

# Quick-Change Mount



## 1 Introduction

This application note describes how to mount the TCM-1 to an anchor using a quick-change mount. The quick-change mount enables the user or diver to remove the logger easily without having to untie a meter's lanyard from the anchor. The quick-change mount is constructed of easily-sourced hardware and can be assembled with a minimum of tools. (Materials may vary depending on manufacturing and supply available so use the following as guidelines for your specific mount.) Once assembled, loggers can be exchanged easily in the field with by divers or anyone with gloved hands.

## 2 Requirements

The following items are required (per setup)

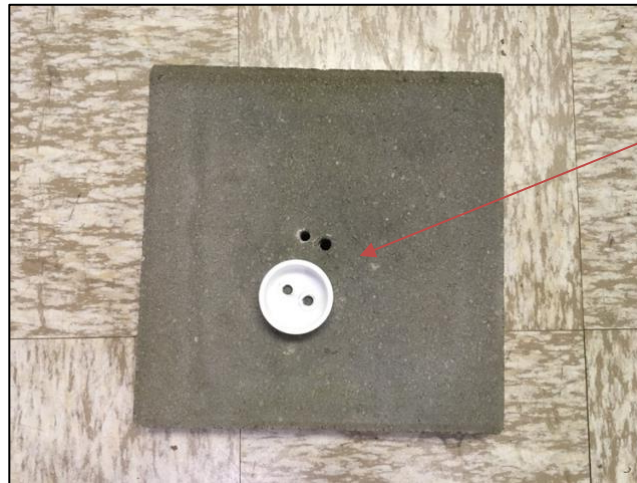
- Any TCM-x meter
- Cap assembly consisting of:
  - 1 X 1-1/2" PVC pipe cap (flat end cap type preferred as shown in Figure 1)
  - 1 X 1-1/2" PVC cleanout fitting
  - 1 X 1-1/2" PVC cleanout screw in plug

- 2 X 5/16"-18 X 2.5" stainless steel bolts
- 2 X 5/16" stainless steel washers
- 2 X 5/16"-18" stainless steel locknuts
- Grease for lubricating stainless steel threads (to prevent galling)
- PVC Cement
- Patio stone 12" X 12" x 1.75" or 18" X 18" x 1.75"
- Tools for construction:
  - Power drill
  - 1/4" drill bit (for lanyard hole in PVC plug)
  - 5/16" drill bit (for bolt holes in the PVC end cap)
  - 5/16" masonry (for bolt holes in the patio stone)
  - 1/2" socket wrench with extension
  - 1/2" crescent wrench
- Tools for servicing by diver:
  - 1" crescent wrench (to loosen plug)



### 3 Cap and “Cup” Assembly

- First, drill 2 holes in the PVC pipe end cap about a half inch apart.
- Drill 2 holes in the center of the patio stone or anchor using the drilled holes on the end cap as a template.
- Bolt the end cap and stone together and secure.



Drill holes

**Figure 1A (left):** End Cap is attached with 2 bolts that are drilled to the center of the patio stone. **Figure 1B (right):** Bolts on the underside of the patio stone are secured.



Glue



the cleanout fitting to the end cap with PVC cement.



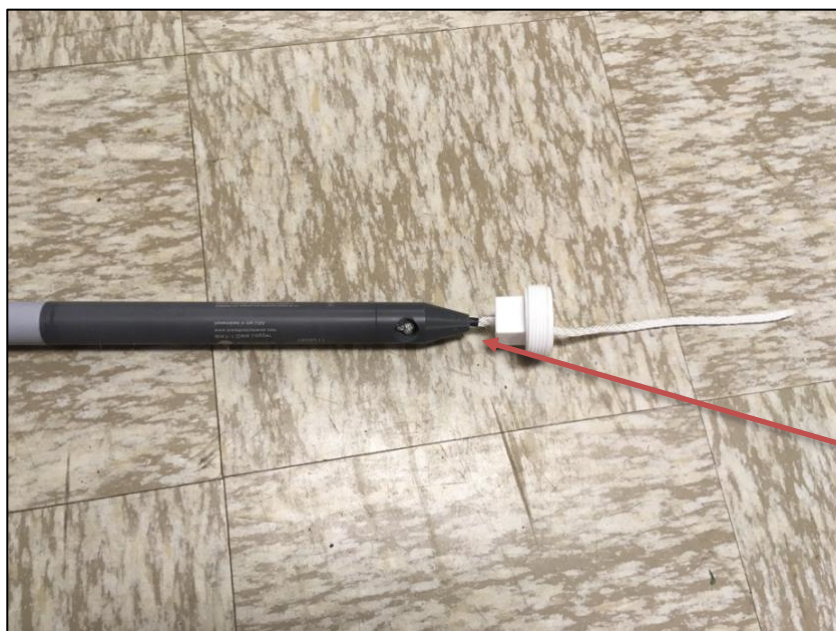
Drill a hole in the center of the pipe plug.

Tie the meter's lanyard to the plug with an overhand knot on the back side of the cap (keep the lanyard short ~2 cm.)

Purchase as many caps as you have meters, but you only need as many "cups" as you have sites.



Knot end of the screw in plug.



Keep the length of lanyard between meter and plug short (~2 cm).

## 4 Removing the Meter

When the diver is at the meter and anchor on the bottom, he/she would unscrew the cap with the "old" meter and screw in the "new" meter using an open-ended wrench to loosen the cap.

## 5 Additional Information

Lowell Instruments has made a good faith effort to make sure that the information in this application note is accurate and complete. However, we are not perfect and this document may contain errors. We also reserve the right to change the instructions at any time and without notice.

Please contact your local distributor for support or check [www.lowellinstruments.com](http://www.lowellinstruments.com) for the most up-to-date documentation including software, manuals, FAQs, firmware updates, and application notes.

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