

### Installing and Using the Precision Spotlight

MODELS: SPL-12W, SPL-12B, SPL-12C



SPLR-2 (included)



SPLR-1



SPLR-3



#### IMPORTANT!

**READ THESE INSTRUCTIONS BEFORE INSTALLING AND USING THIS PRODUCT.**

The MarincO Precision spotlight uses a super bright 100 Watt, replaceable H3 Halogen bulb that produces a rich yet intense beam that can illuminate objects up to 1,000 ft away. It is IP56 Weatherproof rated for extreme environments, with a UV weather resistant housing and fully enclosed tilt function driven by quiet motors that can withstand extreme temperatures (5°F to 113°F or -15°C to 45°C). It has been designed and tested to withstand the harsh marine environments including high humidity, salt water spray, shock, and vibration. Innovative construction allows for upside down mounting and reverse motion programming. Precision circuitry allows for remarkable aiming and tracking with two speed choices. The spotlight has a 30 minute shut-down timer. If the spotlight is left unattended for more than 30 minutes, the spotlight will turn off. The shut-down has no effect on the SOS function of the spotlight.

The Precision remotes have glow in the dark buttons and include one touch Automatic Sweep and SOS options. The wireless remotes transmit a signal up to 200ft (60m). While the spotlight comes with a wireless bridge remote there are two more optional remotes: a wireless handheld remote w/lanyard (SPLR-1) and a hard wired bridge mount remote (SPLR-3).

#### Package Includes:

- Spotlight with 12 Volt bulb installed
- Mounting bracket (no fasteners included)
- Wireless Bridge Remote (SPLR-2)

- Instruction manual
- Additional 24 Volt bulb\*\*

\*\* (models SPL-12W, SPL-12B, SPL-12C only)

# Precision Spotlight Instructions

---

## Required for Installation:

- Four (4) No. 10 stainless steel pan head screws for spotlight bracket  
(Length and type of screws to be determined by mounting surface)
- Two (2) No. 6 stainless steel pan head screws  
(Length and type of screws to be determined by mounting surface)
- Two (2) #16 AWG butt wire connectors

**⚠ WARNING** IF THE APPLICATION IS 24 VOLTS, THE 12 VOLT BULB WILL NEED TO BE REPLACED WITH THE 24 VOLT BULB. TO REPLACE THE BULB REFER TO THE BULB REPLACEMENT SECTION. (PAGE 5).

Failure to use the appropriate bulb wattage will damage the spotlight.

**⚠ WARNING** BEFORE OPERATION REMOVE BLUE FILM FROM LENS. FAILURE TO REMOVE FILM WILL DAMAGE THE SPOTLIGHT.

## Mounting and wiring of the Precision Spotlight

1. Select a flat surface to mount the spotlight. Make sure there are no obstructions around the spotlight that could interfere with the rotation (template included with light). Be sure you will have wiring access to the underside of the chosen location and that drilling holes will not damage existing wiring or structures. Avoid locations where lines, anchors and sails might entangle or damage the light.
2. Refer to the template for mounting and wire hole location.
3. While installing the mounting bracket make sure that the securing screw is opposite the direction that the light will be facing. Mark the mounting holes and center wire hole. Be sure that there is at least a 6" (145 mm) radius of clearance from the center hole. See dotted line on figure 1 (page 7).
4. Drill hole sizes appropriate for the type of screws or bolts being used. Note: the maximum bracket hole sizes are No. 10 screws.
5. Drill the appropriate hole size to accommodate the wires. This will depend on the type of wire being used.
6. The spotlight requires 12 or 24 volt power supplied through appropriate gauge wire. (Note: If the wired bridge remote version is used, then 2 additional wires will need to be routed from the remote to the spotlight.)

**⚠ WARNING** CORRECT WIRE SIZE FOR THE RUN AND PROPER CIRCUIT PROTECTION NEEDS TO BE SELECTED BASED ON ABYC STANDARDS. FAILURE TO FOLLOW ABYC STANDARDS MIGHT LEAD TO SEVERE INJURY, DEATH OR DAMAGE TO VESSEL.

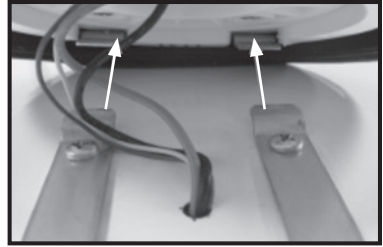
7. Mount the mounting bracket after applying a small amount of non silicone sealant to the area the screws or bolts penetrate the mounting surface. (Note: mounting bracket screw heads should not protrude more than 0.2" (5 mm) above mounting bracket.)
8. Connect wires to spotlight using butt connectors. Red wire is positive, Black wire is negative.

**⚠ WARNING** POLARITY OF THE WIRES NEEDS TO BE CORRECT TO OPERATE THE SPOTLIGHT! FAILURE TO WIRE CORRECTLY WILL DAMAGE THE SPOTLIGHT SYSTEM!

9. Slide spotlight over mounting bracket making sure the wires are not pinched and the two holding tabs engage the light in the proper location. Align the securing screw hole in the back of the spotlight base with the securing screw hole in the mounting bracket. This will require a degree of pressure and effort as the mounting seal must be suitably compressed during this process. For easier alignment, slightly lift the back side of the

# Precision Spotlight Instructions

spotlight (containing the securing screw hole) while depressing the gasket on the front side of the spotlight (opposite the securing screw hole). Insert securing screw and ensure that it is fully engaged and secure.



**⚠ WARNING YOU MUST FEEL THE SCREW REACH A TWISTING TORQUE TO KNOW THAT IT IS PROPERLY ENGAGED**

*Note: In the photograph, the purple and yellow control wires are shown for the wired remote. If a wireless bridge remote is used, then the purple and yellow leads are not necessary and can be tucked away within the spotlight base*

## Mounting the wired and wireless bridge remote

1. The remotes are all IP54 weather resistant.
2. Please choose a mounting location based on the gasket supplied with the remote (*large hole should be towards top*)
3. Drill holes the correct size for the mounting screws. The holes through the remotes are sized for a No. 6 pan head screw. The length and thread type will need to be determined by the application. Remove and set aside the 2 screw covers.
4. Drill hole for the wiring. Note that the hole needs to be 5/8" to allow the unit to sit flat.
5. **If mounting the wireless bridge remote** it will require a 12V or 24V power source. **If mounting the hard wired bridge remote** then it does not need a local power source and instead uses the purple and yellow wires connecting from the spotlight to the remote. These two wires will supply the remote with power and control the spotlight. The terminals on the remote can handle a 16 AWG to 26 AWG wire. Maximum torque on the terminals is 2.21 in lbs (.25 nm).
6. Feed wires through drilled surface hole and gasket from below.
7. **For the wireless bridge remote** attach the power source wires to the remote (+) positive and (-) negative terminals. **For the hard wired bridge remote** attach the 2 wires from the spotlight. The yellow wire needs to connect to the (+) positive and the purple wire needs to connect to the (-) negative. Maximum torque on the terminals is 2.21 in lbs (.25 nm)
8. Place remote in desired location, align holes and tighten down.
9. Apply screw covers to remote to hide screws.

## Pairing of wireless bridge and hand held wireless remote to spotlight

1. Disconnect all power to the spotlight.
2. Apply power to wireless remote. Press and hold the power button on the wireless remote.
3. While pressing the power button connect power to the spotlight.
4. After a few seconds you will hear the relay click and the light will turn on.
5. When the light turns on the pairing is complete, release power button.

## Pairing multiple spotlights with separate remotes

If multiple spotlights will be within 200' of one another and you want to control each spotlight with independent remotes, please follow the instructions below.

1. For 1st spotlight, follow the "Pairing of wireless bridge and hand held wireless remote to spotlight" instructions above.
2. For 2nd spotlight, follow instructions above except press and hold the power button AND the UP button while inserting the battery in an SPLR-1 remote or connecting power to an SPLR-2 remote.
3. For 3rd spotlight, follow instructions above except press and hold the power button AND the RIGHT button while inserting the battery in an SPLR-1 remote or connecting power to an SPLR-2 remote.

# Precision Spotlight Instructions

---

4. For 4th spotlight, follow instructions above except press and hold the power button AND the DOWN button while inserting the battery in an SPLR-1 remote or connecting power to an SPLR-2 remote.
5. For 5th spotlight, follow instructions above except press and hold the power button AND the LEFT button while inserting the battery in an SPLR-1 remote or connecting power to an SPLR-2 remote.

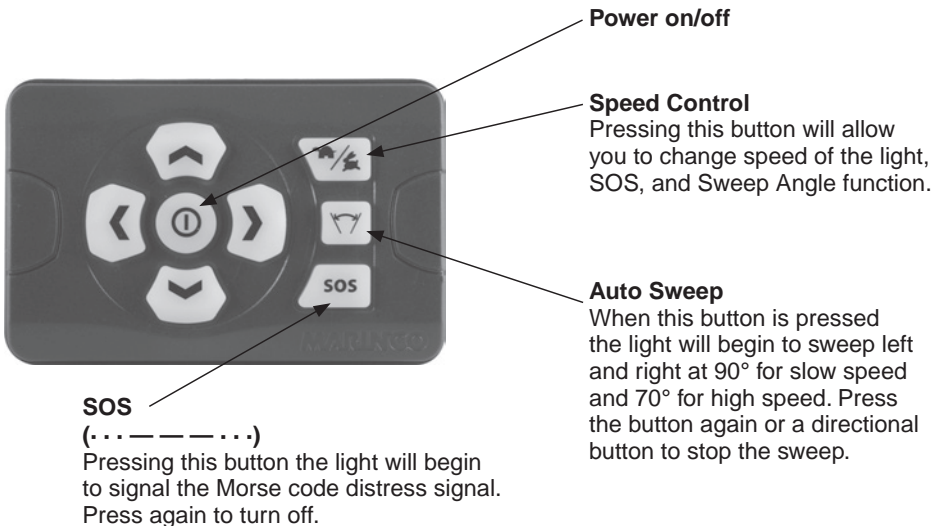
## Programming the remote when mounting the spotlight upside down

*NOTE: This procedure reverses the directional buttons on the remote.*

1. Pairing of the remote described above must be completed first.
2. Disconnect all power to the spotlight.
3. Hold down the tilt UP and DOWN buttons on the remote.
4. While pressing the 2 buttons apply power to the spotlight and continue to hold down the buttons for a few seconds until the spotlight tilts up or down.
5. The spotlight is now configured for inverted mode. Release buttons.
6. To return the spotlight to the standard configuration repeat steps above.

**⚠ WARNING** BEFORE OPERATION REMOVE BLUE FILM FROM LENS

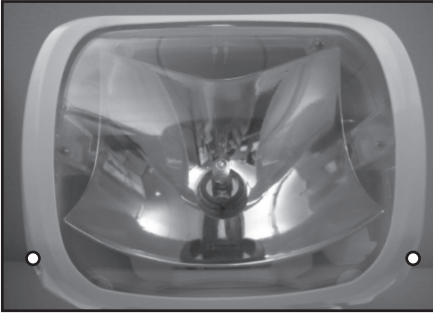
## Operation



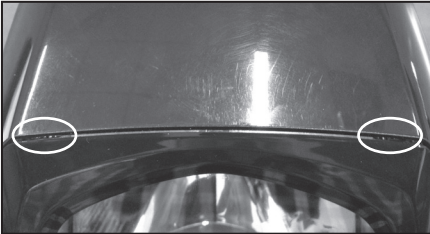
# Precision Spotlight Instructions

**BULB REPLACEMENT CAUTION! AVOID TOUCHING THE GLASS SURFACE OF THE NEW BULB.** (TOOLS REQUIRED: MEDIUM PHILLIPS SCREWDRIVER AND SMALL FLATHEAD SCREWDRIVER)

1. Remove 2 screws on bottom of lens bezel.



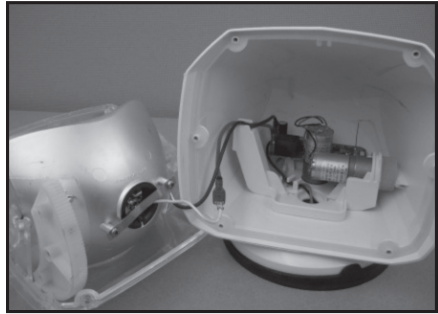
2. Remove the bezel by inserting a small flathead screwdriver into the two locations circled. Gently separate the bezel from the body at both locations using a straight separating motion until you feel the bezel release from the lens.



3. Remove 6 screws from around the lens.



4. Remove lens and reflector as an assembly.



5. Remove the screw holding the metal grounding bar behind the reflector. Remove the bulb assembly by pushing on the bulb so it exits the back of the reflector.



6. Unplug bulb and replace with new bulb. (or 24 volt bulb if installation requires). **DO NOT TOUCH THE GLASS SURFACE OF THE BULB.** During reassembly, hand tighten all screws until snug. Do not overtighten or use a power driver as doing so may strip the threaded screw bosses.



# Precision Spotlight Instructions

**3** YEAR WARRANTY

## Specifications

<b>Bulb</b>	100 Watt, H3 Halogen (replaceable) (12 Volt installed / 24 Volt included)
<b>Power (Input voltage)</b>	12 Volt or 24 Volt (note: must match bulb with voltage)
<b>Current draw (idle / in use)</b>	0.03 Amps / 7.0 Amps
<b>Peak beam intensity</b>	210,000 cp
<b>Peak beam distance</b>	917 ft (280 m)
<b>Lux @ 66' (20m)</b>	525 Lux
<b>Coverage at 66' (20 m)</b>	132 sq Ft (12 sq m)
<b>Rotatation</b>	370° (built in limit stops)
<b>Tilt</b>	120° Tilt (75° up and 45° down)
<b>Wireless range</b>	200 ft (65m)
<b>Dimensions</b>	7.5"W x 7.5"H x 9.25"D (19cm x 19cm x 23.5cm)
<b>Weight</b>	3.30 lbs (1.5 kg)
<b>Housing material</b>	UV resistant PC/ASA
<b>Lens material</b>	UV resistant Lexan®
<b>Wire type</b>	16 AWG power 24 AWG control
<b>Operating temp range</b>	5°F to 113°F (-15°C to 45°C)
<b>IP Rating</b>	IP56

Tested in accordance with ANSI/NEMA standard FL1

Description	Color	Item #	OEM #
12/24 Volt, 100 Watt	white	<b>SPL-12W</b>	—
12/24 Volt, 100 Watt	black	<b>SPL-12B</b>	—
12/24 Volt, 100 Watt	chrome	<b>SPL-12C</b>	—
12 Volt, 100 Watt	white	—	SPL-12W.OEM
12 Volt, 100 Watt	black	—	SPL-12B.OEM
12 Volt, 100 Watt	chrome	—	SPL-12C.OEM
24 Volt, 100 Watt	white	—	SPL-24W.OEM
24 Volt, 100 Watt	black	—	SPL-24B.OEM
24 Volt, 100 Watt	chrome	—	SPL-24C.OEM

## Replacement Parts

<b>202319</b>	12V, H3 halogen replacement bulb
<b>202320</b>	24V, H3 halogen replacement bulb
<b>SPLR-1</b>	Spotlight remote, wireless hand-held
<b>SPLR-2</b>	Spotlight remote, wireless bridge mount
<b>SPLR-3</b>	Spotlight remote, wired bridge mount



## Remote Specifications

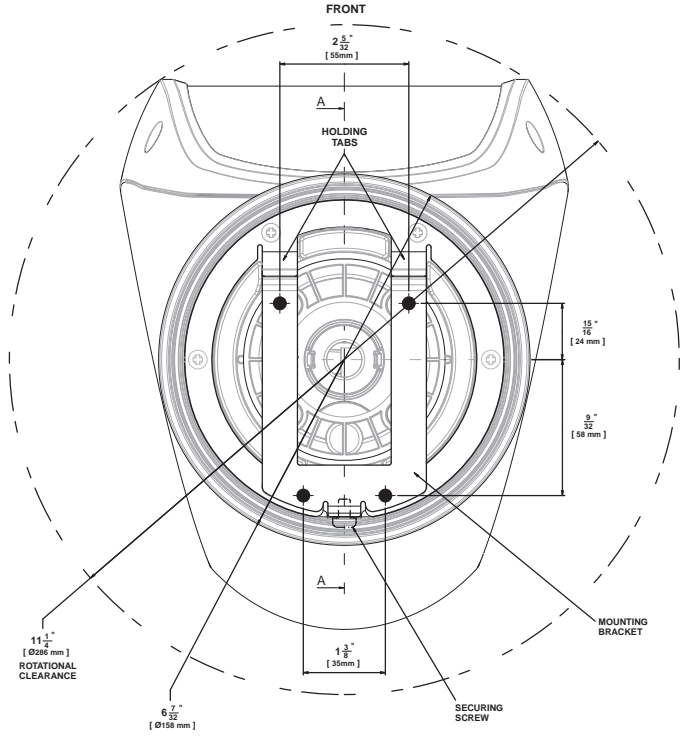
	Included * Wireless Bridge Remote (SPLR-2)	(Optional) † Hand Held Bridge Remote (SPLR-1)	(Optional) ▲ Wired Bridge Remote (SPLR-3)
<b>Power</b>	12 or 24 Volt (hard wired to power)	CR2450 button cell battery	12 or 24 Volt (hard wired to spotlight)
<b>Current draw (idle / in use)</b>	negligible	negligible	negligible
<b>Wireless range</b>	200 ft (65m)	200 ft (65m)	—
<b>Estimated battery life</b>	—	> 40 hours (continuous use)	—
<b>Dimensions</b>	3.5"W x 2.25"H x .75"D 88mm x 57mm x 19mm	2.0"W x 3.78"H x 1"D 51mm x 96mm x 25mm	3.5"W x 2.25"H x .75"D 88mm x 57mm x 19mm
<b>Weight</b>	2.12 oz. (60g)	2.82 oz. (80g)	2.12 oz. (60g)
<b>Housing material</b>	UV resistant PC/ASA	UV resistant PC/ASA	UV resistant PC/ASA
<b>Button material</b>	Silicone (glow in the dark)	Silicone (glow in the dark)	Silicone (glow in the dark)
<b>Wire</b>	16AWG	—	24AWG
<b>Operating temp range</b>	5°F to 113°F (-15°C to 45°C)	5°F to 113°F (-15°C to 45°C)	5°F to 113°F (-15°C to 45°C)
<b>IP Rating</b>	IP54	IP56	IP54

\* There is no wiring required from the spotlight to the bridge remote. The spotlight and the bridge remote must be wired locally to power.

† The hand held bridge remote includes a wrist lanyard and a surface mount cradle.

▲ The wired bridge remote requires hard wiring of 2 leads from the spotlight to the bridge.

# Precision Spotlight Instructions



**FIGURE 1**

