

CoralCare Controller Gen2

Software manual desktop application



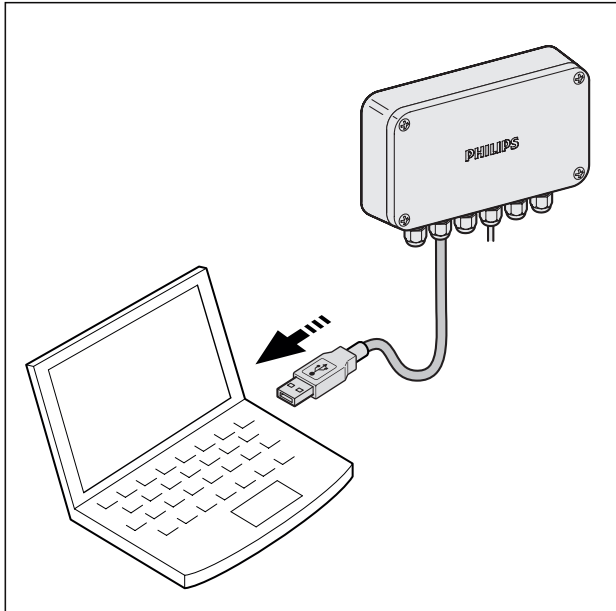
PHILIPS

This manual includes information about the CoralCare desktop application.

For information about the Coralcare app please navigate to www.philips.com/coralcare.

CoralCare software is designed to run on all Windows versions & Mac.

- Download the CoralCare software on www.philips.com/coralcare.
- Connect the USB cable of the controller to your PC if you want to access and program the CoralCare Controller via the desktop application. If you want to access your device via wifi, make sure the controller is powered via the USB adapter.

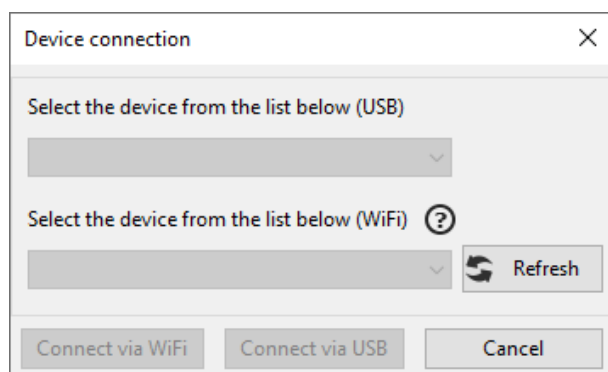


- Open the application and click on the message “not connected” in the bottom left-hand corner of the application.



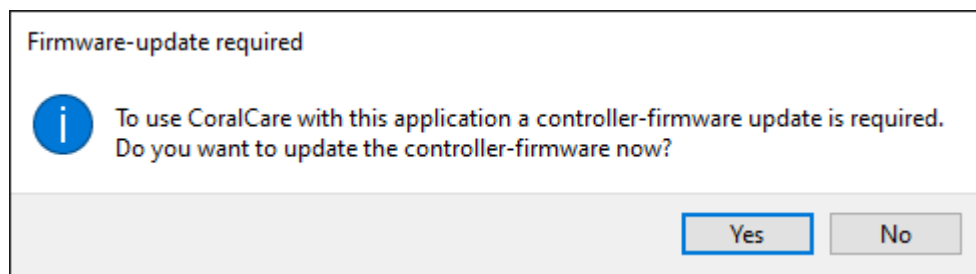
Alternatively, click on “device” in the task bar and then click on “open device” to go to the same device connection window. If you connected your controller via the USB cable to your computer you can press “refresh” and should be able to select your device in the pull down menu ‘USB’. Then click “Connect via USB”.

If you want to connect via wifi, select the correct device from the “wifi” tab and press “Connect via wifi”.



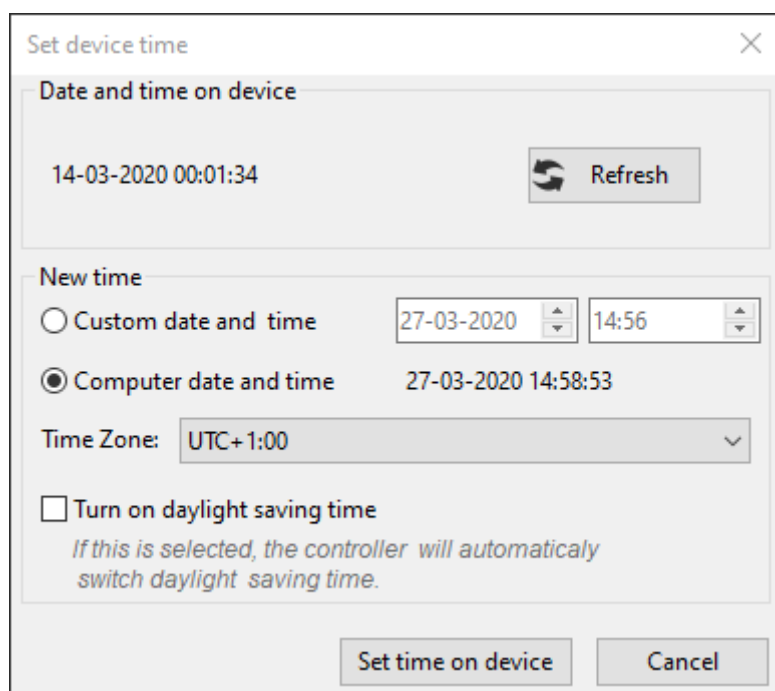
Keep in mind that the first 60 seconds after powering up the controller, the controller will not be accessible via wifi. This is to ensure the device can be reconfigured via the app if the wifi connection failed (or if the controller was relocated to an area with another wifi network).

After connection to the controller is made, the software will check the firmware of the controller. If a new version is available, the software will show the following message:



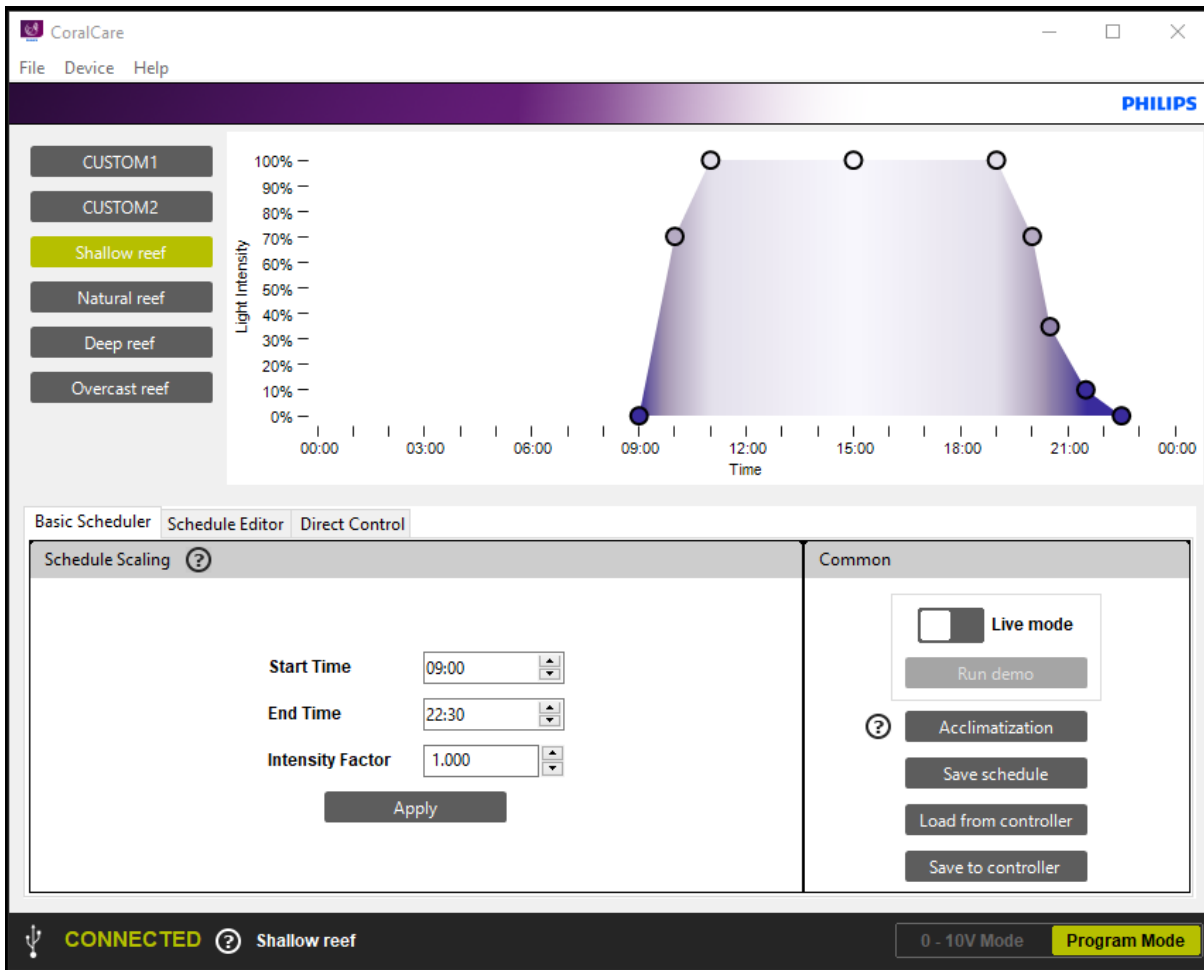
Please note that a firmware update might take some time before it is successfully uploaded to the controller.

After the firmware check, the software will start loading the settings from the controller and will check if the time is programmed correctly. If this is out-of-sync with the time settings of your desktop, the software will load the "Set device time" screen



Press refresh to check the time which is programmed in the controller. If you want to change the time, you can enter a custom day and time manually or synchronize the time with your computer. Make sure to check your time zone and turn on daylight saving if this is applicable for your region. If you want to access the time settings again navigate to device --> Set device time

- After connecting, the software will automatically download the settings from the controller and synchronize them with the application. You can always reload the settings from the controller by clicking “Load from controller” in the “Common” tab of the “Basic scheduler” overview.



- By default the controller is programmed to output 5% light intensity for both channels (programmed in Custom1 and Custom2). If you want to use a 3rd party aquarium computer to control the CoralCare fixtures you need to click “0 - 10V Mode” and press “Save to controller”. All other schedule options become unavailable in this mode.



- When the application is started and the controller connected, it displays the active schedule (also mentioned in the bottom bar). You are now able to choose one of the predefined schedules (Shallow Reef, Natural Reef, Deep Reef or Overcast Reef) or define a new one.

- You can make use of the “Basic Scheduler” tab to modify start and end time as well as intensity factor of the existing schedules. Make your adjustments and press “Apply” to alter the schedule. Do not forget to press “Save to controller” to program the changes into the controller.

Basic SchedulerSchedule EditorDirect Control

Schedule Scaling ⓘ

Start Time09:00

End Time22:30

Intensity Factor1.000

Apply

Common

☐ Live mode

Run demo

ⓘ Acclimatization

Save schedule

Load from controller

Save to controller

- In the tab “Schedule editor” you can create a new “Custom 1” schedule. You can use one of the default sched-
ules as a baseline and save the modified schedules to “Custom 1” or “Custom 2” by clicking “Save schedule”.

Basic SchedulerSchedule EditorDirect Control

Points

Time	Color temperature		Light intensity
09:00	Warm0	Cold0	0%
10:00	Warm18	Cold35	35%
11:00	Warm43	Cold50	50%
15:00	Warm50	Cold50	50%

Add

Remove

Common

☐ Live mode

Run demo

ⓘ Acclimatization

Save schedule

Load from controller

Save to controller

- In this same menu, you can also alter the default name of “Custom 1” and “Custom 2”

Save user schedule ⓘ

☒ 1

CUSTOM1

☐ 2

CUSTOM2

OK

Cancel

- If you want to alter individual points in the schedule you can “add” or “remove” time points.

Explanation about data point settings:

- Time: This is the time (in hours and minutes) at which the chosen light settings (color point and intensity) are active.
- Light intensity: This determines the total intensity of the light. This is independent of the selected color-point.
- Color temperature: Using the slider, you can define the color point of the light. It can be somewhere between a warm and a fully saturated blue color. The numbers "Warm 0-100" and "Cold 0-100" represent the percentage of power that is supplied to the two light channels.

For example:

If the color temperature slider is set in the middle and the light intensity is set to 100%, the color temperature variables show "100 warm" and "100 cold". This effectively means that both light channels are pushed to maximum light output.

If the light intensity is reduced to 50%, the color temperature variables show "50 warm" and "50 cold". This effectively means that both channels are dimmed to 50% output.

If the color slider is set to the right and the intensity is set to 100%, the color temperature variables show "0 warm" and "100 cold". This effectively means that the white channel is disabled and the blue channel is burning at 100%. Setting the intensity to 50% will result in the blue channel being dimmed to 50%.

Rounding

Whilst the color point and intensity are being selected the application calculates the percentage at which the two LED channels should be set. For both drivers this ranges between 1 and 100% (or "off").

It is important to be aware that the application performs a rounding algorithm.

For example:

The intensity is 100% and the colorpoint is set to "4 warm" and "100 Cold"

Now the intensity is dimmed to 25%

Warm will be 1

and Cold will be 25

If the intensity is lowered any further (for example 20%) the application will display

Warm = 0

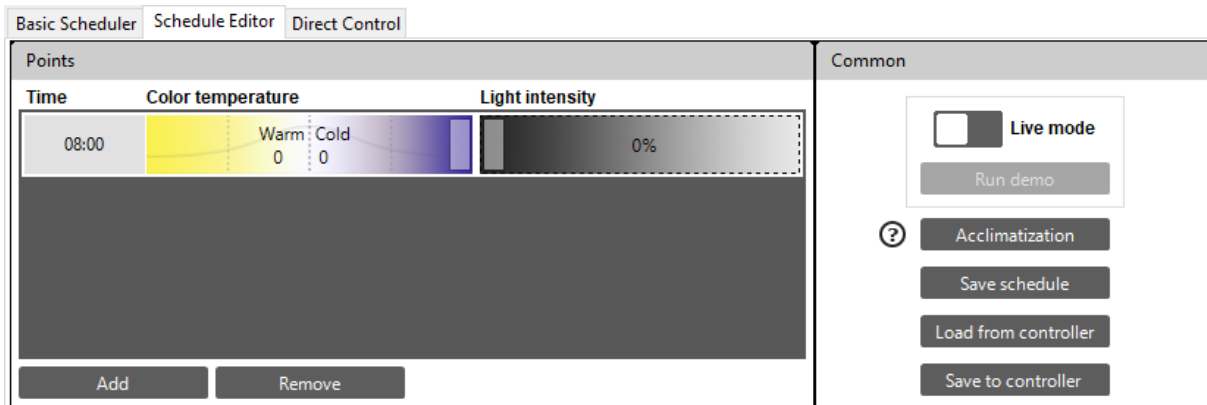
Cold = 20

All values smaller than 1 will be automatically rounded to 0.

In this example, the white channel is therefore disabled.

If you want to start a schedule from scratch:

- First define at what time you want the fixture(s) to switch on, and at what color point you want it to start. Set the intensity at 0% for the first point.



- Add a second point and again define time, color and intensity. The light settings will calculate all steps (time, color and intensity) between these points and make sure the change in light settings runs smoothly.



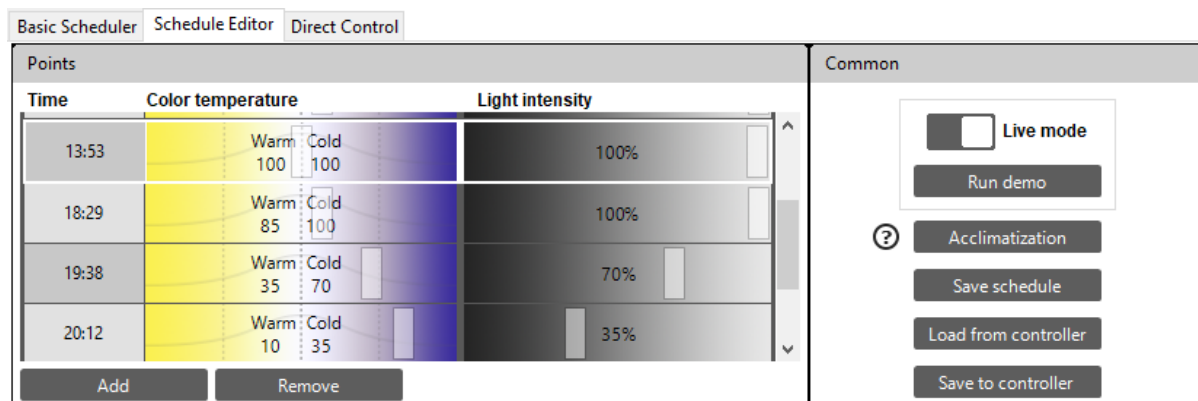
- Keep adding points until a complete day schedule has been defined.
For example:



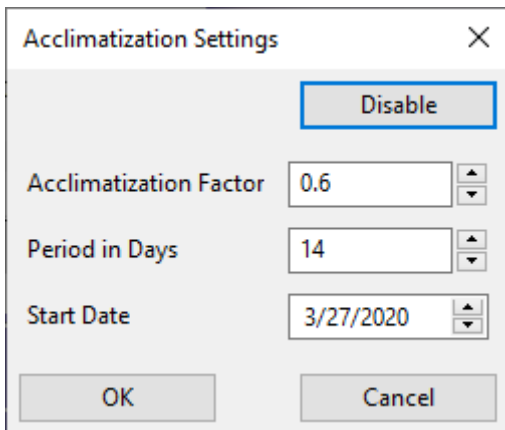
- Once you are satisfied with the defined schedule, you can first press “Save schedule” to save it to one of the two custom schedules.
This file can be shared with other reefers to show how you have set up your 24 –hour schedule.

The settings have not yet been saved in the controller!

- The settings will be transmitted to the controller when you click “Save to controller”
- If the luminaires are connected to the controller (and power is enabled), the “live mode” option can be used to experience the levels that are set in the scheduler application. Live mode can be enabled by moving the white box to the right.

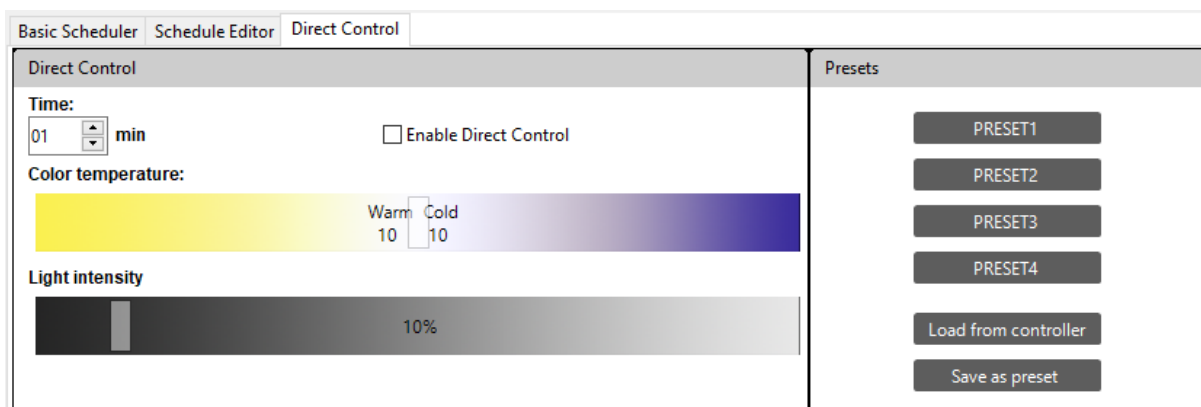


- With live mode enabled, the controller sends all data directly to the fixtures (for every entry). This starts when a time entry is selected. When a time entry is selected, the corresponding row (time, color and intensity) is highlighted and content is transmitted to the lamp. All changes in the highlighted area will be transmitted directly to the fixture(s).
- In addition to live mode, the controller also supports a demo mode. In two minutes, the program runs through the entire schedule and transmits the data to the fixture(s).
- The acclimatization feature can be used to reduce the light intensity of the active schedule for a period of time. The light intensity is initially reduced, before being gradually increased over the acclimatization period towards the active schedule. After the acclimatization period, the active schedule will remain. This is typically implemented when installing new lamps, with a new aquarium, or when new corals are added to an existing tank. 'Acclimatization factor' refers to the amount of light reduction to start the process with. 'Acclimatization period' refers to the time it takes for the light intensity to increase towards the active schedule.



The 'Acclimatization Settings' dialog box contains a 'Disable' button at the top right. Below it are three input fields: 'Acclimatization Factor' with a value of 0.6, 'Period in Days' with a value of 14, and 'Start Date' with a value of 3/27/2020. At the bottom are 'OK' and 'Cancel' buttons.

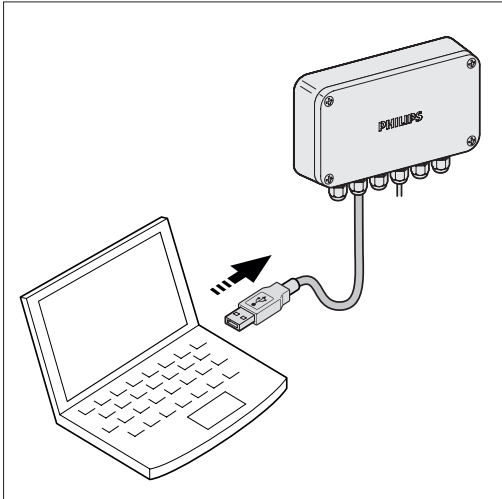
- You can also make use of the tab "Direct control" to directly control the light. Tick the box "Enable direct control" and the connected light will synchronize with the application.



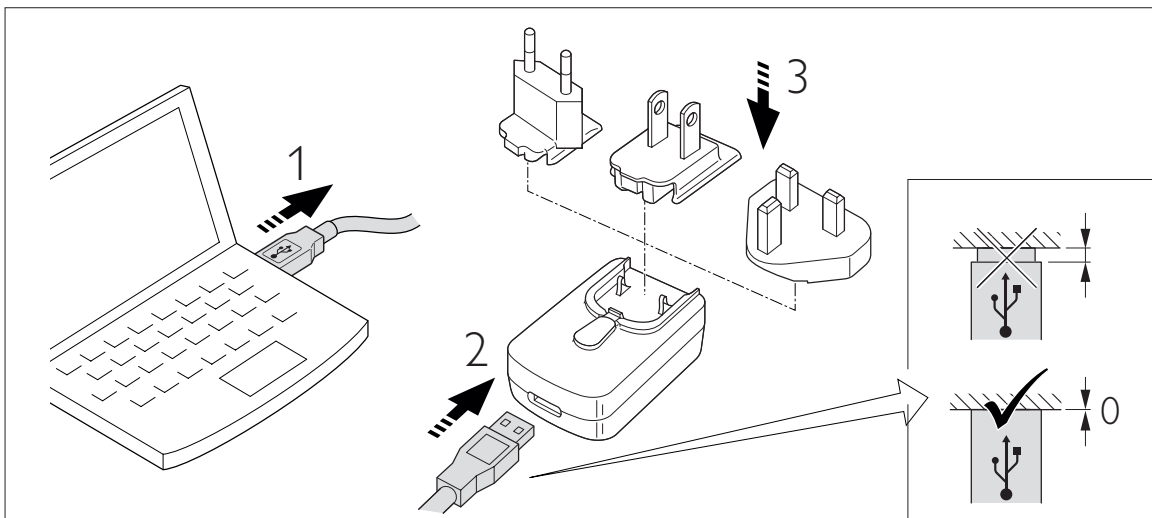
The 'Direct Control' tab interface is divided into two main sections. The left section, titled 'Direct Control', includes a 'Time' field set to '01 min', an unchecked 'Enable Direct Control' checkbox, a 'Color temperature' slider ranging from 'Warm 10' (yellow) to 'Cold 10' (blue), and a 'Light intensity' slider set to '10%'. The right section, titled 'Presets', contains four buttons labeled 'PRESET1', 'PRESET2', 'PRESET3', and 'PRESET4', along with 'Load from controller' and 'Save as preset' buttons.

- You can program the active setting into a preset by clicking "Save to preset" and by selecting one of the four presets. With the "time" field you are able to determine how long the preset or direct control should overrule the active schedule.
- You can stop a preset by deticking the box "Enable direct control"

- When you finished the setup of the schedule and saved it to the controller, you can disconnect the USB cable from the computer.



- Connect the USB cable to the USB power supply.



- Insert the power supply into the plug (the controller will automatically be enabled and operational).

Battery Backup

The controller holds a battery backup that will save the data and the time on the controller.

The 24-hour schedule data (time, color point and intensity) will be saved in the internal memory and will never be lost. The actual time will continue to be correct up to two days after disconnection of the power from the USB.

After two days, the time should be re-programmed via the PC application.

The internal clock of the device has a maximum deviation of 15 minutes a year.

We therefore recommend you re-program the time of the controller on a yearly basis.

Disconnecting controller

If there is no communication between the controller and the fixture (no power on controller or communication cable disconnected from fixture), the fixture will go into a default state, with 10% light output.



Signify
I.B.R.S. / C.C.R.I. Numéro 10461
5600 VB Eindhoven, the Netherlands

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www.philips.com/coralcare
Europe ☎ +800 7445 4775
US ☎ 1-800-555-0050

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