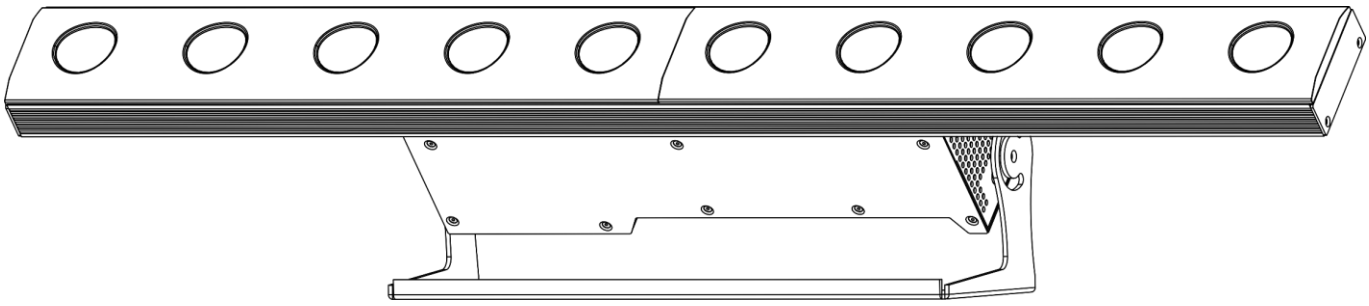
MANUAL



ENGLISH

Razor Blaze 10 V1

Order code: 30746

Table of contents

Warning

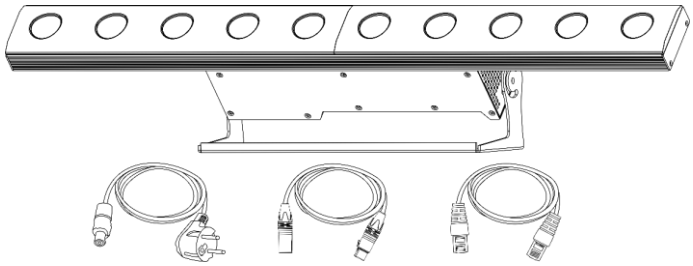
For your own safety, please read this user manual carefully before your initial start-up!

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear to be damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that the fixture must be returned to the factory, it is important that the fixture will be returned in the original factory box and packing.

Your shipment includes:

- Showtec Razor Blaze 10
- Pro-power to Schuko power cable (0,9 m)
- 3-pin DMX cable (1,4 m)
- Network cable (1,45 m)
- User manual



LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving the lifespan is of higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

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

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never modify, bend, mechanically strain, put pressure on, pull or heat up the power cord.
- Never strain the cable insert or the female part in the device. There must always be sufficient cable going to the device. Otherwise, the cable will be damaged, which can cause serious damage.
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never place any material over the LEDs.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never use the device during thunderstorms, unplug the device immediately.
- Never leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach, as they are potential sources of danger.
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmer pack.
- Do not switch the device on and off in short intervals, as this will reduce the device's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes hot). Allow the device to cool for at least 10 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use the device indoors, avoid contact with water or other liquids.
- Only operate the device after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always allow a free space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power cord holding it by the plug. Never pull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- Make sure that the core diameter of extension cords and power cords is sufficient for the required power consumption of the device.
- If the LEDs are obviously damaged, they have to be replaced to prevent their function from being impaired, due to cracks or deep scratches.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If device was dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue the use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The device must be installed beyond the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the device. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

CAUTION! Eyedamages!!!
Avoid looking directly into the lightsource!!!
(meant especially for epileptics)!!!

Operating Determinations

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The minimum distance between light output and the illuminated surface must be bigger than 1 m.
- In order to eliminate wear and improve the device's lifespan, during periods of non-use, completely disconnect from power source via breaker or by unplugging.
- The maximum ambient temperature t_a = 40 °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.
- If the device is operated in any other way than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash, etc.

You endanger your own safety and the safety of others!

Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself!
Always let the installation be carried out by an authorized dealer!

Procedure:

- If the Razor Blaze is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the Razor Blaze to the trussing system.
- The Razor Blaze must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety cable, see Fig. 01.
- When rigging, derigging or servicing the Razor Blaze, always make sure, that the area under the installation place is blocked and staying in the area is forbidden.

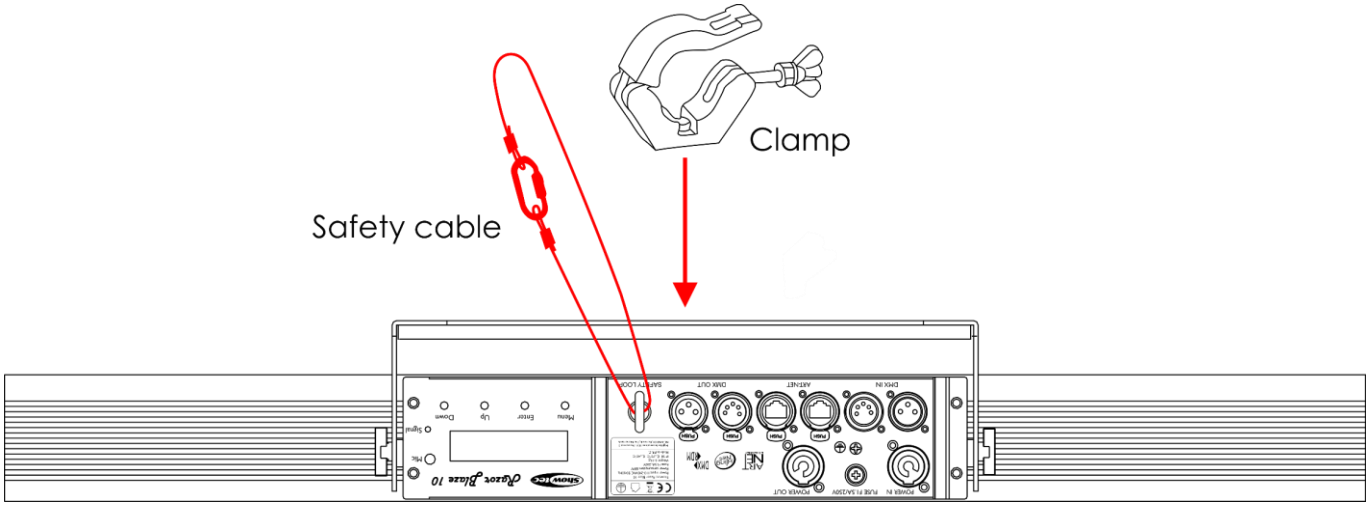


Fig. 01

The Razor Blaze 10 can be placed also on a flat stage floor. Position the fixture on the floor. Turn the bar at the desired angle and tighten the adjustment screws.

Improper installation can cause serious injuries and/or damage of property!

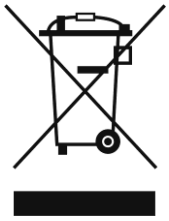
Connection with the Mains

Connect the device to the mains with the power plug.
Always check if the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
⏚	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

Make sure that the device is always connected properly to the earth!

Improper installation can cause serious damage and/or damage of property!



⚠ Return Procedure ⚠

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.com and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause of the return. Be sure to properly pack fixture as any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

01) Your name.
02) Your address.
03) Your phone number.
04) A brief description of the symptoms.

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.
It is the customer's responsibility to notify and submit claims with the shipper in the event that the fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.
Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless agreed otherwise in writing.
Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period, complaints will not be handled anymore.
Complaints will only be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the Device

Features

The Showtec Razor Blaze 10 is a 2-in-1 LED matrix bar equipped with 10 x 3 W Warm White High Power LEDs with 4° beam angle and 60 x RGB LEDs. The Razor Blaze 10 supports DMX/RDM, Art-Net and Kling-Net protocols. It can be used also as a stand-alone fixture with built-in programs or in a master/slave setup with multiple fixtures producing a synchronized show.

- Power supply: 110–240 V AC, 50/60 Hz
- Power consumption: 80 W
- Light source: 10 x 3 W High Power Warm White (WW) Cree® LEDs
  60 x 0,3 W RGB 5050SMD LEDs
- Beam angle: 4° (WW LEDs)
- Dimmer: 0–100 %
- Strobe: 0–20 Hz
- Control mode: Auto, Sound-controlled, Master/Slave, DMX-512, Art-Net, Kling-Net
- Control protocol: DMX-512, RDM, Art-Net, Kling-Net
- DMX mode: 11, 20, 47 and 190 channels
- Display: LCD display
- Connections: Pro-power connectors IN/OUT, 5-pin DMX connectors IN/OUT, 3-pin DMX connectors IN/OUT, 2 x RJ45 connectors
- Housing: Metal, flame retardant plastic
- Color: Black
- Cooling: Natural convection
- IP rating: IP-20
- Fuse: F1,5 A/250 V
- Dimensions: 780 x 137 x 104 mm (L x W x H) (including bracket)
- Weight: 3,1 kg

Note: Knowledge of DMX is required to fully utilize this unit.

Front View

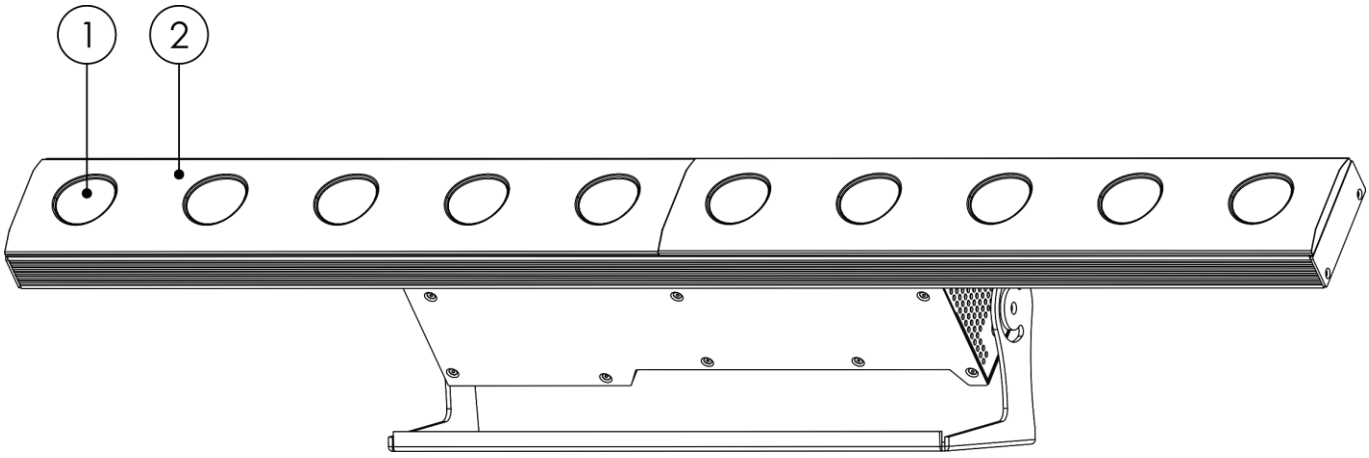


Fig. 02

01) 10 x 3 W High Power Warm White Cree® LEDs (WW LEDs)
02) 60 x 0,3 W RGB 5050SMD LEDs (RGB LEDs) – For the exact position of the 60 RGB LEDs, **see DMX Channels – 190 Channels** on pages 27–28.

Back View

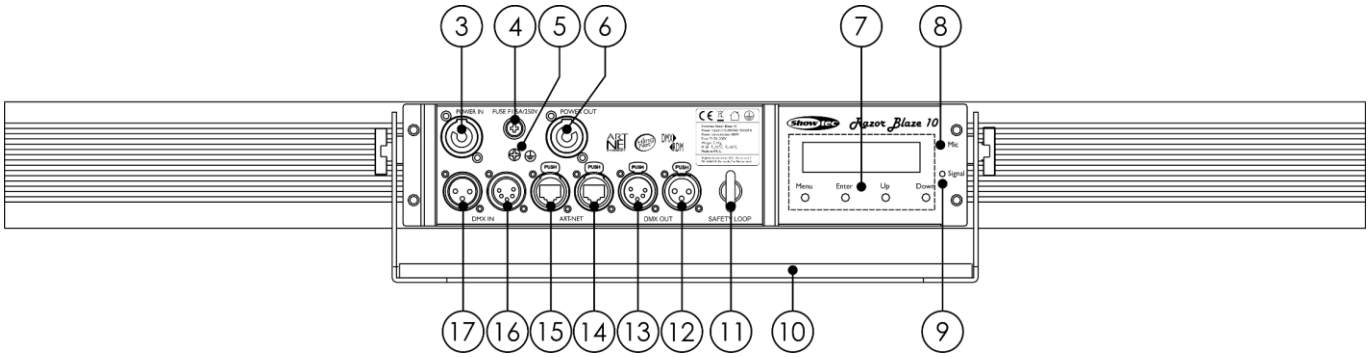


Fig. 03

03) Pro power connector 100–240 V IN (Blue)
04) Fuse T1,5 A/250 V
05) Ground/earth connection
06) Pro power connector 100–240 V OUT (Gray)
07) Control panel: LCD display and control buttons
08) Built-in microphone
09) Signal LED indicator. This indicator starts blinking when data signal (DMX/RDM/Art-Net/Kling-Net) is present.
10) Mounting bracket with 2 adjustment screws
11) Safety eye
12) 3-pin DMX connector OUT
13) 5-pin DMX connector OUT
14) RJ45 connector
15) RJ45 connector
16) 5-pin DMX connector IN
17) 3-pin DMX connector IN

Installation

Remove all packing materials from the Razor Blaze 10. Check if all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly.
Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

Setup and Operation

Follow the directions below, as they pertain to your preferred operation mode.
Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120 V specification product on 230 V power, or vice versa.

Multiple Fixtures Power Linking

The Razor Blaze 10 supports power linking. Power can be relayed to another device via the power OUT connector. Note that the input and the output connectors have different designs: one type cannot be connected to the other.
To link fixtures in a chain, a hard usage cable with appropriate cable jacket must be used. Power linking cables are available for purchase from Highlite International.
To prevent power overload and damage to the fixture, do not link more fixtures in one chain than recommended. After you have reached the maximum number of fixtures, use a new power outlet.

Maximum recommended number of fixtures on a power link @ 110 V: 9 fixtures
Maximum recommended number of fixtures on a power link @ 240 V: 20 fixtures

Control Modes

There are 5 control modes:

- Built-in programs
- Sound-controlled
- Master/Slave
- DMX-512, RDM (11CH, 20CH, 47CH and 190CH)
- Art-Net, Kling-Net (11CH, 20CH, 47CH and 190CH)

One Razor Blaze (Built-in Programs)

01) Fasten the effect light onto firm trussing or mount it on flat surface. Leave at least 0,5 m on all sides for air circulation.
02) Secure the device with a safety cable (order code 70140 / 70141).
03) Plug the end of the cord into a proper electric power supply socket.
04) When the Razor Blaze is not connected with a DMX cable, it functions as a stand-alone device.
05) Please see **4. Auto Mode** on page 19 for more information.

One Razor Blaze (Sound-controlled)

01) Fasten the effect light onto firm trussing or mount it on flat surface. Leave at least 0,5 m on all sides for air circulation.
02) Secure the device with a safety cable (order code 70140 / 70141).
03) Plug the end of the cord into a proper electric power supply socket.
04) When the Razor Blaze is not connected with a DMX cable, it functions as a stand-alone device.
05) Select a built-in program. See **4. Auto Mode** on page 19 for more information.
06) Activate the sound control. See **6. Sound Mode** on page 19 for more information. The selected built-in program will be played to the beat of the music.

Multiple Razor Blaze Fixtures (Master/Slave Control)

01) Fasten the effect light onto firm trussing or mount it on flat surface. Leave at least 0,5 m on all sides for air circulation.
02) Secure the device with a safety cable (order code 70140 / 70141).
03) Use a 3-pin/5-pin DMX cable to connect the Razor Blaze and other devices.

Pins:

1. Earth
2. Signal (-)
3. Signal (+)

1. Earth
2. Signal (-)
3. Signal (+)
4. N/C
5. N/C

04) Link the units as shown in Fig. 04. Connect the first unit's DMX "out" socket with the second unit's "in" socket, using a DMX cable. Repeat this process to link the rest of the units. The first connected device will be automatically recognized as master device.
05) Supply electric power: Plug electric mains power cords into each unit's power IN socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.
06) Refer to **5. Slave Mode** on page 19 to set up the slave devices. You can set the desired operation mode on the master device and all slave devices will react the same as the master device.

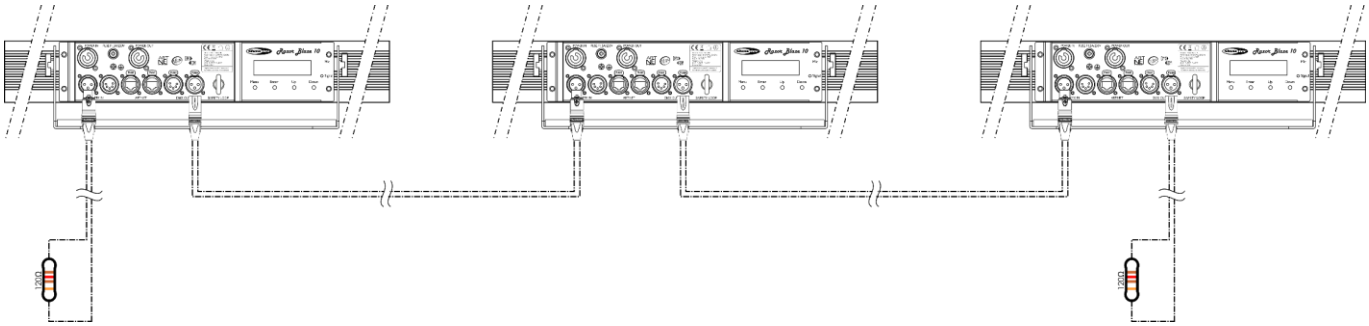
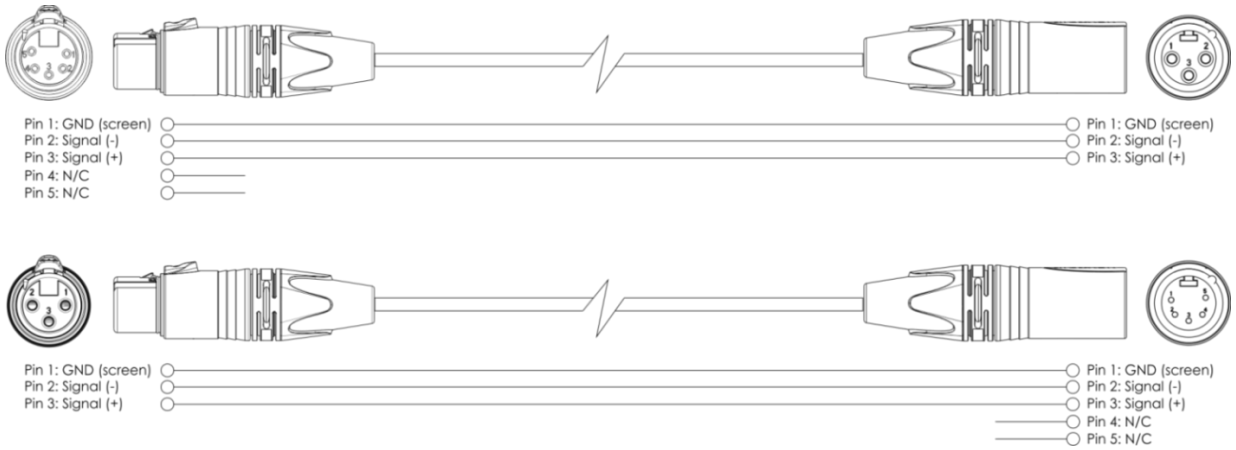


Fig. 04

Note: Link all cables before connecting electric power!

Multiple Razor Blaze Fixtures (DMX/RDM Control)

01) Fasten the effect light onto firm trussing or mount it on flat surface. Leave at least 0,5 m on all sides for air circulation.
02) Secure the device with a safety cable (order code 70140 / 70141).
03) Use a 3-pin/5-pin DMX cable to connect the Razor Blaze and other devices.



04) Link the units as shown in Fig. 05. Connect a light controller to the first unit's DMX "in" socket, using a DMX cable. Connect the first unit's "out" socket with the second unit's "in" socket, using a DMX cable. Repeat this process to link the rest of the units.
05) Supply electric power: Plug electric mains power cords into each unit's power IN socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

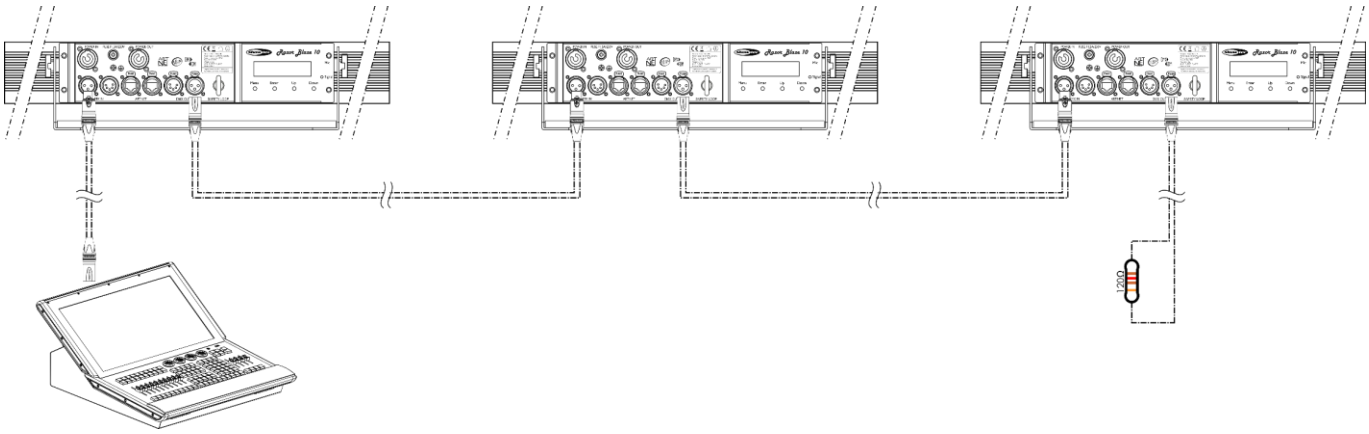


Fig. 05

Note: Link all cables before connecting electric power!

Multiple Razor Blaze Fixtures (Art-Net/Kling-Net)

01) Fasten the effect light to a firm trussing or mount it on flat surface. Leave at least 0,5 m on all sides for air circulation.
02) Secure the device with a safety cable (order code 70140 / 70141).
03) Use a CAT-5/CAT-6 cable to connect the Razor Blaze and other devices.
04) Connect your computer with installed Art-Net/Kling-Net software to the first device's RJ45 connector.
05) Link the units as shown in Fig. 06. Connect the first unit's second RJ45 connector with the second unit's first RJ45 connector, using a CAT-5/CAT-6 cable. Repeat this process to link the rest of the units.
06) Supply electric power: Plug electric mains power cords into each unit's power IN socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

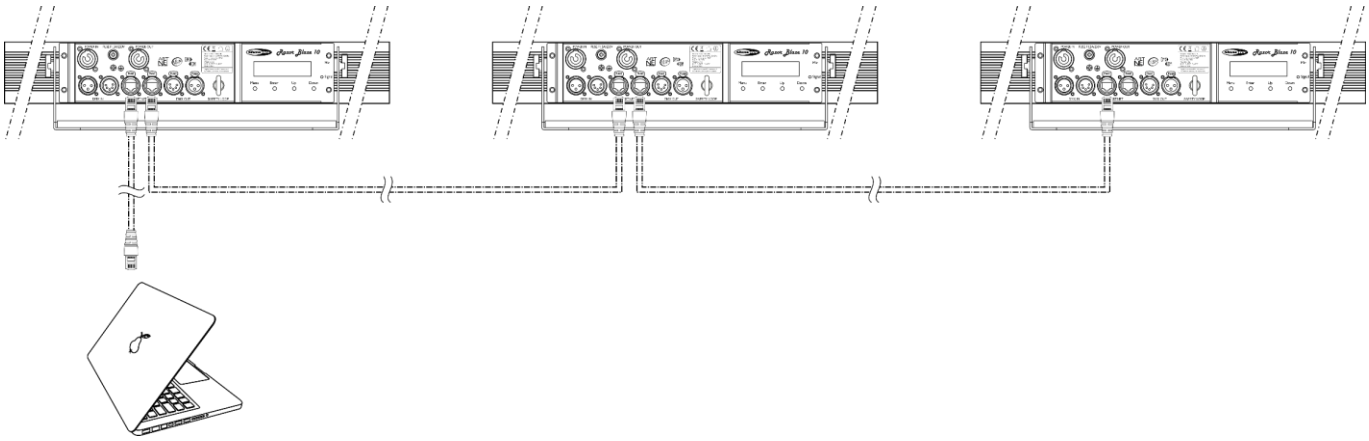


Fig. 06

Note: Link all cables before connecting electric power!

Connecting to a Network

Art-Net Settings

01) Install any Art-Net-based software on your PC (Windows or Mac) or use a light controller which supports Art-Net.
02) Connect the device's RJ45 connector to the RJ45 connector of the lighting controller/network switch, using a CAT-5/CAT-6 cable.
03) Set the IP address of your computer/light controller to **2.x.x.x** or **10.x.x.x**, depending on the Art-Net settings. See **1. Network Setup** on pages 17–18 for more information.
04) Set the Subnet mask to **255.0.0.0**. on all devices.
05) Make sure that all fixtures in the network have a **unique IP address**.
06) If you want to connect more fixtures, follow the example below.

Note: When creating large setups, it is recommended to use a 16-bit, high speed Ethernet switch to distribute the Art-Net data signal.

Example settings:

If you want to connect multiple Razor Blaze fixtures using Art-Net protocol, proceed as follows:

01) Set the universe of the first Razor Blaze to **000**. See **1.3. Universe** on page 18.
02) Set the DMX starting address of the first Razor Blaze to **001**.
03) If you want to operate the Razor Blaze in 190-channel DMX mode, you can connect only 2 devices (2 x 190 channels = 380 channels needed). Due to the channel limit of 512, you cannot connect the third fixture to the same data line, as it would result in limited functionality of this device.
04) In order to solve this problem, set the universe of the third Razor Blaze to **1** and its DMX address to **001**.
05) When connecting multiple devices, you can repeat steps 1 to 4 up to 255 times, each time inserting ascending universe numbers (as there are 256 universes available).
06) Map all connected devices. The connected Razor Blaze fixtures are now ready for use.

There are 512 channels in 1 universe. The universe number is made up of the sub and the port numbers (sub:port). Thus, the number of the 1st universe will be 000 (00:00), the number of the 2nd – 001 (00:01), etc. There are 256 universes in 1 net. The last universe in the net will have the number 255 (15:15).

Note: Counting begins at 0.

Art-Net is a protocol that uses TCP/IP to transfer large amount of DMX-512 data over an Ethernet network. Art-Net 4 can support up to 32768 universes. Art-Net™ Designed by and Copyright Artistic Licence Holdings Ltd.

Kling-Net Settings

01) Install any Kling-Net-based software on your PC (Windows or Mac), for example **50180** – Arkaos LED Master or **50224** – Media Master Express 4.0.
02) Make sure that your PC has a **fixed IP Address**. The Razor Blaze requires no further network setting adjustments.
03) Connect the Razor Blaze with a CAT-5/CAT-6 cable to your computer. Once you have connected the devices, they will automatically be recognized by the software.
04) Map the devices, using the "drag-and-drop" method, by placing the fixtures in "on-screen" interface in the right position. Now the system is completely set up.

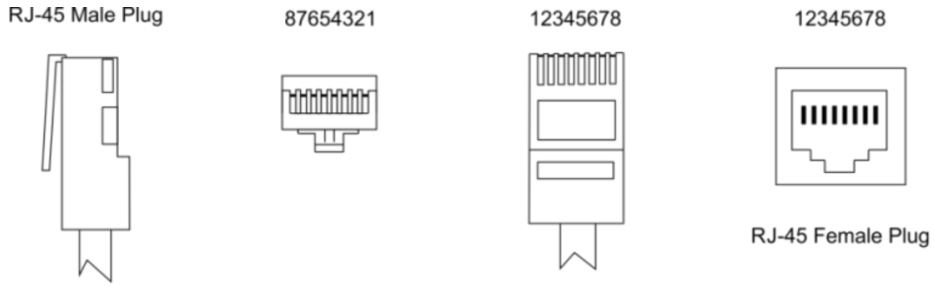
Note: When creating large setups, it is recommended to use a 16-bit, high speed Ethernet switch to distribute the Kling-Net data signal.

How To Make a Data Cable

A standard ETHERNET cable can be used to replace the data cable required to transmit the data.

Please follow the instructions below in order to create an extra network cable.

Take a standard network cable (CAT-5/ 5E /6) and connect it to the RJ45 connector, as shown in Fig. 07. The wires should now be colored as follows:



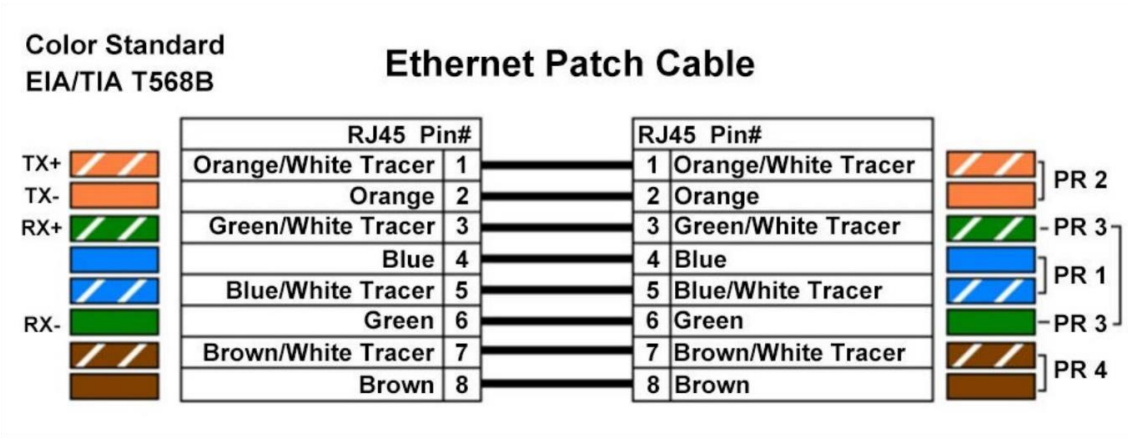


Fig. 07

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended DMX data link distance: 100 meters
Maximum recommended number on a DMX data link: 30 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DAP Audio DMX Data Cables

- DAP Audio 110 Ohm cable with digital signal transmission. **Order code** FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).
- DAP Audio data cable FL08 DMX/AES-EBU, XLR/M 5-pin > XLR/F 5-pin. **Order code** FL08150 (1,5 m), FL083 (3 m), FL086 (6 m), FL0810 (10 m), FL0820 (20 m).
- DAP Audio DMX adapter: 5-pin > 3-pin. **Order code** FLA29.
- DAP Audio DMX adapter: 3-pin > 5-pin. **Order code** FLA30.
- DAP Audio DMX Terminator 3-pin. **Order code** FLA42.
- DAP Audio DMX Terminator 5-pin. **Order code** FLA43.

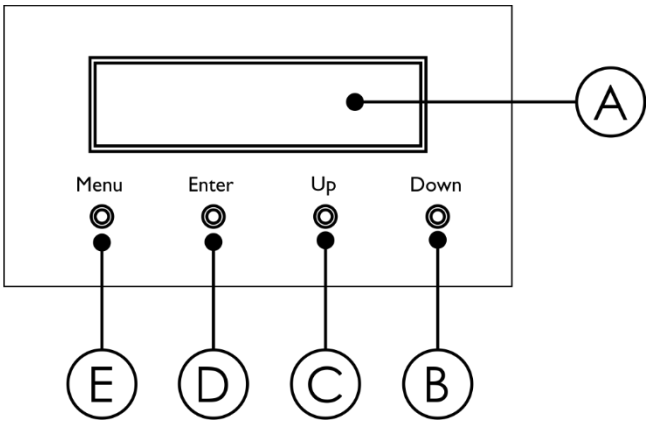
DAP Audio PC Interface Cables

- CAT-5 cable 7,6 mm Matte blue PVC. **Order code** FL55150 (1,5 m), FL553 (3 m), FL556 (6 m), FL5510 (10 m), FL5515 (15 m), FL5520 (20 m).
- CAT-6 cable (recommended for best data transfer). **Order code** FL563 (3 m), FL566 (6 m), FL5610 (10 m), FL5615 (15 m), FL5640 (40 m).

Note: Use of 3-pin XLR audio cables for DMX data transmission might lead to signal degradation and unreliable operation of the DMX network.

The Razor Blaze can be operated with controller or without controller in stand-alone mode.

Control Panel



A) LCD display
B) DOWN button
C) UP button
D) ENTER button
E) MENU button

Fig. 08

DMX Addressing

The control panel on the back side of the controller allows you to assign the fixture a DMX address, which is the first channel with which the Razor Blaze will respond to a DMX controller.
When using multiple Razor Blaze fixtures, make sure you set the DMX addresses right.
Without full pixel control, the device has **47** channels. Therefore, the DMX address of the first Razor Blaze should be **1 (001)**; the DMX address of the second Razor Blaze should be **1+47=48 (048)**; the DMX address of the third Razor Blaze should be **48+47=95 (095)**, etc.
Make sure that you do not have any overlapping channels in order to control each Razor Blaze correctly. If two or more Razor Blaze fixtures are addressed similarly, they will work similarly.

Note: If you want to connect multiple devices and operate them in **190-channel** mode (full pixel control), you need to use Art-Net. See **Art-Net Settings** on page 12 for more information.

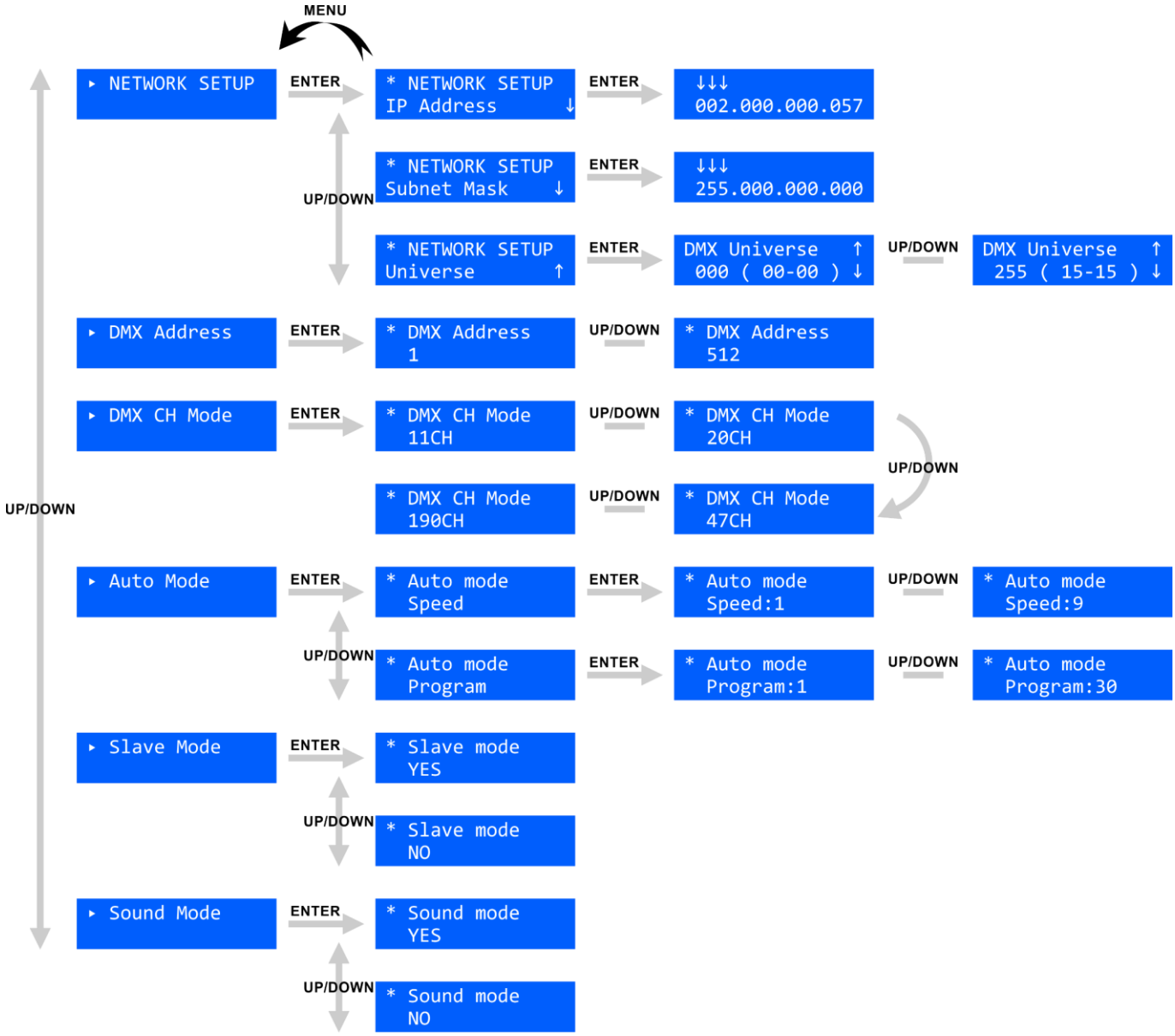
Controlling:
After having addressed all Razor Blaze fixtures, you may now start operating these via your lighting controller.

After switching on, the Razor Blaze will automatically detect whether DMX-512 data is received or not. The signal LED indicator **(09)** will start blinking. After 10 seconds the LED will turn off.
Note: If there is no data received at the DMX input, the problem may be:

- The DMX cable from the controller is not connected with the input of the Razor Blaze.
- The controller is switched off or defective, the cable or connector is defective, or the signal wires are swapped in the input connector.

Note: It is necessary to insert a termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

Menu Overview



Start-up

Upon start-up the display will show the following splash screen:

Immediately afterwards the screen will show the IP address of the device and the current operation mode. Press the **DOWN** button to see the current version of the firmware:

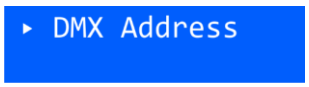
- Use the **MENU button** to exit the current submenu and to return to the Main Menu.
- Use the **UP/DOWN buttons** to navigate through the menus or to increase/decrease numeric values. In the submenus the navigation is facilitated through upwards and downwards arrows. The arrows indicate whether you will need to use the **UP** or the **DOWN** button.
- Use the **ENTER button** to open the desired menu, to confirm your choice or to set the currently selected value.

After 20 seconds of inactivity the display screen will return to the start screen. If no button is pressed, after 30 seconds the display will turn off. Press any button to turn the display on.

Main Menu Options

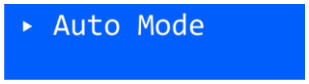
The Main Menu has the following options:

Network Setup

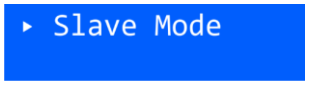


DMX Address

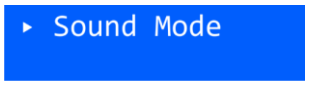
DMX Channel Mode



Auto Mode



Slave Mode



Sound Mode

1. Network Setup

In this menu you can configure the network settings of the device.

01) Press the **UP**/**DOWN** buttons to scroll through the following 3 options:

IP Address

Subnet Mask

Universe

02) Press the **ENTER** button to confirm the selection and to open the submenu.

1.1 IP Address
In this submenu you can configure the IP address of the device.
01) Press the **UP/DOWN** buttons to change the first number of the IP address. The selection range is between 0 and 255.
02) Press the **ENTER** button to confirm and to move to the next number. 3 downwards arrows above the number indicate the current selection.

03) Repeat steps 1–2 for the remaining 3 sections of the IP address.

1.2 Subnet Mask
In this submenu you can configure the Subnet Mask of the device.
01) Press the **UP/DOWN** buttons to change the first number of the Subnet Mask. The selection range is between 0 and 255.
02) Press the **ENTER** button to confirm and to move to the next number. 3 downwards arrows above the number indicate the current selection.

03) Repeat steps 1–2 for the remaining 3 sections of the Subnet Mask.

1.3 Universe
In this submenu you can set the universe number of the device.
01) Press the **UP/DOWN** buttons to select the universe number. The selection range is between 000 (00–00) and 255 (15–15). For more information about universe addressing, see **Art-Net Settings** on page 12.

02) Press the **ENTER** button to save the selection.

2. DMX Address
In this menu you can set the device's DMX address.
01) Press the **UP/DOWN** buttons to select the starting DMX address of the device. The selection range is between 1 and 512.

02) Press the **ENTER** button to confirm the selection. A check mark will appear for 1 second next to the selected value.

3. DMX Channel Mode
In this menu you can select the DMX channel mode.
01) Press the **UP/DOWN** buttons to select the desired DMX channel mode. There are 4 options available:

* DMX CH Mode 11CH	11-channel mode
* DMX CH Mode 20CH	20-channel mode
* DMX CH Mode 47CH	47-channel mode
* DMX CH Mode 190CH	190-channel mode

02) Press the **ENTER** button to confirm your choice. A check mark will appear for 1 second next to the selected option. See pages 20–28 for the DMX Channel Modes.

4. Auto Mode
In this menu you can start one of the built-in programs.
01) Press the **UP/DOWN** button to toggle between the following 2 options:
- Speed: Set the speed. The adjustment range is between 1 and 9, from slow to fast.
- Program: Select one of the 30 built-in programs.

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

5. Slave Mode
In this menu you can set the device as a slave in master/slave mode.
01) Press the **UP/DOWN** buttons to toggle between the following 2 options:
- YES: The device will be set as a slave in master/slave mode.
- NO: The device will be act as the master device in a master/slave setup.

02) Press the **ENTER** button to confirm. A check mark will appear for 1 second next to the selected option.

6. Sound Mode
In this menu you can activate the sound control.
01) Press the **UP/DOWN** buttons to toggle between the following 2 options:
- YES: Activate sound-controlled mode.
- NO: Deactivate sound-controlled mode.

02) Press the **ENTER** button to confirm. A check mark will appear for 1 second next to the selected option.

DMX Channels

11 Channels

Channel 1 – Master Dimmer (WW LEDs and RGB LEDs)

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 2 – Strobe ⚠ CH1 must be open, works only for CH3–CH6 ⚠

0–255	Strobe flash rate, from low to high frequency (0–20 Hz)

Channel 3 – Red Dimmer RGB LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 4 – Green Dimmer RGB LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 5 – Blue Dimmer RGB LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 6 – Dimmer WW LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 7 – Built-in Programs WW LEDs ⚠ CH1 must be open ⚠

0	No function
1–17	Program 1: Single LED linear scroll (from left to right)
18–34	Program 2: Single LED linear scroll (from right to left)
35–51	Program 3: Two LEDs linear scroll (from left to right)
52–68	Program 4: Two LEDs linear scroll (from right to left)
69–85	Program 5: Split scroll, inward
86–102	Program 6: Split scroll, outward
103–119	Program 7: Split bounce in/out
120–136	Program 8: Linear fade (from left to right)
137–153	Program 9: Linear fade (from right to left)
154–170	Program 10: Linear bounce fade
171–187	Program 11: LEDs fill (from left to right)
188–204	Program 12: LEDs fill (from right to left)
205–221	Program 13: Random/lightning strobe effect
222–238	Program 14: All LEDs full bar fade up/down
239–255	Auto mode, all WW LEDs programs (1–14)

Channel 8 – Built-in Programs RGB LEDs ⚠ CH1 must be open ⚠

0	No function
1–17	Program 1: Multicolor, multipixel effect 1
18–34	Program 2: Multicolor, multipixel effect 2
35–51	Program 3: Multicolor, multipixel effect 3
52–68	Program 4: Multicolor, multipixel effect 4
69–85	Program 5: Multicolor, multipixel effect 5
86–102	Program 6: Multicolor, multipixel effect 6
103–119	Program 7: Multicolor, multipixel effect 7
120–136	Program 8: Single color linear fade (from left to right) (select color in CH10)
137–153	Program 9: Single color linear fade (from right to left) (select color in CH10)
154–170	Program 10: Single color fade fill (from left to right) (select color in CH10)
171–187	Program 11: Single color fade fill (from right to left) (select color in CH10)
188–204	Program 12: Single color split bounce in/out (select color in CH10)
205–221	Program 13: Single color linear bounce fade (select color in CH10)

222–238	Program 14: Single color split scroll, outward (select color in CH10)
239–255	Auto mode, all RGB LEDs programs (1–14)

Channel 9 – Speed Built-in Programs

0–255	Gradual speed adjustment, from slow to fast

Channel 10 – Color Selection for RGB LEDs (Programs 8–14) ⚠ CH8 must be set between 120–238 ⚠

0–36	Red
37–73	Green
74–110	Blue
111–147	Yellow
148–184	Cyan
185–221	Pink
222–255	White

Channel 11 – Sound-controlled Mode ⚠ CH1 must be open ⚠

0	No function
1–255	Sound-controlled mode activated

20 Channels

Channel 1 – Master Dimmer (WW LEDs and RGB LEDs)

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 2 – Strobe ⚠ CH1 must be open, works for CH8–CH20 ⚠

0–255	Strobe flash rate, from low to high frequency (0–20 Hz)

Channel 3 – Built-in Programs WW LEDs ⚠ CH1 must be open ⚠

0	No function
1–17	Program 1: Single LED linear scroll (from left to right)
18–34	Program 2: Single LED linear scroll (from right to left)
35–51	Program 3: Two LEDs linear scroll (from left to right)
52–68	Program 4: Two LEDs linear scroll (from right to left)
69–85	Program 5: Split scroll, inward
86–102	Program 6: Split scroll, outward
103–119	Program 7: Split bounce in/out
120–136	Program 8: Linear fade (from left to right)
137–153	Program 9: Linear fade (from right to left)
154–170	Program 10: Linear bounce fade
171–187	Program 11: LEDs fill (from left to right)
188–204	Program 12: LEDs fill (from right to left)
205–221	Program 13: Random/lightning strobe effect
222–238	Program 14: All LEDs full bar fade up/down
239–255	Auto mode, all WW LEDs programs (1–14)

Channel 4 – Built-in Programs RGB LEDs ⚠ CH1 must be open ⚠

0	No function
1–17	Program 1: Multicolor, multipixel effect 1
18–34	Program 2: Multicolor, multipixel effect 2
35–51	Program 3: Multicolor, multipixel effect 3
52–68	Program 4: Multicolor, multipixel effect 4
69–85	Program 5: Multicolor, multipixel effect 5
86–102	Program 6: Multicolor, multipixel effect 6
103–119	Program 7: Multicolor, multipixel effect 7
120–136	Program 8: Single color linear fade (from left to right) (select color in CH10)

137–153	Program 9: Single color linear fade (from right to left) (select color in CH10)
154–170	Program 10: Single color fade fill (from left to right) (select color in CH10)
171–187	Program 11: Single color fade fill (from right to left) (select color in CH10)
188–204	Program 12: Single color split bounce in/out (select color in CH10)
205–221	Program 13: Single color linear bounce fade (select color in CH10)
222–238	Program 14: Single color split scroll, outward (select color in CH10)
239–255	Auto mode, all RGB LEDs programs (1–14)

Channel 5 – Speed Built-in Programs

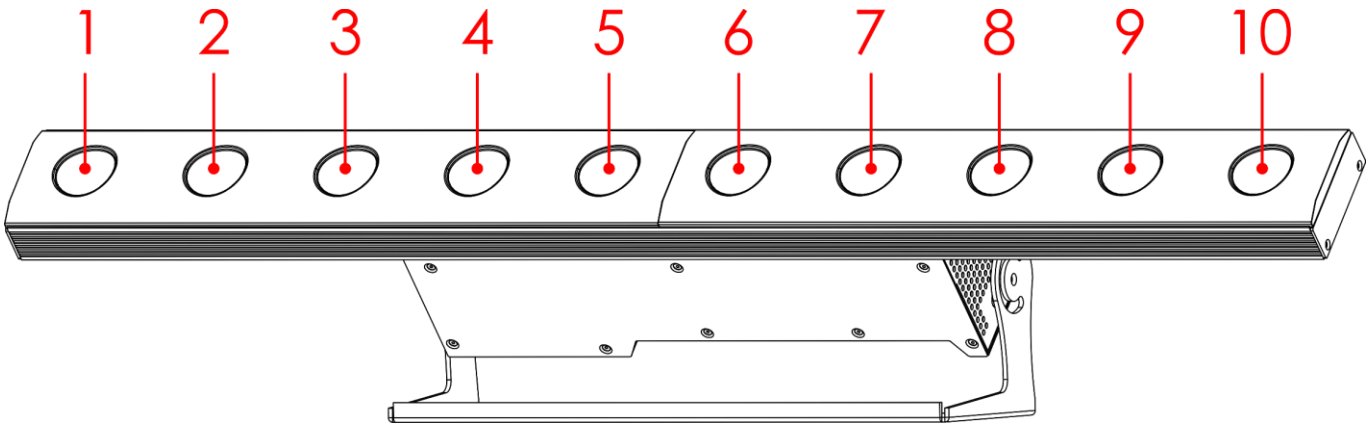
0–255	Gradual speed adjustment, from slow to fast

Channel 6 – Color Selection for RGB LEDs (Programs 8–14) ⚠ CH4 must be set between 120–238 ⚠

0	No function
1–36	Red
37–73	Green
74–110	Blue
111–147	Yellow
148–184	Cyan
185–221	Pink
222–255	White

Channel 7 – Sound-controlled Mode ⚠ CH1 must be open ⚠

0	No function
1–255	Sound-controlled mode activated



Channel 8 – Dimmer WW LED 1 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 9 – Dimmer WW LED 2 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 10 – Dimmer WW LED 3 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 11 – Dimmer WW LED 4 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 12 – Dimmer WW LED 5 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 13 – Dimmer WW LED 6 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 14 – Dimmer WW LED 7 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 15 – Dimmer WW LED 8 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 16 – Dimmer WW LED 9 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 17 – Dimmer WW LED 10 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 18 – Red Dimmer RGB LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 19 – Green Dimmer RGB LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 20 – Blue Dimmer RGB LEDs ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

47 Channels

Channel 1 – Master Dimmer (WW LEDs and RGB LEDs)

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 2 – Strobe ⚠ CH1 must be open, works for CH8–CH20 ⚠

0–255	Strobe flash rate, from low to high frequency (0–20 Hz)

Channel 3 – Built-in Programs WW LEDs ⚠ CH1 must be open ⚠

0	No function
1–17	Program 1: Single LED linear scroll (from left to right)
18–34	Program 2: Single LED linear scroll (from right to left)
35–51	Program 3: Two LEDs linear scroll (from left to right)
52–68	Program 4: Two LEDs linear scroll (from right to left)
69–85	Program 5: Split scroll, inward
86–102	Program 6: Split scroll, outward
103–119	Program 7: Split bounce in/out
120–136	Program 8: Linear fade (from left to right)
137–153	Program 9: Linear fade (from right to left)
154–170	Program 10: Linear bounce fade
171–187	Program 11: LEDs fill (from left to right)
188–204	Program 12: LEDs fill (from right to left)
205–221	Program 13: Random/lightning strobe effect
222–238	Program 14: All LEDs full bar fade up/down
239–255	Auto mode, all WW LEDs programs (1–14)

Channel 4 – Built-in Programs RGB LEDs ⚠ CH1 must be open ⚠

0	No function
1–17	Program 1: Multicolor, multipixel effect 1
18–34	Program 2: Multicolor, multipixel effect 2
35–51	Program 3: Multicolor, multipixel effect 3

52–68	Program 4: Multicolor, multipixel effect 4
69–85	Program 5: Multicolor, multipixel effect 5
86–102	Program 6: Multicolor, multipixel effect 6
103–119	Program 7: Multicolor, multipixel effect 7
120–136	Program 8: Single color linear fade (from left to right) (select color in CH10)
137–153	Program 9: Single color linear fade (from right to left) (select color in CH10)
154–170	Program 10: Single color fade fill (from left to right) (select color in CH10)
171–187	Program 11: Single color fade fill (from right to left) (select color in CH10)
188–204	Program 12: Single color split bounce in/out (select color in CH10)
205–221	Program 13: Single color linear bounce fade (select color in CH10)
222–238	Program 14: Single color split scroll, outward (select color in CH10)
239–255	Auto mode, all RGB LEDs programs (1–14)

Channel 5 – Speed Built-in Programs

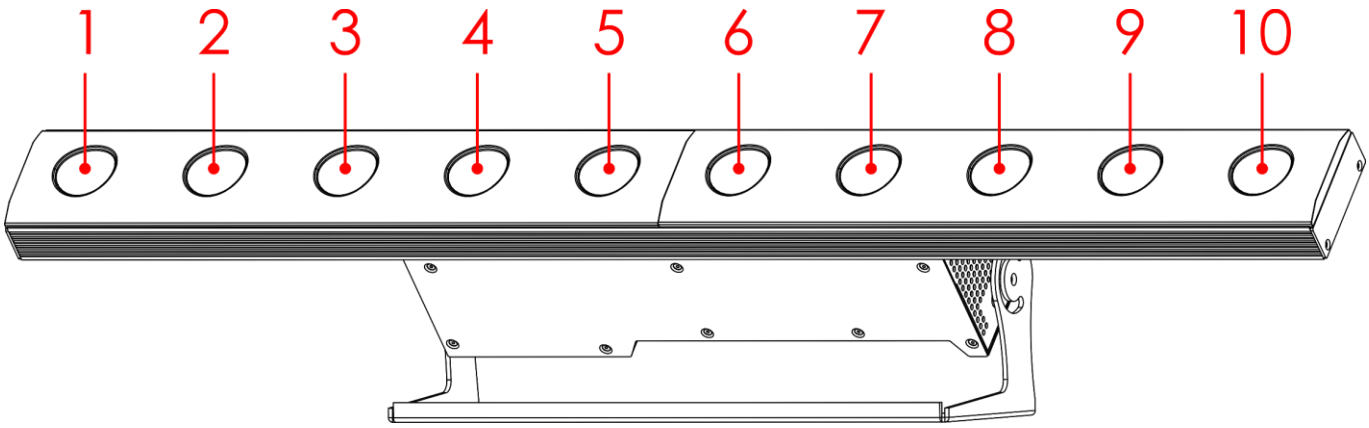
0–255	Gradual speed adjustment, from slow to fast

Channel 6 – Color Selection for RGB LEDs (Programs 8–14) ⚠ CH4 must be set between 120–238 ⚠

0	No function
1–36	Red
37–73	Green
74–110	Blue
111–147	Yellow
148–184	Cyan
185–221	Pink
222–255	White

Channel 7 – Sound-controlled Mode ⚠ CH1 must be open ⚠

0	No function
1–255	Sound-controlled mode activated



Channel 8 – Dimmer WW LED 1 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 9 – Dimmer WW LED 2 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 10 – Dimmer WW LED 3 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 11 – Dimmer WW LED 4 ⚠ CH1 must be open ⚠

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 12 – Dimmer WW LED 5 ⚠ CH1 must be open ⚠

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 13 – Dimmer WW LED 6 ⚠ CH1 must be open ⚠

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 14 – Dimmer WW LED 7 ⚠ CH1 must be open ⚠

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 15 – Dimmer WW LED 8 ⚠ CH1 must be open ⚠

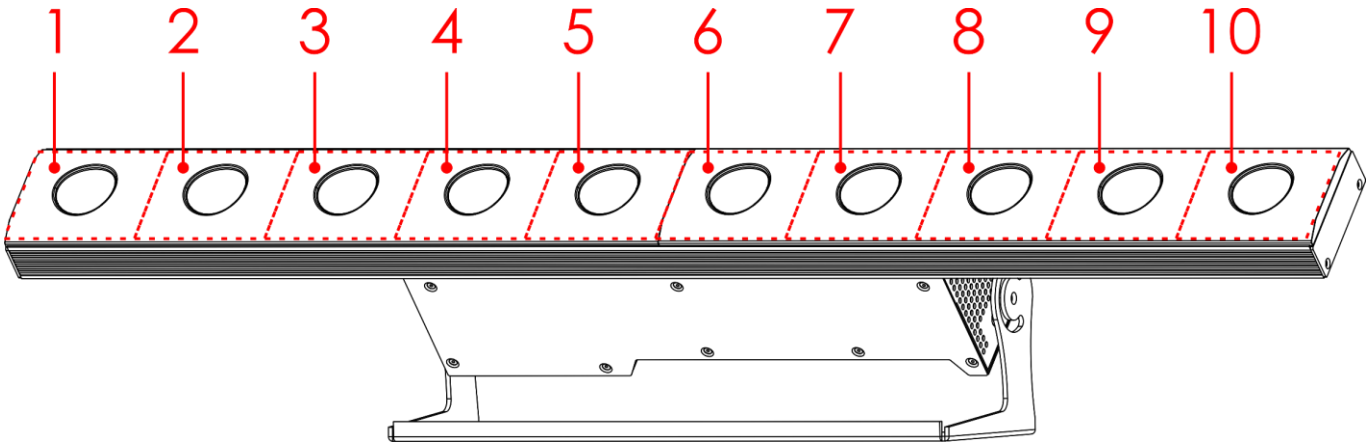
0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 16 – Dimmer WW LED 9 ⚠ CH1 must be open ⚠

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 17 – Dimmer WW LED 10 ⚠ CH1 must be open ⚠

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)



Channel 18 – Red Dimmer RGB LEDs Group 1

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 19 – Green Dimmer RGB LEDs Group 1

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 20 – Blue Dimmer RGB LEDs Group 1

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 21 – Red Dimmer RGB LEDs Group 2

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 22 – Green Dimmer RGB LEDs Group 2

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 23 – Blue Dimmer RGB LEDs Group 2

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 24 – Red Dimmer RGB LEDs Group 3

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 25 – Green Dimmer RGB LEDs Group 3

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 26 – Blue Dimmer RGB LEDs Group 3

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 27 – Red Dimmer RGB LEDs Group 4

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 28 – Green Dimmer RGB LEDs Group 4

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 29 – Blue Dimmer RGB LEDs Group 4

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 30 – Red Dimmer RGB LEDs Group 5

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 31 – Green Dimmer RGB LEDs Group 5

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 32 – Blue Dimmer RGB LEDs Group 5

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 33 – Red Dimmer RGB LEDs Group 6

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 34 – Green Dimmer RGB LEDs Group 6

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 35 – Blue Dimmer RGB LEDs Group 6

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 36 – Red Dimmer RGB LEDs Group 7

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 37 – Green Dimmer RGB LEDs Group 7

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 38 – Blue Dimmer RGB LEDs Group 7

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 39 – Red Dimmer RGB LEDs Group 8

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 40 – Green Dimmer RGB LEDs Group 8

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 41 – Blue Dimmer RGB LEDs Group 8

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 42 – Red Dimmer RGB LEDs Group 9

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 43 – Green Dimmer RGB LEDs Group 9

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 44 – Blue Dimmer RGB LEDs Group 9

0–255	Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 45 – Red Dimmer RGB LEDs Group 10

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

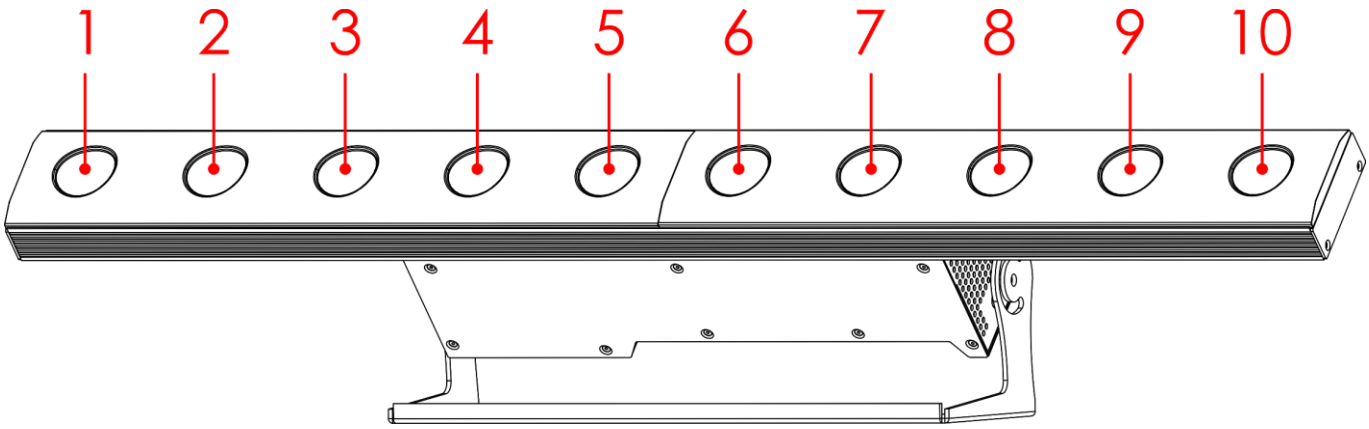
Channel 46 – Green Dimmer RGB LEDs Group 10

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 47 – Blue Dimmer RGB LEDs Group 10

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

190 Channels



Channel 1 – Dimmer WW LED 1

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 2 – Dimmer WW LED 2

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 3 – Dimmer WW LED 3

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 4 – Dimmer WW LED 4

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 5 – Dimmer WW LED 5

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 6 – Dimmer WW LED 6

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 7 – Dimmer WW LED 7

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 8 – Dimmer WW LED 8

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 9 – Dimmer WW LED 9

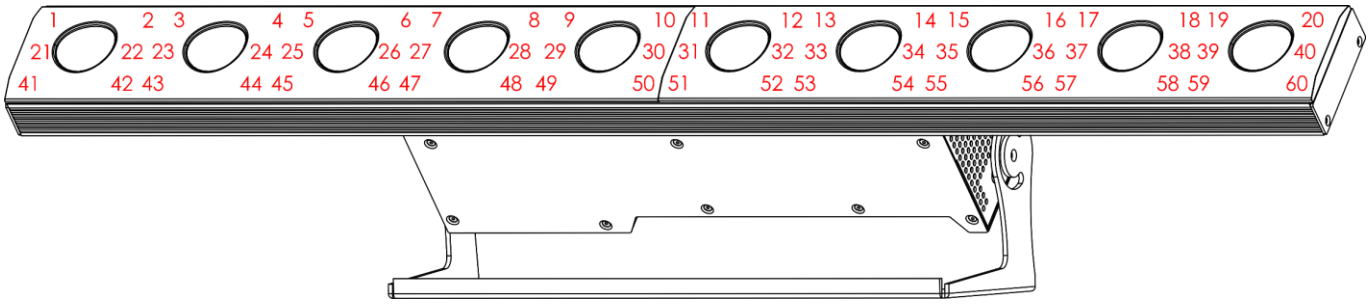
0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channel 10 – Dimmer WW LED 10

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)

Channels 11–190 Individual Pixel Control of all 60 RGB LEDs

0–255 Gradual adjustment of the brightness, from low to high intensity (0–100 %)



CH	LED	Color	CH	LED	Color	CH	LED	Color	CH	LED	Color
11	RGB LED 1	Red	**56**	RGB LED 16	Red	**101**	RGB LED 31	Red	**146**	RGB LED 46	Red
12	RGB LED 1	Green	**57**	RGB LED 16	Green	**102**	RGB LED 31	Green	**147**	RGB LED 46	Green
13	RGB LED 1	Blue	**58**	RGB LED 16	Blue	**103**	RGB LED 31	Blue	**148**	RGB LED 46	Blue
14	RGB LED 2	Red	**59**	RGB LED 17	Red	**104**	RGB LED 32	Red	**149**	RGB LED 47	Red
15	RGB LED 2	Green	**60**	RGB LED 17	Green	**105**	RGB LED 32	Green	**150**	RGB LED 47	Green
16	RGB LED 2	Blue	**61**	RGB LED 17	Blue	**106**	RGB LED 32	Blue	**151**	RGB LED 47	Blue
17	RGB LED 3	Red	**62**	RGB LED 18	Red	**107**	RGB LED 33	Red	**152**	RGB LED 48	Red
18	RGB LED 3	Green	**63**	RGB LED 18	Green	**108**	RGB LED 33	Green	**153**	RGB LED 48	Green
19	RGB LED 3	Blue	**64**	RGB LED 18	Blue	**109**	RGB LED 33	Blue	**154**	RGB LED 48	Blue
20	RGB LED 4	Red	**65**	RGB LED 19	Red	**110**	RGB LED 34	Red	**155**	RGB LED 49	Red
21	RGB LED 4	Green	**66**	RGB LED 19	Green	**111**	RGB LED 34	Green	**156**	RGB LED 49	Green
22	RGB LED 4	Blue	**67**	RGB LED 19	Blue	**112**	RGB LED 34	Blue	**157**	RGB LED 49	Blue
23	RGB LED 5	Red	**68**	RGB LED 20	Red	**113**	RGB LED 35	Red	**158**	RGB LED 50	Red
24	RGB LED 5	Green	**69**	RGB LED 20	Green	**114**	RGB LED 35	Green	**159**	RGB LED 50	Green
25	RGB LED 5	Blue	**70**	RGB LED 20	Blue	**115**	RGB LED 35	Blue	**160**	RGB LED 50	Blue
26	RGB LED 6	Red	**71**	RGB LED 21	Red	**116**	RGB LED 36	Red	**161**	RGB LED 51	Red
27	RGB LED 6	Green	**72**	RGB LED 21	Green	**117**	RGB LED 36	Green	**162**	RGB LED 51	Green
28	RGB LED 6	Blue	**73**	RGB LED 21	Blue	**118**	RGB LED 36	Blue	**163**	RGB LED 51	Blue
29	RGB LED 7	Red	**74**	RGB LED 22	Red	**119**	RGB LED 37	Red	**164**	RGB LED 52	Red
30	RGB LED 7	Green	**75**	RGB LED 22	Green	**120**	RGB LED 37	Green	**165**	RGB LED 52	Green
31	RGB LED 7	Blue	**76**	RGB LED 22	Blue	**121**	RGB LED 37	Blue	**166**	RGB LED 52	Blue
32	RGB LED 8	Red	**77**	RGB LED 23	Red	**122**	RGB LED 38	Red	**167**	RGB LED 53	Red
33	RGB LED 8	Green	**78**	RGB LED 23	Green	**123**	RGB LED 38	Green	**168**	RGB LED 53	Green
34	RGB LED 8	Blue	**79**	RGB LED 23	Blue	**124**	RGB LED 38	Blue	**169**	RGB LED 53	Blue
35	RGB LED 9	Red	**80**	RGB LED 24	Red	**125**	RGB LED 39	Red	**170**	RGB LED 54	Red
36	RGB LED 9	Green	**81**	RGB LED 24	Green	**126**	RGB LED 39	Green	**171**	RGB LED 54	Green
37	RGB LED 9	Blue	**82**	RGB LED 24	Blue	**127**	RGB LED 39	Blue	**172**	RGB LED 54	Blue
38	RGB LED 10	Red	**83**	RGB LED 25	Red	**128**	RGB LED 40	Red	**173**	RGB LED 55	Red
39	RGB LED 10	Green	**84**	RGB LED 25	Green	**129**	RGB LED 40	Green	**174**	RGB LED 55	Green
40	RGB LED 10	Blue	**85**	RGB LED 25	Blue	**130**	RGB LED 40	Blue	**175**	RGB LED 55	Blue
41	RGB LED 11	Red	**86**	RGB LED 26	Red	**131**	RGB LED 41	Red	**176**	RGB LED 56	Red
42	RGB LED 11	Green	**87**	RGB LED 26	Green	**132**	RGB LED 41	Green	**177**	RGB LED 56	Green
43	RGB LED 11	Blue	**88**	RGB LED 26	Blue	**133**	RGB LED 41	Blue	**178**	RGB LED 56	Blue
44	RGB LED 12	Red	**89**	RGB LED 27	Red	**134**	RGB LED 42	Red	**179**	RGB LED 57	Red
45	RGB LED 12	Green	**90**	RGB LED 27	Green	**135**	RGB LED 42	Green	**180**	RGB LED 57	Green
46	RGB LED 12	Blue	**91**	RGB LED 27	Blue	**136**	RGB LED 42	Blue	**181**	RGB LED 57	Blue
47	RGB LED 13	Red	**92**	RGB LED 28	Red	**137**	RGB LED 43	Red	**182**	RGB LED 58	Red
48	RGB LED 13	Green	**93**	RGB LED 28	Green	**138**	RGB LED 43	Green	**183**	RGB LED 58	Green
49	RGB LED 13	Blue	**94**	RGB LED 28	Blue	**139**	RGB LED 43	Blue	**184**	RGB LED 58	Blue
50	RGB LED 14	Red	**95**	RGB LED 29	Red	**140**	RGB LED 44	Red	**185**	RGB LED 59	Red
51	RGB LED 14	Green	**96**	RGB LED 29	Green	**141**	RGB LED 44	Green	**186**	RGB LED 59	Green
52	RGB LED 14	Blue	**97**	RGB LED 29	Blue	**142**	RGB LED 44	Blue	**187**	RGB LED 59	Blue
53	RGB LED 15	Red	**98**	RGB LED 30	Red	**143**	RGB LED 45	Red	**188**	RGB LED 60	Red
54	RGB LED 15	Green	**99**	RGB LED 30	Green	**144**	RGB LED 45	Green	**189**	RGB LED 60	Green
55	RGB LED 15	Blue	**100**	RGB LED 30	Blue	**145**	RGB LED 45	Blue	**190**	RGB LED 60	Blue

Maintenance

The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:
01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
02) There may not be any deformations on housings, fixations and installation spots.
03) Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
04) The electric power supply cables must not show any damages or material fatigue.

The Showtec Razor Blaze 10 requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.
The front lens will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light output very quickly.
Keep connections clean. Disconnect electric power, and then wipe the DMX connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Replacing the Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to replace the fuse.
01) Unplug the unit from electric power source.
02) Insert a screwdriver into the slot of the fuse cover. Turn the fuse holder counterclockwise. The fuse holder will come out.
03) Remove the used fuse. If brown or unclear, it is burned out.
04) Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

No Light

This troubleshooting guide is meant to help solve simple problems.
If a problem occurs, follow the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out the following steps.
If the light effect does not operate properly, refer servicing to a technician.
Suspect three potential problem areas as the power supply, the LEDs, or the primary fuse.
01) Power supply. Check that the unit is plugged into an appropriate power supply.
02) The LEDs. Return the Razor Blaze to your Showtec dealer.
03) The primary fuse. Replace the fuse. See page 29 for replacing the fuse.
04) If all of the above appears to be in order, switch the unit on again.
05) If you are unable to determine the cause of the problem, do not open the Razor Blaze, as this may damage the unit and the warranty will become void.
06) Return the device to your Showtec dealer.

No Response to DMX

Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.
01) Check the DMX settings. Make sure that DMX addresses are correct.
02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
03) Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products? If not, take the controller in for repair. If yes, take the DMX cable and the light effect to a qualified technician.

Problem	Probable cause(s)	Solution
One or more fixtures do not function at all	No power to the fixture	• Check if power is switched on and cables are plugged in
	Primary fuse blown	• Replace fuse
Fixtures reset correctly, but all respond erratically or not at all to the controller	The controller is not connected	• Connect controller
	3-/5-pin DMX OUT of the controller does not match DMX IN of the first fixture on the link (i.e. signal is reversed)	• Install a phase reversing cable between the controller and the first fixture on the link
Fixtures reset correctly, but some respond erratically or not at all to the controller	Poor data quality	• Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbing the link
	Bad data link connection	• Inspect connections and cables. Correct poor connections. Repair or replace damaged cables
	Data link not terminated with 120 Ohm termination plug	• Insert termination plug in the DMX OUT connector of the last fixture on the link
	Incorrect addressing of the fixtures	• Check address settings
	One of the fixtures is defective and disturbs data transmission on the link	• Bypass one fixture at a time until normal operation is restored: unplug both connectors and connect them directly together • Have the defective fixture serviced by a qualified technician
	3-/5-pin DMX OUT on the fixtures does not match (pins 2 and 3 reversed)	• Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture that behaves erratically
No light or LEDs cut out intermittently	Fixture is too hot	• Allow the fixture to cool down • Turn up the air conditioning
	LEDs are damaged	• Disconnect the fixture and return it to your dealer
	The power supply settings do not match local AC voltage and frequency	• Disconnect fixture. Check settings and correct if necessary

Product Specifications

Model:	Showtec Razor Blaze 10
Input voltage:	110–240 V AC, 50/60 Hz
Power consumption:	80 W
Fuse:	F1,5 A/250 V
Dimensions:	780 x 137 x 104 mm (L x W x H) (including bracket)
Weight:	3,1 kg

Operating and programming:	
Signal pin OUT (3-pin):	Pin 1 (earth), pin 2 (-), pin 3 (+)
Signal pin OUT (5-pin):	Pin 1 (earth), pin 2 (-), pin 3 (+), pin-4 (N/C), pin-5 (N/C)
DMX mode:	11, 20, 47 and 190 channels
Signal input:	3-pin/5-pin DMX IN
Signal output:	3-pin/5-pin DMX OUT
Control mode:	Auto, Sound-controlled, Master/Slave, DMX-512, Art-Net, Kling-Net
Control protocol:	DMX-512, RDM, Art-Net, Kling-Net

Electro-mechanical properties:	
Light source:	10 x 3 W High Power Warm White (WW) Cree® LEDs 60 x 0,3 W RGB 5050SMD LEDs
Beam angle:	4° (WW LEDs)
Dimmer:	0–100 %
Strobe:	0–20 Hz
Cooling:	Natural convection
Display:	LCD display
Housing:	Metal, flame retardant plastic
Color:	Black
IP rating:	IP-20
Connections:	Pro-power connectors IN/OUT, 5-pin DMX connectors IN/OUT, 3-pin DMX connectors IN/OUT, 2 x RJ45 connectors

Max. ambient temperature t_a:	40 °C
Max. housing temperature t_B:	80 °C

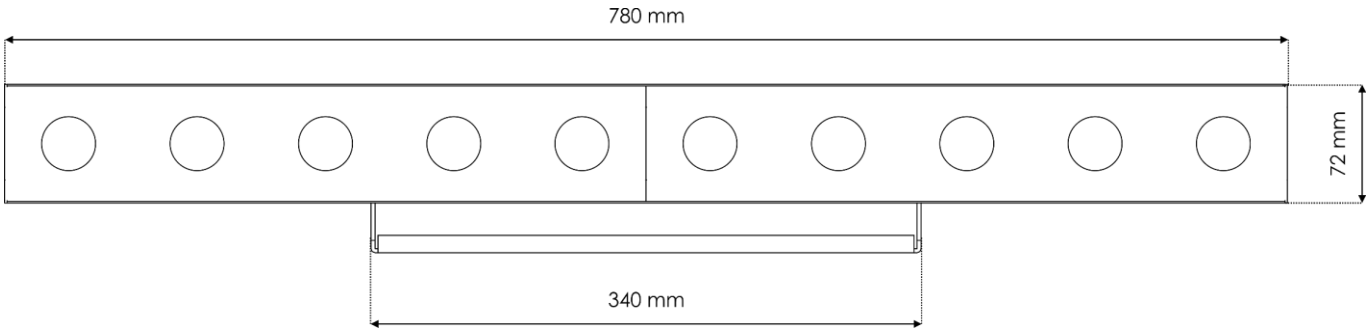
Minimum distance:	
Minimum distance from surfaces:	0,5 m
Minimum distance to lighted object:	1 m

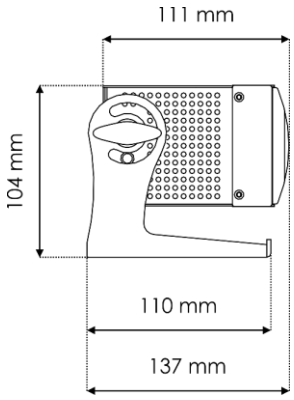
Design and product specifications are subject to change without prior notice.

CE

Website: www.Showtec.info
Email: service@highlite.com

Dimensions





Notes