

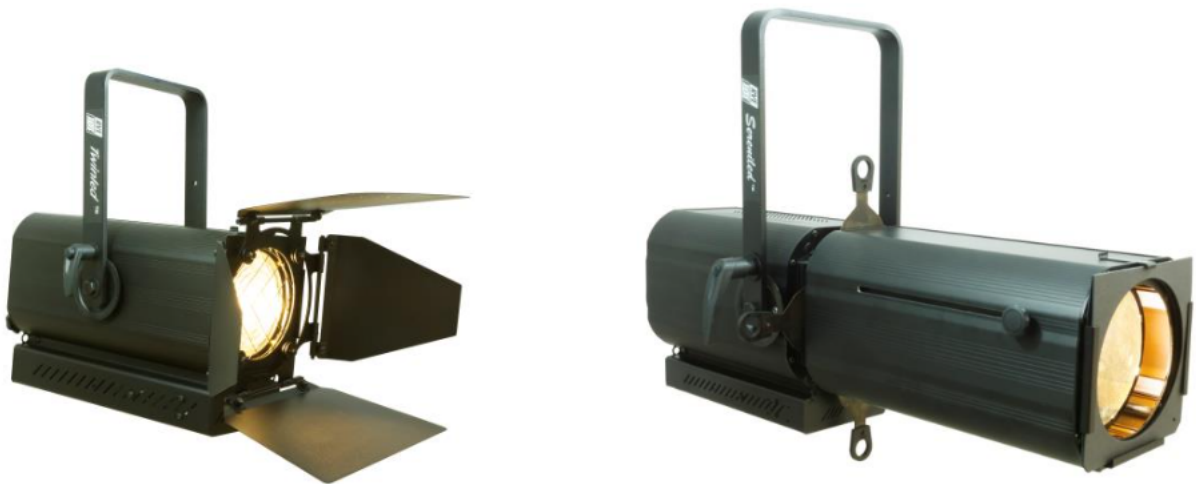


## **USER'S GUIDE**

**SERENILED EVO2**

**SERENILED PLUS**

**TWINLED EVO2**



Usersguide\_serened\_twinled\_evo2\_uk\_ft02\_08112016. RVE reserves the right to make any change in design or construction to the equipment described without prior notification.

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Thank you for choosing this quality product from RVE. We trust our products and services meet your requirements, if not please contact us directly using the attached feedback form to help us improve our service quality.

This fixture has been manufactured with great care and left our factory in perfect condition. If it has been damaged in transport, please contact your dealer first. If you cannot reach a satisfactory solution do not hesitate to contact us directly. A feedback form is appended. Our warranty covers all manufacturing and component defects for two years from the date you received the product.

Our products are designed for the use of professional technicians, and the instructions provided here ensure safe and correct operation of this product. RVE will not accept any responsibility where damage has been caused to the product or persons through improper use of the product and/or non-compliance with the recommendations described herein.

***CAUTION! Electric shock hazard.  
Keep this device away from rain and  
moisture.  
Unplug power cables before opening the  
 housings or panels.***

## **FOR YOUR OWN SAFETY, PLEASE READ THIS USER'S MANUAL CAREFULLY BEFORE INITIAL USE!**

**This is an AC powered electrical appliance, thus standard electrical code, safety precautions and measures for electrical appliances shall apply at all times.**

**Only properly qualified persons should install and handle this equipment, and all procedures outlined in this manual have to be followed.**

The instructions hereafter ensure a safe and correct usage of this product. User's failure to comply with the installation, operating, maintenance and safety procedures recommended in this manual, as well as those generally applicable to this lighting equipment, may cause the product to not perform as expected.

RVE declines any liability for direct, indirect, incidental, special, or consequential damages resulting from the customer's failure to follow the installation, operating, maintenance and safety procedures outlined in this manual or those generally applicable to lighting equipment.

This liability waiver includes personal injury, property damage, loss of operations, loss of profits, loss of product or loss of time, whether incurred in by the customer, the customer's employees or any third party.

Apart from the instructions given in this manual, all relevant safety and health-related standards, codes and regulations pertaining to the location where this device is being used must be complied with.

## 1 - IMPORTANT SAFETY INFORMATION

This product is designed for interior use only. For details on maximum ambient temperature, minimum distance from flammable objects, please refer to the product label.

Continuous main power is required for this fixture to operate. An internal dimmer controls the light intensity via DMX or local input device.

**CAUTION: Use of a phase control dimmed main supply may damage the internal electronics.**

Some products must be fitted with a front protection shield (wire guard or safety glass). Should this not be supplied as a standard accessory, please make sure you buy it separately and install it before using the product. Please follow your local code in this regard.

There are no user serviceable parts in this product. Replacement of any internal component of this product must be carried out exclusively by professional personnel and only with original RVE components. Replacement of any part of the wiring system must comply with the original wiring diagram and with components identical or compatible with those originally fitted.

This product must be fitted with a secondary holding system such as a safety chain or link. Should this not be supplied as a standard accessory, please make sure you buy it separately and install it before using the product. Please follow your local code in this regard.

Installation of this product must be exclusively carried out by professional personnel in compliance with the safety standards, codes and regulations of the location where the product is used.

## 2 - BOX CONTENT

**If something is missing, please contact RVE or your local dealer.**

**For the SERENILED and SERENILED PLUS models:**

With Fresnel and Pebble lens fixtures:

- One power supply cable (2m) equipped with a PowerCON TRUE1™ connector
- One 185 x 185mm color filter holder
- One lens safety guard
- One user's guide
- One safety cable

With Profiles:

- One power supply cable (2m) equipped with a PowerCON TRUE1™ connector
- One 185 x 185mm color filter holder
- Four shutters
- One user's guide
- One safety cable

### **For the TWINLED models:**

With Fresnel:

- One power supply cable (2m) equipped with a PowerCON TRUE1™ connector
- One 136 x 136 mm color filter holder
- One lens safety guard
- One user's guide
- One safety cable

With Profiles:

- One power supply cable (2m) equipped with a PowerCON TRUE1™ connector.
- One 136 x 136 mm color filter holder
- Four shutters
- One user's guide
- One safety cable

## **3 - OVERVIEW OF THE LED FIXTURE**

Unlike conventional tungsten-halogen fixtures, this RVE fixture uses a LED solid-state electronic light source, which is more energy efficient and longer lasting than a tungsten-halogen lamp. The implications of using a LED source are as follows:

The LED is built in the fixture, if and when the time comes to replace it, this will require servicing via your local dealer. The LED is not a plug-in replacement component and is not user serviceable.

The color temperature of the LED is fixed at a factory level, for example "warm" 3200K theatre standard, or "cool" 5600K, which is becoming more common in TV studio applications and in theater using color filters.

Although regular color filters may be used with LED sources, the non-continuous spectrum of LED produces a different effect with many standard colors. Lee Filters, Rosco and other manufacturers supply color filters dedicated to LED fixtures. These LED filters are generally matched to 6000K (cool) white sources. Please check that you are using the correct source/filter combination.

This fixture requires a constant main power supply (not a dimmed supply) and optionally a DMX signal. The DMX signal is used to control beam intensity and other adjustable features. Refer to the operational section of this manual for details.

### **3.1 - Mechanical Operation**

**The mounting yoke** is designed to allow the fixture to be suspended from above using a C-clamp or similar, or supported on a stand or bracket from below. **Note:** the fixture location must provide for suitable ventilation to the LED module.

**Focus controls** is located on the rear end (Fresnels) or side (Profiles) of the fixture. On Fresnels turn the knob clockwise to narrow the beam (SPOT). Turn the knob counterclockwise to widen the beam (FLOOD). The beam distribution (peak/flat) is fixed.

**Beam shaping** is done with a 4 leaf barndoor optional attachment (Fresnels), or with shutters (Profiles).

### 3.2 - Control Functions and Operation

To set up the fixture, you must use an appropriate hook clamp, as well as a safety chain or cable according to the regulations of the location it is used in.

### 3.3 - Main Power Supply Connection

If the power cable is supplied bare, make sure to install a proper power supply connector on it. The wiring is as follows: blue is neutral, grey is the phase, green/yellow is ground.

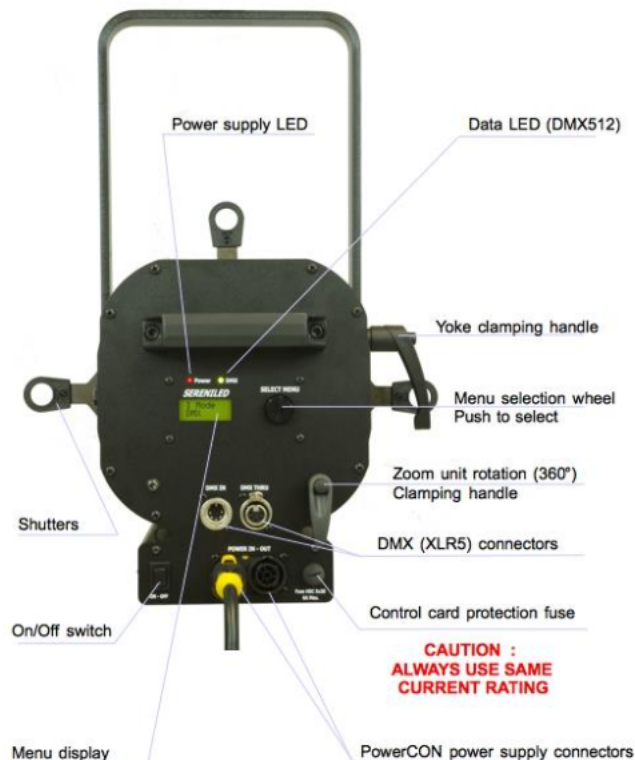
Plug the PowerCON plug into the proper PowerCON socket on the fixture rear panel. The yellow PowerCON connector is plugged by inserting and twisting into the rear panel. Plugging it and unplugging it under power will result in no damage.

Through the use of optional PowerCON extension cords, fixtures can be chained for power with an absolute limitation of 1500W per chain. PowerCON plugs (yellow) can also be plugged into each other, thus making it possible to extend extension cords by connecting one to another.

**WARNING:** The power supply line must be protected according to usual safety standards. The 5x20 6A fuse located at the rear of the fixture only protects the electronic control card and not the power supply.

Switch the fixture on with the switch on the rear panel.

### Profile Layout:



## Fresnel Layout:

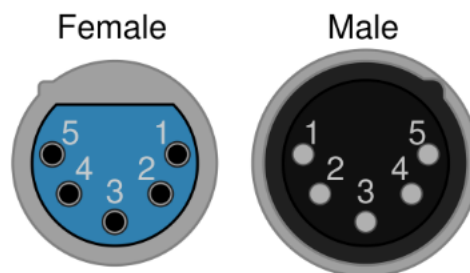


### 3.4 - DMX 512 data control

To control the fixture remotely from a console or other DMX 512 system, plug in a DMX 512 cable equipped with XLR 5 in the XLR 5 pins male base at the rear of the fixture, the other end of the cable is plugged into the lighting console DMX output, or to another element of the DMX chain.

XLR 5 plug pin assignment:

- Pin 1: 0
- Pin 2: Data -
- Pin 3: Data +
- Pin 4: Not used
- Pin 5: Not used



### 3.5 - LED indicators

The power LED (red) on: Power supply on (in auto off the LED will be off after 1'30" of inactivity even though power is still on.)

The data LED (green) off: Demo mode or Manual mode

The data LED (green) on, static: DMX mode active with no DMX signal present

The data LED (green) blinking: DMX mode active with DMX signal reception



### 3.6 – Control panel

The control panel consists of:

- The back-lit LCD displaying 2 lines of 8 Characters
- A selection wheel with push select function

The menu selection wheel allows you to select and modify the configuration of your fixture. Turn left or right to navigate through the menus and push the wheel to select or confirm your choice.

By default, the display is on "stand by" mode which quickly allows you to see the current selected mode: DMX, Manual, or Demo and the dimming level of the fixture.

In "standby" mode, a short push on the menu selection wheel allows direct access to the last used menu, the rotation of the wheel to the left or right selects one of the 13 available functions in Pro mode, or one of the 3 available functions in Basic mode. To modify the selected function, short push on the wheel, an arrow (←) appears at the bottom right of the display. The rotation of the wheel will then move through the different setting options available. To validate a setting, just press a short push on the wheel.

Exception: in the Menu function 1, when selecting the operating mode of the fixture (Manual, DMX or Demo), the displayed choice is automatically validated after 3 seconds, unless a short push on the wheel validates it before that.

Your fixture automatically saves its operating mode (Manual, DMX512, Demo) and the level setting (Manual mode only). The fixture will automatically restart in this mode and at this level (Manual mode), if the setting has been entered at least 30 seconds before switching the fixture off.

**NOTE:** The display goes back to "stand by" position automatically in the absence of any action for one minute.

## 4 - SETTINGS AND OPERATION

**In Basic Mode only functions 1, 2 and 13 below are accessible.** (see Chapter 5.1 for selection)  
**In Pro mode** the 13 available menu functions are (Summary in appendix A):

### 1 – OPERATING MODE (MODE)

This function defines the operating mode: Manual, DMX or Demo

**The DMX mode is selected by default.**

### 2 - DMX ADDRESS (Addr)

This function sets up the DMX patch of the fixture (DMX address). The given address is channel 1 of the fixture, the 3 others following channels have consecutive numbering (+1 for each channel).

**The DMX ADDRESS is 001 by default.**

**Note:** In DMX mode, the fixture can use up to 4 DMX channels (channel 1: 8 bits Dimmer, channel 2: 16 bits Dimmer, channel 3: Strobe, channel 4: Frequency).

For a maximum performance, you should consider the RVE LED fixture as a "moving light". Thus we recommend, if this is not already the case, to create a "model" in the library of your lighting console. You will find at the end of this user's guide all the details on DMX channels allowing you to create such a model.

(cf. Appendix B: TWINLED / SERENILED / SERENILED PLUS DMX MANAGEMENT PROTOCOL SOFT VER 1.0).

### **3 - DIMMER RESOLUTION (8/16b)**

This function sets up the dimmer in 8 or 16 bit mode. The 16 bit mode optimizes the dimming of the LED at low level.

**The dimmer mode is the 8 bit one by default.**

### **4 - REMOTE PARAMETERS CONFIGURATION (DMXCfg)**

This function, when enabled, allows remote control through DMX of: 1-The adjustment of the operating frequency of the LED, and 2-Strobe speed.

**This function is disabled by default.**

### **5 - LAST DMX LEVEL MEMORISATION (DMXMem)**

This function sets up the fixture fail safe status in case of loss of DMX signal. Three options are available in case of loss of DMX signal:

**ON:** the fixture remains at the last received DMX level.

**OFF = 80%:** the first two DMX channels (respectively: 8 bit mode, 16 bit mode) go to 80% after 1.5 seconds, channel 3 (Strobe) goes to zero (Open).

**OFF = 0%:** the first three DMX channels (respectively: 8 bit mode, 16 bit and Strobe) go to 0% and 0 respectively.

**This setting is ON by default.**

### **6 – STROBE ACTIVATION (STROBE)**

This function enables the strobe effect.

Disable: Strobe disabled

Enable: Strobe activated

**The strobe is disabled by default.**

**Note:** If the strobe is activated (Enable) and the DMXCfg function is also enabled, the speed of the strobe will be controlled by the lighting console (third DMX channel of the fixture).

If the strobe is activated (Enable) and the DMXCfg function is disabled, the speed of the strobe will be controlled only directly from the fixture through the selection wheel (Menu function 7).

### **7 - STROBE SPEED ADJUSTMENT (SetStr)**

This function allows setting the strobe speed:

**OPEN:** No flashing, on at the light level set either by the fader, the manual input or the DMX value

**SPEED 01 to 10:** SPEED 01 = slow strobe, SPEED 10 = fast strobe  
**CLOSED:** Blackout

The strobe is set to **OPEN** by default.

**Caution:** if the strobe is closed, the LED remains locked to Blackout and the dimming up is disabled.

The setting of this function is ignored when the strobe function is disabled, or when the strobe is remotely controlled through DMX (requiring DMXCfg function enabled).

## 8 - DIMMING CURVE (Curves)

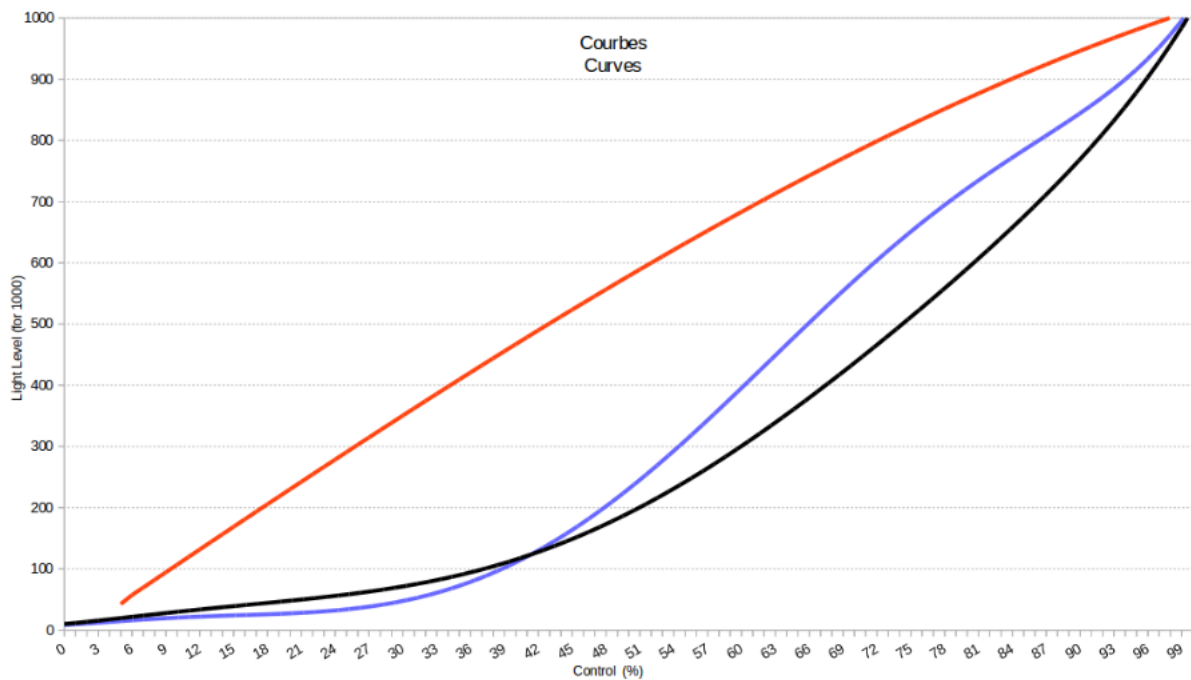
This function offers a choice from 3 different dimmer response curves for the LED:



**LED-HAL** reproduces a halogen source dimming curve.

**SQUARE** offers a slightly more regular, yet still similar to halogen, dimming curve.

**LINEAR** offers a straight, proportional LED dimming curve.

The selected curve is **LED-HAL** by default.



	<b>LINEAR</b>
	<b>LED-HAL.</b>
	<b>SQUARE</b>

**Note:**

In Manual mode (the dimming level is controlled locally with the selection wheel), the light level is directly controlled by the user, and the fixture uses the linear curve regardless of the selected curve in this function.

**9 - CUT OFF DIMMING RESPONSE (CutOff)**

This function is used to provide a LED behavior similar to a halogen lamp during the dimming cut off. The values are either fast or slow. Fast provides an instantaneous cutoff of the light level, slow provides a delayed cutoff similar to a halogen filament cooling down.

**The cutoff function is on SLOW by default.**

**10 - TRANSITION BEHAVIOUR (Smooth):**

This function sets the LED dimming response for the transitions between points. Off makes for a direct transition. Fast and slow smoothen the transitions respectively.

**The smooth function is set to SLOW by default.**

**11 - LED FREQUENCY ADJUSTMENT (Freq):**

This function adjusts the LED frequency to avoid interference with cameras. The frequency can be selected from a table of different values, for example 469Hz or 3kHz (not indicative, your product may have different values). When the DMXCfg function is enabled, the frequency set is controlled through the dedicated DMX channel and this menu becomes inactive.

**The frequency is set to 3kHz by default.**

**12 - LCD SCREEN ILLUMINATION (BackL):**

This function controls the LCD backlight and power LED (red). They are either on at all time or turned off automatically after 1'30" has elapsed after the last input.

**The screen illumination is set to AutoOFF by default.**

**13 - SOFTWARE VERSION AND TEMPERATURE CONTROL (V 1.0):**

This menu displays the software version and the LED temperature in °C or °F.

**5 - SPECIAL FUNCTIONS****5.1 - PRO or BASIC Controls (ProBasic)**

The PRO-BASIC function is a special function which limits the access to the control Menu. To activate this function, turn OFF and ON the Power switch while maintaining a long push on the selection wheel. You can then select ProBasic with the selection wheel and push to select and access this menu.

From there, select either:

**PRO**, to enable access to all the functions, or

**BASIC**, to limit access to solely functions 1, 2 and 13, that is Mode, DMX address and version/temperature display.

**The fixture is set in PRO MODE by default.**

## 5.2 - RESET

The RESET control is a special function allowing to RESET the products to factory default settings. To activate this function, turn OFF and ON the Power Switch while maintaining **a long push** on the selection wheel. Select RESET with the selection wheel and push to reset the fixture to all factory default settings.

## 6 - MAINTENANCE

### 6.1 - FUSE REPLACEMENT

The fuse holder is fitted on the rear of the unit.

Type: 6.3A 5x20mm, 250 VAC/DC fast blow fuse

**CAUTION: Only replace the fuse with the power cable disconnected.**

### 6.2 - CLEANING AND MAINTENANCE

To ensure optimum performance of the product, a regular maintenance service should be carried out. Please make sure the product is cold and disconnected from the power supply when doing this.

#### General maintenance

Clean all optical parts such as lenses, if necessary by opening the product to clean inside surfaces.

Check the lens(es) for cracks or chips and replace any visibly damaged component.

Clean air ducts and fans to ensure adequate ventilation for the LED and the power supply.

Check internal and external wiring and replace any cable which presents obvious mechanical damage or has been affected by heat.

## 7- SPARE PARTS

All components are available as spare parts. We strongly recommend that you always use original RVE components as spare parts. Please refer to our technical assistance department should you need to order and/or replace any part of the unit.

## 8 - WARRANTY

Our warranty covers all structural and manufacturing defects for a period of two (2) years from the date of purchase. In case of issues, we strongly recommend that you first contact your dealer who delivered the product to you. If you cannot obtain satisfaction there, then please contact our factory or its local representative. In all cases, please document the serial number located at the rear of the fixture.

## RVE LED FIXTURE FUNCTIONS SUMMARY

#	Function	Description	Available Options	Factory Setting
1	<b>Mode</b>	Mode control	<b>MANUAL</b> (control through the selection wheel) – <b>DMX - DEMO</b>	<b>DMX</b>
2	<b>Addr</b>	Selects the DMX starting address. Other remotely controlled functions are assigned in sequence to the 1st assigned DMX address	from 000 to 512	<b>001</b>
3	<b>8/16 Bit</b>	8 or 16 Bit dimming resolution	8 bits on 1 channel - 16 bit on 2 channels	<b>8 Bit</b>
4	<b>DMXCfg</b>	If set on Enable, remote control through a dedicated DMX channel of the LED frequency and the strobe speed is allowed	<b>ENABLE - DISABLE</b>	<b>DISABLE</b>
5	<b>DMXMem</b>	Sets the behavior of the unit in case of DMX failure	<b>ON</b> =last DMX value; <b>OFF</b> =80% fades to 80% after 1.5 Sec; <b>OFF</b> =0% fades to 0	<b>ON</b>
6	<b>Strobe</b>	Activates the strobe function	<b>ENABLE - DISABLE</b>	<b>DISABLE</b>
7	<b>SetStr</b>	Selects the Strobe speed. This function is inactive when the strobe function is disabled or when <b>DMXCfg</b> function is set to Enable	<b>OPEN = ON</b> ; <b>SPEED = xx</b> (select value from 01 slowest to 10 fastest); <b>CLOSED = OFF</b>	<b>OPEN</b>
8	<b>Curves</b>	Selects the dimming curve	<b>LED-HAL</b> ; <b>SQUARE</b> ; <b>LINEAR</b>	<b>LED-HAL</b>
9	<b>CutOff</b>	Replicates the halogen lamp dimming behavior at cut off	<b>FAST</b> =NOT ACTIVE; <b>SLOW</b> =ACTIVE	<b>SLOW</b>
10	<b>Smooth</b>	Dimmer evolution between points	<b>OFF</b> =Immediate response; <b>SLOW</b> =300ms; <b>FAST</b> =150ms	<b>SLOW</b>
11	<b>Freq</b>	Sets the LED frequency. This menu is not active when <b>DMXCfg</b> is enabled.	List of available frequencies	<b>3kHz</b>
12	<b>BackL</b>	LCD screen backlight and Power LED	<b>ON</b> ; <b>AutoOFF</b> =LCD light off after 1'30"	<b>AutoOff</b>
13	<b>V 1.0</b>	Visualizes the software version and LED temperature	select LED Temp in °C or °F	<b>°C</b>

**SPECIAL FUNCTIONS: Activated by maintaining the selection wheel pushed while turning the power switch of the fixture on.**

#	Function	Description	Available Options	Factory Setting
1	<b>ProBasic</b>	Operation mode	<b>PRO</b> : enables access to all the functions – <b>BASIC</b> : limits the access to functions: 1 Mode, 2 DMX Address and 13 V 1.0	<b>PRO</b>
2	<b>RESET</b>	Factory default <b>RESET</b>	Restores all settings to factory default	N/A

10 – APPENDIX B

TWINLED / SERENILED / SERENILED PLUS DMX MANAGEMENT PROTOCOL SOFT VER 1.0

<u>Channel</u>	<u>Entity</u>	<u>Values</u>
1	Dimmer	0-255 Light level values from 0 to 100%: proportional (LTP) in 8 bit mode
2	Fine dimmer	0-65535 Light level values from 0 to 100%: proportional (LTP) In 16 bit mode
3	<u>Strobe Speed</u> Available only if DMX Cfg ON (Off by default)	Not Used (8 bit mode)
3		0-20: Open 21-40: Speed (slow) 41-60: Speed 61-80: Speed 81-100: Speed 101-120: Speed 121-140: Speed 141-160: Speed 161-180: Speed 181-200: Speed 201-220: Speed (fast) 221-240: Closed and reserved 241-255: Closed
4	<u>Frequency</u> Available only if DMX Cfg ON (Off by default)  Note: for technical reasons, all frequencies may not be available on all products.	0-20: 3kHz 21-40: 2.4kHz 41-60: 2.0kHz 61-80: 1.7kHz 81-100: 1.5kHz 101-120: 1.3kHz 121-140: 1.2kHz 141-160: 1.1kHz 161-180: 939Hz 181-200: 760Hz 201-220: 610Hz 221-240: 469Hz 241-255: Reserved