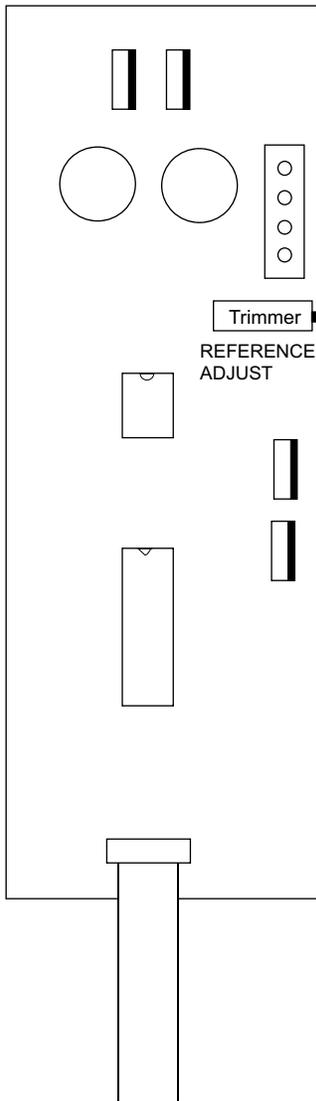


DA-1 Digital to Analog Converter

(8 bit digital input for connection to the AR-16, EX-16 or EX-32)



Ribbon to
AR-16 or EX-16

- (1) Power Input (+)
- (2) Power Input (-) (18 to 24 Volts DC, 50 ma)*
- (3) D to A Output (+) (0 to 5 volts typical, in 256 increments)
- (4) D to A Output (-)

(USE CAUTION, REVERSED POLARITY
MAY CAUSE DAMAGE)

The reference adjust trimmer will allow the output voltage range to be adjusted for output voltage ranges from about 0 to 1.2 volt to about 0 to 6 volts.

The DA-1 and DA-2 are also available with a 0 to 10 volt output range. Please contact technical support for more information.

NOTE: The power source must be completely isolated. Do not use the DA-1 power source to power the ADC-16 or any other device.

*Use the white PS-12VDC-500 power supply (unregulated)
The PS-12VDC-500 will provide about 18 volts under a light load.

Test the DA-1 using the test program DA-1.EXE which is provided on the test disk. The analog output should equal 0 volts with a 00000000 binary input, 2.5 volts with a 10000000 binary input, 5 volts with a 11111111 binary input, etc. (decimal equivalent, 0, 128, 255).

IMPORTANT NOTE: When the DA-1 is connected to a relay output port on the AR-16, EX-16 or EX-32 which has opto isolators installed, it will be necessary to connect the (+) feed voltage to conductor 9 on the ribbon cable. You may do this by soldering a jumper on the DA-1 where the circuit track has been broken near the 10 mf cap (just above the ribbon cable). **The (+) feed voltage (conductor 9 on the ribbon cable) must be broken if opto isolators are not installed or damage to the DA-1 can occur.**

When opto isolators are not installed, the DA-1 (-) output terminal is connected to an earth ground (via the RS-232 signal ground and chassis ground of the desktop PC). An earth ground on the D to A output may cause problems with some types of equipment.