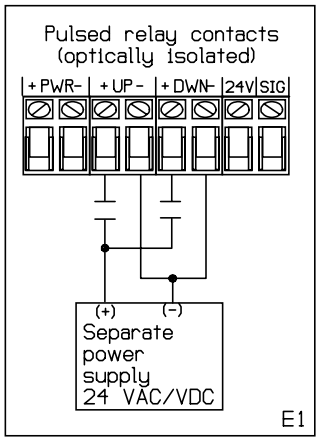
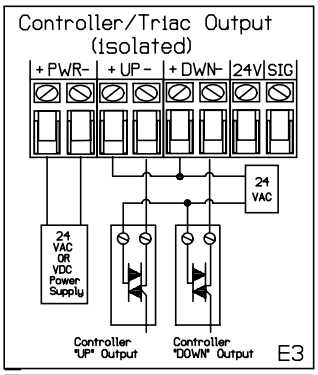
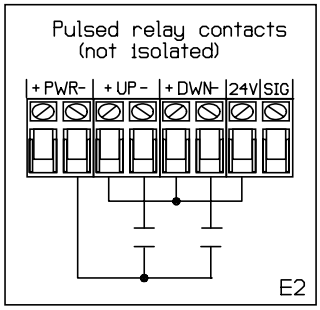
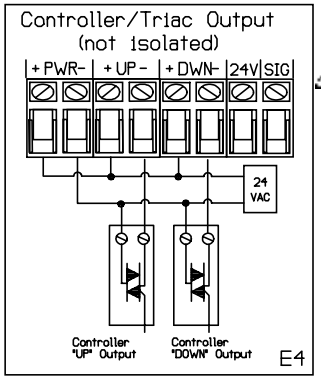
AUD

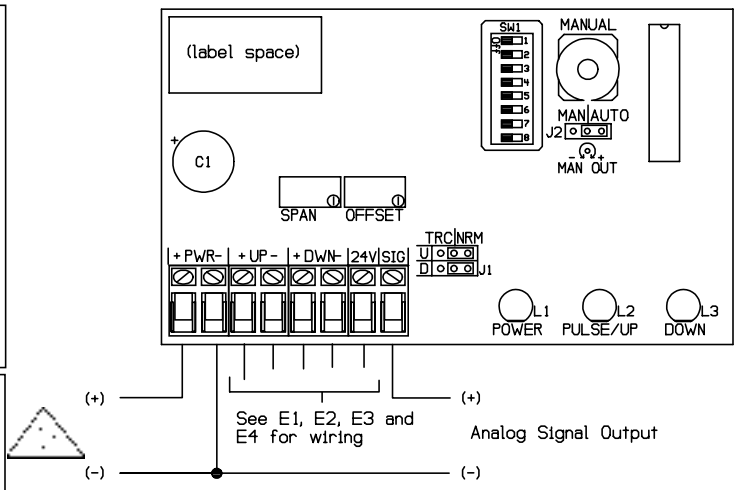
Floating Point or Tri-State Input to Analog Current or Voltage Output

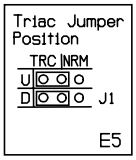


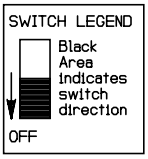


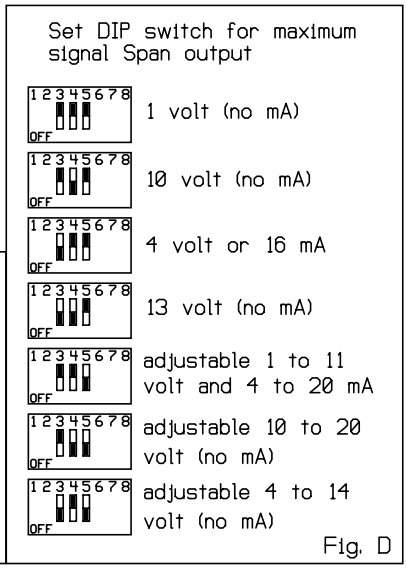


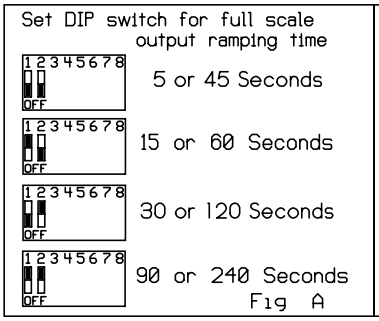


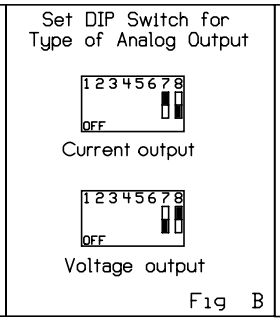


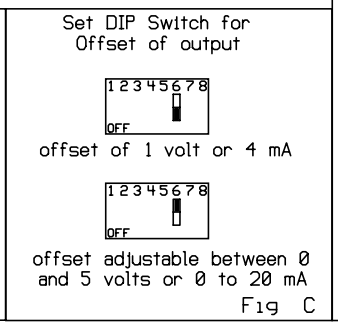












INSTALLATION

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION.

Ground yourself to discharge static electricity before touching any electronic equipment, as some components are static sensitive. The interface device can be mounted in any position. If circuit board slides out of snap track, a non-conductive "stop" may be required. Use only fingers to remove board from snap track. Slide out of snap track or push up against side of snap track and lift that side of the circuit board to remove. Do not flex board. Use no tools.

POWER CONNECTIONS: This product operates on 24 VDC or 24 VAC, 60 Hz, or if ordered as Model # 0396-01 on 24 VDC or 24 VAC, 50 Hz.

Be sure to follow all local and electrical codes.
Refer to wiring diagram for connection information.

1. The secondary supply voltage to the interface should be isolated from earth ground, chassis ground, and neutral leg of the primary winding. Any field device connected to this transformer must use the same common. If you are not sure of other field device configurations, use separate transformers.

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2. **If the 24 volt AC or DC power is shared** with other devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV (if AC), a diode (if DC), AC or DC Transorb, or other spike snubbing device across each of the shared coils. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits.

CALIBRATION AND CHECKOUT

SIGNAL INPUTS: See figures E1, E2, E3, and E4 for wiring details. The AUD accepts pulsed relay contact input, pulsed DC, or pulsed AC voltage input (see E5 for triac jumper position)

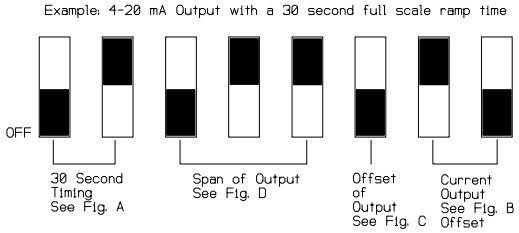
DIP SWITCH PROGRAMMING:

1) Select the rate of change range by setting the DIP switch as shown in Figure A. The rate of change is the time it takes for the analog output to go from minimum to maximum. Rate of change selections are 5, 15, 30 and 90 seconds for Version 1, and 45, 60, 120, and 240 seconds for Version 2 and 3 (Version 3 differs in that it will reset to maximum on startup, or if both inputs pulse 3.5 seconds). Changing the timing range with power on will result in reset to mimimum on Versions 1 and 2.

2) Select either current or voltage output with the two switches shown in Figure B. NEVER have both of these switches on or off at the same time while powered, or chip failure may occur.

3) Select offset of 1 volt / 4 mA or adjustable offset by switch 6 as shown in Figure C. With the adjustable offset setting, you can adjust the "OFF-SET" trim pot as desired. For offset higher than 5 volts contact customer service.

4) Select the desired span by setting the three switches as shown in Figure D. If you chose an adjustable span, you can adjust the"SPAN" trim pot , as necessary. After all connections have been made, activate the power source. The "POWER" LED should light. The "UP" and "DOWN" LED's will light when the AUD is receiving input signals.



To Set the Adjustable Span Potentiometers:

If you do not wish to use any of the preset selections and desire to set your own minimum and maximum output, you must make potentiometer adjustments to the AUD while powered. The OFFSET DIP switches (shown in Figure C) should be set for adjustable offset and the SPAN DIP switches (shown in Figure D) should be set for the span desired.

Hold both inputs on for 4 seconds to reset the analog output to minimum. Then set the OFFSET trimmer potentiometer to the desired minimum output level [measured between terminals PWR (-) and SIG]. Hold the "UP" input on for a little longer than the selected rate time to insure that the analog output is at maximum. The input signal will NOT "wrap around" or start over if the upper range limit is exceeded.. Then set the Span trimmer potentiometer to the desired maximum output signal (measured between terminals PWR (-) and SIG.

The minimum output signal will be equal to the offset. The maximum output signal will be equal to the offset plus the span. Examples:

If the Span is set at 4 VDC and the Offset is set at 0 VDC
Minimum Output will be 0 VDC, Maximum Output will be 4 VDC
If the Span is set at 16 mA and the Offset is set at 4 mA
Minimum Output will be 4 mA, Maximum Output will be 20 mA

Whenever power is first applied or restored after power interruption, the AUD automatically resets to the minimum output signal as defined by the DIP switch settings or the adjusted minimum.

Triac input - Follow example in Figure E3 or E4, page 1.

Manual Override Potentiometer - If you want to manually increase and decrease the output (to test the hookup to the actuator) within the selected signal span, place Jumper J2 in MAN (manual) position. ***Be sure to return Jumper J2 to AUTO position after testing.***

Power Supply : 24 VAC or VDC (50 Hz compatible if ordered as Model 0396-01)	Output Load Impedance/Voltage: 1000 ohms to infinity (min):
Power Consumption: 50mA	Output Load Impedance/Current: 0 to 750 ohms (max)

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