

Tether Tender

User Manual



Revision 1A

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2. INTRODUCTION

The Tether Tender is an extremely helpful accessory for your Smart Tether system. It is comprised of 2 basic functions:

- 1. An automatic length counter keeps track of the amount of tether currently deployed without the need for the user to monitor or update any settings in the software.**
- 2. A GPS receiver built into the tether tender automatically tracks the Base Point for your operation.**

These functions combine to make it much easier to get accurate, geo-referenced position data from the Smart Tether.

The Tether Tender is compatible with Smart Tether software version 6.0 or higher.

3. CARE AND HANDLING OF THE TETHER TENDER

The Tether Tender is designed to stand up to your most demanding missions. Following a few simple guidelines while handling your Tether Tender will help ensure that it is not damaged.

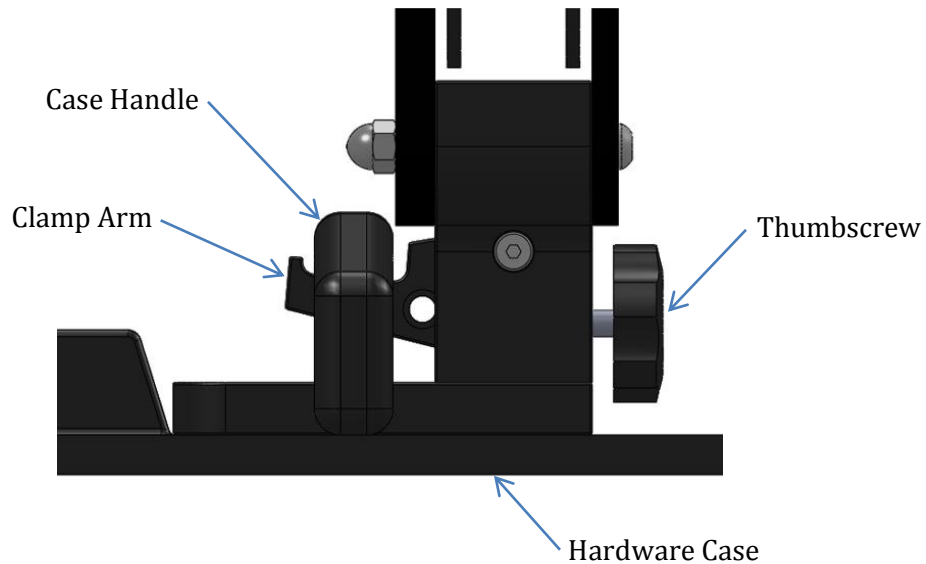
- Avoid dropping the Tether Tender; the electronics inside may be damaged or the encoder may become misaligned and not count the tether length accurately.
- The Tether Tender is splash-resistant but should not be submerged in water.
- When not in use, cover the USB plug using the attached cap to prevent corrosion or water ingress.

4. OPERATION

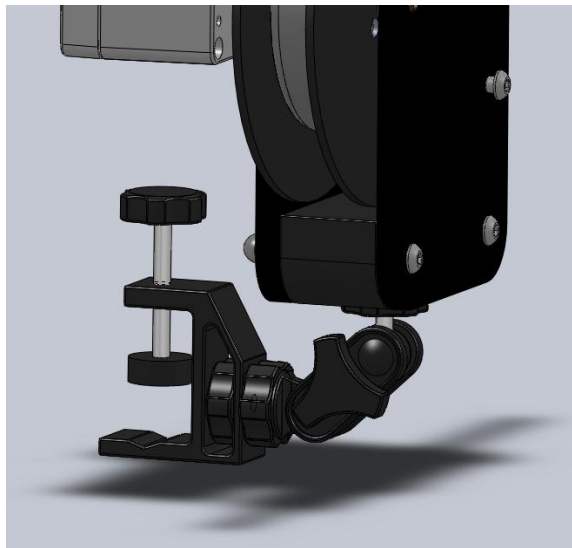
1. Mounting

The Tether Tender should be mounted to a secure base so that tension on the tether won't cause it to move around or fall over.

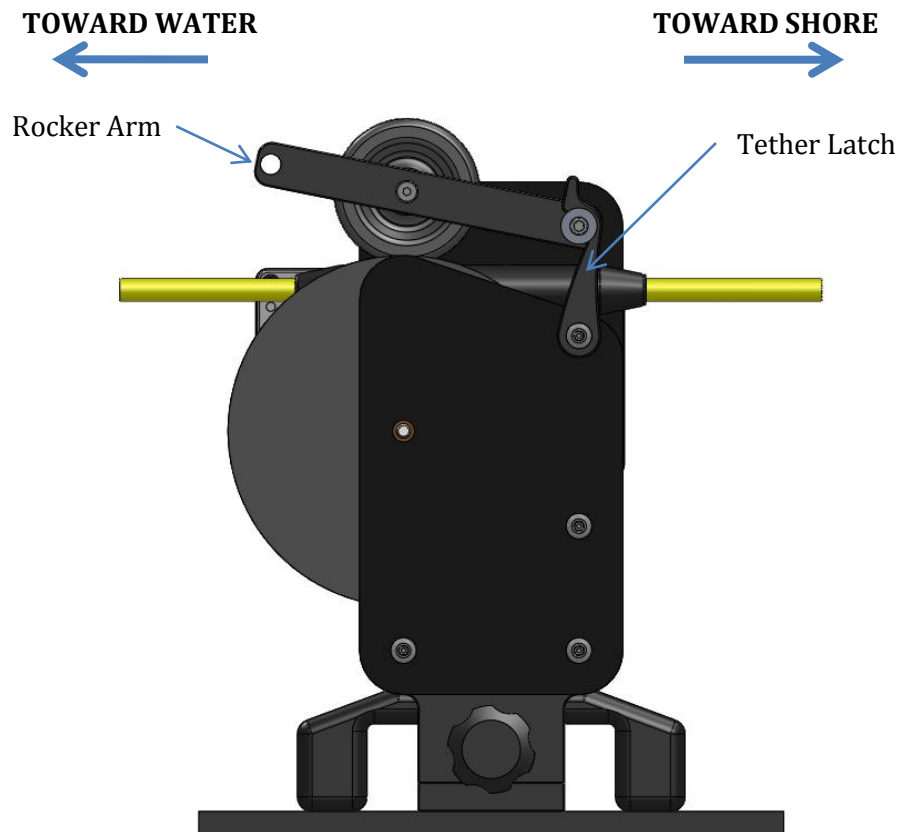
- The Tether Tender can be mounted to any Pelican or Storm hardware case using the included handle clamp base. Simply slide the clamp arm under any of the case's handles (turn the thumbscrew counterclockwise if it won't fit under the handle) and then turn the thumbscrew clockwise to tighten. The thumbscrew only needs to be hand-tight to firmly clamp onto the case.



- The Tether Tender can also be clamped to any other convenient stable base using the included clamping base. The center ball link can be removed if not needed; this will make the mount stiffer, but not able to clamp onto things at arbitrary angles.



2. Tether Installation

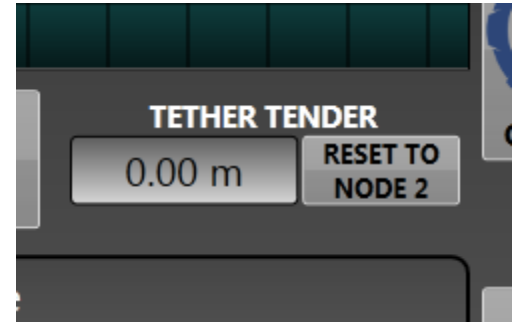


- Unclip the tether latch and let it hang down.
- Lift the rocker arm and slide the tether onto the large pulley wheel from the side.
- Let the rocker arm spring back down on the tether.
- Clip the tether latch back on the post to prevent the tether from falling out of the Tether Tender.



3. Connections and Operation

- Connect the Tether Tender to the PC using the supplied USB cable. The Smart Tether software will automatically link to the Tether Tender.
- From the Tools > Tether Tending menu, click the radio button for the Tether Tender, and press OK.
- From the main window, the tether tending area should show “Tether Tender” with a length of 0.
- Place the second node on the wheel of the tether tender and press the button “Reset To Node 2”. This will reset the length to reflect the length of tether between the 2nd node and the end point.
- Run the tether through the Tether Tender and see that the length changes in the Navigation Window.



Tips:

- *If it is more convenient to reset the length to a node other than node 2, go to the Tools > Tether Tending menu and select the desired node from the list under the Tether Tender section. This can be useful if a reset needs to be done during an operation with the tether already deployed.*
- *On PRO 3 and PRO 4 VideoRay systems, node 2 is the first node after the ROV. On DiverNav systems, node 2 is the first node on the green tether closest to the diver. In all cases node 2 should be marked with 2 thin black bands on the tether.*

5. ADDITIONAL TIPS

- Remember that the Tether Tender has a GPS receiver built into it that automatically monitors your Base Point, so you will not need to use a standalone GPS antenna as you would with a standard Smart Tether system. You may need to select the correct GPS from the menu; see your Smart Tether manual.
- The thrust of the ROV or the pull of a diver is sufficient in most cases to pull the tether through the Tether Tender, so you do not need to manually feed the tether through as the tether is deployed, but remember that the tether will not come back through the Tender on its own; as slack develops you will need to manually retrieve and coil the tether.

To learn more about Smart Tether products, contact KCF at 814.867.4097 or sales@kcftech.com.