Analog Output Module Installation

Introduction

This document applies to boards marked A05-037-01 only, not A05-037-00.

The B05-037 Analog Output Module is a rail-mount board which connects to an Abbey Systems *swampfox*, Topcat or Power*link* RTU through an RJ-45 data cable (into CN1) and provides four current-sourcing 0–20 mA or 4–20 mA analog outputs. All connectors and major components are shown in **Fig. 1**.
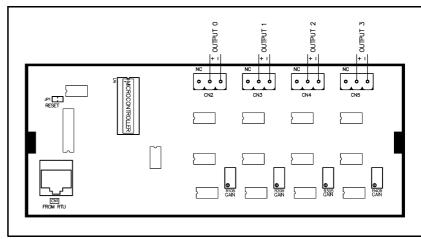

Fig. 1 Physical layout

Mounting

Rail type	Clearance from rail mounting surface	Module length	Module width
'G'	65 mm	180 mm	78 mm
'Top hat'	60 mm	180 mm	78 mm

Keep the module away from strong electrical and magnetic fields (heavy current carrying conductors, RF, high-frequency energy fields, etc).

Connection to the RTU

The supplied 0.5 metre 8-way RJ-45 "straight-through" data cable (you can use any Cat-5 or Cat-6 straight-through RJ-45 patch lead) carries data and power, and connects from CN1 on the Analog Output Module to the following connector on the RTU:

RTU p/n	RTU name	Connector
B07-000	*swampfox*	"Config"
B06-050	Topcat	"Serial 2"
B06-005	PLSCOMM	"Config" (rear panel, next to 24V power input connector)
B06-020	PLCOMM	"Config" (rear panel, next to 24V power input connector)
B07-020	PLXCOMM	"Config" (rear panel, next to 24V power input connector)

I/O characteristics

The four outputs are independent, current-sourcing, ground-referenced and non-isolated. Each output sources a positive current in the range 0–20 mA (or 4–20 mA, depending on the configuration at the Master) from the centre pin, through the load, to the negative pin, as shown in **Fig. 1**. The total load loop resistance must be 250Ω or less. The negative pins of all four outputs are common, and are also common with the ground of the RTU.

Use with Local Interrogator or Local Master

The RTU serial port used with the Analog Output Module may also be used for local interrogation in some sites. In this case, the Analog Output Module can be unplugged when local interrogation is required (the analog output currents will go to zero), and then reconnected (the analog outputs will return to normal within five seconds).