# USERMANUAL Q-7

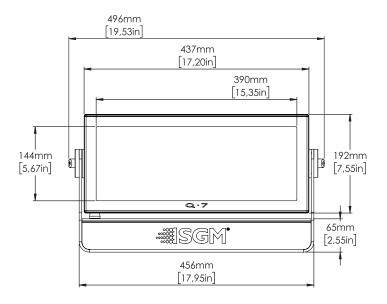


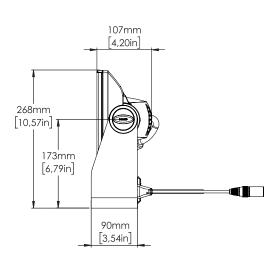


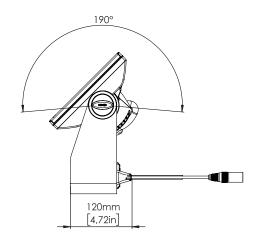


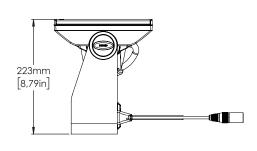
## **DIMENSIONS**

## STANDARD VERSION







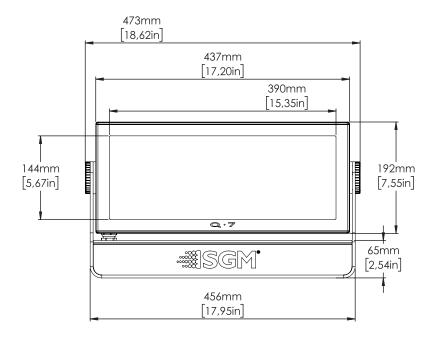


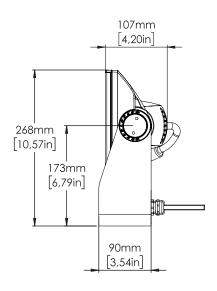
All dimensions in millimeters and inches. Drawing not to scale

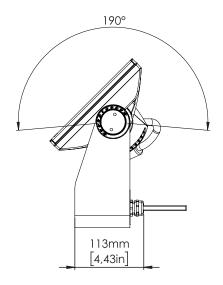
This manual covers installation, use, and maintenance of the SGM Q Series. A digital version is available at www.sgmlight.com or upon request via support@sgmlight.com. The information in this document is subject to change without notice. SGM and all affiliated companies disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss, or any other loss occasioned by the use of, inability to use, or reliance on the information contained in this manual. The SGM logo, the SGM name, and all other trademarks in this document perwtaining to SGM services or SGM products are trademarks owned or licensed by SGM, its affiliates, and subsidiaries. This edition applies to firmware version 2.23 or later.

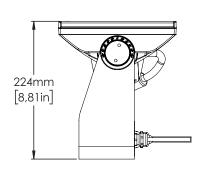
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## **POI VERSION**









All dimensions in millimetres and inches. Drawing not to scale

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## WARNING! READ THE FOLLOWING SAFETY PRECAUTIONS CAREFULLY BE-FORE UNPACKING, INSTALLING, POWERING OR OPERATING THE DEVICE.



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

Les fixtures SGM sont impropre 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 inhérent.



## 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.
- $\cdot \;\;$  Install only in accordance with applicable building codes.
- Ensure a minimum clearance of 0.3 m (12 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 =  $42^{\circ}$ C ( $108^{\circ}$ F). STEADY STATE =  $48^{\circ}$ C ( $118^{\circ}$ F).



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

- $\boldsymbol{\cdot}$  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 4 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 SGM luminaires should regularly clean those parts of the luminaire directly exposed to the elements, such as the external housing and front lenses. Additionally, all owners of SGM luminaires must periodically check the external housing of the luminaire for structural breaks, components in bad shape, cracked lenses, or loose screws. To ensure proper operation, but also to prevent the risk of potential accidents, do not use the luminaire if the lens, housing, or power cables are damaged. If parts of the luminaire appear to be missing, cease use immediately and contact SGM support.



## WIRING AND CONDUIT/ CONTAINMENT

SGM luminaires supplied with power and data cable leads are not intended for installation in permanently installed conduit or containment. When installing luminaires 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 luminaires 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**

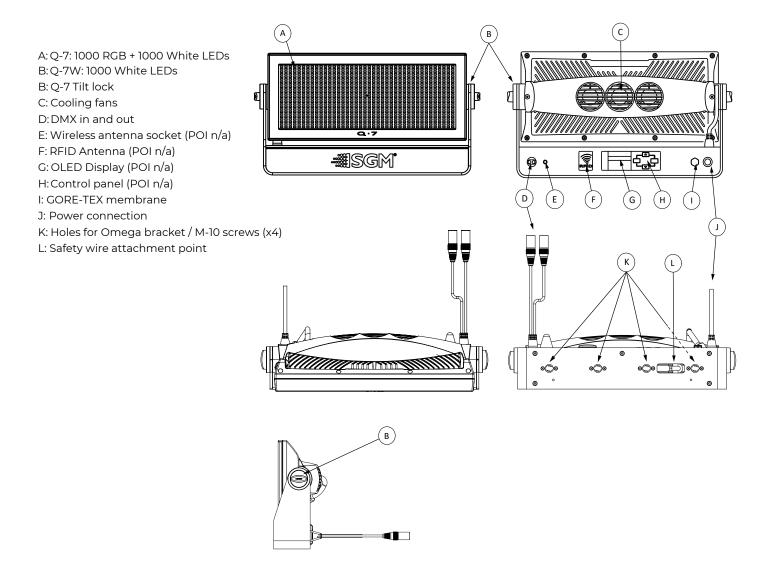
When using electrical equipment, basic safety precautions should always be followed including the following:

- · Do not mount near gas or electric heaters.
- Permanently installed equipment should be mounted in locations and at heights where it will not readily be 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 luminaire shall, under no circumstance, be covered with insulating material of any kind.

## READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

## **INSTALLATION STANDARD FIXTURE**

## **IDENTIFICATION AND TERMINOLOGY**



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

## **UNPACKING**

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

The fixture is shipped with:

- 2 x Omega brackets with 1/4-turn fasteners (standard only).
- 1 x Mounting bracket with fasteners (standard only).
- 1 x Omni / CRMX™ Antenna (standard only).
- · Safety information leaflet.

## APPLICATION CONSIDERATIONS

The standard fixture is IP65-rated and is designed for both indoor and outdoor events. This means that it is protected from:

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

When using standard fixtures outdoors or in wet locations, ensure that:

- The DMX connection out of the last fixture in a chain is properly sealed, in accordance with the ingress protection (IP) requirements.
- The DMX out of the last fixture is terminated with a 120 Ohm resistor between pin 2 and 3 (as per RS485 standards).

When selecting a location for the device, ensure that:

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

## TRANSPORT HANDLING

Always use the supplied packaging or suitable flight case for transportation and storage. Never carry the fixture by connected cables or wires.

## RIGGING

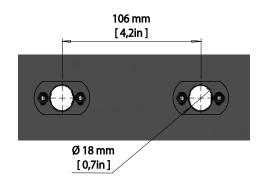


Figure 1: Locking points

The fixture may be installed in any orientation, on the ceiling or on a wall surface.

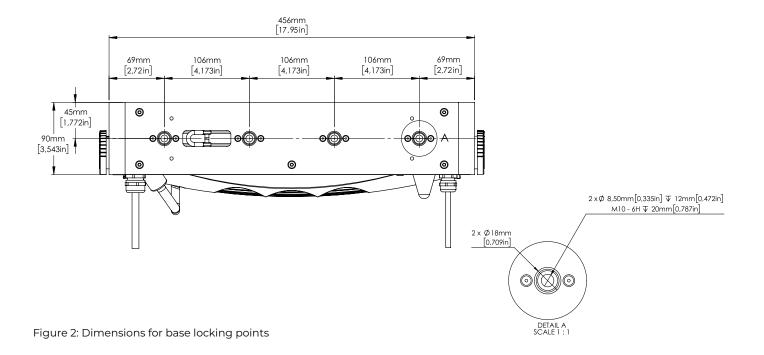
When installed horizontally with a downward beam-angle, water or dirt can potentially pool in the fan wells. Under normal operation the moisture will evaporate.

In locations with high rainfall, consider locating the fixture under cover or an overhang, or modify the position and orientation of the fixture to minimize pooling.

All SGM fixtures have locking points in the base for installation and rigging. In both standard and POI fixtures, the distance between the points from center to center is always 106 mm. Standard versions include 1/4 turn fasteners to mount SGM omega brackets. POI versions come with M-10 captive nuts for M-10 screws.

Always use the supplied omega bracket to rig a standard fixture. Lock the bracket with the 1/4-turn fasteners.

PLEASE NOTE! 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 BRACKETS.



## RIGGING PROCESS USING SGM OMEGA BRACKETS

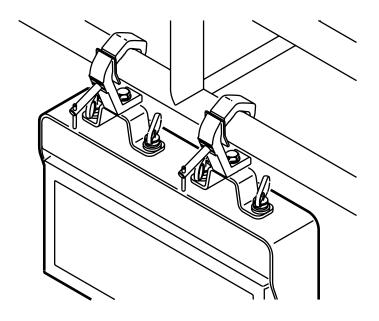


Figure 3: Installing the Q-7

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

- Check that the clamp/bracket is undamaged. Supporting structure should be capable of bearing at least 10 times the weight of all installed fixtures, lamps, cables etc.
- 2. Bolt a clamp or bracket securely to the omega bracket with a M12 bolt (min. grade 8.8) and a lock nut. For longer term installations, choose outdoor rated hardware.
- 3. Align the omega bracket with the fixture base. For standard Omega Bracket, insert the fasteners into the fixture base bracket, and turn both levers a full 1/4 turn clockwise to lock. When using the POI Omega Bracket, insert the included M-10 screws through the bracket holes and tighten them with a M-10 key until they are fully attached to the base.
- 4. Hang the fixture on a truss or other structure. Tighten the clamp/bracket.
- 5. Verify that there are no combustible materials, cables, or surfaces to be illuminated within 0.3 m (12 in.) of the fixture.
- 6. Check that there is no risk of the head/yoke colliding with other fixtures or structures.



WARNING! ALWAYS USE MIN. 2 OMEGA BRACKETS WHEN RIGGING THE FIXTURE.



WARNING! ALWAYS SECURE AN ELEVATED FIXTURE WITH A SAFETY WIRE. 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/HAN-DLE FOR SECONDARY ATTACHMENT.

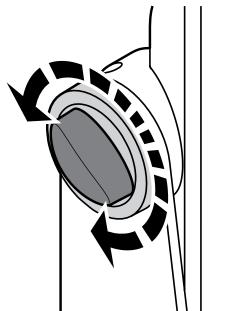


Figure 4: Safety wire attachment point

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

- · 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) = 30 cm (12 in.).

## TILT LOCK



The fixture head can pivot through 190 °.

To adjust the tilt angle in standard versions:

- · Loosen the two tilt wing-screws (one on each side) by turning them counter-clockwise.
- · Tilt the fixture to the angle desired and hold it.
- · Lock the position by re-tightening both tilt lock screws clockwise.

## **CAUTION!**

ALWAYS LEAVE A FIXTURE TO COOL OFF FOR 15 MIN-UTES AFTER OPERATION BEFORE HANDLING.

POWER REQUIREMENTS

Figure 5: Standard tilt lock

The fixture can operate on any 208-240 V, 50/60 Hz AC mains power supply, and draws a maximum of 465 W.

Connect the fixture to AC power by installing a power connector to the bare end side of the supplied power cable. Connect the powercon twist-lock connector side to the fixture. The fixture must be grounded/earthed and be able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection.

Wire	Color	Symbol	Conductor
	Black	L	live
	White	N	neutral (L2)
	green/yellow	<u>+</u> or <u>+</u>	ground (earth)

Figure 6: Connecting AC Power

The power cable color coding is given in figure 6:

- · Connect the black wire to live
- · Connect the white wire to neutral (or phase 2 on 208V supplies)
- · 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.

For permanent installations, a qualified electrician must wire the mains cable directly to a suitable branch circuit and as per local code. The junction's ingress protection (IP) rating must be suitable for the location. Always use a junction box with a proper IP class suitable for the environment.

After connecting the fixture to power, run the on-board test by selecting the option "TEST→ SELFTEST" in the menu, to ensure that the fixture and each LED are functioning correctly. (POI versions are tested through RDM.)

PLEASE NOTE! THE PROTECTIVE CAPS MUST BE SECURELY MOUNTED ON ANY UNUSED CONNECTORS, IN OR-DER TO MAINTAIN INGRESS PROTECTION (IP RATING).

## **CAUTION!**

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

## CONNECTING DATA

The fixture is controllable using a DMX control device, and it can be connected using either a DMX cable, or via the fixture's built-in CRMX wireless receiver system (POI only).

When using a cabled DMX system, connect the DMX-In cable to the input connector and DMX-Out cable to the output, both on the rear of the fixture's base (chassis mounted male and female 5-pin XLR plugs). For outdoor installations, use only IP-rated XLR connectors suitable for outdoor use. Terminate the DMX out cable of the last fixture in the data link with a 120 ohm DMX termination.

Note that SGM fixtures provide a passive DMX Thru signal as DMX Out, instead of an active output signal.

## PLEASE NOTE! FOR POI VERSIONS, PLEASE REFER TO "INSTALLATION POI FIXTURE"

## ENABLING THE WIRELESS CONE ANTENNA RECEIVER (POI N.A.)

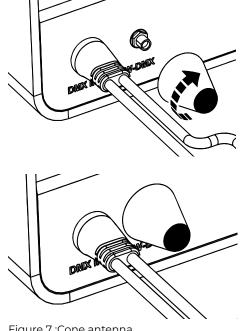


Figure 7: Cone antenna

The wireless cone antenna is factory mounted and is recommended for short-range wireless operation. For long range wireless operation, the CRMXTM wireless receiver is recommended (see below).

Before you enable the wireless cone antenna, ensure that there is no DMX cable connected to the fixture.

Go to SETTINGS → WIRELESS DMX → ENABLE in the menu to enable wireless DMX, and to SETTINGS → WIRELESS DMX→ WIRELESS LED STATUS to confirm that a data connection has been established. The wireless cone antenna operates at a frequency of 2.4 GHz, so ensure that the DMX transmitter is configured to operate in this range.

The cone antenna has to be connected to the fixture when using cabled DMX connection, or when CRMXTM antenna isn't connected, to maintain IP rating.

## ATTACHING THE CRMX™ WIRELESS ANTENNA

The CRMX™ wireless receiver antenna is an included accessory and is recommended for long-range wireless operation.

Before connecting the wireless receiver, ensure that there is no DMX cable connected to the fixture. For long-range operation, replace the factory default cone antenna with the supplied wireless  $CRMX^{TM}$  antenna to the connector on the back of the fixture.

Go to SETTINGS → WIRELESS DMX → ENABLE menu to activate wireless DMX, and to SETTINGS → WIRELESS DMX → WIRELESS LED STATUS" to confirm that a data connection has been established.

CRMX™ operates at a frequency of 2.4 GHz, so ensure that the DMX transmitter is configured to operate in this range.

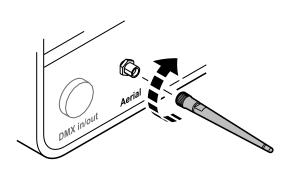


Figure 8: CRMXTM Wireless receiver

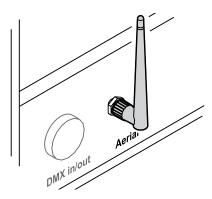


Figure 9: CRMXTM Wireless receiver

## CONNECTING A WIRELESS TRANSMITTER

The fixture is designed to look for wireless transmitters in 'connect' state when this option is not yet enabled. The fixture comes tested for wireless functionality from the factory, therefore the beginning of the pairing process is disconnect from the factory wireless DMX transceiver.

To connect the fixture to a wireless transmitter:

- 1. Log off the currently paired wireless transmitter. Go to SETTINGS → WIRELESS DMX → LOG OFF in the menu. Fixture confirms logged off.
- 2. Press the connect button on the wireless transmitter.
- 3. Confirm that the fixture has paired with the wireless transmitter.

## PLEASE NOTE! FOR POI VERSIONS, REFER TO ""WIRELESS DATA CONNECTION" ON PAGE 18" .

## SIGNAL PRIORITY

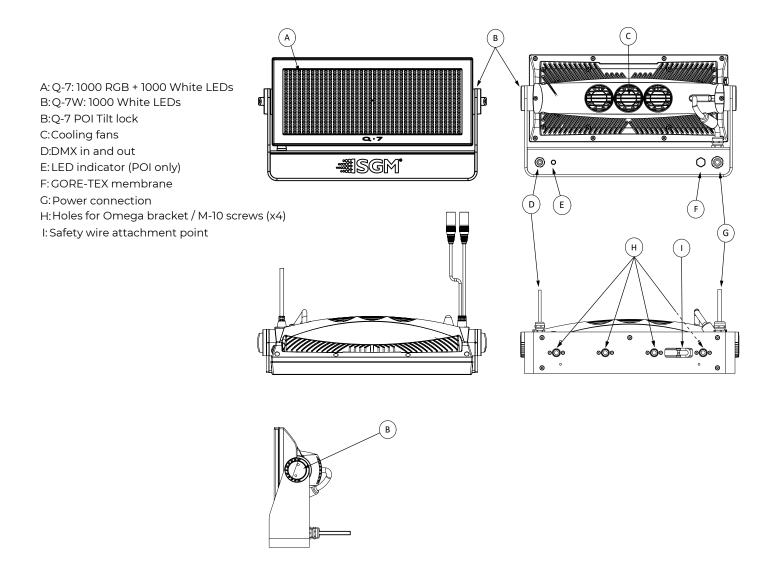
The fixture can be paired to an active wireless transmitter simultaneously when connected to a cabled DMX. The fixture will prioritize cabled DMX over wireless DMX.

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

PLEASE NOTE! IN POI VERSION WITH WIRELESS, THE DMX SIGNAL STRENGTH IS CHECKED THROUGH RDM.

## **INSTALLATION POI FIXTURE**

## **IDENTIFICATION AND TERMINOLOGY**



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

PLEASE NOTE! POI FIXTURES SHOULD BE PRE-SET WITH ANY CUSTOM PROGRAMMING **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.

Thefixture is shipped with:

- · 1x Spanner with magnet (POI only).
- · 4 x M-10 screws (POI Only).
- · Safety information leaflet.

## **APPLICATION CONSIDERATIONS**

The POI fixture is IP66-rated and designed for use in outdoor installations. 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.

## 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	Ν	neutral
	green/yellow	<u>+</u> or <u>+</u>	ground (earth)

Figure 10: Connecting AC Power

The power cable color coding is shown to the left:

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

## CONNECTING TEMPORARY SIGNAL

The fixture is compatible with DMX512 (ANSI E1.11 – 2008) only. It can be connected using either the SGM POI up-loader cable, or via the fixture's built-in CRMX wireless receiver system.

STEP 1: Download and install the SGM RDM Addressing tool.

< https://sgmlight.com/products/rdm-addressing-tool >

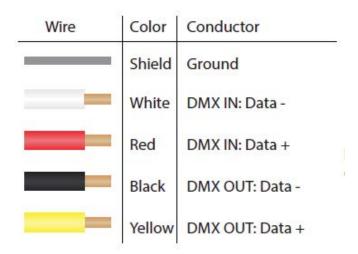
STEP 2: Connect the bare end data cable to the POI Up-loader cable for POI fixtures.

STEP 3: Connect the USB up-loader cable for POI fixtures to a computer with a USB Type-A port.

Step 5 Disconnect up-loader cable from computer, then disconnect up-loader cable from fixture.

Repeat Steps 2-5 for more fixtures. Multiple fixtures can be addressed and configured. Contact your SGM representative for more information on multiple fixture addressing.

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.



Figurell: Data wiring guide for setup



Figure 12: Connecting data to USB up-loader cable for POI fixtures

## SETTINGS AND FIXTURE DEFAULTS

All configuration of POI fixtures is done through the SGM Addressing Tool. The SGM 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.

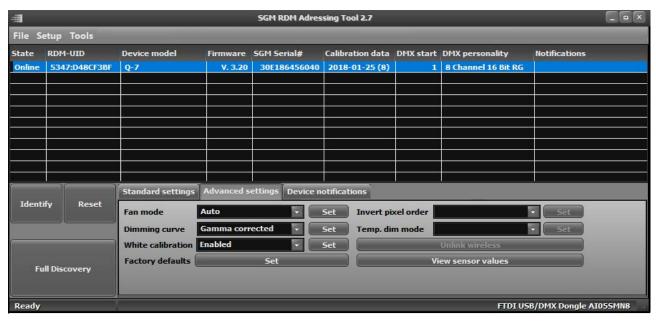


Figure 13: SGM Addressing tool

STEP 1: Launch SGM RDM Addressing Tool. 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. These modes must match the control mode in the controller which will control the fixture. Look for the LED indicator to blink to confirm setting change. DMX modes for POI and Std versions are identical. Refer to CONFIGURING THE DEVICE later in this manual for specifics for more information on fixture functions. Visit <a href="www.sgmlight.com">www.sgmlight.com</a> to see all DMX charts available under the respective product, or upon request via <a href="mailto:support@sgmlight.com">support@sgmlight.com</a>.

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.

Factory Defaults are as follows:

- · DMX address = 1
- · Dimming curve = Gamma corrected
- DMX mode = Default mode (6 channel CTC)
- · Startup mode = DMX
- · Display saver = Display dim
- · Flip display = Disable

- · Fan mode = Standard
- Refresh rate = Dimming optimized
- Master slave = Slave
- · White calibrated = Calibrated
- RDM device label set to = Fixture type name
- · Internal programs = Cleared

## PLEASE NOTE! REMOTE DEVICE MANAGEMENT (RDM) REQUIRES A CORRECTLY INSTALLED AND TERMINATED DMX CABLE.

When setting addresses through RDM and using USB dongles, it may be necessary to disable "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 only address one fixture at a time.

## WIRELESS DATA CONNECTION

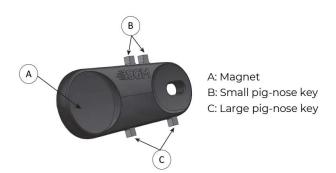


Figure 14: POI Spanner

In POI fixtures with wireless, it is necessary to pair the fixture with a new transmitter (by default, the fixture is linked to the SGM factory transmitter during the testing and QA process).

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

STEP 1: Using a SGM magnetic spanner tool, 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 to a new transmitter.

STEP 2: Select "connect" or "link" on a wireless DMX transmitter. The transmitter and the internal SGM receiver should now be linked together.

Repeat the process to link the fixture to another transmitter.

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

## LED INDICATOR BEHAVIOUR

The fixture displays the status of connections, setting and errors through the LED indicator. It can have different colors and three possible stages: static, flashing, or off.

Once configuration is complete, temporary power and data can be disconnected.

- · The LED indicator is located next to the DMX input cable, and shows the current status of the fixture.
- · The LED indicator has two different colors and three possible stages: static, flashing, or off.
- · Static green: fixture is powered and receiving DMX signal.
- · Flashing green: fixture is powered on without receiving DMX signal.
- Static/flashing red: an error message is stored; review via the SGM RDM Addressing Tool, reboot the fixture, or contact SGM support for diagnostic help.
- · Off: fixture is off or indicator LED is set to auto dimming (set via RDM).

## MOUNTING

All SGM POI fixtures have M10 size attachment points to mount the supplied brackets or directly to a structure.

The POI wash fixture may be installed in any orientation and it might take up to two brackets per fixture. Depending on the structure, please use appropriate and secure methods for mounting the Omega brackets.

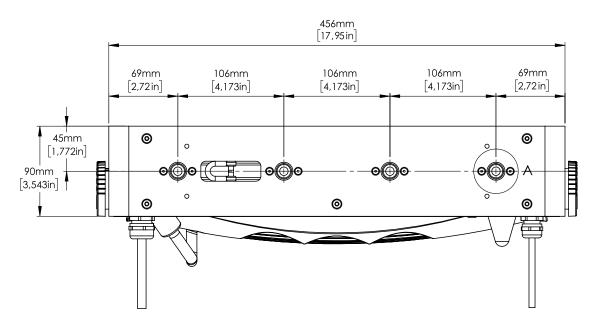


Figure 15: POI base with dimensions

## **BRACKETS**

There are four bracket choices available from SGM:



Flat bracket



Wall mount bracket

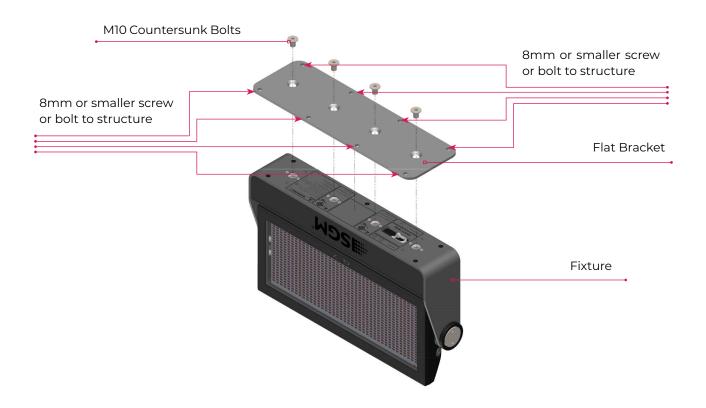


Omega bracket



Universal bracket

## FLAT BRACKET ATTACHMENT



## OMEGA BRACKET ATTACHMENT



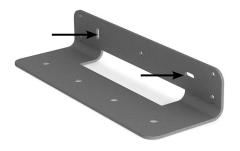
## UNIVERSAL BRACKET ATTACHMENT



PLEASE NOTE! THE UNIVERSAL BRACKET HAS DIFFERENT SLOT CURVES FOR 5/6/7/8 SERIES FIXTURES AND 10 SERIES FIXTURES. WHEN ATTACHING THE BRACKET TO THE FIXTURE, MAKE SURE THE SLOT WITH "6/8 SERIES" LABEL IS FACING AWAY FROM THE CENTER OF THE FIXTURE. BOLTS TO MOUNTING SURFACE WILL USE THIS SLOT.

## WALL BRACKET ATTACHMENT

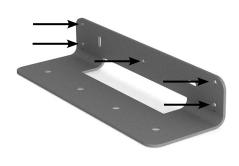
## Medium 6/8 Series



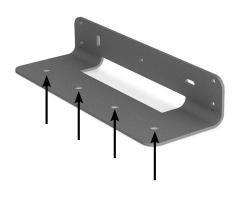
Attach and align the bracket to a surface. The shorter side of the bracket is the side that attaches to a wall surface. There are two slots provided to align the bracket. Using appropriate fasteners, align and level the bracket. Then tighten to the surface.

Using the holes shown, use appropriately rated fasteners for both location and surface material and construction. Fasteners should be no larger than M6.

Alignment Slots



Wall Attachment Slots



Fixture Attachment Slots



Use the supplied countersunk M10 bolts to secure the fixture to the bracket. Ensure cabling is not pinched or trapped when mounting fixture.

PLEASE NOTE! REMOVE RUBBER FEET FROM FIXTURE IF SO EQUIPPED PRIOR TO MOUNTING.

## POI TILT LOCK

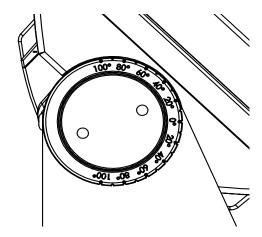
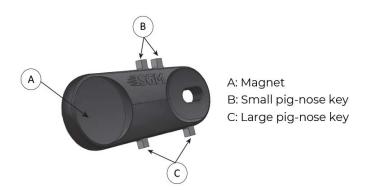


Figure 16: P-6 POI Tilt lock

The fixture can be tilted in any orientation. To adjust the tilt angle in POI fixtures:

- Loosen the two tilt lock kobs (one on each side) by turning them counter-clockwise using the small pig-nose key. Knobs are loosened by turning counter-clockwise.
- · Tilt the fixture to the angle desired and hold it.
- Lock the position by tightening the tilt lock knobs clockwise with the same pig-nose key.



The POI fixture includes a spanner with a magnet, which function is to establish connection between the fixture and the wireless transmitter.

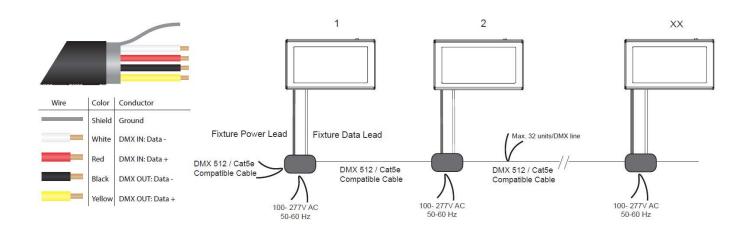
The spanner also has two types of pig-nose keys used for tilt adjustment in POI fixtures. Depending on the type of fixture, either use the large or the small pig-nose keys.

Figure 17: POI Spanner

## **CAUTION!**

ALWAYS LEAVE A FIXTURE TO COOL OFF FOR 15 MINUTES AFTER OPERATION BEFORE HANDLING.

PLEASE NOTE! POI FIXTURES MUST BE TERMINATED IN SUITABLY IP RATED ENCLOSURES, AND WITH CABLE CONNECTIONS MEANT FOR DIGITAL DATA SIGNAL.



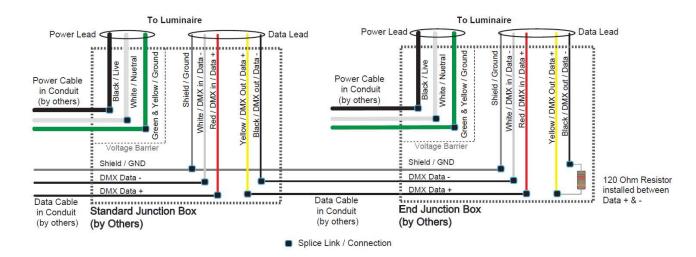


Figure 18: Connecting DMX and AC Power in POI

The last fixture in line must have a resistor installed between the yellow and black data out wires. This is to terminate the DMX signal, like to RS-485 signal protocol.

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

For permanent installations, have a qualified electrician wire the mains cable directly to a suitable branch circuit. 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 on the same DMX link. Additional fixtures will overload the link.
- The last fixture must always be fitted with a DMX termination plug to the fixtures DMX out.
- SGM fixtures provide a passive DMX Thru signal as DMX Out, instead of an active output signal.

## **WIRELESS**

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 during the testing and QA process).

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

- STEP 1: Using a SGM magnetic spanner tool, 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 to a new transmitter.
- STEP 2: Select "connect" or "link" on a wireless DMX transmitter. The transmitter and the internal SGM receiver should now be linked together.

Repeat the process to link the fixture to another transmitter.

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

## **USER INTERFACE**

The fixture can be set up by using the control panel and OLED multi-line display on fixture's head or through RDM.

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.

The OLED display shows the current status and menu of the fixture. It is used to configure individual fixture settings and read error messages. The complete list of the menu and all commands available are listed in "Control menu".

Before turning on the fixture, make sure the power cable is properly connected. When the fixture is powered on it will boot and reset before displaying the selected operating mode and DMX start address. Navigate through the menus and options using the arrow buttons, and select items using the ENTER button.



Figure 19: OLED display and control panel

## USING THE DISPLAY PANEL

- 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.

## **SHORTCUTS**

- ESC + ENTER: Press ENTER to confirm factory defaults.
- ESC + UP: Press ENTER to start LED test.
- UP + DOWN arrows simultaneously = flip the display upside-down.

## OPERATIONAL MODE (A)

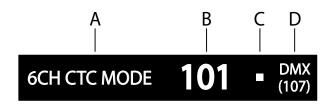
Displays the current mode (quick color, stand-alone, or DMX mode). The fixture is set by default to be controlled in DMX mode.

## DMX ADDRESS (B)

Displays the current DMX address. The DMX address is altered directly from this view.

## EXTERNAL DATA INDICATOR (C)

The DMX signal indicator will flash when the DMX signal is received.



- A Operational mode
- B DMX address
- C External data indicator (DMX)
- D External data protocol + next available DMX address

Figure 20: Display

## EXTERNAL DATA PROTOCOL (D)

Shows the external data protocol (CRMX™ or DMX).

- · When 'DMX' is displayed: the fixture responds to data received through cabled DMX.
- · When 'CRMX' is displayed: the fixture responds to data received through wireless DMX.

The next available DMX address will show immediately, depending on the fixture's DMX footprint.

## **ERROR INDICATOR**

If any errors are detected, the message 'ERR' will be flashing in the display for easy detection.

To read the error message, select ENTER → INFO → ERRORS in the menu.

## CONFIGURING THE DEVICE FOR DMX CONTROL

## **ABOUT DMX**

The fixture can be controlled using signals sent by a DMX controller on a number of DMX channels.

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

The cables can be daisy chained between the fixtures, and up to 32 fixtures can be connected on the same DMX link. Up to 300 m. (~1000ft.) of cable is achievable with high quality DMX cables. All DMX links must be terminated 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.

## **DMX START ADDRESS**

The fixture 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 fixture must be assigned its own DMX start address. For example, if the first RGBW fixture is set to 6ch CTC DMX mode with a start DMX address of 101, the following RGBW fixture in the DMX chain should then be set to a DMX address of 107. As the first fixture uses all the first 6 DMX channels, including channel 101, the next available channel is 107 (101+6=107 >> 107).

If two or more fixtures 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.

## SET/EDIT DMX ADDRESS

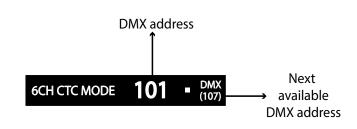


Figure 21: Display

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

See "User Interface" on page 26 for instructions on using the display panel.

The fixture also offers the option to set the DMX address through RDM.

## PLEASE NOTE! POI VERSIONS ARE ADDRESSABLE VIA RDM. SEE "POI PERMANENT OUTDOOR INSTALLATION".

## SETTING THE DMX MODE

When selecting ENTER → MODE → Select mode in the control panel, it is possible to chose the DMX mode that provides the required controls. Confirm the chosen mode by pressing 'Enter'.

## **DMX CHARTS**

The fixture operates in different DMX modes. Each DMX mode has its own DMX chart. All DMX charts are available for download at www.sgmlight.com under the respective product, or upon request via support@sgmlight.com

## FULL COLOR CALIBRATION AND COLOR TEMPERATURE CORRECTION (Q-7 ONLY)

## · Most DMX channels:

Possibility to choose between raw or white-calibrated color (6500K default) via the Control Menu (SETTINGS → WHITE CALIBRATED).

## · RGB DMX modes:

Features full color calibration (irrespective of current color setting) when 2 or 3 colors are mixed, to ensure uniform color mixing between products. Adjusting 1 color does not activate full color calibration.

## • RGB + CTC DMX modes:

Features full color calibration (irrespective of current color setting) when 2 or 3 colors are mixed, to ensure uniform color mixing between products. Adjusting 1 color does not activate full color calibration. This mode allows you to adjust the white color temperature step less from 2000K to 10000K (when RGB is at 100%).

Enabling the CTC channel (DMX value above 5) sets the white reference, of which any color will mix towards, example:

- 1. CTC is set to 182 / 71,3% = 5600K (default value).
- 2. Green + Blue at 100% = Cyan.
- 3. Red is added/faded to 100% = Cyan will fade to 5600K white.

PLEASE NOTE! IF YOU WANT TO BE ABLE TO MIX RAW RGB COLORS WITHOUT FULL COLOR CALIBRATION, SELECT A RGBW MODE AND DISREGARD THE WHITE COLOR.

## SETTING A STATIC COLOR MANUALLY

The standard fixture can be configured to display a predefined and static color.

To set up a static color select ENTER → MANUAL → QUICK COLOR.

Note that, once the MANUAL  $\rightarrow$  QUICK COLOR settings are changed, the fixture will be set, by default, to automatically start in quick color mode whenever it is powered on. This can be reset through the menu SETTINGS  $\rightarrow$  STARTUP MODE  $\rightarrow$  SELECT STARTUP MODE.

The current quick color program can always be stopped by going to:

ENTER → MANUAL → STOP PROGRAM

PLEASE NOTE! IN POI VERSIONS, CONFIGURING THE FIXTURES IS DONE BY RDM.

## USING STANDALONE OPERATION

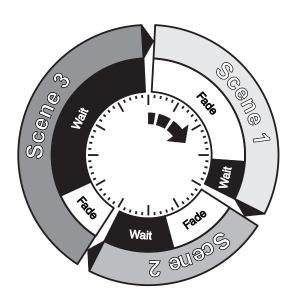


Figure 22: Standalone operation

Standalone operation is not running when the fixture is connected to a control device, but when it is pre-programmed with a series of up to 24 scenes, playing continuously in a loop. Up to three stand-alone programs can be defined and run from the menus, and one of the programs can be set to run by default whenever the fixture is powered on.

Each of the three available standalone programs contains 24 user-definable scenes with its own RGB and shutter settings.

Each scene has a definable fade-in time for the transition from one color to the next, and a wait (static) time of up to 120 minutes and 59 seconds.

To define a stand-alone program, press ENTER → MANUAL → EDITOR.

The standalone mode of the fixture's startup is enabled by selecting:

ENTER → SETTINGS → STARTUP MODE → SELECT STARTUP MODE → STANDALONE.

To select the fixture's startup program, press:

ENTER → SETTINGS → STARTUP MODE → STARTUP PROGRAM.

The chosen program will run its length cyclically whenever the fixture is powered on.

To run an internal program, go to:

ENTER → MANUAL → RUN PROGRAM.

To stop an active internal program, go to:

ENTER → MANUAL → STOP PROGRAM.

PLEASE NOTE! IN POI VERSIONS, CONFIGURING THE FIXTURES IS DONE THROUGH RDM.

## **FIXTURE PROPERTIES**

## **FACTORY DEFAULT**

DMX address = 1

Dimming curve = Gamma corrected

DMX mode = Default mode (6 channel CTC)

Startup mode = DMX

Display saver = Display dim

Flip display = Disable

Fan mode = Standard

Refresh rate = Dimming optimized

Master slave = Slave

White calibrated = Calibrated

RDM device label set to = Fixture type name

Internal programs = Cleared

## INDIVIDUAL FIXTURE SETTINGS

## Setting the dimming curve

The setting of the dimming curve will determine the fixture's behaviour, when changing the light intensity between 0% - 100%.

Linear control provides uniform adjustment throughout the control action, whereas gamma corrected dimming provides finer control at low light levels, where the eye is more sensitive to change. By default, the Q-7 Series uses gamma corrected dimming. For a uniform response, set all fixtures to the same dimming curve. To set the dimming curve, go to SETTINGS  $\rightarrow$  DIMMING CURVE in the menu.

## PLEASE NOTE! POI VERSIONS, THE DIMMING CURVE NEEDS TO BE SET THROUGH RDM.

## Flipping the OLED display (POI n.a.)

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, press ENTER and select SETTINGS → FLIP DISPLAY, or press the up and down buttons on the control panel at the same time.

## Setting the OLED display saver (POI n.a.)

By default the OLED display dims down after a short period when the control panel is not in use. It can also be set to turn off completely, ideal when a pitch-black environment is required. Pressing any key will always turn on the display or restore it to normal brightness. To configure the display settings, go to SETTINGS  $\rightarrow$  DISPLAY SAVER.

## PLEASE NOTE! TO AVOID THE RISK OF DISPLAY DETERIORATION CAUSED BY LONG TERM USAGE, IT IS RECOM-MENDED TO SELECT THE SETTING + DISPLAY OFF.

## Setting the fan mode

For operating environments where low-noise is a requirement, or where the fixture will be operating in high temperatures, it is possible to adjust the default fan speed by going to SETTINGS → FAN MODE in the menu.

## PLEASE NOTE! IN POI VERSION, THE FAN MODE ADJUSTMENT IS POSSIBLE THROUGH RDM.

## Setting the LED refresh rate (Frequency)

When using LED lighting with cameras, flickering can occur due to incompatible frequency settings which means the LEDs and the cameras is not synchronised. In order to avoid flickering and horizontal banding (rolling shutter) the Q-7 Series offers the ability to adjust the refresh rate (frequency) in order to achieve flicker-free performance.

In the Q-7 menu, go to SETTINGS → REFRESH RATE. Here you are able to set the refresh rate (frequency) of the LEDs to be

- · Dimmer optimized (low frequency), flicker can occur on cameras / highest dimming resolution.
- · High frequency optimized (low dimming resolution), flicker is unlikely to occur / low dimming resolution.
- · Custom value, from 0,2 kHz to 72,0 kHz. Adjust to a custom frequency.

It is recommended to have the Q-7 configured to run "Dimmer optimized" whenever possible to maintain the best possible dimming performance. Does flicker or horizontal banding occur, it is likely because the Q-7 is set to "Dimmer optimized" or a low custom value. To avoid these phenomenons set the refresh rate to "High frequency optimized" or adjust the refresh rate to a custom value above 0,544929 kHz (value of "Dimmer optimized"). When adjusting a custom value, you want to choose a frequency high enough to avoid flickering and/or horizontal banding, but low enough to maintain a good dimming performance. Since there are differences between camera models, exposure settings etc., the optimal refresh rate settings will differ. In order to achieve the best result, adjust the refresh rate through a preview monitor with a feed from the cameras.

## **CONTROL MENU**

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
MODE	Select Mode	-	-	Select DMX mode.
INFO	Product Type	-	-	Display product type.
	Firmware Version	-	-	Display installed firmware version.
	Serial Number	-	-	Display SGM serial#.
	RDM ID	-	-	Display RDM ID (unique RDM ID for identification).
	DMX View	_	_	Display recieved DMX levels.
	Temperatures		_	Display fixture temperatures (Mainboard and LED panel).
	MB: LED:			biopidy invalid temperatures (mainboard and EEB pariety).
	Power On Time	-	-	Display fixtures total power on time.
	Power On time	-	-	Display fixtures power on time
	Resettable			(can be reset. i.e. for service use).
	LED On Time	-	-	Display LED (R, G, B, W) total power on time.
	LED On Time	-	-	Display LED (R, G, B, W) power on time
	Resettable			(can be reset. i.e. for service use).
	Log	-	-	Display recorded operating data and error codes/ Display burn-in times.
	Debug	-	-	Service use only.
SETTINGS	Wireless DMX	Enable		Press enter to enable wireless DMX operation.
		Disable		Press enter to disable wireless DMX operation.
		Wireless DMX		Press enter to enable wireless DMX out operation
		Out Enable		(recieved Wireless DMX is trasmitted to cabled DMX Out).
		Wireless DMX		Press enter to disable wireless DMX out operation.
		Out Disable		0 11 %
		Press enter to Log Off Wireless		Send log off command to the CRMX system.
		Signal Strength		Check wireless signal strengh
	Startup Mode	Select Startup Mode		Default operating mode when fixture is powered on:
				1. Quick Color
				2. Stand-alone
		Startus Dragram		3. DMX (factory default)
		Startup Program		Stand-alone program 1, 2 or 3. Only used if the startup mode is set to "stand-alone". Program 1 is default.
	Dimming Curve	Linear		Provide equal resolution dimming from 0-100%.
		Gamma Corrected		Provide high-resolution dimming at low levels.
	White Calibrated	Calibrated		Enable white calibrated color.
	(Q-7 only)	Raw		Enable raw color.
	Flip Display	Disable	[X] / [ ]	Select normal control panel display.
		Enable	[X] / [ ]	Flip control panel display.
	Display Saver	Display Dim		Dim the OLED display when the control panel is not in use.
		Display Off		Turn off the OLED display when the control panel is not in use.
	Fan Mode	Standard	[X] / [ ]	Adjust fan speed relative to internal fixture temperature.
		Silent	[X] / [ ]	Low fan speed for quiet operation.
		Max Power	[X] / [ ]	High fan speed for maximum cooling effect.
		Always Full Power	[X] / [ ]	Always high fan speed with no adjustment.
1	Minivalues	Red (Q-7)	0 → 8000	
		Green (Q-7)	0 → 8000	
		Blue (Q-7)	0 → 8000	1
		White (Q-7)	0 → 8000	1
		Line 1 (Q-7 W)	-	Adjust default minimum setting (0-8000). Service use only.
		Line 2 (Q-7 W)	-	1
		Line 3 (Q-7 W)	-	1
		Line 4 (Q-7 W)	-	1
	RFID Write	Enable	-	Enable the RFID write for the SGM Tool.
		Disable	_	Enable the RFID write for the SGM Tool.

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
SETTINGS	Refresh Rate	Dimming optimized	-	Set the LED's to a dimmer optimized default. (factory default).
(continued)				See "Setting the LED refresh rate (Frequency)" on page 13 for details.
		High frequency opti-	-	Set the LED's to a high frequency optimized default.
		mized		See "Setting the LED refresh rate (Frequency)" on page 13 for details.
		Custom value frequency	-	Set a custom frequency (refresh rate) for the LED's.
				See "Setting the LED refresh rate (Frequency)" on page 13 for details.
	Factory Default	-	-	Reset the fixture to factory default settings.
	Service Pin	-	-	Contact your SGM dealer or SGM support to request the service pin.
				Service use only.
	Service Menu	-	-	Only accessible when service pin has been entered. Service use only.
Manual	Quick Color	Red (Q-7)	1 → 255	Press enter to set fixture to static quick color startup mode (red mix).
		Green (Q-7)	1 → 255	Press enter to set fixture to static quick color startup mode (green mix).
		Blue (Q-7)	1 → 255	Press enter to set fixture to static quick color startup mode (blue mix).
		White (Q-7 / Q-7 W)	1 → 255	Press enter to set fixture to static quick color startup mode (white mix).
	Run Program	1, 2 or 3	-	Select program (1, 2 or 3) to run internal sequence.
	Stop Program	-	-	Stop current running internal sequence or Quick Color.
	Master/Slave	Master Slave	-	Set fixture to operate as Master or Slave fixture.
		Master master	-	
	Editor	Program	1 → 3	Currently selected program (1, 2 or 3).
		Scene	1 → 24	Currently selected scene (1-24).
		Red (Q-7)	1 → 255	Red value in currently selected scene (0-255).
		Green (Q-7)	1 → 255	Green value in currently selected scene (0-255).
		Blue (Q-7)	1 → 255	Blue value in currently selected scene (0-255).
		White (Q-7 / Q-7 W)	1 → 255	White value in currently selected scene (0-255).
		Shutter	1 → 255	Shutter setting in currently selected scene (0-255) - according to latest
				DMX chart.
		Fade Time (Min.)	1 → 999	Fade-in (transition) time to current scene in min. (0-999).
		Fade Time (Sec.)	1 → 59	Fade-in (transition) time to current scene in sec. (0-59).
		Wait Time (Min.)	1 → 999	Wait (static) time in current scene in min. (0-999).
		Wait Time (Sec.)	1 → 59	Wait (static) time in current scene in sec. (0-59).
Test	OFF	-	-	Stop test sequence execution.
	Automated Test	-	-	Initiate a self-test sequence.
	Burn-in Test	-	-	Service use only.
	(30min.)			
	Burn in times:			
	Display Test	-	-	Service use only.
				•

## SUPPORTED RDM FUNCTIONS

he Q-7 Series 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. An RDM controller is needed to get control over the supported parameters. See the tables below for supported RDM functions.

PID	ACTIONS ALLOWED	NAME
0x0080	GET	Device Model Description
0x0081	GET	Manufacturer Label
0x0082	GET/SET	Device label
0x0090	SET	Factory Defaults
0x1000	GET/SET	Identify
0x00F0	GET/SET	DMX Start Address
0x00E0	GET	DMX Personality
0x00E1	GET	DMX Personality Description
0x0200	GET	Sensor Definition
0x0201	GET/SET	Sensor Value
0x0400	GET/SET	Device Hours
0x0401	GET/SET	Lamp Hours
0x0500	GET/SET	Display Invert (POI n.a.)
0x0501	GET/SET	Display Level, 0=OFF, 1 and above=ON ( POI n.a.)

PID	ACTIONS ALLOWED	NAME
0x1001	SET	Reset Device
0x8620	GET/SET	Refresh Rate, 0= Standard, 1= High Frequency
0x8623	GET/SET	Dimming Curve, 0=Raw, 1=Gamma Corrected
0x8625	GET/SET	FAN 0=AUTO 1=LOW 2=HIGH 3=FULL
0x8626	SET	CRMX Log Off
0x8628	GET/SET	Dim Mode, 0=Standard, 1=Max Power
0x8629	GET/SET	Invert Pixel Order, 0=Standard, 1=Invert
0x8631	GET/SET	Battery Extension, 0=Disable, 24=24 hour
0x8060	GET	SGM Serial numberq

PLEASE NOTE! THE RDM CONTROLLER COMMUNICATES WITH THE FIXTURES TO SHOW ONLY THE AVAILABLE OPTIONS FOR EACH RDM FUNCTION. THE TABLE IS SUBJECT TO CHANGE WITHOUT NOTICE.

## **SENSORS**

RDM enables various sensor readouts for remote device monitoring. See the table below for sensors and sensor types.

## PLEASE NOTE: THE RDM CONTROLLER COMMUNICATES WITH THE FIXTURES TO SHOW ONLY THE AVAILABLE SENSORS FOR THIS FIXTURE. THE TABLE IS SUBJECT TO CHANGE WITHOUT NOTICE.

NAME	SENSOR TYPE
SMPS PCB	Temperature
Pan PCB	Temperature
Tilt PCB	Temperature
Effect PCB	Temperature
Base	Temperature
Head	Temperature
Red LED	Temperature
Green LED	Temperature
Blue LED	Temperature
White LED	Temperature
Led Left	Temperature
Led Right	Temperature
Angle Sensor 1	Other
Angle Sensor 2	Other

NAME	SENSOR TYPE
CRMX Signal Strength	Other
Wireless Paired	Other
Humidity	Other
Humidity Base	Other
Humidity Head	Other
Fan 1 LED RPM	Velocity
Fan 2 LED RPM	Velocity
Fan Base RPM	Velocity
Fan Head RPM	Velocity
Fan Zoom RPM	Velocity
AC Power Connected	Contacts
Battery PCT (percentage)	Other
Battery Charging	Contacts
Battery Voltage	Voltage



Figure 23: Accessory holder



Figure 24: 4-way Barndoor



Figure 25 : 8-way Barndoor



Figure 26: Floorstand

## **ACCESSORY HOLDER**

The Accessory holder is a mandatory base for holding barndoors and color frames of the fixture. It is a clip-on accessory that includes a safety wire intended to be attached to the bracket of the fixture, and a knob on the side to allow the sliding of barndoors, color frames or rigid diffusion filters.

## **BARNDOORS**

The Q-7 Series have 4-way and 8-way barndoors. The difference between the two types is that the 8-way barndoors give an extra control when cutting the light, by extending the width of the eight adjustable flaps.

The barndoors are designed and intended to be mounted on the fixture without the use of any tools. It is only required the use of the accessory holder, where the barndoors will slide and fit in, by releasing the locking knob in the side of the accessory holder.

The Q-7 Series barndoors are also compatible with the use of color frame and diffusion filters.

## **FLOORSTAND**

The Q-7 Series have available an optional floorstand, ideal when there is a frequent need of changing the position of the fixture between hanging and standing.

The Q-7 floorstand it is easy to mount or remove, simply by the use of 1/4 turn fasteners.

## **ANTI-GLARE SHIELDS**



Figure 27: Anti-glare shields



Figure 28: Anti-glare shields

The Q-7 Series feature two different types of optional anti-glare shields:

Full anti-glare shield - covers the full fixture's opening

Half anti-glare shield - covers half of the fixture's opening

Using the anti glare shields will remove any unwanted discomfortable glare and reflections.

The anti glare shields are easily mounted by removing the two tilt lock bolts, one in each side of the fixture. Refit the anti glare shield in position and screw both tilt locks bolts again.

Note: This accessory is suitable for both permanent outdoor and indoor installations.

## **MAINTENANCE**



Figure 29: SGM Vacuum Test Kit



Figure 30: SGM Uploader Cable

## 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 fixture, 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 nonuse, or inability to use, the vacuum test kit after reassembling the fixture.

## **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.

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

Updated maintenance procedures and frequency are available at www.sqmlight.com under the respective product.



Figure 31: SGM Firmware tool

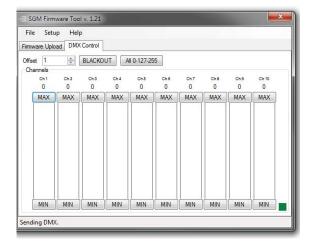


Figure 32: SGM Firmware tool

Fixture firmware can be identified in two different ways:

## Standard Fixture

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

## POI Fixture

- Connect either Std or POI uploader cable depending on which is more suitable for the installation
- · Launch the SGM RDM Adressing Tool
- Click "Full Discovery" fixture should show in the chart. Firmware will be displayed in the firmware column

To update a fixture 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).

- Download the SGM Firmware Tool software from the SGM website
- Download latest firmware file from product web page on the SGM website
- Connect either Std or POI uploader cable depending on which is more suitable for the installation
- · Launch SGM Firmware Tool on a windows PC
- Click "File" then "Open" and navigate to the firmware file needed, select it and click "Open"
- The firmware is now loaded in the uploader, click "Upload Firmware"

The fixture will now update and reboot

The Firmware Tool software offers a simple DMX controller featuring 512 DMX channels for test purposes.

IT IS RECOMMENDED KEEP FIRMWARE UPDATED. THE LATEST FIRMWARE VERSION IS ALWAYS AVAILABLE FOR DOWNLOAD UNDER THE RESPECTIVE PRODUCT AT WWW.SGMLIGHT.COM.

## **CLEANING**

SGM fixtures with IP65 or 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. The exterior housing can also be cleaned to get a better look. To maintain adequate cooling, fans must be cleaned periodically.

Whenever necessary, clean the fixture using a soft cloth dampened with a solution of water and a mild detergent. Do not use products that contain solvents, abrasives, or caustic agents for cleaning, as they can cause damage to hardware, cables, and connectors.

The level of cleaning required will vary greatly depending on the operating environment and installation. Therefore, it is recommended to do frequent check-ups the first few weeks of operation to see how often cleaning is necessary.

## **TROUBLESHOOTING**

PROBLEM	POTENTIAL CAUSE(S)	REMEDIES
Fixture does not respond or appears to be completely dead.	No power to the fixture.	Confirm that the power is switched on, confirm that the cables are plugged in.
	Main fuse is blown.	Contact SGM support or certified SGM service partner.
Fixture suddenly turned off.	Power was turned off.	Check the power supply, switches and breakers.
Fixture suddenly stopped responding.	Wireless transmitter or connections was disconnected/tampered with.	Inspect the wireless transmitter and connections.
	DMX cables were disconnected.	Inspect DMX cables.
Fixture operates irregularly/	DMX cable polarization is inverted (pin 2 + 3).	Install a phase-inverter or replace cables.
abnormally.	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.
	A corrupted fixture generates noise/ disruptions on the DMX link.	Track and isolate the corrupted fixture.
Color is uneven.	The minimum values are out of calibration.	Contact your local SGM dealer or support@ sgmlight.
	The SGM Calibration Data set has been lost.	Contact your local SGM dealer or support@ sgmlight.

## **FIXTURES AND ACCESSORIES**

The Q-7 Series has different variants and can be used with a variety of accessories.

Contact your local SGM dealer to get the latest pricing and news about available fixtures and accessories.

## PLEASE NOTE! THE LIST BELOW IS SUBJECT TO CHANGE WITHOUT NOTICE.

## ORDERING INFORMATION

Q-7 Color Flood, Std, BL/WH	P/N: 80030524 / 80030561
Q-7 Color Flood, POI, BL/WH	P/N: 80030800 / 80030850
Q-7 W White Flood, Std, BL/WH	P/N: 80030525 / 80030563
ACCESSORIES	
Omega bracket w/Q-bolt,, BL/WH	P/N: 83060602 / 83061206
Omega bracket POI with M10 Screws, BL/WH	P/N: 83060623 / 83060624
SGM USB uploader cable	P/N: 83062011
BCC-2 Dual bracket	P/N: 83060603
BCC-4 Quad bracket.	
Floorstand for i-5/P-5/Q-7 Series	P/N: 83060610
Accessory Holder X-5 & Q-7 Series	P/N: 83061123
Barndoor 4-way, i-5/P-5/Q-7 Series.	P/N: 83061120
Barndoor 8-way, i-5/P-5/Q-7 Series.	
Color frame, P-5 & Q-7 Series	P/N: 83061122
Half Anti-Glare Shield, P-5, Q-7, i-5 Series, BL / WH	P/N: 83061161 / 83061180
Full Anti-Glare Shield, P-5, Q-7, i-5 Series, BL/WH	
Flightcase for 4 pcs of PQI-5/7, non-stackable	P/N: 82051501
Flight case for 4 pcs of i-5/P-5/Q-7 incl. barndoors	P/N: 82051502
SGM Vacuum test-kit	P/N: 83061136

PLEASE NOTE! BARNDOOR 4-WAY, BARNDOOR 8-WAY, OR COLOR FRAME REQUIRES ONE ACCESSORY HOLDER (ITEM NO. 83061123) PER FIXTURE.

## **SUPPORT HOTLINE**

SGM offers 24/7 technical support.

Worldwide: +45 3840 3840

US: +1 407-242-6217

support@sgmlight.com

## **APPROVALS AND CERTIFICATIONS**

Conforms to	
Conforms to	
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 toUK SI 2	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 chance without notice. For the latest information, visit www.sgmlight.com.

# USER NOTES



## 

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