Vertex Desktop Manual

Thanks a lot for buying a VERTEX Aquaristik product!

Please contact your distributor of trust for any questions.

Contents

System Requirements

Vertex Software supports Windows XP, Windows Server 2003 and Windows Vista.

The program automatically adapts itself to the operating system on which it runs, eliminating the need for manual settings.

Recommended system configuration:
- Intel Pentium processor equivalent to industry standards with 500 MHz or faster
- 128 MB RAM
- Graphics mode 800 x 600 with 16,7m colors
- 5 MB free hard disk space (an additional 10MB is needed during installation only to accommodate the initial setup files)
- CD-ROM or DVD-ROM drive
- Operating System Windows XP, Windows Server 2003 and Windows Vista
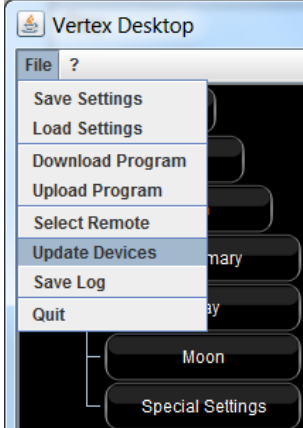
Installation

Download the installation file from www.vertexaquaristik.com.

Please connect the V-Stick during installing the software, so that all necessary drivers can be loaded.
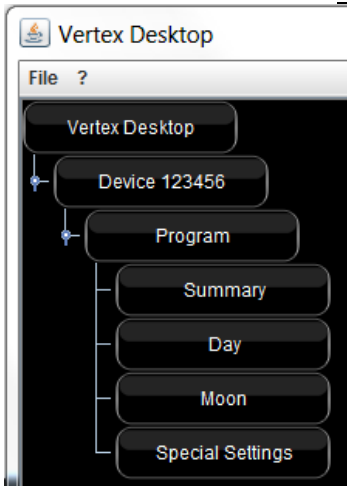
Getting started

After installing the V-stick start the software. To search for new devices in reachable distance around the V-Stick chose FILE – UPDATE DEVICES. On startup all 'accepted' devices are displayed in the tree structure automatically. Watch out for Accept Queries on the device on select 'Update Devices' in the 'Vertex Desktop'.

Right after the fixed connection you will see in the menu tree many other options coming up with which you can control the connected device. Each devices name is the serial number.

If you have already connected some devices in advance, these devices are shown in the list as long they are activated.

Menu structure

The menu structure will be shown as soon as the connection to the device is established.

Program name	Program description
Summary	Here the actual software version is mentioned. Also the fan mode and the language of the device can be modified
Day	The program mode can be chosen and also the settings for the day programs can be defined.
Moon	Here you can choose the program mode and also define the settings for the moon programs.
Special Settings	With the special settings you can control the weather and also you can select active pads.

Program description
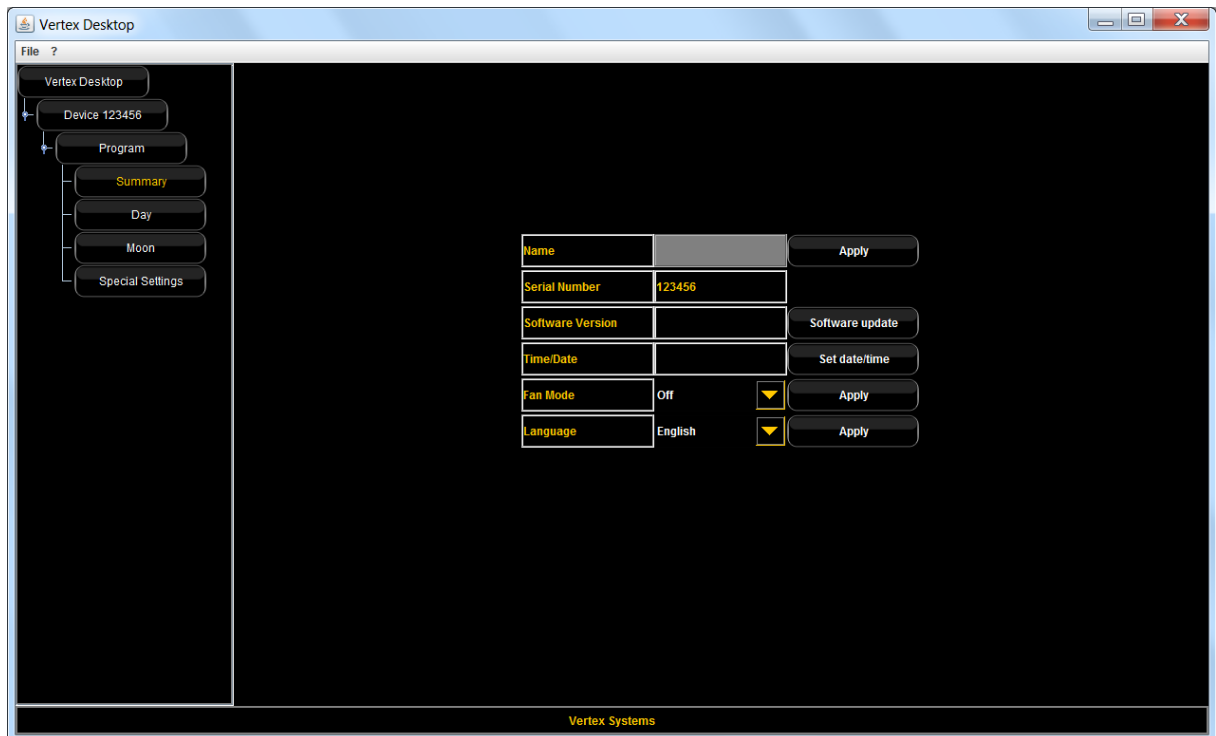
Summary

In the summery you can change necessary settings.

Name

You can enter a free decided name into the grey field and save that by pressing 'Apply'.

Serial Number

The serial number of the device is not editable, so that it is still identifiable after renaming.

Software Version

By selecting the right path you can update the firmware of your device. (→ Firmware update)

Time/Date

The system time of the device can be set.

Time Format	You can choose the time format
Date	You need to set the actual date to communicate with the fixture, for a common time basis
Time	You need to set the actual time to communicate with the fixture, for a common time basis
Days until Full moon	To simulate a real moon cycle you need to input the amount of days until the real full moon is happening.

Fan Mode

Here you can select the fan mode. By choosing ON the fans are running continuously. The AUTO-mode is recommended to safe power and to run the LEDs in optimal conditions.

AUTO-Mode:

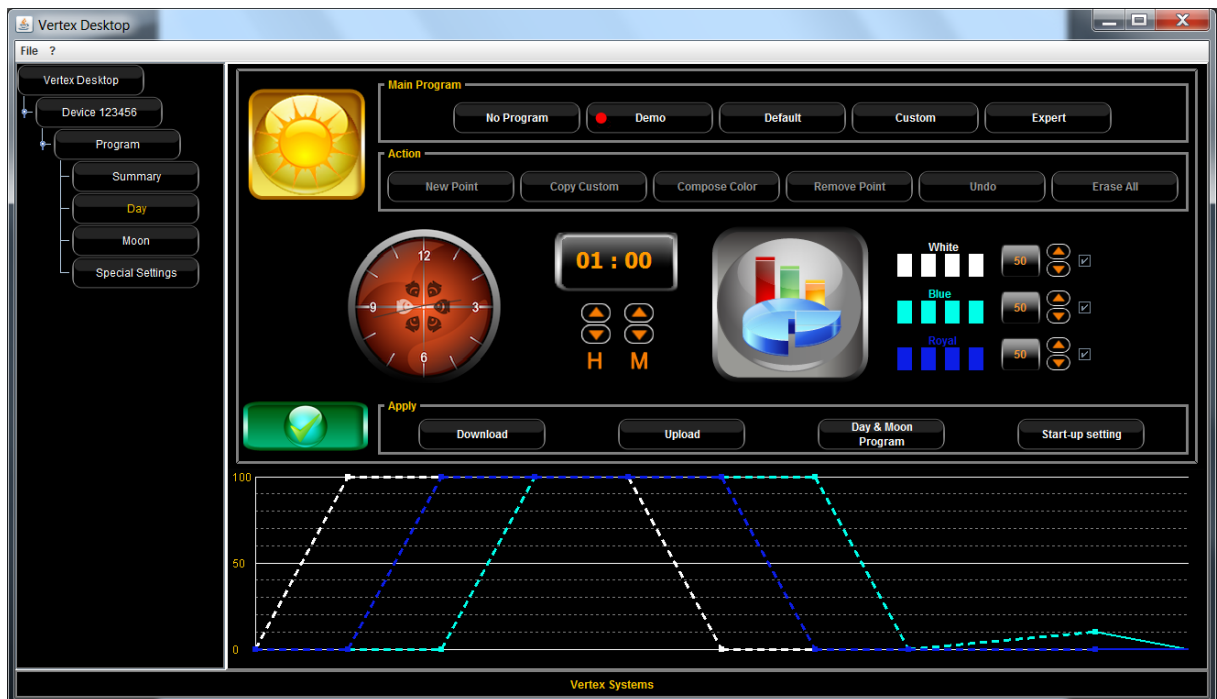| Temperature	Fan speed
0-59°C	Off
60-79°C	Low
80-100°C	High

The fan speed cannot be influenced manually

Language

The shown language on the devices display can be chosen.

Day

Demo

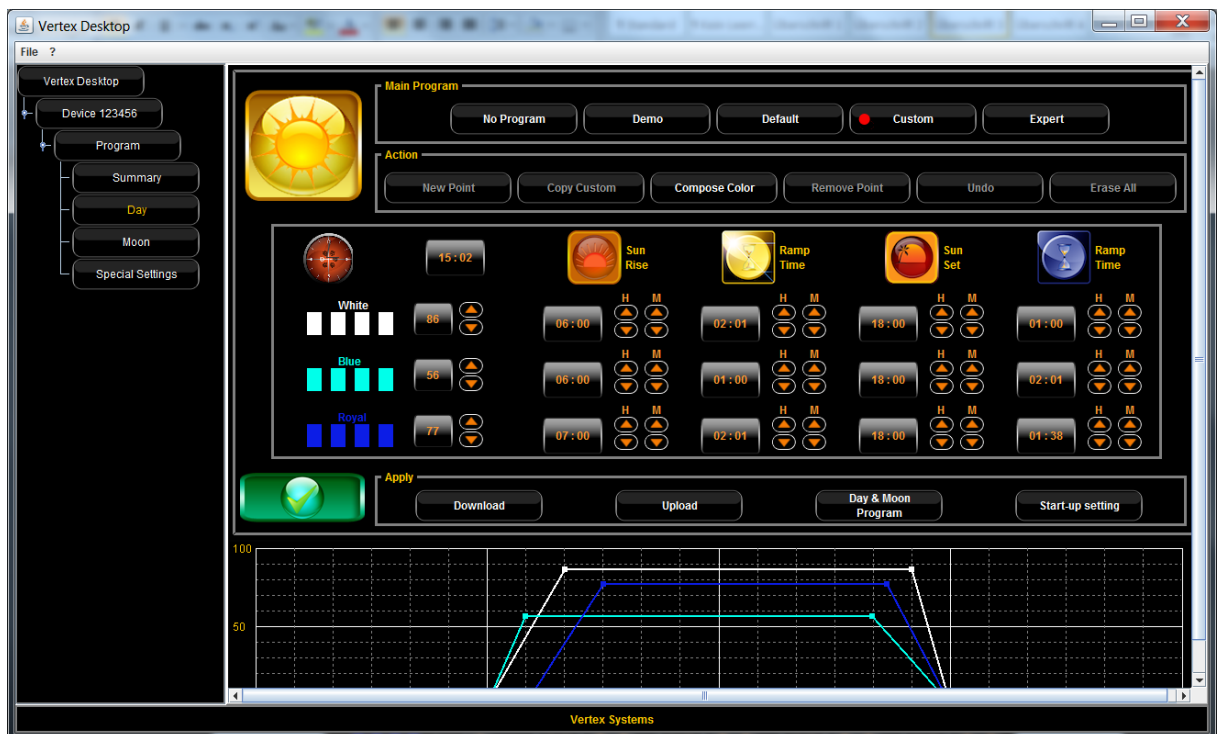The program Demo shows you all possible functions in a shorten time. It is ideal for shows without modifying the main program. No modifications in the programs are possible.

Default

The program Default includes a standard program, which is factory made. No modifications are possible.
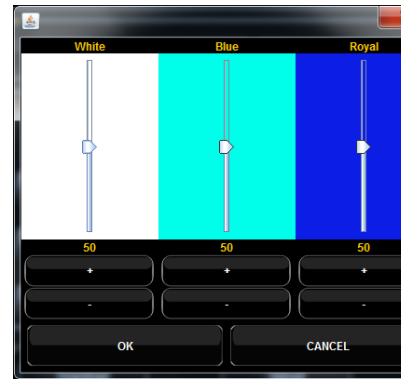
Custom

The program Custom is a template, where all the channels can be parameterized by intensity, rise- and dawn timings separately.

With 'Compose Color' you can modify the intensity of each color the way you like. Each modification will be shown immediately on the device, without influencing any other running program.
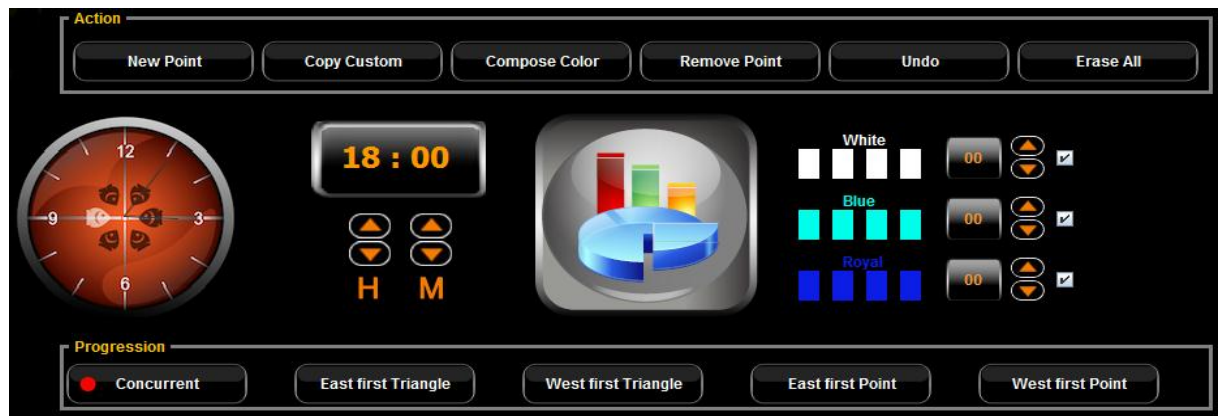

Each color channel can be modified also by changing the times of 'Sun Rise' and 'Sun Set'. Additionally you can set the ramps, so that during the dimming times different color scenes are created.
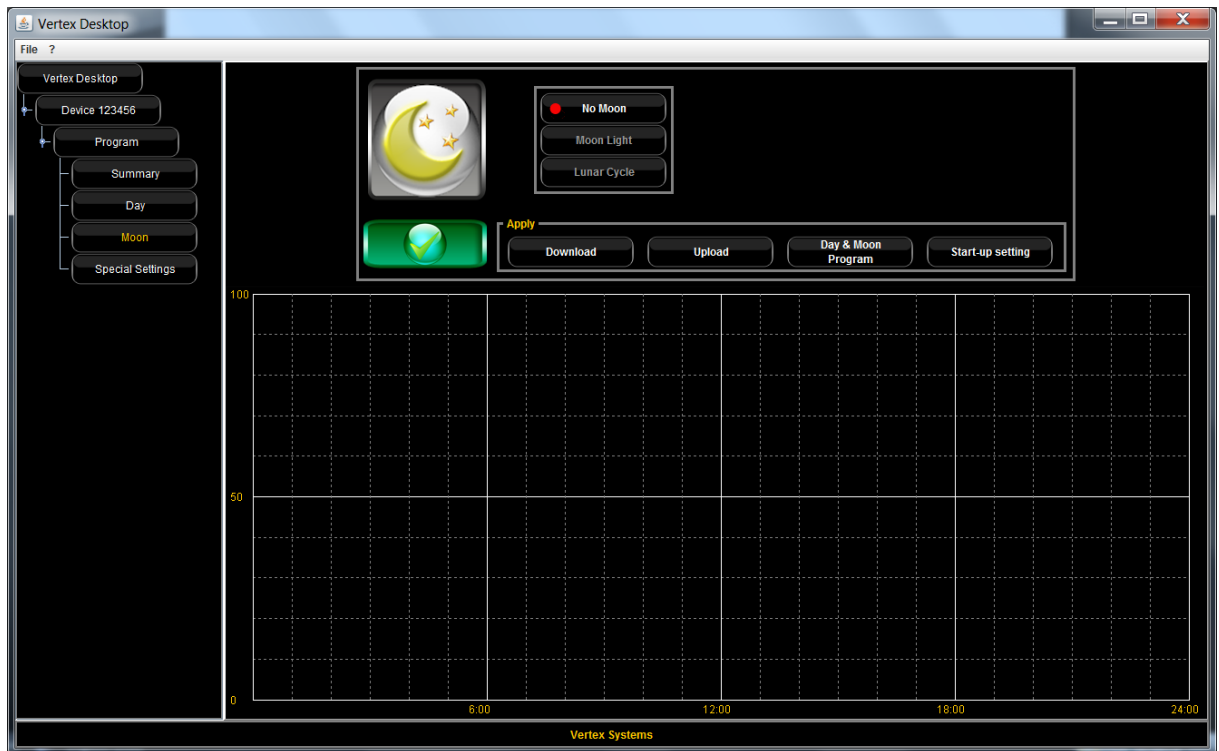
Expert

The program Expert is fully controllable.

Action	Description
New Point	Creates a new point (also possible with right mouse-click into the time grid), after defining time, color and color intensity below. This function will work only when no existing point is already selected
Copy Custom	Copies the Custom-program into the time grid
Compose Color	Modifies the color intensity in real time
Remove Point	Removes a point of the time grid
Undo	Undo the last step
Erase All	Erases the complete time grid

Progression	Description
Concurrent	All pads will be controlled simultaneous
East first Triangle	The pads start to change the intensity one after one, starting from the east side (display side), until all have reached the new intensity settings
West first Triangle	The pads start to change the intensity one after one, starting from the west side (power cable side), until all have reached the new intensity settings
East first Point	The pads are simulating a moving spot starting from the east side (display side) and going to the west side (power cable side)
West first Point	The pads are simulating a moving spot starting from the west side (power cable side) and going to the east side (display side)

Moon

Depending on the selected day-program certain moon programs are available.

Day	Night
No Program	No Moon
Demo	No Moon
Default	No Moon
	Moon Light
Custom	No Moon
	Moon Light
Expert	No Moon
	Moon Light
	Lunar Cycle

No Moon

When the 'No Moon' is selected the devices is completely dark during the night, as long the day program is not overlapping	

Moon Light

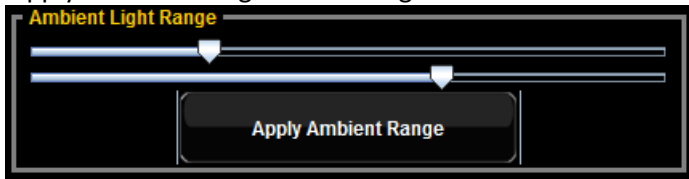|	
The 'Moon Light' provides a continuously light in the night	

With the 'Ambient Light Range' you can select LED-pad-area that shines during the night. With 'Apply Ambient Range' this setting will be transmitted to the device.

Lunar Cycle

The 'Lunar Cycle' simulates a real moon cycle.

Please bear in mind to adjust the correct number for 'days until full moon' in 'Summary – Time/Date'!

As soon the 'Lunar Cycle' is chosen you can select on the right side different moon cycle programs.

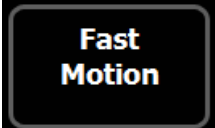| Type of moon cycle	Description
Solid Lunar Cycle	Moon intensity changes similar to real moon cycle
Rising Lunar Cycle	Moon intensity changes similar to real moon cycle but will be dimed up and dimed down
Triangle Lunar Cycle West first	Moon intensity changes similar to real moon; the pads will be dimed up one by one from the west side (power cable side) until all are illuminated, then the pads will be dimed down again from the west side until all are cleared
Triangle Lunar Cycle East first	Moon intensity changes similar to real moon; the pads will be dimed up one by one from the east side (display side) until all are illuminated, then the pads will be dimed down again from the east side one by one until all are cleared
Point Lunar Cycle West first	Moon intensity changes similar to real moon; the pads are simulating a moving spot, starting from the west side (power cable side), going to the east side (display side), so no more than maximum 2 pads are active at the same time
Point Lunar Cycle East first	Moon intensity changes similar to real moon; the pads are simulating a moving spot, starting from the east side (display side), going to the west side (power cable side), so no more than maximum 2 pads are active at the same time

For 'Moon Light' and 'Lunar Cycle' you can compose the moon color as you want with 'Compose Moon Color'.

Special Settings

In 'Special Settings' you can modify additional features, that the device is able to run.

Fast Motion

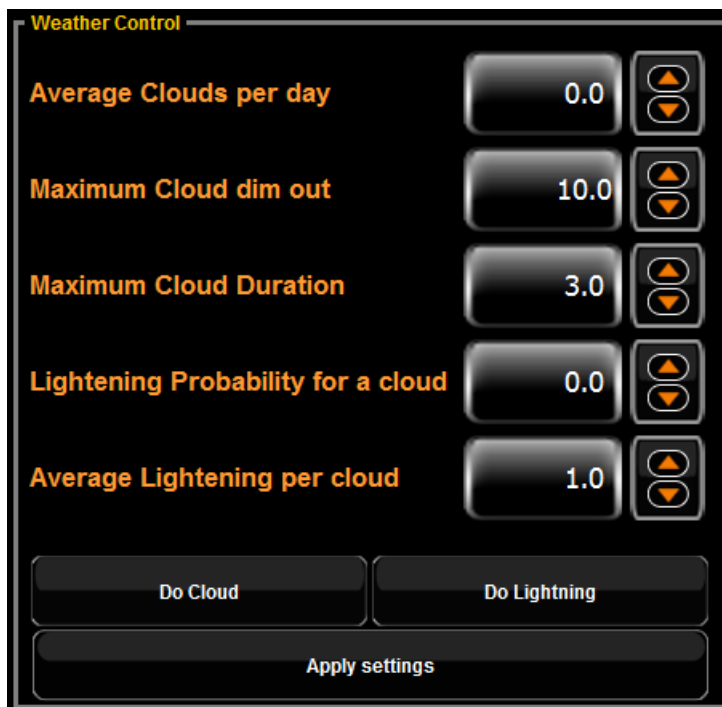|		
Fast Motion		By click on 'Fast Motion' the done programs of a complete day (24hrs) are time lapsed onto 3 minutes.

Pad Enable

Enable (Module 1-6 suns)		By clicking on the sun selected LED-pads can be separate activated or deactivated.

Weather Control

Button	Description
Average Clouds per day (0-20)	Definition of how many clouds per day in the average are whished
Maximum Cloud dim out (0-100)	Defines the maximum dim out ratio in percent
Maximum Cloud Duration (3-60)	Defines the maximum cloud duration in minutes
Lightening Probability for a cloud (0-100)	Defines the probability of lightening events for one cloud in percent
Average Lightening per cloud (0-60)	Defines an average amount of lightening that can occur during a cloud event

Programming the device

After modifying all settings you need to write the program into the device. Therefore you have in the menu 'Day' and 'Night' the 'Apply-bar'.
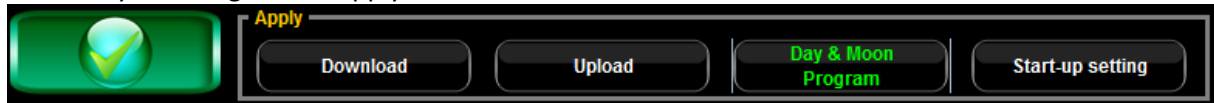
Button	Description
Download	Downloads the actual custom and expert graphs from the device into Vertex Desktop
Upload	Uploads the custom and expert waves onto the device and activates it
Day & Moon Program	Activates the selected day and moon program in the fixture
Start-up setting	Stores all fixture settings into its flash memory, finally. So the settings are save against power failure

Firmware update

Important Notice:

- Perform firmware updates at your own risk. Vertex provides no warranty in case of damages due to user aborted firmware updates.
- Interfering with the firmware update process may render your fixture non functioning.
- Firmware updates overwrite the existing configuration be sure to save your configuration BEFORE performing a firmware update.
- Firmware updates revert the fixture back to factory default settings.
- Only perform firmware updates to correct software behavior or to enable new features.
- Please only update one firmware version at a time. Updating multiple devices at the same time and place will not work and may cause damage to your fixture.

We strongly recommend using the Vertex desktop application on a laptop computer so you can be within a short distance (2 Meters or 6 Feet is ideal) to your Illumina fixture. This way communication between the VLink adaptor and your fixture will be faster and much more reliable.

Unmount the device in the VLink application before performing the firmware update and set it to Channel 0 if not already to ensure a good radio link. Check for adequate LQI before starting. Values of -70 are good but -65 will be better.

Follow these steps to update the firmware on your fixture:

1. If using a laptop computer make sure it is plugged into a power source and any screen savers are disabled
2. Download and extract the firmware archive to your computer and note the location
3. Connect the VLink USB dongle to your computer.
4. Launch the Vertex desktop application and wait for your fixture to connect
5. Click on "Summary" then "Software Update"
6. Browse to the firmware file on your computer and press ok

7. In the pop up window press the Start button allow the update process to complete without interference
8. Once the progress bar reaches 100% the new firmware is installed

("Necessary Update" updates only the master module (Module 0) located directly next to the display.)

Module Layout example:
Controller Display> Module 0> Module 1> Module 2> Module 3> Module 4 etc.

In case of a failure to update the firmware for whatever reason use the rescue mode described below to recover.

1. Unplug the power
2. Press and hold the 2nd Button from the Right of the display
3. The blue LED's will flash for a brief moment indicating that the recovery procedure was successful

You may now retry the firmware update process.

To recover modules other than the master module 0 you must follow these instructions:

1. Carefully remove the fixture endplate on the power cord side
2. Slide out the acrylic glas shield carefully and place it in a safe location
3. Press the small button next to the white auxiliary expansion plug on the module
4. Power on the fixture and retry the firmware update process

- After installing the software and using VStick the connection will not be established:
  - Reason 1:   The VStick is too far from the device.
  - Corrective 1:   Place the computer in a range of approx. 2m (6 ft) to the device

  - Reason 2:   The device seems to be offline.
  - Corrective 2:   After pressing 'Update device' you need to confirm the connection on the device itself with 'Accept'

- Moon program is written, but the device is still dark
  - Reason 1:   The running moon program is close to a new moon
  - Corrective 1:   Wait some days that the moon cycle will increase the light intensity automatically

  - Reason 2:   The moon intensity is too low
  - Corrective 2:   Increase the moon light intensity

For further information to our Vertex™ products please contact your retailer or visit us on:

www.vertexaquaristik.com

Thank you