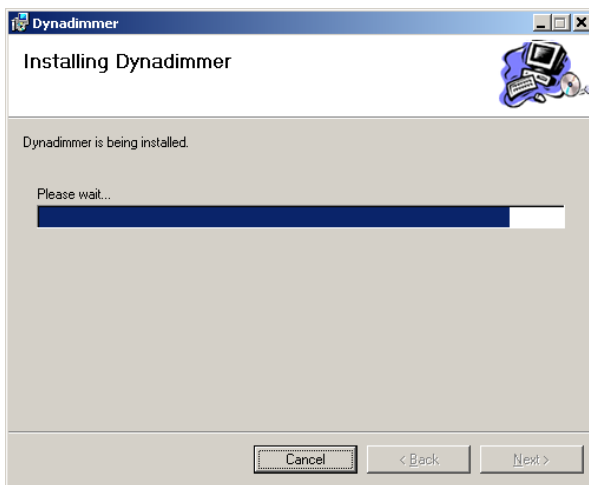## 1.3   Installation of the Dynadimmer software

Once the installation of .NET Framework has been completed or if it was stopped because it was already installed on the PC, the installation screen of the Dynadimmer Programmer application appears.
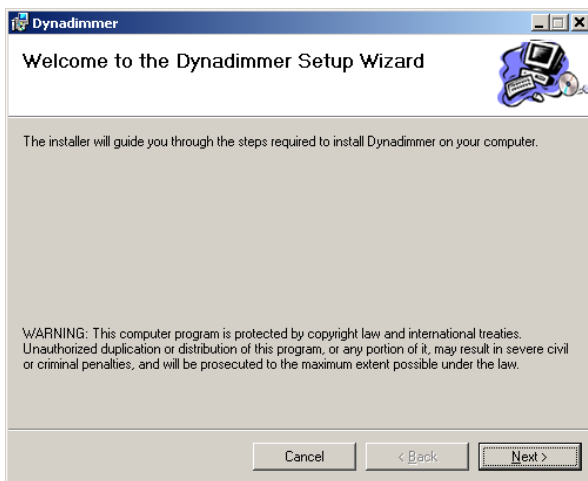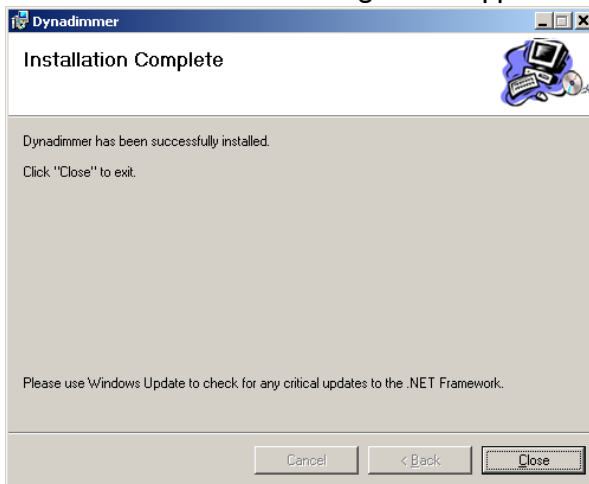

Click <Next>.
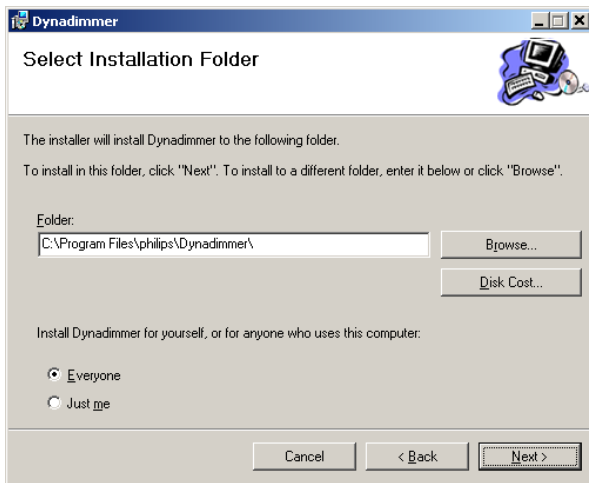
Now select <Next>. Then select <Next> again.

After this screen the following screen appears.

Now select <Close>. The installation has now been successfully completed.
A shortcut called "Philips Dynadimmer" has been created on the desktop.

1.4 Installation of the USB Programmer cable driver

The USB Programmer cable driver can be downloaded from www.philips.com/Dynadimmer or www.ftdichip.com/Drivers/VCP.htm

Follow this procedure when using the driver downloaded from Philips website:
- Download CDM 2.04.16.exe and save the file locally
- Double click CDM 2.04.16.exe to start installation procedure
- A Dos Box will show the installation progress
- Connect USB Programmer cable when driver installation process is finished
- Open the Device Manager (Open the Device Manager (located in "Control Panel\System") then select the "Hardware" tab and click "Device Manger") and select "View > Devices by Connection", the device appears as a "USB Serial Converter" with an additional COM port with the label "USB Serial Port":
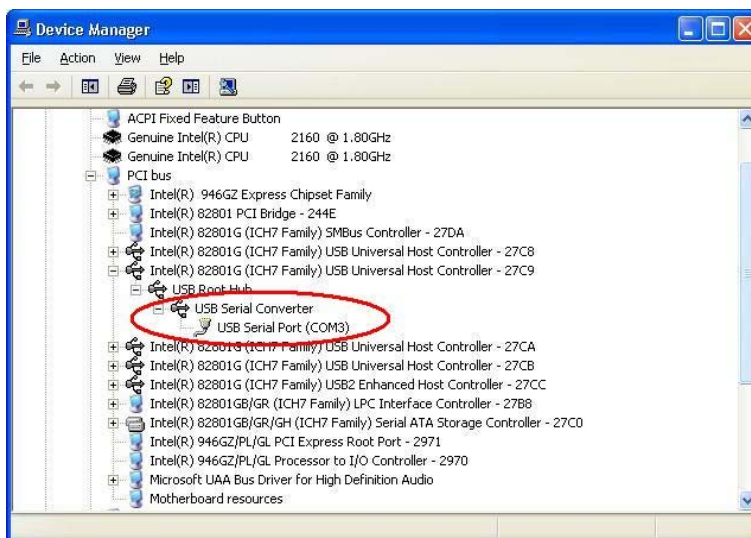
2 The Dynadimmer software application

2.1 General

The Dynadimmer software is used in combination with the Programmer or a special USB programmer cable. The USB programmer cable is used to program a new, or read an existing, dimming schedule directly from a Dynadimmer.
Three different dimming shapes can be stored simultaneously in the Programmer to program the Dynadimmer without the need of a PC. The existing dimming schedules can be downloaded from the Programmer back to the PC as well.

2.2 Starting application

The application can be started by double-clicking the Philips Dynadimmer desktop icon.

The application starts up and the following screen appears. First select the COM port where the Programmer or USB programmer cable is connected. Check the "USB" checkbox if the special USB programmer cable is used, this checkbox must be unchecked if the Programmer is used.
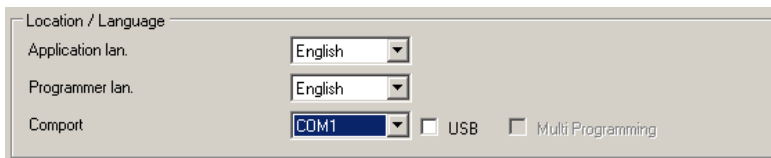
Select the right COM port.

If the tooling is not connected, "Wait for Programmer" is shown at the top of the screen. The status changes automatically to "connected" when the tooling is connected.
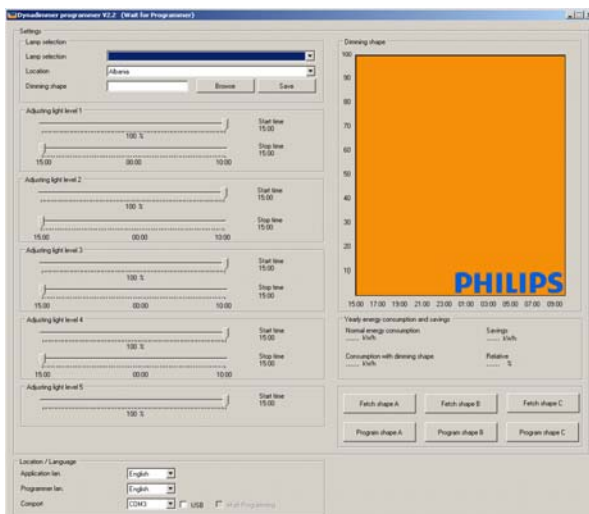

"Wait for Programmer" in case the Programmer is not connected else it states "Connected".

2.3 Language Settings

The Dynadimmer programming software is currently equipped with seven languages, English, Dutch, Spanish, Portuguese, Italian, German and French.
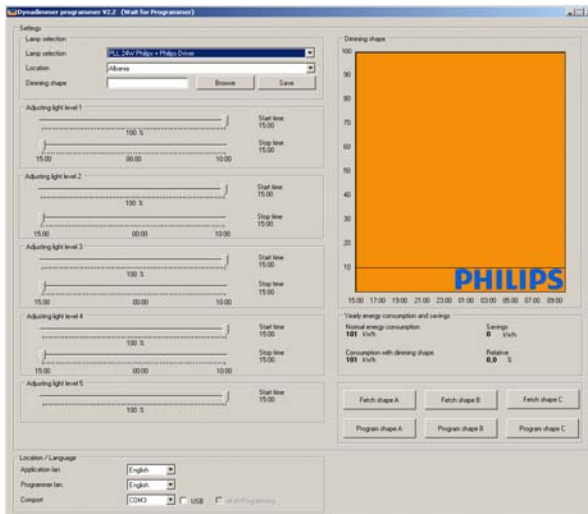
2.3.1 Setting the application language

The Dynadimmer software will always come up with the language in which the software was running when it was closed the last time. To change the Dynadimmer application language; select the language of choice at the bottom of the screen.
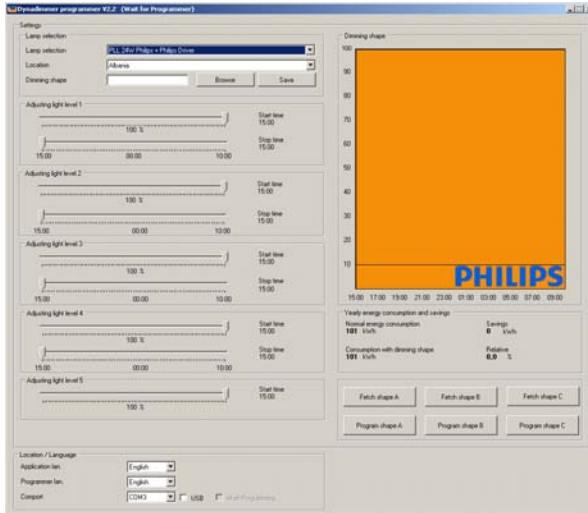
Select in the drop-down menu the application language

2.3.2 Setting the Programmer language

To change the Programmer language, select the language of choice. A precondition is that the Programmer is connected to the computer and recognized by the application. The Programmer needs to be rebooted (switch OFF and ON) to enable the new selected language.


Select in the drop-down menu the Programmer language.
The programmer has to be connected to the application.

2.4 Dimshape Settings

2.4.1   Setting the Location

The Dynadimmer is using the midpoint of the night to calibrate the time. It is important that the right time value is allocated to the midnight point. This can be done by selecting the correct country from the country selector. Please select the right country where the lighting will be installed.
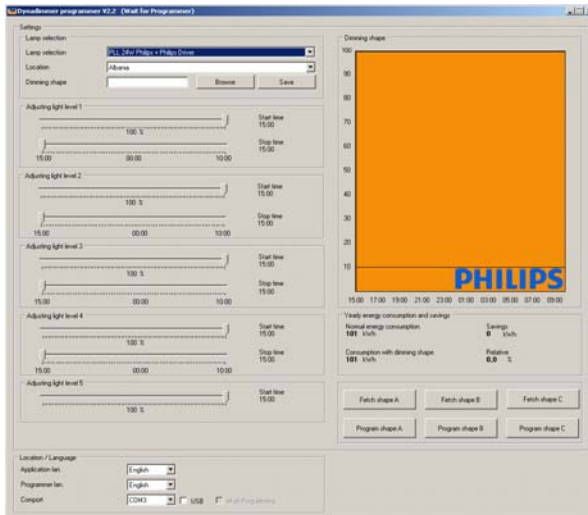
Select the correct location

2.4.2   Setting the Lamp-Driver combination

To enable the Dynadimmer to be programmed a lamp-driver combination must be selected. A pull-down menu is available showing the most common combinations. Select one of the values in this menu. This value is required and must be filled in before the settings can be programmed or saved.
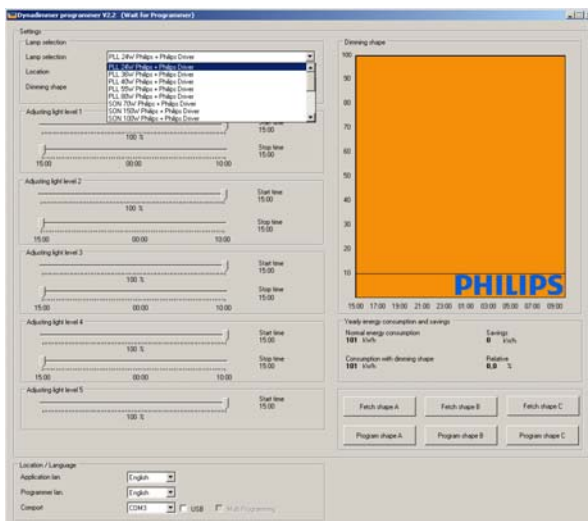
Select the right lamp-driver combination

There are only Philips released and validated lamp-driver combinations within this list. If any other lamp-driver combination is to be used then this combination first has to be tested, validated and inserted into the software. Please contact your Philips account manager to have that done.

2.4.3 Setting switch points

Five time zones can be scheduled which means four switch points need to be defined. The switch points can be set by using the slide bars. The range of the slide bars is from 15.00 (3.00 PM) to 10:00 AM. When the slide bars are moved, they automatically appear in the graph. The switch points cannot overlap. This is monitored by the application.


The time switch points can be set in steps of 15 minutes. The start time of the dim level is automatically set to the stop time of the previous schedule. The other switch points can be set in the same way by using the slide bars for the other levels.

2.4.4 Setting dim levels

Five dim levels can be specified. The first dim level can be set using the top settings slide bar for light level 1. The range of the slide bar depends on the selected lamp-driver combination.

The set level can be seen to the right of the slide bar. The graph is also changed automatically.
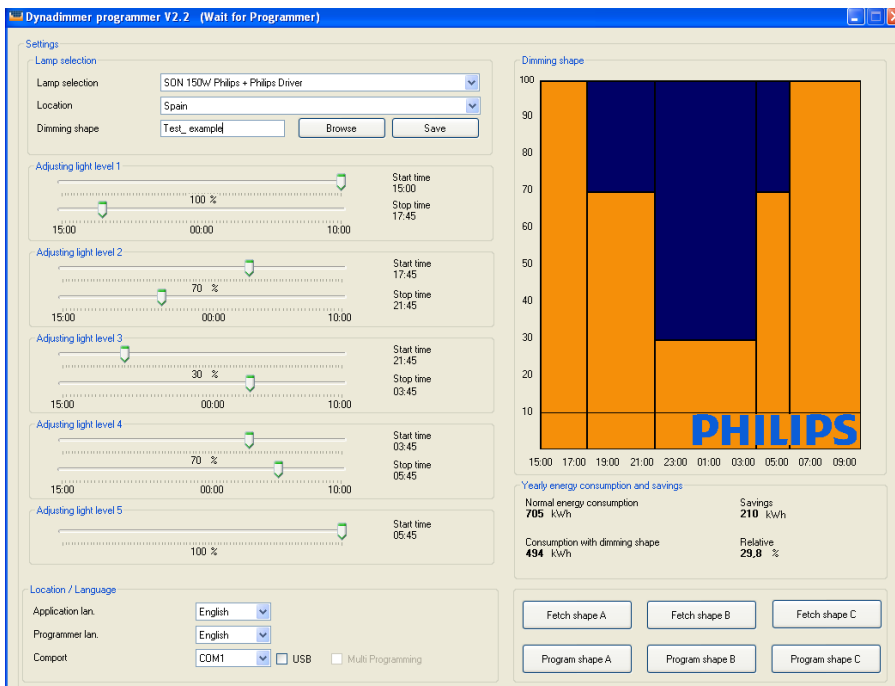
The other dim levels can be set in the same way using the slide bars for the other levels.
The horizontal line in the graph indicates the minimum light level for the type of lamp selected.

2.5 Creating and saving dimming shapes

To be able to program the dimming schedule, it first has to be saved on the PC. The dimming schedule needs to be saved under a name. The name must be specified in the shape input field with a maximum of 16 characters and may not contain any special characters. All characters other than letters and numbers will be converted to '-' characters. If a file already exists with the same name, it will be overwritten without a warning.

2.6 Retrieving dimming shapes

2.6.1 Dimming shapes stored on the PC
A previously saved dimming schedule can be retrieved through the <Browse> button.
Select the required file and select open. Please note that only one shape at a time can be retrieved and changed. The dimming schedule that is open at the time of retrieving an existing schedule will be lost if not saved properly.
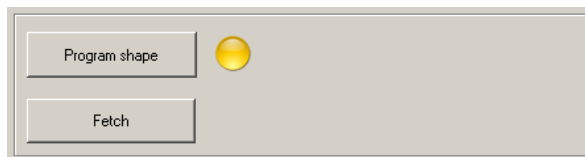
2.6.2 Dimming shapes stored on the Programmer
This function works only if the Programmer is connected and *connected* is stated in the title bar.
By selecting Fetch shape A, Fetch shape B or Fetch shape C the existing schedules in the programmer can be shown on the screen. Please note that only one shape at a time can be retrieved and changed. The dimming schedule that is open at the time of retrieving an existing one will be lost if not saved properly.

2.6.3 Dimming shapes stored on the Dynadimmer
This function works only if the Dynadimmer is connected with the USB programmer cable and the current dimming shape in the Dynadimmer is stated in the title bar.

Pressing the <Fetch> button retrieves the actual dimming schedule from the Dynadimmer. The application is automaticaly updated with the new values.

2.7 Programming dimming shapes

2.7.1 Programming the Programmer

Connect the Programmer to the PC using the serial connection. Switch ON the programmer with the green button. The programmer now indicates that it is connected to the PC. The software will also indicate that it is connected.
When the dimming schedules have been created or adjusted, the dimming schedule can be programmed at three locations in the Programmer by using the three programming buttons - Program shape A, Program shape B or Program shape C. As soon as the Programmer is programmed, the details are also saved in the PC under this name. The file will be overwritten WITHOUT A WARNING if this name already exists.
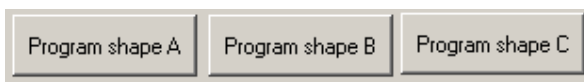
2.7.2 Programming the Dynadimmer with an USB Programming Cable
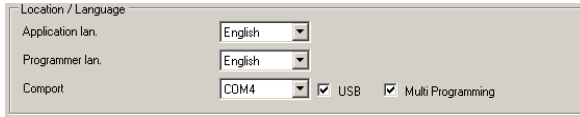
2.7.2.1 Manual Programming
The USB programming cable must be connected to the PC before the Dynadimmer programming software is started. Select the correct COM port from the list and tick the "USB" checkbox. It is important to do this exactly in the order as described. Connect the Dynadimmer to the USB programming cable, the title of the programming software should show the current dimming schedule in the Dynadimmer.

Open an existing dimming schedule, or create and save a new one. The Dynadimmer will be loaded with this new schedule as soon as the <Program shape> button is pressed. The yellow ball next to this button will change to green if the programming process went well.

2.7.2.2 Multi Programming

Multi Programming is used to program multiple units as soon as the USB programming cable is connected to the Dynadimmer. This speeds up the process because no buttons need to be pressed; connecting is enough to program the Dynadimmer.

Follow the same steps described in the previous paragraph. The checkbox "Multi Programming" must be ticked to enable this feature.

Tick the Multi Programming checkbox to enable the Multi Programming mode

2.8 Energy-saving with existing settings

The software calculates an estimated energy consumption of the selected lamp-driver combination and dimming shape. The savings are stated in kWh and as a percentage.

The energy savings are calculated based upon the outdoor lighting switching program as used in the Netherlands and may differ slightly if used in another location.

The calculations are made based on the norm of 4200 burning hours per year.
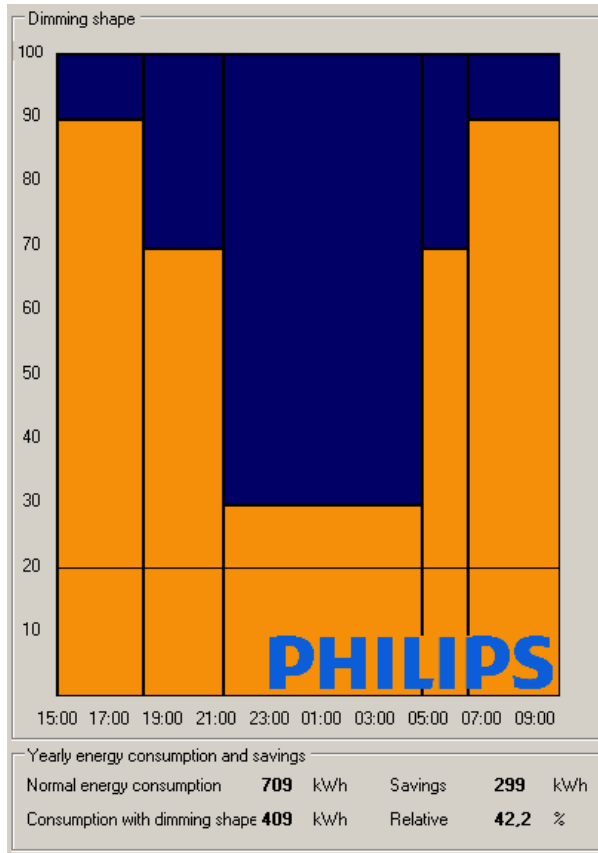
Dimming schedule example

3 The Dynadimmer Programmer

3.1 Dynadimmer Programmer hardware, functions and installation

3.1.1 General
The Dynadimmer Programmer is needed to program the Dynadimmer with the correct dimming shape. A dimming shape is created by the software as described in chapter 2 and has to be downloaded into the Programmer. The Programmer can contain three dimming shapes at the same time. The Programmer allows easy dimming shape selection to program the correct dimming shape into the Dynadimmer.

3.1.2 Connecting the Dynadimmer
It is allowed to connect and disconnect the Dynadimmer from the Programmer even when the Programmer is powered up. Do not connect the Dynadimmer to the Programmer if the Dynadimmer is connected to mains. The programmer will beep indicating that this is the case and shut down accordingly.

3.2 General operation

3.2.1 The Programmer interface
Three buttons and a two-line display make up the interface.

Green button to switch the Programmer ON

Orange button to select the to-be-programmed dimming shape

Black button to actually write the dimming shape into the Dynadimmer

Warning!
It is important to firstly disconnect the Dynadimmer from mains before connecting the Programmer

The green button is to switch the Programmer ON. At power-up the Programmer indicates whether internal power supply is still ok. After this it indicates that it is waiting for a connection.

The orange button is to select the correct dimming shape (from the three dimming shapes installed) to program the Dynadimmer. Hold the orange button for three seconds to select another dimming shape. Select the dimming shape prior to connecting the Dynadimmer.

The selection mechanism only works if the Dynadimmer is not yet connected. The selected dimming shape name will be displayed in the screen.

The Black button is to program the dimming shape into the connected Dynadimmer.
If the programming is successful then an OK message will be displayed in the screen.

3.2.2 Connect the Programmer to the Dynadimmer

The Programmer will indicate the software version and the battery status immediately after start-up. Change the batteries if indicated to do so. The Programmer tries to connect to the Dynadimmer when it is powered-up. The programmer will search for 15 seconds for a Dynadimmer; if it does not find one then it will switch OFF.

The Programmer will indicate on the top row the dimming shape that is (already) programmed inside the Dynadimmer, on the second row the "to-be-programmed dimming scheme" is displayed.

Current light scheme in Dynadimmer

The 'to-be-programmed' light scheme

The top row of the Programmer display is filled with blocks if there is no dimming shape programmed in the Dynadimmer (the Dynadimmer is empty).

3.2.3 Writing the dimming shape in the Dynadimmer

The Dynadimmer can be programmed if the Dynadimmer is connected to the Programmer.
The dimming shape that needs to be programmed can be selected by means of the orange button.
Holding this button down for 3 seconds selects another dimming scheme. Yet ensure that the Dynadimmer is not connected to the Programmer for this selection mechanism to work.

Select the black button to actually write the dimming shape into the Dynadimmer.
The Programmer will state OK if the programming was successful.

3.2.4 Copying the dimming shape from the Dynadimmer into the Programmer

The Dynadimmer dimming shape can be copied from the Dynadimmer back into the Programmer to review the dimming shape, copy it to other Dynadimmers or adjust it.

First the dimming shape (memory location A, B or C) that can be overwritten in the Programmer needs to be selected with the orange button. Holding the orange button down for 3 seconds selects another dim scheme that can be overwritten. Ensure that the Dynadimmer is **not** connected for this selection mechanism to work.

Secondly the Programmer copying function needs to be enabled by selecting the black and orange button simultaneously for 5 seconds. The screen will then state "Copy to Programmer". Ensure that the Dynadimmer is **not** connected for this selection mechanism to work.

Now connect the Dynadimmer to the programming cable. The Programmer will recognize the Dynadimmer and will overwrite the existing file with the file stored inside the Dynadimmer. The file will be copied so the same file remains in the Dynadimmer. The Programmer will state OK if the copying was successful. The Programmer will switch off afterwards to save battery power.

Now the Programmer can be connected to the PC software and the software can read the Programmer and load the dimming shape as described in chapter 2 by using the Fetch buttons.