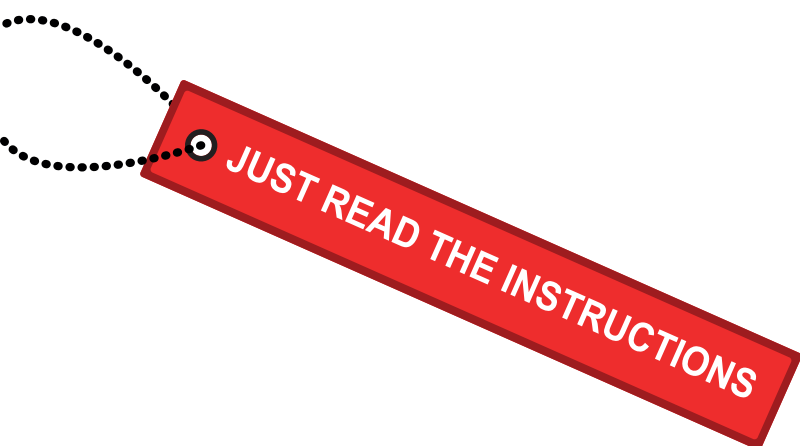




pipe 2
pipe 4
pipe 8

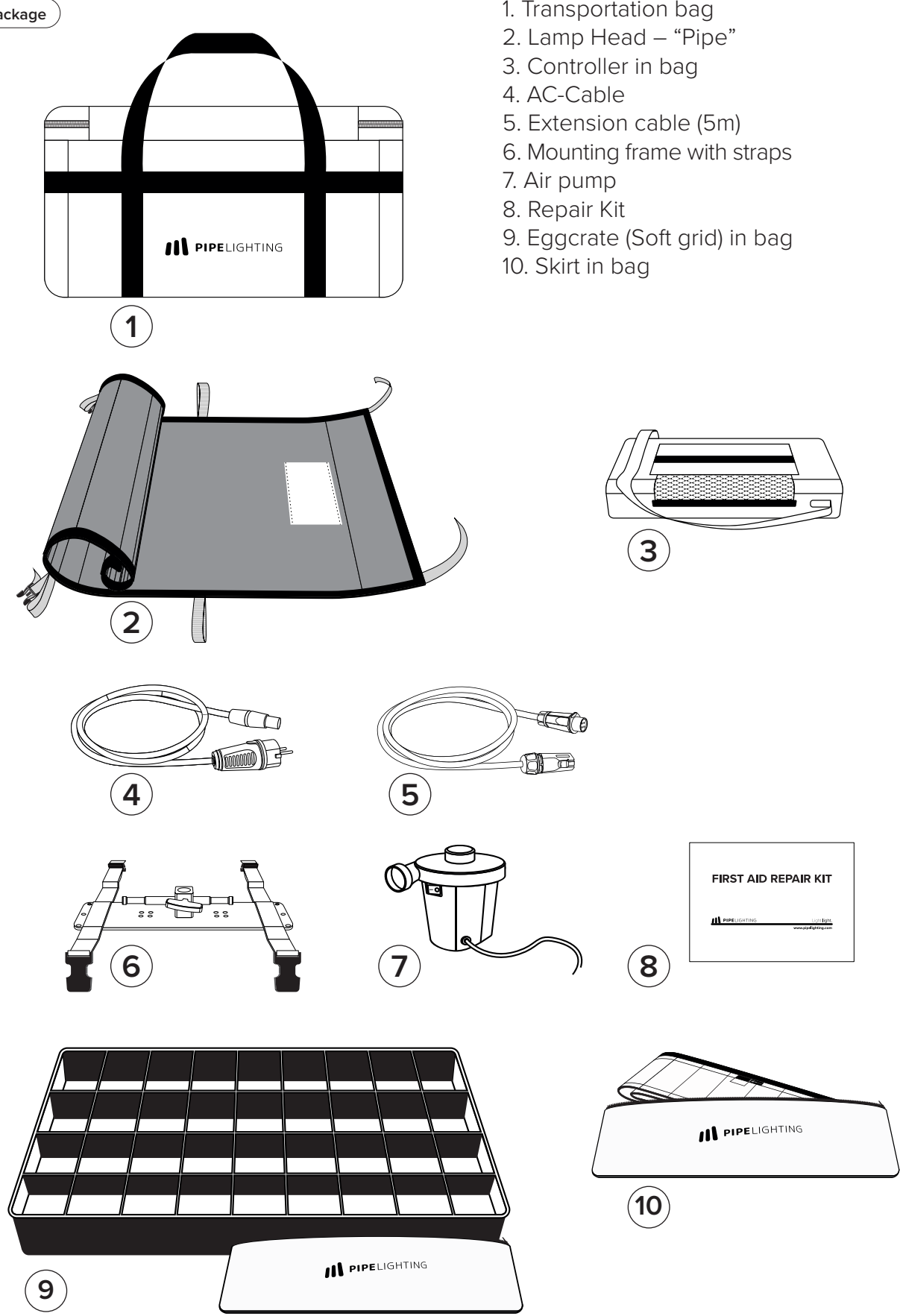
USER'S MANUAL GUIDE

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PRODUCT PACKAGE

Fig. 1. Product package



TECHNICAL SPECIFICATIONS

Model	PIPE 2	PIPE 4	PIPE 8
Lamp head size (L × W × H), cm	65×35×20	135×35×20	260×30×30
Lamp head weight, kg	0,7	1	1,7
Voltage, V	24	24	24
Current per color, A	4	8	16
Total power rating, W	160	320	650
CRI	95+		
CCT	2600 K – 5700 K		
Lumens	5 490	10 980	21960

Operation Conditions

Controller	
Operating T, °C	Min: -15°C / Max: +40°C
Storage T, °C	15-20°C
IP Rating	IP20

Lamp Head	
Operating T, °C	Min: -15°C / Max: +40°C
Storage T, °C	15-20°C
IP Rating	IP67

USAGE PRECAUTIONS

Fig. 2. Usage precautions



**DO NOT SMOKE
DURING OPERATION!**



AVOID SHARP OBJECTS!



**ROLL WITH
THE LEDS INWARDS ONLY!**



**AVOID OVERINFLATING!
LAMP HEAD GETS HOT!**



**DO NOT USE THE FIXTURES
NEAR HOT SURFACES OR OBJECTS**



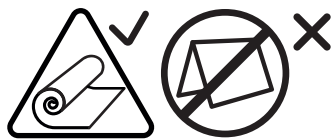
**USING THE FIXTURE UNDER DIRECT SUNLIGHT
OR HIGH TEMPERATURES (MORE THAN 30°C)
CHECK THE PRESSURE!**



**DO NOT TOUCH THE LAMP HEAD
WITH DIRTY HANDS!
DO NOT WEAR GLOVES!**



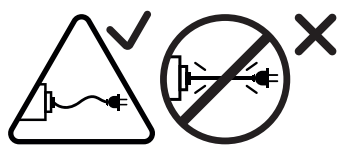
**ROLLING THE LAMP HEAD THE INNER
DIAMETER SHOULD BE 5CM MAX.!**



DO NOT FOLD THE LAMP HEAD!



**DO NOT FOLD OR
STORE WET EQUIPMENT**



**AVOID TENSION
ON POWER AND CONTROL CABLES!**

GETTING READY FOR OPERATION

1. Open the case, take the lamp head with clean hands. Unroll the lamp head on a flat clean surface without any sharp or hot objects (Fig. 3).

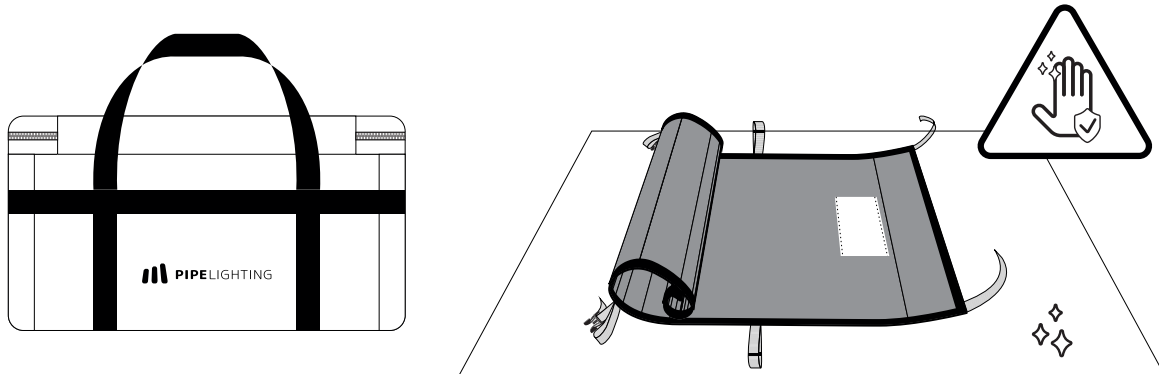


Fig. 3

2. The device can be used both inflated and deflated (Fig. 4).

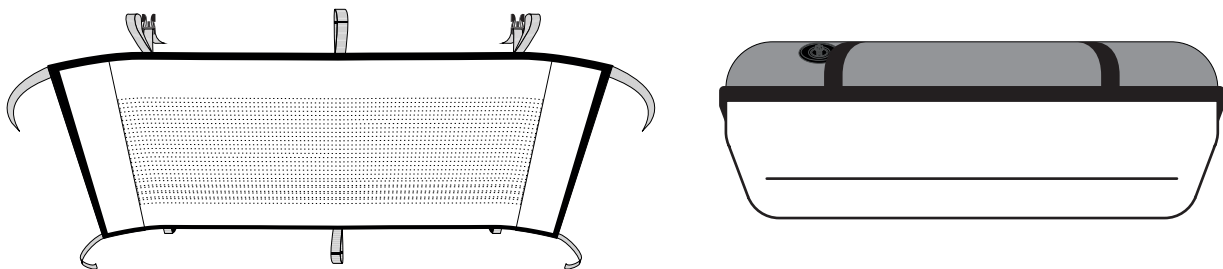


Fig. 4

3. Open the air valve cover and make sure that the air valve button is in position **2**. The positions of the air valve button **1** and **2** are shown in Fig. 5.

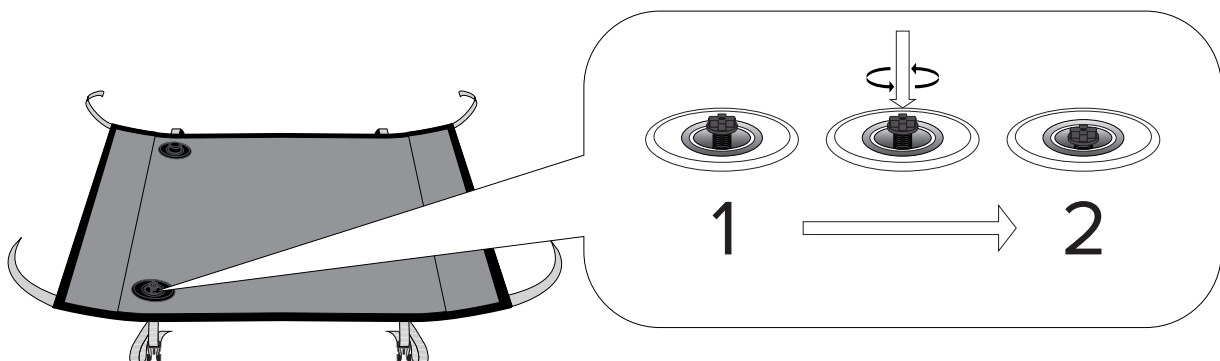


Fig. 5

4. Inflate the lamp head with the air pump provided by bringing the pump to the valve. Make sure the lamp head had reached its shape. Do not overinflate! Move the pump away from the valve and quickly move the valve button to position **1**. If necessary, inflate the lamp head slightly through the closed valve by pushing the pump on the valve button. To release pressure push the valve.

GETTING READY FOR OPERATION

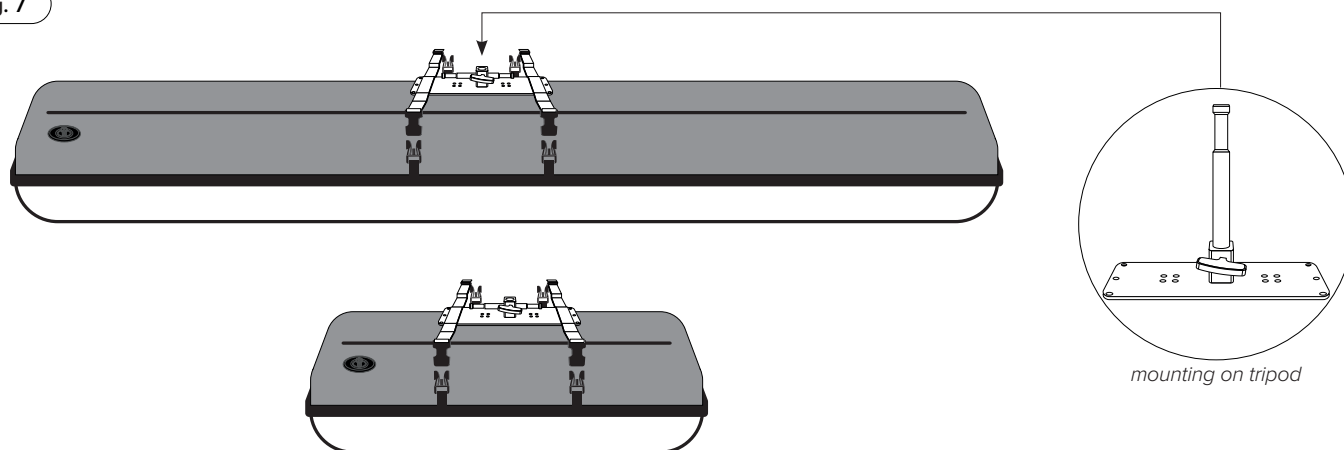
5. Fold the corners of the lamp head with Velcro to the end face, fasten with Velcro as shown in Fig.6.

Fig. 6



6. Attach the mounting pad to the lamp head (Fig.6). Adjust the fastening straps on the rear side of the device.

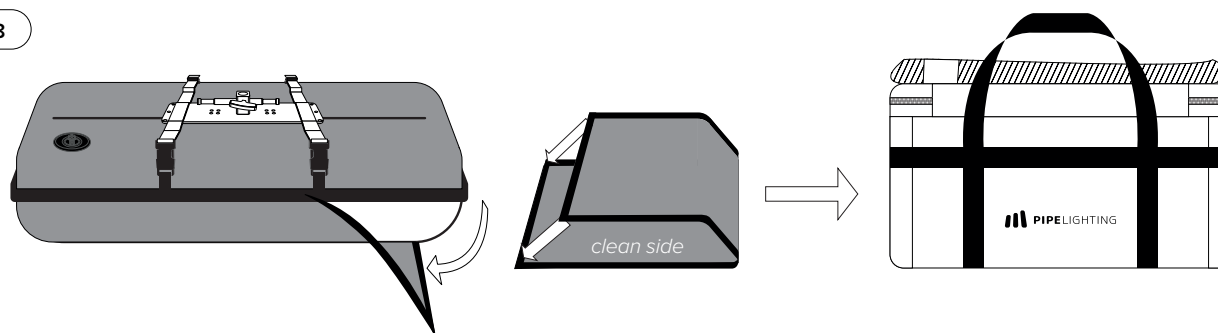
Fig. 7



7. Fix the instrument in operating position on the tripod.

8. Remove the protective cover from the lamp head head. Carefully fold the protective cover with the clean side inwards and put it into the bag (Fig.7).

Fig. 8



9. If necessary, attach a soft grid/eggcrate and/or skirt (included) to the instrument head.

CONNECTING THE CONTROLLER

1. Align the connectors of the signal cable and the controller as shown in Fig.9.

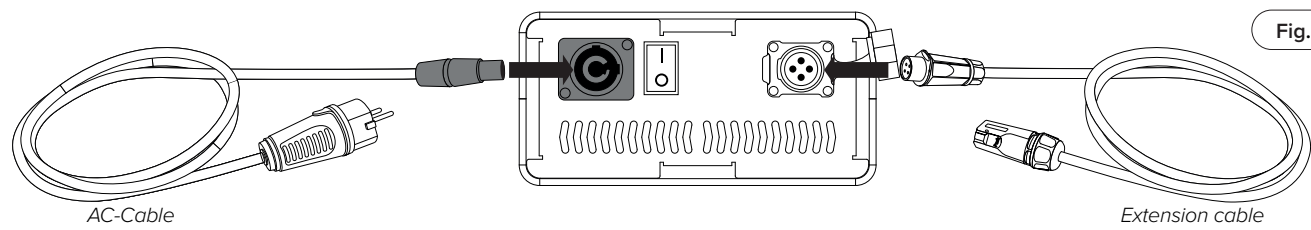


Fig. 9

- 2. Connect the power AC-cable to the connector on the body and the 220V socket.
- 3. Switch on the controller (Fig.10).

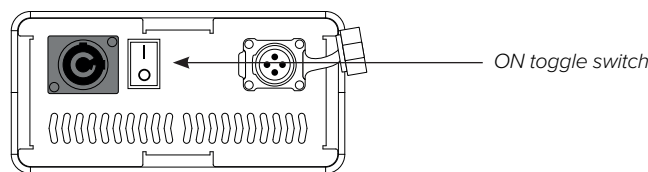
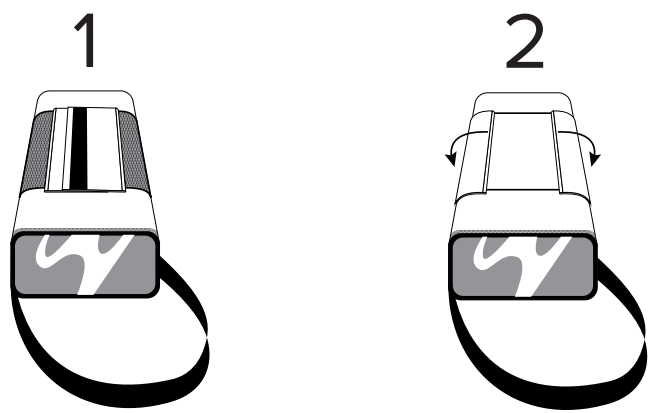


Fig. 10

CONTROLLER PROTECTIVE COVER

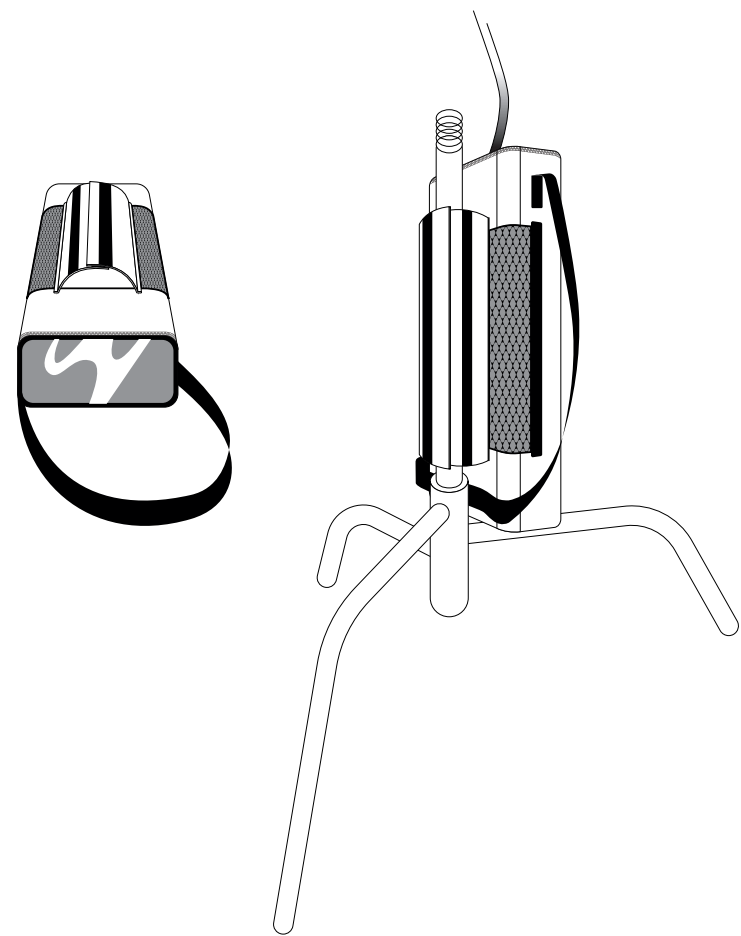
The controller protective cover has two operating positions. Position **1** (Fig. 11) with air vent open is the main operating position. When used outdoors during rainfall, the flaps of the cover should be folded to position **2** (Fig. 11).

Fig. 11



It is also possible to use the flaps of the flap to form a mounting bracket with which the controller can be mounted on a tripod (Fig. 12).

Fig. 12



UNDERWATER USAGE

You can use Pipe Lighting products under water. To do so please take all the air out of the fixture with the back side of the air pump. Make sure to fix the lamp head properly under water using weights and/or frame.

Maximum guaranteed water depth: 2m.

ATTENTION: Make sure to close the air valve (put it in **1** position) and the cap of the valve on the lamp head! Danger of moisture entering the lamp head! The cable connector must stay above the water surface! (Fig.13)

The valve is not airtight, it reduces, but does not eliminate the possibility of moisture entering the device!

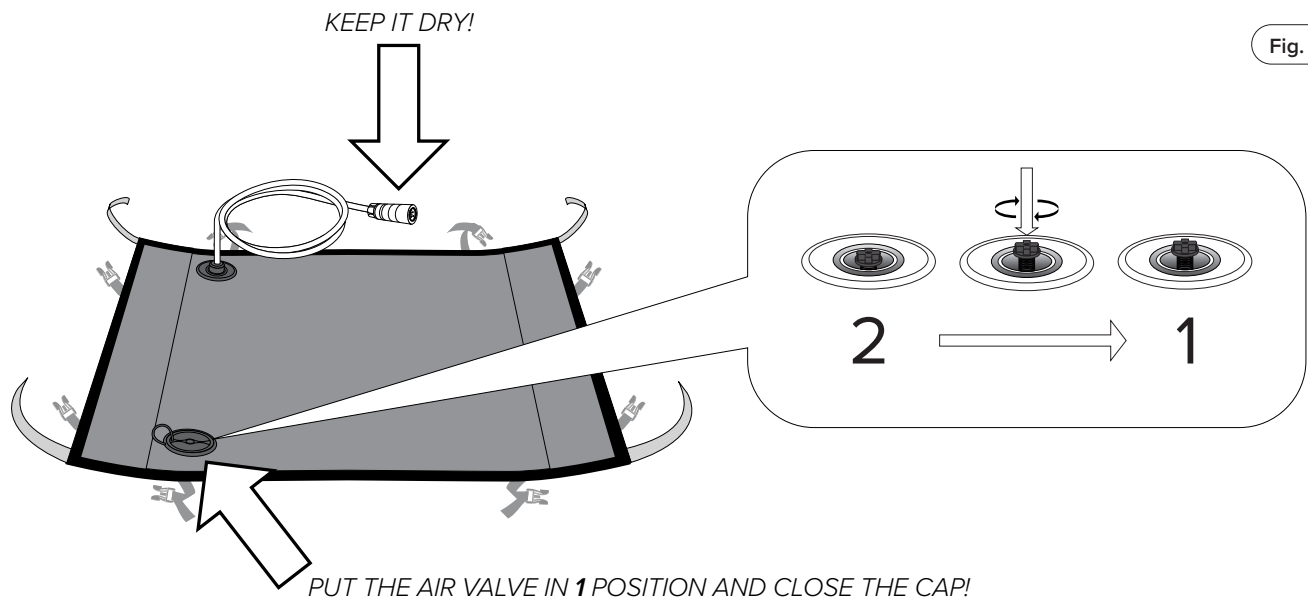
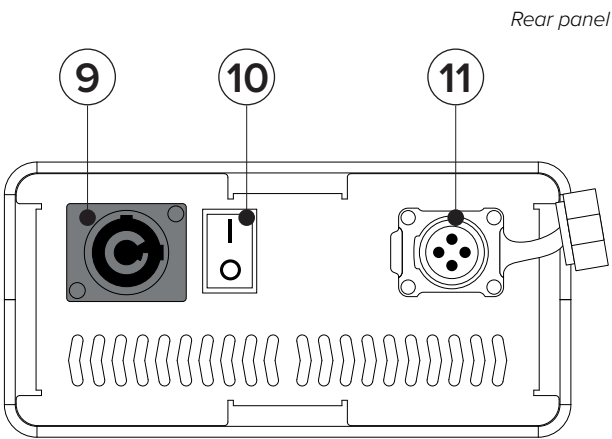
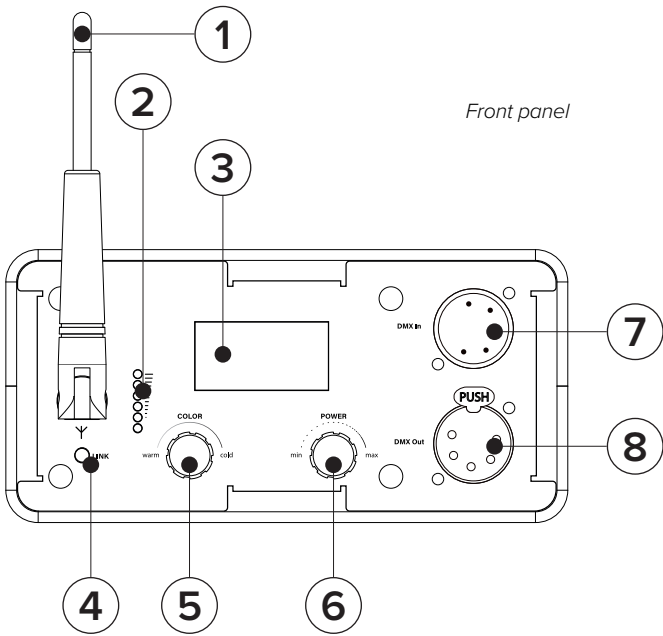
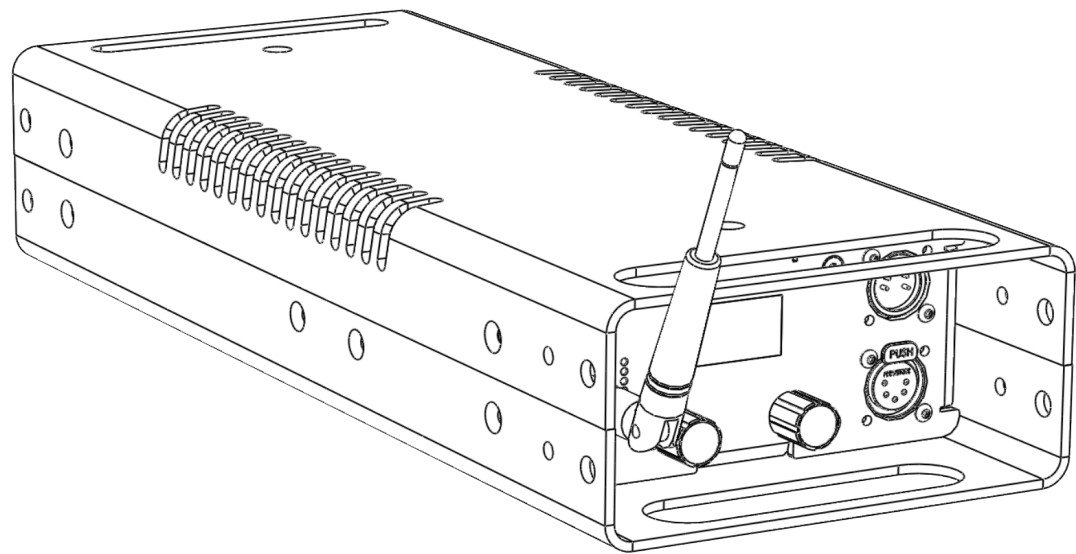


Fig. 13.

CONTROLLER

Fig. 14. Controller

General view



- 1. CRMX antenna
- 2. Radio Level Indicator
- 3. OLED Display
- 4. Link Button
- 5. Color Encoder
- 6. Power Encoder
- 7. DMX Input
- 8. DMX Output
- 9. Power Input
- 10. Power Switch
- 11. LED Output

CONTROLLER SETTINGS

1. After switching the unit on, you will see the main screen (Fig.15).

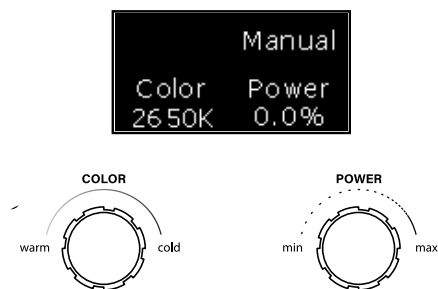


Fig. 15

2. The left encoder controls the color temperature. The right encoder controls the brightness of the unit (Fig. 16).

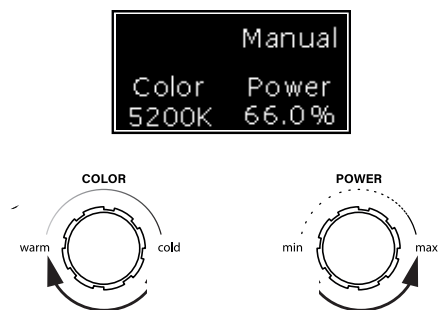


Fig. 16

3. Pressing the right encoder shows the internal temperature of the controller (Fig. 17).

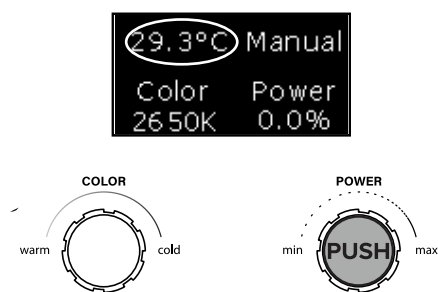
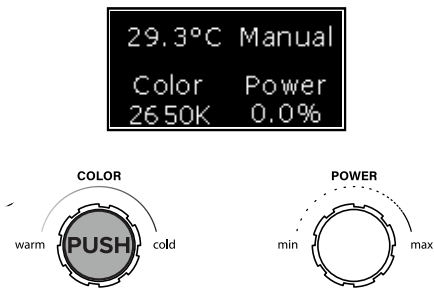


Fig. 17

The DMX address must be set to control the unit remotely. The address has the same value for both wired and wireless **DMX**. Pipe Lighting controller uses 2 DMX-channels (except in Separate Mode): one for the color temperature and one for the brightness.

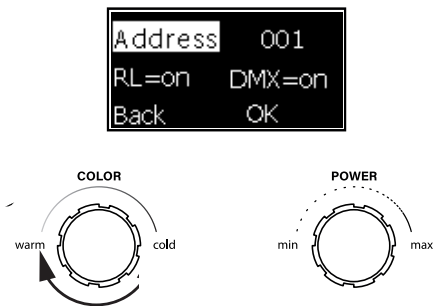
1. Pressing the left encoder brings up a menu to enable **DMX** control and set the devices DMX address (Fig.18).

Fig. 18



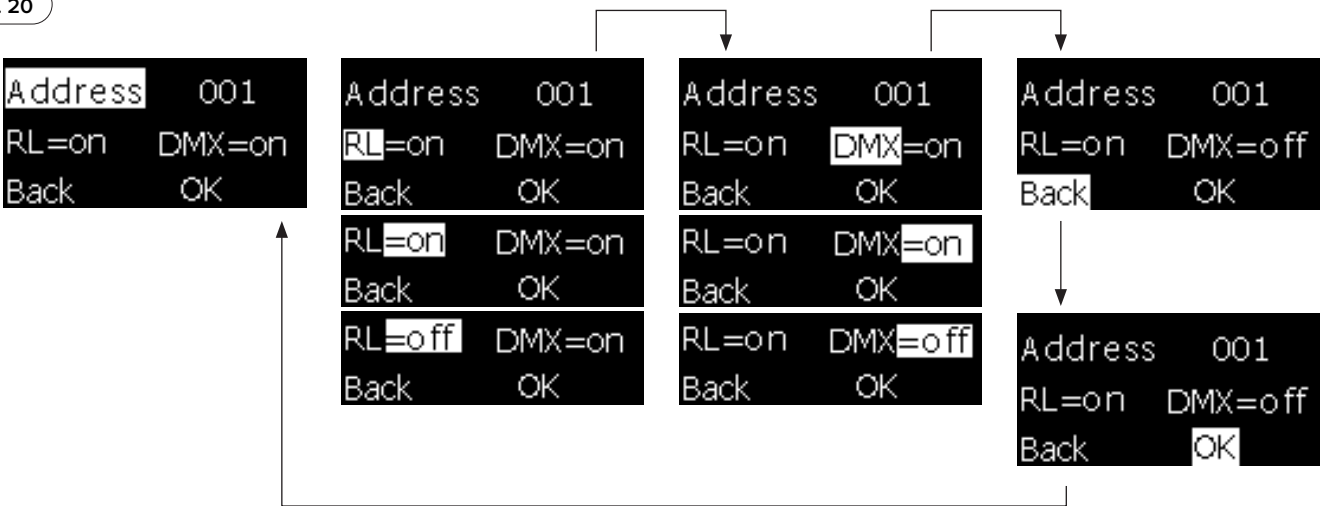
2. Rotating the left encoder toggles to the parameter edit mode (Fig.19).

Fig. 19



3. Pressing the left encoder will switch to the DMX address editing mode. The address can be set in the range from 1 to 510. Confirmation of the selection is made by pressing the left encoder again. The RL parameter enables/disables the radio control of the unit. The DMX parameter enables/disables the wired DMX control of the unit. Selecting Back returns to the main screen without changing any parameters. Selecting Ok saves the changes made to the parameters and returns to the main screen. (Fig.20).

Fig. 20



The **User menu** provides access to the parameters for different operation modes and features of the controller (Fig.21).

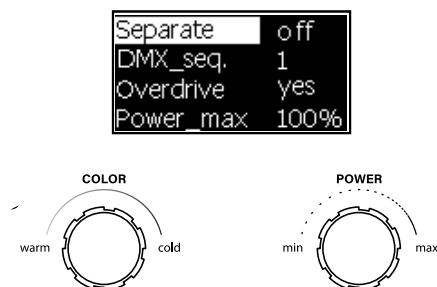


Fig. 21

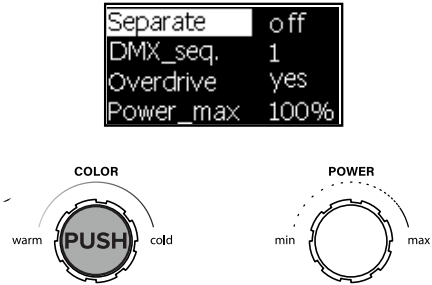
To access the **User menu**:

1. Switch off the device.
2. Press and hold the left encoder button.
3. Turn on the power to the controller while holding down the left encoder button.
4. Release the left encoder button when the current firmware number is shown on the LCD screen.

Separate mode is mode in which two channels act independently of each other.

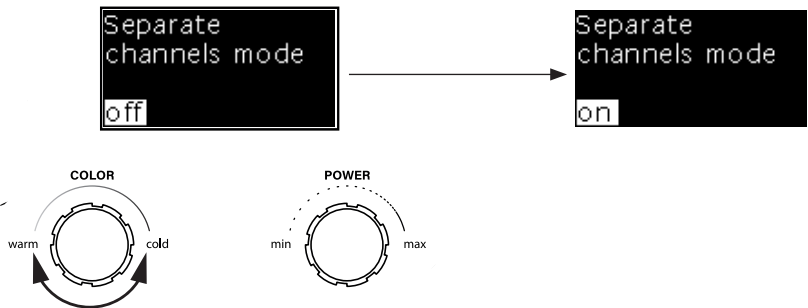
1. Pressing the left encoder brings up the menu to enable/disable the **Separate mode** (Fig. 22).

Fig. 22



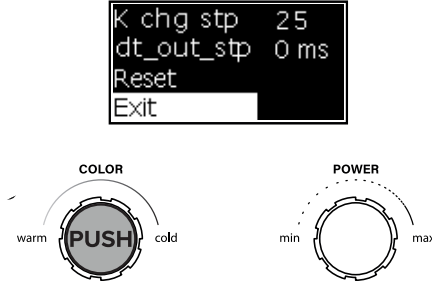
2. Rotating the left encoder knob toggles between the menu items. Pressing confirms the selected option (Fig.23).

Fig. 23



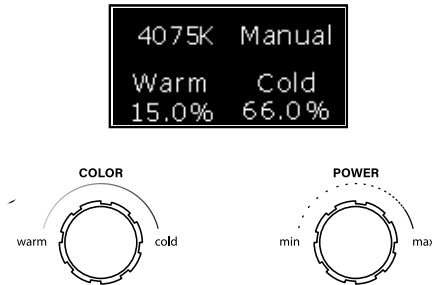
3. After exiting to the **User menu**, select **Exit** to save the settings (Fig.24).

Fig. 24



4. Now you are using the **Separate mode** (Fig.25).

Fig. 25



The left encoder controls the brightness of tunsten LEDs. The right encoder controls the brightness of daylight LEDs (Fig.26).

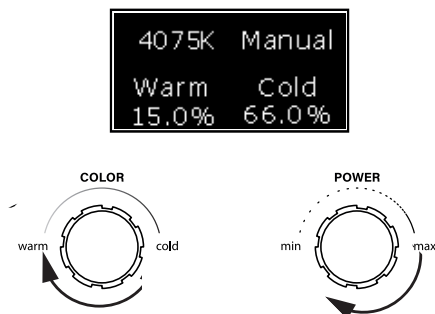


Fig. 26

The upper left corner shows the actual color temperature in K (Kelvin). The temperature is calculated automatically according to the calibration of the unit and the set tungsten to daylight LED ratio (Fig.27).

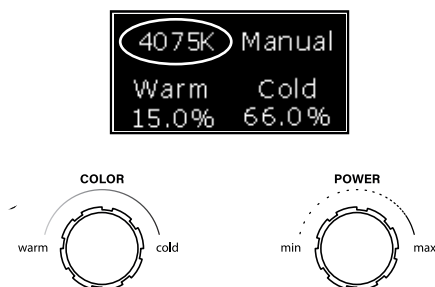


Fig. 27

The maximum power of the two groups of diodes is not limited. Each group can be set to 100% (Fig. 28).

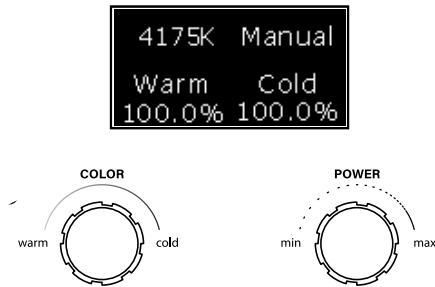
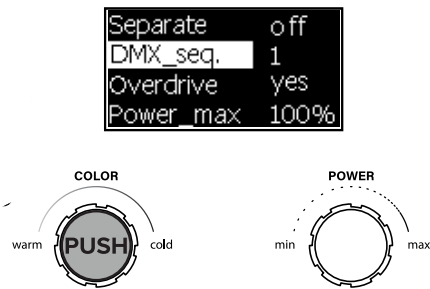


Fig. 28

- When controlling via **DMX** in **Separate** mode 3 addresses are activated:
- brightness of tungsten diodes,
 - brightness of daylight diodes,
 - common virtual CONTROLLER (see **DMX_seq** parameter).

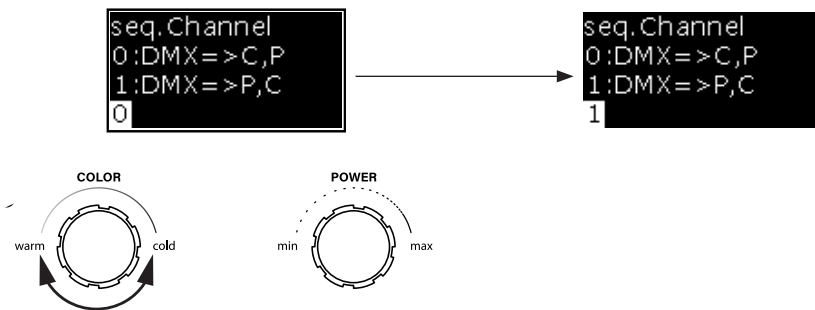
1. Pressing the left encoder brings up a menu for setting the channel addressing sequence (see **DMX Addressing**) (Fig.29).

Fig. 29



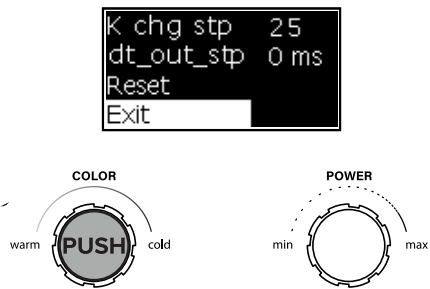
2. Rotating the left encoder toggles between valid parameter options (Fig. 30).

Fig. 30



3. After exiting to the **User menu** select **Exit** to save the settings(Fig. 31).

Fig. 31



1. Pressing the left encoder calls the **Overdrive** menu (Fig.32).

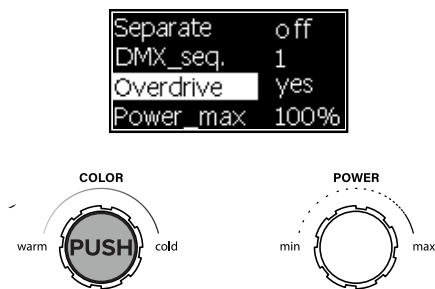


Fig. 32

2. Rotation of the left encoder toggles between the menu options. Pressing the encoder confirms the selected parameter (Fig.33).

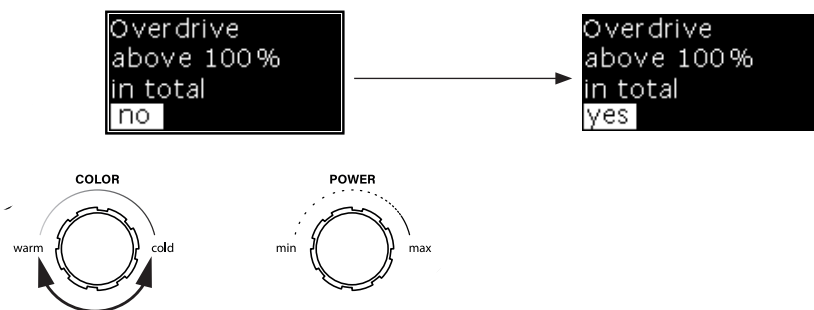


Fig. 33

3. After exiting the **User menu**, select **Exit** to save the settings (Fig. 34).



Fig. 34

4. After restarting the device the main window will switch to the **Overdrive mode**. In this mode it becomes possible to turn on both control channels at 100%, which in total makes 200% in the middle of the color temperature range at 4175 K (Fig.35).

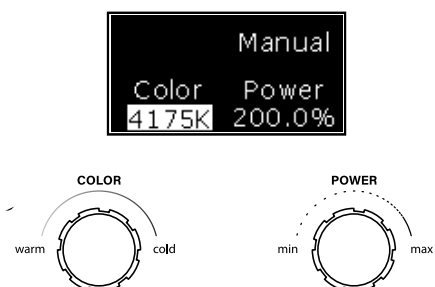


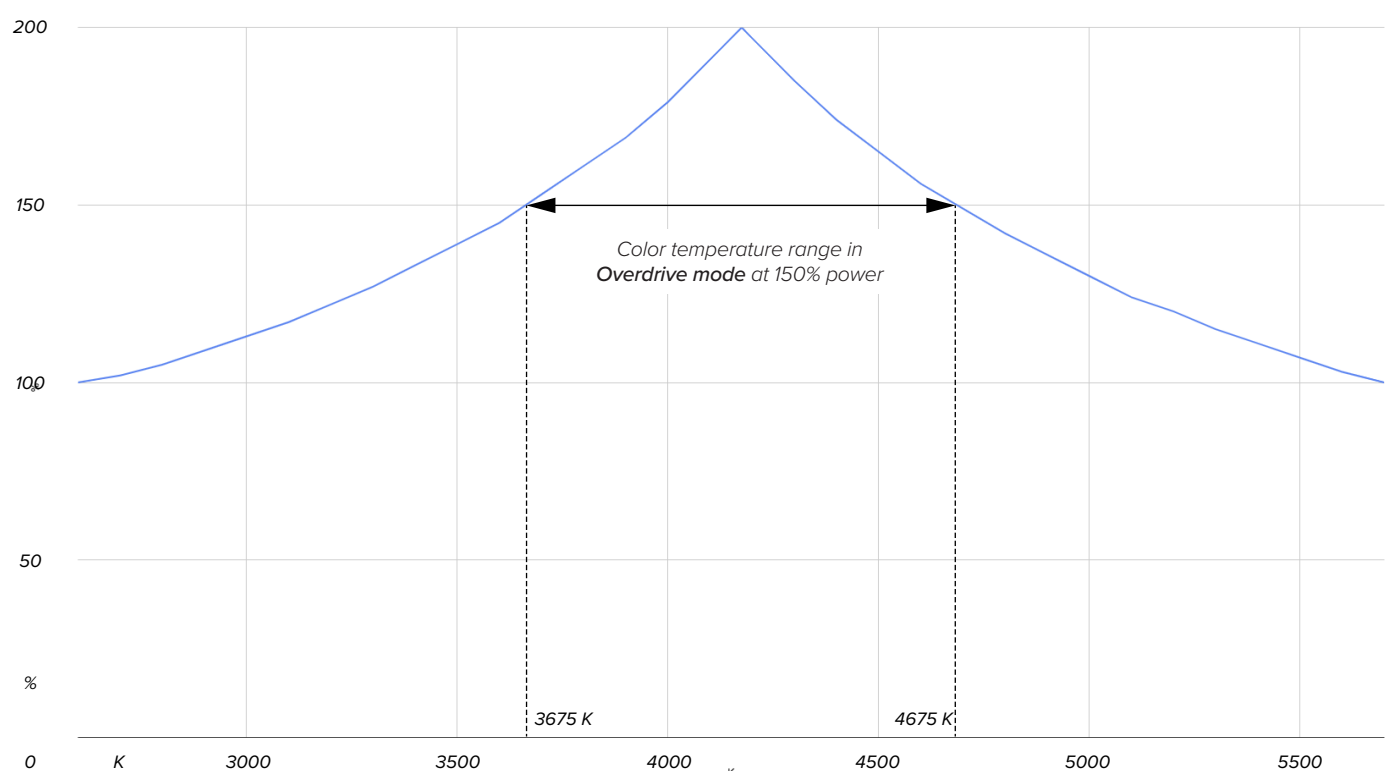
Fig. 35

In **Overdrive mode** the maximum potential of diodes of the unit is used. Each of the control channels can be set from 0% to 100%, reaching the required color temperature.

A different maximum luminous power can be reached for each color temperature value. If at the extremes of the range the maximum achievable power is still 100%, then in the middle of the range it reaches 200% (both channels operating at full power).

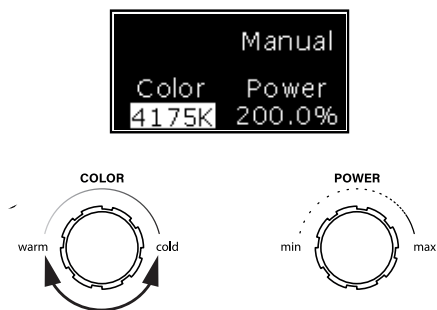
The graph below shows the relationship between the maximum power of the device and the width of the color temperature control range (Fig. 36).

Fig. 36



Reaching 200% maximum power is only possible in the middle of the color temperature range. To simplify the search, the middle of the range is invertibly illuminated (Fig. 37).

Fig. 37



1. Pressing the left encoder brings up a menu for selecting the **Power_max** parameter value (Fig.38).

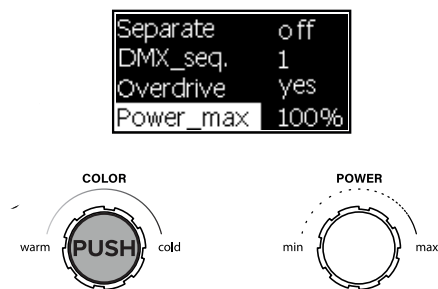


Fig. 38

2. Turning the left encoder toggles between the menu options. Pressing confirms the selected parameter (Fig.39).

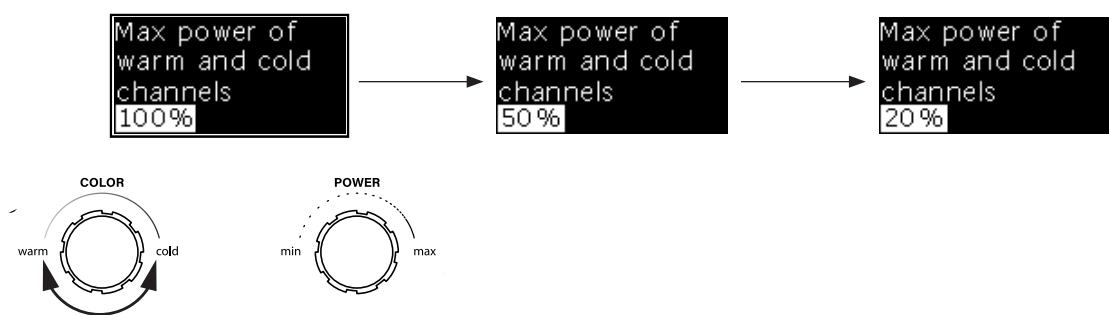


Fig. 39

3. After exiting to the **User menu**, select **Exit** to save the settings (Fig.40).

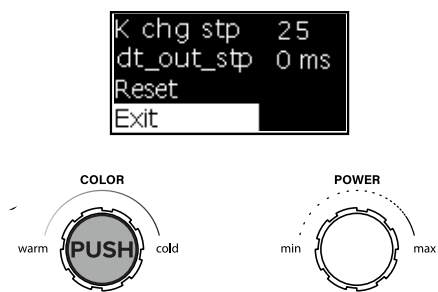


Fig. 40

The main window will switch to the **Power_max mode**.

In **Power_max mode** the power is limited to the selected parameter. At the same time it is possible to adjust the power in steps of 0,2% and 0,5%, including around the zero mark (Fig.41).

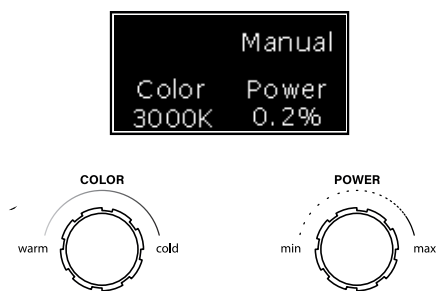
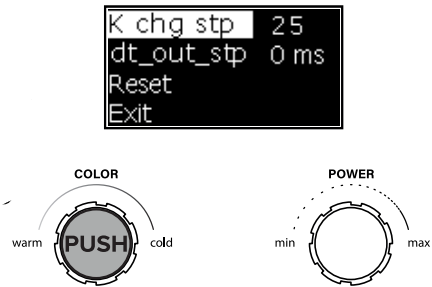


Fig. 41

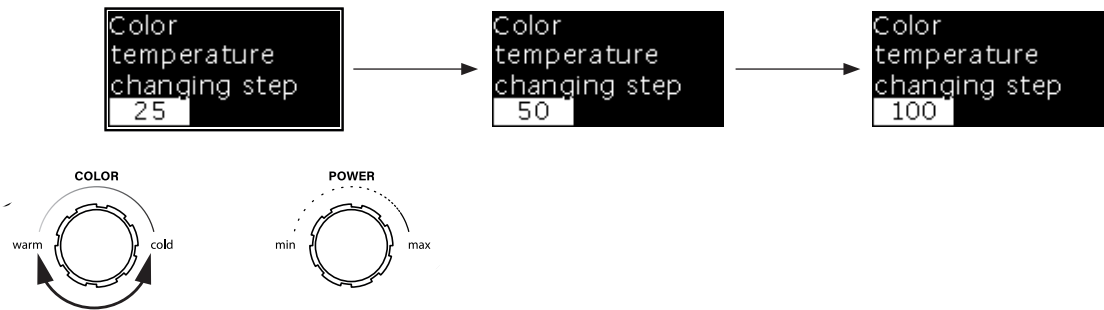
1. Pressing of the left encoder displays the menu of the **K_chg_stp** parameter value selection (Fig. 42).

Fig. 42



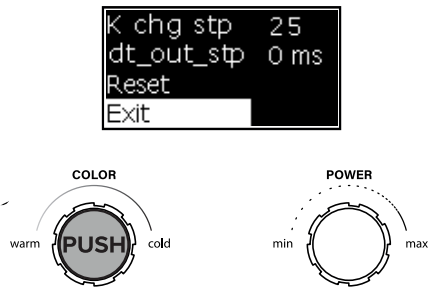
2. Turning the left encoder toggles between the menu options, allowing temperature step values: 10, 25, 50, 100 (Fig.43)

Fig. 43



3. After exiting to the **User menu** select **Exit** to save the settings (Fig.44).

Fig. 44



1. Pressing of the left encoder displays the menu to select the values of parameter **dt_out_stp** (Fig.45).

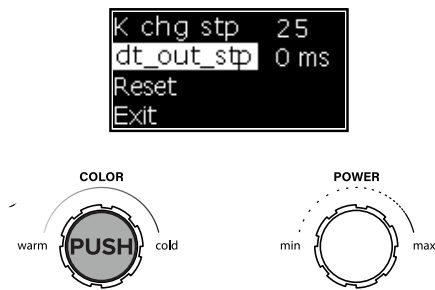


Fig. 45

2. When **dt_uot_stp** is set to 0 ms, the transitions between the different controller parameter states are instantaneous, and you can visually see a step change in brightness and temperature at low power values. Rotation of the left encoder knob changes the parameter which represents the time of smooth transition between states in milliseconds. It is possible to set the transition time from 1 ms to 9999 ms (Fig.46).

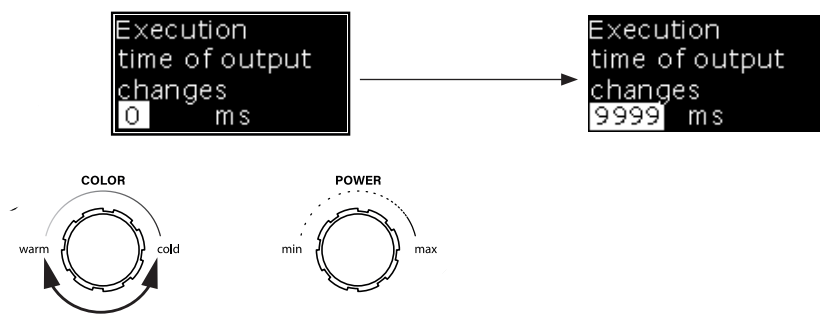


Fig. 46

3. After exiting to **User menu** select **Exit** to save the settings (Fig. 47).

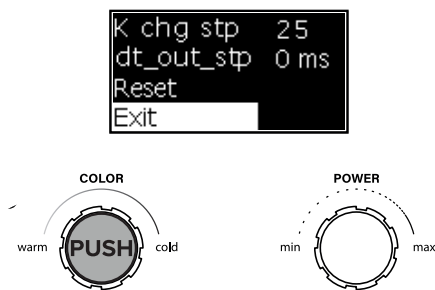
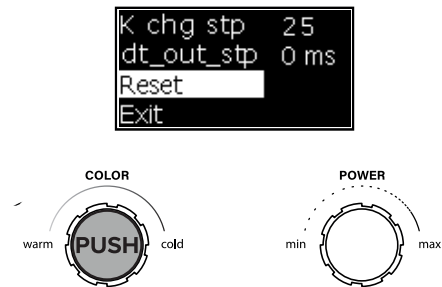


Fig. 47

1. Pressing the left encoder resets all the controller settings to the factory settings. The calibration factors are set to default corresponding the model (Fig.48).

Fig. 48



RESETTING CRMX NETWORK ADAPTER

PipeLighting® dimmers use a built-in LumenRadio® radio module with CRMX protocol.

In case of signal loss or connection failure it is necessary to reset the network adapter of the device. To do so, press and hold for 5 seconds the "Link" button under the antenna on the front panel of the dimmer, when the device is switched on (Fig. 49). It is necessary to search again (Link) the device on your CRMX router. For stable operation, we recommend using the light control panel from Gaffers Control®.

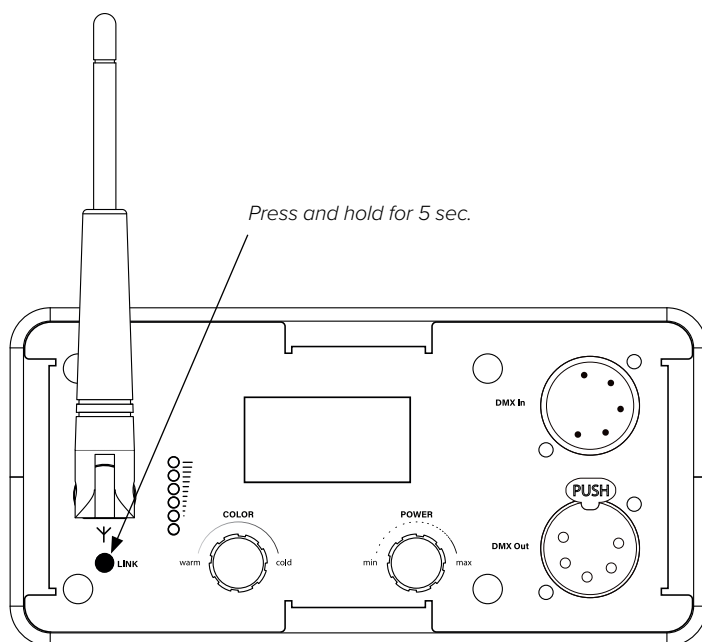
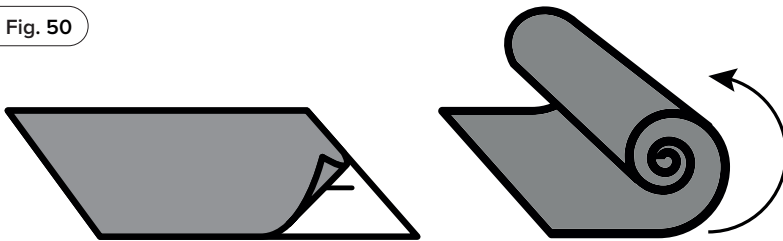


Fig. 49

FINISHING WORK AND ORDER OF STACKING THE EQUIPMENT IN THE BAG

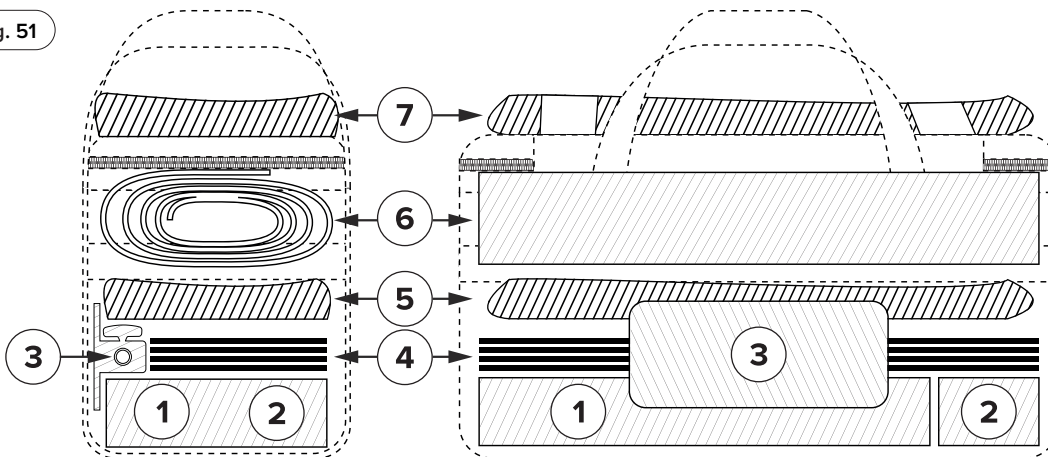
1. Before you start packing, make sure that the unit is complete.
2. Unplug the unit from the power outlet. Disconnect all wires from the controller and put the controller in the case first.
3. Carefully roll up all cables and put them in the case as well.
4. With clean hands, place the protective cover over the head of the unit.
5. Remove the lamp head from the tripod and place it on a clean surface.
6. Disconnect the straps of the mounting pad.
7. Deflate the lamp head with the supplied pump. Do not close the air valve in the deflated lamp head.
8. Remove the attachment straps.
9. Spread the head of the lamp head and make sure there are no kinks.
10. Roll up the instrument head into a roll with an inner radius of at least 5 cm (Fig. 50).

Fig. 50



11. Stack the accessories in the case only in the order shown in Fig. 51:

Fig. 51



1. Controller.
2. Air pump.
3. Mounting pad.
4. Cables.
5. Skirt.
6. Instrument head.
7. Eggcrate/Soft grid (on the lid by Pipe 8).

WARRANTY

1. The manufacturer guarantees the controller for 2 years and the lamp head for 1 year.
2. Any malfunction not caused by mechanical damage to the components of the device is considered under warranty.
3. Water entering the controller is not considered as a warranty case.

Non-warranty cases in relation to the lamp head: mechanical damage to the lamp head (cut, puncture, melt, etc.) Also non-warranty cases include damage to the seams of the device caused by leaving in the open sun, installation near heated objects, open window, ingress of aggressive liquids, improper storage conditions and improper packing in the case (not arranged according to the scheme, the lamp head is folded, not rolled, etc.).

Non-warranty cases in relation to the controller: mechanical damage, traces of water inside the controller, opening the controller body.





MADE IN GERMANY

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