Stage Line®

PROFESSIONAL LED BEAM MOVING HEAD

BEAM-100LED

Best.-Nr. 38.0860

CE

INSTRUCTION MANUAL

BEAM-100LED Product Guide

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:

- IMG Stage LIne BEAM-100LED Beam with IEC powercable 0,9m
- 1 bracket for truss mounting
- Safety eye
- 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 your lifespan expectancy is of a 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 remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- 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 would 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 device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that 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 case closed while operating.
- Always allow 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 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. So that its functions are not impaired, due to cracks or deep scratches.
- If device is 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 IMG Stage Line device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your dealer for service.
- For adult use only. Movinghead must be installed out of 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 unit. 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 !.
Avoid looking directly into the light source.
(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 more than 0.5 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 35° 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!

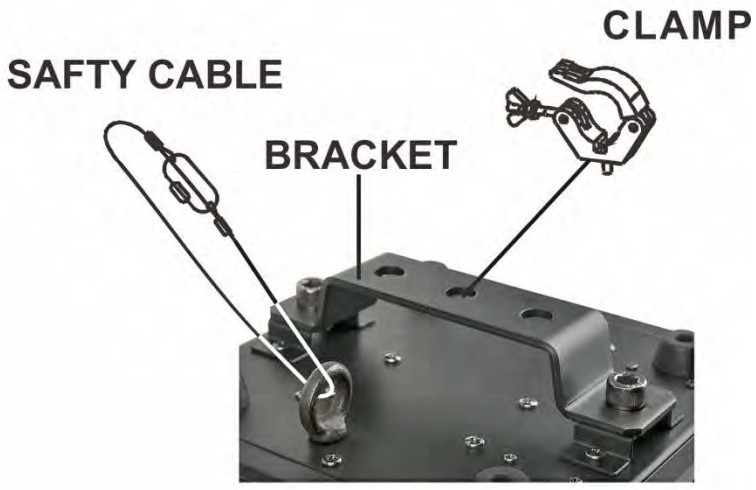
Rigging

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 !

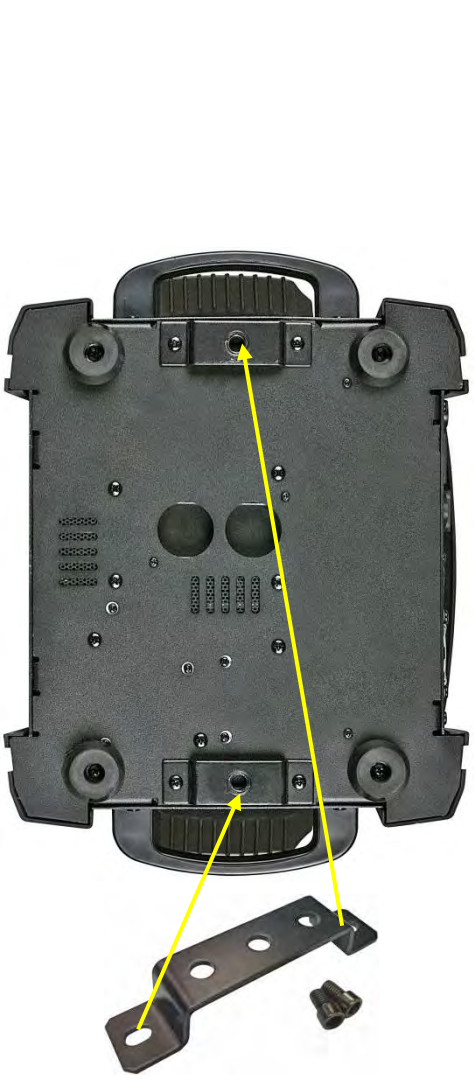
Procedure:

- 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 place is blocked and staying in the area is forbidden.



The BEAM-100LED can be placed on a flat stage floor or mounted to any kind of truss by a clamp.

Mounting a clamp to the underside of the BEAM-100LED moving head



Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
⏚	YELLOW/GREEN	GREEN	GREEN	EARTH

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

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 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 otherwise agreed 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 then 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 IMG Stage Line BEAM-100LED Beam is a moving-head with high output and great effects.

- Input Voltage: 100-240 VAC, 50/60Hz
- Power consumption: 230W max. at full output
- LED Drive Current: 28A
- DMX-control via standard DMX-controller
- User-selectable Pan ranges, 540° / 360° / 180°, User-selectable Tilt ranges, 270° / 180° / 90°
- Reverse Pan / Tilt movement
- Special: Pan / Tilt / Color wheel / Gobo wheel movement blackout
- Pan 0° -- 540°, Tilt 0° -- 270°
- Pan/Tilt resolution: 16 bit
- Control: Full color display for DMX-512, Master/Slave, Sound-controlled
- 16 Built-in programs selectable by DMX
- Light Source: 1 x 100W LED
- Colourwheel with 14 dichroic-colours and white
- Color functions: Rainbow-flow effect, split colors
- Rotating Gobowheel with 15 static metal gobos, 3 sizes open with Gobo Shake Function (No replaceable gobos)
- Rotation: Bi-directional
- Gobo functions: Gobo-flow effect, Gobo shake
- Single clamp bracket, which makes it easy to handle and position in truss systems
- Filters: Frost & Color correction
- Electronic Focus
- Prism: Rotating 8-facet
- Output: 41000 Lux @ 5m.
- Beam Angle: 4°
- Dimmer: 0-100%
- Strobe: 0-20Hz
- Housing: Black Metal & Flame-retardant plastic
- Fixture Connection: XLR Data in/out (XLR 3-pin), IEC Power IN/OUT
- Fuse F5A / 250V
- Dimensions: 330 x 245 x 460 mm(WxDxH)
- Weight: 17,28 kg
- User selectable Basic (8CH) or Advanced (14CH) operating modes

Overview

Fig. 1

1) Lens
2) Menu Buttons + LCD Display

Backside

Fig. 2

3) Fuse F5A 250V
4) IEC power connector OUT
5) IEC power connector IN
6) DMX signal connector (IN) 3-pin
7) DMX signal connector (OUT) 3-pin

Installation

Remove all packing materials from the BEAM-100LED 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.

Connect the device to the main power supply. The device can be music-controlled by its built-in microphone.

Control Modes

There are 4 modes:

- Stand-alone (built-in programs)
- Sound-controlled
- Master/Slave
- DMX512 (14 Channels ADVANCED or 8 channel BASIC)

One BEAM-100LED (Built-in Programs)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Always use a safety cable (IMG Stage Line TAR-1004SAVE / TAR-603SAVE).
3. When the BEAM-100LED is not connected by a DMX-cable, it functions as a stand-alone device. Please see page 15 for more information about the built-in programs.

One BEAM-100LED (Sound-control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Always use a safety cable (IMG Stage Line TAR-1004SAVE / TAR-603SAVE).
3. When the BEAM-100LED is not connected by a DMX-cable, it functions as a stand-alone device. Turn on the music. If the device is set to sound-control, then the BEAM-100LED will react to the beat of the music. Please see page 15 for more information about the sound-control options.

Multiple BEAM-100LEDs (Master/Slave control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Always use a safety cable (IMG Stage Line TAR-1004SAVE / TAR-603SAVE).
3. Use a 3-p XLR cable to connect the BEAM-100LED.
   The pins:

1. Earth
2. Signal -
3. Signal +

4. Link the units as shown in (Fig. 3), 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 15 (Built-in Programs, or Music control). 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 BEAM-100LEDs (Master/Slave control)

Fig. 3

Multiple BEAM-100LEDs (DMX Control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Always use a safety cable (IMG Stage Line TAR-1004SAVE / TAR-603SAVE).
3. Use a 3-p XLR cable to connect the BEAM-100LEDs and other devices.

Occupation of the XLR-connection:

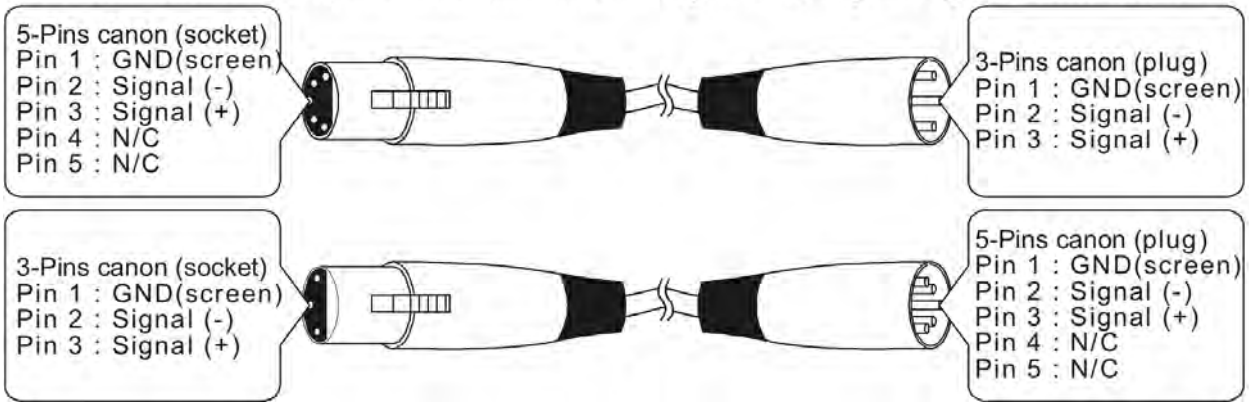
DMX-OUTPUT
XLR mounting-socket:

1 - Ground
2 - Signal (-)
3 - Signal (+)

DMX-input
XLR mounting-plug

1 - Ground
2 - Signal (-)
3 - Signal (+)

The transformation of the controller line of 3 pins and 5 pins (plug and socket)



4. Link the units as shown in (figure 4), 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.
5. 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 BEAM-100LEDs DMX Set Up

Note : Link all cables before connecting electric power

Fig. 4

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 of BEAM-100LEDs on a DMX data link: 30 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase IMG Stage Line 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.

We recommend IMG Stage Line cables:
CDMXN-150/SW
CDMXN-300/SW
CDMXN-500/SW
CDMXN-1000/SW

The BEAM-100LED Beam can be operated with a controller in **control mode** or without the controller in **stand-alone mode.**

Control Panel

Fig. 5

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 the DMX fixture address, which is the first channel from which the BEAM-100LED will respond to the controller.
Please note when you use the controller, the unit has **14** channels.
When using multiple BEAM-100LEDs, make sure you set the DMX addresses right.
Therefore, the DMX address of the first BEAM-100LED should be **1(001)**; the DMX address of the second one should be **1+14=15 (015**); the DMX address of the third BEAM-100LED should be **15+14=29 (029)**, etc.
Please, be sure that you don't have any overlapping channels in order to control each BEAM-100LED correctly.
If two or more BEAM-100LEDs are addressed similarly, they will work similarly.
For address settings, please refer to the instructions under "Addressing'.

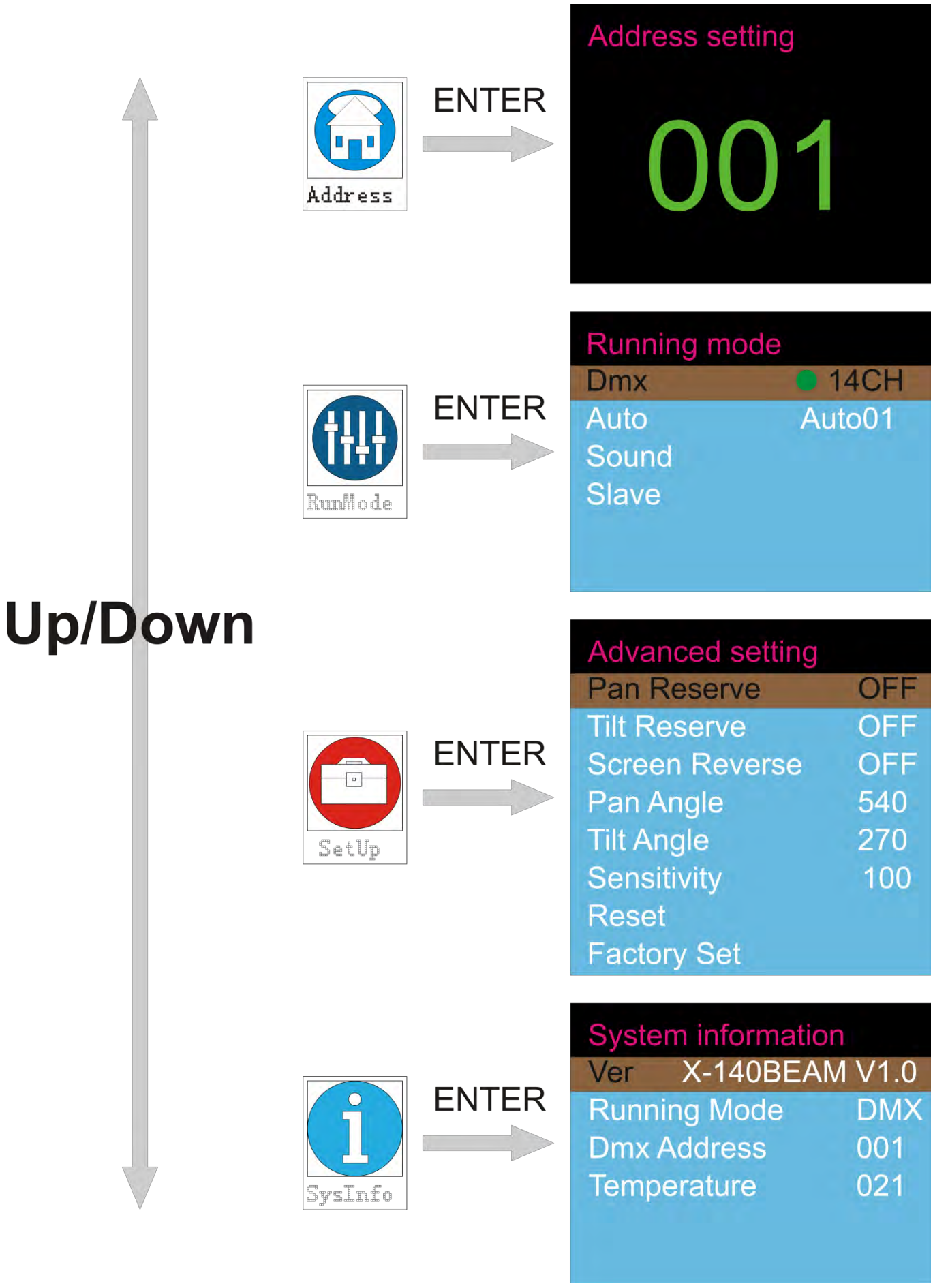
Controlling:

After having addressed all BEAM-100LED fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the BEAM-100LED 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 BEAM-100LED.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

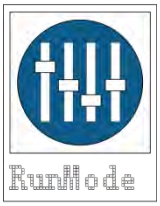
Note: It's necessary to insert a XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

Menu Overview



Main Menu Options

DMX address



DMX Mode / Built-in Programs / Sound-controlled / Master-Slave Mode

Audio Sensitivity / Pan + Tilt/Reverse Pan + Tilt / Display/Reverse Display/ Pan + Tilt Angle

System Info

DMX Addressing

With this menu you can set the DMX address.

1) Press Mode, until the display shows 

.

2) Press Enter to confirm. You can choose 512 different DMX addresses.
Use the Up / Down buttons to select the required address from 

.

3) Once you have set the desired DMX address, press the enter button to store your DMX address.

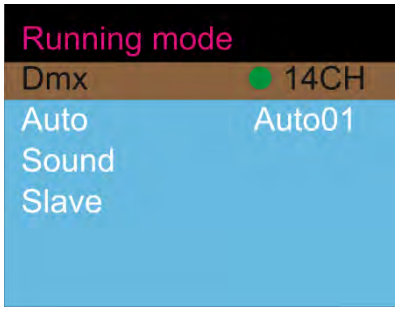
Built-in Programs Mode

You can select 4 different Programs when using the BEAM-100LED.

1) Press MODE until the display shows 

, then press ENTER to open the menu and change your settings.

2) Use the UP / DOWN buttons to select one of 4 programs.



DMX Advanced/Basic Mode

1) When the display shows : Dmx , press ENTER to open the menu and change your settings.

2) When the display shows : 14CH , the device has 14 Channels.

3) When you press Up/Down, the display will show 8CH . The device now has 8 channels.

Auto Mode

1) Use the Up/Down buttons to scroll through the Running Mode.

2) When the display shows : Auto , press ENTER to open the menu and change your settings.

3) You can choose one of 16 built-in programs by pressing the Up/Down buttons. Auto01 Up/Down Auto16

Sound-controlled Mode

1) Use the Up/Down buttons to scroll through the Running Mode.

2) When the display shows : Sound , press ENTER.

3) The device is now sound-controlled and will react to the music.

Slave Mode

1) Use the Up/Down buttons to scroll through the Running Mode.

2) When the display shows : Slave , press ENTER.

3) The device is now a slave device. It will now react the same as its master.

Advanced Mode

You can select 8 different Advanced settings when using the BEAM-100LED Beam.

1) Press MODE until the display shows 

, then press ENTER to open the menu and change your settings.

2) Use the UP / DOWN buttons to select all 8 settings.

Pan movement Mode

1) When the display shows : PanReverse and has been set to OFF, the device is in normal Pan Mode.
2) Press ENTER to open the menu and change your settings.
3) When you press Up/Down and set the device to ON, the Pan function is reversed.

Tilt movement Mode

1) When the display shows : TiltReverse and has been set to OFF, the device is in normal Tilt Mode.
2) Press ENTER to open the menu and change your settings.
3) When you press Up/Down and set the device to ON, the Tilt function is reversed.

Display Mode

1) When the display shows : ScreenReverse and has been set to OFF, the device is in normal Display Mode.
2) Press ENTER to open the menu and change your settings.
3) When you press Up/Down and set the device to ON, the Display function is reversed.

Pan Mode

1) When the display shows : PanAngle , then press ENTER to open the menu and change your settings. You are able to set 3 different Pan Angles.

540 Pan is 540°.
360 Pan is 360°.
180 Pan is 180°.

Tilt Mode

1) When the display shows : TiltAngle , then press ENTER to open the menu and change your settings. You are able to set 3 different Tilt Angles.

270 Tilt is 270°.
180 Tilt is 180°.
090 Tilt is 090°.

Audio Sensitivity

1) When the display shows : Sensitivity , the device is in Audio Sensitivity Mode.
2) Press ENTER to open the menu and change your settings.
3) When you press Up/Down, you can set the audio sensitivity from 000 to 100. T

Reset

1) When the display shows : Reset , the device is in Reset Mode.
2) Press ENTER to Reset the device.

FactorySet

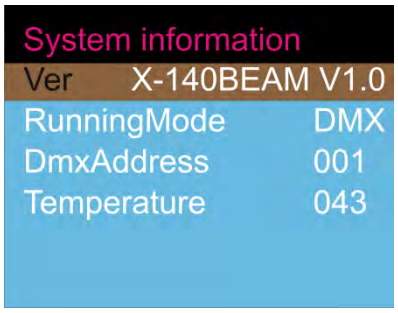
1) When the display shows : FactorySet , the device is in Factory Default Mode.
2) Press ENTER to return to its Factory Default Settings.

System Information

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

1) Press MODE until the display shows 

, then press ENTER to open the menu and **view** your settings.



Password Change

This is a Service Function.

1) Press and hold **MODE** for 3 seconds.
2) The display will show 0000.
3) Press the Up button to change the value. Press the Down button to go to the next digit.
4) Enter **password: 2323**.
5) A new menu will open and the display shows:

6) You can scroll through the menu with the Up/Down buttons.
7) Press ENTER to open a specific menu and change a certain value.
8) When you press Up/Down, you can set the value of PAN, TILT, GOBO, COLOR, PRISM, FOCUS and FROST from 000 to 255. You can change the LED value from 000 to 070.
9) Press the ENTER button to store your setting. This option will auto-exit after 10 seconds.

DMX Channels

14 Channels

Channel 1 – Horizontal movement (Pan)

Push the slider up, in order to move head horizontally (PAN).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 540° and stopped at any position you wish.

Channel 2 – Vertical movement (Tilt)

Push the slider, up in order to move head vertically (TILT).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 270° and stopped at any position you wish.

Channel 3 – Pan fine 16 bit

Channel 4 – Tilt fine 16 bit

Channel 5 – PAN/TILT Speed

0-255	From Max Speed (0) to Min. Speed (255)

Channel 6 – Colourwheel

Linear color change following the movement of the slider. Between 128 - 255, the color-wheel rotates continuously the so-called "Rainbow" effect.

0-3	Open / White
4-7	Yellow
8-11	Light Pink
12-15	Green
16-19	Red
20-23	Bright Blue
24-27	Light Green
28-31	Dark Yellow
32-35	Old Yellow
36-39	Light Blue/Violet
40-43	Hard Pink
44-47	Light Blue
48-51	Moon Yellow
52-55	Steel Blue
56-63	UV
64-67	Split Color, White + Yellow
68-71	Split Color, Yellow + Light Pink
72-75	Split Color, Light Pink + Green
76-79	Split Color, Green + Red
80-83	Split Color, Red + Bright Blue
84-87	Split Color, Bright Blue + Light Green
88-91	Split Color, Light Green + Dark Yellow
92-95	Split Color, Dark Yellow + Old Yellow
96-99	Split Color, Old Yellow + Light Blue/Violet
100-103	Split Color, Light Blue/Violet + Hard Pink
104-107	Split Color, Hard Pink + Light Blue
108-111	Split Color, Light Blue + Moon Yellow
112-115	Split Color, Moon Yellow + Steel Blue
116-119	Split Color, White + UV
120-127	UV + White
128-191	Clockwise rotation (CW) rainbow effect from slow to fast
192-255	Counter-clockwise rotation (CCW) rainbow effect from slow to fast

Channel 7 – Shutter / Strobe (Dimmer must be open ⚠)

0-3	Close
4-7	Shutter open
8-76	Strobe effect, from slow to fast (0-20 flashes/sec.)
77-145	Pulse strobe effect from slow to fast
146-215	Strobe effect, from slow to fast (0-20 flashes/sec.)
216-255	Shutter open

Channel 8 – Dimmer intensity

0-255	From black to brightest

Channel 9 – Static Gobo-wheel + Gobo Shake

0-3	Open / White
4-7	Gobo 1
8-11	Gobo 2
12-15	Gobo 3
16-19	Gobo 4
20-23	Gobo 5
24-27	Gobo 6
28-31	Gobo 7
32-35	Gobo 8
36-39	Gobo 9
40-43	Gobo 10
44-47	Gobo 11
48-51	Gobo 12
52-55	Gobo 13
56-59	Gobo 14
60-63	Gobo 15
64-67	Gobo 16
68-71	Gobo 17
72-77	Gobo Shake 17 from slow to fast
78-83	Gobo Shake 16 from slow to fast
84-89	Gobo Shake 15 from slow to fast
90-95	Gobo Shake 14 from slow to fast
96-101	Gobo Shake 13 from slow to fast
102-107	Gobo Shake 12 from slow to fast
108-113	Gobo Shake 11 from slow to fast
114-119	Gobo Shake 10 from slow to fast
120-125	Gobo Shake 9 from slow to fast
126-131	Gobo Shake 8 from slow to fast
132-137	Gobo Shake 7 from slow to fast
138-143	Gobo Shake 6 from slow to fast
144-149	Gobo Shake 5 from slow to fast
150-155	Gobo Shake 4 from slow to fast
156-161	Gobo Shake 3 from slow to fast
162-167	Gobo Shake 2 from slow to fast
168-173	Gobo Shake 1 from slow to fast
174-179	Open / White
180-217	Clockwise rotation (CW) rainbow effect from slow to fast
218-255	Counter-clockwise rotation (CCW) rainbow effect from slow to fast

Channel 10 – Channel Functions

0-7	No Function
8-15	Blackout during Pan/Tilt movement
16-23	Blackout during Colorwheel movement
24-31	Blackout during Gobowheel movement
32-39	Blackout during Pan/Tilt/Colorwheel movement
40-47	Blackout during Pan/Tilt/Gobowheel movement
48-55	Blackout during Pan/Tilt/Gobowheel /Colorwheel movement
56-87	No Function
88-95	No Function

96-103	Reset Pan after 5 seconds
104-111	Reset Tilt after 5 seconds
112-119	Reset Color wheel after 5 seconds
120-127	Reset Gobo wheel after 5 seconds
128-135	No Function
136-143	Reset Prism after 5 seconds
144-151	Reset Focus after 5 seconds
152-159	Reset all Channels after 5 seconds
160-167	No Function
168-255	No Function

Channel 11 – Built-in Programs + Sound-controlled Program

0-7	No Function
8-23	Built-in Program 1
24-39	Built-in Program 2
40-55	Built-in Program 3
56-71	Built-in Program 4
72-87	Built-in Program 5
88-103	Built-in Program 6
104-119	Built-in Program 7
120-135	Built-in Program 8
136-151	Sound control 1
152-167	Sound control 2
168-183	Sound control 3
184-199	Sound control 4
200-215	Sound control 5
216-231	Sound control 6
232-247	Sound control 7
248-255	Sound control 8

Channel 12 – Prism

0-7	Open
8-12	8-facet Prism Effect, no rotation
13-130	Clockwise rotation (CW) prism effect from slow to fast
131-247	Counter-clockwise rotation (CCW) prism effect from slow to fast
248-255	8-facet Prism Effect, no rotation

Channel 13 – Focus

0-255	0-255 Continuous adjustment from far to near

Channel 14 – Frost Effect

0-255	Frost effect off - on

8 Channels

Channel 1 – Horizontal movement (Pan)

Push the slider up, in order to move head horizontally (PAN).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 540° and stopped at any position you wish.

Channel 2 – Vertical movement (Tilt)

Push the slider, up in order to move head vertically (TILT).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 270° and stopped at any position you wish.

Channel 3 – Colourwheel

Linear color change following the movement of the slider. Between 128 - 255, the color-wheel rotates continuously the so-called "Rainbow" effect.

0-3	Open / White
4-7	Yellow
8-11	Light Pink
12-15	Green
16-19	Red
20-23	Bright Blue
24-27	Light Green
28-31	Dark Yellow
32-35	Old Yellow
36-39	Light Blue/Violet
40-43	Hard Pink
44-47	Light Blue
48-51	Moon Yellow
52-55	Steel Blue
56-63	UV
64-67	Split Color, White + Yellow
68-71	Split Color, Yellow + Light Pink
72-75	Split Color, Light Pink + Green
76-79	Split Color, Green + Red
80-83	Split Color, Red + Bright Blue
84-87	Split Color, Bright Blue + Light Green
88-91	Split Color, Light Green + Dark Yellow
92-95	Split Color, Dark Yellow + Old Yellow
96-99	Split Color, Old Yellow + Light Blue/Violet
100-103	Split Color, Light Blue/Violet + Hard Pink
104-107	Split Color, Hard Pink + Light Blue
108-111	Split Color, Light Blue + Moon Yellow
112-115	Split Color, Moon Yellow + Steel Blue
116-119	Split Color, White + UV
120-127	UV + White
128-191	Clockwise rotation (CW) rainbow effect from slow to fast
192-255	Counter-clockwise rotation (CCW) rainbow effect from slow to fast

Channel 4 – Shutter / Strobe

0-3	Close
4-7	Shutter open
8-76	Strobe effect, from slow to fast (0-20 flashes/sec.)
77-145	Pulse strobe effect from slow to fast
146-215	Strobe effect, from slow to fast (0-20 flashes/sec.)
216-255	Shutter open

Channel 5 – Static Gobo-wheel + Gobo Shake

0-3	Open / White
4-7	Gobo 1
8-11	Gobo 2
12-15	Gobo 3
16-19	Gobo 4
20-23	Gobo 5
24-27	Gobo 6
28-31	Gobo 7
32-35	Gobo 8
36-39	Gobo 9
40-43	Gobo 10
44-47	Gobo 11
48-51	Gobo 12
52-55	Gobo 13
56-59	Gobo 14
60-63	Gobo 15
64-67	Gobo 16
68-71	Gobo 17
72-77	Gobo Shake 17 from slow to fast
78-83	Gobo Shake 16 from slow to fast
84-89	Gobo Shake 15 from slow to fast
90-95	Gobo Shake 14 from slow to fast
96-101	Gobo Shake 13 from slow to fast
102-107	Gobo Shake 12 from slow to fast
108-113	Gobo Shake 11 from slow to fast
114-119	Gobo Shake 10 from slow to fast
120-125	Gobo Shake 9 from slow to fast
126-131	Gobo Shake 8 from slow to fast
132-137	Gobo Shake 7 from slow to fast
138-143	Gobo Shake 6 from slow to fast
144-149	Gobo Shake 5 from slow to fast
150-155	Gobo Shake 4 from slow to fast
156-161	Gobo Shake 3 from slow to fast
162-167	Gobo Shake 2 from slow to fast
168-173	Gobo Shake 1 from slow to fast
174-179	Open / White
180-217	Clockwise rotation (CW) rainbow effect from slow to fast
218-255	Counter-clockwise rotation (CCW) rainbow effect from slow to fast

Channel 6 – Prism

0-7	Open
8-12	8-facet Prism Effect, no rotation
13-130	Clockwise rotation (CW) prism effect from slow to fast
131-247	Counter-clockwise rotation (CCW) prism effect from slow to fast
248-255	8-facet Prism Effect, no rotation

Channel 7 – Focus

0-255	0-255 Continuous adjustment from far to near

Channel 8 – Frost Effect

0-255	Frost effect off - on

Channel settings

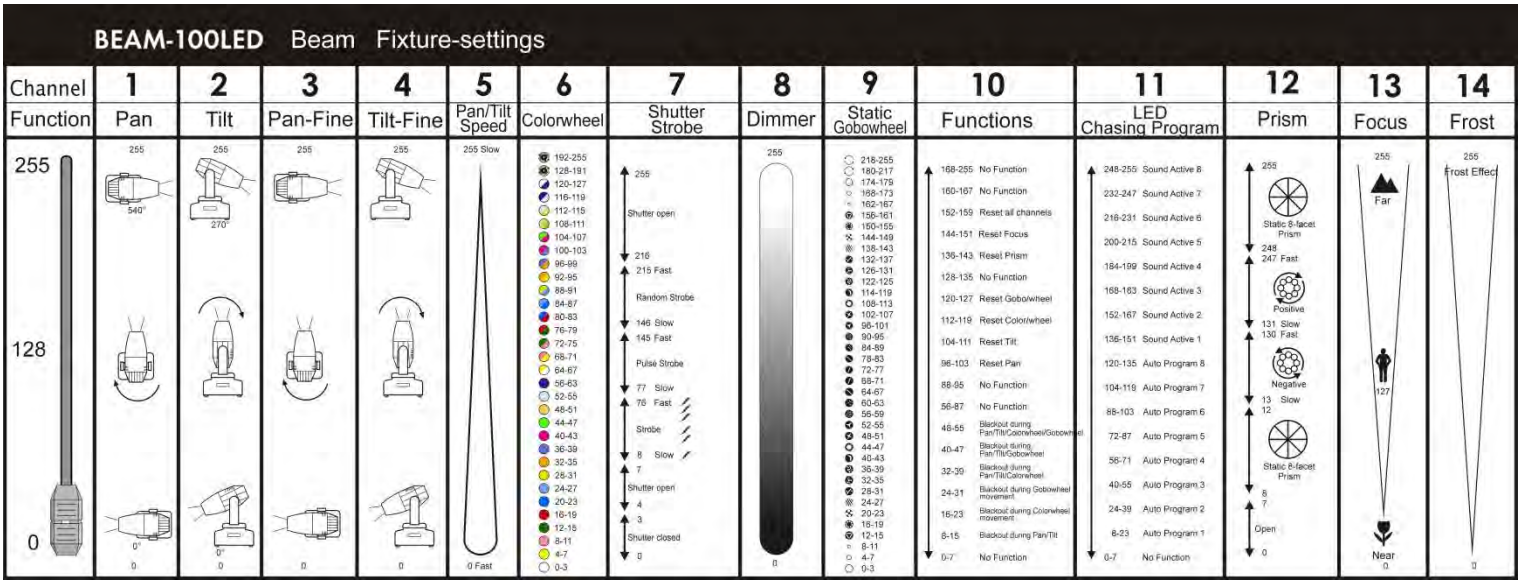


Fig. 6

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-relating 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:

1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

The IMG Stage Line BEAM-100LED 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, colour-wheel, the gobowheel, 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 to do so.

1. Unplug the unit from electric power source.
2. Insert a screwdriver into the slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. 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

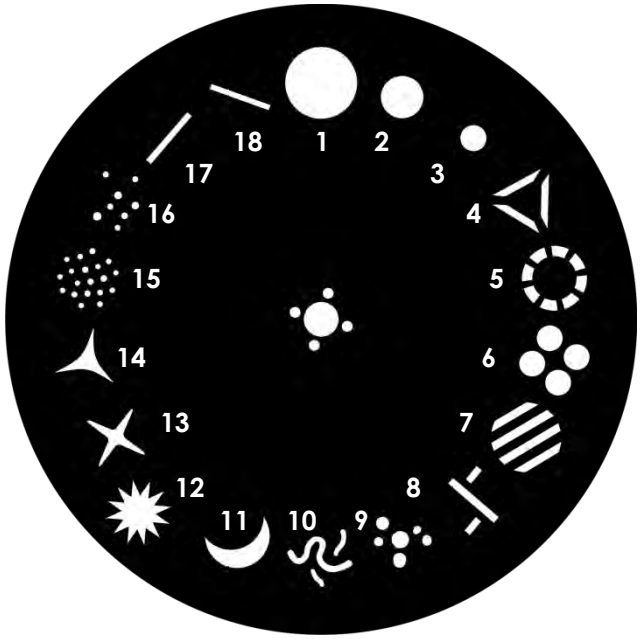


Fig. 7

Colorwheel

Fig. 8

Troubleshooting

No Light, No Movement - All Products

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: the power supply, the lamp, the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The LEDs. Return the BEAM-100LED Beam to your IMG Stage Line dealer.
3. The fuse. Replace the fuse. See page 25 for replacing the fuse.

No Response to DMX

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

1. Check the DMX setting. Make sure that DMX addresses are correct.
2. Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
3. 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.

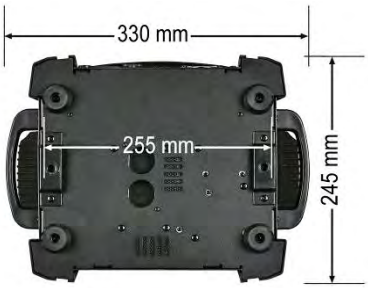
Problem	Probable cause(s)	Remedy
One or more fixtures are completely dead.	No power to the fixture	• Check that power is switched on and cables are plugged in.
	Primary fuse blown.	• Replace fuse.
Fixtures reset correctly, but all respond erratically or not at all to the controller.	The controller is 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 regained: 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 the problem persists.
No light or lamp cuts out intermittently	Fixture is too hot.	• Allow fixture to cool. • Clean fan. • Make sure air vents at control panel and front lens are not blocked. • Turn up the air conditioning .
	LEDs damaged	• Disconnect fixture and return to your dealer.
	The power supply settings do not match local AC voltage and frequency.	• Disconnect fixture. Check settings and correct if necessary.

Product Specification

Model: IMG Stage Line BEAM-100LED Beam
Input Voltage: 100-240 VAC, 50/60Hz
Power consumption: 230W max. at full output
Fuse F5A / 250V
Dimensions: 330 x 245 x 460 mm(WxDxH)
Weight: 17,28 kg

Operation and Programming
Signal pin OUT: pin 1 earth, pin 2 (-), pin 3 (+)
Set Up and Addressing: LED control panel
Pan/Tilt resolution: 8-16 bit
DMX Channels: 14 or 8
Signal input 3-pin XLR male
Signal output 3 -pin XLR female

Electro-mechanical effects
DMX-control via standard DMX-controller
User-selectable Pan ranges, 540° / 360° / 180°
User-selectable Tilt ranges, 270° / 180° / 90°
Reverse Pan / Tilt movement
Special: Pan / Tilt movement blackout
Pan 0° -- 540°
Tilt 0° -- 270°
Pan/Tilt resolution: 16 bit
Control: DMX-512, Master/Slave, Sound-controlled
16 Built-in programs selectable by DMX
Light Source: 1 x 100W LED
Colourwheel with 14 dichroic-colours and white
Color functions: Rainbow-flow effect, split colors
Rotation: Bi-directional
Gobo functions: Gobo-flow effect, Gobo shake
Filters: Frost & Color correction
Rotating Gobowheel with 15 static metal gobos, 3 sizes open with Gobo Shake Function (No replaceable gobos)
Single clamp bracket, which makes it easy to handle and position in truss systems.
Electronic Focus
Prism: Rotating 8-facet
Output: 41000 Lux @ 5m.
Beam Angle: 4°
LED Drive Current: 28A
Dimmer: 0-100%
Strobe: 0-20Hz
Housing: Black Metal & Flame-retardant plastic
User selectable Basic (8CH) or Advanced (14CH) operating modes



Gobos
Colourwheel: heat-resistant and intensify glass; dichroic glas coating
Max. ambient temperature t_a: 40°C; Max. housing temperature t_B: 80°C
Cooling: 2 axial fans – 1 fan in the projector and 1 in the base
Motor: high quality stepping-motor controlled by microprocessors

Minimum distance:
Minimum distance from flammable surfaces: 0.5m
Minimum distance to lighted object: 1.3m

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

CE

Website: www.imgstageline.com