

USER MANUAL

G-7 BEAST



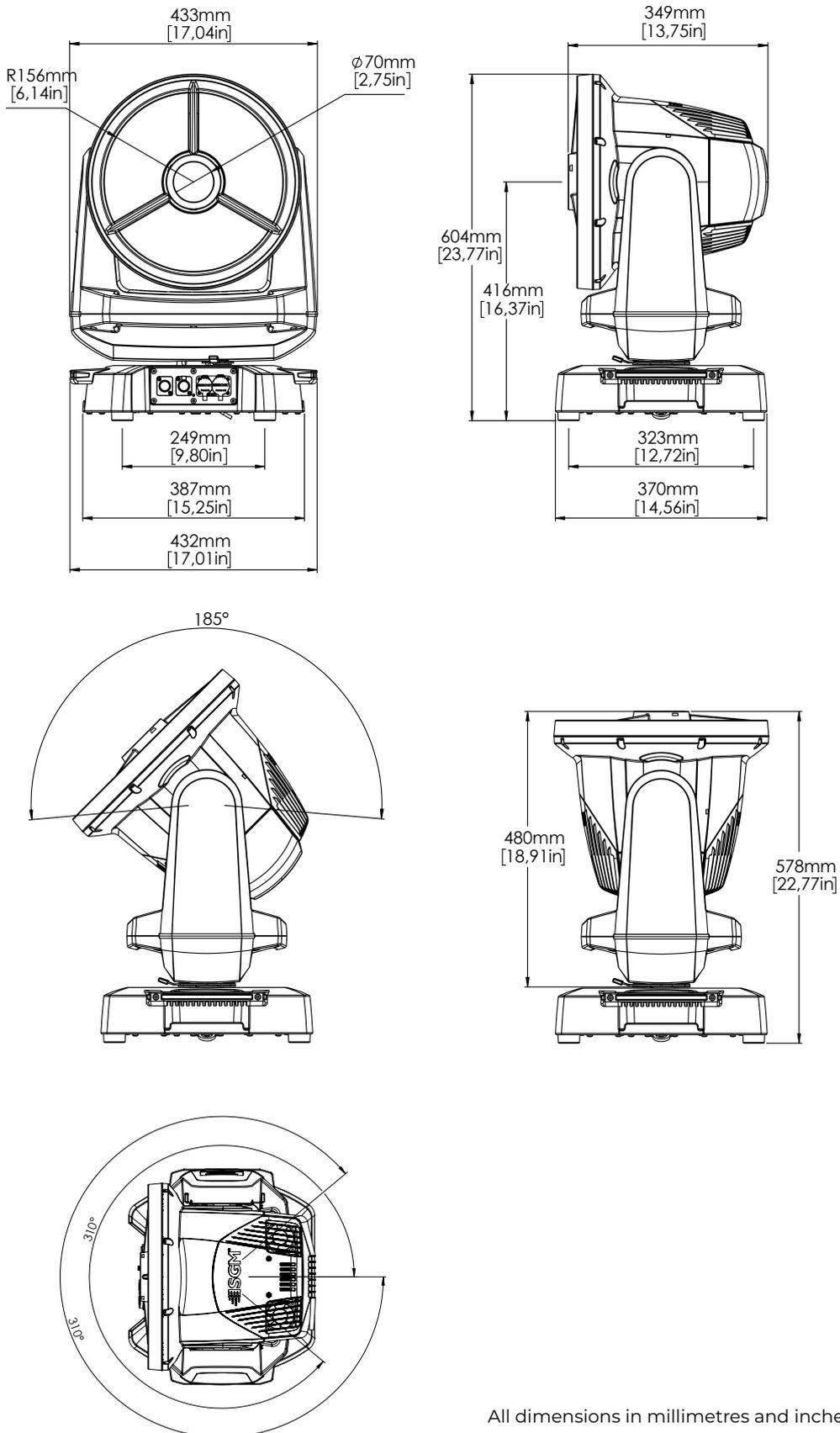
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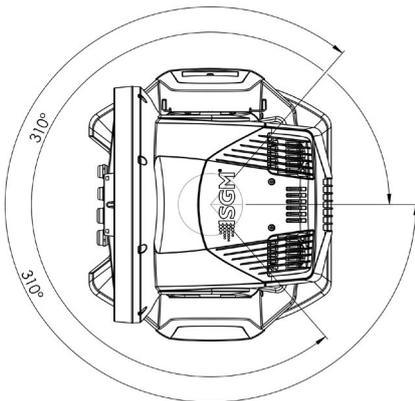
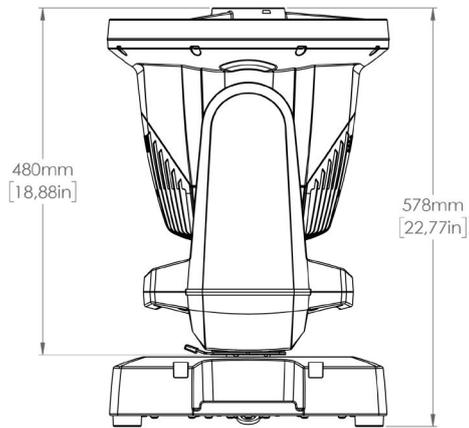
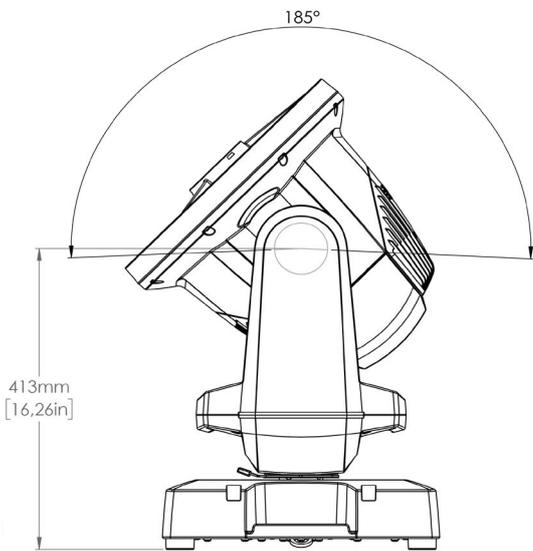
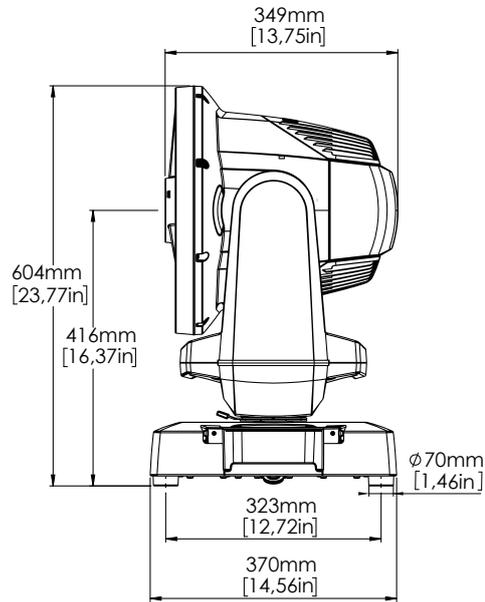
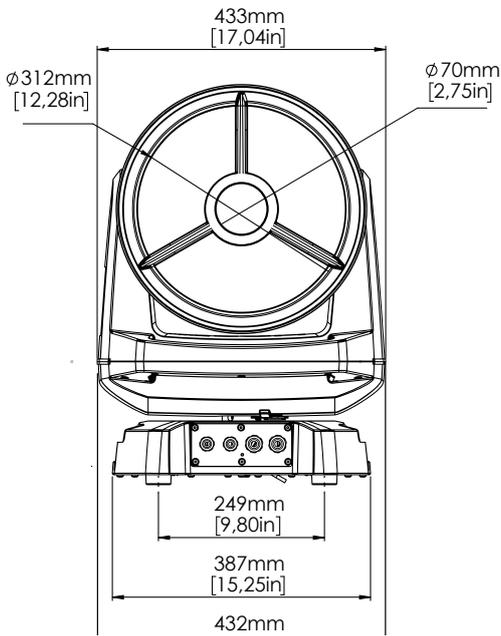
G-7 BEAST DIMENSIONS

G-7 BEAST STANDARD VERSION



All dimensions in millimetres and inches. Drawing not to scale

G-7 BEAST POI VERSION



All dimensions in millimetres and inches. Drawing not to scale

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WARNING! READ THE FOLLOWING SAFETY PRECAUTIONS CAREFULLY BEFORE UNPACKING, INSTALLING, POWERING OR OPERATING THE DEVICE.

SGM luminaires are intended for professional use only. They are not suitable for household use.

Les luminaires SGM sont impropres à l'usage domestique. Uniquement à usage professionnel.

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

Ce produit doit être installé selon le code d'installation pertinent, par une personne qui connaît bien le produit et son fonctionnement ainsi que les risques inhérents.



DANGER! RISK OF ELECTRIC SHOCK DO NOT OPEN THE DEVICE!

- Always power off/unplug the fixture before removing covers or dismantling the product.
- Ensure that the mains power is cut off when wiring the device to the AC mains supply.
- Ensure that the device is electrically connected to earth (ground).
- Do not apply power if the device or mains cable is in any way damaged.
- Do not immerse the fixture in water or liquid.



WARNING! TAKE MEASURES TO PREVENT BURNS AND FIRE!

- Install in a location that prevents accidental contact with the device.
- Install only in a well-ventilated space.
- Install at least 0.3 m (12 in.) away from objects to be illuminated.
- Install only in accordance with applicable building codes.
- Ensure a minimum clearance of 0.1 m (4 in.) around the cooling fans.
- Do not paint, cover, or modify the device, and do not filter or mask the light.
- Keep all flammable materials well away from the device.



Allow the device to cool for 15 minutes after operation before touching it

CAUTION: Exterior surface temperature after 5 min. operation = 47 °C (117 °F). Steady state = 56 °C (133 °F).

WARNING! TAKE MEASURES TO PREVENT PERSONAL INJURY. DO NOT LOOK DIRECTLY AT THE LIGHT SOURCE FROM CLOSE RANGE.

- Take precautions when working at height to prevent injury due to falls.
- For Permanent Outdoor Installations (POI), ensure that the fixture is securely fastened to a load-bearing surface with suitable corrosion-resistant hardware.
- For a temporary installation with clamps, ensure that the quarter-turn fasteners are turned fully and secured with a suitable safety cable. The standard safety wire cable must be approved for a safe working load (SWL) of 10 times the weight of the fixture, made of a grade AISI 316 steel, and it must have a minimum gauge of 3 mm.
- For elevated installations, secure the fixture with suitable safety cables, and always comply with relevant load dimensioning, safety standards, and requirements.



BEFORE INSTALLING THIS PRODUCT

Please visit the SGM official website at www.sgmlight.com for the latest version of this user manual/ safety information leaflet. Due to continuous improvements, the instructions may change without notice. SGM always recommends the latest available firmware version from www.sgmlight.com.



EXTERNAL CLEANING AND VISUAL INSPECTION OF THE FIXTURE

All users of the SGM fixtures should regularly clean those parts of the fixture directly exposed to the elements, such as the external housing and front lenses. Additionally, all owners of the SGM fixtures must periodically check the external housing of the fixture for structural breaks, deterioration, cracked lenses, or loose screws. To ensure proper operation, but also to prevent the risk of potential accidents, do not use the fixture if the lens, housing, or power cables are damaged. If parts of the fixture appear to be missing, cease use immediately and contact SGM support.



WIRING AND CONDUIT/ CONTAINMENT

SGM fixtures supplied with power and data cable leads are not intended for installation in permanently installed conduit or containment. When installing the fixtures in a permanent installation, ensure cable leads are installed as a service loop to an appropriately rated junction box using suitable cable strain reliefs/glands. All installed fixtures must be securely mounted, and service loop appropriately protected for installation location. All electrical wiring and connections should be completed by a qualified electrician.



SAFETY PRECAUTIONS

When using electrical equipment, basic safety precautions should always be followed including the following:

- Do not mount near gas or electric heaters.
- Permanently installed equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than intended use.
- Refer service to qualified personnel or authorized service centers.
- Do not look directly into the beam for long periods of time, when the fixture is on.
- The fixture shall, under no circumstance, be covered with insulating material of any kind.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

INSTALLATION STANDARD FIXTURE

The G-7 BeaSt/ G-7 BeaSt POI is a fast, lightweight and mid-sized Beam Strobe moving head with high-output and low power consumption, designed for multiple applications, including when wireless operation is essential.

The G-7 BeaSt features:

An IP66 rated moving head with two separated white LED engines: a 6,500 K Beam and a 8,000 K Strobe Blinder*.

2 colour wheel with 18 colours, including CTO and open.

Motorized collimation from -1° to 30°.

Built-in wireless DMX.

Full RDM compatibility.

1 aerial gobo wheel with 6 rotatable gobos, including Frost + open.

Low power consumption.

Superior thermal management for high reliability.

*The light sources of the fixture are expected to run until about 20,000 hours LM-70/ TM-21.

PARTS IDENTIFICATION AND TERMINOLOGY

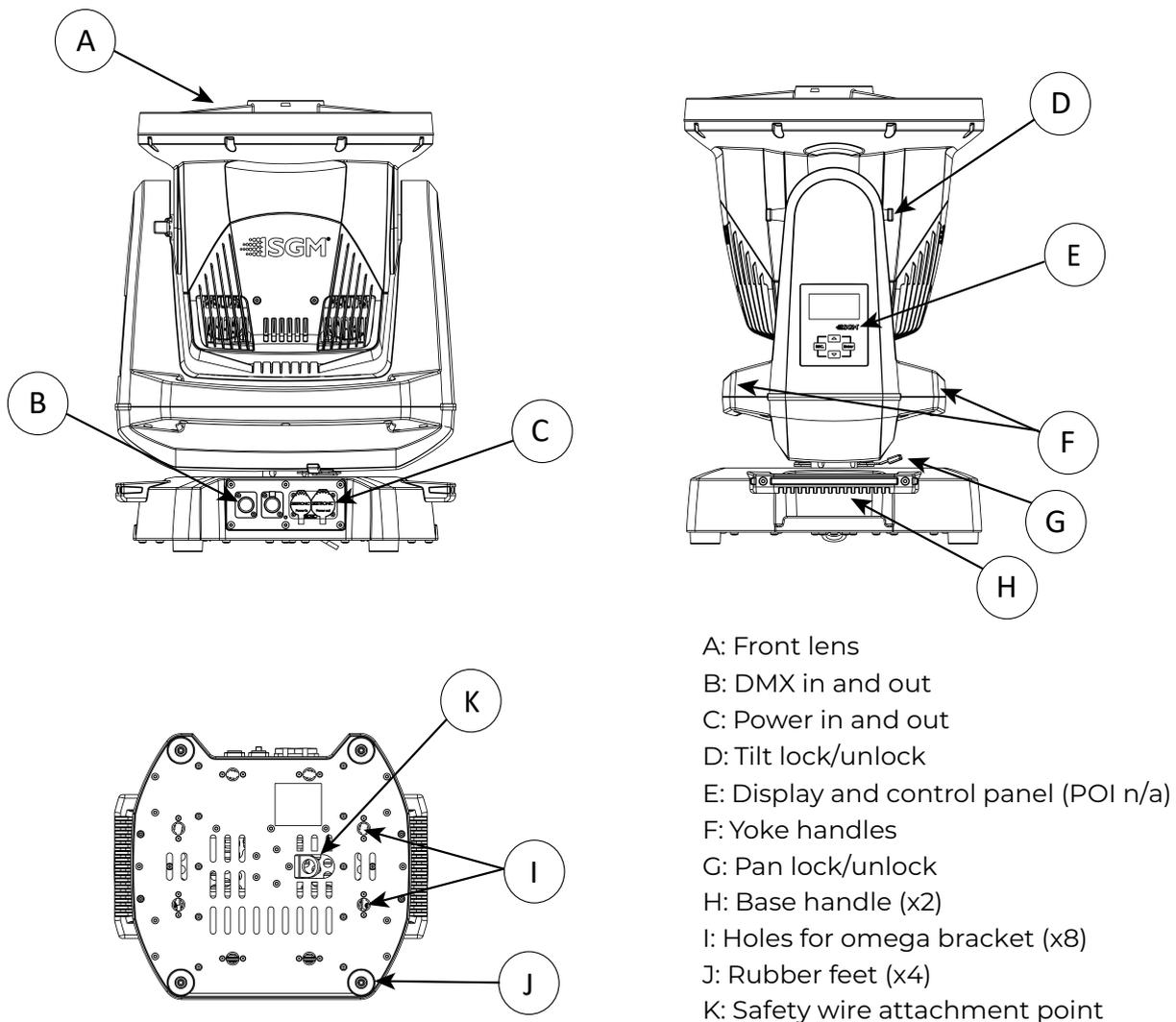


Figure 1: G-7 BeaSt parts and terminology

UNPACKING

Unpack the device and inspect it to ensure that it has not been damaged during transport.

The G-7 BeaSt is shipped with:

- 2 m (78 in.) power cable with IP connector.
- Two omega brackets with 1/4-turn fasteners.
- Safety information leaflet.

APPLICATION CONSIDERATIONS

The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

- Dust, to the degree that dust cannot enter the device in sufficient quantities, as to interfere with its operation.
- High pressure water jets from any direction.

When selecting a location for the device, ensure that:

- It is situated away from public thoroughfares and protected from contact with people.
- It is not immersed in water.
- It has adequate ventilation.

When using the fixture with a DMX controller, ensure that:

- According to RS485 standard, the DMX Out of the last fixture should be terminated with a 120 ohm resistor between pin 2 and 3.
- If the resistor is not installed, make sure that the DMX Out is properly sealed by mounting the protection cap, in accordance with the ingress protection (IP) requirements.
- A maximum of 32 fixtures can be connected to the same DMX link.

TRANSPORT HANDLING

- Always use the supplied packaging or suitable flight case for transportation and storage.
- Release the tilt lock when transporting the fixture. Leaving the tilt lock blocked may cause damage to the fixture.
- Never carry the fixture by connected cables or wires, use the handles.

PLEASE NOTE.: THE 1/4-TURN FASTENERS ARE ONLY LOCKED WHEN TURNED FULLY CLOCKWISE.

Depending on the structure, please use appropriate and secure methods for mounting the Omega bracket.

RIGGING

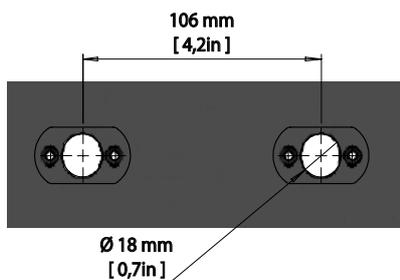
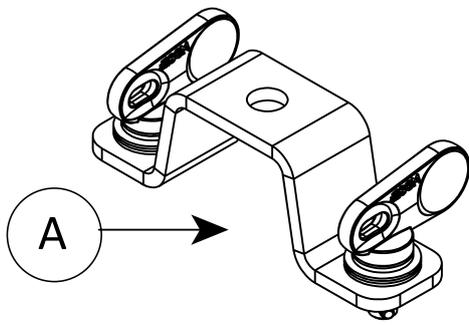


Figure 2: SGM Locking points

All SGM luminaires have locking points at the base for installation and rigging. The distance between the points from centre to centre is always 106 mm (Fig. 2). The base of the standard G-7 BeaSt includes 1/4-turn fastener cam locks to mount the omega brackets. For further details of the bracket dimensions contact SGM support.

The G-7 BeaSt may be installed in any orientation, with or without base, on the ceiling or on a wall surface.

Always use the supplied omega brackets and lock with 1/4-turn fasteners (fig 3).



A: Omega Bracket
 B: 1/4-turn locking points (vertical view)
 C: Omega Brackets attached to the 1/4-turn locking points (horizontal view)

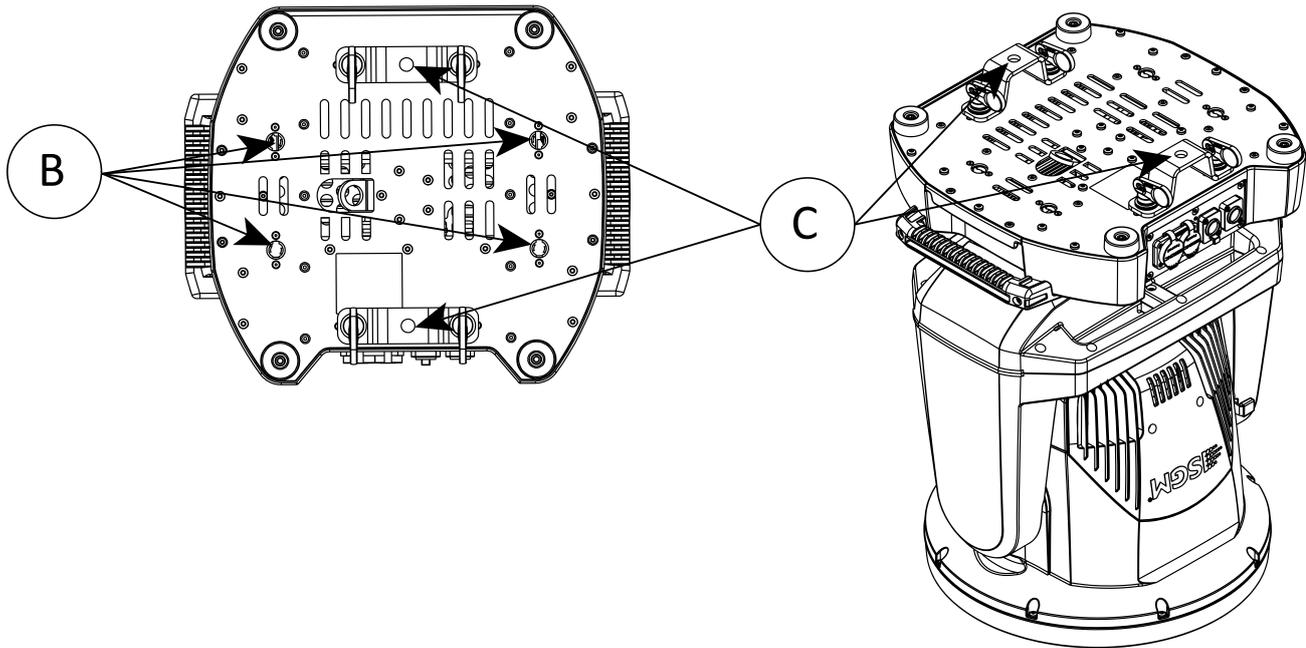


Figure 3: G-7 BeaSt base with Omega brackets

RIGGING PROCESS USING SGM OMEGA BRACKET

Start the rigging process by blocking the lower working area, and make sure the work is performed from a stable platform.

1. Check that the clamp/ bracket is undamaged and can bear at least 10 times the weight of the fixture. Check that the structure can bear at least 10 times the weight of all installed fixtures, lamps, cables etc.
2. Bolt the clamp/ bracket securely to the omega bracket with a M12/ ½ bolt (min. grade 8.8 C5M) and a lock nut.
3. Align an Omega bracket with two 1/4-turns in the G-7 BeaSt base. Insert the fasteners into the G-7 BeaSt base and turn both levers a 1/4-turn clockwise to lock, make sure that the levers are completely locked. Install the second Omega bracket.
4. Working from a stable platform, hang the fixture on a truss, or any other structure, and tighten the clamps. Note the orientation of the base.
5. Install a safety wire that can bear at least 10 times the weight of the fixture. The safety wire attachment point is designed to fit a carabiner.

Check if the tilt and pan lock is released ([fig. 4](#)). If not, push the slide button shown in the figure 4 to the right to release the tilt lock.

6. Verify that there are no combustible materials or surfaces to be illuminated within 300 mm (12 in.) of the fixture.
7. Check that there is no possibility of head or yoke colliding with other fixtures.

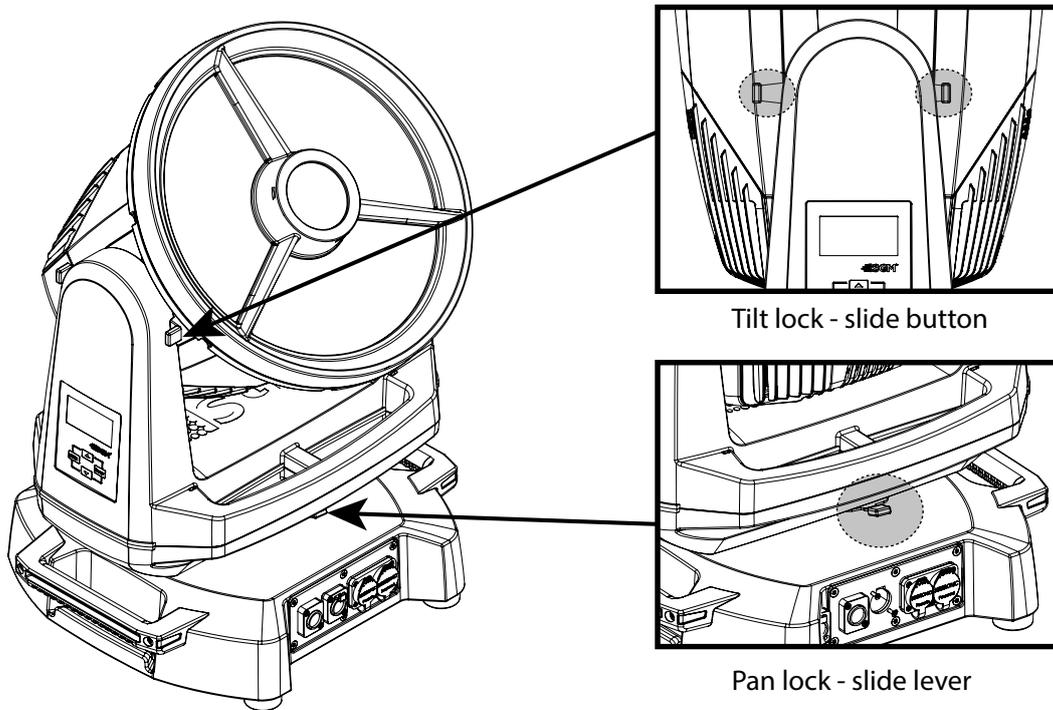
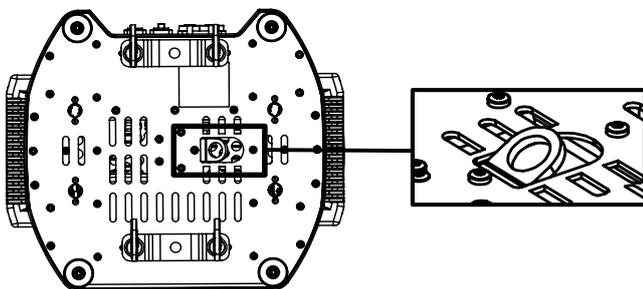


Figure 4: G-7 BeaSt tilt lock



WARNING! ALWAYS SECURE AN ELEVATED G-7 BEAST WITH A SAFETY WIRE



Fasten a safety wire (not shown) between the load-bearing support structure and the safety wire attachment point on the device (fig. 5).

The safety cable (not included in the package) must:

- Bear at least 10 times the weight of the device (SWL).
- Have a minimum gauge of 4 mm.
- Have a maximum length (free fall) = 300 mm (12 in.).

Figure 5: Safety Wire attachment point

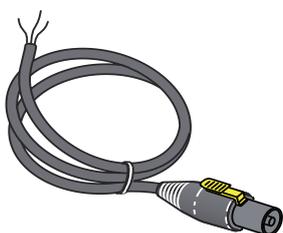
CAUTION!

ALWAYS USE A SAFETY WIRE OF A GRADE AISI 316 STEEL.

MAKE SURE THE SLACK OF THE SAFETY WIRE IS AT A MINIMUM.

NEVER USE THE YOKE OR CARRYING HANDLES FOR SECONDARY ATTACHMENT.

POWER REQUIREMENTS



The G-7 BeaSt can operate on any 100–240 V, 50/ 60Hz AC mains power supply. The maximum power consumption is 640 W.

Connect the fixture to AC power by using the supplied 2 m (78 in.) power cable (fig.6) with IP connector or similar with a maximum of 20 A, to ensure the correct ingress protection (IP rating).

The fixture must be grounded/ earthed and able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection.

Figure 6: Power cable

CONNECTING POWER

Wire	Color	Symbol	Conductor
	Black	L	live
	White	N	neutral
	green/yellow	⏏ or ⏚	ground (earth)

Figure 7: Connecting AC Power

The power cable color coding is given in figure 7:

- Connect the black wire to live.
- Connect the white wire to neutral.
- Connect the green/ yellow wire to ground (earth).

For a temporary outdoor installation, the mains cable must be fitted with a grounded connector intended for exterior use.

After connecting the G-7 BeaSt to power, run the on-board test by selecting TEST → AUTOMATED TEST in the menu, to ensure that the fixture and each LED are functioning correctly.

PLEASE NOTE! THE PROTECTIVE CAPS MUST BE SECURELY MOUNTED ON ANY UNUSED DMX CONNECTORS IN ORDER TO MAINTAIN THE IP RATING.

CAUTION!

DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM, AS DOING SO MAY CAUSE DAMAGE.

CONNECTING DATA

The G-7 BeaSt is controlled by using a DMX control device, and it can be connected either by a DMX cable or via the fixture's built-in CRMX wireless receiver system.

If using a cabled DMX system, connect the DMX IN cable to the input connector (male 5-pin XLR plug), and the DMX OUT to the output connector (female 5-pin XLR plug), both connectors on the rear of the fixture's base. For outdoor events, use IP66 or higher rated XLR connectors.

PLEASE NOTE! IF USING A WIRELESS DMX SYSTEM, REMEMBER TO USE THE PROTECTIVE CAPS IN ANY UNUSED DMX CONNECTOR IN ORDER TO MAINTAIN THE FIXTURE'S IP RATING.

WIRELESS

The G-7 BeaSt is designed to look for wireless transmitters in 'connect' status.

To connect the G-7 BeaSt to a wireless transmitter:

- Log off the currently paired wireless transmitter (by default, the fixture is linked to the SGM factory transmitter).
- See "Disconnecting a wireless transmitter" below.
- While in the WIRELESS DMX menu, make sure the fixture's wireless is enabled.
- Press the connect button on the wireless transmitter.
- Confirm that the fixture has paired with the wireless transmitter

To disconnect the fixture from the currently paired wireless transmitter, go to:

SETTINGS → WIRELESS DMX → LOG OFF

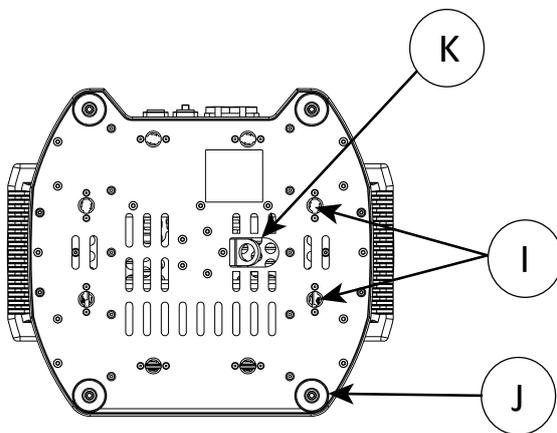
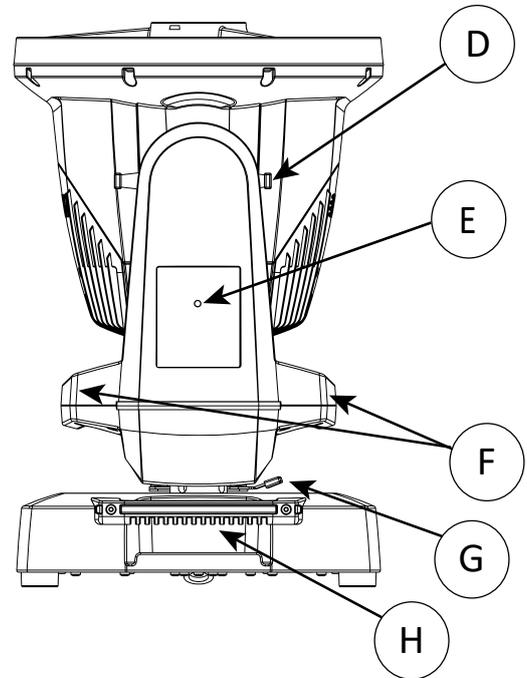
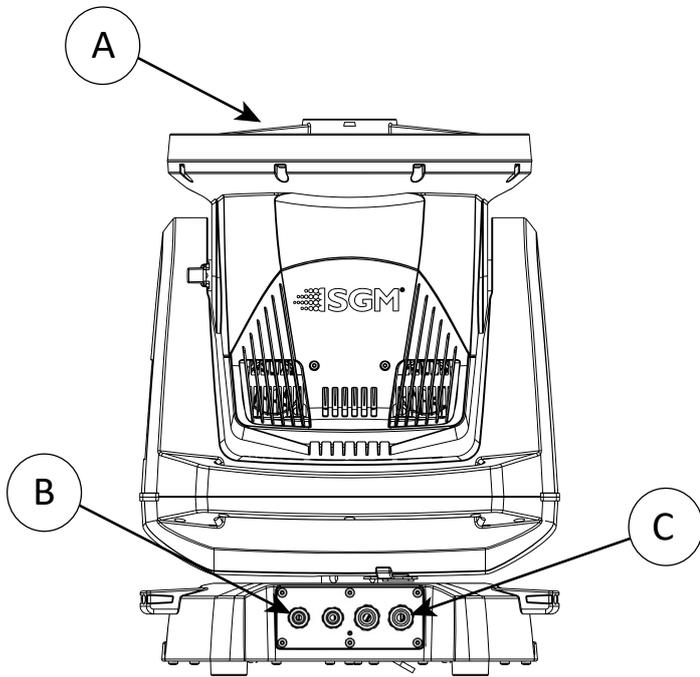
SIGNAL PRIORITY

The G-7 BeaSt can be paired to an active wireless transmitter simultaneously as being connected to cabled DMX. The fixture will prioritize cabled DMX over wireless DMX.

The active input type is displayed under the wireless signal strength indicator. The signal strength can also be checked via RDM data by using an external RDM device.

INSTALLATION POI FIXTURE

IDENTIFICATION AND TERMINOLOGY



- A: Front lens
- B: DMX in and out
- C: Power in and out
- D: Tilt Lock lock/unlock
- E: Led Indicator
- F: Yoke handles
- G: Pan lock/unlock
- H: Base handle (x2)
- I: Holes for Omega brackets (x8)
- J: Rubber feet (x4)
- K: Safety wire attachment point

Illustrations might vary from received products. This is subject to change without notice.

PLEASE NOTE! POI VERSIONS OF THE FIXTURE SHOULD BE PRE-SET WITH ANY CUSTOM PROGRAMMING OR GOBOS BEFORE INSTALLATION. ALTHOUGH MOST FUNCTIONS ARE POSSIBLE TO BE SET VIA RDM ONCE MOUNTED IN POSITION, IT IS EASIER TO DO CONFIGURATION AND ANY TROUBLESHOOTING BEFORE MOUNTING IS COMPLETE.

UNPACKING

Unpack the device and inspect it to ensure that it has not been damaged during transport.

The G-7 BeaSt is shipped with:

- Two M10 screws.
- Safety information leaflet.

APPLICATION CONSIDERATIONS

The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

- Dust, to the degree that dust cannot enter the device in sufficient quantities, as to interfere with its operation.
- High pressure water jets from any direction.

When selecting a location for the device, ensure that:

- It is situated away from public thoroughfares and protected from contact with people.
- It is not immersed in water.
- It has adequate ventilation.

When using the fixture with a DMX controller, ensure that:

- According to RS485 standard, the DMX Out of the last fixture should be terminated with a 120 ohm resistor between pin 2 and 3.
- If the resistor is not installed, make sure that the DMX Out is properly sealed by mounting the protection cap, in accordance with the ingress protection (IP) requirements.
- A maximum of 32 fixtures can be connected to the same DMX link.

CONNECTING TEMPORARY POWER

Connect to AC power using the supplied 8mm cable (the larger of the two permanently wired cables). The fixture must be grounded/earthed. The AC power supply must incorporate a fuse or circuit breaker for fault protection. For temporary programming, a plug or terminals can be used.

Wire	Color	Symbol	Conductor
	Black	L	live
	White	N	neutral
	green/yellow	⏏ or ⏚	ground (earth)

- The power cable color coding is shown to the right:
- Connect the black wire to live
- Connect the white wire to neutral
- Connect the green/yellow wire to ground (earth)

Figure 8 : Connecting AC Power

CONNECTING TEMPORARY SIGNAL

SGM fixtures use the DMX 512 standard for communication.

STEP 1: Download and install the SGM RDM Addressing tool. < <https://sgmlight.com/products/rdm-addressing-tool> >

STEP 2: Connect the bare end data cable to the USB up-loader cable for POI fixtures as shown below

STEP 3: Connect the USB up-loader cable for POI fixtures to a computer with a USB Type-A port. When addressing through USB powered DMX/ RDM devices, ensure the DMX link is terminated, and keep all cables as short as possible.

STEP 4: Launch the SGM RDM Addressing Tool.

Wire	Color	Conductor
	Shield	Ground
	White	DMX IN: Data -
	Red	DMX IN: Data +
	Black	DMX OUT: Data -
	Yellow	DMX OUT: Data +

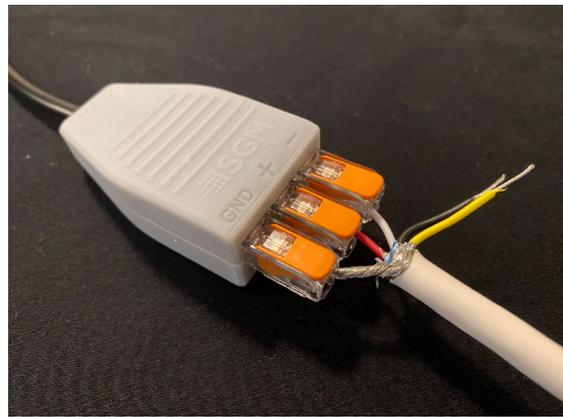


Figure 10 Connecting data to USB up-loader cable for POI fixtures

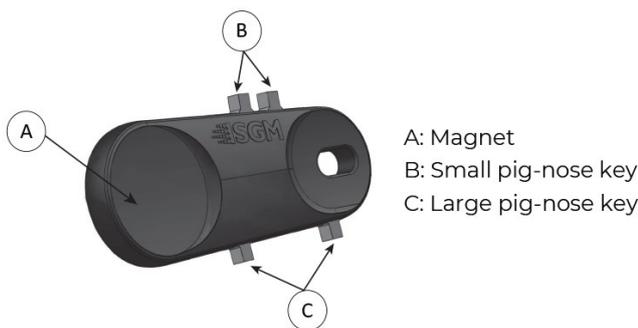
Figure 9: Connecting AC Power

PLEASE NOTE: AT A MINIMUM, ALL FIXTURES WILL NEED TO BE GIVEN A DMX ADDRESS AND DMX PERSONALITY IN ORDER TO PATCH AND PROGRAM ON A CONTROLLER. REFER TO MANUALS FOR MORE DETAILS.

WIRELESS DATA CONNECTION

In POI versions with wireless, it is necessary to pair the fixture with a new transmitter (by default, the fixture is linked to the SGM factory transmitter).

In order to do so, make sure the fixture is powered on before taking the following steps:



1. Take the spanner that comes with the fixture, place the magnet close to the LED indicator and wait for 3 seconds. The LED indicator will blink orange for 1-2 seconds before switching to static green again. The fixture can now be paired with a new transmitter.

2. Go to the wireless transmitter and press “connect” or “link”. Now the external third-party transmitter and the internal SGM receiver should be linked together.

Repeat the process to link the fixture to another transmitter.

Figure 11: POI Spanner

DISCONNECTING A WIRELESS TRANSMITTER IN POI

To disconnect the G-7 BeaSt POI from the currently paired wireless transmitter, simply hold the magnet for 3 seconds over the LED indicator. The LED indicator blinks orange for 1-2 seconds, switching later to green again. The fixture is now logged off.

LED INDICATOR

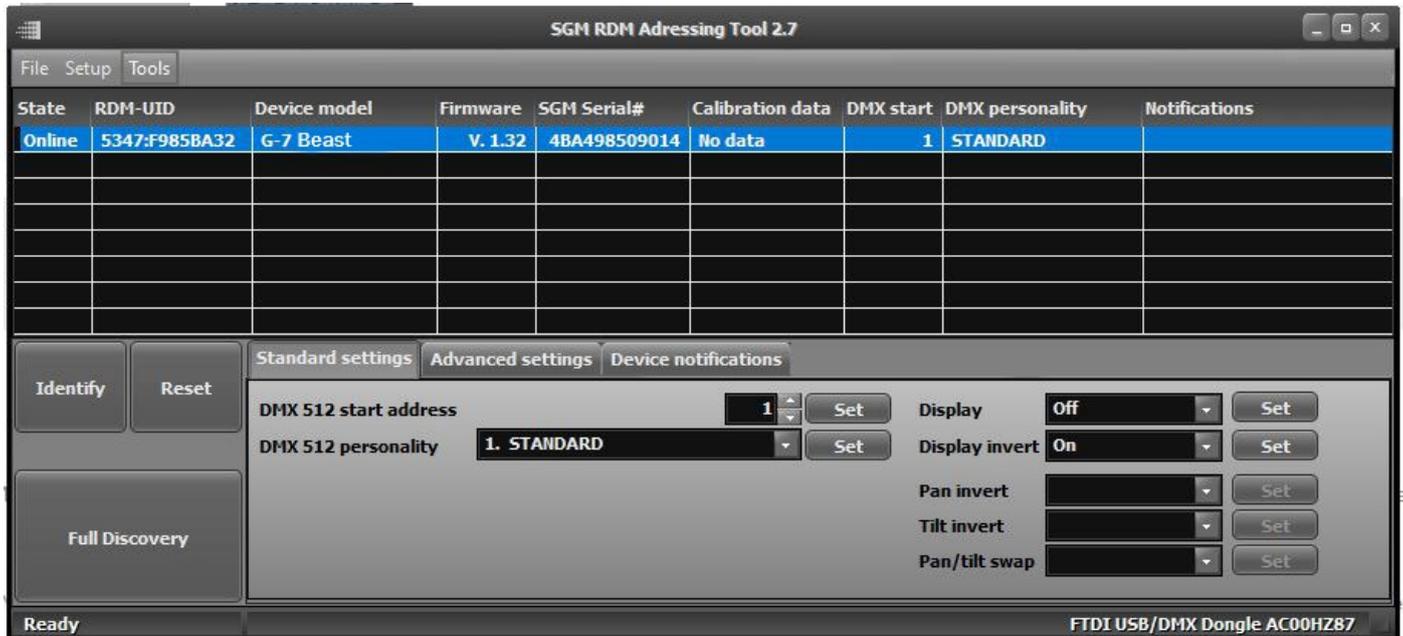
The LED indicator is located on the yoke arm, and shows the current status of the fixture.

The LED indicator can have different colors and three possible stages: static, flashing or off.

- Solid Orange: Fixture is starting up.
- Blinking Orange - Green: Fixture is resetting its functions.
- Blinking Green: Reset is completed, no errors and no wireless or wired DMX connection.
- Solid Green: Wireless and/or wired DMX connected.
- Blinking Green - Orange - Red: Fixture is resetting and error(s) has occurred during reset.
- Blinking Green - Red: Reset is completed, but error(s) occurred during reset.
- Solid Red (3 seconds): Hall sensor is activated. When activated more than 3 seconds, wireless DMX connection is logged off.
- Off: fixture is off or LED indicator is set to auto dimming (set via RDM).

SETTINGS AND FIXTURE DEFAULTS

The Addressing Tool is a windows based program designed to allow the user to configure the fixture through the RDM protocol. All settings on a standard fixture are available on a POI fixture. But on POI, these settings are changed through the Addressing Tool.



STEP 1: Click Full Discovery and look for the green light to illuminate on the fixture. If the green light does not appear, cycle power or refer to troubleshooting.

STEP 2: Select the standard settings tab and enter a DMX address and a personality/mode of operation. Look for the LED indicator to blink to confirm setting change. DMX modes for POI are the same as the G-7 Spot standard. Visit www.sgmlight.com to see all DMX charts available under the respective product, or upon request via support@sgmlight.com.

STEP 3: If necessary for the application, click advanced settings to set the fan mode, dimming curve, calibration or to reset to factory defaults.

STEP 4: Disconnect POI Uploader cable.

Repeat as required for multiple fixtures.

PLEASE NOTE!!

REMOTE DEVICE MANAGEMENT (RDM) REQUIRES A CORRECT DMX CABLED INSTALLATION AND TERMINATION.

WHEN SETTING ADDRESSES THROUGH RDM AND USING USB DONGLES, DISABLE THE USB SELECTIVE SUSPEND TO ENSURE A PROPER VOLTAGE TO THE DMX LINK. IF ANY LAG OR TROUBLE OCCURS WHEN ADDRESSING, DECREASE THE CABLE LENGTH RANGE TO <12 M AND ADDRESS ONLY ONE FIXTURE AT A TIME.

MOUNTING

All SGM POI fixtures have M10 size attachment points to mount the supplied brackets or directly to a structure. The M-10 screws are included in the package in the same amount as the number of M-10 nuts in the base.

The G-7 Beast POI base has eight M-10 nuts that can be used for installation and rigging. The POI Omega Bracket (not included) or a customized bracket is needed to install the fixture. Consider the dimensions below of the G-7 Spot POI base for customized mounting bracket purposes.

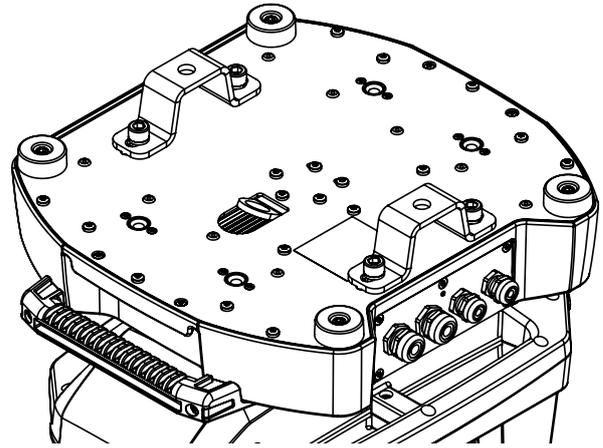


Figure 12: G-7 Beast base with Omega brackets

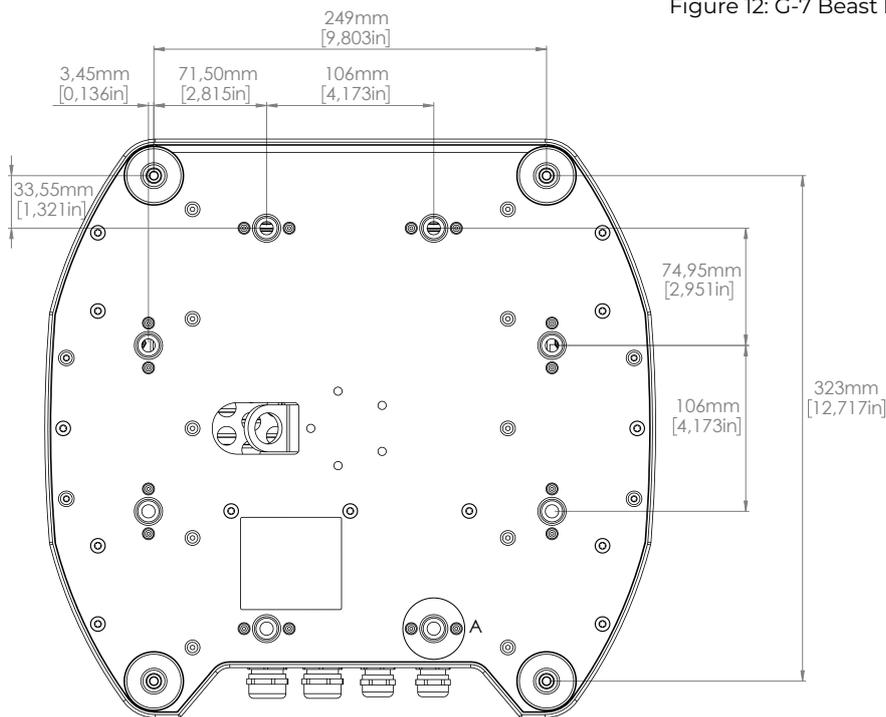


Figure 13: G-7 BeaSt base with dimensions¹²

BRACKETS

The SGM POI Omega bracket suited for M-10 holes can be ordered as an accessory. Contact your local SGM dealer for further information on correct POI-rated mounting.



Figure 14: Omega bracket

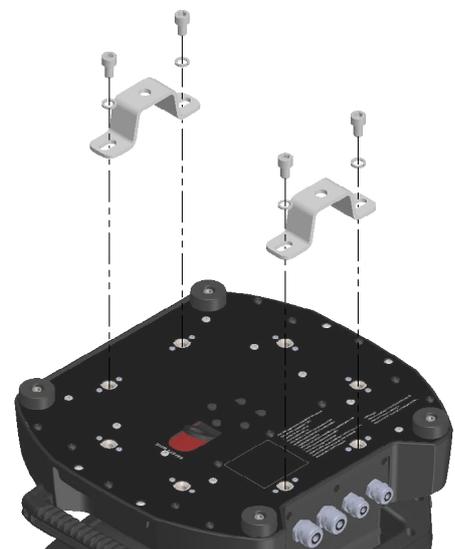


Figure 15: Omega bracket attachment

MECHANICAL TOLERANCES AND RECOMMENDED USE IN LOW AMBIENT TEMPERATURES

Ambient temperature range for storage, start-up, and operation of G-7 Beast and G-7 Beast POI moving heads is described at www.sgmlight.com. All lighting fixtures have mechanical tolerances which can introduce unexpected results when in extreme temperatures. To minimize these undesirable effects in extreme cold from firmware 1.31 on, the G-7 Spot (both in POI and non-POI versions) includes a “Heat Up mode” feature accessible via the “Function” DMX channel (DMX chart available at www.sgmlight.com). This functionality preconditions the mechanical systems of the unit during low ambient temperature periods, without creating a visual impact in the illuminated area. When the user activates the “Heat Up mode” the fixture warms up by operating the light source at 30% output as well as adjusting other settings. The CMY flags, CTO and iris functions are also used to block as much light as possible. Pan / tilt movement or gobo wheels are not affected and will still respond to DMX parameters.

In temperatures below -20°C (-4°F) degrees, main features such as pan and tilt function correctly, while the precision mechanical features such as gobo indexing may not perform at their maximum accuracy even when using the “Heat Up mode”. To use the precision mechanical features at their best, when in ambient temperatures below -20°C (-4°F), a full-output warm-up procedure is advised. See below for more details.

POI Recommended Operation

The “Heat Up mode” is recommended for permanent activation when in ambient temperatures below 0°C (32°F) degrees. Heat Up mode is automatic when enabled. Once internal operating temperature is reached, normal operation resumes. Heat Up mode is functional to around -20°C in typical use.

When in permanent outdoor installations, the start-up temperature equals stand-by mode, since SGM’s DryTech™ system requires constant power. Features based on precision mechanical systems such as gobo selection, gobo indexing / rotating, CMY flags, prism rotation, and iris may work slightly different at lower temperatures than usual. Very low ambient temperatures or freezing winds can eventually cause the features to not respond to the same level of accuracy as under normal circumstances. This behavior will not cause damage to the fixture or affect the long-term performance of the product at higher temperatures. Proper function of the features based on precision mechanical systems below -20°C is possible, but this requires additional programming.

PERMANENTLY CONNECTING POWER & DATA

SGM POI DMX Cable

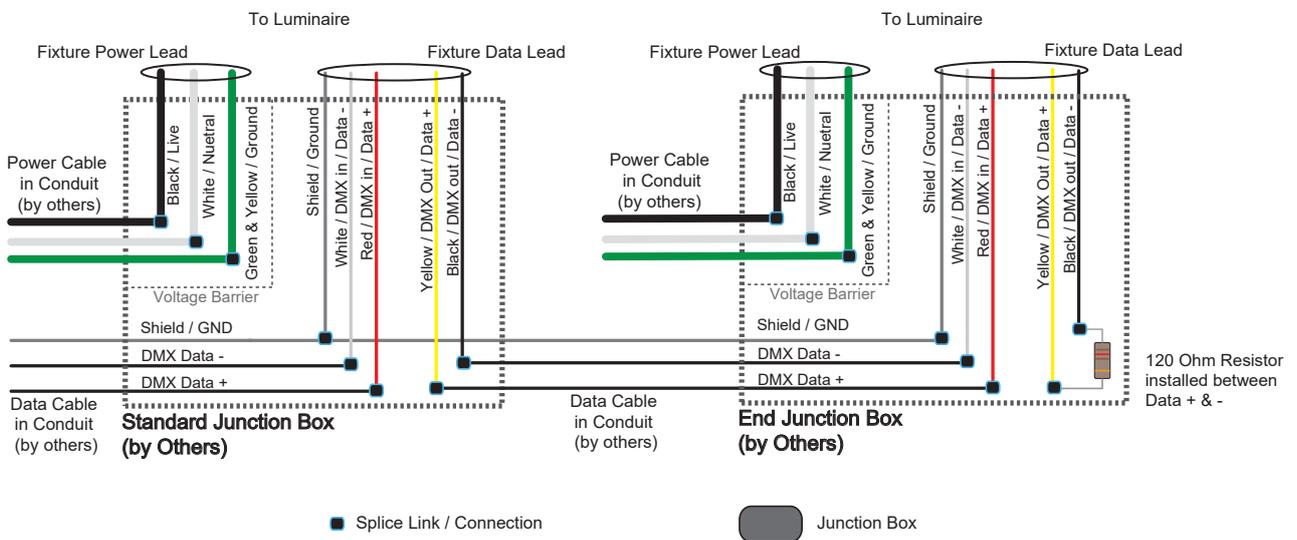
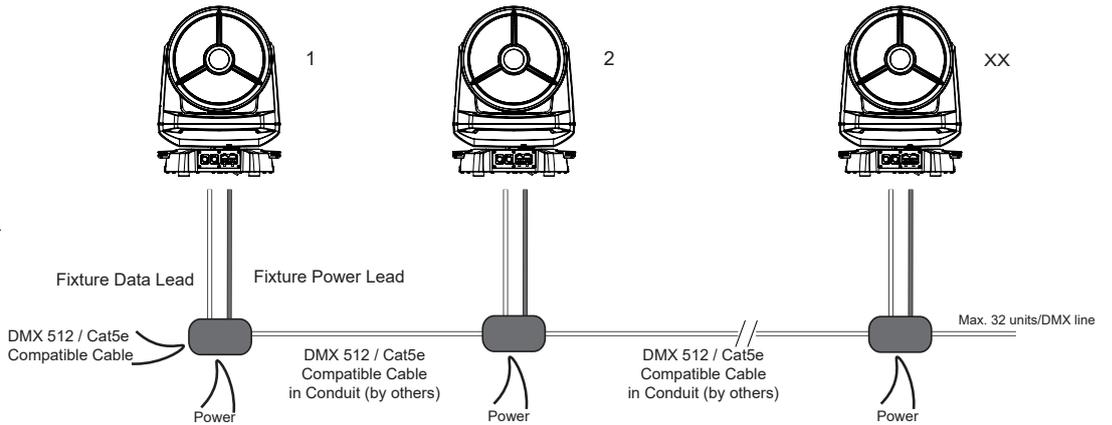
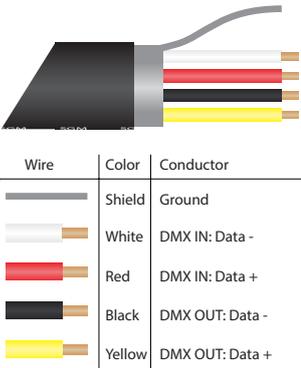


Figure 16: Connecting DMX and AC Power in G-7 BeaSt POI

DMX-in and DMX-out are in the same cable. See more in figure about the SGM POI DMX cable.

For permanent installations, have a qualified electrician to wire the mains cable directly to a suitable branch circuit. The junction's ingress protection (IP) rating must be suitable for the location.

For a temporary installation, the mains cable may be fitted with a grounded connector intended for exterior use.

PLEASE NOTE!

- Cat5e compliant cable is suitable for the transmission of DMX 512 with RDM.
- Up to 32 fixtures can be connected to the same DMX link. Additional fixtures will overload the link.
- The last fixture must always be fitted with a DMX termination plug to the fixture's DMX out.
- SGM fixtures provide a passive DMX Thru signal as DMX out, instead of an active output signal.

USER INTERFACE

The G-7 Beast can be set up by using the control panel located in the yoke of the fixture or through RDM. After being powered on, the G-7 Beast boots and resets. The current DMX start address and any status messages will be displayed thereafter. Navigate the menus and options using the arrows and select items using the ENTER button (fig 17).

The display shows the current status and menu of the fixture, and can be used to configure individual fixture settings. Check the fixture's wireless status and firmware version to see error messages. In the settings, the display can be set to turn off if desired.

PLEASE NOTE! IN POI VERSIONS THE DISPLAY IS REPLACED BY AN INDICATOR LIGHT. THE ADJUSTMENTS ARE MADE THROUGH RDM. SEE "POI PERMANENT OUTDOOR INSTALLATION" FOR MORE INFORMATION.

WIRELESS SIGNAL INDICATOR(A)

Wireless icon appears if the fixture is connected to a wireless transmitter.

FIXTURE NAME (B)

NEXT DMX ADDRESS (C)

The next available DMX address depends on the fixture's DMX mode footprint.

DMX START ADDRESS (D)

In order to select another DMX address, use the arrow buttons. The DMX address will flash if no data input is detected.

The DMX start address is the first channel used to receive instructions from the controller. For independent control, each fixture must be assigned its own control channels. If you give two fixtures the same address, they will behave identically. Address sharing

DISPLAY SETTINGS

Flipping the OLED display

If the fixture is installed hanging upside down, it might be useful to flip the display so that it is easier to read. To flip the display go to: SETTINGS → FLIP DISPLAY in the menu, or press the up and down buttons on the control panel at the same time.

Setting the display saver

By default the OLED display dims down after a short period when the control panel is not in use, but it can also be set to turn off completely. Pressing any key will always turn on the display or restore it to normal brightness. To change the display saver, go to:

SETTINGS → DISPLAY OFF.

PLEASE NOTE: TO AVOID THE RISK OF DISPLAY DETERIORATION CAUSED BY LONG TERM USE IN PERMANENT INSTALLATIONS, IT IS RECOMMENDED TO USE THE DISPLAY OFF SETTING.

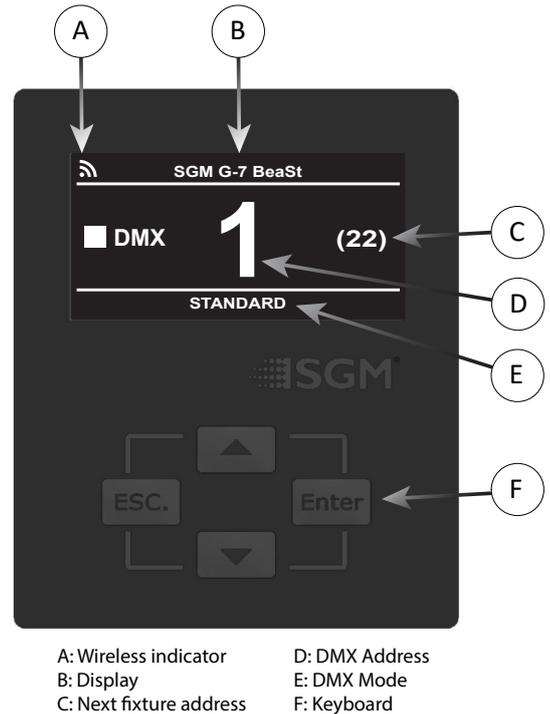


Figure 17: Control panel view

can be useful for diagnostic purposes and symmetrical control.

DMX MODE (E)

Display the current DMX mode.

USING THE KEYBOARD (F)

Press the 'ENTER' button to access the menu or make a selection.

Press the arrow buttons to scroll up and down in the menus.

Press the 'ESC' button to take a step back in the menu.

CONNECTING TO A DMX CONTROL DEVICE

CONNECTING TO A DMX CONTROL DEVICE

The G-7 Beast is controlled by using a DMX control device, and it can be connected either by a DMX cable or via the fixture's built-in CRMX wireless receiver system.

If using a cabled DMX system, connect the DMX IN cable to the input connector (male 5-pin XLR plug), and the DMX OUT to the output connector (female 5-pin XLR plug), both connectors on the rear of the fixture's base. For outdoor events, use IP66 or higher rated XLR connectors.

NOTE! IF USING A WIRELESS DMX SYSTEM, REMEMBER TO USE THE PROTECTIVE CAPS IN ANY UNUSED DMX CONNECTOR IN ORDER TO MAINTAIN THE FIXTURE'S IP RATING.

CONNECTING A WIRELESS TRANSMITTER

The G-7 BeaSt is designed to look for wireless transmitters in 'connect' status.

To connect the G-7 BeaSt to a wireless transmitter:

- Log off the currently paired wireless transmitter (by default, the fixture is linked to the SGM factory transmitter).
- See "Disconnecting a wireless transmitter" below.
- While in the WIRELESS DMX menu, make sure the fixture's wireless is enabled.
- Press the connect button on the wireless transmitter.
- Confirm that the fixture has paired with the wireless transmitter.

DISCONNECTING A WIRELESS TRANSMITTER

To disconnect the fixture from the currently paired wireless transmitter, go to:

SETTINGS → WIRELESS DMX → LOG OFF.

SIGNAL PRIORITY

The G-7 BeaSt can be paired to an active wireless transmitter simultaneously as being connected to cabled DMX. The fixture will prioritize cabled DMX over wireless DMX.

The active input type is displayed under the wireless signal strength indicator. The signal strength can also be checked via RDM data by using an external RDM device.

ABOUT DMX

DMX is the USITT DMX512-A standard, based on the RS-485 standard. The signal is sent to the fixture as DMX data from a console or a controller via a shielded twisted pair cable designed for RS-485 devices.

The G-7 BeaSt can be controlled using signals sent by a DMX controller on a number of DMX channels, which varies depending on the DMX mode that has been set. Visit www.sgmlight.com to see all DMX charts under the respective product, or upon request via support@sgmlight.com.

The cables can be daisy-chained between the fixtures, with a possibility of having up to 32 fixtures connected to the same DMX link. Up to 300 meters (1000 ft.) of cable is achievable with high quality DMX cables. All DMX links must be terminated in the last fixture by connecting a DMX termination plug to the last fixture's 5 pin DMX out connector.

PLEASE NOTE:

- **Standard microphone cable is not suitable for transmitting DMX.**
- **Up to 32 fixtures can be linked to the same DMX chain. Additional fixtures will overload the link.**
- **The last fixture must always be fitted with a DMX termination plug to the fixture's DMX out.**

DMX START ADDRESS

The G-7 BeaSt can be operated in different DMX modes. For any of the modes, the first channel used to receive data from a DMX control device is known as the DMX start address.

For independent control, each G-7 BeaSt must be assigned its own DMX start address. For example, if the first G-7 BeaSt is set to 22ch DMX mode with a start DMX address of 10, the following G-7 BeaSt in the DMX chain should then be set to a DMX address of 32. As the first fixture uses all the 22 DMX channels, including channel 10 and 31, the next available channel is 32. See formula below:

START ADDRESS + CHANNELS USED = NEXT FREE DMX CHANNEL

If two or more G-7 BeaSts have the same DMX start address, they will behave identically. Incorrect settings will result in unpredictable responses from the lighting controller. Address sharing can be useful for diagnostic purposes and symmetrical control.

SETTING THE DMX ADDRESS

The DMX address is shown in the display of the control panel. To change the address setting, press the up and down arrows. When the desired address is displayed, press 'OK' to save the setting. For your convenience, the next available DMX address is displayed to the right. Note that channel spacing is determined by number of channels of the DMX mode.

See "Configuring the device" on page 10 for instructions on using the display panel.

The G-7 BeaSt also offers the option to set the DMX address through RDM.

DMX MODES

All DMX charts are available at www.sgmlight.com under the respective product, or upon request via support@sgmlight.com.

G-7 BEAST CONNECTION DIAGRAM

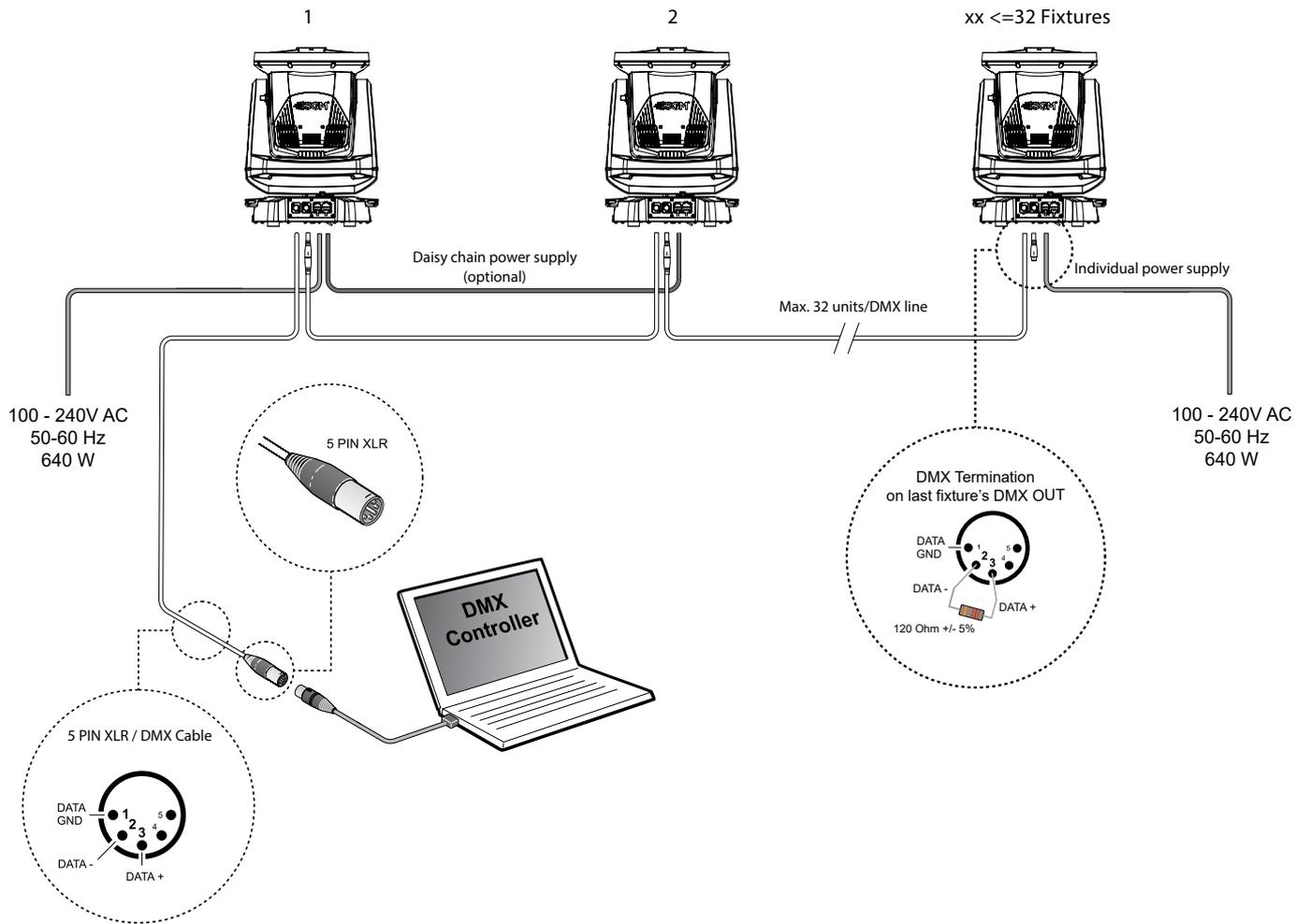


Figure 18: Connecting DMX in G-7 Beast

USING STAND-ALONE OPERATION

In stand-alone operation mode, the fixture is not running connected to a control device, but is preprogrammed with a series of up to 24 scenes, playing continuously in a loop (fig. 19). This program can be set up to run by default, whenever the fixture is powered on.

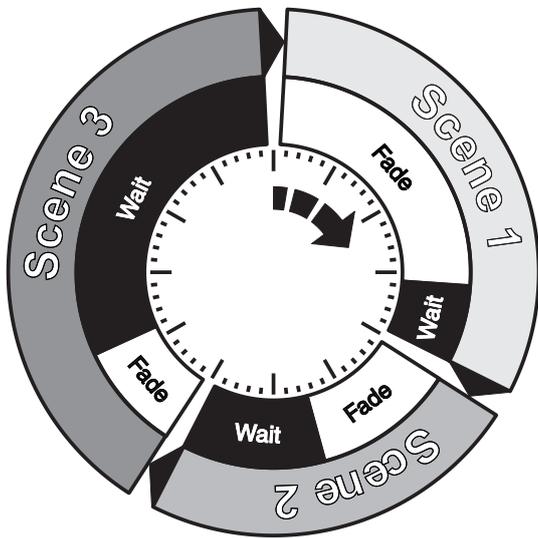


Figure 19: Standalone operation

MANUAL CONTROL/ INTERNAL SEQUENCE EDITOR

The editor option offers the ability to adjust all DMX parameters of the fixture. Each scene has its own DMX settings with the possibility to define a fade-in time for the transition from the previous scene, and a wait (static) time, each with a fade time up to 4,000 seconds and a wait time up to 4,000 seconds.

The 24 scenes can be preset directly from the control menu of the fixture by using the editor.

Locate the editor by pressing 'OK' in the menu, and select 'MANUAL'.

The following options will be available:

- Editor.
- Run Program.
- Stop Program.
- Run on power on.

To set a single static scene, set the fade time of scene 2 to 0.0 seconds, this will keep the fixture running scene 1.

To make a sequence of up to 24 scenes, set the fade time of the scene, following the last one to 0.0 seconds. This will keep the fixture looping between the scene 1 to the scene before the scene with 0.0 seconds fade time.

The copy/ paste function offers the ability to create replicas of previously created scenes.

EDITOR

Select Editor by pressing OK. The following options will show up:

- Scene - Press OK and choose a scene (1 to 24). Confirm with OK.
- Wait Time - Press OK and set the wait time (0 to 4,000 seconds). Confirm with OK.
- Fade Time - Press OK and set the fade time of the selected scene (0 to 4,000 seconds). Confirm with OK.
- Copy Scene - Press OK to copy the selected scene to the clipboard.
- Paste Scene - Press OK to paste copied scene from the clipboard to the selected scene.
- Clear Scene - Press OK to clear the selected scene and set the default settings.

Scroll down in the display to see all controllable features.

To change a value of the feature:

- Select the feature to change.
- Press OK and change the value.
- Confirm with OK.

Channels operating in 8 bit mode will allow you to set a value from 0 to 255.

Channels operating in 16 bit mode will allow you to set a value from 0 to 65,535.

CONTROL MENU

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
DMX MODE	SELECT MODE	-	-	Select DMX mode.
INFO	GENERAL INFO	Product	-	Displays product type.
		SN	-	Displays SGM serial#.
		RDM Label	-	Displays RDM Label.
		RDM ID	-	Displays RDM ID. (Unique RDM ID for identification).
	SOFTWARE VERSION	Main	-	Displays installed firmware version.
		Date	-	
		Time	-	
		Head	-	Software version of the head board.
	TIMERS	LED D	-	Displays LED total power on time.
		LED RES	-	
		ON D	-	Displays fixture total power on time.
		ON RES	-	
		Current time	-	Display current time.
	DMX VIEW	Up to 507 DMX addresses	-	Displays received DMX levels.
	SENSORS	Main PCB Temp	-	Displays fixture's temperatures.
		Head PCB Temp	-	
		LED Beam Temp	-	
		LED STROBE Temp	-	
		Pan Angle	-	Displays pan and tilt angles.
		Tilt Angle	-	
		Wireless Signal	-	Displays wireless status.
		Wireless Paired	-	
		Humidity Yoke	-	Displays humidity status.
		Humidity Head	-	
		Light PWM	-	Displays light source PWM.
		Strobe PWM	-	
		Voltage 50V	-	Displays internal voltage.
	Voltage 12V	-		
	EFFECT SENSORS	Color Wheel 1	-	Displays effect sensor's status.
		Color Wheel 2	-	
		Gobo	-	
		Collimator	-	
	COMPENSATION CNT	Pan	-	Displays compensation count for each module.
Tilt		-		
Color Wheel 1		-		
Color Wheel 2		-		
Gobo Rot Select		-		
Gobo Rot		-		
Collimator		-		
ERRORS	-	-	Displays error codes.	

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
SETTINGS	WIRELESS DMX	Enable	[X] / []	Press 'Enter' to enable / disable - [X] / [].
		Bridge DMX	-	
		Log Off	-	Press 'Enter' to log off wireless DMX.
		STATUS	Signal Strength %	
	CRMX PAIRD			Display CRMX PAIRD: YES or NO.
	FLIP DISPLAY	-	-	Press 'Enter' to enable / disable - [X] / [] flipped display.
DISPLAY OFF	-	-	Press 'Enter' to enable / disable [X] / [] display light.	
SETTINGS	FAN MODE	Standard		Fan speed according to internal fixture temperature.
		Silent		Low fan speed for quiet operation.
		Max Power		High fan speed for better cooling effect.
		Always 100%		Always maximum fan speed for high cooling effect.
	SERVICE PIN	-	-	-
	SERVICE MENU	-	-	-
FACTORY DE-FAULT	-	-	Press 'OK' to set the fixture to factory default and 'ESC' to unset See "Factory default" on page <?>.	
TEST	AUTOMATED TEST	-	-	Initiates a self-test sequence. Select 'OFF' to stop self-test sequence.
	LED TEST	-	-	Runs the LED test.
	DISPLAY TEST	-	-	Lights display in different patterns to ease troubleshooting.
RESET	PAN TILT	-	-	Press 'OK' to reset the PAN TILT.
	EFFECT MODULE	-	-	Press 'OK' to reset the EFFECT MODULE.
	COLLIMATOR MODULE	-	-	Press 'OK' to reset the COLLIMATOR MODULE.
	ALL	-	-	Press 'OK' to reset all.

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
MANUAL	EDITOR	Scene	1 - 24	Please visit www.sgmlight.com , or contact your local SGM support for a complete DMX description chart.
		Wait Time	0.0 - 4,000.0	
		Fade Time	0.0 - 4,000.0	
		Copy Scene	-	
		Paste Scene	-	
		Clear Scene	-	
		Capture P/T	-	
		SHUTTER	0 - 255	
		DIMMER	0 - 255	
		PAN	0 - 65535	
		TILT	0 - 65535	
		GOBO 1 ROT	0 - 65535	
		GOBO 1	0 - 255	
		STROBE DURATION	0 - 255	
		STROBE RATE	0 - 255	
		COLLIMATOR	0 - 255	
		STROBE EFFECT	0 - 65535	
		STROBE DIMMER	0 - 255	
		STROBE PIX 1	0 - 255	
		STROBE PIX 2	0 - 255	
	STROBE PIX 3	0 - 255		
	STROBE PIX 4	0 - 255		
COLOUR WHEEL 1	0 - 255			
COLOUR WHEEL 2	0 - 255			
RUN PROGRAM	-	-	When pressed, the program starts after 5 seconds.	
STOP PROGRAM	-	-	Stops the program.	
RUN ON POWER ON	-	-	Enables automatic start of manual program when powering on the fixture.	

FACTORY DEFAULT

Factory default can be activated from the control panel display on the yoke of the fixture. Located in MAIN / SETTINGS / FACTORY DEFAULT, it has the following effect:

- Log off wireless.
- Stored in static memory.
- Set DMX address to 1.
- Set Standard DMX mode.
- Hide errors set to false.
- Device label set to "SGM".
- Flip screen set to normal orientation.
- Fan mode set to standard.
- Wireless enabled.
- Manual programs.

a) All values set to 0.

b) Except from Pan/Tilt that is set to 32767

SUPPORTED RDM FUNCTIONS

The G-7 Beast features support for various RDM functions.

RDM (Remote Device Management) is a protocol enhancement to USITT DMX512 that allows bi-directional communication between the fixtures and the controller over a standard DMX line. This protocol will allow configuration, status monitoring, and management.

You will need a RDM controller to get control over the supported parameters. See the tables below for supported RDM functions.

RDM FUNCTIONS

To get access to all RDM functions please contact support@sgmlight.com.

PID	ACTIONS ALLOWED	NAME
0x0082	GET/SET	Device Label
0x0081	GET	Manufacturer Label
0x00E0	GET/SET	Dmx Personality
0x00E1	GET	Dmx Personality Description
0x0200	GET	Sensor Definition
0x0201	GET/SET	Sensor Value
0x0080	GET	Device Model Description
0x1001	SET	Reset Device
0x0051	GET	Parameter Description
0x0090	SET	Factory Defaults
0x0501	GET/SET	Display Level

PID	ACTIONS ALLOWED	NAME
0x0500	GET/SET	Display Invert
0x0400	GET/SET	Device Hours
0x0401	GET	Lamp Hours
0x0121	GET	Slot Description
0x0120	GET	Slot Info
0x0122	GET	Default Slot Value
0x8626	SET CRMX	Log Off
0x8633	GET/SET	Enable Wireless DMX
0x8625	GET/SET	FAN 0=AUTO, 1=LOW, 2=HIGH, 3=FULL

SENSORS

To get access to all sensors, please contact support@sgmlight.com.

NAME	SENSOR TYPE
Main PCB Temp	Temperature
Head PCB Temp	Temperature
LED Beam Temp	Temperature
LED Strobe Temp	Temperature
Pan Angle	Angle
Tilt angle	Angle
Wireless Signal	Other

NAME	SENSOR TYPE
Wireless Paired	Other
Humidity Yoke	Humidity
Humidity Head	Humidity
Light PWM	Other
Strobe PWM	Other
Voltage 50 (for general power supply)	Voltage
Voltage 12 (for PCB)	Voltage

TROUBLESHOOTING

PROBLEM	POTENTIAL CAUSE(S)	REMEDIES
Fixture does not respond or appears to be off.	No power to the fixture.	Confirm that the power is switched on, the cables are plugged in, and the power connector is inserted and turned to its locked position.
Fixture suddenly turned off.	Power was turned off.	Check the switches and breakers.
Fixture suddenly stopped responding.	The wireless transmitter or connectors were disconnected/tampered with.	Inspect the wireless transmitter and connectors.
	DMX cables were disconnected.	Inspect DMX cables.
Fixture operates irregularly / abnormally.	DMX address is incorrect.	Inspect and enter the correct DMX address.
	DMX cable polarization is inverted (pin 2 + 3).	Install a phase-inverter or replace cables.
	DMX cable is corrupted.	Replace or repair defective cables and/or connectors.
	DMX link is not terminated.	Install a XLR 120 ohm DMX termination at the end of the DMX link.
	Corrupted DMX cable.	Replace or repair defective cables and/or connectors.
	The fixture operates an internal program.	Go to MENU → MANUAL → STOP PROGRAM.
Pan/tilt is skipping/shuddering.	Obstacles are within the required pan/tilt clearance.	Inspect and remove any obstacles that constrain free operation of the pan/tilt.
	Calibration values are missing or incorrect.	Contact SGM support or certified SGM service partner.
Pan/tilt does not reset correctly.	Calibration values are missing or incorrect.	Contact SGM support or certified SGM service partner.
Display is turned on, but the fixture doesn't respond.	Several causes.	Contact your local SGM dealer or support@sgmlight.com

ERRORS

The OLED display indicates whenever an error occurs. Note that lost steps in pan/tilt are corrected continuously and, therefore, do not show as an error, but are registered in the compensation count menu (cnt menu) instead.

CONTROL PANEL DISPLAY VIEW	MENU LOCATION	DETAILED DESCRIPTION
ERR - CW 1/CW 2/Gobo Sel Comp.	Main	Colour wheel 1, Colour wheel 2, Rotating gobo effect wheel. It has been detected that the stepper motor has lost steps. The function has been re-initialized (reset) to compensate for a wrong stepper motor position and is again correctly positioned. The "ERR" message will remain until the function has been manually reset from the control panel/RDM or a power cycle.
ERR - Gobo Rot 1-6 Magnet	Main	Gobo wheel, rotating gobo effect is not detected. Actual effect wheel is missing or damaged/magnet is missing.
ERR - Colour Wheel 1/Colour Wheel 2/ Gobo Rot Sel/Gobo Rot	Main	An error during initialization (reset) of the function has occurred. In this case, it can not be expected that the function is working properly and a manual reset from the control panel, RDM or a power cycle is required.
Pan/Tilt	Main/Info/Compensation Cnt	The number of times the pan/tilt has lost steps and has been compensated to obtain correct position. Note that this compensation cnt will not be displayed as an error since these functions are continuously corrected.

MOTORIZED COLLIMATION

The collimation system of the G-7 BeaSt is based on a small motorized convex reflector that bounces light from the LED engine to a fixed concave parabolic reflector (fig. 20). The movement of the controllable convex reflector modifies the focal point, allowing users to collimate the light. When the movable reflector is located at its furthest position, the fixture outputs narrow beam angle. As the small reflector moves closer to the light source, the beam angle becomes wider.

This optical design is able to provide negative (1), coherent (2), and expanded (3) aerial beams of light:

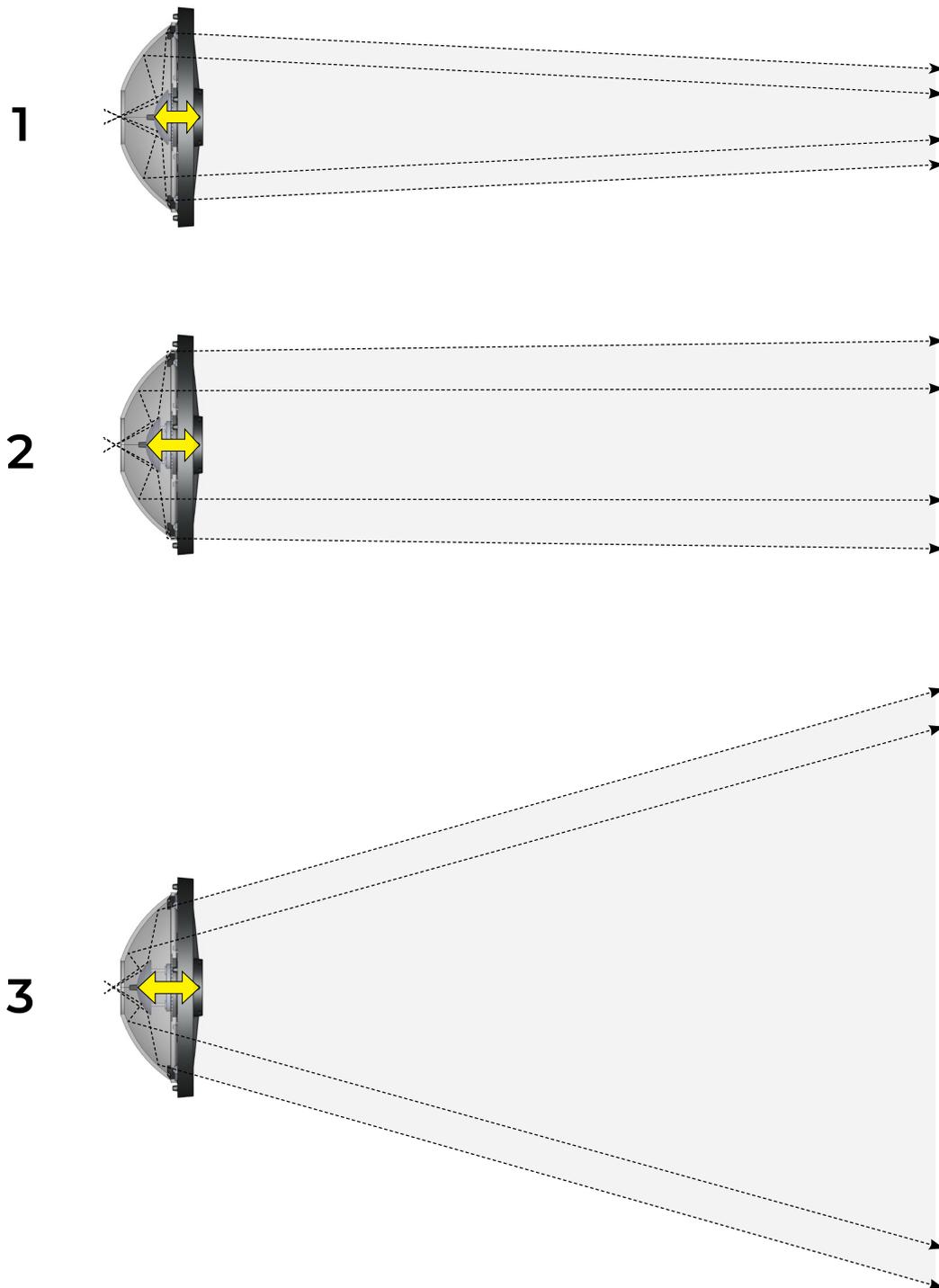


Figure 20: Collimation range.

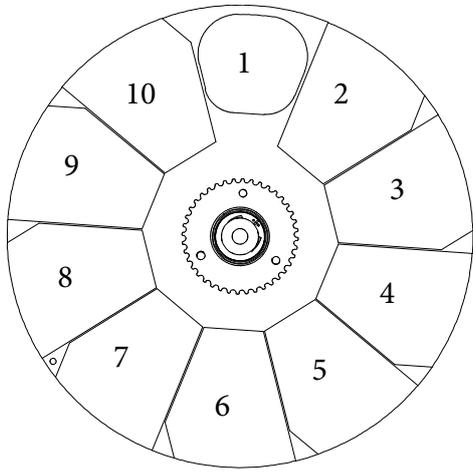


Figure 21: Identification of colour position

HIGH-PRECISION PAN AND TILT

The G-7 BeaSt has a fast pan and tilt movement, with a 620° pan and 185° tilt movement.

DUAL HIGH-SPEED STROBE EFFECT

The G-7 BeaSt has two separated white LED engines; both can generate strobe effects.

In the Beam light source, the ultra high-speed strobe effect introduces instant white colour control. Random strobe and pulse effects can be generated with variable speed.

In the Strobe Blinder light source, three different DMX channels can control duration, rate, and pre-programmed sequences for strobe effects. Variable speed can be controlled via duration and rate. The effect channel reproduces different strobe looks similar to traditional strobe fixtures.

COLOR WHEELS POSITION

The G-7 BeaSt includes two independent colour wheels, each with 9 individual colours (see figure 21 and tables below for identification), and four modes: snap, split colour, and scroll mode. See our website www.sgmlight.com or contact SGM support for a complete dmx chart.

- Colour wheel 1 consist of 9 solid colours + open position.
- Colour wheel 2 consist of 9 colours, including CTO and open position.

COLOUR WHEEL 1			
NO.	DESCRIPTION	PART NUMBER	XY COORDINATES
1	Open		
2	G-7B Colour filter - Light Green	12000031-A	X 0.150266 Y 0.732946
3	G-7B Colour filter - Congo Blue	12000034-A	X 0.168150 Y 0.012605
4	G-7B Colour filter - Amber	12000033-A	X 0.550571 Y 0.444738
5	G-7B Colour filter - Cyan	12000027-A	X 0.157466 Y 0.177242
6	G-7B Colour filter - Lime	12000035-A	X 0.317640 Y 0.629761
7	G-7B Colour filter - Light Red	12000030-A	X 0.647861 Y 0.346560
8	G-7B Colour filter - Yellow	12000029-A	X 0.475045 Y 0.516444
9	G-7B Colour filter - Magenta	12000028-A	X 0.276437 Y 0.088168
10	G-7B Colour filter - Deep Blue	12000041-A	X 0.158741 Y 0.022253

COLOUR WHEEL 2			
NO.	DESCRIPTION	PART NUMBER	XY COORDINATES
1	Open		
2	G-7B Colour filter - CTO	12000044-A	X 0.419125 Y 0.387084
3	G-7B Colour filter - Dark Magenta	12000043-A	X 0.506598 Y 0.215602
4	G-7B Colour filter - Medium Magenta	12000042-A	X 0.298359 Y 0.104614
5	G-7B Colour filter - Medium Blue	12000032-A	X 0.152902 Y 0.127135
6	G-7B Colour filter - Lavender	12000037-A	X 0.216985 Y 0.048248
7	G-7B Colour filter - Light Cyan	12000036-A	X 0.166628 Y 0.223336
8	G-7B Colour filter - Light Yellow	12000038-A	X 0.426559 Y 0.535431
9	G-7B Colour filter - Deep Green	12000040-A	X 0.10636 Y 0.546889
10	G-7B Colour filter - Deep Red	12000039-A	X 0.685176 Y 0.297799

GOBO WHEEL		
NO.	DESCRIPTION	ITEM NO.
Open		
1	Split Orange/Congo - Gobo G-7B	37005031-A
2	Split colour Cyan/ White - Gobo G-7B	37005033-A
3	Double opening - Gobo G-7B	37005034-A
4	Search light - Gobo G-7B	37005029-A
5	Bar - Gobo G-7B	37005028-A
6	Frost - Gobo G-7B	37005030-A

Gobo wheel

The G-7 BeaSt comes with 7 rotatable, indexable and exchangeable* gobos, including:

- 2 split colours (open + cyan, orange + congo blue).
- 3 glass aerial gobo patterns.
- 1 frost filter.
- 1 open gobo.

Note that the G-7 Beast comes with three gobo-scroll cycles;

- Scroll through all gobo's right.
- Scroll through all gobo's left.
- Scroll back and forth no-color gobos (excluding coloured).

*See "Gobo replacement" on page 21 32.

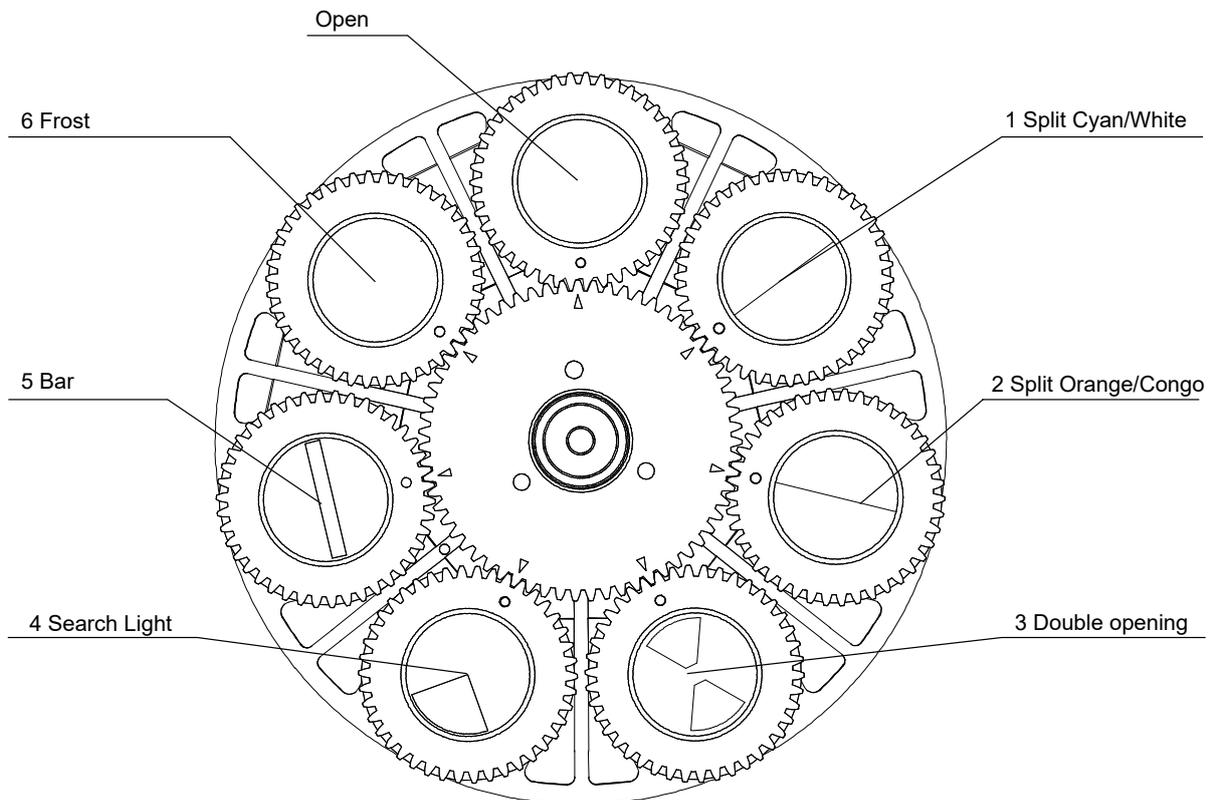


Figure 22: Identification of gobo wheel

OPENING THE FIXTURE

Opening the fixture will only be necessary when changing gobos. Note that any removal/loosening or tampering with any component marked in the fixture will result in a void of warranty.



WARNING! HANDLE COMPONENTS WITH CARE. ALWAYS WEAR SUITABLE GLOVES. EVERY TIME THE FRONT IS OPENED, THE THERMAL PADS HAVE TO BE REPLACED. (ITEM NUMBER 21400060)

BEFORE STARTING

- Be sure the fixture is in a clean, dust free, and dry environment before opening it.
- The internal thermal pads must be replaced when servicing the unit. Make sure extra thermal pads are available before opening the fixture.
- Prepare a dust free cloth to protect the reflectors when removed.
- Make sure an elevated, flat, and clean surface or riser is placed close to the front ring, so the front can rest over it while accessing the internal parts.
- Don't touch the reflectors, the colour filters, or the gobos, even while wearing gloves. This may cause permanent damage.
- Use only borosilicate glass gobos with $27.9 +0/-0.2$ mm or 27.8 ± 0.1 mm diameter size.

REMOVING THE FRONT RING

- Turn the fixture off, disconnect it from mains and allow it to cool.
- Place the fixture on a flat surface with the front facing up, and activate the tilt lock.
- Loosen up the 8 screws behind the front ring to remove it (figure 23).
- Place the front ring with the lens facing down over the elevated flat, clean and scratch-free surface. Notice that the electrical wire connecting the light source to the head is short and located left of the tilt lock (figure 24). Avoid touching the reflector, and cover it with a dust-free cloth.
- To release the front ring from the head, remove the small plate surrounding the front ring's cable (figure 18) by loosening the 2 screws, and disconnect the two wires by pressing the connectors' clip.

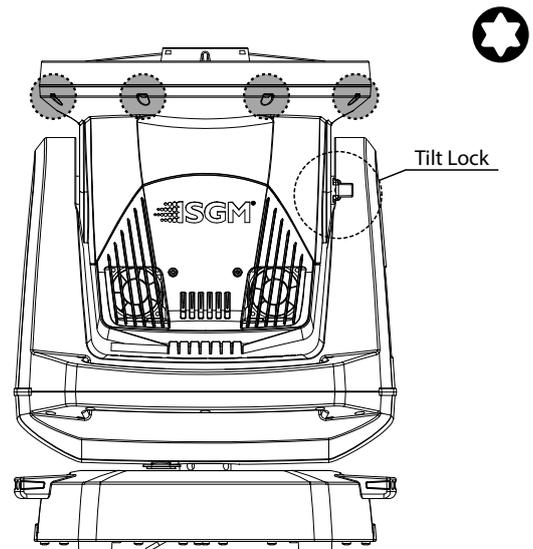


Figure 23

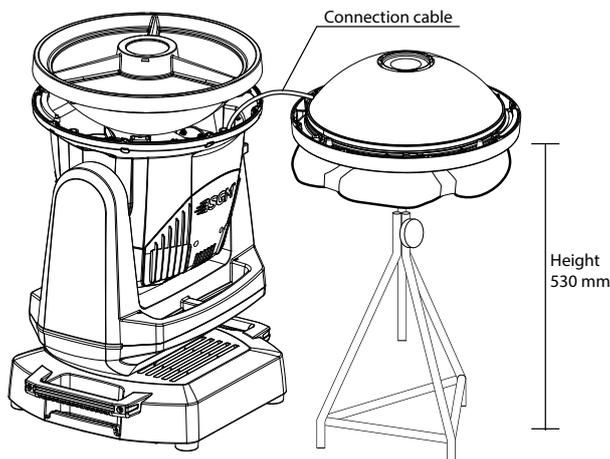


Figure 24

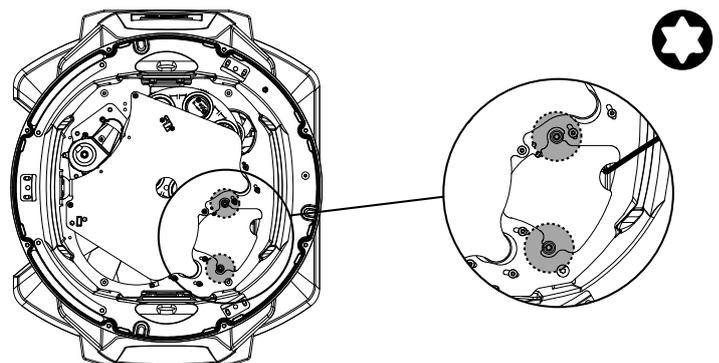


Figure 25

RELEASING THE GOBOS

1. The gobo is placed in the effect module as shown in illustration 26.
2. Turn the gobo wheel until the desired gobo wheel is accessible (see figure 27).
3. Release the gobo holder by pushing the holder down, and slide it out from the gobo wheel (figure 28). Do not touch the gobo.
4. The gobo is held in place in the gobo holder by a conical retaining spring. Unhook the end of the spring and pull the gobo out (figure 24).

PLEASE NOTE! DO NOT DETACH OR UNSCREW THE MODULE, AS IT WILL REQUIRE READJUSTMENT BY A CERTIFIED SGM TECHNICIAN TO MAINTAIN OPTIMAL OPERATION.

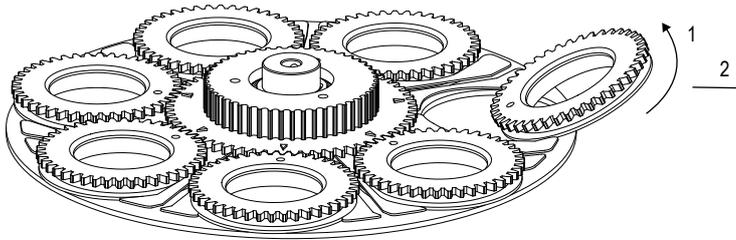


Figure 28: Gobo holder removal

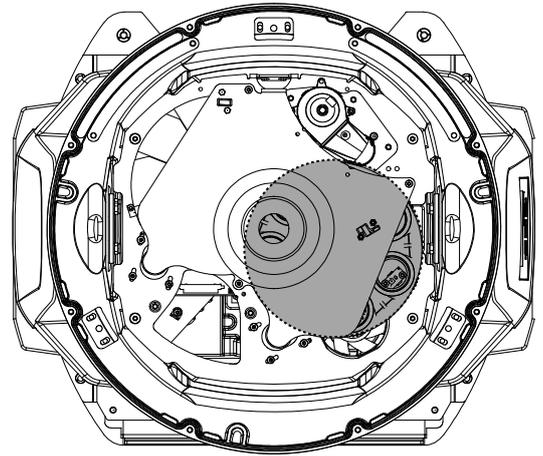


Figure 26: The gobo is under the marked area

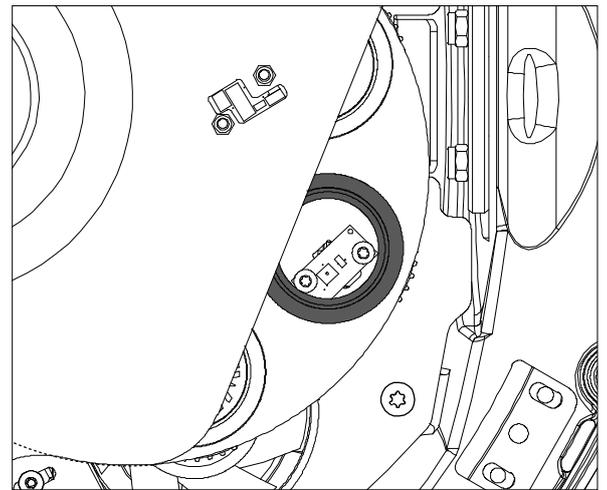


Figure 27: Turn the gobo to the position which is to be replaced

INSERTING NEW GOBOS

1. Identify the coated side of the new gobo.
 - If the gobo has a silver side, that is the coated side.
 - When there is no silver side, the identification can be made by holding an object (avoid using metallic or sharp-edged objects) close to the gobo, and checking which side shows a gap between the object and its reflection. The side showing no gap is the coated one (Figure 29).
2. Insert the new gobo into the gobo holder with the coated side towards the light source (coated side towards gobo holder) while aligning both index marks (figure 30) of the gobo and the gobo holder.
3. Insert the conical spring, with the narrow end against the gobo (figure 30 and 27) by pushing its end under the lip of the gobo holder. Check that the gobo is secured in place.

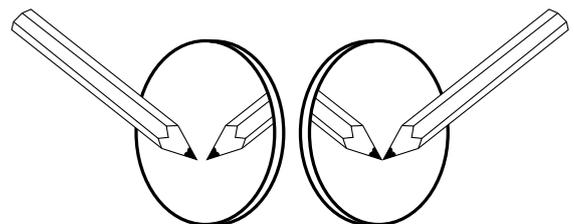


Figure 29: Locating coated side

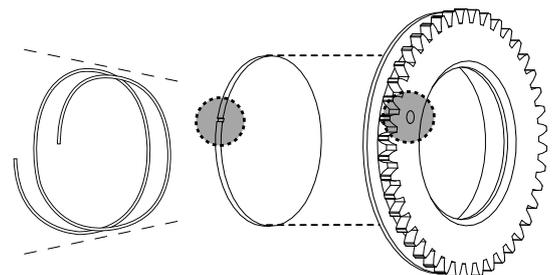


Figure 30: Mounting gobo in holder

4. Insert the gobo holder into the gobo wheel and align the index marks (figure 31). All index marks around the wheel have to be aligned to the same position.
5. If necessary, continue replacing gobos one by one as described.
6. Reassemble the fixture (see page 33).

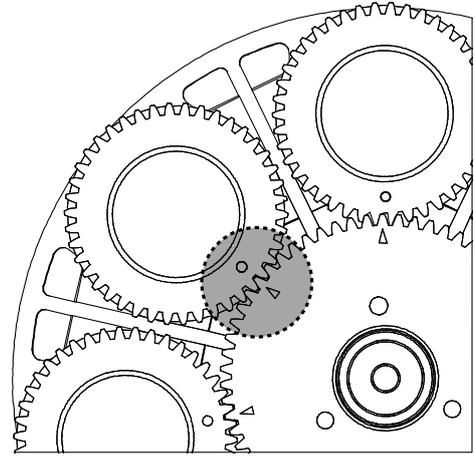


Figure 31: Alignment marks

REINSTALLING THE FRONT RING

1. Before reinstalling the front ring, the thermal pads have to be replaced (fig. 32). Clean the thermal sockets thoroughly before installing the new ones. For more information on how to replace G-7 BeaSt gobos and to order thermal pads, please contact support@sgmlight.com

Thermal pads order number: 21400060

2. When mounting the front ring, cross-tighten the permabond treated screws as illustrated on figure 33. Make sure to tighten the screws with increasing torque over three cross-tightening sequences to ensure the correct ingress protection

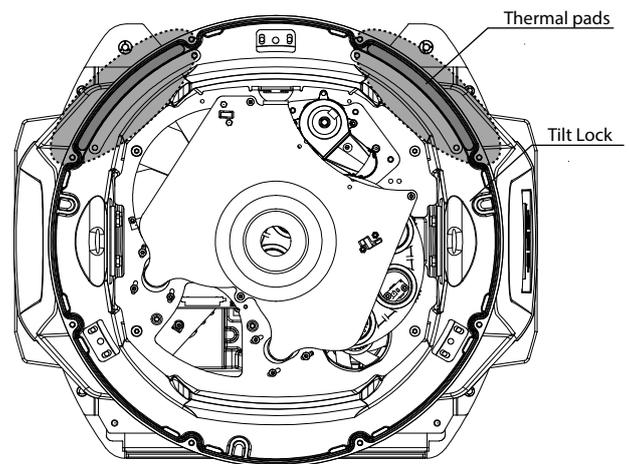


Figure 32 Thermal pads to be replaced

PLEASE NOTE! WHEN ASSEMBLING THE G-7 BEAST AFTER GOBO OR COLOUR WHEEL REPLACEMENT, IT IS RECOMMENDED TO USE PERMABOND A1044 FOR ALL SCREWS AND TO TIGHTEN WITH THE CORRECT TORQUE.

FRONT RING TORQUE: 1NM

- 1st: 0.3 Nm
- 2nd: 0.6 Nm
- 3rd: 1.0 Nm

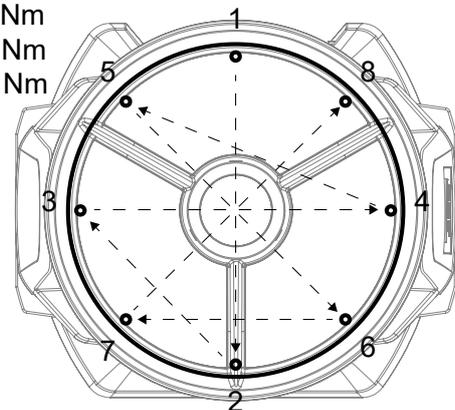


Figure 33 Criss-cross mounting

POLYTETRAFLUOROETHYLENE MEMBRANE

The G-7 Beast includes an expanded polytetrafluoroethylene membrane, which allows the fixture to equalize air pressure. In order to vacuum test the fixture, the membrane has to be removed:

1. Turn the fixture off, disconnect it from mains and allow it to cool.
2. Place the fixture on a flat, level surface, with the front facing up.
3. Be sure that the tilt lock is located at the right and is activated.
4. Remove the back cover by loosening its 2 screws (figure 34).
5. The membrane is located at the right (figure 35).

For more information on how to vacuum test the G-7 Beast, please contact support@sgmlight.com

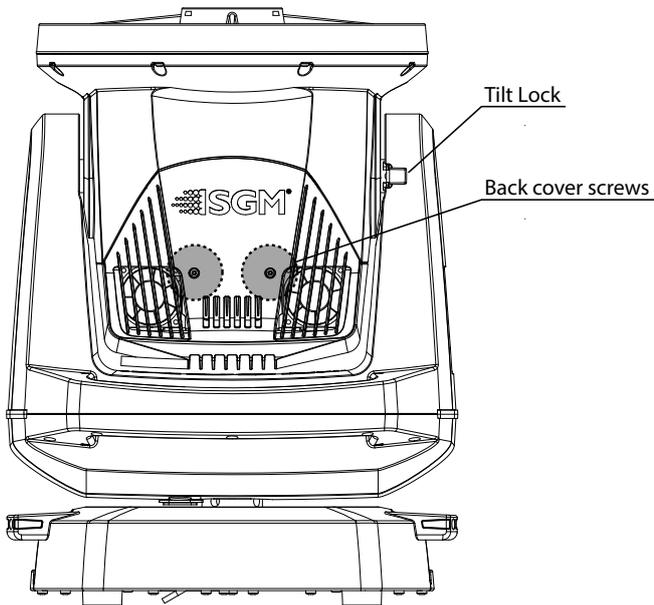


Figure 34: Back cover screws

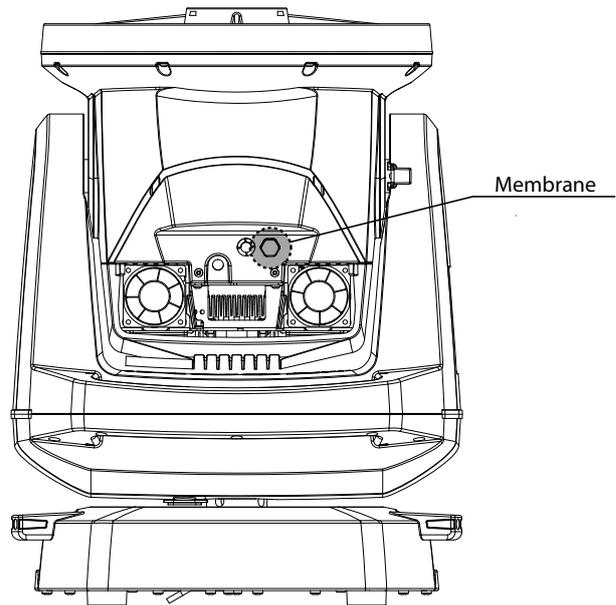


Figure 35: Membrane

MODULE AND LENS WARRANTY

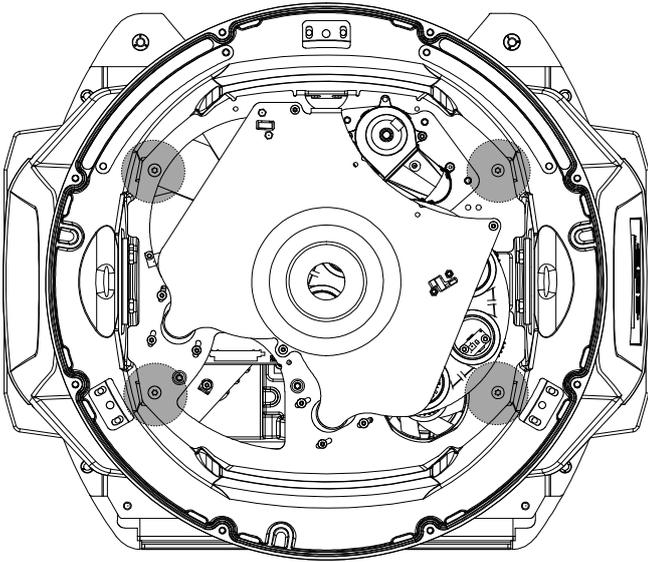


Figure 36: Illustration of screws for BeaSt module

Due to the careful calibration of the cube and lens, it is not allowed to take these apart or remove from the fixture. If this is done, the warranty of the product will be void, and a significant loss of light quality might occur. If you change a gobo, make sure to follow "Gobo replacement" on page 21. The screws will be marked with yellow markings to ensure that they are not loosened by accident. Breaking this seal will result in the void of warranty for the fixture.

The module is attached with four screws through the baffle plate. These are marked in the fixture with a yellow seal (Figure 36).

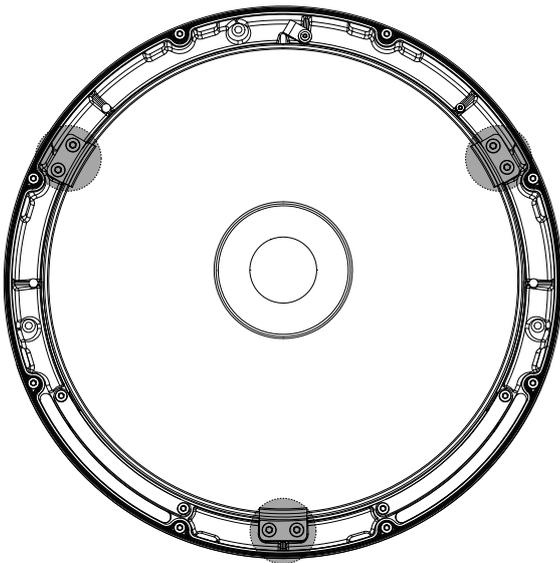


Figure 37: Illustration of screws for the BeaSt Lens

The module is attached with four screws through the baffle plate. These are marked in the fixture with a yellow seal (Figure 37).



Figure 38: SGM Vacuum Test Kit

SGM VACUUM TEST KIT

The Vacuum Test Kit is an accessory suitable for all SGM IP-rated fixtures, made for testing the IP integrity upon reassembly.

In order to ensure the IP-rating of the i-6 Series, it's highly recommended that the fixture is always vacuum tested after installing or swapping any part that might compromise the IP-rating, e.g., swapping the front lens.

SGM disclaims liability for any damage occasioned by the non-use, or inability to use, the vacuum test kit after reassembling the fixture.



Figure 39: SGM Uploader Cable

USB - XLR UPLOADER CABLE

The SGM USB to DMX cable is an accessory used mainly to update the fixture with the latest SGM firmware. See below how to update the fixture with the latest firmware.

Both the SGM Uploader cable and the SGM Uploader cable POI are also used for controlling the DMX values channel by channel through the Firmware Uploader Tool software (available for download at www.sgmlight.com)

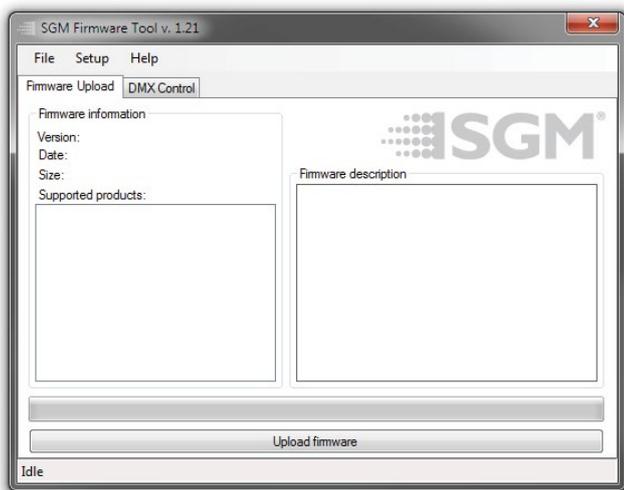


Figure 40: SGM Uploader cable POI

USB - POI UPLOADER CABLE

The SGM USB to DMX cable is an accessory used mainly to update the fixture with the latest SGM firmware. See below how to update the fixture with the latest firmware.

The SGM Uploader cable is also used for controlling the DMX values channel by channel through the Firmware Uploader Tool software (available for download at www.sgmlight.com).



FIRMWARE UPDATES

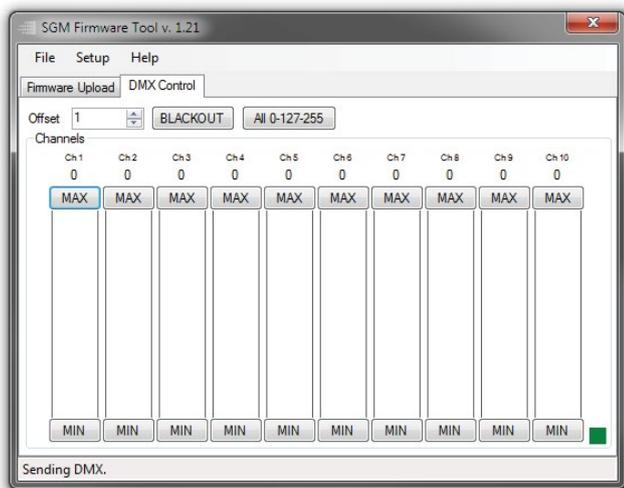
The firmware installed in the fixture can be identified in different ways:

- When powering on the fixture, the display shows the current installed firmware version (only standard).
- Go to INFO → FIRMWARE VERSION (only standard).
- Through RDM.

We recommend that the fixture's firmware is always up-to-date. The latest firmware version is available for download under the respective product at www.sgmlight.com.

To update your G-7 Beast with the latest firmware, use an SGM USB 5-Pin-XLR uploader cable, and a Windows-based computer with the SGM Firmware Tool software installed (available for download at www.sgmlight.com).

Additionally, the Firmware Tool software offers a simple DMX controller, featuring 512 DMX channels for test purposes (fig. 11).



CLEANING

SGM fixtures with IP66 rating do not need any cleaning procedures inside the fixture. However, cleaning the front lens may be needed to achieve the maximum light output after exposure to dust, sand, or dirt. Exterior housing can also be cleaned to obtain a better look. To maintain adequate cooling, fans must be cleaned periodically.

Whenever necessary, clean the G-7 Beast using a soft cloth dampened in water. For the front lens the front lens use regular glass cleaner. For thorough cleaning of plastic and metal exterior, use plastic cleaner such as SONAX PRO-FILINE Interior Plastic Cleaner. Do not use products that contain solvents, abrasives, or caustic agents for cleaning, as they can cause damage to hardware, cables, and connectors. Consult www.sgmlight.com or contact SGM Light support if you have any questions about cleaning and maintenance.

Cleaning will vary greatly depending on the operating environment and installation. It should therefore be checked at frequent intervals within the first few weeks of operation to see how often cleaning is necessary.

MAINTENANCE SCHEDULE G-7

ITEM	MAINTENANCE
Outer fan cover screws ¹	Inspect every other year starting at year two.
Internal sun damage behind lens ²	Inspect each year.
LED engine fans and screws ³	Inspect and clean each year.
DMX and power connections	Inspect every other year starting at year two.
Outer surfaces, hardware, gaskets ⁴	Inspect each year.
Outer lens	Clean as needed.

MAINTENANCE NOTES

- 1 - Thread-locker must be used if replacing or re-installing hardware. Consult SGM authorized service center for instructions and further information.
- 2 - Internal parts can sometimes be subjected to overheating due to magnification of sunlight. Look for discolored or deformed components.
- 3 - In rough service environments such as with dust or fog/haze media in the air, inspect fans every 6 months at minimum.
- 4 - If any part is cracked, no matter the size, contact SGM .

CLEANING

SGM fixtures with IP66 rating do not need any cleaning procedures inside the fixture. However, cleaning the front lens may be needed to achieve the maximum light output after exposure to dust, sand, or dirt. Exterior housing can also be cleaned to obtain a better look. To maintain adequate cooling, fans must be cleaned periodically.

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Cleaning will vary greatly depending on the operating environment and installation. It should therefore be checked at frequent intervals within the first few weeks of operation to see how often cleaning is necessary.

ORDERING INFORMATION

Please note: the products listed below are subject to change without notice.

G-7 BeaSt fixtures

G-7 BeaSt, Std, BL	P/N: 80103000
G-7 BeaSt, Std, WH	P/N: 80103001
G-7 BeaSt, Std, CU	P/N: 80103002
G-7 BeaSt, POI, BL	P/N: 80203000
G-7 BeaSt, POI, WH	P/N: 80203001
G-7 BeaSt, POI, CU	P/N: 80203002

The G-7 BeaSt can be ordered in any RAL colour. Contact your local SGM dealer for ordering customized colour housings or for more information.

G-7 BEAST ACCESSORIES

2 m (78 in.) power cable with IP connector	P/N: 07860275
Omega bracket with 1/4-turn fasteners, BL/WH	P/N: 83060602/83061206
Omega bracket POI, BL/WH	P/N: 83060623/83060624
SGM USB uploader cable	P/N: 83062011
SGM USB uploader cable POI	P/N: 83062067
Flight case for 2 pcs G-7 Series	P/N: 82051020

G-7 BEAST CONSUMABLES

Thermal pads	P/N: 21400060
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SUPPORT HOTLINE

SGM offers 24/7 technical support hotline.

Worldwide: +45 3840 3840

US: +1 407-242-6217

support@sgmlight.com

APPROVALS AND CERTIFICATIONS

Conforms to 2014/35/EU: Low Voltage Directive
Conforms to 2014/30/EU: EMC Directive
Conforms to 2011/65/EU: RoHS2 Directive
Conforms to ANSI/UL Std. 1573
Certified to CSA Std. C22.2 No. 166
Conforms to UK SI 2016 No. 1101: The Electric Equipment (Safety) Regulations 2016
Conforms to UK SI 2016 No. 1091: Electromagnetic Compatibility Regulations 2016
Conforms to UK SI 2012 No. 3032: Restriction of the Use of Certain Hazardous Substances
in Electrical and Electronic Equipment Regulations 2012 (RoHS2)

The information in this document is subject to change without notice. For the latest information, visit www.sgmlight.com.





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