



5LED



EVO

SERIES USER MANUAL

May 2019. Firmware V01.01

VELVET

made to last



This guide provides information about how to use the product functions to illuminate with this equipment as well as warnings on his use.

These are products of professional use for exterior and interior locations or studio and must be operated only by qualified technical personnel.

To obtain the maximum features, please read the following operating instructions very carefully before using this fixture for the first time. Please keep these operating instructions for you and subsequent users to reference in the future.

THELIGHT Luminary for cine and TV, S.L.

Every EVO color tunable LED panel is offered in two different version: Weatherproof and STUDIO dustproof. The main differences are:

The WEATHERPROOF version includes:

- Weatherproof protection IP54
- Can be powered both AC 90-264V AC and DC 18-35V DC
- 1x XLR-5 IN connector for DMX-RDM wire control
- Includes Wi-Fi Art-Net wireless remote control
- Includes built-in LumenRadio for DMX-RDM wireless control

The STUDIO version includes:

- Dustproof protection IP51
- Must be exclusively powered on AC (90-264V AC)
- 2x XLR5 connectors (In and Through) for DMX-RDM wire control
- Includes Wi-Fi Art-Net wireless remote control
- Includes 1x RJ45 connector for Ethernet wire control



The symbols and their meanings are explained below.

**WARNING**

Possible risk of injury or damage to equipment

**DANGER**

Indicates the risk of electric shock or fire danger that could result in injury or damage to equipment.

In order to protect against risk of electric shock, the installation should be properly grounded. Defeating the purpose of the grounding type plug will expose you to the risk of electric shock.



Do not open the product. The housing is sealed with several watertight gaskets that will get immediately damaged when trying to open the housing. Doing so will invalidate the IP54 rate and therefore the product warranty.

Do not attempt to repair any part of the product on your own. Maintenance and repair work to be carried out only by VELVET Service Centre.

Do not cover the aluminum lamp head heat sink while using it. Proper ventilation must be provided. Avoid exposing the lamp head to the heat radiation of other light fixtures.

Do not power on the product if the ambient temperature exceeds 45 °C.

Never point a light beam from another fixture into the light EVO source.
Do not place the product on heat sources.

Never connect the product to a dimmer system or a dimmer channel in non-dim mode. Doing so will damage the EVO fixture electronics. Damages caused by connecting the product to a not suitable power source are not covered by the warranty.



The lamp head is equipped with power LED. Due to their high light-output intensity don't stare directly into the light source.

Though the light generated by LED does not produce any heat, for what his use turns out to be very comfortable for the actors, the lamp head acts as a heat sink through its back part.

Surface can reach a temperature between the 20 °C and the 70 °C. Please use protective gloves if you touch the lamp head at the heat sink.

VELVET (THELIGHT Luminary for cinema and TV, S.L.) does not assume any responsibility for lighting failures caused by malfunction of this product. The manufacturer disclaims liability for any damage to persons or property caused by inappropriate operation, damage of this kind lies in the responsibility of the operator.

WARRANTY

This product is manufactured to local specifications and the warranty is valid within the country of purchase. Should the product fail or malfunction while you are abroad, the manufacturer assumes no responsibility for servicing the product locally or bearing the expenditure incurred thereof. Various symbols are used throughout this instruction manual and on the product to prevent physical harm to you or other people and damage to property.



This equipment has been checked and meets the requirements of general safety for electronic devices. These requirements are specified to provide a reasonable protection against electromagnetic interferences when the equipment is used in commercial environments.

This equipment generates, uses and can emit waves of radio frequency, and if not properly used following the instructions of this manual can produce interferences in radio communications. The use of this equipment in residential areas can produce interference, the user will be the only responsible of correcting them.

www.velvetlight.tv

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VELVETLight technology is protected under Spanish license laws with international patents pending.

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Thank you for selecting EVO LED panel from VELVET. The EVO is a compact, portable, silent, maintenance-free and high-quality color tunable LED soft light. It is much more efficient than a traditional soft light and is the LED soft light efficiency market leader with 4.1 Lux per watt.

The EVO panels emit variable colored light with adjustable color temperature and adjustable green/magenta correction. Every EVO model can be controlled using DMX-RDM protocol, Art-Net through LumenRadio wireless, Wi-fi Art-Net or locally with shock-resistant buttons and color display.

RICH COLORS

5LED FULL COLOR SPECTRUM LIGHT

EVO full color spectrum light is produced by the exclusive technology developed by VELVET for professional photography, cinematography and television industry use. It brings the most advanced color technology in an LED lighting panel. The combination of 5 LED (R+G+B+W+CW) extend the color possibilities over traditional RGBW technology, producing a much wider color gamut, a more natural white light and richer, saturated colors. The EVO 5LED technology offers higher degree of color control:

- Any base white light color temperature can be set to apply any color or gel.
- Settings on one mode can be fine-tuned in any other.

SILENT & COOL LIGHT

The EVO runs completely silently, with no fans to service, it does not emit any infrared or UV radiation therefore does not forward heat, making actors feel comfortable into its light beam.

LEADER ON EFFICIENCY

The VELVET EVO leads the industry in electronic and optic efficiency. This has real on-set advantages, and a whole cascade of benefits:

- More running time off standard 14.4V Vlock or Gold Mount batteries
- 100% fan-free and silent operation (no maintenance required)
- Full output from both AC and DC power

TOTAL CONTROL BUILT IN

EVO can be fully, quickly and easily controlled in any possible way, locally or wirelessly, or from your smartphone with VELVET App.

WIRELESS

- DMX-RDM through LumenRadio CRMx (only EVO Weatherproof version)
- Wi-Fi Art-Net to control from Smart device VELVET App
- This function will be available along 2019 through Firmware update

WIRE CONTROL

- DMX-RDM through XLR-5 connector
- Art-Net through Ethernet RJ-45 connector (only STUDIO version).

This function will be available along 2019 through Firmware update.

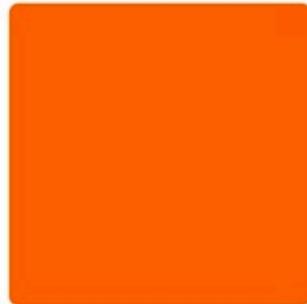
**ON BOARD CONTROL**

The color display offers unlimited possibilities, quick user-friendly control and shock-proof buttons.

- Gels list are displayed as colors
- White light or color adjustment preset is always visible on its real color.

VELVET SUPERSOFT EVO

The EVO produces a super soft uniform, single-shadow, natural light at any white light or color setting. The fully tunable white and color light emitted by EVO produce a beautiful wraparound true-to-life light quality.

[UPDATED SERVICE MANUAL PDF](#)[PRODUCT BROCHURE PDF](#)



EVO 2
WEATHERPROOF

**Ref. VE2CIP54
INCLUDES**

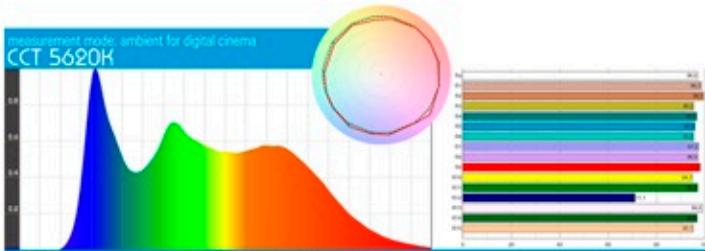
1x EVO 2 Color LED panel IP54 with DC in XLR-3, 1x DMX in XLR-5, 1x Micro-USB, LumenRadio wireless DMX, VELVET WIFI, 1x yoke with 28mm junior pin - 16mm baby receiver, 1x hexagonal baby mount

**Ref. VE2CIP54NY
INCLUDES**

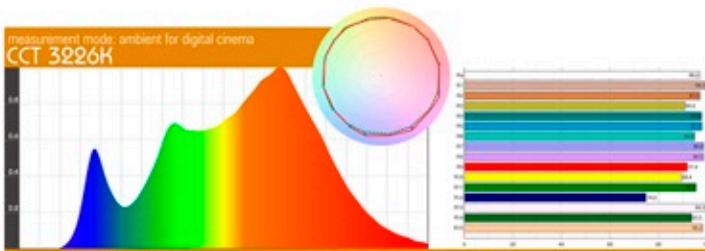
Panel without yoke 1x EVO 2 Color LED panel IP54 with DC in XLR-3, 1x DMX in XLR-5, 1x Micro-USB, LumenRadio wireless DMX, VELVET WIFI, 1x hexagonal baby mount

EVO 2 is a weatherproof panel with a 100% aluminum housing, designed specifically to endure the toughest working conditions in wet or dusty locations. It delivers the same full output powered by two standard V-Lock or Gold Mount batteries as it does from AC power. EVO's back panel has a twist-on plate to quickly install the battery mount, AC Power supply, or center-rig ball joint mount. The EVO 2 weighs only 6.9 kgs / 15.2 lbs and it is just 92mm / 3.6" thick.

RELATIVE VALUE



RELATIVE VALUE





EVO 2
STUDIO

Ref. VE2CST
INCLUDES

1x EVO 2 Color tunable Studio LED panel IP51 with DC in XLR-3, integrated AC power supply, DMX in & out XLR-5, Mini-USB, WIFI Art-Net, 1x RJ45 Ethernet, 1x yoke with Euro 28mm junior pin - 16mm baby receiver, 1x PowerCon TRUE1 power cable.

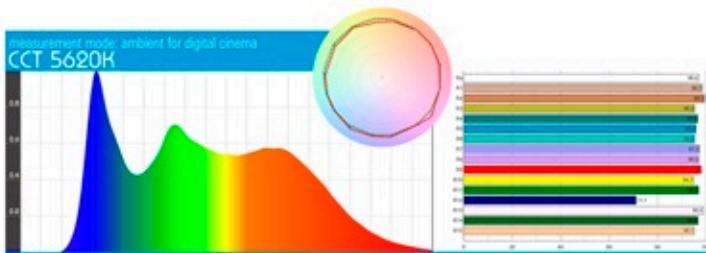
Ref. VE2CSTNY
INCLUDES

1x EVO 2 Color tunable Studio LED panel IP51 with DC in XLR-3, integrated AC power supply, DMX in & out XLR-5, Mini-USB, WIFI Art-Net, 1x RJ45 Ethernet, 1x PowerCon TRUE1 power cable.

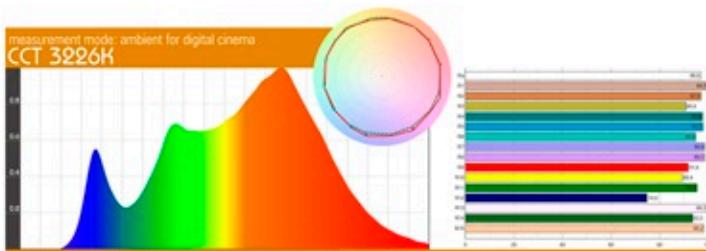
The EVO 2 STUDIO is a dustproof, maintenance-free panel, which runs completely silently, with no fans to service. The STUDIO version operates exclusively on AC power and includes input and output through DMX XLR5 connectors for daisy-chaining. It also includes an Ethernet connection through RJ45.

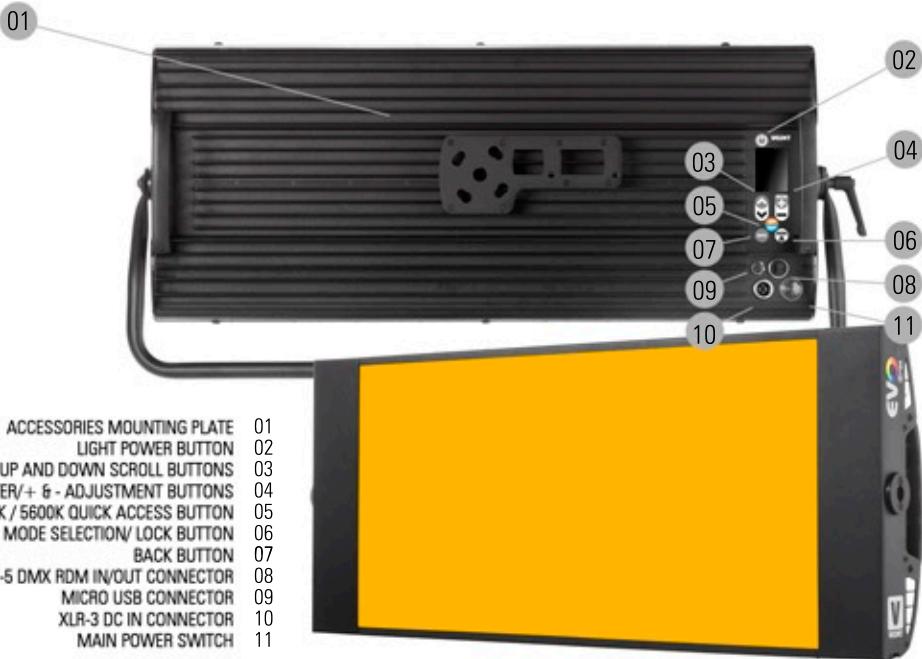
EVO is ideal for studio applications. Its low weight, slim profile and industry leader efficiency with only 200W consumption speed up installation. The EVO 2 Studio weights only 8.9 kgs / 19.6 lbs. Including yoke and it is just 128mm / 5" thick.

RELATIVE VALUE



RELATIVE VALUE





ACCESSORIES MOUNTING PLATE 01
 LIGHT POWER BUTTON 02
 UP AND DOWN SCROLL BUTTONS 03
 ENTER/+ & - ADJUSTMENT BUTTONS 04
 3200K / 5600K QUICK ACCESS BUTTON 05
 MODE SELECTION/ LOCK BUTTON 06
 BACK BUTTON 07
 XLR-5 DMX RDM IN/OUT CONNECTOR 08
 MICRO USB CONNECTOR 09
 XLR-3 DC IN CONNECTOR 10
 MAIN POWER SWITCH 11

BEAM ANGLE

115° Continuously adjustable from 2.500K to 10.000K

COLOUR TEMPERATURE LIGHT INTENSITY

GREEN-MAGENTA Continuously adjustable (full Plusgreen to full Minusgreen)

COLOR

Full color spectrum R+G+B+W+CW with Hue, Saturation and base Color temperature control

COLOR CONTROL MODES

CTT mode, HSI+ mode, GEL mode, RGB+ mode, EFFECTS mode

NOTE: Adjustments are laid over a base white light and can be transferred from one mode to another

CONTROL

- ONBOARD with shock proof buttons and color display

- WIRE DMX-RDM through XLR-5 IN connector

- WIRELESS Wi-Fi Art-Net + Android and iOS VELVET App

Wi-Fi function available along 2019 through Firmware update

COLOR RENDERING INDEX

Exceeds 95 CRI

TLCI

Exceeds 95 TLCI

PHOTOMETRICS

7000 Lux at 1 m/ 650 fc at 3 feet

1000 Lux at 3 m/ 92 fc at 10 feet

DIMENSIONS

753 x 318 x 93mm / 29.6 x 12.5 x 3.6 inches

PANEL WEIGHT

6.9 kg / 15.2 lb

PANEL + YOKE WEIGHT

7.6 kg / 16.7 lb

POWER

200W (1.8 Amps at 110 VAC)

POWER SUPPLY

24-35V DC via XLR3. V-Lock or Gold mount battery plate 90-264V AC 50/60Hz

LED RATED LIFE

Exceeds 50,000 hours

COOLING

Silent and fan-free passive cooling

PROTECTION

IP54 rainproof and dustproof, indoor or outdoor use

CONSTRUCTION & FINISH

Fixture and yoke made of black powdercoated extruded and sheet aluminum

aluminum yoke with 16mm baby receptacle combined with 28mm junior pin, center ball-head mount, multiple 1/4"-20 rigging points, double vertical yoke, pole operated yoke



XLR-5 DMX RDM IN + OUT CONNECTOR	01
LIGHT POWER BUTTON	02
UP AND DOWN SCROLL BUTTONS	03
ENTER/+ & - ADJUSTMENT BUTTONS	04
3200K / 5600K QUICK ACCESS BUTTON	05
MODE SELECTION/ LOCK BUTTON	06
BACK BUTTON	07
MICRO USB CONNECTOR	08
RJ-45 ETHERCON LAN CONNECTOR	09
MAIN POWER SWITCH	10
XLR-3 DC IN CONNECTOR	11
BEAM ANGLE	115°
COLOUR TEMPERATURE	Continuously adjustable from 2.500K a 10.000K
LIGHT INTENSITY	Dimmable 0 to 100, smooth and flicker-free
GREEN-MAGENTA	Continuously adjustable (full Plusgreen to full Minusgreen)
COLOR	Full color spectrum R + G + B + W + CW with Hue, Saturation and base Color temperature control
COLOR CONTROL MODES	CTT mode, HSI+ mode, GEL mode, RGB+ mode, EFFECTS mode NOTE: Adjustments are laid over a base white light and can be transferred from one mode to another
CONTROL	• ONBOARD with shock proof buttons and color display • WIRE DMX-RDM through XLR-5 IN connector • WIRELESS Wi-Fi Art-Net + Android and IOS VELVET App Wi-Fi function available along 2019 through Firmware update
COLOR RENDERING INDEX	Exceeds 95 CRI
TLCI	Exceeds 95 TLCI
PHOTOMETRICS	7000 Lux at 1 m/ 650 fc at 3 feet 1000 Lux at 3 m/ 92 fc at 10 feet
DIMENSIONS	753 x 318 x 113mm / 29.6 x 12.5 x 4.4 inches
PANEL WEIGHT	8.2 kg / 16 lb
PANEL + YOKE WEIGHT	8.9 kg / 19.6 lb
POWER	200W (1.8 Amps at 110 VAC)
AC INPUT VOLTAGE	90-264 VAC 50/60Hz
LED RATED LIFE	Exceeds 50,000 hours
COOLING	Silent and fan-free passive cooling
PROTECTION	IP54 rain and dustproof, indoor or outdoor use
CONSTRUCTION & FINISH	Fixture and yoke made of black powdercoated extruded and sheet aluminum
RIGGING OPTIONS	aluminum yoke with 16mm baby receptacle combined with 28mm junior pin, center ball-head mount, multiple 1/4"-20 rigging points, double vertical yoke, pole operated yoke



The EVO 2 weatherproof IP54 location panel can be powered by AC power, by any battery from 24 to 35 VDC or by any Vlock or Gold batteries and it delivers the same full output both AC and DC powered.

**BATTERY POWER
24 to 35 VDC**



Connect any battery from 24 to 35 VDC to the XLR3 connector located at the back of the panel.

When powering VELVET EVO from an external battery through the XLR3 connector check the proper polarity as shown in the picture at the side of the panel.

To ensure maximum performance of the equipment use only high-load capacity batteries with a high continuous draw meaning a Discharge Current of at least 7A.

**BATTERY POWER DOUBLE
Vlock or Gold Battery**

EVO 2 can also be directly powered with two Vlock or Gold batteries. Attach the quick link double Vlock or Gold plate by aligning the center pin of the mounting plate to the center hole on the panel docking plate. Rotate the Vlock or Gold plate clockwise until the four shoulder rivets drop into their receptacles. A locking pin will snap into place when the plate is properly locked.

Connect the XLR3 to the connector located on the back of the panel.



EVO 2 Weatherproof panel exclusively runs when two Vlock (or Gold Mount) batteries are inserted on the mounts.

Secure the Vlock or Gold plate by inserting the locking pin into place.

AC POWER 90 to 264 VAC

Attach the quick link 200W AC Power Supply plate by aligning the center pin of the mounting plate to the center hole on the panel docking plate. Rotate the AC Power Supply plate clockwise until the four shoulder rivets drop into their receptacles. A locking pin will snap into place when the plate is properly locked.

Connect the XLR3 to the connector located on the back of the panel, connect the power cable to the PowerCon TRUE1 connector located on the left side of the power supply and the power plug with a mains power outlet.



Secure the AC Power Supply plate by inserting the locking pin into place.



Use only an original VELVET power supply unit and a VELVET connector cable. The use of other power supply units and connector cables might cause malfunction and damage of the EVO panel.



For protection from electric shock, always connect the external power supply unit electrically to ground (earth) when connected to AC power. The AC mains power supply must be fitted with a fuse or circuit breaker and ground-fault (earth-fault) protection.



Always connect the EVO product direct to AC power through VELVET AC Power Supply. Do not connect it to a dimmer-system. Doing so will damage the product.



EVO Studio dustproof IP51 maintenance free softlight LED panels have been designed to be exclusively AC powered.

Attach the quick link 200W AC Power Supply plate by aligning the center pin of the mounting plate to the center hole on the panel docking plate. Rotate the AC Power Supply plate clockwise until the four shoulder rivets drop into their receptacles. A locking pin will snap into place when the plate is properly locked.

Connect the XLR3 to the connector located on the back of the panel. Connect the power cable to the PowerCon TRUE1 connector located on the left side of the power supply and the power plug with a mains power outlet.



Secure the AC Power Supply plate by inserting the locking pin into place.



Use only an original VELVETLight power supply units and an VELVETLight connector cable. The use of other power supply units and connector cables might cause malfunction and damage of the EVO panel.



For protection from electric shock, always connect the external power supply unit electrically to ground (earth) when connected to AC power. The AC mains power supply must be fitted with a fuse or circuit breaker and ground-fault (earth-fault) protection.



Always connect the EVO product direct to AC power through VELVET AC Power Supply. Do not connect it to a dimmer-system. Doing so will damage the product.



POWER



200W AC POWER SUPPLY WEATHERPROOF

with XLR3 IP65 and PowerCon TRUE1 aerial connectors on quick link mount + Schuko Power cable for EVO 2 IP54

NOTE: this AC power supply can exclusively be used on the EVO 2 Weatherproof panel

Ref VEIP-PSU200W



EVO DOUBLE VLOCK ADAPTER

on quick link EVO plate with
XLR3 connector

Ref VE-DVLOCK



EVO DOUBLE VLOCK IP54 ADAPTER

on quick link EVO plate with
XLR3 IP54 connector

Ref VE-DVLOCKIP54



EVO DOUBLE GOLD ADAPTER

on quick link EVO plate with
XLR3 connector

Ref VE-DGOLD





POWER



EVO DOUBLE GOLD IP54 ADAPTER

on quick link EVO plate with
XLR3 IP54 connector

Ref VE-DGOLDIP54



XLR-3 CABLE 4,5m/ 15 feet CABLE

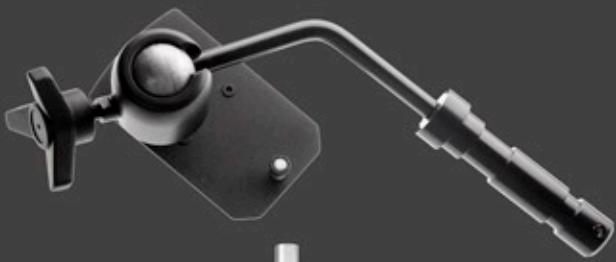
Ref CAB-XLR3DCC4.5M



**EVO BALL HEAD
CENTER MOUNT**

with 28mm junior pin on quick link mount for EVO 1 and 2

Ref VE-QLS

**EVO POLE OPERATED
YOKES**

EVO 1 and EVO 2 Kits

Ref VE1-YPO (EVO 1)

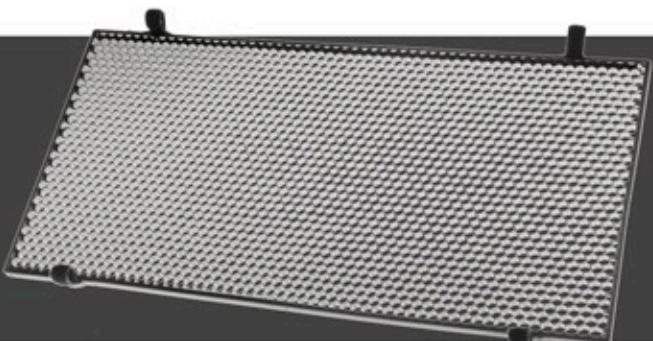
Ref VE2-YPO (EVO 2)



**EVO LOUVER**

40°

Ref VE2-LV40 (EVO 2)

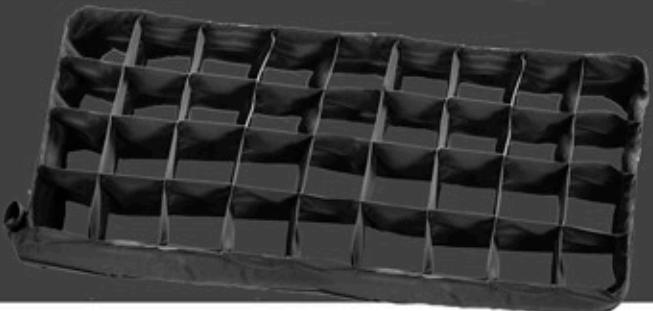
**EVO SNAPGRID 40°**

FOLDABLE by DopChoice

Including transport bag

Ref VE1-SG (EVO 1)

Ref VE2-SG (EVO 2)

**EVO SNAPBAG**

FOLDABLE by DopChoice

Including transport bag

Ref VE1-SB (EVO 1)

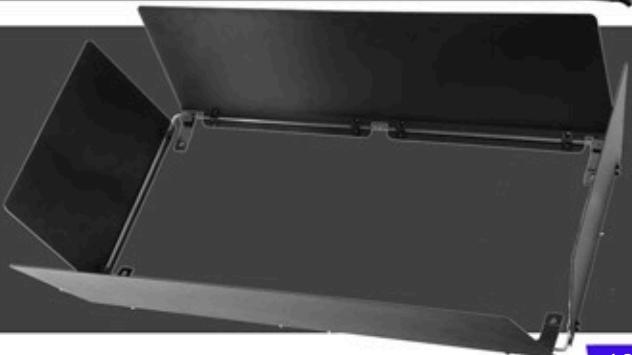
Ref VE2-SB (EVO 2)

**EVO BARN DOORS**

kit of 4x barndoors for EVO

Ref VE1-RB (EVO 1)

Ref VE2-RB (EVO 2)



**SPLITTER DMX**
AERIAL IN/OUT

Cable with 2x XLR-5 female
and 1x XLR-5 male connectors

Ref THE-DMXINOUT

**PORTABLE DMX DESK**
UNIVERSAL and WIRELESS

transmitter (8 x Fader/512Ch)
INCLUDES: 1 Antenna x1 & 1
AC adapt (w/UK/EU/US plugs)

NOTE: this product is only compatible with
EVO Weatherproof panel

Ref ACC-DESK-TX8





CORDURA SOFT BAG

Semi rigid Cordura carrying bag for 1x EVO 2 kit

Ref VE2-BAG





Place the EVO panel with the lighting diffuser surface facing downwards on an even and clean surface.

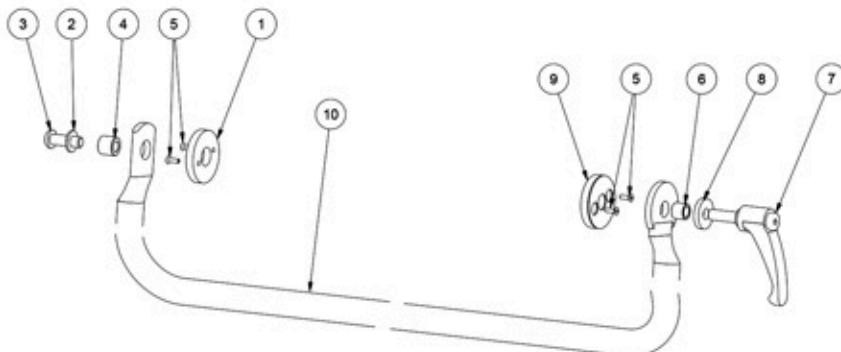
Align the adjustable Yoke with the VELVET EVO panel and put the 16mm baby receiver in the bottom part (EVO STUDIO includes an Euro28 junior pin instead).



Assemble the Yoke to the LED panel by using the mounting kit of bolts, washers and adjustable handle. First mount the handles with the metric M8 metal washer then insert the hinge bearing between the Yoke and the LED panel.



If the heat sink surface is facing to you and the VELVET logo on control display shows in the correct position, mount the long hinge bearing on the left side of the panel together with the M8 screw and the short hinge bearing on the right side of the panel together with the adjustable handle



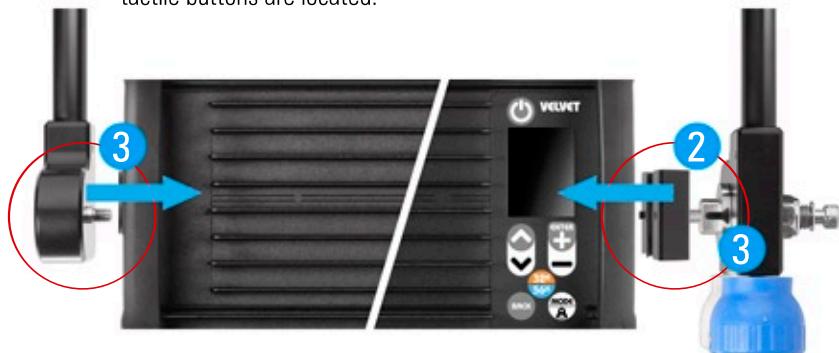
- 01 EVO left side Nylon washer
- 02 Standard washer M8 black
- 03 Socket button head cap screw ISO7380 M8x35 black
- 04 EVO yoke left side bushing
- 05 Hexagon socket countersunk head screw M3x8 black
- 06 EVO yoke right side bushing
- 07 EVO adjustable handle M8x30
- 08 Thick washer DIN6340-8.4
- 09 EVO right side Ferodo washer
- 10 EVO tubular yoke



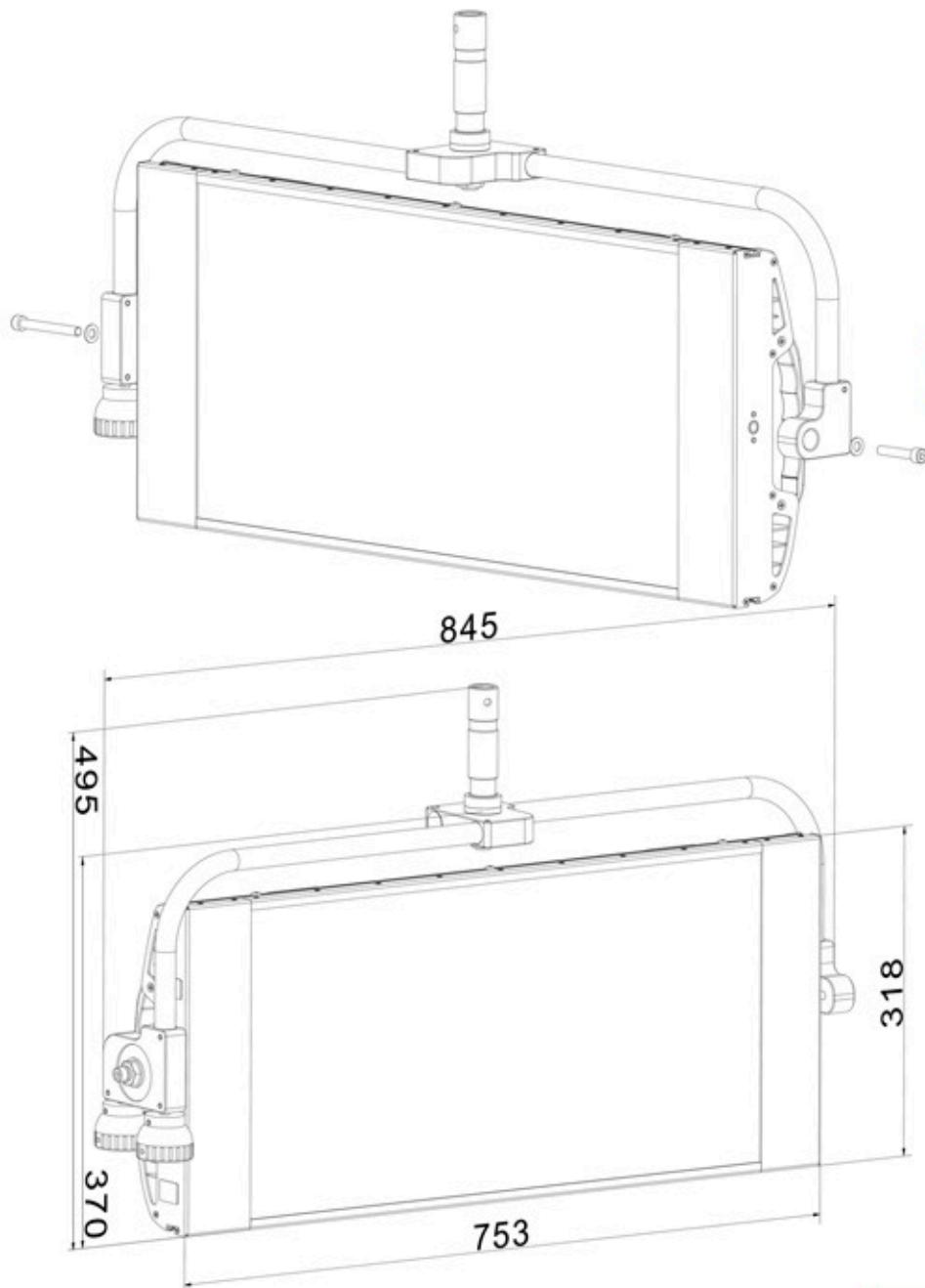
The VE2-YPO kit is valid for the following VELVET products: VELVET EVO 2 WEATHERPROOF and VELVET EVO 2 STUDIO

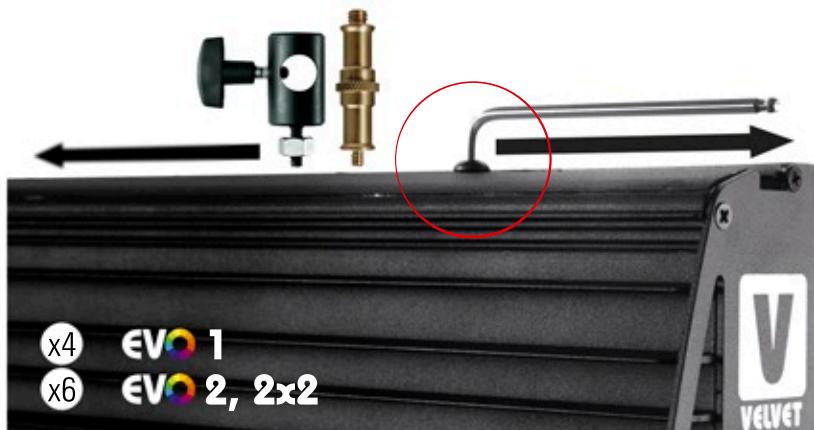


- 1. Remove the Ferodo washer fixed with two Philips countersunk head screws M4x10 black on the right side panel cover as show in the picture. You can identify the "right side" because is where the display and tactile buttons are located.



- 2. Install the supplied adapter plate using the original two Philips countersunk head screws M4x10 black.
- 3. Display the panel over a table with the back facing to you and the display and tactile buttons to the right.
Mount the Pole Operated Yoke with the tilt gear box facing to the right.
Insert the Hexagon socket head cap screw M8x70 with its washer through the PO yoke gear box and through the adapter plate already installed on the panel.
Use the Hexagon socket head cap screw M8x40 with its washer to fix the left side of the yoke with the left side of the panel.



**RIGGING OPTIONS**

VELVET EVO panels have been designed to be easily installed and rigged up on studio, special locations and vehicles.

They can be rigged up in many ways through the adjustable yoke, swivel ball head or by using the sliding 1/4-20" threads and bolts located on both top and bottom of any VELVET panel.

**SECURITY CABLES**

The LED panel is provided with several holes specially design to insert one or more snaps and their safety cable.



When a VELVET EVO panel and any other component is mounted in a hanging position it must be secured with a safety cable rated at a minimum of ten times the weight of the light fixture including its accessories.



SNAPGRID INSTALLATION

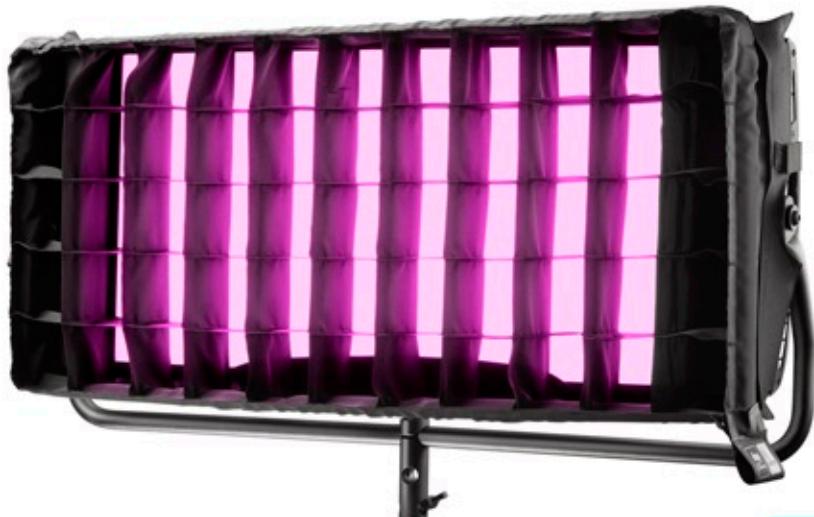
Open the Snapgrid and secure it over the EVO PANEL by hooking the rear velcro strips

Pull the elastics on all 4 corners over the housing starting with the TOP corners.

Pull the white cord

Secure the Snapgrid sliding the side velcro strips through the fixture's left and right handles.

Bring bring the back velcro strips again to the proper tension so that the Snapgrid is visually centered with respect to the front screen





SNAPBAG INSTALLATION

Secure the drawer by hooking the main rear velcro strip

Place and secure the Snapbag by passing the 4 side velcro strips through the fixture's left and right handles

Guide the Snapbag's white elastic cord around the EVO fixture using the four white elastic handles and secure the corners with the 4 black tensors.

At the end of process, secure again all velcros and tensors. Check the front corners and finish the assembly using the central main tensioners so that the assembly looks equal, centered and firm.





NOTES SNAPGRID & SNAPBAG CLOTH FLAMEPROOF RATING

The Snapgrid and Snapbag has been manufactured with black cloth which meets the flameproof standards UNE EN 1101 and EN 13772.



BARndoors INSTALLATION

Position the VELVET EVO panel with the light pointing up. Unscrew the 6 adjustable $\frac{1}{4}$ -20" threads and bolts located on both top and bottom. Then, place and screw the Barndoors to secure it.





The following operation instructions are valid for the EVO Firmware V01.01

POWER ON/OFF

When the EVO power switch is turned on after 3 seconds the CTT mode will be shown on the color display.

The EVO will show the last white light and color settings and the panel source will emit light only as per the last setting.

To light on/off the light source you need to press the upper light power button (not the power switch).

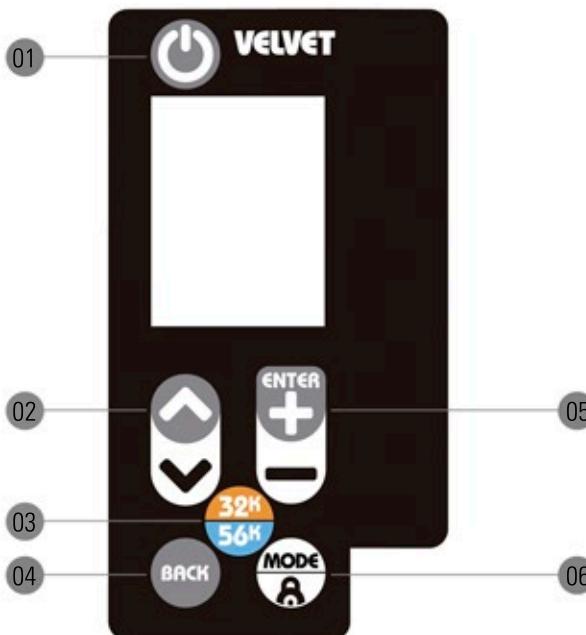
When the display background is dark means the light source is off.

When the display background is light means the light source is on.

The menu system and TFT backlight are set, by default, to "sleep" after one minute of inactivity showing a VELVET logo over a black background.



The lamp head is equipped with power LED. Due to their high light-output intensity don't stare directly into the light source.



01 LIGHT POWER BUTTON Powers on/off the light source.

02 UP & DOWN Scrolls up and down through available options.

03 32K/56K Goes to preset 3200K and 5600K.

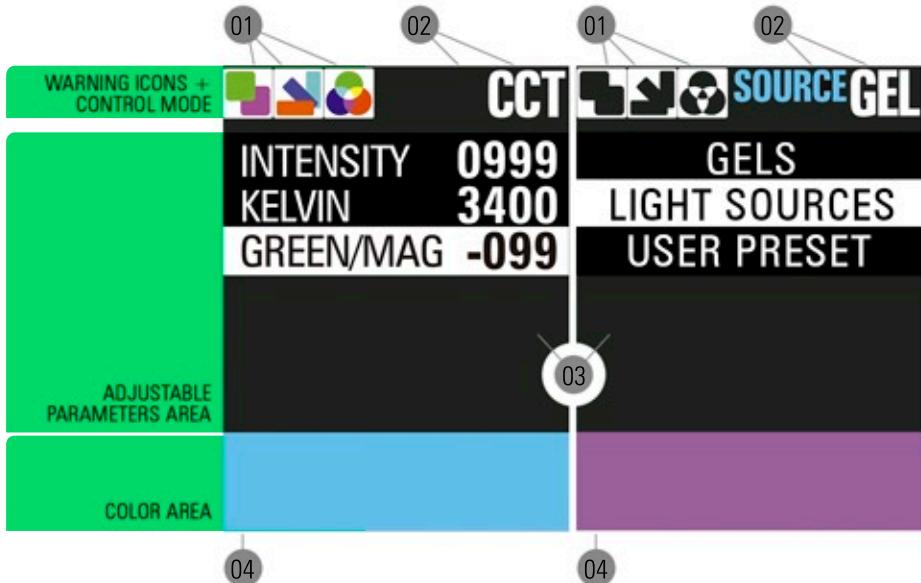
04 BACK

Cancels the current operation and returns to the previous screen Increases or decreases a value or menu choice by one. Pressing and holding the button increases the rate of change as a main function.

05 ENTER/PLUS & MINUS As secondary, activates a menu selection or stores a value.

Changes mode page as a main function.

Keeping pressed for 3 seconds locks every button. To unlock press again along 3 seconds. Lockout does not affect remote wire or wireless access to fixture settings



01 WARNING ICONS Inform about the global status of the fixture. The icons are automatically turned ON or OFF depending on the changes the user has made across some specific menu options

When any icon is turned ON means that the function is activated (appear as a colored icon), otherwise the feature is disabled (grey icon)

The WARNING icons are:

- GREEN/ MAGENTA
- GEL selected
- COLOR light selected

02 CONTROL MODE The two icons on the top right show the CONTROL MODE and the active INFORMATION option within each mode. The available MODES/ Active OPTIONS are:

- CCT
- HSI+
- GEL
- RGB+
- EFFECT
- SETTINGS

03 ADJUSTABLE PARAMETERS Every control mode will show below its own adjustable parameters and options

04 COLOR AREA Shows a real time emulation of every color adjustment as a visual reference of the light emitted by the fixture

MENU MAP

Fixture main menu structure



MODE

CCT	HSI+	GEL	RGB+	EFFECTS
Intensity Kelvin Green/Magenta Saturation	Intensity Hue Saturation Kelvin	Gels Light Sources Presets	Intensity Red Green Blue White Cold white	DISCO Light intensity Loop speed Default values
				FLAME Light intensity Hue Saturation Flicker speed Default values
				POLICE Light intensity Loop speed Color combination Default values
				PULSE Light intensity Hue Flash time Loop speed Fade out Default values
				STROBE Flash intensity Kelvin Flash time Default values
				TELEVISION Light intensity Hue Speed Default values

SETTINGS

DIMMING CURVE	REMOTE CONTROL	DISPLAY	ABOUT
Linear (default) Logarithmic Exponential S-Curve Incandescent	DMX-RDM Mode Master/ Slave Adress 8 bit/ 16 bit DMX mode LumenRadio (Only EVO weatherproof) Connection active/ waiting State Linked/ Free Enable On/ Off	Brightness Low/ High	Factory preset Firmware update



The EVO can be fully, quickly and easily controlled in any possible way, locally or wirelessly, or from your smartphone with VELVET GOYA App. The EVO panel control options are:

- Onboard control with tactile shock-resistant buttons & color display
- Wire control modes:
 - DMX-RDM through XLR-5 connector
 - Art-Net through Ethernet RJ-45 connector (only available on EVO STUDIO)
- Wireless control modes:
 - DMX-RDM with CRMX LumenRadio (only EVO Weatherproof)
 - Art-Net through VELVET Wi-Fi

ON-BOARD CONTROL

The EVO 5LED technology (R+G+B+W+CW) offers clear advantages on light quality and color adjustment:

- More saturated colors
- More natural white light with much wider color gamut
- Higher degree of color control

EVO technology has two important control advantages:

- Any base white light color temperature can be set to apply any color or gel.
- Settings on one mode can be fine-tuned in any other.

Press MODE to select the Control Mode.

When in sub-menus, pressing BACK returns you to the previous display.
When in sub-menus, pressing MODE always returns you to the previously selected Mode.

On CCT mode the EVO emits white light with optimized color rendition and white point. On HSI+, RGB+ and GELS modes the EVO emits colored light.



CCT mode

Select the parameter line with and directly set the value by pressing

Any time GREEN/MAGENTA will be set out of ZERO, the GREEN/MAGENTA icon will change to ON as a warning that standard white light is offset



HSI+ mode

On EVO traditional HSI mode becomes HSI+ because you can select any base white light from 2500°K to 10000°K.

Select the parameter line with and directly set the value by pressing

When the Saturation value is 0 the light emitted by EVO is only white light and therefore HUE will not have any effect.

When the Saturation value is between 1 and 100 the light emitted by EVO includes color tint and therefore HUE will be active



GEL mode

The GELS, LIGHT SOURCES or USER PRESETS selected from this mode can be fine-tuned in RGB+ mode by pressing ENTER button. EVO has no limits to your creativity.

Select the line "GELS" or "LIGHT SOURCES" with

Press ENTER to select the function

Select the desired Gel or Light Source with

Press ENTER to load the selected Gel. Pressing again you can fully adjust the selected GEL or Light Source Intensity, Red, Green, Blue, White and Warm White values

Once you select any GEL or LIGHT SOURCE, the GEL icon will change to ON warning that the light emitted is not standard white any more

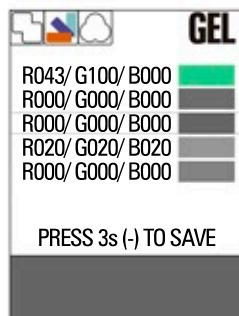
Press along 3 seconds to save any white light or color settings (Intensity, Red, Green, Blue, White and Warm White values) and load them back as User presets.





GELS LIST

01	Light bastard amber	59	Booster blue	118	Tough MTY
02	Bastard amber	60	Pale blue	119	Tough Y 1
03	Dark bastard amber	61	Light steel blue	120	Tough MT 54
04	Medium bastard amber	62	Daylight blue	121	CTB
05	Rose tint	63	Cool blue	122	CTB 3/4
06	No color straw	64	Light sky blue	123	CTB 1/2
07	Pale yellow	65	Sky blue	124	CTB 1/3
08	Pale gold	66	Brilliant blue	125	CTB 1/4
09	Pale amber gold	67	Nile blue	126	CTB 1/8
10	Medium yellow	68	Sea blue	127	Double CTB
11	Light straw	69	Azure blue	128	Full plusgreen
12	Straw	70	Peacock blue	129	Tough minusgreen
13	Straw tint	71	Night blue	130	Fluorofilter
14	Medium straw	72	Light green blue	131	Minusgreen 1/2
15	Deep straw	73	Green blue	132	Minusgreen 1/4
16	Light amber	74	Trudy blue	133	Plusgreen 1/2
17	Light flame	75	Bright blue	134	Plusgreen 1/4
18	Flame	76	Primary blue	135	Plusgreen 1/8
19	Fire	77	Urban blue	136	Minusgreen 1/8
20	Medium amber	78	Surprise blue	137	85
21	Golden amber	79	Medium blue	138	CTO
22	Deep amber	80	Zephyr blue	139	CTO 1/2
23	Orange	81	Deep blue	140	CTO 1/4
24	Scarlet	82	Pea green	141	CTO 1/8
25	Orange red	83	Pale yellow green	142	CTO 3/4
26	Light red	84	Light green	143	CTS
27	Medium red	85	Moss green	144	CTS 1/2
28	Light salmon pink	86	Dark yellow green	145	CTS 1/4
29	Salmon pink	87	Primary green	146	CTS 1/8
30	Medium salmon pink	88	Turquoise		
31	No color pink	89	Blue green		
32	Flesh pink	90	Kelly green		
33	Light pink	91	Medium blue green		
34	Medium pink	92	Lime		
35	Pale rose pink	93	Hamburg rose		
36	Light rose	94	Hamburg lavender		
37	Light salmon	95	Hamburg steel blue		
38	Salmon	96	Pale apricot		
39	Deep salmon	97	Rose gold		
40	Deep pink	98	Canary		
41	Middle rose	99	Apricot		
42	Rose	100	Soft golden amber		
43	Magenta	102	True pink		
44	Light rose purple	103	Broadway pink		
45	Rose purple	104	Rose pink		
46	Medium purple	105	Follies pink		
47	Mauve	106	Pale violet		
48	Surprise pink	107	Middle lavender		
49	Light lavender	108	Royal lavender		
50	Pale lavender	109	Rose indigo		
51	Special lavender	110	Medium violet		
52	Lilac	111	Alice blue		
53	Gypsy lavender	112	Sapphire blue		
54	Lavender	113	Royal blue		
55	Deep lavender	114	Gaslight green		
56	Indigo	115	Chroma green		
57	No color blue	116	Pale grey		
58	Mist blue	117	Tough mt2		



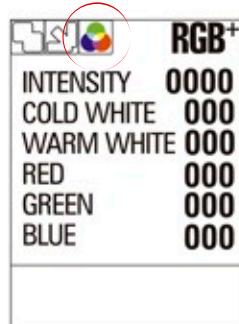
A total of TEN user presets can be saved. The presets can be loaded locally or remotely through DMX

To **SAVE** a USER PRESET

Select any user preset line and push along two seconds to save.

To **LOAD** a USER PRESET

Select any user preset line and push along two seconds to load



RGB+ mode

On EVO traditional RGB mode becomes RGB+ because you have 5 LED channels to play with.

Select with and directly set by pressing

Once you set any color parameter out of ZERO, the RGB COLOR icon will change to ON warning that the light emitted is not standard white any more

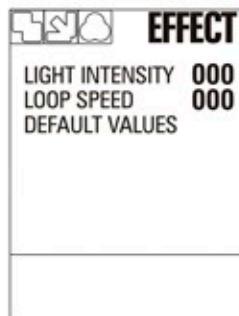


EFFECT mode

EVO effects replace many effects devices with its tunable effects. EVO allows to customize any effect by adjusting frequency, speed and even the effect color.

On any effect you can always use your personally adjusted effect or go back to the default values.

You can save or load your own effects.



The six EFFECTS pre-loaded in the EVO fixture are:

- DISCO

Changes colors, color temperature and intensity in a loop. Tune it to create new personal effects by adjusting:

Light intensity
Loop speed
Default values



- FLAME

A flickering effect simulating a burning flame by color temperature and intensity fades combined with pause periods. You can adjust it to create new personal effects from a weak candle to a powerful fire or even a water effect.

Light intensity
Hue
Saturation
Kelvin
Flicker speed
Default values

- POLICE

Blue and red flashing effect simulating an emergency vehicle. Tune it to create new personal effects like ambulance or fire truck.

Light intensity
Loop speed
Color combination
Default values

- PULSE

Light pulse effect with soft fade in and fade out.

Light intensity
Hue
Flash time
Loop speed
Fade out
Default values

- STROBE

White light or color strobe effect.

Flash intensity
Kelvin
Flash time
Default values

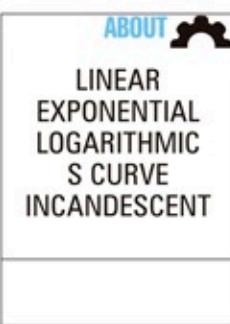


Risk of injury or death due to epileptic attack or breakdown. Announce a strobe lighting effect is going to be used.

- TELEVISION

Emulates a tv screen effect by changing among different white lights and soft colors with intensity variation. You can adjust:

Light intensity
Hue
Speed
Default values



ABOUT/ Dimming Curve

The dimming curve is the correlation between the change in the value of the dimming control and the actual change in the fixture's light intensity. Curve is also the extent to which the fixture delays its response time to the control signal in order to smooth dimming.

Select the Curve with and directly set it pressing to choose among Linear (default), Logarithmic, Exponential, S curve, Incandescent.

• LINEAR (default)

Linear has no curve. Brightness levels correlate exactly with the value of the dimming control.

Moderate lag in response for good dimming smoothness. Linear allows quick jumps in brightness. This is the default setting.

• EXPONENTIAL

The resolution is high at lower intensity levels and low at higher intensity levels. It provides moderate lag in response for good smoothness and allows quick jumps in brightness. Suitable for most applications.

Use this dimming curve when you need a high resolution at low intensity levels.

• LOGARITHMIC

The resolution is low at lower intensity levels and high at higher intensity levels. Use this dimming curve when you need a high resolution at high intensity levels.

• S CURVE

The resolution is both high at lower and higher intensity levels and low at intensity levels in between. Use this dimming curve, when you need a high resolution both at low and high intensity levels.

• INCANDESCENT

This curve mimics the response of incandescent on a conventional dimmer. Delay is quite pronounced and present in fade in and fade out. Extreme smoothness with no instant changes. Use this curve when fixtures must operate in sync with incandescent sources.



EVO offers a simplified as well as sophisticated DMX control mode. There are two locally selectable DMX control modes: one on 8 bit and one on 16 bit.

Use the 8 bit modes with basic controllers like dimmer consoles. The DMX mode selection can only be made through a DMX console by changing the channel 2 value. Please refer to "DMX Map chart 8 bit" and "DMX Chart 16 bit".

- **8 BIT DMX CONTROL MODE**

On the 8 bit DMX mode the channel number 2 acts as mode selection and allows to dynamically change the DMX operation mode.

- **16 BIT DMX CONTROL MODE**

On the 16 bit DMX mode the channel number 3 acts as mode selection and allows to dynamically change the DMX operation mode.

VELVET recommends to 16 bit modes in combination with controllers supporting 16 bit resolution to achieve best results. The high resolution provides smooth dimming and precise color adjustments.

The 16 bit modes uses two channels for most parameters and provide higher resolution compared to the 8 bit modes. One channel sets the coarse value between 0 and 255 of the function while each step is divided in 256 increments using the fine channel.

EVO CONTROL

DMX 8 bit control map chart



DMX MODES	CHANNELS							
	01	02	03	04	05	06	07	08
Master Intensity Values: 0-255 Percent: 0-100	Mode 1 CCT & HSI 8 bit Values: 0-9 Percent: 0-4	Kelvin (2500K to 10000K) Values: 0-255 Percent: 0-100	Green/Magenta (100M to 100G) Value 0: Neutral Val 1-121: 100M to 1M Val 122-132: Neutral Val 133-255: 1G to 100G	Saturation Values: 0-255 Percent: 0-100	Hue (0 to 359 degrees) Values: 0-255 Percent: 0-100			
Master Intensity Values: 0-255 Percent: 0-100	Mode 2 CCT & HSI + RGB+CW 8 bit Values: 10-19 Percent: 5-7	RED	GREEN	BLUE	WHITE	COLD WHITE		
Master Intensity Values: 0-255 Percent: 0-100	Mode 3 CCT & HSI + GELS 8 bit Values: 20-29 Percent: 8-11	Kelvin (2500K to 10000K) Values: 0-255 Percent: 0-100	Green/Magenta (100M to 100G) Value 0: Neutral Val 1-121: 100M to 1M Val 122-132: Neutral Val 133-255: 1G to 100G	Saturation Values: 0-255 Percent: 0-100	Gel number Values: 0-255 Percent: 0-100			
Master Intensity Values: 0-255 Percent: 0-100	Mode 4 CCT & HSI + LIGHT SOURCE 8 bit Values: 30-39 Percent: 12-16	Kelvin (2500K to 10000K) Values: 0-255 Percent: 0-100	Green/Magenta (100M to 100G) Value 0: Neutral Val 1-121: 100M to 1M Val 122-132: Neutral Val 133-255: 1G to 100G	Saturation Values: 0-255 Percent: 0-100	Lightsource Values: 0-255 Percent: 0-100			
Master Intensity Values: 0-255 Percent: 0-100	Mode 5 CCT & HSI + PRESETS SELECTION 8 bit Values: 40-49 Percent: 17-19	Kelvin (2500K to 10000K) Values: 0-255 Percent: 0-100	Green/Magenta (100M to 100G) Value 0: Neutral Val 1-121: 100M to 1M Val 122-132: Neutral Val 133-255: 1G to 100G	Saturation Values: 0-255 Percent: 0-100	Reset number Values: 0-255 Percent: 0-100			
Master Intensity Values: 0-255 Percent: 0-100	Mode 6 CCT & EFFECTS 8 bit Values: 50-59 Percent: 20-23	Effect number Values: 0-255 Percent: 0-100	Parameter #1	Parameter #2	Parameter #3	Parameter #4	Parameter #5	



The EVO panels CPU includes a highly advanced hardware with a dedicated software to offer the user full wireless control.

The EVO Weatherproof panel can be wirelessly controlled on two ways:

- DMX-RDM through LumenRadio CRMX
- Wi-Fi Art-Net to control from Smart devices with VELVET App
This function will be available along 2019 through Firmware update

The EVO STUDIO panel can be wirelessly controlled only through Wi-Fi Art-Net. Using a Smart device with VELVET App you get full, intuitive control.

This function will be available along 2019 through Firmware update

The EVO Weatherproof panel is exclusively equipped with a wireless DMX-RDM receiver supporting the LumenRadio CRMX protocol.

The EVO Weatherproof panel can be linked to any wireless DMX LumenRadio transmitter if there is no DMX signal received via a wired interface (DMX-512A through XLR-5 connector or Art-Net through Ethernet connector) and wireless DMX is activated via the fixture menu.

- To activate wireless DMX Lumen Radio receiver on the EVO Weatherproof panel:

Push MODE button to select “SETTINGS”

Select “WIRELESS CONTROL” with and press

The word “ENABLE” will be visible, press to select “ON”

- The fixture can now be detected by a wireless DMX LumenRadio transmitter

- Once LumenRadio is activated the color display will show the following information:

Connection status	active / waiting
State	linked / free
Signal strength	0 to 100

- To deactivate wireless DMX LumenRadio receiver on the EVO Weatherproof panel:

Push MODE button to select “SETTINGS”

Select “WIRELESS CONTROL” with and press



The word "ENABLE" will be visible, press to select "OFF"

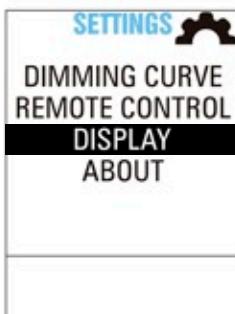
- To link EVO with a wireless DMX LumenRadio transmitter
- To link the EVO you only need to activate the LumenRadio
- To unlink EVO with a wireless DMX Lumen Radio transmitter
Push to select "SETTINGS"

Select "WIRELESS CONTROL" with and press

The word "UNLINK" will be visible (only when the EVO is linked), press along 3 seconds to unlink.



As soon as a wired signal is detected via the other interfaces (DMX-512A through XLR-5 connector or Art-Net through Ethernet connector), any wireless DMX-RDM data will be ignored and the EVO panel only processes the wired signal.

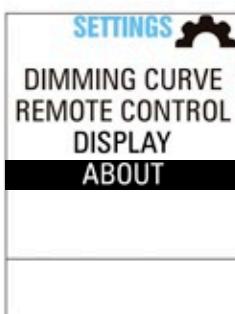


- You can set the color display brightness

Push MODE button to select "SETTINGS"

Select "DISPLAY" with and press

On the DISPLAY sub-menu select "BRIGHTNESS" with and press



About shows fixture model, fixture serial number, firmware version, calibration date, RDM ID, Ethernet ID MAC and fixture temperature.

- FACTORY RESET

Push MODE button to select "SETTINGS"

Select "ABOUT" using and press

On the sub-menu select "FACTORY RESET" using and press

Press to apply factory preset

- FIRMWARE UPDATE

1 Copy the EVO update file to the root of an USB memory stick

2 Power on the EVO

3 Connect the USB memory stick to the mini-USB connector of the EVO panel through a mini-USB male to USB female adaptor.

4 Push MODE button to select "SETTINGS"

Select "ABOUT" with and press

Select "FIRMWARE UPDATE" and press to start the process.

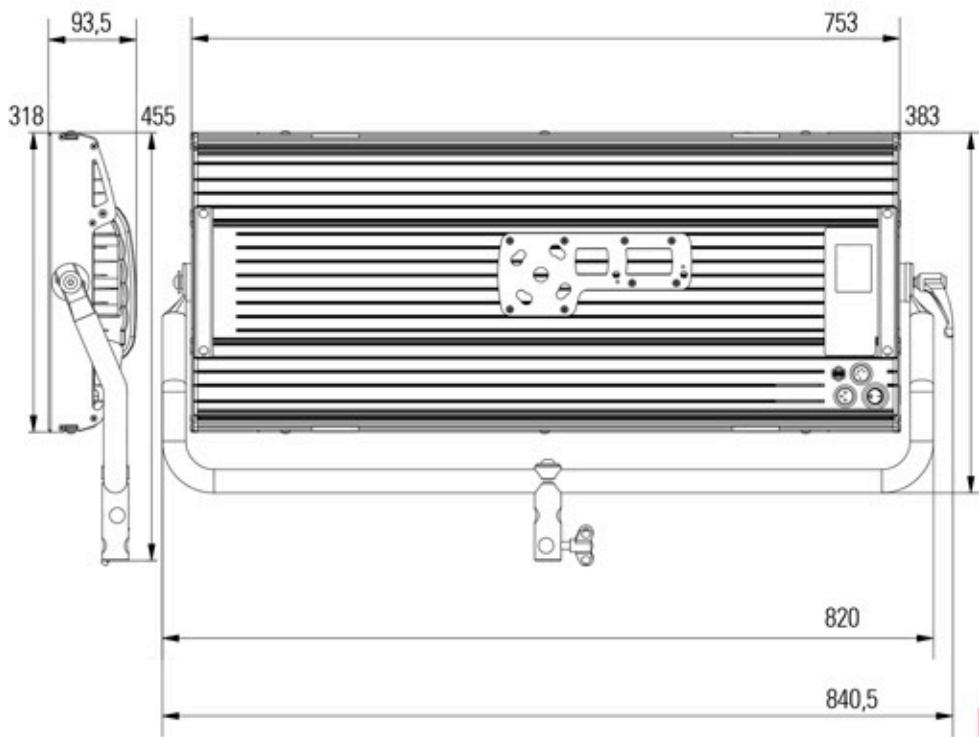
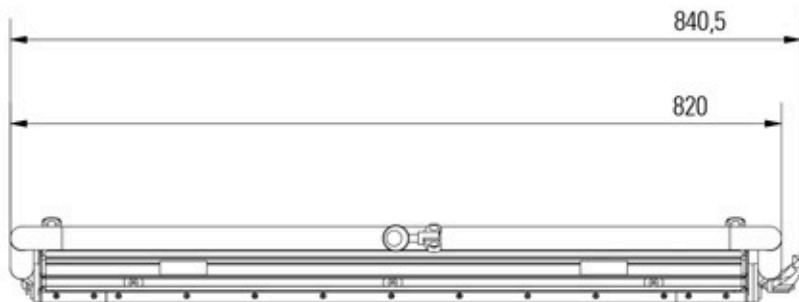


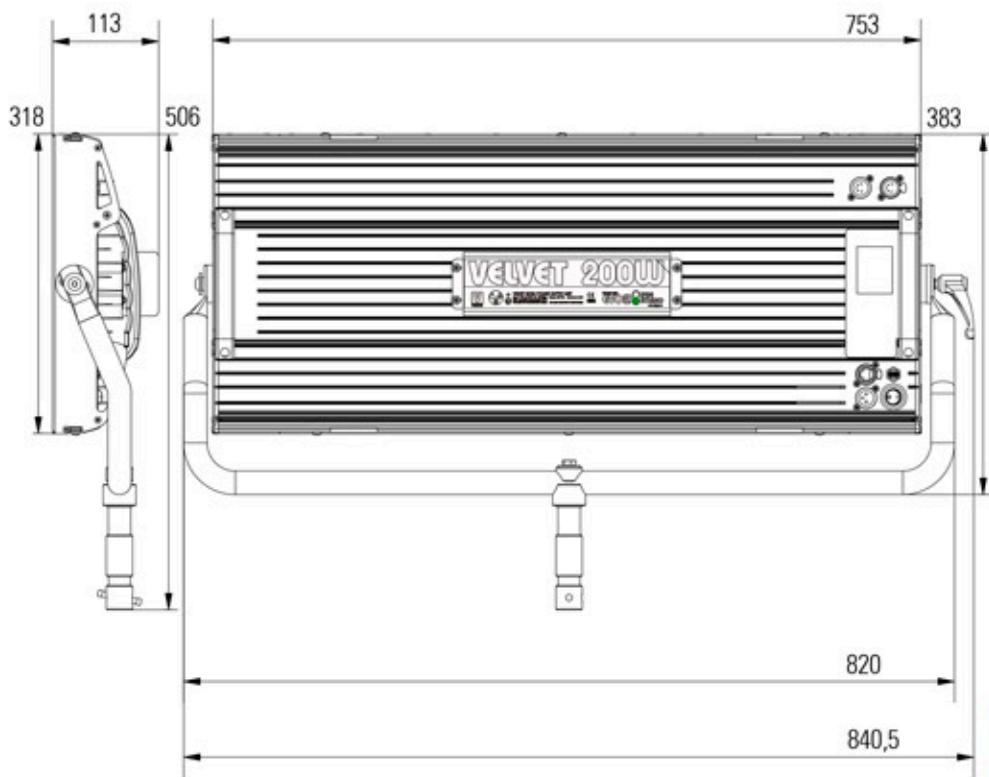
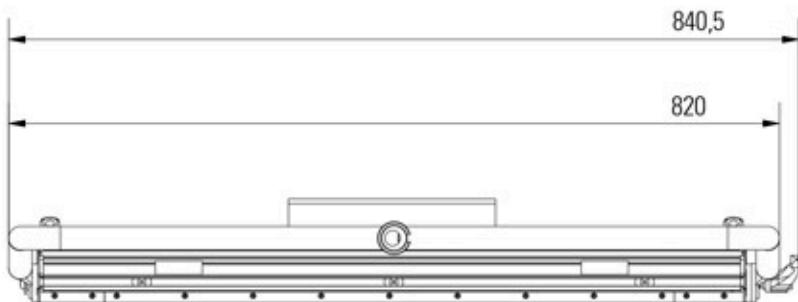
Once the firmware update process is finished the EVO panel will reboot with the new firmware.



DIAGRAMS

EVO 2 Weatherproof







Brand Name: VELVET

Product Description: LED Luminaire systems for professional use

EVO 1, EVO 1 Studio, EVO 2, EVO 2 Studio, EVO 2x2, EVO 2x2 Studio

The above products abide by the following European Directives:

DIRECTIVE 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to electromagnetic compatibility.

DIRECTIVE 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.

DIRECTIVE 2001/95/EC of the European Parliament and the Council of 3 December 2001 on general product safety

DIRECTIVE 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

In compliance with the harmonized standards:

IEC 60598-1:2014 Luminaires – Part 1: General requirements and tests

IEC 60598-1-17:2017 Luminaires – Part 2-17: Particular requirements – Luminaires for stage lighting, television and film studios (outdoor and indoor)

IEC 62031:2008/A1:2012 LED modules for general lighting - Safety specifications

IEC 61547:2009 Equipment for general lighting purposes - EMC immunity requirements

IEC 61000-6-1:2005 Electromagnetic compatibility (EMC) -- Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments

IEC 61000-6-3:2006/A1:2010 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments

IEC 61000-6-4:2006/A1:2010 Electromagnetic compatibility (EMC) -- Part 6-4: Generic standards - Emission standard for industrial environments

EN 301489-1 V1.8.1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

IEC 62493:2009 Assessment of lighting equipment related to human exposure to electromagnetic fields

EN 55015:2013 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 62471:2008 Photobiological Safety of Lamps and Lamp Systems

Barberà del Vallès, 10th February 2019
Authorised Administrator - Javier Fdez. de Valderrama



VELVET LED light fixtures are guaranteed to be free from defects in workmanship and parts in a warranty period of two (2) years from the date of purchase. Defects that occur within this warranty period, under normal use and care will be repaired or replaced at VELVET discretion, solely at our option with no charge for parts or labour. In the event of the equipment malfunction, contact the dealer from which you purchased the product. Please note that you will be not be reimbursed for the cost of bringing the equipment to the VELVET Repair Centre. VELVET reserves the right to replace the product or relevant part with the same or equivalent product or part, rather than repair it. Where a replacement is provided the products or part replaced becomes the property of VELVET. VELVET may replace parts with refurbished parts. Replacement of the product or a part does not extend or restart the Warranty period.

RETURNS POLICY

Returns or exchanges from the customers will be accepted within 15 days of delivery and will not include the actual shipping costs. Item(s) must be in original packaging and condition, must not be assembled, and must include its original user manual.

This warranty does not cover any damage resulting from:

- Failure to follow the instructions in the instruction manual Repair, modification or overhaul not conducted by any authorized VELVET personnel.
- Fire, natural disaster, act of God, lightning, abnormal voltage, etc;
- Submergence in water (flooding), exposure to alcohol or other beverages, infiltration of sand or mud, physical shock, or dropping of the equipment and other unnatural causes.

This warranty only applies to the LED panel and not to the accessories, such as barn doors or mounts.

Any consequential damages arising from failure of the equipment, such as expenses incurred in taking pictures or recording images or loss of expected profit, will not be reimbursed whether they occur during the warranty period or not.

Parts essential to the servicing of the light equipment (that is, components required to maintain the functions and quality of the fixture) will be available for a period of five years after the product is discontinued.

velvetlight.tv



made to last