

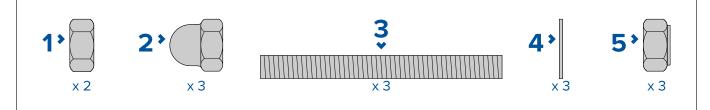
M1xx/M2xx/M3xx Series Camera Installation addendum

Important installation update

Since the publication and printing of the manual supplied with your camera, the mounting procedure for the camera has changed, following additional installation feedback from Raymarine's dealer network. The following mounting procedure MUST be followed when mounting your camera, and supersedes the mounting procedures detailed in the printed manual supplied with your camera.

Installation fixings

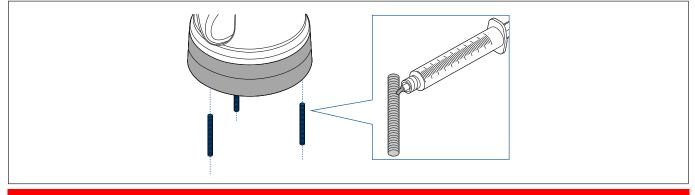
The following fixings are supplied with your camera. This list supersedes the fixings information provided in the printed manual supplied with your camera. All other supplied parts remain the same as those listed in the manual.



- 1. Flat nuts (M6, A4 stainless) x2. Must only be used to assist in winding the studs into the camera's base.
- 2. Dome nuts (M6, A4 stainless) x3. If needed, fit to stude to cover exposed ends. Do NOT use with riser.
- 3. Threaded stud (M6, 60 mm, A4 stainless) x3.
- 4. Flat washers (M6, A4 stainless) x3.
- 5. Nyloc nuts (M6, A4 stainless) x3.

Applying Loctite

Before inserting the threaded studs into the base of the camera, you MUST first apply "Loctite 243" threadlocker (or equivalent), to all 3 studs.



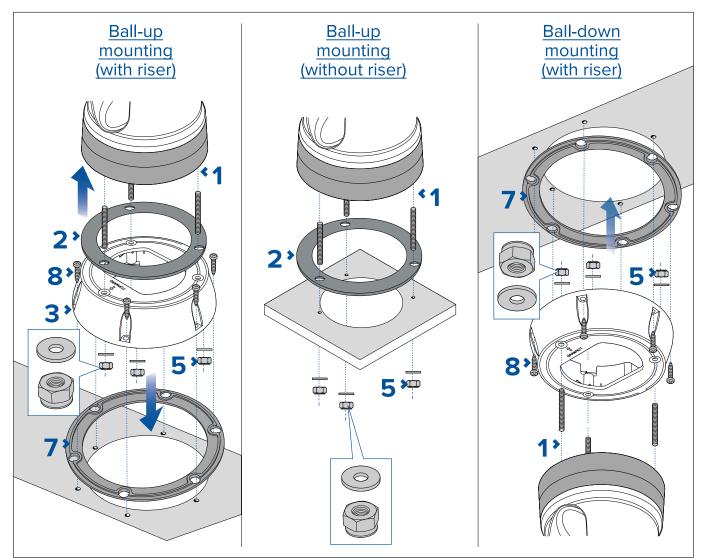
Important: If the supplied threaded studs are not long enough to accommodate all the fixings and the thickness of the mounting surface, obtain longer replacement **marine-grade stainless steel** M6 threaded studs (e.g. 316/A4).

- 1. Clean and de-grease the 3 supplied threaded studs and the camera baseplate's tapped threads.
- 2. Allow to dry before proceeding to the next step.
- 3. Apply generous amounts of "Loctite 243" threadlocker (or equivalent) to each of the studs.
- 4. Insert the threaded studs into the camera's baseplate immediately, ensuring sufficient thread protrudes, to allow the fitting of washer and nuts. If necessary, fix the supplied flat nuts (x2) (temporarily) to the studs, to assist you in winding the studs fully into the camera's threads. Discard flat nuts once done.
- 5. Remove any excess Loctite. Any remaining Loctite must be thoroughly cleaned from the studs and base.
- 6. Allow the Loctite on the threaded studs to cure for 24 hours, before proceeding to the next step.

Note: If using the riser to mount the camera, do NOT allow any Loctite to come into contact with the riser, as the Loctite may damage the riser material.

Mounting the camera

The following mounting procedure MUST be followed when mounting your camera, and supersedes the mounting procedures detailed in the printed manual supplied with your camera.



- 1. Ensure that you've carefully followed the instructions provided in the "Applying Loctite" section to insert the studs correctly into the camera base.
- 2. Use the supplied mounting template to drill the holes for the camera base (or riser, if used), and the cables (as required).
- 3. Place the gasket on the bottom of the camera, carefully aligning the gasket holes with the threaded studs.

Note: If mounting the camera ball down, do NOT fit the gasket between the camera and the riser.

4. Optionally, (temporarily) secure the riser to the camera with a few hand turns of the nyloc nuts on the studs, to prevent the riser from falling while you connect the cables. Check that the camera's gasket remains firmly in place.

Note: Observe the camera forward marking on the top surface of the riser. You must ensure that the riser is mounted so that the camera is oriented properly, relative to the vessel's bow.

- 5. Connect the cables to the camera. If using the riser, loop the cables round within the riser base so that they can be threaded through the bottom of the riser, and into the cable routing hole drilled in the mounting surface.
- 6. Secure the camera assembly to the mounting surface (or riser, if used), using the supplied flat washers and nyloc nuts. Pay careful attention to the correct arrangement of the fixings, as shown in the image above.

Note: If you are replacing an existing camera installation or have purchased an older riser, do NOT use the existing spring washers supplied with the camera or riser.

7. Tighten the nyloc nuts to a torque of 5.0 - 6.0 N·m (3.7 - 4.4 lbf·ft).

- 8. Fit the supplied base seal to the riser.
- 9. Secure the riser to the mounting surface using screws suitable for the mounting surface material and thickness. (Fixings not supplied).