MANUAL

ENGLISH

XS-2 Dual Beam   V1

Ordercode: 40173

Table of contents

Show tec®

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 damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:
- Showtec XS-2 Dual Beam
- 1 mounting bracket
- IEC power cable 1,5 m
- 2 mounting M10 screws
- User manual
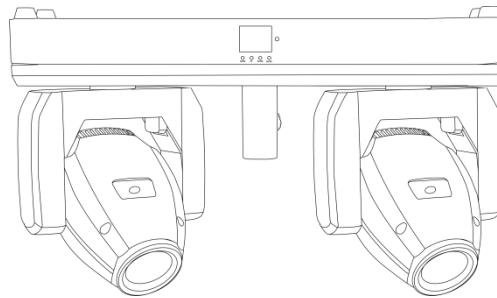
LED Expected Lifespan

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. It is estimated that a viable lifespan of 40,000 to 50,000 hours will be achieved under normal operational conditions. 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 the 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 contained 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 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 remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the fixture holding it by the projector-head, as the mechanics may be damaged. Always hold the fixture by the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never loosen the screws of the gobo, otherwise you risk opening of the ball bearing.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- 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 very hot). Allow the fixture to cool for at least 5 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 fixture 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 keep the case closed while operating.
- Always allow a free air 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.
- If the lens is obviously damaged, it has to be replaced.
- 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 moving head 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 XS-2 Dual Beam. 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.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

> ⚠ **CAUTION! EYEDAMAGES !!!**
> **NEVER LOOK DIRECTLY INTO THE LIGHTSOURCE !!!** ⚠

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 meter.
- The maximum ambient temperature $t_a = 45°C$ must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 45° C.
- If this 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 projector is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the projector, with the mounting bracket, to the trussing system.
- The projector 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.
- When rigging, derigging or servicing the projector, always make sure, that the area below the installation site is secured and that there are not any unauthorized people around.

Show tec®

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 properly connected to the earth!

Improper installation can cause serious damage to people and property!
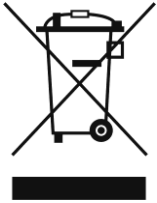
⚠ Return Procedure ⚠

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.nl 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 for the return. Be sure to properly pack fixture, 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 report and submit claims with the shipper in the event that a 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 prepared in writing or sent by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.
Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement from which the obligation is resulting.

Description of the device

Features
The XS-2 Dual Beam consists of two compact 10W LED moving heads, attached to a T-bar.
The fixture creates two strong and tight beams.
The XS-2 Dual Beam is the ideal solution for mobile DJs and will create a fantastic lightshow with only one unit. Combine the XS-2 Dual Beam with a Showtec compact light set (30268) and your lightshow is complete!
- Beam Angle: 4°
- Light Source: 2x10W
- Power consumption: 105 W
- Full color display for auto, Sound control & Master/Slave
- 10, 17, 20 Channels
- 360° pan and 270° tilt
- 9 metal gobos + open
- 7 dichroic-filters + white
- Rainbow flow effect
- Metal & Flame-retardant plastic housing
- XLR Data in/out, IEC Power in/out connectors
- CE certification
- Dimmer: 0-100%
- Strobe: 0-20Hz
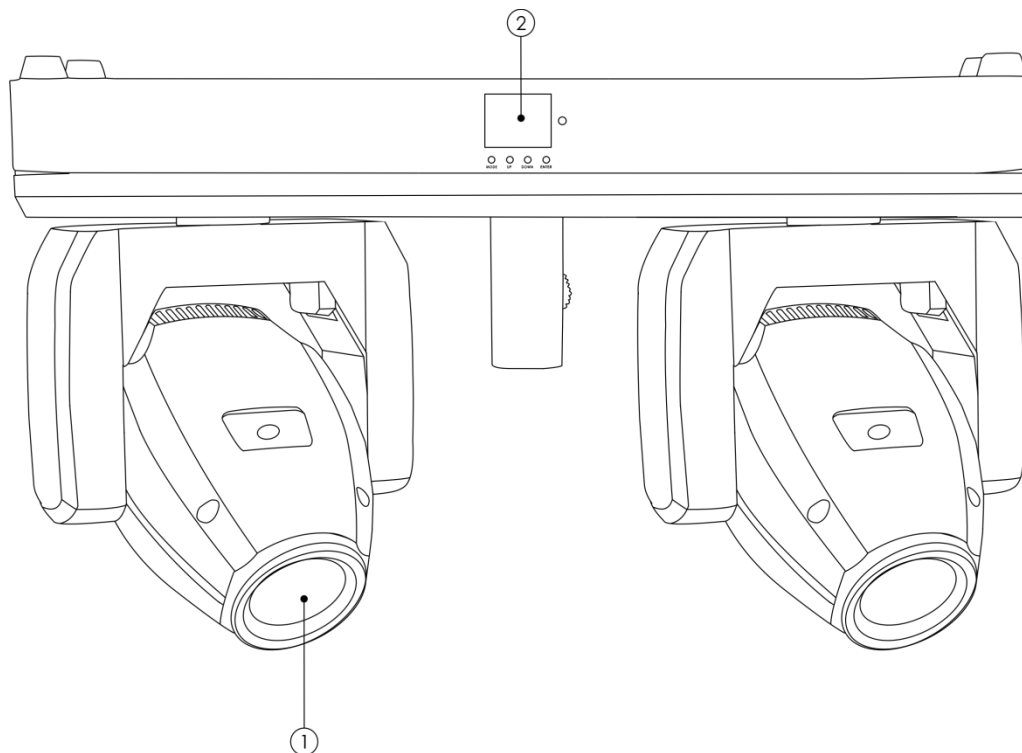- Manual focus
- Control protocol: DMX512

Overview

Fig. 01

01) Lens
02) LCD display

Backside

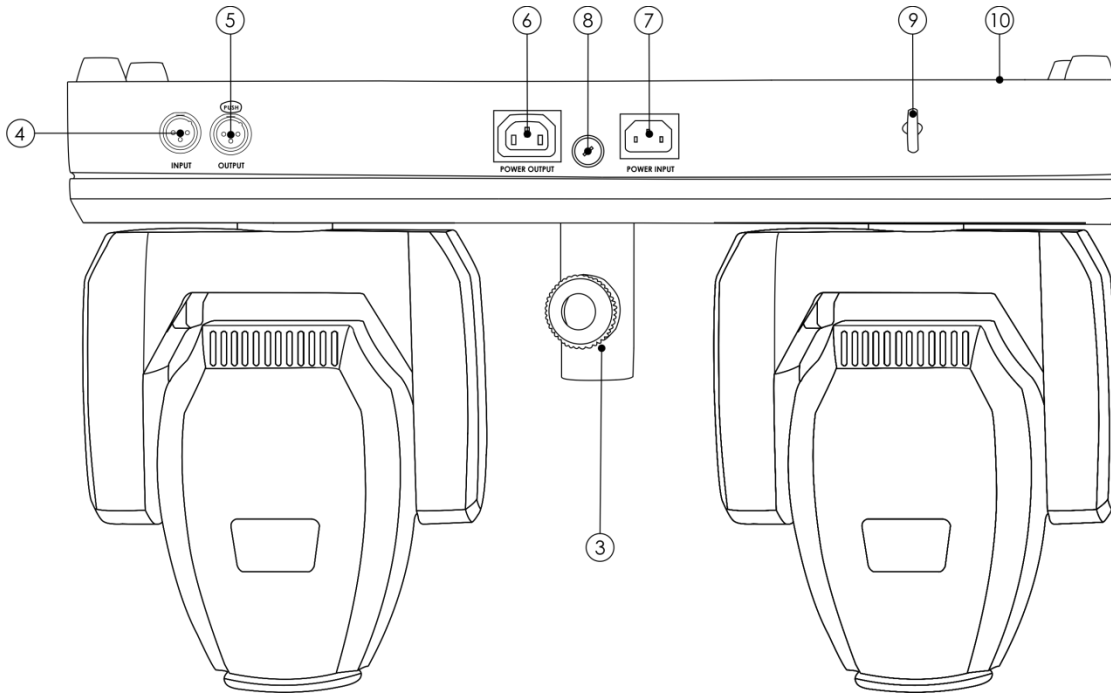**Fig. 02**

03) Adjustment screw
04) 3-pin DMX signal connector IN
05) 3-pin DMX signal connector OUT
06) IEC Power connector 100-240V (OUT)
07) IEC Power connector 100-240V (IN)
08) Fuse F3AL/250V
09) Safety eye
10) T-bar, attach the Dual Beam to a truss, using the included M10 screws and the mounting bracket.

Installation

Remove all packing materials from the XS-2 Dual Beam. Check that 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.

Set Up 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 120V specification product on 230V power, or vice versa.

Control Modes

There are 4 modes:
- Stand-alone (built-in programs)
- Sound-controlled mode
- Master/Slave mode
- DMX512 (10, 17 or 20 channels)

One XS-2 Dual Beam (Built-in Programs)
01) Fasten the effect light to a firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Plug the end of the electric mains power cord into a proper electric power supply socket.
03) When the XS-2 Dual Beam is not connected with a DMX-cable, it functions as a stand-alone device. Please, see page 13 for more information about the built-in programs (2.2 Auto).

One XS-2 Dual Beam (Sound-controlled)
01) Fasten the effect light to a firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Plug the end of the electric mains power cord into a proper electric power supply socket.
03) Turn on the music. If the device is set to sound-control, then the XS-2 Dual Beam will react to the music beats. Please, see page 13 for more information about the sound control options (2.3 Sound).

Multiple Dual Beams (Master/Slave control)
01) Fasten the effect light to a firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Always use a safety cable (ordercode 70140 / 70141).
03) Use a 3-pin XLR cable to connect the Dual Beams.
04) Plug the end of the electric mains power cord into a proper electric power supply socket.
The pins:
     01) Earth
     02) Signal (-)
     03) Signal (+)

05) Link the units as shown in (Fig.03). Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units. You can use the same functions on the master device as described on page 13 (Auto or Sound). This means on the master device you can set your desired operation Mode and all slave devices will react the same as the master device.
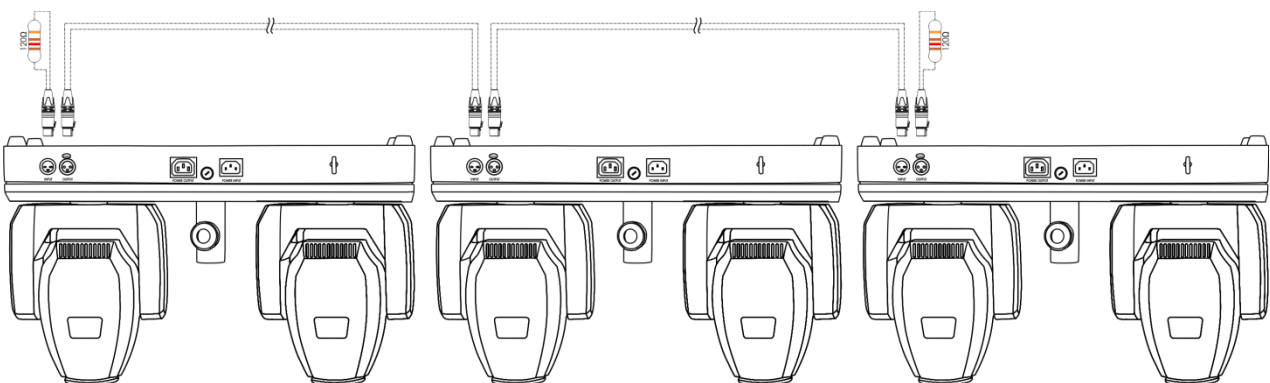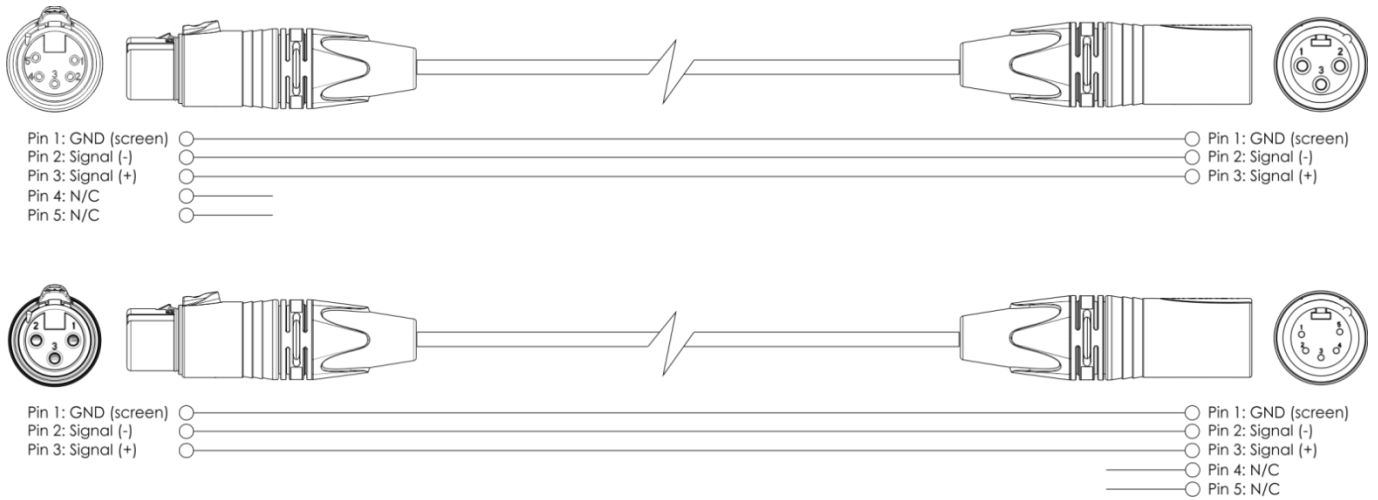
Multiple XS-2 Dual Beams (Master/Slave control)

Fig. 03

Multiple Dual Beams (DMX Control)
01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Always use a safety cable (ordercode 70140 / 70141).
03) Plug the end of the electric mains power cord into a proper electric power supply socket.
04) Use a 3-pin XLR cable to connect the Dual Beams and other devices.

Pin 1: GND (screen)	Pin 1: GND (screen)
Pin 2: Signal (-)	Pin 2: Signal (-)
Pin 3: Signal (+)	Pin 3: Signal (+)
Pin 4: N/C	
Pin 5: N/C	

Pin 1: GND (screen)	Pin 1: GND (screen)
Pin 2: Signal (-)	Pin 2: Signal (-)
Pin 3: Signal (+)	Pin 3: Signal (+)
	Pin 4: N/C
	Pin 5: N/C

05) Link the units as shown in (Fig.04), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
06) Supply electric power: Plug electric mains power cords into each unit's IEC 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.
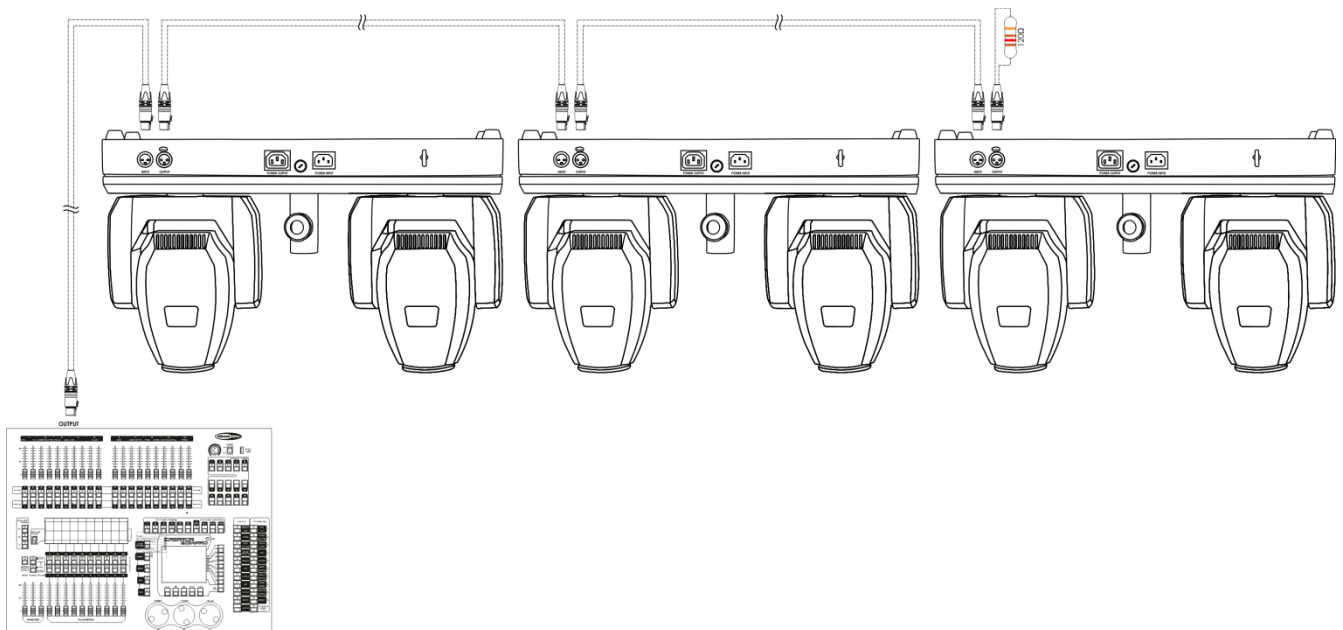
Multiple XS-2 Dual Beams DMX Set Up

Fig. 04

Note : Link all cables before connecting electric power

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 of 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 a 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 of fixtures 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 Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), FLX016 (6 m), FLX0110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5 m), FL713 (3 m), FL716 (6 m), FL7110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL7275 (0,75 m), FL72150 (1,5 m), FL723 (3 m), FL726 (6 m), FL7210 (10 m).
- DAP Audio 110 Ohm cable with digital signal transmission. **Ordercode** FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).
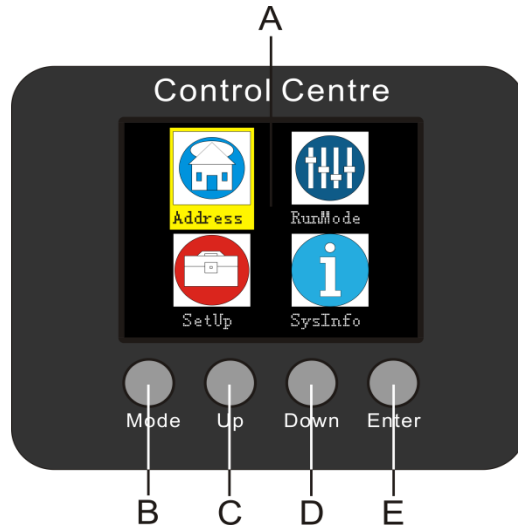
Control Panel

Fig. 05

A. LCD Display
B. Mode button
C. Up button

D. Down button
E. Enter button

Control Mode
The fixtures are individually addressed on a data-link and connected to the controller.
The fixtures respond to the DMX signal from the controller. When you select the DMX address and save it, the controller will display the saved DMX address the next time.

DMX Addressing
The control panel on the front side of the base allows you to assign DMX fixture addresses, which is the first channel with which the XS-2 Dual Beam will respond to the controller.
Please note, when you use the controller and set the XS-2 to maximum settings, the unit has **20** channels. When using multiple Dual Beams, make sure you set the DMX addresses right.
Therefore, the DMX address of the first XS-2 should be **1(001)**; the DMX address of the second XS-2 should be **1+20=21 (021**); the DMX address of the third XS-2 should be **21+20=41 (041)**, etc.
Please, be sure that you do not have any overlapping channels in order to control each fixture correctly. If two or more fixtures are addressed similarly, they will work similarly.

Controlling:
After having addressed all the fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the XS-2 Dual Beam will automatically detect whether DMX 512 data is received or not.
If there is no data received at the DMX-input, the LED on the control panel will not flash.
If not, the problem may be:
• The XLR cable from the controller is not connected with the input of the XS-2.
• The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

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

Menu Overview

|	
Address → ENTER	**Address setting** 001
RunMode → ENTER	**Running mode** Dmx ● 20CH Auto Auto01 Sound Slave
SetUp → ENTER	**Advanced setting** SlaveSet S-1 Sensitivity 100 MastSet M-2 PanReverse1 Off PanReverse2 Off TiltReverse1 Off TiltReverse2 Off Screen Reverse Off PanAngle 360 TiltAngle 180 Reset FactorySet
SysInfo → ENTER	**System information** Ver ET-210 V1. 0 Running Mode DMX Dmx Address 001 Temperature 1 021 Temperature 2 021

Up/Down

Main Menu Options

DMX Address
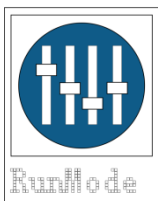
DMX Mode / Built-in Programs / Sound-controlled / Master-Slave Mode
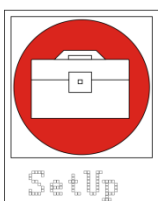
Slave Settings / Audio Sensitivity / Mast Settings / Pan and Tilt Reverse
Display Reverse / Pan and Tilt Angle
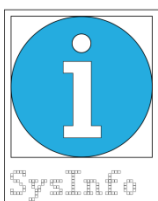
System Information

1. DMX Addressing
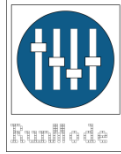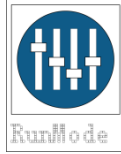With this menu you can set the DMX address.

01) Press Mode, until the display shows .
02) Press Enter to confirm. You can choose 512 different DMX addresses.

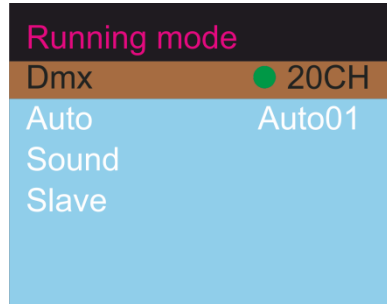Use the Up / Down buttons to select the required address from 001 — 512 .

2. Built-in Programs Mode
You can select 4 different programs when using the XS-2 Dual Beam.

01) Press MODE until the display shows `RunMode` , then press ENTER to open the menu and change your settings.
02) Use the Up/Down buttons to select one of the 4 programs.

2.1 DMX Advanced/Basic Mode
01) When the display shows `Dmx` , press ENTER to open the menu and change your settings.
02) When the display shows `● 20CH`, the device has 20 Channels.
03) When you press Up/Down, the display will show `● 17CH`. The device now has 17 channels.
04) When you press Up/Down again, the display will show `● 10CH`. The device has now 10 channels.

2.2 Auto Mode
01) Use the Up/Down buttons to scroll through the Running Mode.
02) When the display shows `Auto` , press ENTER to open the menu and change your settings.
03) You can choose one of 16 built-in programs by pressing the Up/Down buttons.

`Auto01` — Up/Down — `Auto16`

04) Press ENTER to confirm your choice.

2.3 Sound-controlled Mode
01) Use the Up/Down buttons to scroll through the Running Mode.
02) When the display shows `Sound` , press ENTER.
03) The device is now sound-controlled and will react to the music as it is equipped with a built-in microphone which intercepts ambient sounds.

2.4 Slave Mode
01) Use the Up/Down buttons to scroll through the Running Mode.
02) When the display shows `Slave` , press ENTER.
03) Now you can choose between two options:
   • If set to **S-1**, the slave device will imitate the actions performed by the master device.
   • If set to **S-2**, the slave device will still imitate the master device, but in reverse.

3. Advanced Mode
You can select 6 different Advanced settings when using the XS-2 Dual Beam.
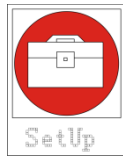
01) Press MODE until the display shows ⬜SetUp⬜ , then press ENTER to open the menu and change your settings.
02) Use the UP / DOWN buttons to select the following settings:

Advanced setting	
SlaveSet	S-1
Sensitivity	100
MastSet	M-2
PanReverse1	Off
PanReverse2	Off
TiltReverse1	Off
TiltReverse2	Off
Screen Reverse	Off
PanAngle	360
TiltAngle	180
Reset	
FactorySet	

3.1 Slave Settings
01) When the display shows **SlaveSet** , the device is in Slave Settings Mode.
02) Press ENTER to open menu and change settings.
03) When you press Up/Down, you can choose between two options:
- If set to **S-1**, the slave device will imitate the actions performed by the master device.
- If set to **S-2**, the slave device will still imitate the master device, but in reverse.

3.2 Audio Sensitivity
01) When the display shows **Sensitivity** , the device is in Audio Sensitivity Mode.
02) Press ENTER to open the menu and change your settings.
03) When you press Up/Down, you can set the audio sensitivity from 000 to 100.

3.3 Master Settings
01) When the display shows **MastSet** , the device is in Master Settings Mode.
02) Press ENTER to open menu and change settings.
03) When you press Up/Down, you can choose between two options.
- If set to **M-2**, the Dual Beam is seen as a separate unit in a daisy chain of other slave devices.
- If the fixture is set to **M-4**, its heads are seen as independent devices. That means that each head of every daisy-chained fixture is seen as a separate unit and their actions are not synchronized with any other master or slave device.

3.4 Pan Reverse 1 and 2 Mode
01) When the display shows **PanReverse1** or **PanReverse2** and both those options are turned off, the device is in normal Pan Mode.
02) Press ENTER to open the menu and change your settings.
03) When you press Up/Down and turn this option on, the Pan function will be reversed.

3.5 Tilt Reverse 1 and 2 Mode

01) When the display shows `TiltReverse1` or `TiltReverse2` and both those options are turned off, the device is in normal Tilt Mode.
02) Press ENTER to open the menu and change your settings.
03) When you press Up/Down and turn this option on, the Tilt function will be reversed.

3.6 Screen Reverse Mode

01) When the display shows `Screen Reverse`, but this option is turned off, the device is in normal Display Mode.
02) Press ENTER to open the menu and change your settings.
03) When you press Up/Down and turn this option on, the Display function will be reversed.

3.7 Pan Mode

01) When the display shows `PanAngle`, press ENTER to open the menu and change your settings.
02) You are able to set 2 different Pan Angles:
   • 360°
   • 180°

3.8 Tilt Mode

01) When the display shows `TiltAngle`, press ENTER to open the menu and change your settings.
02) You are able to set 3 different Tilt Angles:
   • 270°
   • 180°
   • 090°

3.9 Reset

01) When the display shows `Reset`, press ENTER to perform a full reset of the software. The fixture will switch off and on.

3.10 Factory Settings

01) When the display shows `FactorySet`, press ENTER to perform a full reset of the software and restore the factory settings.

4. System Information

01) You can see the current Running Mode, the DMX Address and the current Software version.

02) Press MODE until the display shows `SysInfo`, then press ENTER to open the menu and **view** your settings.

System information	
Ver	ET-210 V1. 0
Running Mode	DMX
Dmx Address	001
Temperature 1	021
Temperature 2	021

DMX Channels

10 Channels

Channel 1 – Head 1 and 2, Horizontal movement (Pan)
Move the slider up and down, in order to move head horizontally (PAN).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 360° and stopped in any position.

Channel 2 – Head 1 and 2, Vertical movement (Tilt)
Move the slider up in order to move head vertically (TILT).
Gradual head adjustment by moving the slider from one end to the other (0-255).
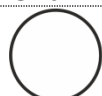The head can be turned by 270° and stopped in any position.

Channel 3 – Head 1 and 2, Color Wheel

0-15	White
16-31	Orange
32-47	Light blue
48-63	Red
64-79	Green
80-95	Purple
96-111	Yellow
112-127	Blue
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 4 – Head 1 and 2, Static Gobo Wheel

0-9	10-15	16-21	22-27	28-33	34-39	40-45	46-51	52-57	58-63

64-69	Gobo 9 shake effect , from slow to fast
70-75	Gobo 8 shake effect , from slow to fast
76-81	Gobo 7 shake effect , from slow to fast
82-87	Gobo 6 shake effect , from slow to fast
88-93	Gobo 5 shake effect , from slow to fast
94-99	Gobo 4 shake effect , from slow to fast
100-105	Gobo 3 shake effect , from slow to fast
106-111	Gobo 2 shake effect , from slow to fast
112-117	Gobo 1 shake effect , from slow to fast
118-127	White
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 5 – Head 1, Dimmer

0-255	0-100% dimmer

Channel 6 – Head 2, Dimmer

0-255	0-100% dimmer

Channel 7 – Head 1 and 2, Shutter

0-3	Shutter closed
4-7	Shutter open
8-76	Strobe effect, from slow to fast
77-145	Pulsating strobe effect
146-215	Random shutters are on or off, from long to short intervals
216-255	Shutter open

Channel 8 – Channel Functions

0-9	Not used
10-14	Pan/tilt blackout
15-19	Color blackout
20-24	Gobo blackout
25-29	Pan/tilt/color blackout
30-34	Pan/tilt/gobo blackout
35-39	Color/gobo blackout
40-44	Pan/tilt/color/gobo blackout
45-49	Not used
50-54	M-2 mode (after 5 seconds)
55-59	M-4 mode (after 5 seconds)
60-64	Cancellation of the M-2 and M-4 modes (after 5 seconds)
65-69	Not used
70-74	Reset (after 5 seconds)
75-79	Not used
80-84	Axes X1, X2, Y1, Y2 movement inversion (after 5 seconds)
85-89	Axis X1 movement inversion (after 5 seconds)
90-94	Axis X2 movement inversion (after 5 seconds)
95-99	Axis Y1 movement inversion (after 5 seconds)
100-104	Axis Y2 movement inversion (after 5 seconds)
105-109	Cancellation of axis X1 movement inversion (after 5 seconds)
110-114	Cancellation of axis X2 movement inversion (after 5 seconds)
115-119	Cancellation of axis Y1 movement inversion (after 5 seconds)
120-124	Cancellation of axis Y2 movement inversion (after 5 seconds)
125-129	Cancellation of axes X1, X2, Y1, Y2 movement inversion (after 5 seconds)
130-135	Not used
136-175	Chase 1 effect, from slow to fast
176-215	Chase 2 effect, from slow to fast
216-255	Chase 3 effect, from slow to fast

Channel 9 – Built-in programs

0-7	Not used
8-22	Program 1
23-37	Program 2
38-52	Program 3
53-67	Program 4
68-82	Program 5
83-97	Program 6
98-112	Program 7
113-127	Program 8
128-142	Program 9
143-157	Program 10
158-172	Program 11
173-187	Program 12
188-202	Program 13
203-217	Program 14
218-232	Program 15
233-247	Program 16
248-255	Sound control

Channel 10 – Speed of the built-in programs

0-255	From fast to slow

Show tec®

17 Channels

Channel 1 – Head 1, Horizontal movement (Pan)
Move the slider up and down, in order to move head horizontally (PAN).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 360° and stopped in any position.

Channel 2 – Head 1, Pan fine 16 bit

Channel 3 – Head 1, Vertical movement (Tilt)
Move the slider up in order to move head vertically (TILT).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 270° and stopped in any position.

Channel 4 – Head 1, Tilt fine 16 bit

Channel 5 – Head 2, Horizontal movement (Pan)
Move the slider up and down, in order to move head horizontally (PAN).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 360° and stopped in any position.

Channel 6 – Head 2, Pan fine 16 bit

Channel 7 – Head 2, Vertical movement (Tilt)
Move the slider up in order to move head vertically (TILT).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 270° and stopped in any position.

Channel 8 – Head 2, Tilt fine 16 bit

Channel 9 – Pan/tilt adjustment sensitivity

0-255	Pan/tilt adjustment sensitivity, from high to low

Channel 10 – Head 1 and 2, Color Wheel

0-15	White
16-31	Orange
32-47	Light blue
48-63	Red
64-79	Green
80-95	Purple
96-111	Yellow
112-127	Blue
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 11 – Head 1 and 2, Static Gobo Wheel

0-9	10-15	16-21	22-27	28-33	34-39	40-45	46-51	52-57	58-63

64-69	Gobo 9 shake effect , from slow to fast
70-75	Gobo 8 shake effect , from slow to fast
76-81	Gobo 7 shake effect , from slow to fast
82-87	Gobo 6 shake effect , from slow to fast
88-93	Gobo 5 shake effect , from slow to fast
94-99	Gobo 4 shake effect , from slow to fast
100-105	Gobo 3 shake effect , from slow to fast
106-111	Gobo 2 shake effect , from slow to fast
112-117	Gobo 1 shake effect , from slow to fast
118-127	White
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 12 – Head 1, Dimmer

0-255	0-100% dimmer

Channel 13 – Head 2, Dimmer

0-255	0-100% dimmer

Channel 14 – Head 1 and 2, Shutter

0-3	Shutter closed
4-7	Shutter open
8-76	Strobe effect, from slow to fast
77-145	Pulsating strobe effect
146-215	Random shutters are on or off, from long to short intervals
216-255	Shutter open

Channel 15 – Channel Functions

0-9	Not used
10-14	Pan/tilt blackout
15-19	Color blackout
20-24	Gobo blackout
25-29	Pan/tilt/color blackout
30-34	Pan/tilt/gobo blackout
35-39	Color/gobo blackout
40-44	Pan/tilt/color/gobo blackout
45-49	Not used
50-54	M-2 mode (after 5 seconds)
55-59	M-4 mode (after 5 seconds)
60-64	Cancellation of the M-2 and M-4 modes (after 5 seconds)
65-69	Not used
70-74	Reset (after 5 seconds)
75-79	Not used
80-84	Axes X1, X2, Y1, Y2 movement inversion (after 5 seconds)
85-89	Axis X1 movement inversion (after 5 seconds)
90-94	Axis X2 movement inversion (after 5 seconds)
95-99	Axis Y1 movement inversion (after 5 seconds)
100-104	Axis Y2 movement inversion (after 5 seconds)
105-109	Cancellation of axis X1 movement inversion (after 5 seconds)
110-114	Cancellation of axis X2 movement inversion (after 5 seconds)
115-119	Cancellation of axis Y1 movement inversion (after 5 seconds)
120-124	Cancellation of axis Y2 movement inversion (after 5 seconds)

Show tec®

125-129	Cancellation of axes X1, X2, Y1, Y2 movement inversion (after 5 seconds)
130-135	Not used
136-175	Chase 1 effect, from slow to fast
176-215	Chase 2 effect, from slow to fast
216-255	Chase 3 effect, from slow to fast

Channel 16 – Built-in programs

0-7	Not used
8-22	Program 1
23-37	Program 2
38-52	Program 3
53-67	Program 4
68-82	Program 5
83-97	Program 6
98-112	Program 7
113-127	Program 8
128-142	Program 9
143-157	Program 10
158-172	Program 11
173-187	Program 12
188-202	Program 13
203-217	Program 14
218-232	Program 15
233-247	Program 16
248-255	Sound control

Channel 17 – Speed of the built-in programs

0-255	From fast to slow

Show tec®

20 Channels

Channel 1 – Head 1, Horizontal movement (Pan)
Move the slider up and down, in order to move head horizontally (PAN).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 360° and stopped in any position.

Channel 2 – Head 1, Pan fine 16 bit

Channel 3 – Head 1, Vertical movement (Tilt)
Move the slider up in order to move head vertically (TILT).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 270° and stopped in any position.

Channel 4 – Head 1, Tilt fine 16 bit

Channel 5 – Head 1, Color Wheel

0-15	White
16-31	Orange
32-47	Light blue
48-63	Red
64-79	Green
80-95	Purple
96-111	Yellow
112-127	Blue
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 6 – Head 1, Static Gobo Wheel

0-9	10-15	16-21	22-27	28-33	34-39	40-45	46-51	52-57	58-63

64-69	Gobo 9 shake effect , from slow to fast
70-75	Gobo 8 shake effect , from slow to fast
76-81	Gobo 7 shake effect , from slow to fast
82-87	Gobo 6 shake effect , from slow to fast
88-93	Gobo 5 shake effect , from slow to fast
94-99	Gobo 4 shake effect , from slow to fast
100-105	Gobo 3 shake effect , from slow to fast
106-111	Gobo 2 shake effect , from slow to fast
112-117	Gobo 1 shake effect , from slow to fast
118-127	White
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 7 – Head 1, Dimmer

0-255	0-100% dimmer

Channel 8 – Head 1, Shutter

0-3	Shutter closed
4-7	Shutter open
8-76	Strobe effect, from slow to fast
77-145	Pulsating strobe effect
146-215	Random shutters are on or off, from long to short intervals
216-255	Shutter open

Channel 9 – Head 2, Horizontal movement (Pan)
Move the slider up and down, in order to move head horizontally (PAN).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 360° and stopped in any position.

Channel 10 – Head 2, Pan fine 16 bit

Channel 11 – Head 2, Vertical movement (Tilt)
Move the slider up in order to move head vertically (TILT).
Gradual head adjustment by moving the slider from one end to the other (0-255).
The head can be turned by 270° and stopped in any position.

Channel 12 – Head 2, Tilt fine 16 bit

Channel 13 – Head 2, Color Wheel

0-15	White
16-31	Orange
32-47	Light blue
48-63	Red
64-79	Green
80-95	Purple
96-111	Yellow
112-127	Blue
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 14 – Head 2, Static Gobo Wheel

0-9	10-15	16-21	22-27	28-33	34-39	40-45	46-51	52-57	58-63

64-69	Gobo 9 shake effect , from slow to fast
70-75	Gobo 8 shake effect , from slow to fast
76-81	Gobo 7 shake effect , from slow to fast
82-87	Gobo 6 shake effect , from slow to fast
88-93	Gobo 5 shake effect , from slow to fast
94-99	Gobo 4 shake effect , from slow to fast
100-105	Gobo 3 shake effect , from slow to fast
106-111	Gobo 2 shake effect , from slow to fast
112-117	Gobo 1 shake effect , from slow to fast
118-127	White
128-191	Rainbow effect (changing from left to right), from slow to fast
192-255	Rainbow effect (changing from right to left), from slow to fast

Channel 15 – Head 2, Dimmer

0-255	0-100% dimmer

Channel 16 – Head 2, Shutter

0-3	Shutter closed
4-7	Shutter open
8-76	Strobe effect, from slow to fast
77-145	Pulsating strobe effect
146-215	Random shutters are on or off, from long to short intervals
216-255	Shutter open

Channel 17 – Pan/tilt adjustment sensitivity

0-255	Pan/tilt adjustment sensitivity, from high to low

Channel 18 – Channel Functions

0-9	Not used
10-14	Pan/tilt blackout
15-19	Color blackout
20-24	Gobo blackout
25-29	Pan/tilt/color blackout
30-34	Pan/tilt/gobo blackout
35-39	Color/gobo blackout
40-44	Pan/tilt/color/gobo blackout
45-49	Not used
50-54	M-2 mode (after 5 seconds)
55-59	M-4 mode (after 5 seconds)
60-64	Cancellation of the M-2 and M-4 modes (after 5 seconds)
65-69	Not used
70-74	Reset (after 5 seconds)
75-79	Not used
80-84	Axes X1, X2, Y1, Y2 movement inversion (after 5 seconds)
85-89	Axis X1 movement inversion (after 5 seconds)
90-94	Axis X2 movement inversion (after 5 seconds)
95-99	Axis Y1 movement inversion (after 5 seconds)
100-104	Axis Y2 movement inversion (after 5 seconds)
105-109	Cancellation of axis X1 movement inversion (after 5 seconds)
110-114	Cancellation of axis X2 movement inversion (after 5 seconds)
115-119	Cancellation of axis Y1 movement inversion (after 5 seconds)
120-124	Cancellation of axis Y2 movement inversion (after 5 seconds)
125-129	Cancellation of axes X1, X2, Y1, Y2 movement inversion (after 5 seconds)
130-135	Not used
136-175	Chase 1 effect, from slow to fast
176-215	Chase 2 effect, from slow to fast
216-255	Chase 3 effect, from slow to fast

Channel 19 – Built-in programs

0-7	Not used
8-22	Program 1
23-37	Program 2
38-52	Program 3
53-67	Program 4
68-82	Program 5
83-97	Program 6
98-112	Program 7
113-127	Program 8
128-142	Program 9
143-157	Program 10
158-172	Program 11
173-187	Program 12
188-202	Program 13
203-217	Program 14
218-232	Program 15
233-247	Program 16
248-255	Sound control

Channel 20 – Speed of the built-in programs

0-255	From fast to slow

Maintenance

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.
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 XS-2 Dual Beam 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.
The cooling-fans, color-wheel, the gobo wheel, the gobos and the internal lenses should be cleaned monthly, with a soft brush.
Please clean internal components once a year with a light brush and vacuum cleaner.
Keep connections clean. Disconnect electric power, and then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Replacing a 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:
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.
01) Unplug the unit from electric power source.
02) Insert a flat-head screwdriver into a slot in the fuse cover. Turn the screwdriver to the left, at the same time gently push a bit (Turn and Push). The fuse 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.

Static Gobo wheel and Color wheel

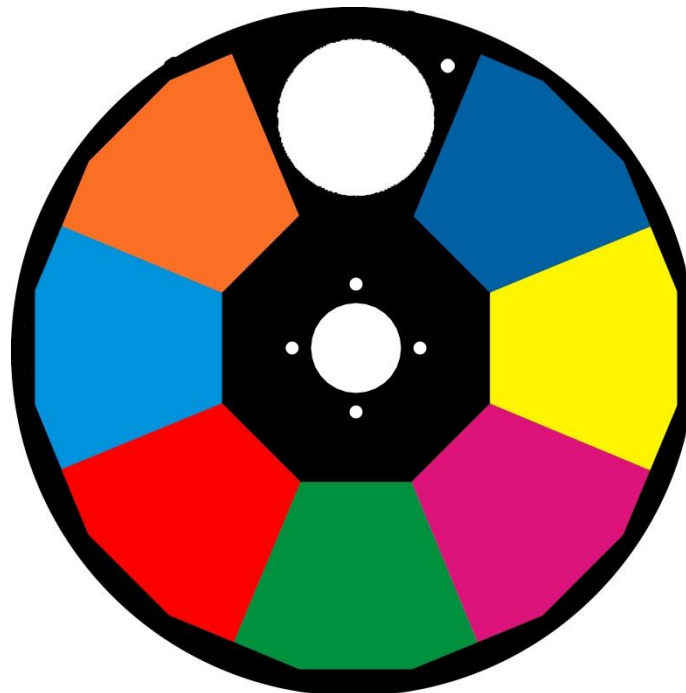**Static Gobo-wheel**

Fig. 10

Color wheel

Fig. 11

Troubleshooting

No Light

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

If the light effect does not operate properly, refer servicing to a technician.

Response: Suspect three potential problem areas as: the power supply, the LEDs, the fuse.

01) Power supply. Check that the unit is plugged into an appropriate power supply.
02) The LEDs. Return the XS-2 Dual Beam to your Showtec dealer.
03) The fuse. Replace the fuse. See page 28 for replacing the fuse.
04) If all of the above appears to be O.K., plug the unit in again.
05) If you are unable to determine the cause of the problem, do not open the Galactic, as this may damage the unit and the warranty will become void.
06) Return the device to your Showtec dealer.

No Response to DMX

Response: Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

01) Check the DMX setting. 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 so, take the DMX cable and the light effect to a qualified technician

See next page for more problem solving.

Show tec®

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-pin XLR Out of the controller does not match XLR Out 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 output jack of the last fixture on the link
	Incorrect addressing of the fixtures	• Check address setting
	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-pin XLR 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
Shutter closes suddenly	The color wheel, gobowheel or a gobo has lost its index position and the fixture is resetting the effect	• Contact a technician for servicing if the problem persists
No light or lamp cuts out intermittently	Fixture is too hot	• Allow the fixture to cool down • Clean the fan • Make sure air vents in control panel and the front lens are not blocked • Turn up the air conditioning
	LEDs 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

Showtec®

Product Specifications

Model:	Showtec XS-2 Dual Beam
Input Voltage:	100~240VAC 50/60Hz
Power consumption:	105W
Fuse:	F3AL/250V
Dimensions:	555 mm x 125 mm x 360 mm (LxWxH)
Weight:	9 Kg
Operating and Programming:	
Signal pin OUT:	Pin 1 (earth), pin 2 (-), pin 3 (+)
Set Up and Addressing:	LCD control panel
Pan/Tilt resolution:	16 bit
DMX Channels:	10, 17, 20
IP Rating:	IP 20
Signal input:	3-pin XLR male
Signal output:	3-pin XLR female
Electro-mechanical effects:	
Battery powered full color display incl. gravity sensor	
Beam effect	
High torque motors	
Ultra-fast movements	
DMX-control via standard DMX-controller	
Reverse Pan / Tilt movement	
Special: Pan / Tilt movement, Color, Gobo blackout	
Pan 0º -- 360º, Tilt 0º -- 270º	
10 Built in programs selectable by DMX	
Gobo wheel: Static Gobowheel with 9 metal gobos and open	
Gobo functions: Rainbow effect, Gobo shake	
Color wheel: 7 dichroic-filters and white	
Color functions: Rainbow effect	
Rotation: Bi-directional	
Beam Angle: 1°-3,8° Electronic adjustment	
Dimmer: 0-100%	
Strobe: 0-20Hz	
Housing: Black Metal & Flame-retardant plastic	
Working temperature:	<40⁰C

Max. ambient temperature t_a:	40°C
Max. housing temperature t_B:	80°C
Minimum distance:	
Minimum distance from flammable surfaces:	0,5 m
Minimum distance to lighted object:	1 m

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

Dimensions

360 mm

555 mmm

$C\epsilon$
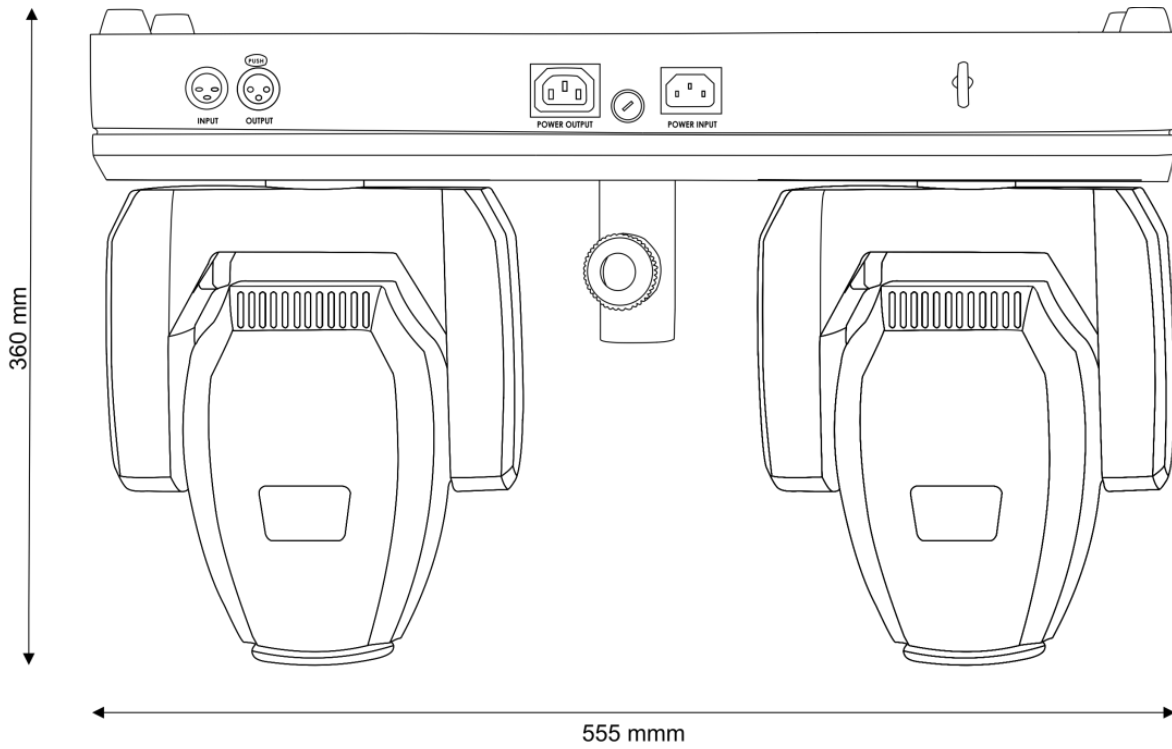
Website: www.Showtec.info
Email: service@highlite.nl

Showtec®