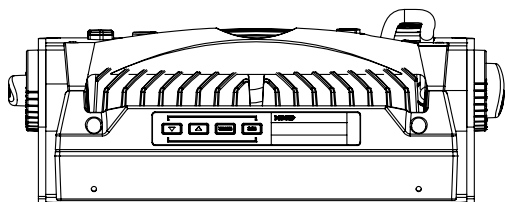
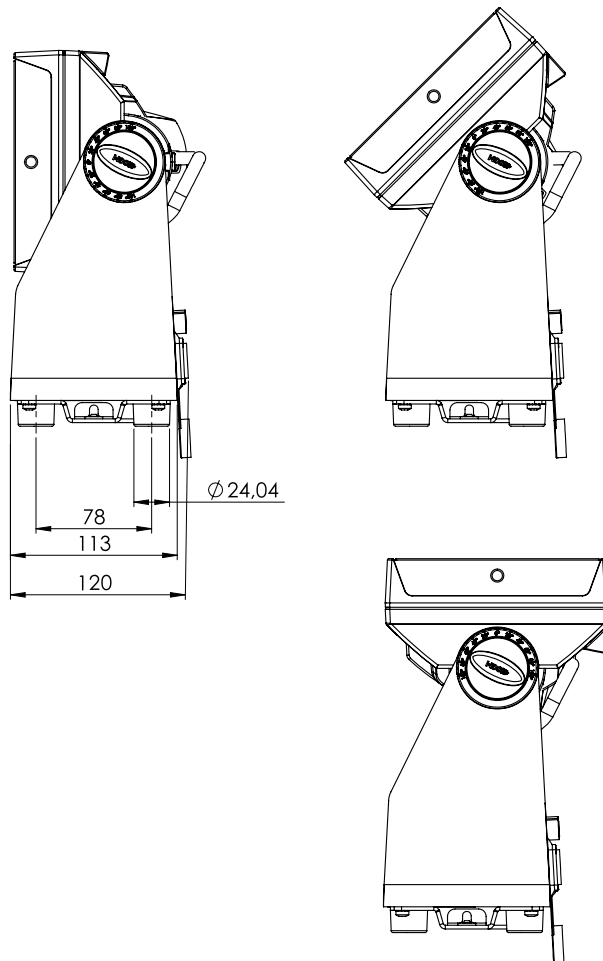
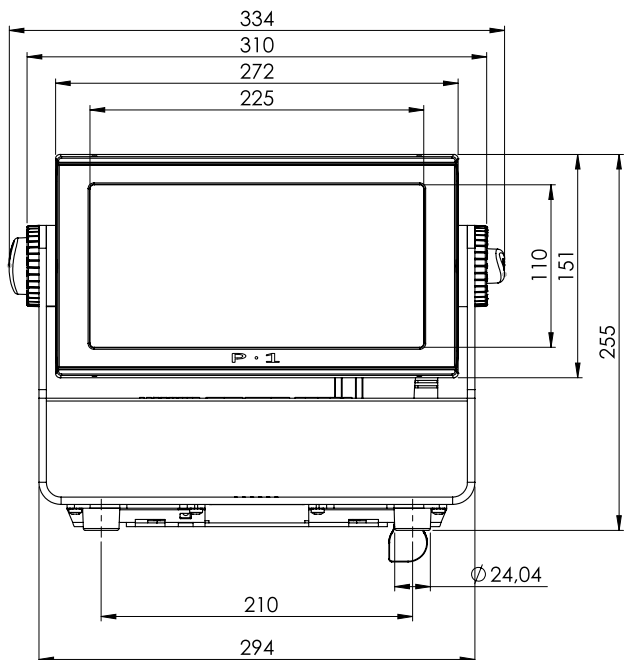


USERMANUAL

P-1



DIMENSIONS



All dimensions in millimeters and inches. Drawing not to scale

This manual covers installation, use, and maintenance of the SGM P 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 pertaining 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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2	DIMENSIONS	
5	SAFETY INFORMATION	
6	BEFORE INSTALLING THIS PRODUCT	
7	INSTALLATION STANDARD FIXTURE	
7	Identification and terminology	
8	Unpacking	
8	Location/ application	
8	Transportation	
8	Rigging	
9	Rigging process using SGM Omega brackets	
10	Ceiling/ Wall mount	
10	Tilt lock	
11	Power requirements	
11	Connecting power	
11	Connecting data	
11	Connecting a wireless transmitter	
11	Disconnecting a wireless transmitter	
11	Signal priority	
12	USER INTERFACE	
12	Using the display panel	
12	Shortcuts	
13	DISPLAY	
13	Wireless signal strength	
13	Current input type	
13	Current DMX address	
13	Current power source/ battery level	
13	Error Indicator	
13	Shortcuts	
14	CONFIGURING THE DEVICE FOR DMX CONTROL	
14	About DMX	
14	DMX Start address	
14	Set/edit DMX address	
14	Setting the DMX mode	
14	DMX charts	
15	SETTING A STATIC COLOR MANUALLY	
15	USING STANDALONE OPERATION	
16	FIXTURE PROPERTIES	
16	Effects	
16	Individual fixture settings	
16	Factory default	
17	CONTROL MENU	
19	RDM	
19	Supported RDM functions	
19	Sensors	

CONTENT

20 ACCESSORIES

20 Filter frames

20 Barndoors

21 MAINTENANCE

21 Cleaning

21 Firmware Updates

22 TROUBLESHOOTING

23 FIXTURES AND ACCESSORIES

23 Ordering information

24 SUPPORT HOTLINE

24 APPROVALS AND CERTIFICATIONS

25 USER NOTES



WARNING! READ THE FOLLOWING SAFETY PRECAUTIONS CAREFULLY BEFORE 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 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 0.3 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°C (108°F).
STEADY STATE = 48°C (118°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 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 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:

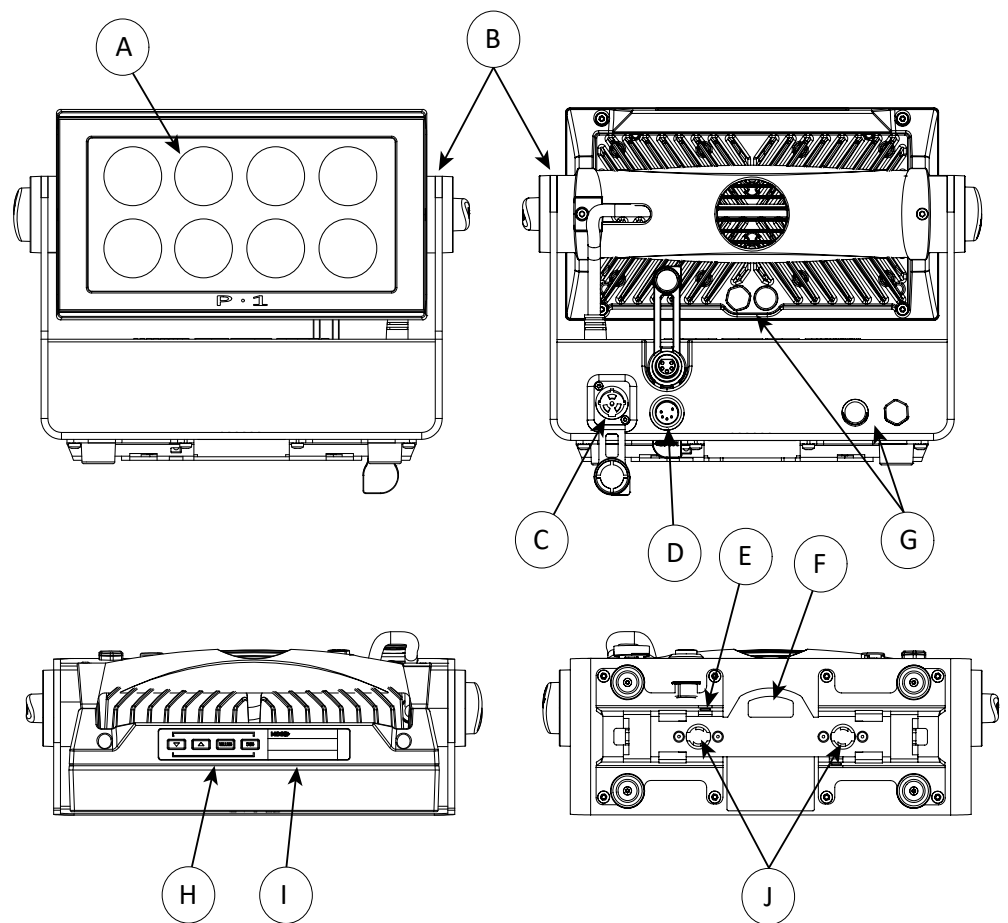
- Do not mount near gas or electric heaters.
- Permanently installed equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 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

IDENTIFICATION AND TERMINOLOGY

- A: 8 x RGBW LEDs
- B: Tilt lock
- C: Power in
- D: DMX in and out
- E: Kensington lock socket
- F: Safety wire attachment point
- G: Dehumidifiers and GORE-TEX membranes
- H: Control panel
- I: OLED Display
- J: Holes in Omega bracket



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 P-1 is shipped with:

- One IP66 power input connector, 2 m (78 in.).
- One Omega bracket with 1/4-turn fasteners.
- Filters (optional).
- Ceiling/ wall mount (optional).
- Barndoor (optional).
- Application considerations

LOCATION/ APPLICATION

The fixture is IP65-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.
- Lower 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 or exposed to high-pressure water jets.
- It has adequate ventilation.

TRANSPORTATION

Always use the supplied packaging or suitable flight case for transportation and storage.

Never carry the fixture by connected cables or wires.

RIGGING

The wfixture may be installed in any orientation. Always use an omega bracket to rig the fixture and lock the bracket with the 1/4-turn fasteners.

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

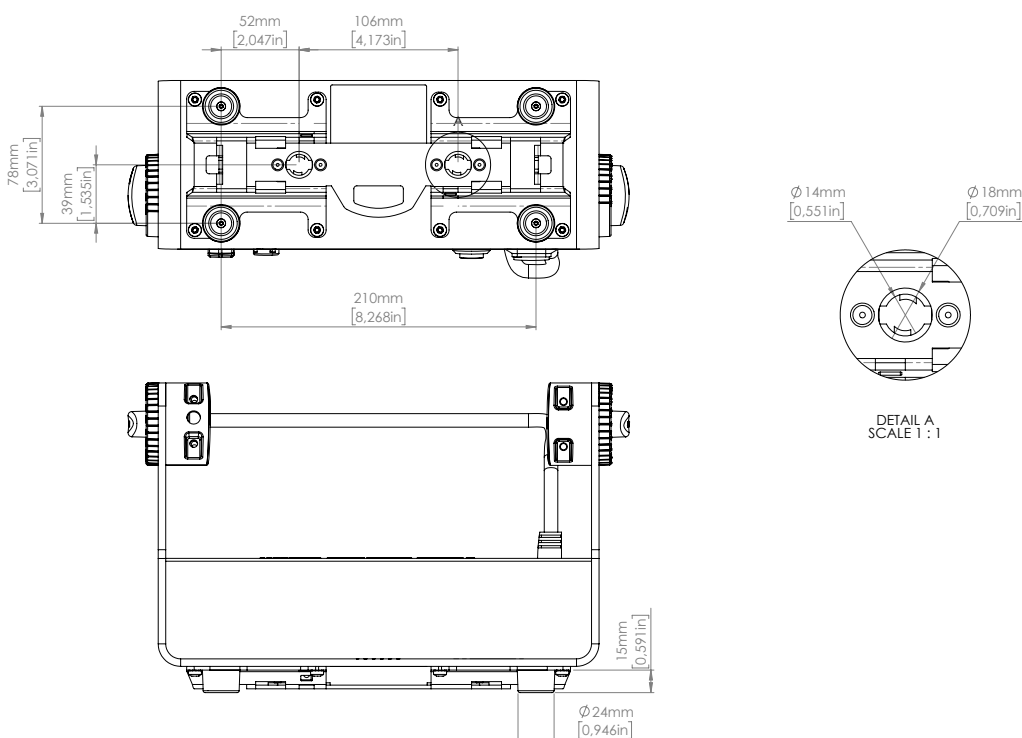


Figure 2: Dimensions for P-1 base locking points

RIGGING PROCESS USING SGM OMEGA BRACKETS

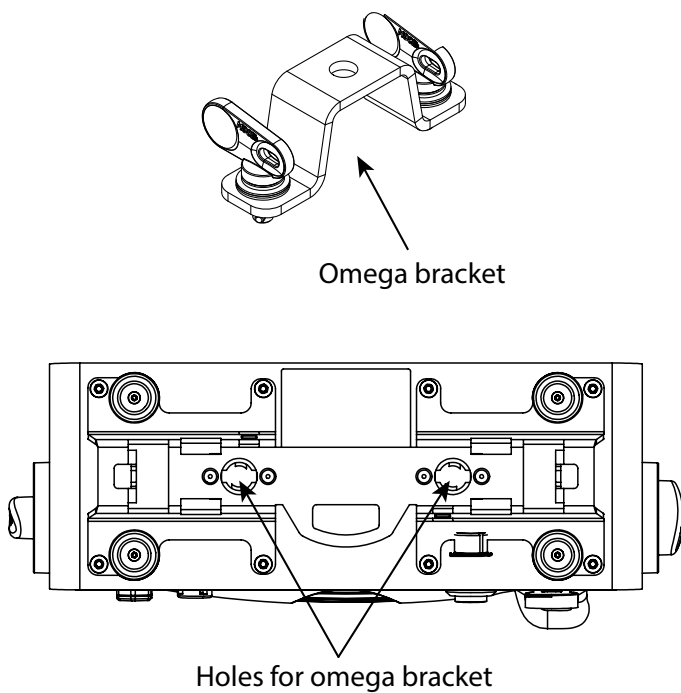


Figure 3 : Base with omega bracket

Start the standard 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. 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 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/HANDLE FOR SECONDARY ATTACHMENT.

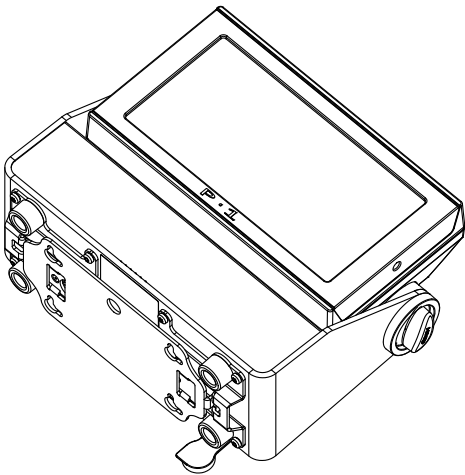


Figure 4: Safety wire attachment point

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.).

CEILING/WALL MOUNT



The P-1 can be installed with an optional ceiling/ wall mount. The ceiling/ wall mount is design to fit the base bracket on the P-1.

To install the ceiling/ wall mount:

1. Loosen the lock screw on the ceiling/ wall mount.
2. Install the ceiling/ wall mount to the surface.
3. Position the fixture over the four slide locks and slide into the locked position.
4. Fasten the lock screw.

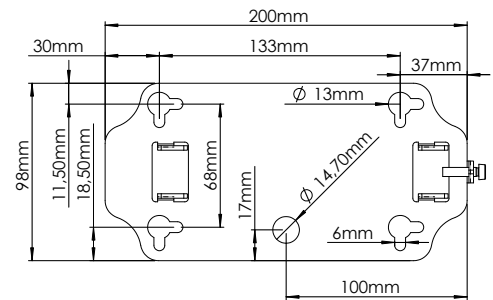
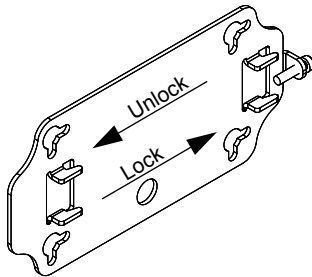
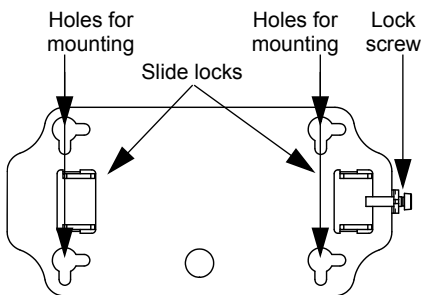
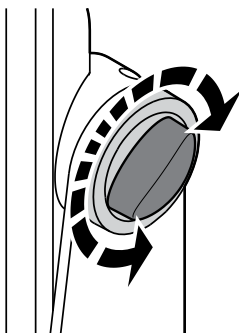


Figure 5: P-1 Ceiling / Wall mount

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.

Figure 6: P-1 Tilt Lock

CAUTION!

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

POWER REQUIREMENTS

The fixture can operate on any 100-240 V, 50/ 60 Hz AC mains power supply.

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.

CONNECTING POWER




Wire	Color	Symbol	Conductor
	Black	L	live
	White	N	neutral (L2)
	green/yellow	\perp or \oplus	ground (earth)

Figure 7: Connecting AC Power/P-1 power cable 8 mm

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 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 ORDER 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 P-1 is controllable using a DMX control device, and it can be connected using either a DMX cable or via the fixture's built-in LumenRadio CRMX wireless receiver system. 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.

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.

DISCONNECTING A WIRELESS TRANSMITTER

To disconnect the fixture from the currently paired wireless transmitter, go to SETTINGS → WIRELESS DMX → LOG OFF in the menu.

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.

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

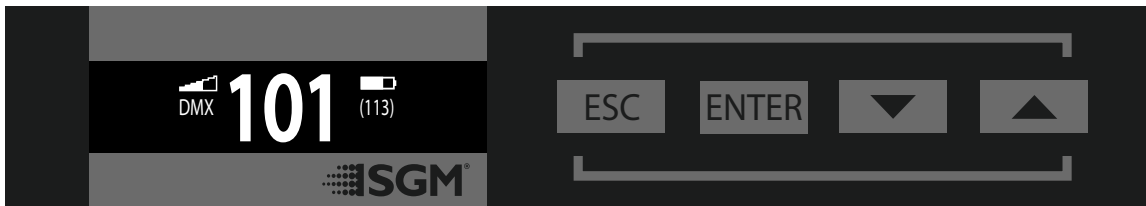


Figure 8: OLED display and control panel

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.
- To turn off the fixture, press and hold the 'ESC' button until the fixture turns off, or go to MENU → POWER OFF.
- To turn on the fixture press any button and the fixture will power on.

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.

WIRELESS SIGNAL STRENGTH

Displays the signal strength of the wireless CRMX connection. The wireless signal's strength symbol will be flashing if the paired transmitter is out of range. If no transmitter is paired the symbol will be off.

CURRENT INPUT TYPE

- 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.

CURRENT DMX ADDRESS

Displays the current DMX address. The DMX address is altered directly from this view. The next available DMX address is displayed to the right. The DMX address will flash on no data input.

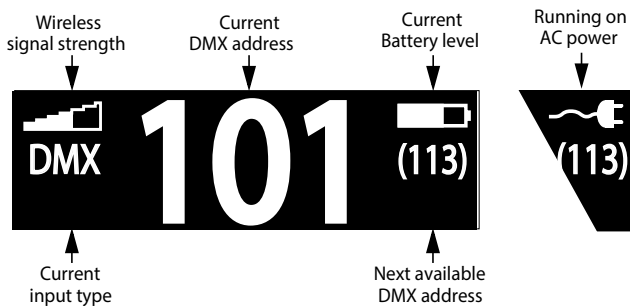


Figure 9: Display

CURRENT POWER SOURCE/ BATTERY LEVEL

Displays the current power source, indicated by a power cable symbol or a battery symbol.

Displays the current battery level.

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.

SHORTCUTS

ESC + ENTER: Press ENTER to confirm factory defaults.

ESC + UP: Press ENTER to start LED test.

ESC + DOWN: Press ENTER to unpair CRMX.

UP + DOWN arrows simultaneously = flip the display up-side-down.



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

Figure 10: Display

PLEASE NOTE! AFTER USING A BATTERY DRIVEN FIXTURE, IT IS IMPORTANT TO RECHARGE THE FIXTURE FOR AT LEAST 12 HOURS BEFORE IT CAN BE USED OR STORED. FULLY CHARGE THE BATTERIES AT LEAST ONCE A MONTH WHEN NOT IN USE.

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 P-1 can be operated in different DMX modes. For any of the modes, the first channel used to receive data from a DMX controller is known as the DMX start address. For independent control, each P-1 must be assigned its own address. If two fixtures of the same type have the same DMX address, they will behave identically. Address sharing can be useful for diagnostic purposes and symmetrical control.

For independent control, each P-1 must be assigned its own address to have a DMX start address set. For example, if the first P-1 is set to 3ch DMX mode with a DMX address of 10, it uses the channels 10, 11 and 12. Then the following P-1 in the DMX chain should be set to a DMX address of 13. As the first fixture uses the prior 3 DMX channels, including channel 12, the next available channel is 13 ($10+3=13 \gg 13$).

If two or more fixtures of the same type have the same DMX address, they will mimic each other's behaviour. Incorrect settings will result in unpredictable responses from the lighting controller. Address sharing can be useful for diagnostic purposes and symmetrical control.

PLEASE NOTE! WHEN USING POWER LINK CONNECTION, MAKE SURE THE MAXIMUM POWER CAPACITY IS NOT EXCEEDED IN ORDER TO AVOID SHORT-CIRCUIT OR FIXTURE DAMAGE.

SET/EDIT DMX ADDRESS

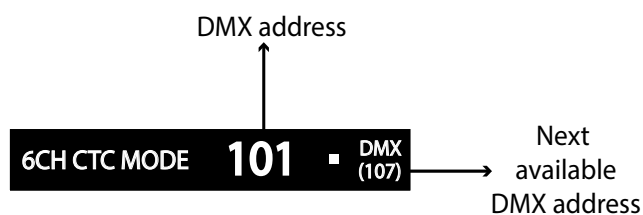


Figure 11: Display

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 12 for instructions on using the display panel.

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

SETTING THE DMX MODE

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.

The P-1 also offers the option to set the DMX address through RDM.

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

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 → 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 → STARTUP MODE → SELECT STARTUP MODE.

Since firmware version 2.24, the P-1 includes a number of color presets accessible via display. To set up a color preset, select:

ENTER → MANUAL → COLOR PRESETS.

The current quick color program or selected color preset can always be stopped by selecting:

ENTER → MANUAL → STOP PROGRAM.

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

ENTER → MANUAL → STOP PROGRAM

USING STANDALONE OPERATION

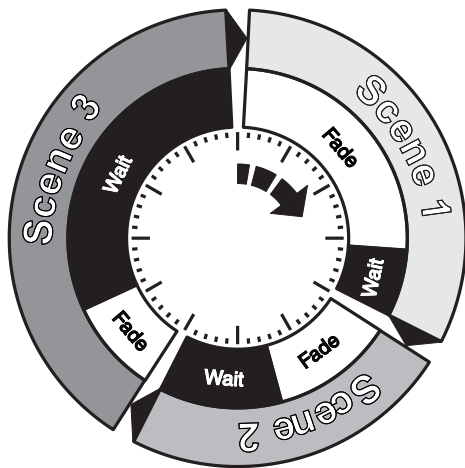


Figure 12: Standalone operation

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.

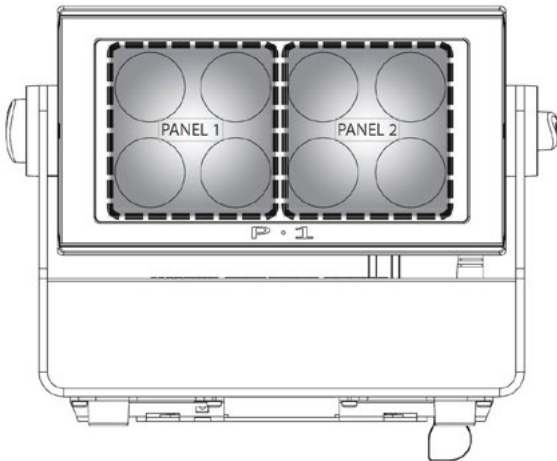


Figure 13: P-1 Pixel segments

FACTORY DEFAULT

When restoring factory defaults in the P-1, the following will be set:

- Set DMX address to 1.
- Set 6 Channel CTC DMX mode.
- Set screensaver to OFF.
- Disable Startup Programs.
- Set all Quick Color values to zero.
- Disable DMX Loss.
- Set all values in Manual Programs to zero.
- Set Fan mode to Standard.

Set Frequency to Default.

Set AC Power Loss Function to Battery Backup.

EFFECTS

Colors and LED Panels

The P-1 features 8 high-power 12.5W RGBW LEDs, divided into two individually controllable panels (left and right). Each panel represents a cluster of four lenses.

The fixture can operate in RGB calibrated mode which ensures that colors are compatible across the range of SGM fixtures. However, the P-1 also offers the ability to operate in RAW mode with full control of each color.

Color temperature correction

The P-1 offers seamless CTC (color temperature correction) control from 2000° Kelvin - 10000° Kelvin. The color temperature can also be modified via color presets when in manual operation (see above).

Beam angle

The P-1 is equipped with a fixed 10° beam angle. The beam angle can be manipulated in various ways by using one of the optional magnetic holographic filters, and barndoors.

INDIVIDUAL FIXTURE SETTINGS

Flipping the display

If the fixture is installed hanging upside down, it may 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

By default the OLED display dims down after a short period when the control panel is in the root menu and not in use. The display 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, press ENTER → SETTINGS.

NOTE: To avoid the risk of display deterioration caused by long term use, it is recommended to select the setting → DISPLAY OFF.

CONTROL MENU

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
Mode	Select mode	-	-	Select DMX mode.
Manual	Quick color	Red	0-255	Static quick color - red mix (0-255). Sets fixture to quick color startup mode.
		Green	0-255	Static quick color - green mix (0-255). Sets fixture to quick color startup mode.
		Blue	0-255	Static quick color - blue mix (0-255). Sets fixture to quick color startup mode.
		White	0-255	Static quick color - white mix (0-255). Sets fixture to quick color startup mode.
		Full color calib.	On or off	Select between color calibrated or RAW color mode.
	Color preset	Intensity	0-255	Dimmer.
		Color	White 3200 K	Color preset #.
			White 5600 K	
			White 10000 K	
			Congo	
			Red	
			Green	
			Blue	
			Orange	
			Light green	
			Pink	
			Light blue	
			Purple	
			Neon green	
			Magenta	
Cyan				
Yellow				
CTC				
Run program	1, 2 or 3	-	Runs internal sequence 1, 2 or 3.	
Stop program	-	-	Stops current running internal sequence or Quick Color.	
Editor	Program	-	Edits scenes.	
Info	Product type	-	-	Displays product type.
	Firmware version	-	-	Displays installed firmware version.
	Serial number	-	-	Displays SGM serial #.
	DRM ID	-	-	Displays RDM ID. (Unique RDM ID for identification).
	DMX view	Up to 492 DMX addresses	-	Displays received DMX levels.
	Sensors	Mainboard	-	Displays fixture temperatures.
		Led left	-	
		Led right	-	
		Humidity	-	Displays humidity percentage.
		AC connected	-	Displays whether power is connected or not.
		Battery PCT	-	Displays battery level.
		Charging	-	Displays whether the battery is charging or not.
		Battery VDC	-	Displays battery voltage.
Wireless signal		-	Displays wireless signal strength.	
Wireless paired	-	Displays wireless connection status.		

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FUNCTION
Info	Sensors	On time red 1	-	Display LED total power on time. (R, G, B, W).
		On time green 1	-	
		On time blue 1	-	
		On time white 1	-	
		On time red 2	-	
		On time green 2	-	
		On time blue 2	-	
		On time white 2	-	
	Power on time	-	-	Displays fixture total power on time.
	LED on time	-	-	Displays LED total power on time. (R, G, B, W).
Errors	-	-	Displays error codes.	
Settings	Wireless DMX	Log off	-	Sends Log off command to the CRMX System.
		Enable/ disable	-	Enables/ disables wireless DMX functionality.
		Bridge	-	Displays strength of the wireless connection.
		Status	-	Displays wireless connection status.
	Startup mode	Select startup mode	-	Default operating mode when fixture is powered on: 1. DMX (factory default). 2. Standalone. 3. Quick Color.
		Startup program	Select startup program	Standalone program 1, 2 or 3. Only used if the startup mode is set to "standalone". Program 1 is default.
	DMX loss	DMX hold	-	Select what happens if DMX signal is lost.
		All on	-	
		Blackout	-	
		Quick color	-	
	AC power loss function	Battery backup	-	Select what happens if AC power connection is lost.
		Emergency light	-	
		Power off	-	
	Battery extension	Set battery extension time	Off or 1-24h	Configures battery extension function.
	LED frequency	Set LED frequency	-	Sets LED frequency.
	Flip display	-	-	Flips control panel display.
	Display off	-	-	Toggles automatic display sleep.
	Factory default	-	-	Reset the fixture to factory default settings.
	Service pin	-	-	-
	Service menu	-	-	-
Test	Self test	Start/ stop self test	-	Activates automated self test.
	Display test	-	-	Test the fixture display.
	Color test	Start/ stop color test	-	Test the LED segments of the fixture.
Power off	-	-	-	Turns the fixture off.

SUPPORTED RDM FUNCTIONS

The fixture features support for various RDM functions, as per the ANSI E1.20 standard.

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.

A RDM enabled controller is required to control the supported parameters. See the tables below for supported RDM functions.

PID	ACTIONS	NAME
0x00F0	GET/ SET	DMX Start Address
0x00E0	GET/ SET	DMX Personality / Mode
0x00E1	GET	DMX Personality Description
0x1000	GET/ SET	Identify
0x1001	SET	Reset Device
0x0200	GET	Sensor Definition
0x0201	GET/ SET	Sensor Value
0x0082	GET/ SET	Device Label
0x0081	GET	Manufacturer Label
0x8060	GET	Serial Number
0x0080	GET	Device Model Description
0x0400	GET/ SET	Device Hours
0x0051	GET	Parameter Description

PID	ACTIONS	NAME
0x0501	GET/ SET	Display Level, 0=OFF, 1 and above=ON
0x0500	GET/ SET	Display Invert
0x8626	SET	CRM Log Off
0x8631	GET/ SET	Battery Extension Hours
0x0090	SET	Factory Defaults
0x0120	GET	Slot Info
0x0121	GET	Slot Description
0x0122	GET	Default Slot Value
0x8637	GET/ SET	Bridge ENABLE=1 DISABLE=2
0x8620	GET/ SET	Led freq (197647Hz)/ value
0x8634	GET/ SET	Quick color feature 0=HOLD 1=WHITE 2=OFF 3=Q COLOR
0x8636	GET	Active Error

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
Mainboard Temp.	Temperature
LED Left	Temperature
LED Right	Temperature
Humidity	Other
AC power connected	Contacts
Battery PCT (percentage)	Other
Battery charging	Contacts
Battery voltage	Voltage
Wireless signal strength	Other

NAME	SENSOR TYPE
Wireless paired	Other
Red LED Hours Pixel 1	Time
Green LED Hours Pixel 1	Time
Blue LED Hours Pixel 1	Time
White LED Hours Pixel 1	Time
Red LED Hours Pixel 2	Time
Green LED Hours Pixel 2	Time
Blue LED Hours Pixel 2	Time
White LED Hours Pixel 2	Time

FILTER FRAMES



Figure 14 : Filter frame for P-1

The P-1 features various optional, magnetic holographic filter frames:

- Medium angle (19°).
- Wide angle (45°).
- Elliptical wide angle horizontal (63°x12°).
- Elliptical wide angle vertical (12°x63°).

The filter frames are easily installed due to their magnetic properties. To install them, position the filter frame in front of the light and snap it into place.

The frames are fitted with a safety wire to secure the frame to the yoke on the P-1.

A filter frame can be mounted simultaneously with a barndoor.

BARNDOORS

The fixture features optional 4-way and 8-way barndoors. The barndoors are designed and intended to be mounted on the fixture without the use of any tools.

To install the barndoors:

1. Pull the two lock pins to the unlocked position and place the barndoor on the front of the P-1 head.
2. Release the lock pins and check the lock pins are correctly in place.
3. Attach a safety wire to the barndoor and secure it to the yoke on the P-1.

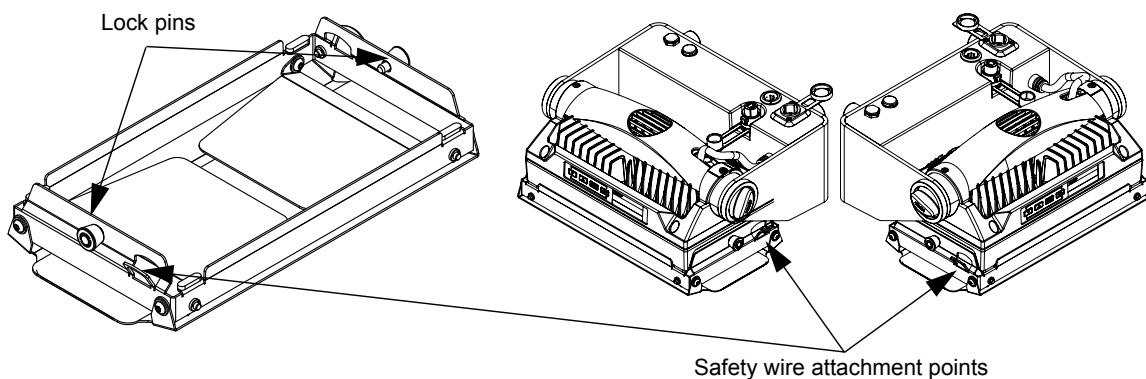
The barndoor can be mounted simultaneously with a filter frame.



Figure 15 : 4-way barndoor for P-1



Figure 16 : 8-way barndoor for P-1



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

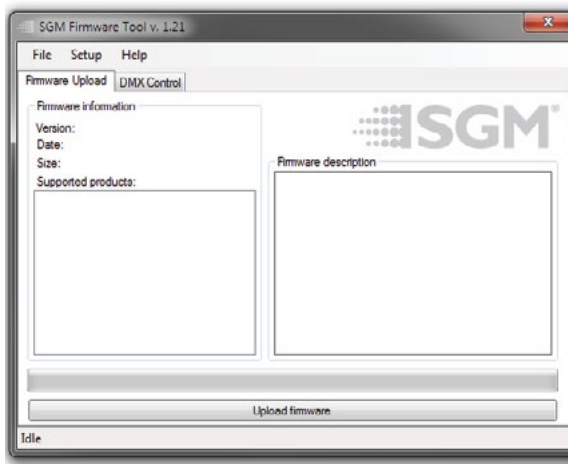


Figure 17: SGM Firmware tool

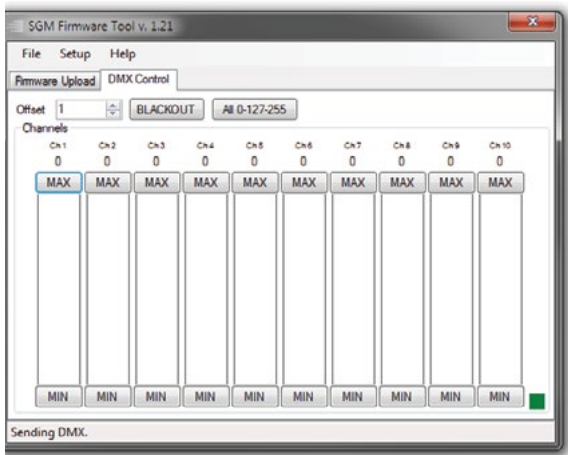


Figure 18: SGM Firmware tool

FIRMWARE UPDATES

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
- Connect uploader cable
- Launch the SGM RDM Addressing 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 uploader cable depending
- 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, and the power cable is inserted and turned to its locked position.
	The batteries are discharged.	Charge the batteries by connecting AC power.
	The fixture has been turned off.	Press any button on the control panel to turn on the fixture.
Fixture suddenly turned off.	Power was turned off.	Check the power supply, switches and breakers.
Fixture suddenly stopped responding.	The wireless transmitter or connections, was disconnected/tampered with.	Inspect the wireless transmitter and connections.
	DMX cables were disconnected.	Inspect DMX cables.
Fixture operates irregularly/abnormally.	DMX cable polarization is inverted (pin 2 + 3).	Install a polarity-inverter or replace cables.
	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.com
	The SGM Calibration Data set has been lost.	Contact your local SGM dealer or support@sgmlight.com

FIXTURES AND ACCESSORIES

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

The P-1 can be used with a variety of accessories.

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

ORDERING INFORMATION

P-1, Std, BL (incl. 3 pcs Batt)	P/N: 80031501
P-1, Std, WH (incl. 3 pcs Batt)	P/N: 80031511
P-1, Std, CU (incl. 3 pcs Batt)	P/N: 80031521
P-1, Std, BL (excl. 3 pcs Batt)	P/N: 80031502
P-1, Std, WH (excl. 3 pcs Batt)	P/N: 80031512
P-1, Std, CU (excl. 3 pcs Batt)	P/N: 80031522

ACCESSORIES

Power cable with IP connector	P/N: 07860275
Omega bracket with quarter turn bolts, BL	P/N: 83060602
Battery, Nominal: 21,6V - Nominal: 3350 mAh (1 pcs)	P/N: 83061709
Battery, Nominal: 21,6V - Nominal: 3350 mAh (2 pcs)	P/N: 83061710
SGM USB uploader cable	P/N: 83062011
P-1 Ceiling/Wall mount, BL	P/N: 83060614
Filter Frame - Medium Angle, BL	P/N: 83061140
Filter Frame - Wide Angle, BL	P/N: 83061141
Filter Frame - Elliptical Horz wide angle, BL	P/N: 83061142
Filter frame - Elliptical Vert wide angle, BL	P/N: 83061147
Barndoor 4-way, P-1 series, BL	P/N: 83061138
Barndoor 8-way, P-1 series, BL	P/N: 83061139
Flightcase for 4 pcs P-1	P/N: 82051009
Flightcase for 4 pcs P-1 incl. charger	P/N: 82051010
Flightcase Charger Cable Assembly Kit (4 pcs)	P/N: 83062044
Vacuum test kit	P/N: 83061136
28 mm spigot adapter for omega bracket	P/N: 83060639

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 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
- Conforms 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.



SGM LIGHT A/S

Sommervej 23

8210 Aarhus V

Denmark

Tel: +45 70 20 74 00

info@sgmlight.com

www.sgmlight.com