DUAL CHANNEL SEQUENCING TO ANALOG MODULE   DSAM

FEATURES

- **Dual channel phase cut to analog output**
- **Dual channel voltage/ mA to voltage output**
- **Jumper selectable Sequencing option**
- **Direct or reverse options per output**
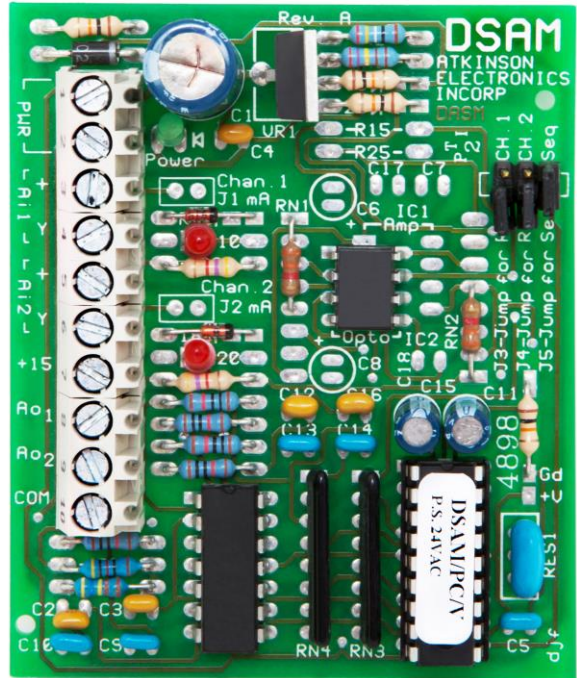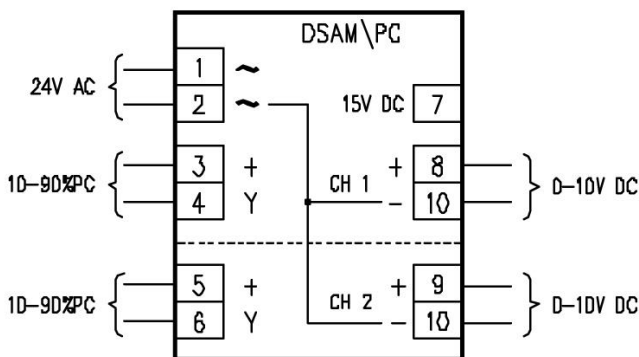
APPLICATIONS

- **Dual phase cut to 0 to 10VDC conversion**
- **Phase cut to sequenced 0 to 10VDC outputs**
- **0-10VDC to sequenced 0 to 10VDC o utputs**
- **Dual 0 to 10VDC damper or valve operation**

DESCRIPTION & OPERATION

The DSAM is a 2 channel analog to analog controller module. It is available in two versions; voltage and milli-Amp input to 0 to 10VDC outputs, and phase cut input to 0 to 10VDC outputs. The DSAM has the option for sequencing its two outputs from a single input signal (channel 1). The DSAM uses state of the art micro controller technology that provides superior system performance. The DSAM is useful when interfacing to 0 to 10VDC damper actuators, and or valves.

The DSAM's 24VAC input uses a half-wave rectifier configuration, (terminal 2 is board common), which is filtered and regulated to provide power for the on-board circuitry and to supply a 15VDC reference voltage on terminal 7. The DSAM uses an embedded micro controller to interpret the input signals and provide a corresponding 0 to 10VDC output (Minimum 1KV load impedance) signals. The analog inputs may be configured to accept 0-10VDC or 0 to 20mA by making a jumper selection on the voltage version. The phase cut version accepts a 10 to 90% phase cut signal.
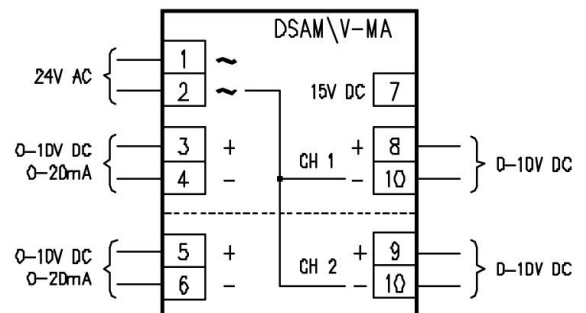
WIRING CONFIGURATION PHASE CUT

SPECIFICATIONS

SIZE:	2.75"L x 3"W x 1.1"H
MOUNTING:	3" RDI Snap Track (supplied)
POWER:	24VAC, ± 10%, 50/60Hz, 2VA
INPUTS:	10 to 90% phase cut 0-20mA or 4-20mA 0 to 10V or 2 to10VDC
INPUT IMPEDANCE:	Phase cut ≥ 3.6KΩ 10VDC ≥ 10KΩ 20mA ≥ 250KΩ
AUX VOLTAGE REF:	15VDC @ 100mA maximum
OUTPUT:	0 to 10VDC (Minimum 1KΩ load impedance)
ACTION:	Direct or reverse (Jumper selectable per channel)
AMBIENT TEMP:	0 to 50°C

WIRING CONFIGURATION VOLTAGE/ MA

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ORDERING INFORMATION

DSAM/XXX

⌐ Input Option Code

INPUT ORDERING CODE

V-mA	0 to 10VDC, 0 to 20mA inputs
PC	10 to 90% phase cut (isolated)

JUMPER DEFINITION

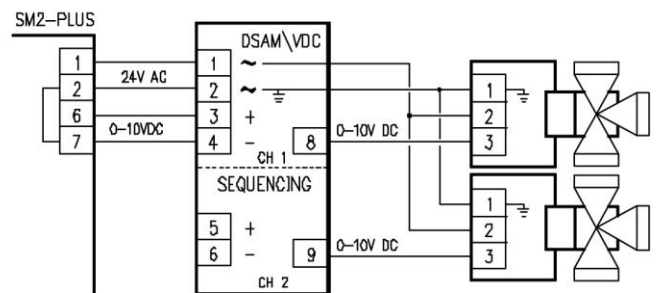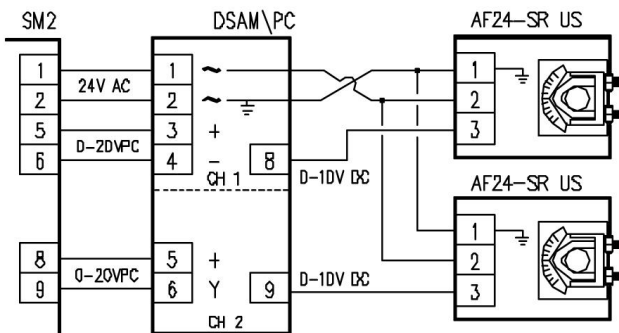|	
J1	Channel 1 selects mA input option
J2	Channel 2 selects mA input option
J1a	Channel 1 selects 4mA or 2VDC input option
J2a	Channel 2 selects 4mA or 2VDC input option
J3	Channel 1 direct/ reverse jumper
J4	Channel 2 direct/ reverse jumper
J5	Sequencing the 2 outputs, single input (CH1)
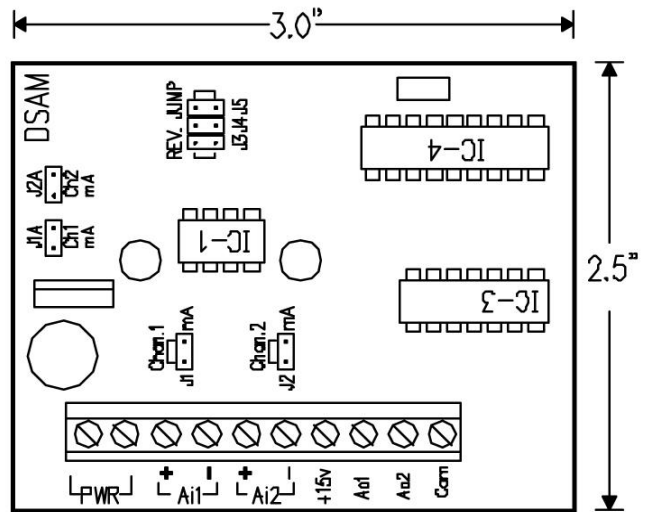
ORDERING CODE EXAMPLEDS

DSAM/PC	10 to 90% phase cut 9 inputs 0 to 10VDC outputs
DSAM/V-mA	10VDC or 20mA input to dual 0 to 10VDC outputs

PHYSICAL CONFIGURATION

TYPICAL PHASE CUT APPLICATION

The DSAM/PC version is used to convert two phase cut signals to two 0 to 10VDC signals to drive two actuators or valves.

TYPICAL VOLTAGE SEQUENCING APPLICATION

The DSAM/V-mA or DSAM/PC is field configured for a single input signal with sequencing outputs. Jp3 & Jp4 select reverse mode for channel's 1 & 2, Jp5 selects sequencing operation.