LED Beam Moving Bar, RGBW

BEAM-4/RGBW
Order No. 38.0230

INSTRUCTION MANUAL
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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:
- BEAM-4/RGBW
- PowerCon to Schuko (1.5 m)
- 1 bracket and 3 quick-locks
- User manual

LED Expected Lifespan

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

CAUTION!

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

Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:
- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!
Before 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 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 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 rotating 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 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 BEAM-4/RG BW fails to work properly, discontinue the use immediately. Pack the unit securely (preferably in the original packing material), and return it to your IMG Stage Line dealer for service.
- For adult use only. 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 device. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

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.

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 $t_a = 40^\circ C$ must never be exceeded.
• The relative humidity must not exceed 50 % with an ambient temperature of 40° 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.
The **BEAM-4/RGBW** can be placed on a flat stage floor or mounted to any kind of truss with a clamp and quick-locks.

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

**Connection with the mains**

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

<table>
<thead>
<tr>
<th>International</th>
<th>EU Cable</th>
<th>UK Cable</th>
<th>US Cable</th>
<th>Pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>BROWN</td>
<td>RED</td>
<td>YELLOW/COPPER</td>
<td>PHASE</td>
</tr>
<tr>
<td>N</td>
<td>BLUE</td>
<td>BLACK</td>
<td>SILVER</td>
<td>NEUTRAL</td>
</tr>
<tr>
<td>🌟</td>
<td>YELLOW/GREEN</td>
<td>GREEN</td>
<td>GREEN</td>
<td>PROTECTIVE GROUND</td>
</tr>
</tbody>
</table>

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

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

Features
The BEAM-4/RGBW is an innovative concept and brings continuous rotating to LED Bars in a compact housing but still with a surprisingly high light output.

• Very fast movement
• Continuous pan-rotation
• Light source: 4 x 10W RGBW LED
• Output@2m: 7000lux
• Input voltage: 100-240V, 60/50Hz
• Power consumption: 60W
• DMX channels: 1, 22, 26
• Clear LCD display for easy setup
• Sound Control
• Control modes: DMX, Auto, Manual, Sound, Slave
• Control protocol: DMX-512
• 5-pin DMX signal connector IN/OUT
• 3-pin DMX signal connector IN/OUT
• Blue-White power connector IN/OUT 100-240V
• Dimmer: 0-100%
• Strobe: 0-20Hz
• Pan: 540° or continuous, depending on DMX Channel
• Tilt: 200°
• Pan/Tilt resolution: 16-bit
• Beam Angle: 3°
• IP-Rating: IP20
• Housing: Metal & Flame retardant plastic
• Dimensions: 555 x 94 x 220 mm (LxWxH)
• Weight: 6.9 kg

Overview

Fig. 01
Frontside

01) Moving head with 4 x 10W RGBW lenses
02) LCD Display + control buttons
03) 5-pin DMX signal connector OUT
04) 5-pin DMX signal connector IN
05) Power switch ON/OFF
06) Fuse T3A/250V

Backside

07) Blue-White power connector IN 100-240V
08) Blue-White power connector OUT 100-240V
09) 3-pin DMX signal connector IN
10) 3-pin DMX signal connector OUT
Installation

Remove all packing materials from the BEAM-4/RGBW. Check if all foam and plastic padding is removed. Connect all cables.

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

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 sound-controlled as it is equipped with a built-in microphone.

Control Modes

There are 5 modes:
- Stand-alone (Auto)
- Manual
- Sound-controlled
- Master/Slave
- DMX-512 (1, 22, 26CH)

One BEAM-4/RGBW (Auto and Manual)
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 BEAM-4/RGBW is not connected with a DMX cable, it functions as a stand-alone device. Please see pages 16-18 for more information about the Auto Mode and Manual Mode.

One BEAM-4/RGBW (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 BEAM-4/RGBW will react to the beat of the music. Please see page 18 for more information about the sound-control options.

Multiple BEAM-4/RGBWs (Master/Slave control)
01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Use a 3-pin XLR cable to connect the BEAM-4/RGBW.

The pins:
- 01) Earth
- 02) Signal -
- 03) Signal +

03) Link the units as shown in fig. 04. Connect the first unit’s DMX “out” socket with the second unit’s “in” socket, using a DMX-signal cable. 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 18 (Auto Mode or Sound-controlled Mode). This means that you can set your desired operation mode on the master device and all slave devices will react the same as the master device.
Multiple BEAM-4/RGBWs (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 (e.g. IMG Stage Line TAR-1004SAVE or TAR-603SAVE).
03) Use a 3-pin or 5-pin XLR cable to connect the BEAM-4/RGBWs and other devices.

04) Link the units as shown in fig. 05. Connect the first unit's DMX "out" socket with the second unit's "in" socket, using a DMX-signal cable. Repeat this process to link the second, third, and fourth units.
05) 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-4/RGBW6 DMX Set Up

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: 13 fixtures
- Maximum recommended number of BEAM-4/RGBW6s on a PowerCon link: 7 fixtures@110V
- Maximum recommended number of BEAM-4/RGBW6s on a PowerCon link: 13 fixtures@240V
The BEAM-4/RGBW can be operated with a controller in control mode or without the controller in stand-alone mode.

Control Panel

![Control Panel Diagram]

- A) LCD display
- B) MODE button
- C) SETUP button
- D) UP button
- E) DOWN 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, 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 BEAM-4/RGBW will respond to the controller. Please note, when you use the controller, the unit has 26 channels.
When using multiple BEAM-4/RGBWs, make sure you set the DMX addresses right. Therefore, the DMX address of the first BEAM-4/RGBW should be 1(001); the DMX address of the second BEAM-4/RGBW should be 1+26=27 (027); the DMX address of the third one should be 27+26=53 (053), etc.
Please be sure that you do not have any overlapping channels in order to control each BEAM-4/RGBW correctly. If two or more BEAM-4/RGBWs are addressed similarly, they will work similarly.

Controlling:
After having addressed all BEAM-4/RGBW fixtures, you may now start operating these via your lighting controller.

Note: After switching on, the device 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-4/RGBW.
- The controller is switched off or defective, the cable or connector is defective, or the signal wires are swapped in the input connector.

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

See next page for the remaining menu functions.
Main Menu Options

- Manual Mode
- Auto Mode
- Sound-controlled Mode
- DMX-512 Mode
- Master/Slave Mode
- Settings

1. Manual Mode

01) While in the main menu, press the MODE button until the display shows .
02) Press the SETUP button to enter the menu.
03) Press the UP and DOWN buttons to toggle between the 3 options:
   - 1.1 LED
   - 1.2 Pan
   - 1.3 Tilt

1.1 Manual Mode - LED

01) When the display shows , press the SETUP button to enter the LED adjustment menu.
02) Press the UP and DOWN buttons to toggle between the 3 adjustable options:
   - Auto
   - Color
   - Dimmer

03) When the display shows , press the SETUP button to enter the menu.
04) Press the UP and DOWN buttons to toggle between the 2 adjustable options:
   - Speed
   - Frequency

05) When the display shows , press the SETUP button to enter the menu.
06) You can now adjust the speed of your light show. The adjustment range is between from slow to fast.
07) When the display shows , press the SETUP button to enter the menu.
08) You can now adjust the strobe frequency. The adjustment range is between .
09) The device will now run a manual show, with the previously adjusted characteristics.
10) Press the MODE button to return to step 2 and press the UP and DOWN buttons until the display shows.
11) Press the SETUP button to enter the menu.
12) Press the UP and DOWN buttons to toggle between the 2 adjustable options:
   - Static
   - Frequency

13) When the display shows , press the SETUP button.
14) Press the UP and DOWN buttons to adjust the LED colors. You can choose from the following options:
   - All on
   - Light blue
   - Light green
   - Light red
   - Purple
• Cyan
• Yellow
• White
• Blue
• Green
• Red
• Black (Blackout)

15) Press the **MODE** button to return to step 12 and press the **UP** and **DOWN** buttons until the display shows **Freq.**

16) Press the **SETUP** button to enter the menu.

17) Press the **UP** and **DOWN** buttons to adjust the strobe frequency. The adjustment range is between 0.99 and 20 Hz.

18) Press the **MODE** button to return to step 2, press the **UP** and **DOWN** buttons until the display shows **Dimmer.**

19) Press the **SETUP** button to enter the menu.

20) Press the **UP** and **DOWN** buttons to toggle between the following colors:
   • Red
   • Green
   • Blue
   • White
   • Frequency

21) If the display shows Red, Green, Blue or White, press the **SETUP** button to proceed to the LED intensity adjustment:

22) Press the **UP** and **DOWN** buttons to adjust the intensity. The adjustment range for each color is between 0-255, from dark to brightest.

23) When the display shows , press the **SETUP** button to enter the strobe settings.

24) Press the **UP** and **DOWN** buttons to adjust the strobe intensity. The adjustment range is between 0-100.

1.2 Manual Mode - Pan

01) Repeatedly press the **MODE** button until the display shows **Pan**.

02) Press the **UP** and **DOWN** buttons until the display shows **Tilt**.

03) Press the **SETUP** button to enter Pan adjustment.

04) Press the **UP** and **DOWN** buttons to toggle between the 4 options:
   • p-Auto
   • p-Manual
   • p-CCW
   • p-CW

05) When the display shows p-Auto, press the **SETUP** button to enter. In this mode, it is not possible to adjust the pan parameters.

06) When the display shows p-Manual, press the **SETUP** button to enter.

07) Press the **UP** and **DOWN** buttons to manually adjust pan movement. The adjustment range is between -100 and 100.

08) When the display shows CCW, press the **SETUP** button to enter the menu.

09) Press the **UP** and **DOWN** buttons to manually adjust the speed of counterclockwise pan movement.

The adjustment range is between 0.1 and 1.0, from slow to fast.
10) When the display shows \( \text{CW CW} \), press the \text{SETUP} button to enter the menu.  
11) Press the \text{UP} and \text{DOWN} buttons to manually adjust the speed of clockwise pan movement. The adjustment range is between \( \text{CW CW} \) and \( \text{CW CW} \).

1.3 Manual Mode - Tilt

01) Repeatedly press the \text{MODE} button until the display shows \( \text{Pan \ Tilt} \).
02) Press the \text{UP} and \text{DOWN} buttons until the display shows \( \text{Pan \ Tilt} \).
03) Press the \text{SETUP} button to enter Tilt adjustment.
04) Press the \text{UP} and \text{DOWN} buttons to toggle between the 2 options:  
   • \( \text{t-Auto} \)
   • \( \text{t-Manul} \)
05) When the display shows \( \text{t-Auto} \), press the \text{SETUP} button to enter. In this mode, it is not possible to adjust the tilt parameters.
06) When the display shows \( \text{t-Manul} \), press the \text{SETUP} button to enter.
07) Press the \text{UP} and \text{DOWN} buttons to manually adjust tilt movement. The adjustment range is between \( \text{z-000} \) and \( \text{z-200} \).

2. Built-in Program Mode

01) While in the main menu, press the \text{UP} and \text{DOWN} buttons until the display shows \( \text{SHOW} \).
02) Press the \text{SETUP} button to enter the Auto Mode.
03) Press the \text{UP} and \text{DOWN} buttons to choose the desired automatic show. The adjustment range is between \( \text{Program} \) and \( \text{Program} \).
04) The device will now run the chosen automatic show.

3. Sound-controlled Mode

01) While in the main menu, press the \text{UP} and \text{DOWN} buttons until the display shows \( \text{SOUND} \).
02) Press the \text{SETUP} button to enter the Sound-controlled Mode.
03) Press the \text{UP} and \text{DOWN} buttons to adjust the sound sensitivity of the device. The adjustment range is between \( \text{S-000} \) and \( \text{S-031} \), from low to high sensitivity.
04) The device will now react to the beat of the background music.

4. DMX-512 Mode

01) While in the main menu, press the \text{UP} and \text{DOWN} buttons until the display shows \( \text{DMX} \).
02) Press the \text{SETUP} button to enter the menu.
03) Press the \text{UP} and \text{DOWN} buttons to toggle between the 2 options:
   • Address
   • Channel
04) When the display shows \( \text{Address Channel} \), press the \text{SETUP} button to enter DMX address settings.
05) Press the \text{UP} and \text{DOWN} buttons to choose the desired DMX address. The adjustment range is between \( \text{Address} \) and \( \text{Address} \).
06) When the display shows \( \text{Address Channel} \), press the \text{SETUP} button to enter channel mode menu.
07) Press the \text{UP} and \text{DOWN} buttons to choose one of the 3 channel modes:
   • 1 channel
   • 22 channels
   • 26 channels

5. Master/Slave Mode

01) While in the main menu, press the \text{UP} and \text{DOWN} buttons until the display shows \( \text{SLAVE} \).
02) The device is now operating in Slave Mode. It means that it will react the same as the master device.
6. Settings

01) While in the main menu, press the **UP** and **DOWN** buttons until the display shows "Settings".

02) Press the **UP** and **DOWN** buttons to toggle between the following options:
- 6.1 BL time
- 6.2 Adjust
- 6.3 Reset
- 6.4 Power
- 6.5 Error
- 6.6 Lamp
- 6.7 Use
- 6.8 Sensor
- 6.9 About

6.1 Settings – BL Time

01) When the display shows "BL time", press the **Setup** button to enter the display blackout settings.

02) Press the **UP** and **DOWN** buttons to choose one of the following options:
- On (display continuously ON)
- 5s (display turns OFF after 5 seconds)
- 10s (display turns OFF after 10 seconds)
- 20s (display turns OFF after 20 seconds)
- 30s (display 30s turns OFF after 30 seconds)

6.2 Settings – Adjust

01) When the display shows "Adjust", press the **Setup** button to enter pan/tilt manual adjustment.

02) When the display shows "Pan", press the **Setup** button to enter pan adjustment.

03) Press the **UP** and **DOWN** buttons to adjust pan. Both, positive and negative values, are possible.

04) When the display shows "Tilt", press the **Setup** button to enter tilt adjustment.

05) Press the **UP** and **DOWN** buttons to adjust tilt. Both, positive and negative values, are possible.

6.3 Settings – Reset

01) When the display shows "Reset", press the **Setup** button to enter the menu.

02) When the display shows "Y/N?", press the **Setup** button to run the reset or the **Mode** button to cancel the reset.

6.4 Settings – Power

01) When the display shows "Power", press the **Setup** button to view the information about the output power.

02) Press the **UP** and **DOWN** buttons to view the information about the main or LED output power.

6.5 Settings – Error

01) When the display shows "Error Lamp", press the **Setup** button to enter the menu.

02) The device will check for all possible software errors, while displaying current status: Error: 000000.

03) Press the **Setup** button to complete the operation. If there were not any errors, the display will show "Pass".

6.6 Settings – Lamp

01) When the display shows "Error Lamp", press the **Setup** button to view the light output information: White (LED4*9W).

6.7 Settings – Use

01) When the display shows "Use", press the **Setup** button to check for how long the device has already been used.

02) When you press the **Setup** button, the display will show "Clear Y/N?".

03) Press the **Setup** button to perform time reset or the **Mode** button to cancel time reset.
6.8 Settings – Sensor

01) When the display shows , press the SETUP button to enter the sensor settings.

02) Press the UP and DOWN buttons to toggle between the following 4 options:
   • p-hall
   • t-hall
   • p-Rast
   • t-Rast

03) When the display shows , press the SETUP button to view the pan sensor state.

04) If there are not any errors, the display will show .

05) When the display shows , press the SETUP button to view the tilt sensor state.

06) If there are not any errors, the display will show .

07) When the display shows , press the SETUP button to enter the pan correction menu.

08) Press the UP and DOWN buttons to toggle between the 2 options:
   • p-Sets
   • p-State

09) When the display shows , press the SETUP button to enter the menu.

10) Press the UP and DOWN buttons to enable or disable the pan correction.
    If enabled, the device will reset the pan position to its default setting, whenever there is any
    deviation from it.

11) When the display shows , press the SETUP button to enter the menu.

12) Press the UP and DOWN buttons to toggle between the 2 options:
    • history (general number of the corrections performed on the device)
    • current (number of corrections performed on the device since it has been switched on)

13) Press the SETUP button to reset both, history and current status.

14) When the display shows , press the SETUP button to run the reset, or the MODE button to
    cancel the reset.

15) Repeatedly press the MODE button to return to step 7 and press the UP and DOWN buttons until the
    display shows .

16) Press the SETUP button to enter the tilt correction menu.

17) Press the UP and DOWN buttons to toggle between the 2 options:
    • t-Sets
    • t-State

18) When the display shows , press the SETUP button to enter the menu.

19) Press the UP and DOWN buttons to enable or disable the tilt correction.
    If enabled, the device will reset the tilt position to its default setting, whenever there is any deviation
    from it.

20) When the display shows , press the SETUP button to enter the menu.

21) Press the UP and DOWN buttons to toggle between the 2 options:
    • history (general number of the corrections performed on the device)
    • current (number of corrections performed on the device since it has been switched on)

22) Press the SETUP button to reset both, history and current status.

23) When the display shows , press the SETUP button to run the reset, or the MODE button to
    cancel the reset.

6.9 Settings – About

01) Repeatedly press the MODE button to return to step 1 and press the UP and DOWN buttons until the
    display shows .

02) Press the SETUP button to enter the menu.

03) Repeatedly press the UP and DOWN buttons to view the current versions of the LED, engine, software
    and model.
DMX Channels

1 channel

Channel 1 – Functions

<table>
<thead>
<tr>
<th>Range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-29</td>
<td>LEDs OFF</td>
</tr>
<tr>
<td>30-44</td>
<td>Built-in show 1</td>
</tr>
<tr>
<td>45-59</td>
<td>Built-in show 2</td>
</tr>
<tr>
<td>60-74</td>
<td>Built-in show 3</td>
</tr>
<tr>
<td>75-89</td>
<td>Built-in show 4</td>
</tr>
<tr>
<td>90-104</td>
<td>Built-in show 5</td>
</tr>
<tr>
<td>105-119</td>
<td>Built-in show 6</td>
</tr>
<tr>
<td>120-134</td>
<td>Built-in show 7</td>
</tr>
<tr>
<td>135-149</td>
<td>Built-in show 8</td>
</tr>
<tr>
<td>150-164</td>
<td>Built-in show 9</td>
</tr>
<tr>
<td>165-194</td>
<td>LEDs OFF</td>
</tr>
<tr>
<td>195-255</td>
<td>Sound-controlled mode, from low to high sound sensitivity</td>
</tr>
</tbody>
</table>

22 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 – Pan fine 16 bit

Channel 3 – 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 200° and stopped at any position you wish.

Channel 4 – Tilt fine 16 bit

Channel 5 – Pan/Tilt speed

<table>
<thead>
<tr>
<th>Range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-255</td>
<td>From fast to slow</td>
</tr>
</tbody>
</table>

Channel 6 – Continuous Pan
Push the slider up, in order to move head horizontally (PAN).
Not functional, between 0-129. Clockwise rotation from fast slow, between 130-192. Counterclockwise rotation from slow to fast, between 193-255.

Channel 7 – LED 1 Red intensity

<table>
<thead>
<tr>
<th>Range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-255</td>
<td>Gradual adjustment Red from 0 – 100%</td>
</tr>
</tbody>
</table>

Channel 8 – LED 1 Green intensity

<table>
<thead>
<tr>
<th>Range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-255</td>
<td>Gradual adjustment Green from 0 – 100%</td>
</tr>
</tbody>
</table>

Channel 9 – LED 1 Blue intensity

<table>
<thead>
<tr>
<th>Range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-255</td>
<td>Gradual adjustment Blue from 0 – 100%</td>
</tr>
</tbody>
</table>

Channel 10 – LED 1 White intensity

<table>
<thead>
<tr>
<th>Range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-255</td>
<td>Gradual adjustment White from 0 – 100%</td>
</tr>
</tbody>
</table>
21 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 – Pan fine 16 bit**

**Channel 3 – 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 200° and stopped at any position you wish.

**Channel 4 – Tilt fine 16 bit**

**Channel 5 – Pan/Tilt speed**
0-255 From fast to slow
**Channel 6 – Continuous Pan**
Push the slider up, in order to move head horizontally (PAN).
Not functional, between 0-129. Clockwise rotation from fast slow, between 130-192.
Counterclockwise rotation from slow to fast, between 193-255.

**Channel 7 – Dimmer**
0-255 Dimmer intensity, from dark to bright

**Channel 8 – LED 1 Red intensity**
0-255 Gradual adjustment Red from 0 – 100%

**Channel 9 – LED 1 Green intensity**
0-255 Gradual adjustment Green from 0 – 100

**Channel 10 – LED 1 Blue intensity**
0-255 Gradual adjustment Blue from 0 – 100%

**Channel 11 – LED 1 White intensity**
0-255 Gradual adjustment White from 0 – 100%

**Channel 12 – LED 2 Red intensity**
0-255 Gradual adjustment Red from 0 – 100%

**Channel 13 – LED 2 Green intensity**
0-255 Gradual adjustment Green from 0 – 100

**Channel 14 – LED 2 Blue intensity**
0-255 Gradual adjustment Blue from 0 – 100%

**Channel 15 – LED 2 White intensity**
0-255 Gradual adjustment White from 0 – 100%

**Channel 16 – LED 3 Red intensity**
0-255 Gradual adjustment Red from 0 – 100%

**Channel 17 – LED 3 Green intensity**
0-255 Gradual adjustment Green from 0 – 100

**Channel 18 – LED 3 Blue intensity**
0-255 Gradual adjustment Blue from 0 – 100%

**Channel 19 – LED 3 White intensity**
0-255 Gradual adjustment White from 0 – 100%

**Channel 20 – LED 4 Red intensity**
0-255 Gradual adjustment Red from 0 – 100%

**Channel 21 – LED 4 Green intensity**
0-255 Gradual adjustment Green from 0 – 100
Channel 22 – LED 4 Blue intensity ⚠ Dimmer must be open ⚠
0-255 Gradual adjustment Blue from 0 – 100%

Channel 23 – LED 4 White intensity ⚠ Dimmer must be open ⚠
0-255 Gradual adjustment White from 0 – 100%

Channel 24 – Functions
0-9 Not functional
10-19 Manual mode
20-29 Built-in show 1
30-39 Built-in show 2
40-49 Built-in show 3
50-59 Built-in show 4
60-69 Built-in show 5
70-79 Built-in show 6
80-89 Built-in show 7
90-99 Built-in show 8
100-109 Built-in show 9
110-129 Not functional
130-255 Sound-controlled mode, from low to high sound sensitivity

Channel 25 – LED speed ⚠ CH 24 must be set between 10-19 for this channel to work ⚠
0-255 From slow to fast

Channel 26 – Strobe
0-14 Strobe OFF
15-255 Strobe speed, from slow to fast. Inactive in Auto mode.
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 BEAM-4/RGBW 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.

The BEAM-4/RGBW 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.

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 the Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

01) Unplug the unit from electric power source.
02) Insert a screwdriver into the slot in the fuse cover. Turn the fuse holder counterclockwise. 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 holder. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

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.

No Light

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

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

01) Power supply. Check that the unit is plugged into an appropriate power supply.
02) The LED. Return the BEAM-4/RGBW to your IMG Stage Line dealer.
03) The fuse. Replace the fuse. See page 25 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 BEAM-4/RGBW, as this may damage the unit and the warranty will become void.
06) Return the device to your IMG Stage Line 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.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable cause(s)</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more fixtures are completely dead.</td>
<td>No power to the fixture. Internal fuse blown.</td>
<td>● Check that power is switched on and cables are plugged in. ● Return the device to your IMG Stage Line dealer.</td>
</tr>
<tr>
<td>Fixtures reset correctly, but all respond erratically or not at all to the controller.</td>
<td>The controller is not connected. 3-pin XLR Out of the controller does not match XLR Out of the first fixture on the link (i.e. signal is reversed).</td>
<td>● Connect controller. ● Install a phase reversing cable between the controller and the first fixture on the link.</td>
</tr>
<tr>
<td>Fixtures reset correctly, but some respond erratically or not at all to the controller.</td>
<td>Poor data quality</td>
<td>● 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.</td>
</tr>
<tr>
<td></td>
<td>Bad data link connection</td>
<td>● Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.</td>
</tr>
<tr>
<td></td>
<td>Data link not terminated with 120 Ohm termination plug. Incorrect addressing of the fixtures. One of the fixtures is defective and disturbs data transmission on the link.</td>
<td>● Insert termination plug in output jack of the last fixture on the link. ● Check address setting. ● 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. ● Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture, that behaves erratically.</td>
</tr>
<tr>
<td></td>
<td>3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed).</td>
<td></td>
</tr>
<tr>
<td>No light or lamp cuts out intermittently</td>
<td>Fixture is too hot. LEDs damaged</td>
<td>● Allow fixture to cool. ● Make sure air vents at control panel and front lens are not blocked. ● Turn up the air conditioning. ● Disconnect fixture and return to your dealer. ● Disconnect fixture. Check settings and correct if necessary.</td>
</tr>
</tbody>
</table>

---

**Order No. 38.0230**

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### Product Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model:</strong></td>
<td>IMG Stage Line BEAM-4/RGBW</td>
</tr>
<tr>
<td><strong>Input Voltage:</strong></td>
<td>100-240 VAC, 60/50Hz</td>
</tr>
<tr>
<td><strong>Power consumption:</strong></td>
<td>60W (full output)</td>
</tr>
<tr>
<td><strong>DMX linking:</strong></td>
<td>30pcs</td>
</tr>
<tr>
<td><strong>Fuse:</strong></td>
<td>5S3A/250V</td>
</tr>
<tr>
<td><strong>Dimensions:</strong></td>
<td>555 x 94 x 220 mm (LxWxH)</td>
</tr>
<tr>
<td><strong>Weight:</strong></td>
<td>6.9 kg</td>
</tr>
</tbody>
</table>

#### Operating and Programming:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signal pin OUT:</strong></td>
<td>Pin 1 (earth), pin 2 (-), pin 3 (+)</td>
</tr>
<tr>
<td><strong>DMX Mode:</strong></td>
<td>1, 22, 26 Channels</td>
</tr>
<tr>
<td><strong>Signal input:</strong></td>
<td>3-pin and 5-pin XLR male</td>
</tr>
<tr>
<td><strong>Signal output:</strong></td>
<td>3-pin and 5-pin XLR female</td>
</tr>
</tbody>
</table>

#### Electro-mechanical effects:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output@2m:</strong></td>
<td>7000lux</td>
</tr>
<tr>
<td><strong>Control modes:</strong></td>
<td>DMX, Auto, Manual, Sound, Slave</td>
</tr>
<tr>
<td><strong>Sound Control</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LED Quantity:</strong></td>
<td>4 x 10W RGBW LED</td>
</tr>
<tr>
<td><strong>Color mixing:</strong></td>
<td>RGBW</td>
</tr>
<tr>
<td><strong>Beam angle:</strong></td>
<td>3°</td>
</tr>
<tr>
<td><strong>Pan / Tilt range:</strong></td>
<td>540° or continuous, depending on DMX Channel / 200°</td>
</tr>
<tr>
<td><strong>Pan &amp; Tilt resolution:</strong></td>
<td>16-bit</td>
</tr>
<tr>
<td><strong>Dimmer:</strong></td>
<td>0-100%</td>
</tr>
<tr>
<td><strong>Strobe:</strong></td>
<td>0-20Hz</td>
</tr>
<tr>
<td><strong>Housing:</strong></td>
<td>Metal &amp; Flame retardant plastic</td>
</tr>
<tr>
<td><strong>DMX-control:</strong></td>
<td>via standard DMX-controller</td>
</tr>
<tr>
<td><strong>On Board:</strong></td>
<td>LCD display for easy setup</td>
</tr>
<tr>
<td><strong>Control:</strong></td>
<td>DMX, Auto, Manual, Sound, Slave</td>
</tr>
<tr>
<td><strong>Connections:</strong></td>
<td>Dedicated PowerCon &amp; Data connector</td>
</tr>
<tr>
<td><strong>Cooling:</strong></td>
<td>Internal fan</td>
</tr>
</tbody>
</table>

#### Minimum distance:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum distance to flammable surfaces:</strong></td>
<td>0,5 m</td>
</tr>
<tr>
<td><strong>Minimum distance to lighted object:</strong></td>
<td>1 m</td>
</tr>
</tbody>
</table>

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