

Front Panel Diagrams

Diagrams showing the external and internal connections are on the front panel for quick and easy reference. The power and lighting switches are also shown on the external connection diagram.

Power

The T1 accepts 12-24 VDC power input. The power connector is located inside the lower half of the unit behind the opaque cover. Two holes are provided for both DC negative and positive on this connector to allow convenient connection to another device requiring DC power (such as a compass). Please see the front panel diagram for correct wire placement.

IMPORTANT NOTE:

If installing the T1 on a boat with an isolated DC power system, please read the system manual section regarding special considerations for isolated DC power systems.

RF Ground

A grounding stud is provided on the outside lower edge of the case. Connect this to RF ground to help reduce unwanted radio frequency noise from the instrument system.

Fuses

There are three fuses inside the T1. The main fuse is found directly next to the DC negative connection; this fuse protects against excess current drain in the T1. The ground fault fuse is immediately below this fuse, and provides protection against current leakage through the battery negative connection. The third fuse is located inside the unit and protects against over-current on the Ockam bus. Spare fuses are stored in a small compartment to the left of the front panel; remove the clear cover to access them.

Ockam Bus

The Ockam bus connects to the BNC connector, and provides power and data for all interfaces and displays.

IMPORTANT NOTE:

The T1 is not an “instant on” device. It may take up to 45 seconds for the unit to complete boot-up and display data over the bus.

Front panel DIP switches

It is not normally necessary to adjust the front panel switch settings. Please see the System Manual for further information regarding use of these switches.

RS-232 port

The RS-232 port allows connection to a computer for advanced navigational functions. Some configuration items also require a connection through the RS-232 port. A separate program such as OckamSoft is typically used to take advantage of the more advanced functions. Please refer to the System Manual for more detailed information.

GPS port

The GPS port is used to input NMEA data from the GPS. The pin assignments are listed in the System Manual. The NMEA sentences accepted are: GLL, GGA, RMC, XTE, BWR, BWC, BER, BEC, RMB, ZDA, VTG, HDG, HVD, and HVM. It is recommended that the NMEA sentences be carefully selected so data is not duplicated between sentences.

NMEA in and out

NMEA data from a compass or depth sounder can be input to the T1 on this connection. Data sentences accepted are: HDG, HDM, PTNTHPR, PMAROUT, ROT, DBK, DBS, DBT, DPT, and MTW. Units requiring NMEA data from the instrument system can be connected to the output port. Data will be output (possibly in modified form) if the system receives the data. The sentences that can be output are: DBT, DPT, HDG, MWD, MWV, RSA, VDR, VHW, VLW, VPW, VWR, and VWT.