LightStation
by SENNA

User Manual

1. Introduction

LightStation is a system of LED panels and the wireless control plate which enables you to set and store different light presets and scenes which can be recalled at any point. The settings include dimmer and temperature regulation.

LightStation is a modular system, meaning that one channel can control 1 LED panel or endless number of panels depending on your needs. There master settings for storing six different light scenes, meaning that you can set and store six different combinations of light presets of LED panels. Fade speed control between light scenes is adjustable. Strobe and running lights, with adjustable speed, are available, too.

1.1 Features:

- Wireless light control
- 6 bank/24 channel system (4 channel per bank)
- Remote dimmer and temperature regulation
- 6 light scene storages
- Auto memory recall and cycle option
- Fade speed
- Strobe and running lights– adjustable speed
- Special effect presets– fire, candle lights, thunder lights, TV, police lights…

1.2 Specifications:

CONTROL PLATE	
Parameter	**Description**
Control plate dimensions	28x5,5x20cm
Control plate weight	0,6 kg
Operating voltage	7,4 v
Operating temperature	0 ÷ 45 °C (or more if connected to power adapters)
Battery	Rechargeable Lithium Battery Pack (7.4v, 2400mAh)
Wireless frequency	431 ÷ 478 MHz, frequency is preset on 444 MHz and cannot be changed on device, only in factory when ordering, in steps of 200 KHz (235 channels)
Wireless output power	20 mW
Wireless range	up to 300 m line of sight
LED PANELS	
Parameter	**Description**
Dimensions	238X190X32mm
Weight	540g
Bulbs	672 psc
Operating voltage	7,4 v
Operating temperature	0 ÷ 45 °C (or more if connected to power adapters)
Battery	Rechargeable Lithium Battery Pack (7.4v, 6400mAh)
Wireless frequency	431 ÷ 478 MHz, frequency is preset on 444 MHz and cannot be changed on device, only in factory when ordering, in steps of 200 KHz (235 channels)
Wireless output power	20 mW
Wireless range	up to 300 m line of sight
Luminous intensity	2000 lux
Color temperature	3200K-5600K
Beam Angle	75°, 60°, 25°
Flicker	Flicker-free

1.3 Components:

Control plate

4 LED Panels with diffusors

8 batteries

1 x stand 0,5m-2,1m
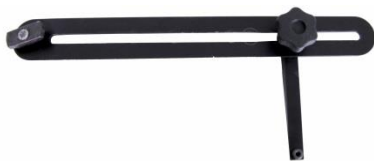

2 x stand 1m-2,6m

1 x boom stand

1 x four-stand bag

4 x honeycomb grids (7°, 15°, 20°, 45°)

6 x color filters

2 x filter/grid rails

4 x joint adapter

1x Holder with ball heads (if ordered)

5 x Power adapter

Flight Case (panels and control plate)

2. Part diagram

2.1 Control plate diagram

- Fade speed potentiometer
- Light scene buttons
- Strobe / Chasing lights buttons
- Display
- Strobe/Chasing L. speed
- Menu Button
- Dimmer control (Tungsten)
- Dimmer control (Daylight)

- Power switch
- Antenna
- Charger input
- Battery safety holder
- Battery

2.2 Led panel diagram

- Panel address button
- Battery pack
- Color temperature regulation
- Display
- Power switch
- Dimmer regulation
- DC power input

3. *Mounting the system*

3.1. Mounting the panels

Before you switch the system on, you need to mount the panels on the stands. Systems includes 4 light stands:

- One small stands (0,5m-2,1m)
- Two standard stands (1m-2,6m)
- One boom stand (1m-6m)

Using the joint adapter you can adjust the angel of panel:

3.2 Mounting the grids

LightStation systems includes 4 different honeycomb grids (7°, 15°, 20°, 45°)
To mount the grids on the panels, simply insert the grids into the slot on the panels as shown in the picture. You can mount color filter on panels the same way.

3.2.1. Mounting honeycomb grids and colour filters

If you have a need to use honeycomb grids and color filters at the same time, please follow the steps:

1. Mount the *filter/grid rails* on the panel. Using the screws on the rails attach *the rails* on both sides of the panel.

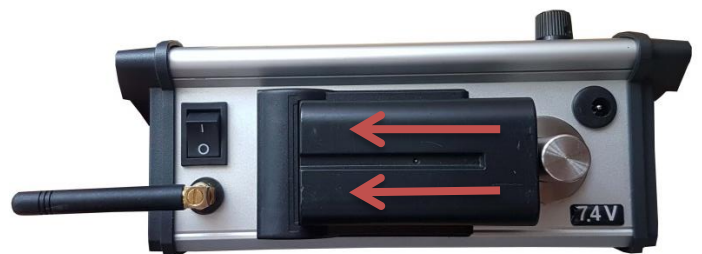2. Insert the grids into the slot on the panel.

3. Insert the color filter into the slot on the *rails.*

4. Getting started

Now that you have mounted the panels on light stands you can turn the system on by following the steps:

1. Insert the battery into battery adapter on the control plate. Press the battery bumper, insert the battery safety into battery adapter and release the battery safety bumper.

2. Insert two batteries into battery adapters on the back of each panel
3. Turn the power switch button on LED panels on.
4. Turn the power switch of the control plate on.
5. The control plate will start establishing wireless connection with panels and the lights will flash on all buttons.
6. When the lights on buttons turn off, wireless connection is established and your LightStation system is ready for use.

4.1. Setting the panel address

In order to be able to control the panel with the light control plate, you need to set the address of each panel. The address of the panel shows which channel controls it. To set the address of the panel please press the *Address button* on the back of the panel as many times as needed to set the channel number as shown in the pictures below:

Channel 1

Channel 2

Channel 3

Channel 4

4.2. Using more than one panel per channel

Basic LightStation set includes 4 LED panel. However, LightStation is a modular system, meaning that it can control as many panels as you like, and if you need more light, you can extend your configuration with more panels whenever you like. Pay attention! The system can control only Senna LED panels. Other LED panels are not compatible with the system and cannot be controlled with Senna Light controller.

When you use more than four panels in LightStation system, you can mount up to 4 LED panels on one single stand. (see the picture)
To mount more panels on a stand please follow the steps:
1. Attach the *holder with ball heads* to the stand
2. Attach the LED panels to the ball heads

Holder with ball heads

Pay attention! When you use more than one panel per channel the important thing you need to do is to set the same address on all the panels you want to control with one channel.

4.3. Dimmer and temperature regulation

Now that the address of the panels are set, you can easily regulate dimmer and color temperature of each panel remotely using *dimmer regulation knobs* on the control plate. Any change you make with be shown on display – in percentage and Kelvins.

5. Advanced settings

5.1. Scene settings

Scene settings allow you to set and store six different light scenes - combinations of light presets of LED panels. To set and store light scenes, please follow the steps:

1. Adjust dimmer and colour temperature of 4 channels using dimmer/temperature knobs on the control plate.
2. Press and hold scene button 1
3. All scene buttons will flash red.
4. The desirable light scene is now stored.
5. Repeat the steps 1-3 until you have stored all six light scenes.

To recall the scene:
Stored scenes now can be recalled at any time by short press to the memory button.
When recalled, memory button will turn green.
The display with show dimmer and temperature settings of each channel of the stored scene.

5.1.1. Scene Fade speed

Fade speed between recalled light scenes can be easily adjusted using the *Fade speed knob.*

5.1.2. Auto Scene recall

After you have stored the desired light scenes, you can set the automatic scene recall.
To set auto scene recall, please follow the steps:
1. Press and hold *Menu* button and while holding it press scene button with which you would like to start the recall session. Green light on the memory button will turn on.
2. Now press scene button where the second wanted scene is stored. Green light on the first scene button will turn on, and then on the second scene button (the lights will constantly loop showing the order of scene recall session)
3. Repeat the step 2 until you have set all wanted scenes in desired recall session. (You can set the same light scene in session more than once)
4. Now you can release the *Menu* button.
5. Auto scene recall session is now stored.

To activate **Auto scene recall** press the *Menu* button shortly.

The panels will turn to the first stored light scene, and then to each next added scene and they will stop at the last scene stored in session.

Display with indicate that scene recall is active and the length of the session recalled.

Fade speed between recalled light scenes can be adjusted with the *Fade speed knob.*
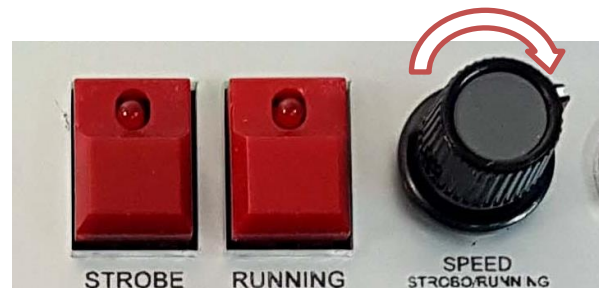
5.1.3. Scene Loop cycle

This option allows the system to constantly loop over the stored light scenes in the order you have set.
To set scene loop cycle option, you should follow the steps 1-5 in the charter *Auto Scene Recall,* **but pay attention to set the same light scene as the first and the last in the scene recall session!**

Set as described, the light will keep looping as long as you do not press the *Menu* button shortly once again.

5.2. Running lights

- The option of running lights can be activated by pressing the **Running button**
- The green light indicator will turn on and the lights will shift one by one.
- The speed of running lights can be adjusted using *Strobe/Running Speed knob.*
- To deactivate running lights option just press *Running* button once again.
- The green light indicator will turn off and the lights will stop running.
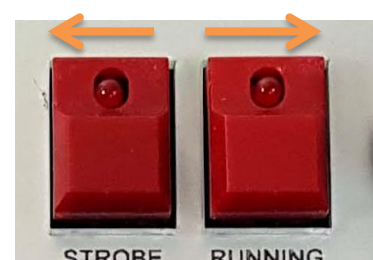
5.3. Strobe

- The *Strobe* option can be activated by pressing the **Strobe button**
- The green light indicator will turn on and the lights will start flashing.
- The strobe speed can be adjusted using *Strobe/Running Speed knob.*
- To deactivate strobe option just press *Strobe* button once again.
- The green light indicator will turn off and the lights will stop flashing.

Note! Strobe and Running lights option cannot be activated at the same time.

6. Menu options

To enter the Menu, please press and hold the **Menu button** for a few seconds.

To navigate through the Manu, use **Strobe** (for previous) and **Running lights** (for next) buttons.

The options of the menu are:

1. Change channel
2. Change bank
3. Change settings (available for customised orders)
4. Console settings
5. Change DMX (available for customised orders)
6. Exit menu
7. Choose effects

6.1. Change channel:

In order to be able to change the channel of the panel/s, control plate and the panel/s must be set on the same bank.

To change the channel of the LED panel/s, please follow the steps:

1. Press the hold Menu button for a few seconds to enter the Menu.
2. Use Stobe/Running buttons to find the option "Change channel"
3. Press the Menu button to confirm the request
4. Use Stobe/Running buttons to choose the channel (1-4)
5. Press the Menu button to confirm the request
6. The display with show "Send to ALL" meaning that the channel of all panels that are turned on at that moment will be changed.
7. To confirm the request press and hold Menu button until the display shows counting down (from 30s to 0)
8. The panel/s will start blinking
9. Press Menu button once again to confirm.
10. Display with show "Channel changed"

If you don't want to change the channel of all panels, please follow this procedure:

1. Keep the panel/s you want to change the channel to turned OFF.
2. Follow the steps 1-6 from the instructions above.
3. Use Stobe/Running buttons to change the option to "Send to New"
4. Press and hold the Menu button to confirm the request
5. The display will show counting down (from 30s to 0)
6. Now turn the panel ON (within this 30 seconds)
7. The panel will start blinking
8. Press Menu button once again to confirm.
9. Display with show "Channel changed"

6.2. Change bank

This option refers to the bank of the panel/s. You can use control plate to easily change the bank of the panels. This is the procedure:

1. The control plate must be set on the same bank as the panel/s you want to effect on.
2. Press the hold Menu button for a few seconds to enter the Menu.
3. Use Stobe/Running buttons to find the option "Change bank"
4. Press the Menu button to confirm the request
5. Use Stobe/Running buttons to set the desirable bank number (1-6)
6. Press the Menu button shortly to confirm the request
7. The display with show "Send to ALL" meaning that the bank of all LED panels that are turned on at that moment will be changed.
8. To confirm the request press and hold Menu button until the display shows counting down (from 30s to 0)
9. The panel/s will start blinking
10. Press Menu button once again to confirm.
11. Display with show "Finished, exiting"
12. Bank is changed

If you don't want to change the bank of all panels, please follow this procedure:

1. The control plate must be set on the same bank as the panel/s you want to effect on.
2. Keep the panel/s you want to change the channel to turned OFF.
3. Follow the steps 1-7 from the instructions above.
4. Use Stobe/Running buttons to change the option to "Send to New"
5. To confirm the request press and hold Menu button until the display shows counting down (from 30s to 0)
6. Now turn the LED panel/s ON (within 30 sec)
7. Panel/s will start blinking.
8. Press Menu button once again to confirm.
9. Display with show "Finished, exiting"
10. Bank is now changed

IMPORTANT: To be able to control the panel/s, the bank of the control plate and the panel/s must be the same!

6.3. Console settings

With console settings you can change display backlight intensity or the color of control plate light:

1. **RGB LED color:**
    13. Press the hold Menu button for a few seconds to enter the Menu.
    14. Use Stobe/Running buttons to find the option "Console settings"
    15. Press the Menu button to confirm the request
    16. Use Stobe/Running buttons to find the option "RGB LED color"
    17. Press the Menu button to confirm the request
    18. One Dimmer knobs (Daylight) of the Channel 1, 2 and 3 to mix the colors.
    19. When you have reached desirable intensity, press Menu button shortly to confirm the request.

2. **Display backlight:**
    1. Press the hold Menu button for a few seconds to enter the Menu.
    2. Use Stobe/Running buttons to find the option "Console settings"
    3. Press the Menu button to confirm the request
    4. Use Stobe/Running buttons to find the option "Display backlight"
    5. Press the Menu button to confirm the request
    6. The display will show " Move WhitePOT"
    7. Use the Dimmer knob (Daylight) of the Channel 1 to change the intensity of display backlight.
    8. When you have reached desirable intensity, press Menu button shortly to confirm the request.

6.4. Choose effect

There are 10 special effect presets available:

1. **Warning light**
2. **Police effect** (Red color filter should be added on one panel and the blue one on the other)
3. **Security escort** (Red color filter should be added on one panel and the blue one on the other)
4. **Fire effect** (It is recommended to add orange color filter on the panel)
5. **Candle light** (It is recommended to add orange color filter on the panel)
6. **Sunrise**
7. **Sunset**
8. **Watching TV**
9. **Thunder Type I**
10. **Thunder Type II**

To activate desirable effect:

1. Press the hold Menu button for a few seconds to enter the Menu.

2. Use Stobe/Running buttons to find the option "Choose effect"
3. Press the Menu button to confirm the request
4. Use Stobe/Running buttons to find choose desirable effect
5. Press Menu button shortly
6. The effect with start playing, and the display will show "Playing effect"
7. To change the intensity of the effect, use the Dimmer knob (Daylight) of the Channel 1.
8. To stop the effect, press Menu button shortly.
9. To exit the option, choose "Exit menu" and press the Menu button once again to confirm.

7. *Using GafferStation console*

GafferStation is simplified model of LightStation control plate.

- Dimmer/Temperature regulation for 4 channels is available the same way as no LightStation control plate.

- There are 2 light Scenes available (the procedure of storing light scenes is the same as on LightStation control plate)

- There are no Strobe/running options

8. *Using LightStation LED panels separately from the system*

LightStation LED panels can also be used separately from the set, meaning that you can control them manually. To unlink the panel from the system, please follow the steps:
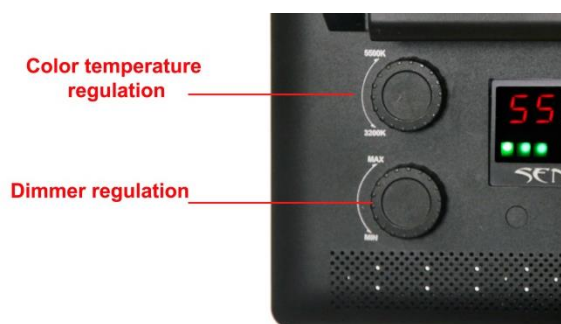
1. Turn the panel off.
2. Press and hold *Address* button on the back of the panel.
3. While you are holding the *Address* button, turn the panel on. The *Address* button will start flashing.
4. Release the address button.
5. The LEDs will turn on.
6. The panel is now unlinked from the system and it can be controlled manually.

If you want to return the Panel to remote control, just turn it off and on again, and it will be a part of LightStation system again.

8.1. Manual control

To adjust the dimmer and colour temperature manually, use *dimmer and temperature knobs* on the back of the panels.
The value will be shown on the display.

9. Batteries

- LightStation system (control plate and panels) run on 7.4v rechargeable batteries.

The batteries capacity of the system is 2 working hour.

9.1. Checking the state of batteries:

To check the **state of the control plate battery** please check the *voltage indicator display.*
If the voltage is under 6,5 battery needs to be charged.
Please attach the power adapter.
If the voltage is 7,4 battery is fully charged.

To check the **state of the panels batteries**, please read the *voltage indicator* on back of the panel.
If the indicator shows 1 green square, the batteries need to be charged. Please attach the power adapter**.**
If the indicator shows 4 green squares, the batteries are fully charged.

9.2. Charging the batteries

When the batteries get empty, you should attach the power adapter on the control plate/LED panels. With the power adapter attached, the system can work on mains power and charge the batteries at the same time.

Power adapter inputs