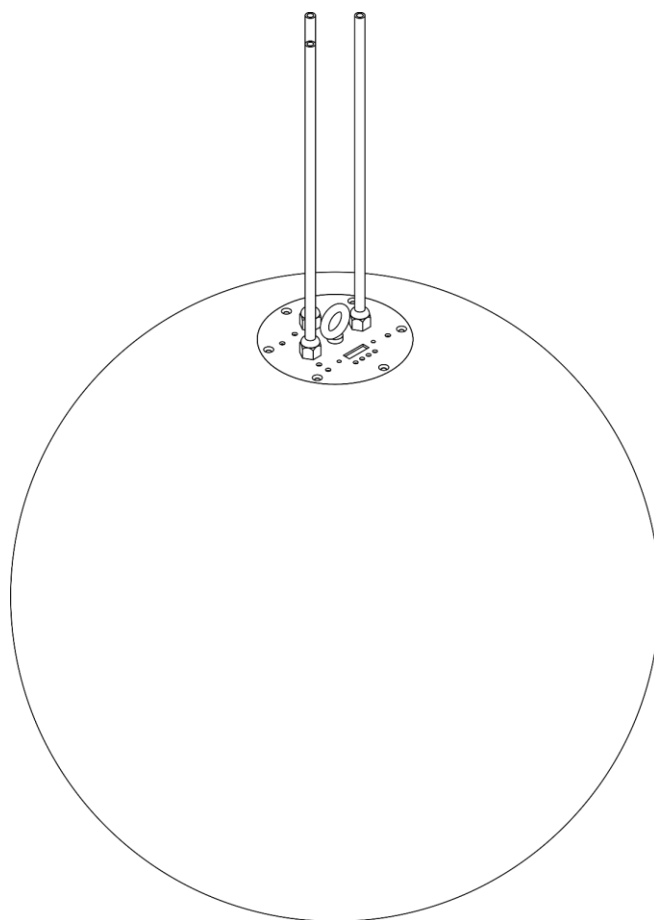




USER MANUAL



ENGLISH

Illumisphere 50

V1

Product code: 41123

Preface

Thank you for purchasing this Showtec product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Intended and non-intended use of the device
- Installation and operation of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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Design and product specifications are subject to change without prior notice.

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Table of contents

| | |
|---|-----------|
| 1. Introduction | 4 |
| 1.1. Before Using the Product | 4 |
| 1.2. Intended Use | 4 |
| 1.3. Product Lifespan..... | 4 |
| 1.4. LEDs Lifespan | 4 |
| 1.5. Text Conventions | 5 |
| 1.6. Symbols and Signal Words..... | 5 |
| 1.7. Symbols on the Information Label | 5 |
| 2. Safety | 6 |
| 2.1. Warnings and Safety Instructions | 6 |
| 2.2. Requirements for the User..... | 8 |
| 3. Description of the Device | 9 |
| 3.1. Overview | 9 |
| 3.2. Top Plate | 9 |
| 3.3. Product Specifications | 10 |
| 3.4. Dimensions..... | 11 |
| 4. Installation | 12 |
| 4.1. Safety Instructions for Installation | 12 |
| 4.2. Personal Protective Equipment | 12 |
| 4.3. Installation Site Requirements | 12 |
| 4.4. Rigging | 12 |
| 4.5. Connecting to Power Supply | 13 |
| 5. Setup | 14 |
| 5.1. Warnings and Precautions | 14 |
| 5.2. Stand-alone Setup | 14 |
| 5.3. DMX Connection..... | 14 |
| 5.3.1. DMX-512 Protocol | 14 |
| 5.3.2. DMX Cables..... | 15 |
| 5.3.3. Master/Slave Setup | 15 |
| 5.3.4. DMX Linking..... | 16 |
| 5.3.5. DMX Addressing..... | 16 |
| 6. Operation | 17 |
| 6.1. Safety Instructions for Operation | 17 |
| 6.2. Control Modes | 17 |
| 6.3. Control Panel | 18 |
| 6.4. Start-up..... | 18 |
| 6.5. Menu Overview | 19 |
| 6.6. Main Menu Options | 20 |
| 6.6.1. DMX Address | 20 |
| 6.6.2. DMX Channel | 20 |
| 6.6.3. Running Mode..... | 20 |
| 6.6.4. Programs | 20 |
| 6.6.5. Settings..... | 21 |
| 6.6.5.1. Calibration | 21 |
| 6.6.6. System Info | 21 |
| 6.7. DMX Channels | 22 |
| 7. Troubleshooting | 23 |
| 8. Maintenance | 24 |
| 8.1. Safety Instructions for Maintenance..... | 24 |
| 8.2. Preventive Maintenance | 24 |
| 8.2.1. Basic Cleaning Instructions | 25 |
| 8.3. Corrective Maintenance..... | 25 |

9. Deinstallation, Transportation and Storage26
9.1. Instructions for Deinstallation.....26
9.2. Instructions for Transportation26
9.3. Storage.....26

10. Disposal26

11. Approval.....26

1. Introduction

1.1. Before Using the Product

**Important**

Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- Showtec Illumisphere 50
- 1 x non-detachable power cable to Schuko (1 m)
- 2 x non-detachable DMX cables with 3-pin DMX IN/OUT connectors (0,8 m)
- User manual

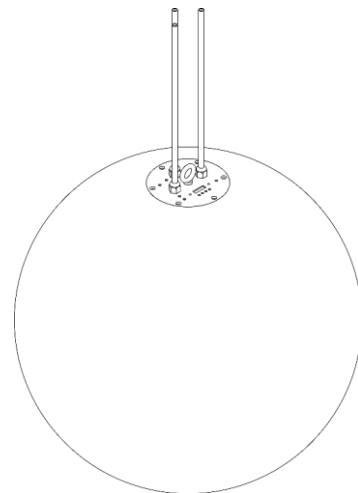


Fig. 01

1.2. Intended Use

This device is intended for professional use as a decorative light effect. It is suitable only for indoor installation. This device is not suitable for households and for general lighting.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

1.3. Product Lifespan

This device is not designed for permanent operation. Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the device's lifespan.

1.4. LEDs Lifespan

The light output of the LEDs gradually decreases over time (lumen depreciation). High operating temperatures contribute to this process. You can extend the lifetime of the LEDs by providing adequate ventilation and operating the LEDs at the lowest possible brightness.

1.5. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example “Press the **UP/DOWN** buttons”
- References: References to chapters are in bold lettering, for example: “Refer to **2. Safety**”
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

1.6. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.



DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



Attention

Indicates important information for the correct operation and use of the product.



Important

Read and observe the instructions in this document.



Electrical hazard



Hot surface



Provides important information about the disposal of this product.

1.7. Symbols on the Information Label

This product is provided with an information label. The information label is located on the non-detachable power cable.

The information label contains the following symbols:



This device is designed for indoor use.



This device falls under IEC protection class I.



This device shall not be treated as household waste.

2. Safety



Important

Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

2.1. Warnings and Safety Instructions



DANGER

Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.



DANGER

Electric shock caused by dangerous voltage inside

There are areas within the device where dangerous touch voltage (> 120 V DC) may be present.

- Do not open the device or remove the sphere.
- Do not operate the device if the sphere is not attached. Before operation, check if the sphere is firmly attached and all screws are tightly fastened.
- Disconnect the device from electrical power supply before service and maintenance, and when the device is not in use.



DANGER

Electric shock caused by short-circuit

This device falls under IEC protection class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket outlet with ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not bypass the thermostatic switch or fuses.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.



WARNING
Risk of burns due to hot surface

The inner parts of the device can become hot during operation.

- Allow the device to cool down for at least 15 minutes before servicing.



WARNING
Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.



Attention
Power supply

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.



Attention
General safety

- Do not connect the device to a dimmer pack.
- Do not switch the device on and off in short intervals. This decreases the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.



Attention
For professional use only
This device shall be used only for the purposes it is designed for.

This device is designed to be used as a decorative light effect. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households and for general lighting.
- This device is not designed for permanent operation.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

**Attention**

Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixations and installation points.
- The power cables are not damaged and do not show any material fatigue.

**Attention**

Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

2.2. Requirements for the User

This product may be used by ordinary persons. Installation and maintenance can be carried by ordinary persons. Service shall be carried out only by instructed or skilled persons. Contact your Highlife International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

3. Description of the Device

The Showtec Illumisphere 50 is a decorative RGBW light effect.

3.1. Overview

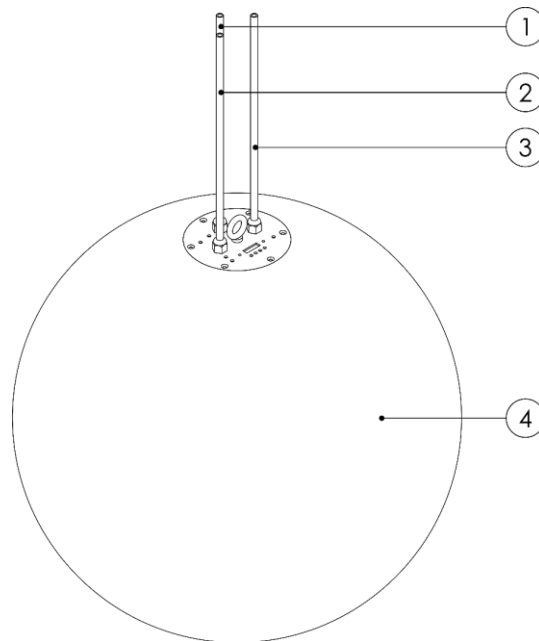


Fig. 02

- 01) Non-detachable power cable to Schuko (1 m)
- 02) Non-detachable DMX cable (0,8 m) with a 3-pin DMX IN connector
- 03) Non-detachable DMX cable (0,8 m) with a 3-pin DMX OUT connector
- 04) Sphere

3.2. Top Plate

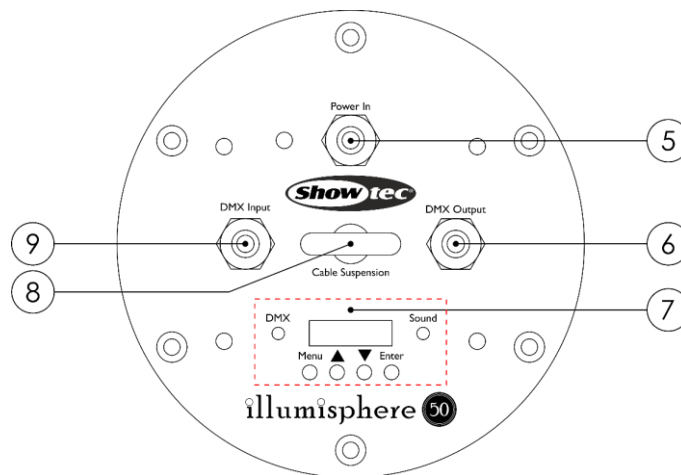


Fig. 03

- 05) Power input
- 06) DMX signal output
- 07) Control panel with OLED display, buttons and LEDs
- 08) Cable suspension eyelet
- 09) DMX signal input

3.3. Product Specifications

| | |
|---|---|
| Model: | Illumisphere 50 |
| Electrical: | |
| Input voltage: | 100–240 V AC, 50/60 Hz |
| Power consumption: | 100 W (max) |
| Fuse: | 3 A, 250 V |
| Physical: | |
| Dimensions: | Ø 500 mm (D) |
| Weight: | 3,6 kg |
| Optics: | |
| Light source: | 462 x SMD 5050 RGBW LEDs |
| Dimmer: | 0–100 % |
| Strobe: | 0–20 Hz |
| Operation and control: | |
| Control: | Auto, Sound, Master/Slave, DMX-512 |
| DMX channels: | 1, 4, 6, 8 channels |
| Control panel: | OLED display and buttons |
| Connections: | |
| Power connections: | Non-detachable power cable (1 m) to Schuko |
| Data connections: | 2 x non-detachable DMX cables (0,8 m) with 3-pin DMX connectors IN/OUT |
| Signal pinout: | Pin 1 (ground), pin 2 (-), pin 3 (+) |
| Construction: | |
| IP rating: | IP20 |
| Thermal: | |
| Maximum ambient temperature t_a : | 40 °C |
| Maximum housing temperature t_c : | 70 °C |
| Minimum distance: | |
| Minimum distance from flammable surfaces: | 0,5 m |
| Minimum distance to lighted object: | 0,5 m |

3.4. Dimensions

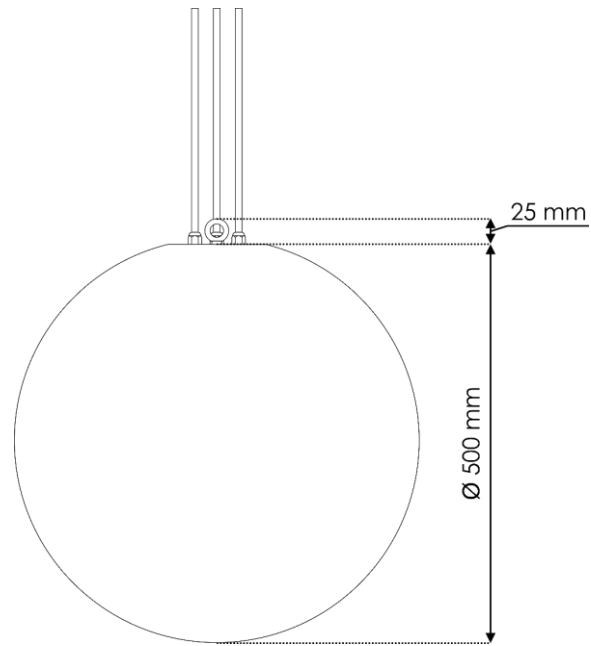


Fig. 04

4. Installation

4.1. Safety Instructions for Installation

**WARNING**

Improper installation can cause serious injuries and damage of property.

If trussing systems are used, installation must be carried out only by instructed or skilled persons.

Follow all applicable European, national and local safety regulations concerning rigging and trussing.

4.2. Personal Protective Equipment

During installation and rigging wear personal protective equipment in compliance with the national and site-specific regulations.

4.3. Installation Site Requirements

- The device can be used only indoors.
- The device can be suspended on an overhead structure or on a truss.
- The maximum ambient temperature $t_a = 40\text{ °C}$ must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

4.4. Rigging

The device can be suspended on an overhead structure or on a truss. Make sure that all loads are within the pre-determined limits of the supporting structure.

**CAUTION**

Restrict the access under the work area when suspending the device.

Use a suitable suspension chain or cable to hang the device. Make sure that the suspension cable/chain can hold 10 times the weight of the Illumisphere 50. Fasten the suspension chain/cable onto the **cable suspension eyelet (08)**, see Fig. 05.



Attention

Do not use the power cable or the DMX cables to hang the LED sphere.

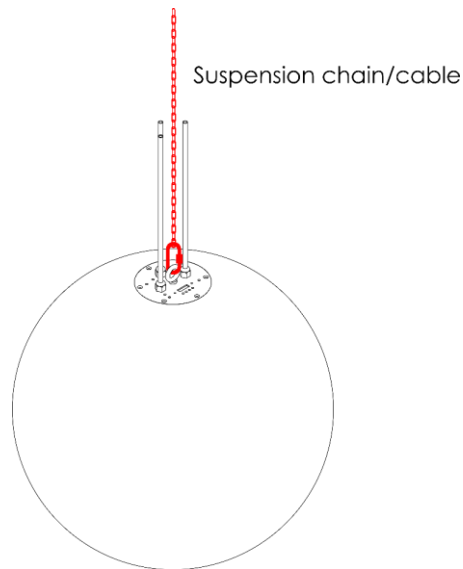


Fig. 05

4.5. Connecting to Power Supply



DANGER

Electric shock caused by short-circuit

The device accepts AC mains power at 100–240 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:

- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has ground (earth) connection.

Connect the device to the socket-outlet with the power plug. Do not connect the device to a dimmer circuit, as this may damage the device.

5. Setup

5.1. Warnings and Precautions

**Attention**

Connect all data cables before supplying power.

Disconnect power supply when connecting or disconnecting data cables.

5.2. Stand-alone Setup

When the Illumisphere 50 is not connected to a controller or to other devices, it functions as a stand-alone device. It can be operated in auto mode or sound-controlled mode.

For more information about running built-in programs in auto mode, refer to **6.6.3. Running Mode** on page 20.

For more information about sound-controlled mode, refer to **6.6.3. Running Mode** on page 20.

5.3. DMX Connection

5.3.1. DMX-512 Protocol

You will need a DMX serial data link to run light shows of one or more devices using a DMX-512 controller or to run synchronized shows of two or more devices set in a master/slave operating mode.

The Illumisphere 50 has 3-pin DMX signal IN and OUT connectors.

The pin assignment is as follows: pin 1 (ground), pin 2 (-), pin 3 (+).

Devices on a serial data link must be daisy-chained in a single line. The number of devices that you can control on one data link is limited by the combined number of the DMX channels of the connected devices and the 512 channels available in one DMX universe.

To comply with the TIA-485 standard, no more than 32 devices should be connected on one data link. In order to connect more than 32 devices on one data link, you must use a DMX optically isolated splitter/booster, otherwise this may result in deterioration of the DMX signal.

Note:

- Maximum recommended DMX data link distance: 300 m
- Maximum recommended number of devices on a DMX data link: 32 devices

5.3.2. DMX Cables

Shielded twisted-pair cables with 3-pin XLR connectors must be used for reliable DMX connection. You can purchase DMX cables directly from your Highlite International dealer or make your own cables.

If you use XLR audio cables for DMX data transmission, this may lead to signal degradation and unreliable operation of the DMX network.

When you make your own DMX cables, make sure that you connect the pins and wires correctly as shown in Fig. 06.

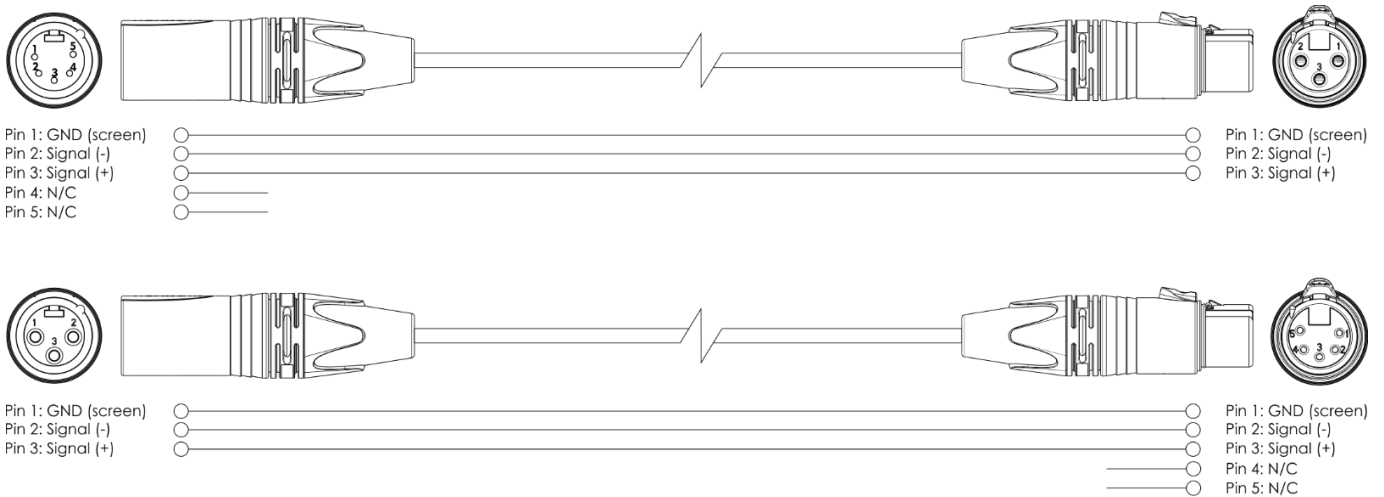


Fig. 06

5.3.3. Master/Slave Setup

The Illumisphere 50 supports master/slave control mode. To connect multiple devices in a master/slave setup, follow the steps below:

- 01) Connect the first device's DMX OUT connector to the second device's DMX IN connector. You can use an extension cable in case the non-detachable cables are too short.
- 02) Repeat step 1 to connect all devices as shown in Fig. 07. The first connected device will be automatically recognized as the master device.
- 03) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device in the setup.
- 04) Set the remaining devices to slave mode. See **6.6.3. Running Mode** on page 20 for more information.

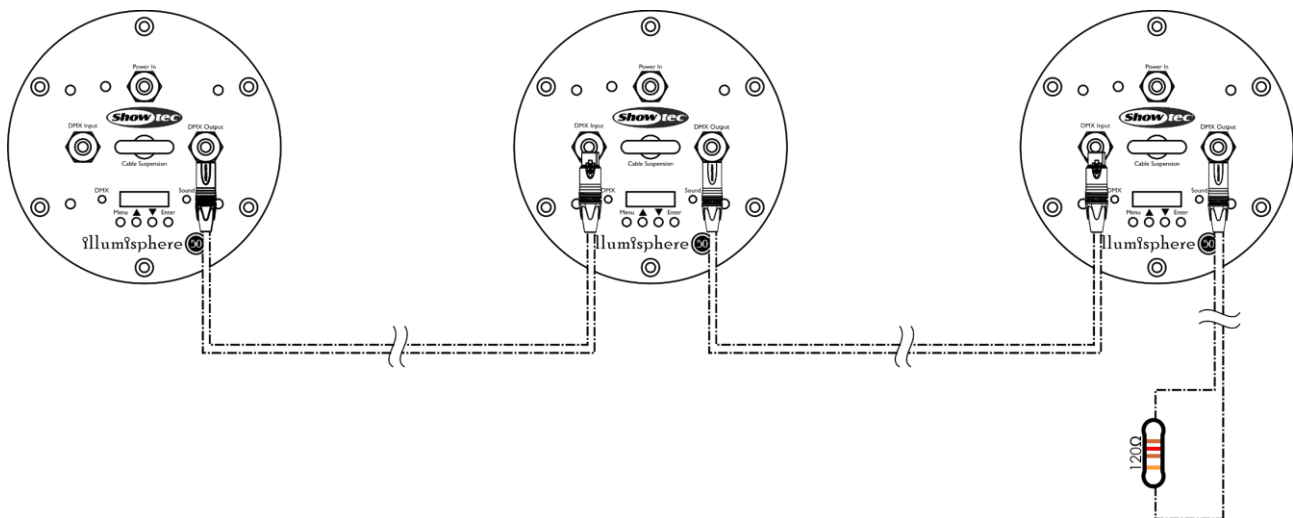


Fig. 07

5.3.4. DMX Linking

To connect multiple devices on one DMX data link, follow the steps below:

- 01) Use a 3-pin DMX cable to connect the DMX OUT connector of the lighting controller to the DMX IN connector of the first device.
- 02) Connect the first device's DMX OUT connector to the second device's DMX IN connector. You can use an extension cable in case the non-detachable cables are too short.
- 03) Repeat step 2 to connect all devices in a daisy-chain as shown in Fig. 08.
- 04) Connect a DMX terminator (120 Ω resistor) to the DMX OUT connector of the last device on the data link.

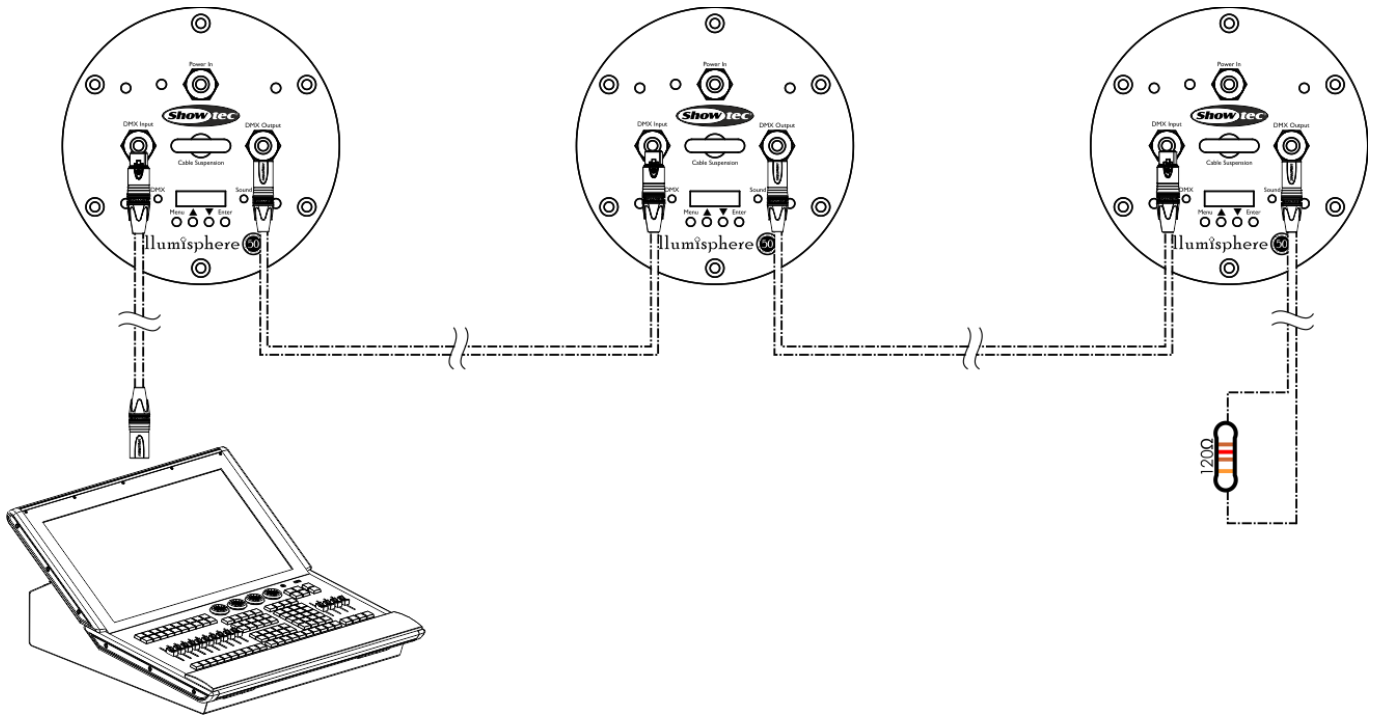


Fig. 08

5.3.5. DMX Addressing

In a setup with multiple devices, make sure that you set the DMX starting address of each device correctly. The Illumisphere 50 has 4 personalities: 1 channel, 4 channels, 6 channels and 8 channels.

If you want to connect multiple devices on one data link and use them in 8-channel mode, for example, proceed as follows:

- 01) Set the starting address of the 1st device on the data link to 1 (001).
- 02) Set the starting address of the 2nd device on the data link to 9 (009), as $1 + 8 = 9$.
- 03) Set the starting address of the 3rd device on the data link to 17 (017) as $9 + 8 = 17$.
- 04) Continue assigning the starting addresses of the remaining devices by adding each time 8 to the previous number.

Make sure that you do not have any overlapping channels in order to control each Illumisphere 50 correctly. If two or more devices are addressed similarly, they will work similarly.

6. Operation

6.1. Safety Instructions for Operation

**Attention**

This device must be used only for the purposes it is designed for.

This device is intended for professional use as a decorative light effect. It is suitable only for indoor installation. This device is not suitable for households and for general lighting.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

**Attention****Power supply**

Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.

6.2. Control Modes

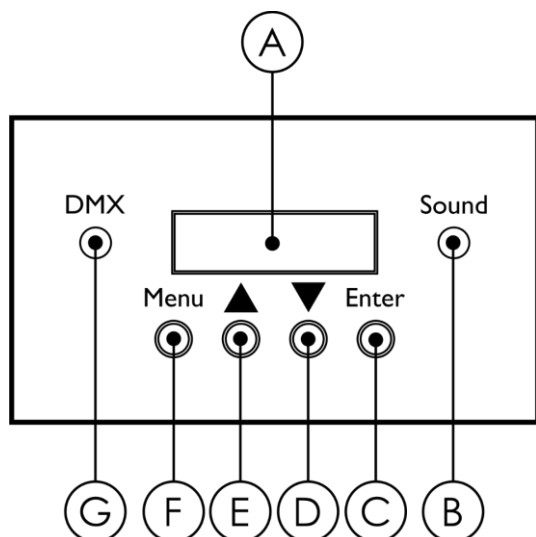
The Illumisphere 50 can be operated with a lighting controller or without a controller in stand-alone mode.

The Illumisphere 50 supports the following control modes:

- Stand-alone (Auto programs)
- Sound-controlled
- Master/Slave
- DMX-512: 1 channel, 4 channels, 6 channels and 8 channels

For more information about how to connect the devices, refer to **5. Setup** on pages 14–16.

6.3. Control Panel



- A) OLED display
- B) Sound-controlled mode indication LED (green)
- C) ENTER button
- D) DOWN button
- E) UP button
- F) MENU button
- G) DMX control mode indication LED (red)

Fig. 09

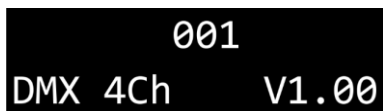
- Use the **UP/DOWN** buttons to navigate through the menus or to increase/decrease numeric values.
- Use the **ENTER** button to open the desired menu or to set the currently selected value.
- Use the **MENU** button to exit the current menu and/or to return to the main menu.

The **green indication LED (B)** will start blinking when the device is operated in sound-controlled mode.

The **red indication LED (G)** will be on when the device is operated in DMX control mode. The LED will turn off when the DMX signal is lost or discontinued.

6.4. Start-up

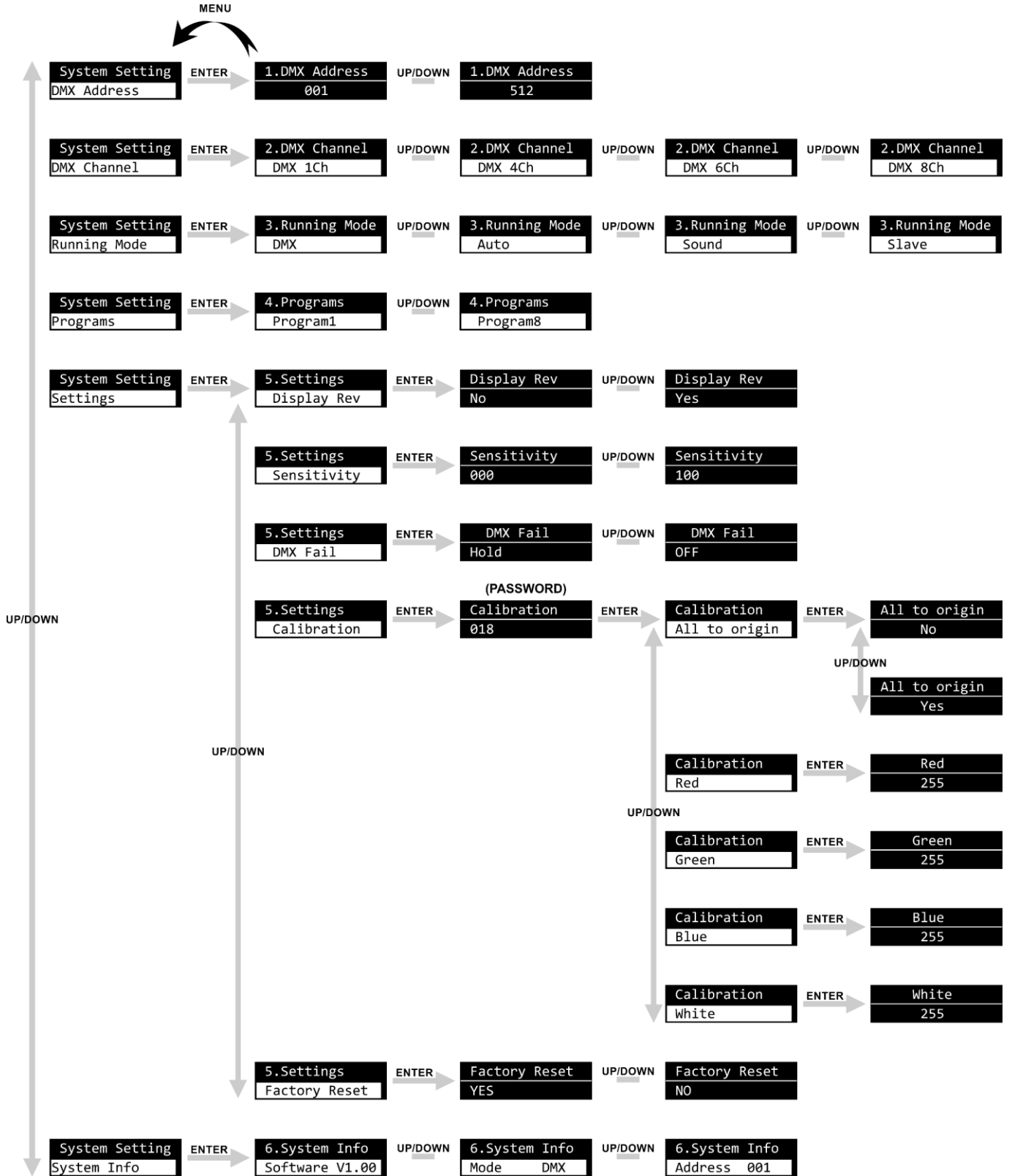
After powering up, the display will show the start screen:



The start screen provides information about the active run mode of the device, the DMX starting address, the current DMX channel mode and the firmware version.

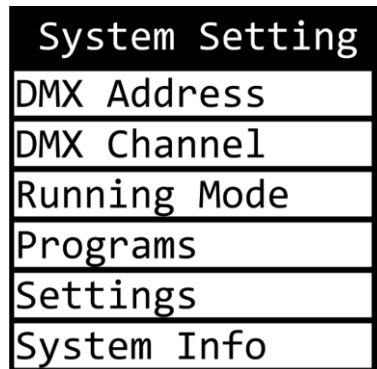
After 15 seconds of inactivity the display will return to the start screen and after another 30 seconds it will turn off. Press any button to activate the display. The display will show the start screen.

6.5. Menu Overview



6.6. Main Menu Options

The main menu has the following options:



- 01) Press the **UP/DOWN** buttons to navigate through the main menu.
- 02) Press the **ENTER** button to open the menus.

6.6.1. DMX Address

In this menu you can set the device's DMX starting address.

- 01) Press the **UP/DOWN** buttons to set the desired DMX address. The adjustment range 001–512.
- 02) Press the **ENTER** button to save the changes.

6.6.2. DMX Channel

In this menu you can set the DMX channel mode.

- 01) Press the **UP/DOWN** buttons to select the desired DMX channel mode. There are 4 options available:
 - 1Ch: 1 channel
 - 4Ch: 4 channels
 - 6Ch: 6 channels
 - 8Ch: 8 channels
- 02) Press the **ENTER** button to confirm your choice. See page 22 for the DMX Channels.

6.6.3. Running Mode

In this menu you can set the control mode of the device.

- 01) Press the **UP/DOWN** buttons to select one of the following 4 options:
 - DMX: The device will operate in DMX mode. In DMX-controlled mode the **red indication LED (G)** is on
 - Auto: The device will run the built-in programs. Refer to **6.6.4. Programs** for the selection of built-in programs
 - Sound: The device will run the selected built-in program reacting to the beat of the music. In sound-controlled mode the **green indication LED (B)** is blinking
 - Slave: The device will operate as a slave device in master/slave mode
- 02) Press the **ENTER** button to confirm your choice.

6.6.4. Programs

In this menu you can select to play one of the 8 built-in programs.

- 01) Press the **UP/DOWN** buttons to select one of the built-in programs.
- 02) Press the **ENTER** button to confirm your choice. The programmed chase will play back.

6.6.5. Settings

In this menu you can adjust the device's settings.

01) Press the **UP/DOWN** buttons to select one of the following settings:

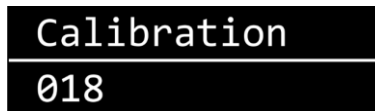
- Display Rev: The display will be rotated at 180° (No/Yes)
- Sensitivity: Adjustment of the sensitivity of the built-in microphone. The adjustment range is 000–100, from low to high sensitivity
- DMX Fail: The device's behavior in case of a DMX error. There are 2 options: Hold (the Illumisphere 50 will use the last properly received DMX signal which ensures uninterrupted performance) and OFF (output blackout)
- Calibration: See **6.6.5.1. Calibration**
- Factory Reset: Reset all settings to factory defaults (YES/NO)

02) Press the **ENTER** button to confirm your choice.

6.6.5.1. Calibration

In this submenu you can calibrate the LEDs. This submenu requires a **password**. The **password** is **018**.

01) Press the **UP** button repeatedly to input the number 018. The display will show:



02) Press the **ENTER** button to confirm the password.

03) Press the **UP/DOWN** buttons to scroll through the following options:

- All to origin: Restore the color intensity of all colors to the default values (No/Yes)
- Red: Red color intensity calibration. The adjustment range is 0–255
- Green: Green color intensity calibration. The adjustment range is 0–255
- Blue: Blue color intensity calibration. The adjustment range is 0–255
- White: White color intensity calibration. The adjustment range is 0–255

04) Press the **ENTER** button to confirm your choice.

6.6.6. System Info

In this menu you can view the device's parameters.

Press the **UP/DOWN** buttons to select one of the following options:

- Software: Shows the firmware version
- Mode: Shows the active run mode
- Address: Shows the DMX starting address of the device

6.7. DMX Channels

| 1CH | 4CH | 6CH | 8CH | Function | Value | Setting | | |
|-----|-----|-----|-----|----------------------|---|--------------------------------------|---------|---|
| | | 1 | 1 | Master dimmer | 000–255 | From low to high intensity (0–100 %) | | |
| | 1 | 2 | 2 | Red | 000–255 | From low to high intensity (0–100 %) | | |
| | 2 | 3 | 3 | Green | 000–255 | From low to high intensity (0–100 %) | | |
| | 3 | 4 | 4 | Blue | 000–255 | From low to high intensity (0–100 %) | | |
| | 4 | 5 | 5 | White | 000–255 | From low to high intensity (0–100 %) | | |
| | | 6 | 6 | Strobe | 000–010 | Open (No strobe effect) | | |
| | | | | | | | 011–020 | Closed (No light output) |
| | | | | | | | 021–245 | From low to high frequency (0–20 Hz) |
| | | | | | | | 246–255 | Open (No strobe effect) |
| 1 | | | 7 | Color Macros | 000–007 | No function | | |
| | | | | | | | 008–013 | Color 1 (R255, G000, B000, W000) |
| | | | | | | | 014–020 | Color 2 (R255, G050, B000, W000) |
| | | | | | | | 021–027 | Color 3 (R255, G150, B000, W000) |
| | | | | | | | 028–034 | Color 4 (R255, G255, B000, W000) |
| | | | | | | | 035–041 | Color 5 (R000, G255, B000, W000) |
| | | | | | | | 042–048 | Color 6 (R000, G255, B050, W000) |
| | | | | | | | 049–055 | Color 7 (R000, G255, B150, W000) |
| | | | | | | | 056–062 | Color 8 (R000, G255, B255, W000) |
| | | | | | | | 063–069 | Color 9 (R000, G000, B255, W100) |
| | | | | | | | 070–076 | Color 10 (R000, G000, B255, W050) |
| | | | | | | | 077–083 | Color 11 (R000, G000, B255, W000) |
| | | | | | | | 084–090 | Color 12 (R075, G000, B255, W000) |
| | | | | | | | 091–097 | Color 13 (R255, G000, B255, W000) |
| | | | | | | | 098–104 | Color 14 (R255, G000, B175, W000) |
| | | | | | | | 105–111 | Color 15 (R255, G000, B100, W000) |
| | | | | | | | 112–118 | Color 16 (R255, G000, B025, W000) |
| | | | | | | | 119–125 | Color 17 (R000, G000, B000, W255) |
| | | | | | | | 126–132 | Color 18 (R255, G255, B255, W255) |
| | | | | | | | 133–139 | Jump 1 (colors 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18) |
| | | | | | | | 140–146 | Jump 2 (colors 1, 8) |
| | | | | | | | 147–153 | Jump 3 (colors 4, 11) |
| | | | | | | | 154–160 | Jump 4 (colors 5, 13) |
| | | | | | | | 161–167 | Jump 5 (colors 2, 12) |
| | | | | | | | 168–174 | Jump 6 (colors 3, 14) |
| | | | | | | | 175–181 | Jump 7 (colors 6, 15) |
| | | | | | | | 182–188 | Jump 8 (colors 7, 17) |
| | | | | 189–195 | Fade 1 (colors 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18) | | | |
| | | | | 196–202 | Fade 2 (colors 1, 8) | | | |
| | | | | 203–209 | Fade 3 (colors 4, 11) | | | |
| | | | | 210–216 | Fade 4 (colors 5, 13) | | | |
| | | | | 217–223 | Fade 5 (colors 2, 12) | | | |
| | | | | 224–230 | Fade 6 (colors 3, 14) | | | |
| | | | | 231–255 | Fade 7 (colors 6, 15) | | | |
| | | | 8 | Macro speed | 000–255 | Speed adjustment, from slow to fast | | |

Note:

- Make sure that the Master Dimmer channel in 6CH and 8CH mode is open in order to use the rest of the LEDs' functionalities.
- CH8 works only in combination with the Jump (133–188) and Fade (189–255) color macros.

7. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

| Problem | Probable cause(s) | Solution |
|---|---|---|
| The device does not function at all | No power to the device | <ul style="list-style-type: none"> Check if power is switched on and cables are plugged in |
| | Main fuse is blown | <ul style="list-style-type: none"> Contact your Highlite International dealer. |
| The device responds erratically | The factory settings of the device are changed | <ul style="list-style-type: none"> Reset the device's parameters to the default factory settings. See 6.6.5. Settings on page 21 |
| The device does not respond to DMX control (red indication LED is off) | The controller is not connected | <ul style="list-style-type: none"> Connect the controller |
| | The signal is reversed. The 3-pin DMX OUT of the controller does not match the DMX IN of the device | <ul style="list-style-type: none"> Install a phase-reversing cable between the controller and the device |
| | The controller is defective | <ul style="list-style-type: none"> Try using another controller |
| The device does not respond to DMX control (red indication LED is blinking) | Bad data link connection | <ul style="list-style-type: none"> Examine connections and cables. Correct poor connections. Repair or replace damaged cables |
| | The data link is not terminated with a 120 Ω termination plug | <ul style="list-style-type: none"> Insert a termination plug in the DMX OUT connector of the last device on the link |
| | Incorrect addressing | <ul style="list-style-type: none"> Check address settings and correct, if necessary |
| No light or LEDs cut out intermittently | In case of a setup with multiple devices one of the devices is defective and disturbs data transmission on the link | <ul style="list-style-type: none"> To find out which device is defective, bypass one device at a time until normal operation is restored |
| | LEDs are damaged | <ul style="list-style-type: none"> Disconnect device and contact your Highlite International dealer |
| | The power supply settings do not match local AC voltage and frequency | <ul style="list-style-type: none"> Disconnect the device. Check the settings and correct, if necessary |

8. Maintenance

8.1. Safety Instructions for Maintenance



DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.



WARNING
Risk of burns due to hot surface

Allow the device to cool down for at least 15 minutes before servicing or cleaning.

8.2. Preventive Maintenance



Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixations and installation points.
- The power cables are not damaged and do not show any material fatigue.

8.2.1. Basic Cleaning Instructions

The Illumisphere 50 requires almost no maintenance. However, you should keep the device clean.

To clean the device, follow the steps below:

- 01) Disconnect the device from the electrical power supply.
- 02) Allow the device to cool down for at least 15 minutes.
- 03) Clean the sphere with a damp cloth. Use a mild detergent solution.
- 04) Dry the sphere carefully with a lint-free cloth.
- 05) Clean the DMX and other connections with a damp cloth.



Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.
- Make sure that the connections are fully dry before connecting the device to the power supply and to other devices.

8.3. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

9. Deinstallation, Transportation and Storage

9.1. Instructions for Deinstallation



WARNING

Incorrect deinstallation can cause serious injuries and damage of property.

- Let the device cool down before dismounting.
- Disconnect power supply before deinstallation.
- Always observe the national and site-specific regulations during deinstallation and derigging of the device.
- Wear personal protective equipment in compliance with the national and site-specific regulations.

9.2. Instructions for Transportation

- Use the original packaging to transport the device, if possible.
- Always observe the handling instructions printed on the outer carton box, for example: "Handle with care", "This side up", "Fragile".

9.3. Storage

- Clean the product before storing. Follow the cleaning instructions in chapter **8.2.1. Basic Cleaning Instructions** on page 25.
- Store the device in the original packaging, if possible.

10. Disposal

Correct disposal of this product



Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

11. Approval



Check the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.



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