

Quick start:



Trocal LED Control & GHL Control Center

Please install the latest version of the software "GHL Control Center" on your PC
<https://www.aquariumcomputer.com/de/downloads>

The GHL Control Center, hereinafter mentioned as GCC, assists you in the convenient programming of your LED control. The GCC allows among other things the backup and restore of individually created illumination curves and device settings. Please note that some functions mapped in GCC may not work with the device due to the limitations of the display and conversely device-specific functions such as the time-lapse function can only be set on the device itself.

1. How to connect the Trocal LED control

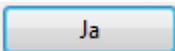
Connect the power adapter of a "Trocal LED" with the LED Control by means of the cable "LED Connect" and connect it to a power outlet. You can now establish a connection to the PC via the included USB cable.

Note: The DENNERLE Trocal LED control can only be programmed with the PC software "GHL Control Center (GCC)" if the device has at first been connected to the PC via the USB connector and before opening the application.

1.1 Now open the GHL Control Center

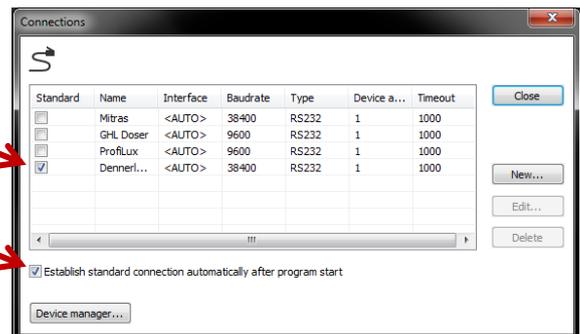


1.2 When first opening the GCC, the following error message appears: "Connection failed. Would you like to check settings now?" Choose "Yes" in

the PopUp 

1.3 In order to connect the DENNERLE Trocal LED Control automatically with the GCC after program start, please activate the check box in the line "Dennerle Trocal LED control" and "Establish standard connection automatically after program start"

Confirm with "Close": 



1.4 You can now connect the DENNERLE Trocal LED Control with the software by double-clicking on it in the side bar.



Please note: These steps are only necessary the first time you are establishing a connection. The next time the program is started, the connection between the DENNERLE Trocal LED Control and GHL Control Center will be established automatically.

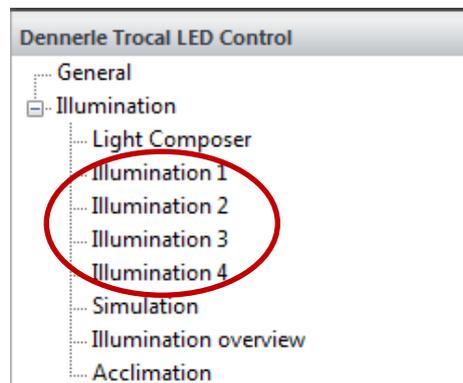
2. Illumination

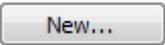
In the **GCC**, up to 2 Trocal LED lights, each with 2 separate channels (i.e. a total of 4 channels) can be programmed independently of each other.

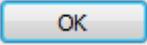
Channel 1 and 3: Warm white; 4,000 K - Channel 2 and 4: Cool White; 6,500 K

2.1 In the sidebar, select an “illumination channel”.

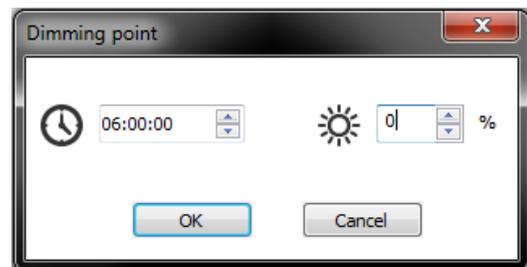
In the following window up to 8 dimming points can be set.



2.2 Select  and then enter your desired time and brightness in the window.

Confirm with 

Note: The brightness at the start point and end point of the illumination run must always be set to 0%!

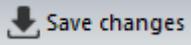


2.3 Repeat step 2.2 until the illumination run corresponds to your wishes.

Tip: For a moon light setting select the colder illumination channel 2 or 4.



2.4 To save the illumination run, click

 in the menu.

The illumination run is then transmitted to the device.

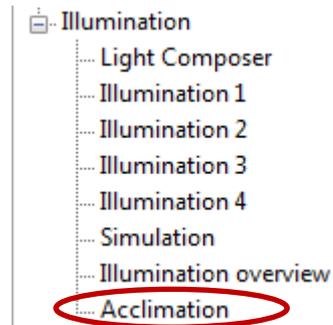
2.5 Repeat steps 2.1 to 2.4 for the other illumination channel(s).

Tip: If you are not sure what the optimum illumination run for your aquarium should be, you can find some examples in the instructions manual of the DENNERLE Trocal LED Control. In the graphical representation of the illumination curve, it is possible to change the previously programmed illumination points comfortably with the mouse pointer. Please note that changes only take effect after saving.

3. Acclimation

The function "acclimation" offers a simple and convenient way to adapt the intensity of the illumination automatically over several days. This is especially important for the plants in order to get accustomed to the new and often much stronger light. Also newly added animal residents (fish, corals etc.) benefit from a gentle increase of the light intensity.

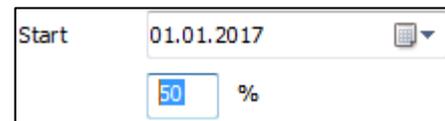
3.1 In the sidebar, select "Acclimation".



3.2 In order to enable the acclimation, select the check box Active.

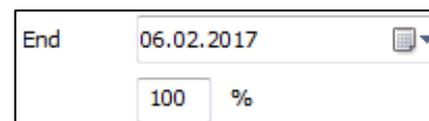


3.3 Select a start date. The acclimation starts immediately and runs with the set value.

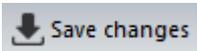


The "Start" section shows a date picker set to 01.01.2017 and a percentage input field set to 50%.

3.4 Select an end date. The acclimation ends on this day.



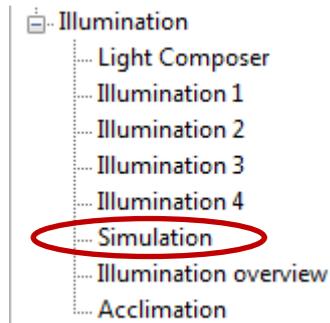
The "End" section shows a date picker set to 06.02.2017 and a percentage input field set to 100%.

3.5 Click on  to save the acclimation run.
The settings you made are transferred to the device.

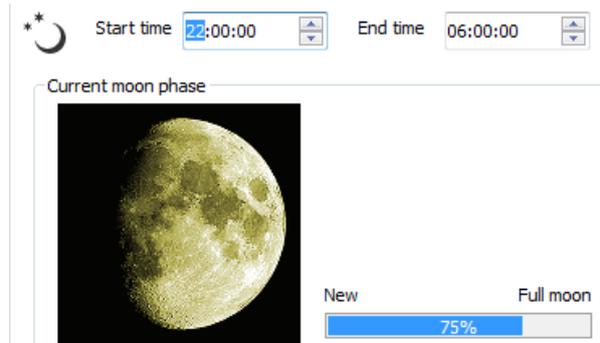
4. Simulation

Under this menu item you can set the period of the active moon phase simulation. This moon phase simulation does not "create" any moonlight, it influences the curve for the moonlight programmed in the illumination channel. The moonlight now corresponds to the current natural moon phases. Accordingly, at new moon e.g., no moonlight can be identified.

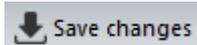
4.1 In the sidebar, select "Simulation".



4.2 Select the start time and the end time in which the moon phase simulation should be active. Ideally, this period of time corresponds to the setting curve for the moonlight in the illumination run.



4.3 To save the moonlight run, click



in the menu.

The settings made are transferred to the device.

4.4 For activating the moonlight you must select the check box "Depends on moon phase" in the corresponding illumination channel.

