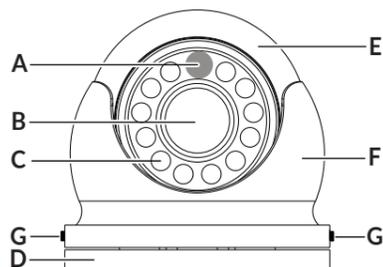# LOWRANCE SIMRAD B&G

IP CAM-1 INSTALLATION GUIDE

ENGLISH

In the box

- 1x IP CAM-1 dome camera
- 1x self-adhesive mounting template
- 3x mounting screws
- 2x spare lock screws and Allen key
- 1x waterproof RJ45 boot
- 1x foam gasket
- 1x 12 V DC connector
- 1x installation guide

A Photo-diode (day/night sensor)
B Lens window
C Infrared LEDs (night illumination)
D Base
E Inner dome
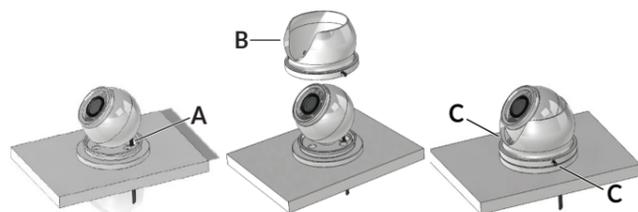**F** Cowling
G Lock screws

Mount camera

⚠ **WARNING:** Switch off the power supply before installing the camera.

1 Use the supplied Allen key to remove the base of the camera.

2 Stick the supplied self-adhesive mounting template at the desired mounting position, aligning the arrow with the direction of the camera.

3 Drill pilot holes for the three mounting screws.

4 If you're exiting the camera cable through the cable entry hole, drill a 22 mm (0.86 inch) cable entry hole as indicated.

➔ *Note: If you're exiting the cable out the side of the camera base, you don't need to drill a cable entry hole.*

5 Stick the supplied foam gasket to the underside of the base.

6 Screw the base into place using the supplied screws.
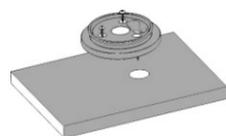
⚠ **WARNING:** Be careful not splinter or damage the surface if fitting the base onto a fiberglass surface.

7 Slide the camera cable through the cable entry hole you have drilled (**A**) or the base exit channel. Place the inner dome onto the protective foam ring on the base. Set the desired camera field of view.

8 Place the cowling (**B**) over the inner dome and on to the base.

9 Move the cowling into position and carefully tighten the lock screws until they lightly hold the inner dome in position (**C**).

⚠ **WARNING:** If you need to adjust the position of the inner dome, fully loosen the lock screws (**A**) to avoid damage to the camera housing.

Fit waterproof RJ45 boot

If you're installing your camera in an external location or a position prone to moisture ingress or harsh weather, you must install the supplied waterproof RJ45 boot to protect the camera's RJ45 connection.
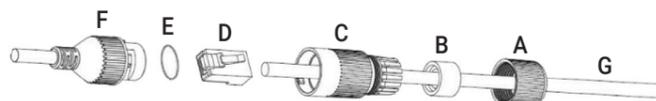
1 Dissemble the boot, unscrewing the lock nut (**A**) and removing the rubber gasket (**B**) from the end cap (**C**).

2 Feed your connector-less Ethernet cable (**G**) through the lock nut and rubber gasket, ensuring the rubber gasket inset ridge faces the end cap.

3 Crimp an RJ45 network connector (**D**) to the end of the Ethernet cable in accordance with the diagram below. Ensure the wires are terminated in the correct order and are not crossed.

Pin	Color
1	White/orange
2	Orange
3	White/green
4	Blue
5	White/blue
6	Green
7	White/brown
8	Brown

4 Check the o-seal (**E**) is fitted on the end of the camera's network interface socket (**F**). Plug the terminated network connector (**D**) into the camera's network interface socket (**F**).

5 Insert the rubber gasket (**B**) into the end cap (**C**) and screw the lock nut (**A**) onto the end cap (**C**). Slide the reassembled boot into the camera's network interface socket (**F**) and rotate until it locks.

Power camera

IP CAM-1 can be powered via PoE (Power over Ethernet) power supply or by a 12 V DC supply.

⚠ **WARNING:** Connect the camera to the power supply with a suitable rated fuse or circuit breaker.

➔ *Note: To prolong the operation life of the camera's sensor, we recommend that power to the camera is routed via a dedicated power switch.*

PoE powering

PoE powering requires only one cable to power the camera and carry the video image. An Ethernet cable and a PoE injector or combined PoE injector/switch are required.

Once you've connected your Ethernet cable (**A**) to the camera's network interface socket using the waterproof RJ45 boot, connect the other end of the Ethernet cable to an inline PoE injector (**B**) or combined injector/switch (**C**), both of which connect to your MFD (**D**) or your MFD's Ethernet network. The combined injector/switch also connects to other Ethernet devices (**E**).

⚠ **WARNING:** Under no circumstances should you cut off the camera's network interface socket as this will void the product warranty.
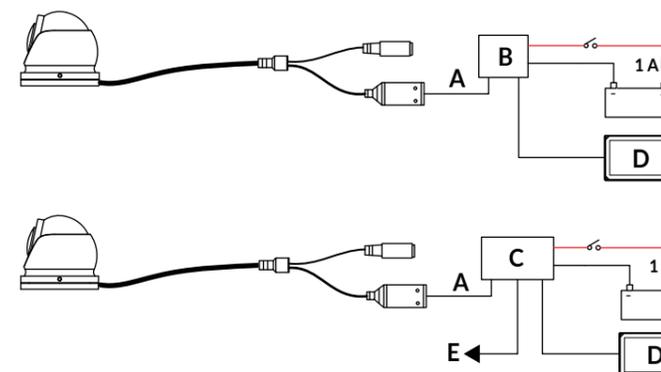
12 V DC powering

A 12 V DC source can power the camera. 12 V DC must be applied to the camera's DC connector (**A**) using the supplied 12 V DC connector (**B**). As this is not a waterproof connection, place it so as to avoid water ingress. Connect the camera's Ethernet cable (**C**) to the MFD (**D**) or MFD's Ethernet network.

➔ *Note: Ensure correct polarity as indicated on the DC connector.*
➔ *Note: 0.75 mm2 (18 AWG) wires are recommended for the DC power.*
➔ *Note: A direct connection to the camera's DC cable can be made by cutting off the DC connector. In this case, connect all red wires (if more than one) to 12 V DC (+) and the black wire to (-).*
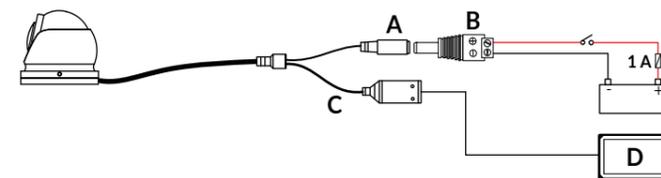
Select camera on MFD

To display a list of cameras connected to your MFD, go to a compatible Simrad®, Lowrance® or B&G® display unit and, from the home screen, navigate to the **Camera** app > **Camera settings** > **Camera source** (or **Settings** > **Cameras** > **Onvif scan** > **Manage cameras**, depending on your display unit).

If more than one camera is on the network, by default, the unit connects to the first one in the list. To source a different camera, select it from the list.

If your camera doesn't display in the list, select **Manual IP** (or **Add camera**, depending on your display unit) and enter a display name and a URL containing the camera's fixed IP address. Leave any other fields blank.

To find the fixed IP address for your IP CAM-1, look on the camera packaging or the identification label attached to the camera cable. Then enter one of the following (where 172.23.xxx.xxx is the IP address of the camera):

- 172.23.xxx.xxx/LIVE/0/MAIN (for high-resolution MFDs)
- 172.23.xxx.xxx/LIVE/0/SUB (for low-resolution MFDs)

View camera output

Once your IP CAM-1 is selected as the camera source on your MFD, you can view its output by opening your **Camera** app (or **Video** page, depending on your display unit).

➔ *Note: You can source the same camera on more than one MFD simultaneously if you set it up as described.*

Care and cleaning

This product is a sensitive piece of electronic imaging equipment and must be handled and treated accordingly. Do not drop or shake the camera during installation. Avoid direct sunlight exposure through the lens as this may degrade the camera's performance over time.

When cleaning the camera, ensure the power is switched off. Clean the camera housing with a soft cloth. Moisten the cloth and use a mild liquid detergent if required. The lens window has a protective coating which may suffer damage as a result of improper cleaning. To clean the lens window use a microfiber cloth. Moisten with clean water if necessary.

Technical specifications

Power	
PoE	IEEE 802.3af
DC connector	12 V DC (10 - 16 V DC) 2.1 x 5.5 mm male CCTV power connector
Power consumption	
IR LED off	1.38 W (0.1 A at 13.8 V DC)
IR LED on	2.76 W (0.2 A at 13.8 V DC)
Operating temperature	-30°C to 60°C (-22°F to 140°F)
Environment	IP66
Stream resolutions	
Main	1080p (1920 x 1080)
Sub	448p (800 x 448)
Protocol	RTSP
Lens	1.8 mm (125° wide angle)
Sensor	1/4 inch CMOS sensor
Housing material	316 stainless steel
Weight	250 g (0.55 lb)

Dimensions