Installation Instructions
Maretron TP-AAP-1 TMP100 Ambient Air Temperature Probe

NOTE: The TP-AAP-1 ambient air temperature probe is not intended for measuring the temperatures of liquids. Please use the TP-IP-1 immersion probe for liquid temperature measurement applications.

Instructions
Please follow these instructions to connect the TP-AAP-1 ambient air temperature probe to the NMEA 2000® network via a Maretron TMP100 Temperature Module. The wiring diagram appears in Figure 1 below. The diagram shows a connection to channel #4, but connections to other channels are similar. Please note that the TP-AAP-1 may be connected only to channels #2, #3, #4, and #5. It may not be connected to channels #0 and #1.

1. Using a cable clamp or other means, secure the TP-AAP-1 so that the sensor is in the ambient air whose temperature is being measured.
2. The TP-AAP-1 cable contains one red and one black wire. Connect the black wire to the appropriate Tx-terminal on the TMP100 as shown in Figure 1 below.
3. Connect the red wire to the appropriate Tx+ terminal on the TMP100 as shown in Figure 1 below.
4. Use a DSM250 (firmware 1.3.8 or greater) or other Maretron display product capable of configuring the TMP100 to configure the “Channel #x Source” to the type of temperature you are measuring.
5. Use a DSM250 (firmware 1.3.8 or greater) or other Maretron display product capable of configuring the TMP100 to configure the “Channel #x Instance” to a number that is unique across the network for the source you have selected. In other words, if you are measuring Freezer Temperature, there may be only one channel on the network that measures Freezer Temperature that has an instance number of 0. Number further Freezer Temperature channels as instance #1, #2, and so on.
6. If desired, use DSM250 (firmware 1.3.8 or greater) or other Maretron display product capable of configuring the TMP100 to configure the “Channel #x Label” to a text string that allows you to identify the particular temperature that is being measured by this probe. For example, if you have two freezers, you may wish to label one of them “Port Freezer” and the other “Starboard Freezer”.
7. Using a Maretron DSM250 or Maretron N2KView, show the temperature with the source and instance you have selected and verify that you see a valid temperature on the display.

Figure 1 – Wiring Diagram