

Philips Stand-alone Controls Programming

User Guide (v1.1)

1. Install the Dimming Controls Programmer Software

1.1. Use the following procedure to install the software on a personal computer

- ▶ Unzip the file *PhilipsStand-aloneControlsProgramming_v3.x.x.zip*
- ▶ Double click on *Setup.exe*
- ▶ 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 step.

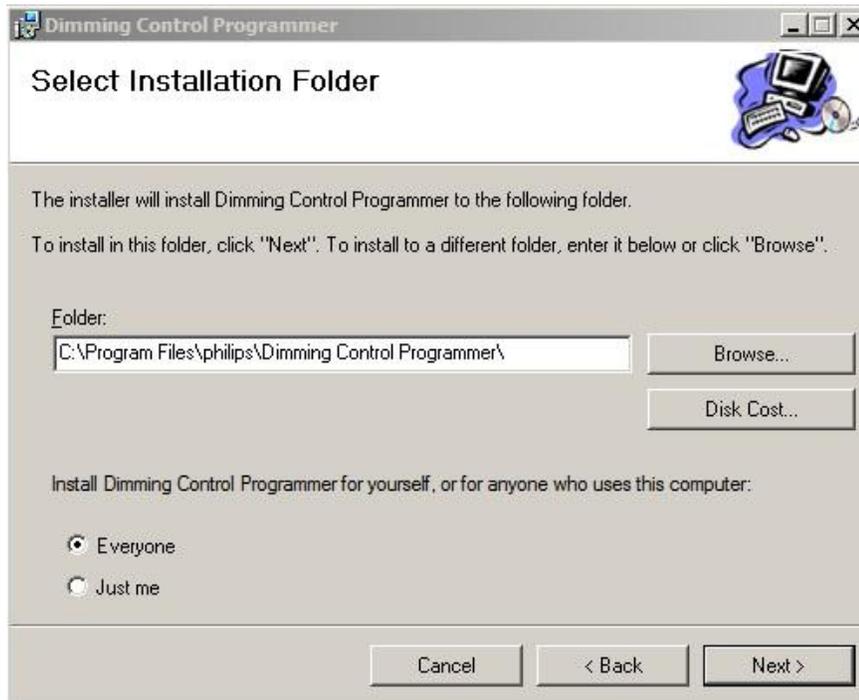
The DimmingControlsProgrammer software setup program will automatically install .NET Framework 2.0 on the computer. This may take a few minutes depending on the computer capabilities. When the installation has finished, the installation of the DimmingControlsProgrammer software will continue automatically.

1.3. Installation steps

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

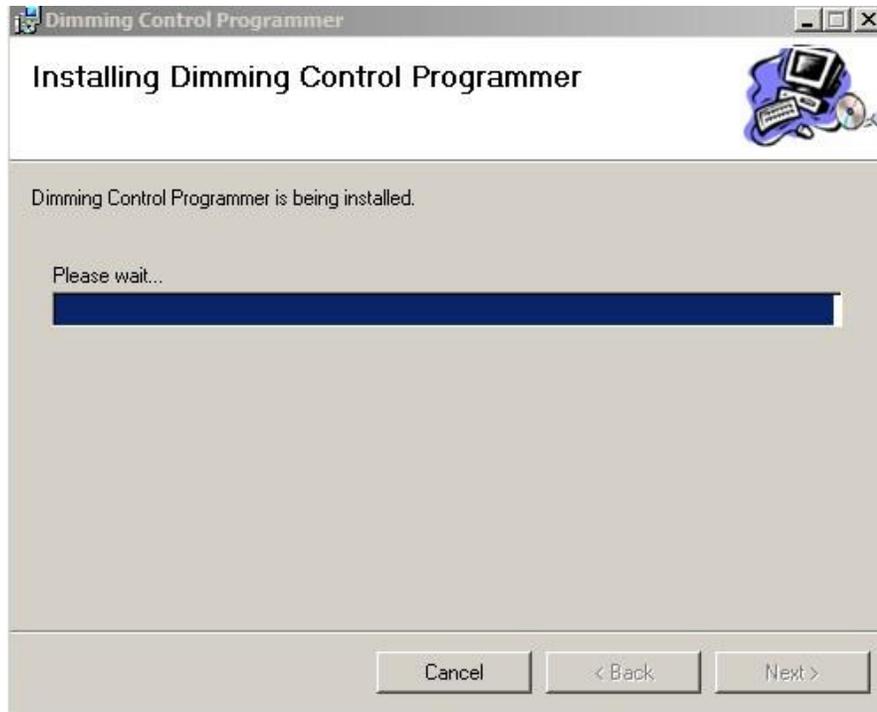


Read and if you agree click <Next>

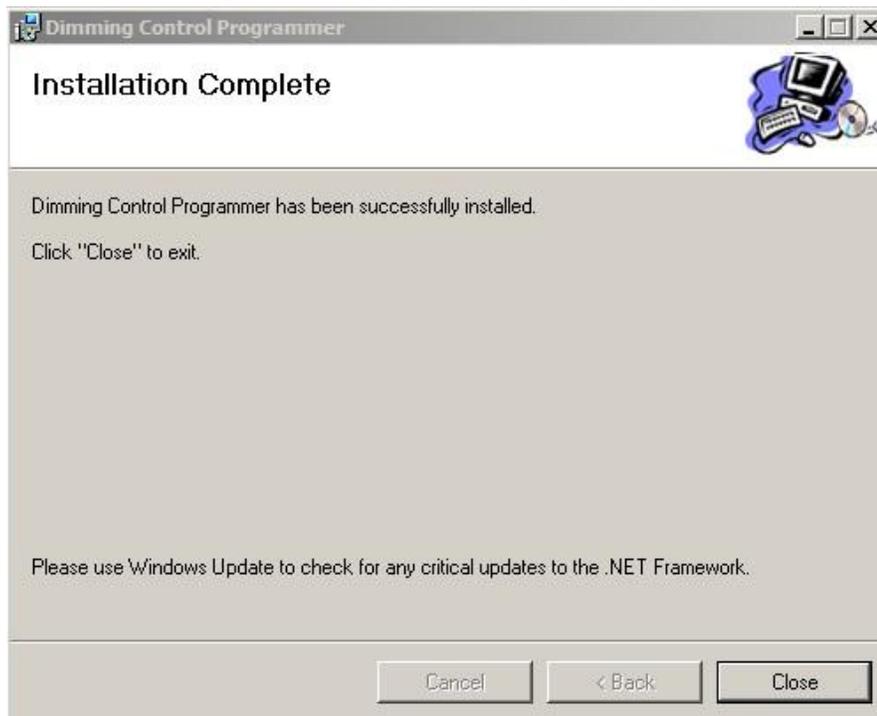


After selecting appropriate installation folder select <Next>.

Read and select <Next> again.



After this screen the following screen appears.



Read and select <Close>. The installation has now been successfully completed.

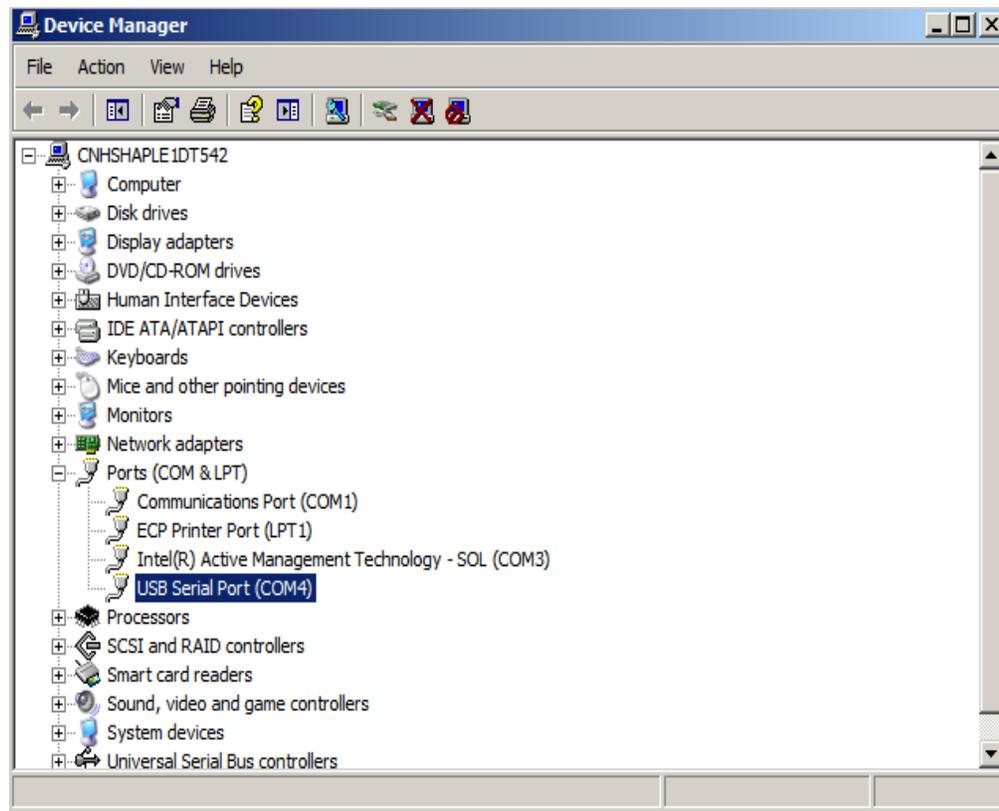
An icon “**Philips Dimming Controls Programmer**” has been created on the desktop.

1.4. Installation of the USB Programmer cable driver

The USB Programmer cable driver can be found in the application setup package.

Following below procedure to install the USB Programmer cable driver:

- ▶ 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 Manager”) 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”



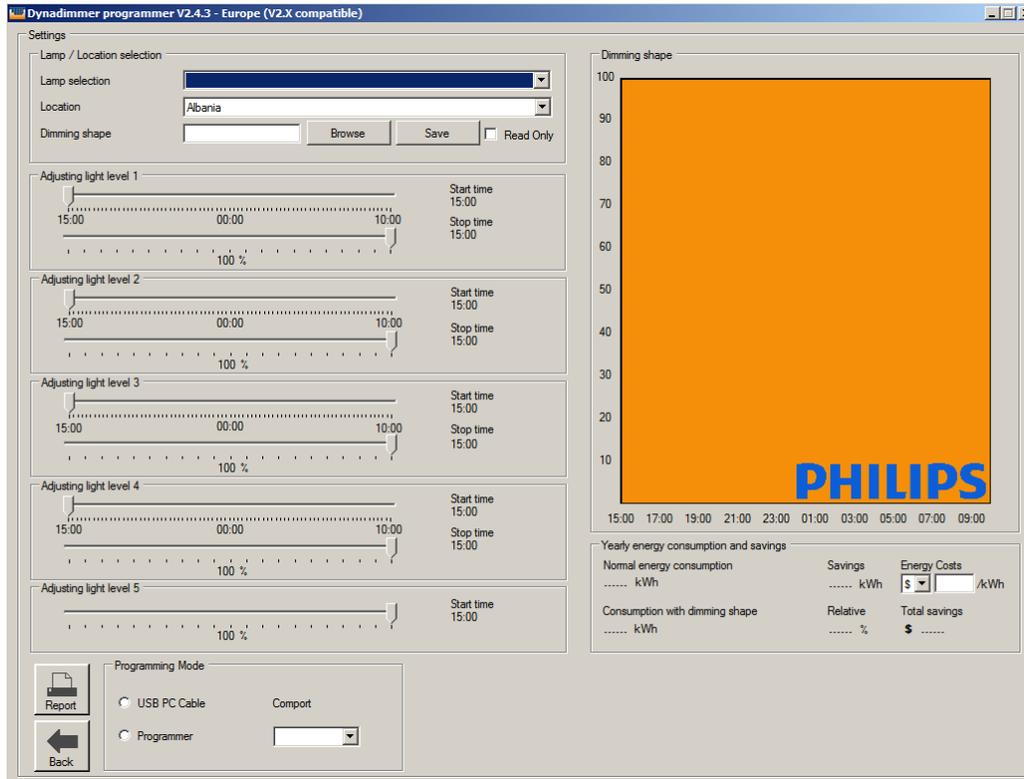
2. Welcome screen

- 2.1. Double-Click the Philips Dimming Controls Programmer Icon to start the application.
- 2.2. Welcome screen opens as shown below:



- 2.3. For version after v3.2.0, there're 2 applications/products can be selected, "Dynadimmer" and "Chronosense", and different regions and application languages can be specified for each applicaion.
- 2.4. Press <OK> button, the main user screen will display according to the application that user selected.

3. Dynadimmer Application



3.1. Create and save the dimming shape

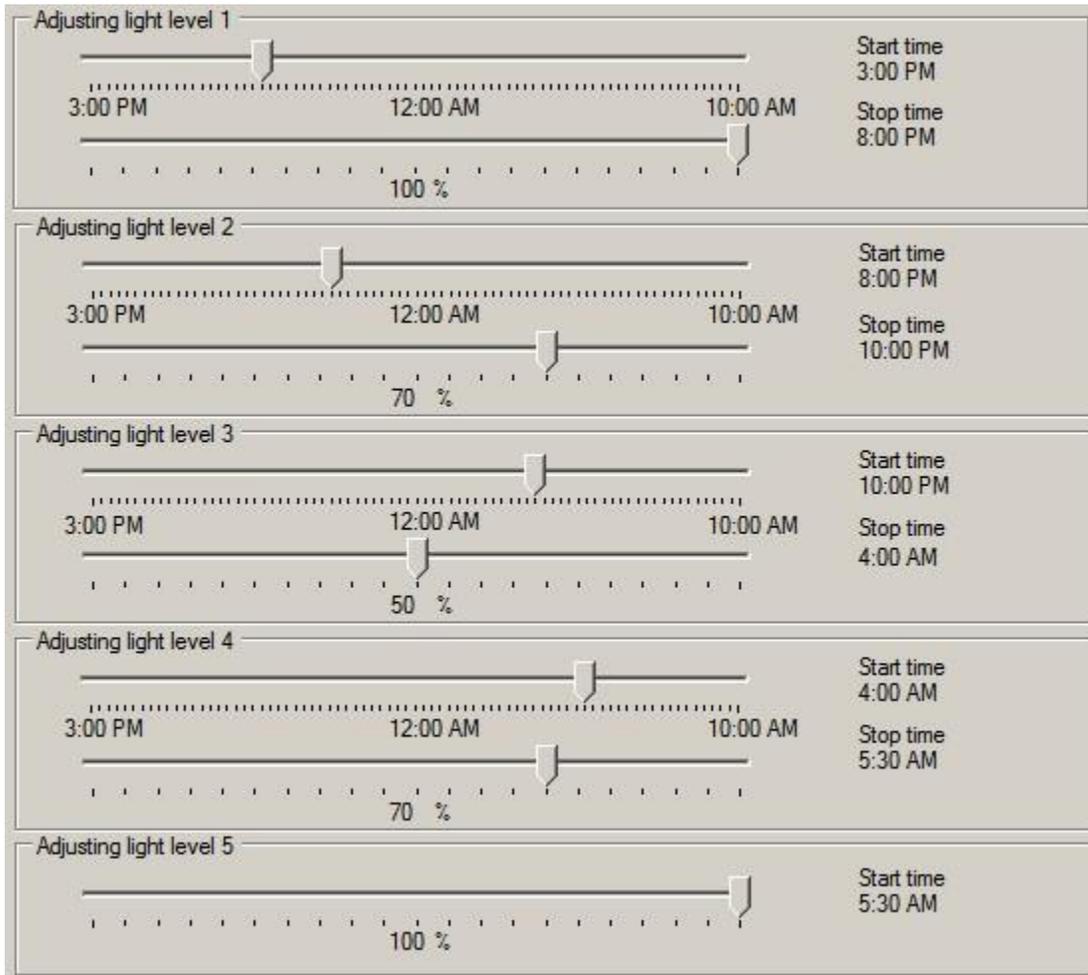
3.1.1. Select the lamp, location and type the name of dimming shape. Here using the *Default_DD_NA* dimming shape as an example:

Lamp type: LED
 Location: California (Los Angeles)
 Midpoint: 11.52 PM

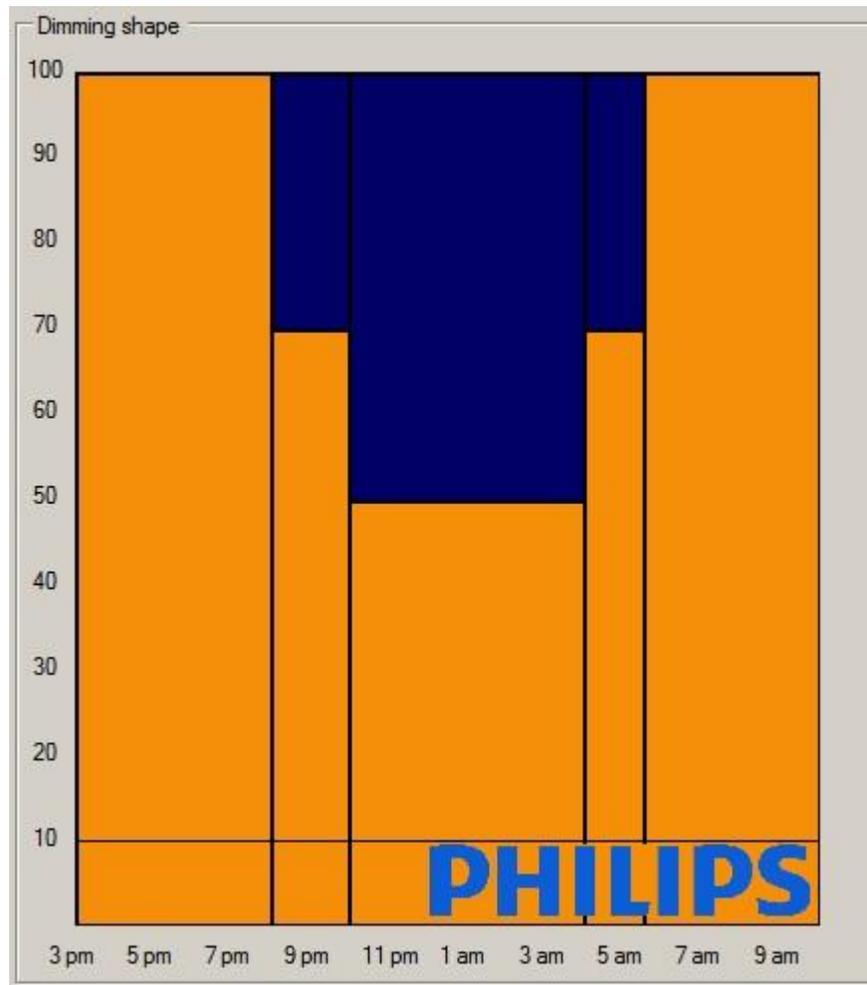
| | Start | Stop | Dim level |
|-------|-------|-------|-----------|
| Zone1 | 15.00 | 20.00 | 100% |
| Zone2 | 20.00 | 22.00 | 70% |
| Zone3 | 22.00 | 04.00 | 50% |
| Zone4 | 04.00 | 05.30 | 70% |
| Zone5 | 05.30 | 10.00 | 100% |



3.1.2. Set adjust light level 1~5 according to the dimming shape



3.1.3. On the right side of the main screen, the created dimming shape will graphically displayed according to the settings:



3.1.4. Yearly energy consumption saving data will be shown for the reference, and if the price of the power cost is input, the total cost saving of the year will be shown:

| Yearly energy consumption and savings | | |
|---------------------------------------|----------------|-------------------|
| Normal energy consumption | Savings | Energy Costs |
| 667 kWh | 265 kWh | \$ 1.015 /kWh |
| Consumption with dimming shape | Relative | Total savings |
| 401 kWh | 39.7 % | \$ 268.975 |

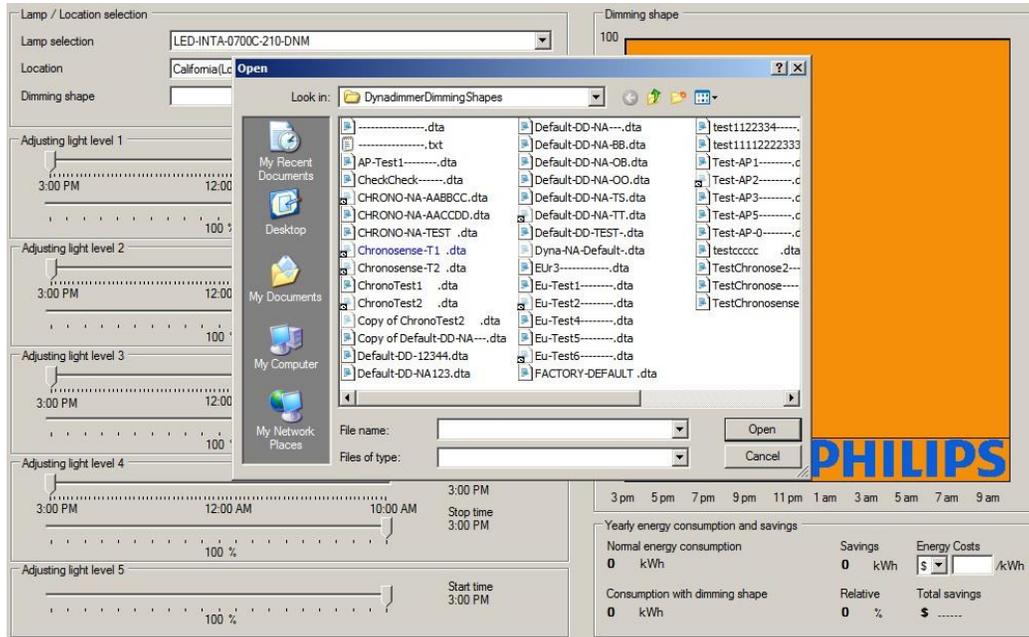
(Notice: Some of the lamps are lack of energy saving data. In these cases, the yearly energy consumption saving data will be displayed as 0.)

3.1.5. Press <Save> button, the created dimming shape will be saved under path:

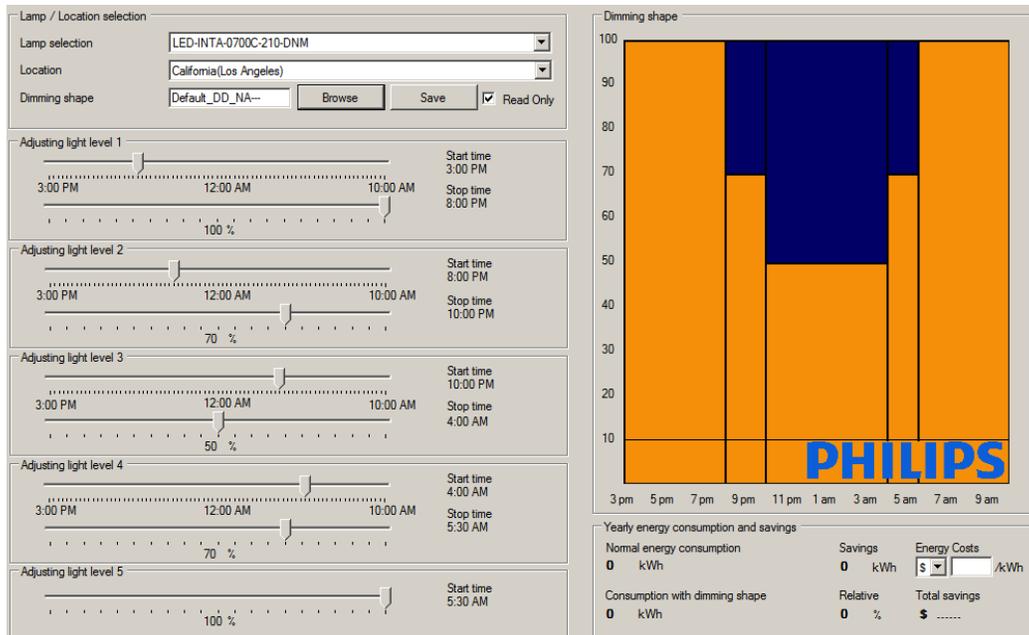
“C:\DynadimmerDimmingShape”. If <Read Only> is checked, the dimming shape will be saved as a Read-only file.

3.2. Read-out saved dimming shape

3.2.1. Press <Browse> button, the open file dialog will displayed, select the dimming shape file you want to open:

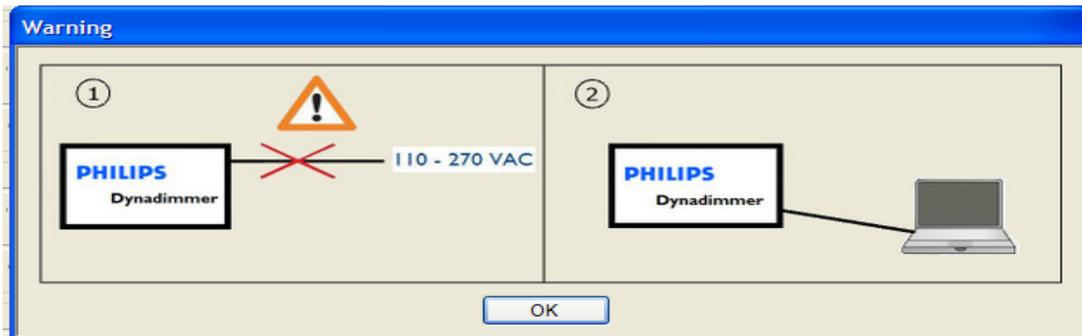


3.2.2. The dimming shape will be loaded:

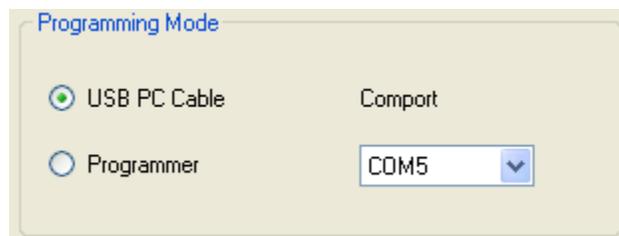


3.3. Program dimming shape through the USB-Cable

- 3.3.1. Select the <PC USB Cable> radio button on the bottom left, and a warning message will be displayed to indicate the customer not connect Dynadimmer with AC power during programming dimming shape:



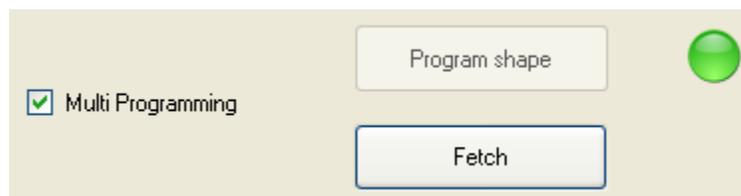
- 3.3.2. Set the USB->Comport for the USB cable:



- 3.3.3. If the USB cable detected and Dynadimmer device plugged, the status will be shown on the top of the main form with the current dimming shape name in the Dynadimmer device (Dynadimmer programmer version number will be different based on installed SCP version number):

Dynadimmer programmer V2.4.3 - North America (Default_DD_NA---

- 3.3.4. <Fetch> button is used to load the dimming shape from the Dynadimmer, <Program Shape> button is used to program the current dimming shape into the Dynadimmer. <Multi programming> check box is used for the Factory to program the same Dynadimmer dimming shape into multiple Dynadimmer devices.



3.4. Program dimming shape through the Programmer

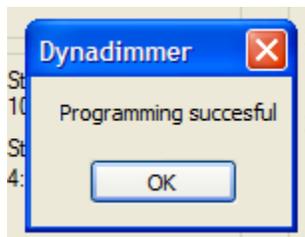
- 3.4.1. Select the <Programmer> radio button on the bottom left of the main frame, and select the correct COM port that programmer connected, the programmer control box will show on the bottom right side of the main frame:



- 3.4.2. If the Programmer is connected to PC successfully, a message will shown on the title of the main frame (Dynadimmer programmer version number will be different based on installed SCP version number):



- 3.4.3. <Programmer Language> is used to set the programmer language. Since the Programmer can store 3 different dimming shapes, the <Fetch shape A/B/C> button is used to load the different dimming shape from Programmer. And <Program shape A/B/C> is used to program the dimming shape into the different Programmer stack. If program successes, a message will show on the screen:



3.5. Additional functionality

- 3.5.1. The <Back> button allows returning back to the welcome screen. Notice that all the dimming shape information will be lost if not saved.
- 3.5.2. By pressing the <Report> button an information report will be generated. It'll contain the dimming shape name, lamp type, location, adjusting level settings and energy consumption saving info.

Dynadimmer Dimming shape

Dimming shape: Default_DD_NA---

Lamp selection: LEDINTA0700C210DNM

Location: California(Los Angeles)

Adjusting light level 1: 100%, 3:00 PM - 8:00 PM

Adjusting light level 2: 70%, 8:00 PM - 10:00 PM

Adjusting light level 3: 50%, 10:00 PM - 4:00 AM

Adjusting light level 4: 70%, 4:00 AM - 5:30 AM

Adjusting light level 5: 100%, 5:30 AM -

Yearly energy consumption and savings:

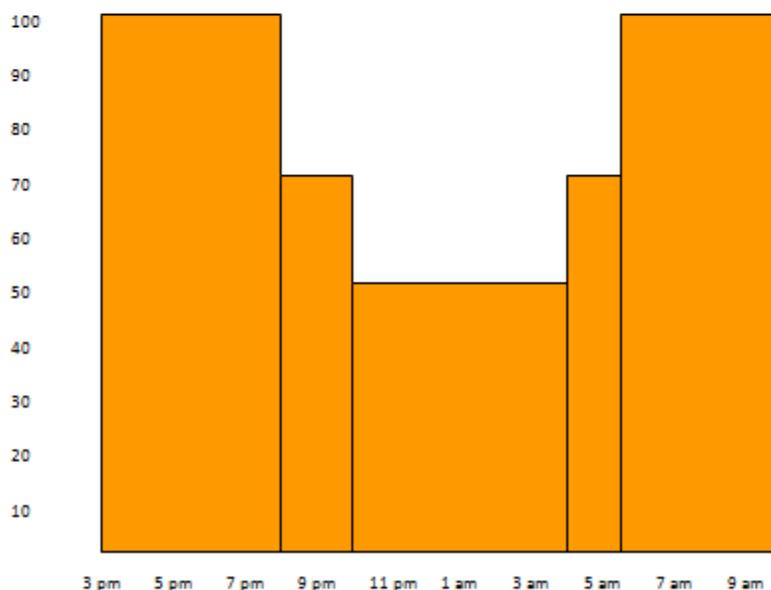
Normal energy consumption: 0kWh

Consumption with dimming shape: 0kWh

Savings: 0kWh

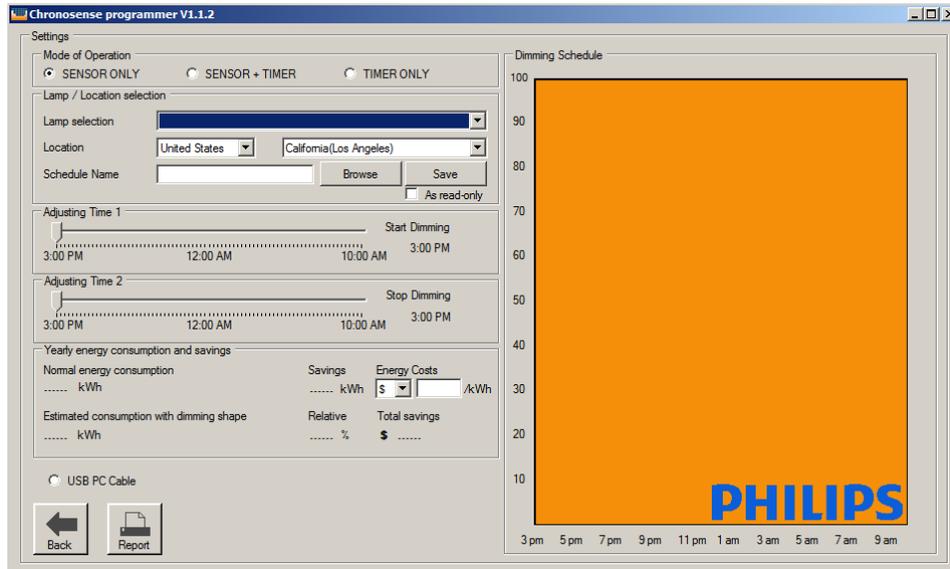
Relative: 0%

Total savings: \$..... (\$ /kWh)



- 3.5.3. For the <Read Only> function. Once a dimming shape file is stored as a Read-only file, it cannot be modified and saved again as the same dimming shape name. Only the shape name is changed, the modified dimming shape could be saved and programmed. Otherwise a warning message will pop up to indicator the user that the read-only dimming shape is changed and the action (save/program) denied.

4. Chronosense Application



4.1. Create and save a dimming schedule

4.1.1. Select the mode of operation, lamp, location, name of dimming schedule and time for dimming.

Type name: *CHRONO_NA_TEST*

Via radio buttons select Mode of Operation: *SENSOR + TIMER*

Via pull-down menus select Lamp type: *HPS – 400 – S51*

Location: *United States - California (Los Angeles)*

Moving the sliders adjust *Time1: 9:15 PM* and *Time2: 4:45 AM*

Mode of Operation

SENSOR ONLY SENSOR + TIMER TIMER ONLY

Lamp / Location selection

Lamp selection: HPS - 400 - S51

Location: United States California(Los Angeles)

Schedule Name: CHRONO_NA_TEST Browse Save

As read-only

Adjusting Time 1

Start Dimming: 9:15 PM

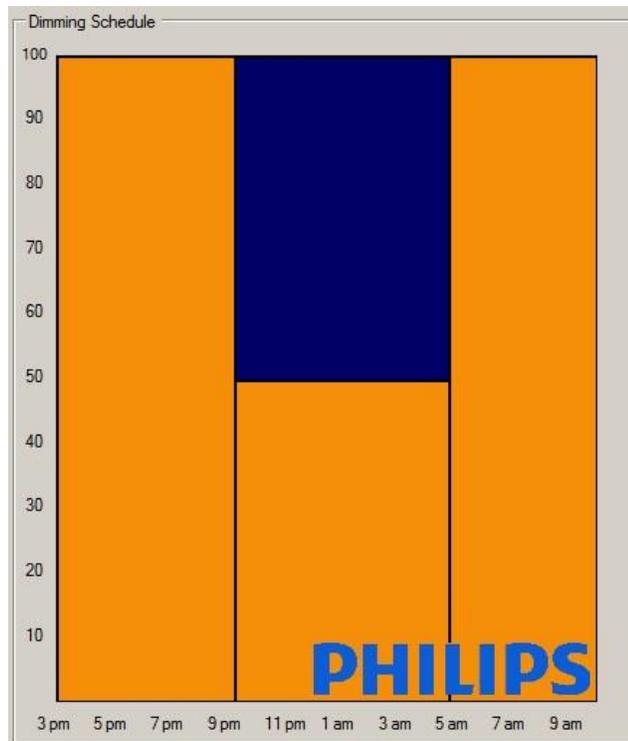
3:00 PM 12:00 AM 10:00 AM

Adjusting Time 2

Stop Dimming: 4:45 AM

3:00 PM 12:00 AM 10:00 AM

4.1.2. On the right side of the main form, the dimming shape will be displayed according to T1 and T2 settings:



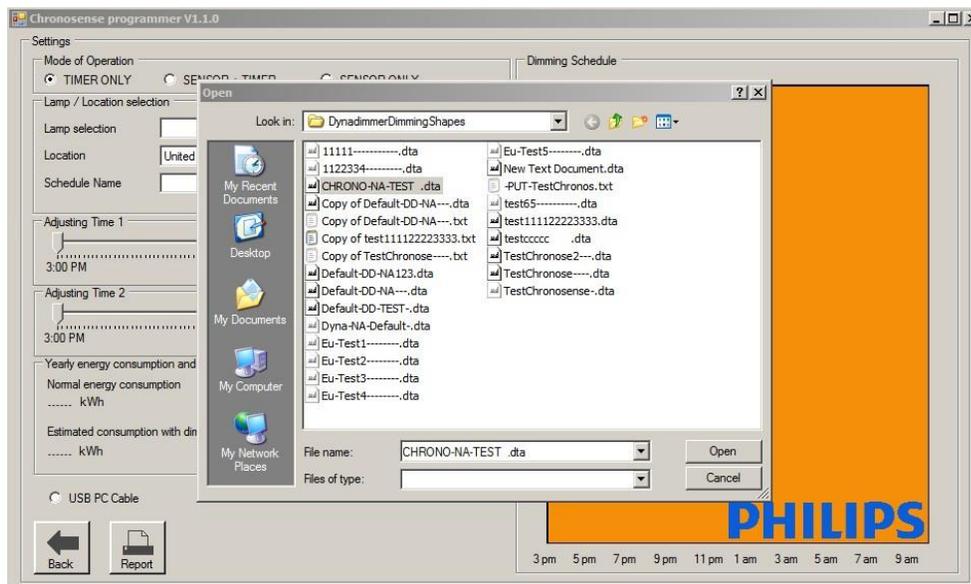
- 4.1.3. Energy savings part of the screen allows calculation of the savings per year related to selected lamp/ballast combination and dimming schedule. Total savings will be calculated after typing-in local energy cost.

| Yearly energy consumption and savings | | |
|--|----------------|-------------------|
| Normal energy consumption | Savings | Energy Costs |
| 1959 kWh | 625 kWh | \$ 1.055 /kWh |
| Estimated consumption with dimming shape | Relative | Total savings |
| 1333 kWh | 31.9 % | \$ 659.375 |

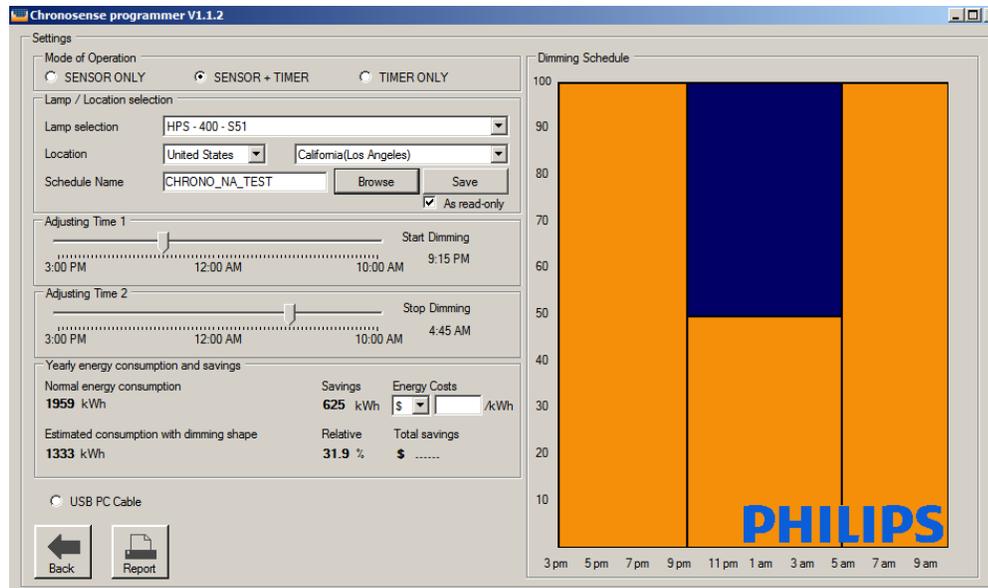
- 4.1.4. After pressing <Save> button, created dimming schedule will be saved under path: "C:\DynadimmerDimmingShapes". If <As read-only> is checked, the dimming schedule will be saved as a read-only file.

4.2. Read-out saved dimming schedules

- 4.2.1. Press <Browse> button, the open-file dialog will be displayed. Select the dimming schedule file from the list:



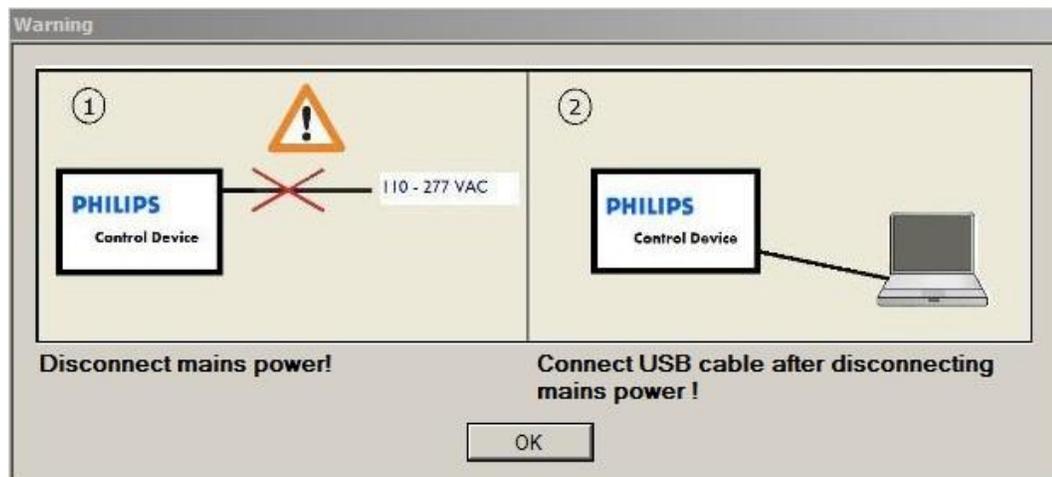
- 4.2.2. Press <Open>. The dimming schedule will be loaded and displayed:



4.3. Program dimming schedule through the USB PC Cable

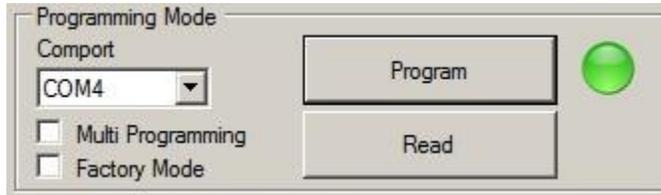
4.3.1 Create new or read-out a saved dimming schedule.

4.3.2 Select the <USB PC Cable> radio button on the bottom left, and a warning message will be displayed to remind the customer to disconnect Chronosense from the mains during the programming procedure:



4.3.3. Plug the cable into the USB port of the PC and Chronosense 3-pin connector. Windows operating system may show a message that new USB device has been recognized and installed.

- 4.3.4. After pushing OK button select appropriate Comport from the pull-down menu:



- 4.3.5. If communication between the computer and Chronosense has been successfully established, the top of the main screen will show the name of the current dimming schedule programmed inside the Chronosense. Otherwise no connection will be indicated (Chronosense programmer version number will be different based on installed SCP version number):

Chronosense programmer V1.1.0 (CHRONO_NA_TEST)

Chronosense programmer V1.1.0 (Chronosense not connected)

- 4.3.6. Pushing <Program> button will program currently displayed dimming schedule into the Chronosense. Accordingly new schedule name will appear on the status bar.

4.4. Additional functionality

- 4.4.1. <Multi programming> check box is used for “conveyor-belt” programming of many devices without clicking <Program> button again and again. Only plug a Chronosense, wait for the programming to finish, then unplug and plug another Chronosense. The green indicator shows that the programming has been finished, during the programming the color is yellow.
- 4.4.2. <Read> button is used to download the currently programmed dimming schedule from a Chronosense device into the computer memory and displayed on-screen.
- 4.4.3. The <Back> button allows returning back to the welcome screen. Notice that all the dimming shape information will be lost if not saved.
- 4.4.4. For the <As read-only> function. Once a dimming schedule file is stored as a read-only file, it cannot be modified and saved again as the same dimming schedule name. Only the shape name is changed, the modified dimming shape could be saved and programmed. Otherwise a warning message will

pop up to indicator the user that the read-only dimming schedule is changed and the action (save/program) denied.

- 4.4.5. By pressing the <Report> button an information report will be generated. It will contain the dimming schedule name, mode of operation, lamp type, location, time settings and energy savings info.

This function will only work on the computer with Microsoft Word installed.

Example:

Chronosense Dimming Schedule

Schedule Name: CHRONO_NA_TEST

Mode of Operation: SENSOR + TIMER

Lamp selection: HPS - 400 - S51

Location: United States - California(Los Angeles)

Adjusting Time 1: 9:15 PM

Adjusting Time 2: 4:45 AM

Yearly energy consumption and savings:

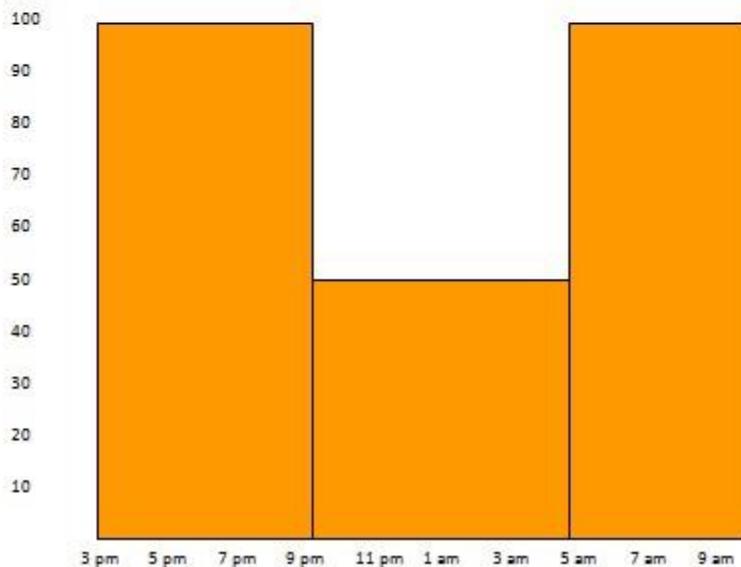
Normal energy consumption: 1959kWh

Estimated consumption with dimming shape: 1333kWh

Savings: 625kWh

Relative: 31.9%

Total savings: \$659.375 (\$1.055 /kWh)



4.4.5. <Factory Mode> check box is a special mode that Philips uses during manufacturing process in the factory.