

GARMIN[®]

GC™ 12

INSTALLATION INSTRUCTIONS

Mounting Considerations

You can mount the camera upside-down or sideways. You can reverse the camera image to use in rearview mode. See your chartplotter owner's manual for instructions.

You should mount the camera in a location where it is

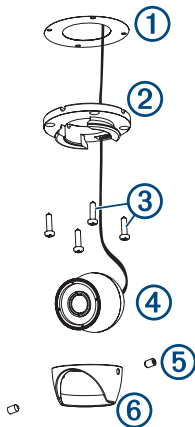
- not an obstacle in doorways or walkways.
- not exposed to extreme temperatures.
- not exposed to gas or oil.
- not exposed to radioactivity.
- not facing into direct sunlight or a direct reflection of sunlight.

Tools Needed

- 1 A fuse or circuit breaker
- Drill and 2 mm (¹/₁₆ in.) drill bit

Mounting the Camera

1 Secure the template ① to the mounting location.



- 2 Using a 2 mm (¹/₁₆ in.) drill bit, drill the pilot holes.
- 3 Adjust the dome base ② to the correct orientation for your desired camera tilt.
- 4 Secure the dome base to the mounting location using the included tapping screws ③.
- 5 Insert the camera ④ into the dome base.
- 6 Secure the set screws ⑤ into the dome front ⑥ using the included wrench.

Installation Considerations

You must connect the camera power wire to the battery through a 1 A fuse or circuit breaker. If you do not use a fuse or circuit breaker, the camera can malfunction.

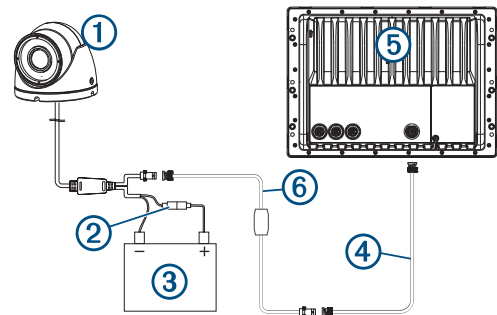
Some Garmin[®] GPSMAP[®] chartplotters have a built-in CVBS video encoder. Video from the camera or cameras appears on all chartplotters on the network when plugged into a single CVBS IN port. Go to garmin.com/gc12 for a list of compatible GPSMAP chartplotters.

If you want to use more than one camera or the chartplotter does not have a CVBS IN port, you must use an encoder.

You can add up to four cameras to one encoder and up to two encoders to the Garmin Marine Network.

NOTE: To reduce the possibility of interference, you can install a composite video ground loop isolator (not included) between the camera and any chartplotters that do not have isolated power grounds.

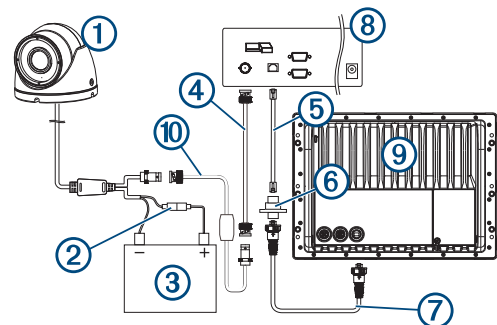
Installation Diagram



①	GC 12
②	1 A fuse or circuit breaker (not included) ¹
③	12 Vdc power source
④	BNC to BNC coaxial video cable (not included)
⑤	Compatible Garmin chartplotter
⑥	Composite video ground loop isolator (not included)

Installation With Encoder Diagram

You can add more than one camera to your network when you use an encoder.



①	GC 12
②	1 A fuse or circuit breaker (required, not included) ¹
③	12 Vdc power source
④	BNC to BNC coaxial video cable (not included)
⑤	Network cable
⑥	Power-over-Ethernet isolation coupler (GPN 010-10580-10)
⑦	Garmin Marine Network cable
⑧	Axis [®] Q7424 Encoder (optional/not included)
⑨	Compatible Garmin chartplotter
⑩	Composite video ground loop isolator (not included)

¹ You must connect the camera power wire to the battery through a 1 A fuse or circuit breaker. If you omit a fuse or circuit breaker, the camera can malfunction.



Troubleshooting

Video Does Not Appear on the Chartplotter Screen

- Verify all cables are firmly connected.
- Verify the video cable is connected to the camera video output port.

Image on the Chartplotter Screen is Dim or Dark

- Verify the lens is clean. If necessary, wipe the lens with a soft, clean cloth.
- If the camera is exposed to too much direct light, change the camera position or location.
- Adjust the contrast on your chartplotter. See your chartplotter manual for instructions.

Image on the Chartplotter Screen Flickers

- Verify the camera points away from the sun.
- Adjust the contrast on your chartplotter. See your chartplotter manual for instructions.

Camera is Not Working and the Surface is Hot

- Verify the camera is connected to an appropriate power source.

Video Image Includes Scrolling Bars on the Chartplotter Screen

- Verify all cables are firmly connected.
- Install a composite video ground loop isolator (not included) between the camera and any chartplotter that does not have an isolated power ground.

Specifications

Dimensions (W x H)	50.5 x 44.3 mm (2 x 1 3/4 in.)
Weight	205 g (7.23 oz)
Operating temperature	From -10 to 50°C (from 14 to 122°F)
Water rating	IEC 60529 IPX7 ¹
Operating current	12 Vdc IR off: 80 mA IR on: 170 mA
Storage temperature	From -15 to 60°C (from 5 to 140°F)
Power input	From 9 to 18 Vdc
Compass-safe distance	155 mm (6.125 in.)
Viewing angle	Vertical: 52 degrees Horizontal: 69 degrees
IR distance	10 m (33 ft.)
Video output	1.0Vp-p composite 75 Ω composite
Resolution	PAL
Effective pixels	Vertical: 582 Horizontal: 976

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¹ The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to www.garmin.com/waterrating.