

AIO-TERM1

Analog Terminal Interface Board

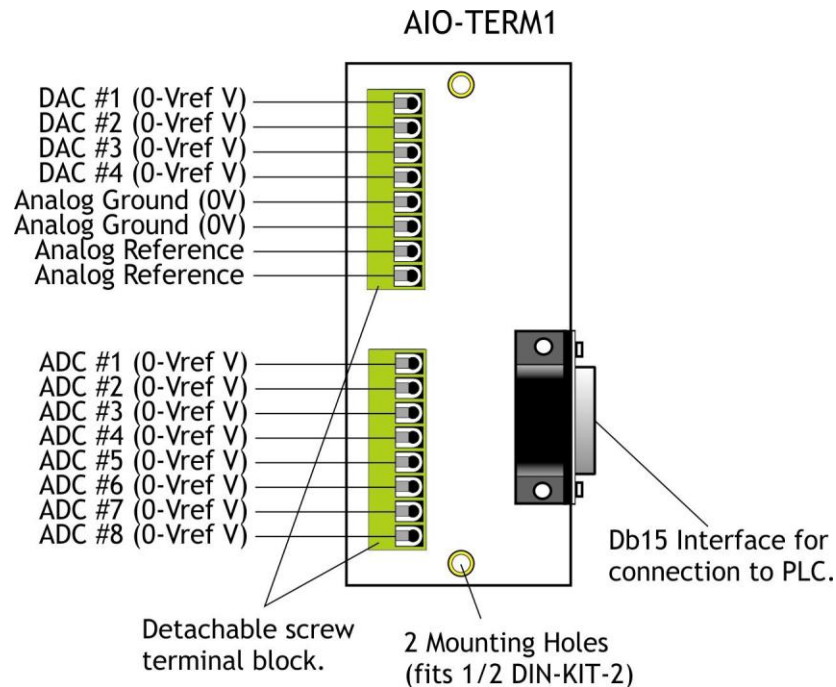


Figure 1 - AIO-TERM1 – 4/8 channels Analog Interface Board

1. Introduction

The AIO-TERM1 is designed to connect easily to a FMD or F-series PLC DB15 analog port and provides screw terminal connection for simplified wiring for all 8 analog inputs and up to 4 analog outputs.

2. Physical Mounting & Wiring

Each AIO-TERM1 board has two 1/8" (3mm) diameter mounting holes which allow it to be easily mounted on copper or Nylon standoffs. Note that the two mounting holes are spaced 4.200 inches apart, which is identical to that found on the FMD and F-series PLCs. This means that the AIO-TERM1 can be mounted readily on a **DIN-Rail** using 1/2 pack of DIN-KIT-2B (<http://www.triplc.com/mountingkits.htm>) or 1/3 pack of DIN-KIT-3B.

It is easier to mount the AIO-TERM1 on the left hand side of any FMD or F-series PLCs. It can be connected to the PLC's analog DB15 female interface directly (figure 2) or by using the 1-foot (30cm) long DB15 male-to-female connecting cable (figure 3), which is optional and sold separately. Once the DB15 interface is connected, the analog inputs and output signals from the PLC

become available on two detachable screw terminal blocks, making connection to field devices much easier.

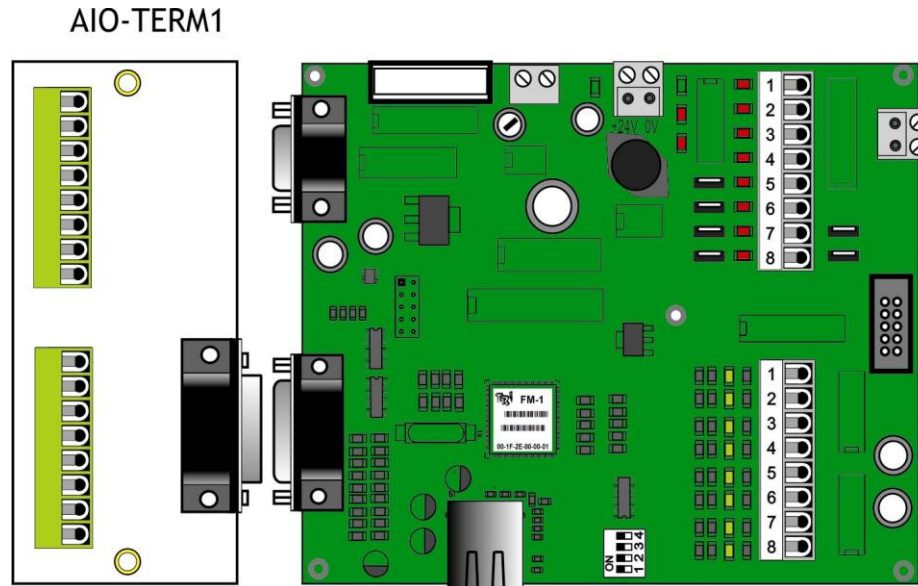


Figure 2 - AIO-TERM1 Direct Connection to PLC

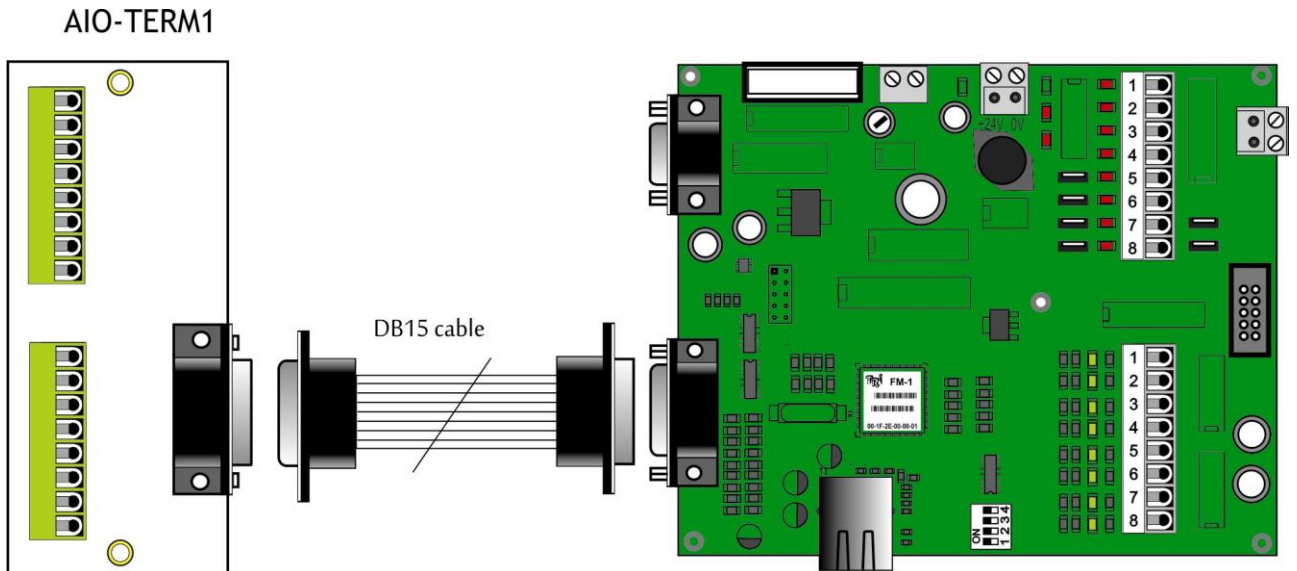


Figure 3 - AIO-TERM1 Cable Connection to PLC
(Optional DB15 Cable Sold Separately)

Each block of screw terminals can easily be detached from the controller body, enabling easy replacement of the controller board when necessary. When shipped from the factory they are installed vertically into the header pins, but there is an option to rotate the screw terminal by 90 degree so that they can be wired from the side (inline with the PCB). To remove the terminals, use a small flat-head screw-driver and insert it underneath the terminal block, applying even pressure to raise the terminal block until it becomes loosened from the connecting-pin strip, as shown below:

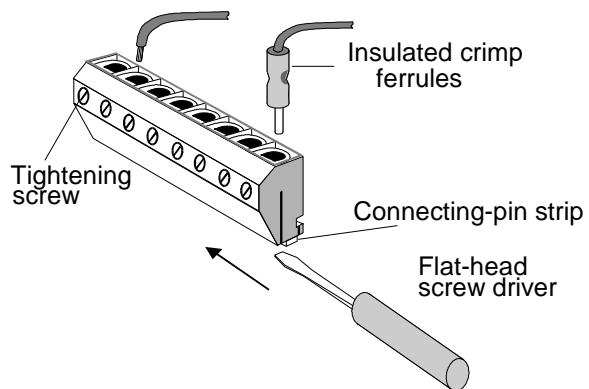


Figure 4 - Removing Screw Terminal block

Although you can connect a single or multi strand wire directly to the screw terminal, we strongly recommend using the insulated crimp ferrules to provide a good end termination to multi-stranded wires. Using ferrules reduces the possibility of stray wire-strands short-circuiting adjacent terminals and their use is therefore highly recommended.