

TracNet™ Coastal

TCM Replacement Instructions



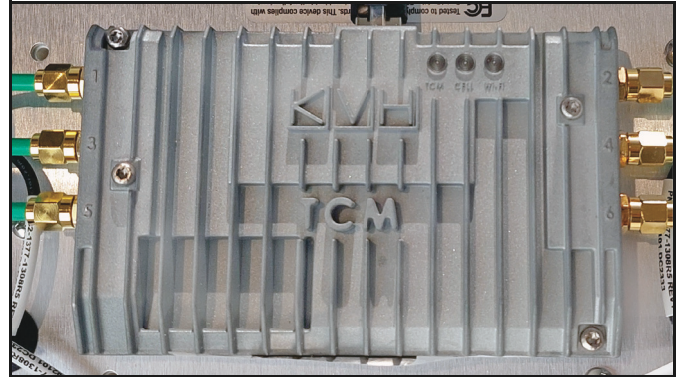
The following instructions explain how to replace the TCM (Terrestrial Communications Module) in a TracNet Coastal antenna.

Tools Required

This procedure requires the following tools:

- #2 Phillips screwdriver
- Driver with T10 Torx bit
- Torque driver set to 8-10 in-lbs
- 5/16" open-end wrench
- 5/16" torque wrench set to 12-15 in-lbs
- Laptop PC (if no Hub connected)

Figure 1: TCM



Technical Support

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Initial Steps

1. Power off and unplug the Hub or other device that is supplying PoE power to the antenna. Follow shipboard lockout/tagout procedures to ensure no one reapplies power while the unit is under repair.

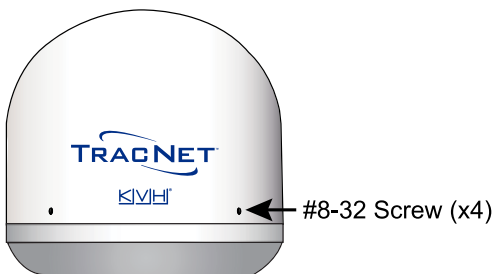


CAUTION

To prevent injury, be sure to disconnect all power from the antenna before proceeding. Power must remain disconnected for the duration of this procedure.

2. Remove and discard the four #8-32 screws securing the radome to the baseplate. Carefully lift the radome straight up until clear of the antenna assembly and set it aside in a safe place.

Figure 2: Coastal Radome Screws



NOTE: If you keep the radome topside, secure it with a lanyard to prevent it from falling overboard. Do not place the radome on a hot steel deck – the heat may warp the radome.

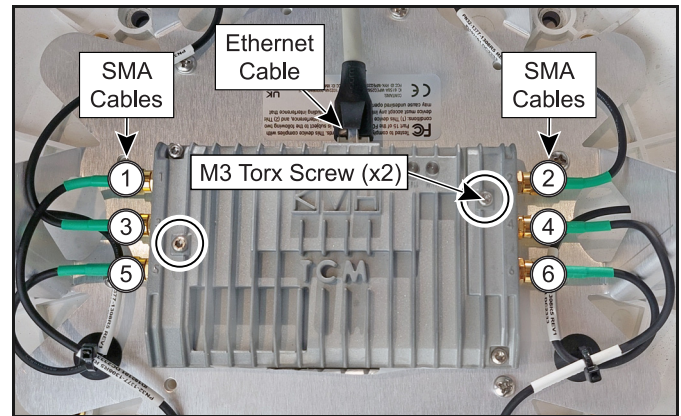
IMPORTANT!

While you are working inside the dome, be careful not to break any of the LTE antennas. You may temporarily remove any that might be in the way before beginning this procedure (refer to the LTE antenna replacement instructions).

Replace the TCM

1. Disconnect the Ethernet cable from the TCM.

Figure 3: TCM Cables and Mounting Hardware



2. Using a T10 Torx screwdriver, remove the two M3 Torx screws securing the TCM to the antenna frame.
3. Using a fine-tip marker, label the SMA cables with their TCM connector numbers as shown in Figure 3.
4. Using a 5/16" open-end wrench, disconnect the six SMA cables from the TCM. To avoid stressing the cable, hold the top of the connector while loosening the connector nut.
5. Remove the old TCM, ensuring that the residue from the old TCM's thermal pad is fully removed from the mounting plate.
6. Note the serial number of the new TCM. You will need it later.
7. Reconnect the six SMA cables as shown in Figure 3. Be sure to match the numbers on the cables with the numbered connectors on the TCM. Tighten the connections to 12-15 in-lbs of torque.
8. Remove the clear liner from the thermal pad on the bottom of the new TCM.
9. Line the new TCM up with the holes in the mounting plate and secure it to the frame with two new M3 Torx screws. Tighten the screws to 8-10 in-lbs of torque.
10. Reconnect the Ethernet cable to the TCM.
11. Inspect the inside of the antenna to make sure you have not left any tools or debris inside.
12. Reinstall the radome onto the antenna and secure it with new #8-32 screws. Tighten to 5 in-lbs of torque. Cover the screws with plastic caps.
13. Contact KVH Technical Support. Give them the antenna's serial number and the new TCM's serial number to enable the device and perform an asset swap on the terminal.

14. If your system is equipped with a Hub, skip to [Step 19 on page 3](#).

If your system is not equipped with a Hub, proceed to the next step.

Figure 4: TracNet Coastal Hub



15. Connect to the system by connecting your computer directly to the PoE injector's LAN Port or by connecting to the vessel network that is connected to the PoE injector.
16. Cycle power (remove and reapply power to the system in intervals of five seconds) six times in a row.
17. Enter **<https://192.168.5.1/tcmmode>** in your web browser to enter TCM Operation Mode.
18. Select **No Hub** and then select **Save & Restart System**.

Figure 5: TCM Operation Mode Selection

A screenshot of a web interface for TCM Operation Mode Selection. At the top, a blue banner reads "Current TCM Operational Mode: No Hub". Below this, the section "Change Operational Mode:" contains two radio button options. The "No Hub" option is selected and highlighted with a blue border. It includes the text: "For use with TracNet systems not equipped with a Hub or Hub+ BDU; a PoE injector, ICM, or other device powers the antenna". The "Hub Connected" option is unselected and includes the text: "For use with TracNet systems equipped with a Hub or Hub+ BDU". At the bottom, there is a blue button labeled "SAVE & RESTART SYSTEM" and a link labeled "Cancel & Return to Sign In".

19. Power the system on, if applicable, and test the system for normal operation.
20. Assist the customer with reconfiguring the system, as required. Refer to the Help or Installation Guide for details.

The procedure is complete!