

**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 10V DC conversion
- ❖ Phase cut to sequenced 0 to 10V DC outputs
- ❖ 0 - 10V DC to sequenced 0 to 10V DC outputs
- ❖ Dual 0 to 10V DC damper or valve operation

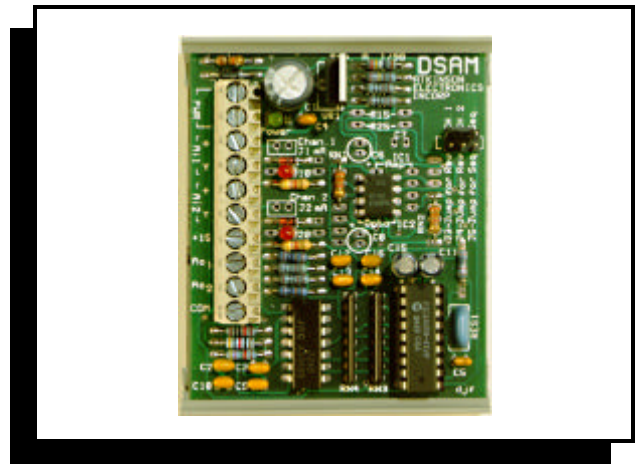
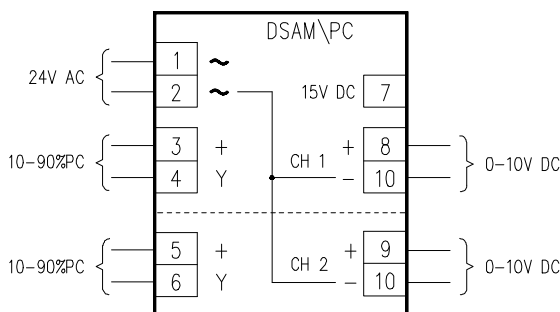
**DESCRIPTION**

The DSAM is a 2 channel analog to analog controller module. It's available in two versions; voltage and milli-Amp input to 0 to 10V DC outputs, and phase cut input to 0 to 10V DC outputs. The DSAM has the option for sequencing it's 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 10V DC damper actuators, and or valves.

**OPERATION**

The DSAM's 24V AC/DC 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 15V DC reference voltage on terminal 7. The DSAM uses an embedded micro controller to interpret the input signals and provide a corresponding 0 to 10V DC output signals. The analog inputs may be configured to accept 0-10V DC 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.

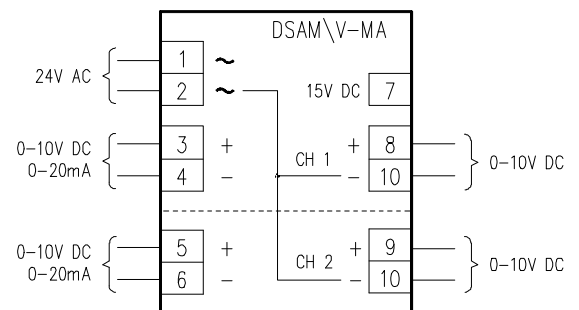
**WIRING CONFIGURATION - PHASE CUT**



**SPECIFICATIONS**

SIZE:	2.75" L x 3" W x 1.1" H
MOUNTING:	3" RDI snap-track (supplied)
POWER:	24V AC, ± 10%, 50/60Hz, 2VA 24V DC @ 60 mA
INPUTS:	10 - 90% Phase Cut 0 - 20 mA or 0 - 10V DC
INPUT IMPEDANCE:	Phase cut ≥ 3.6KΩ 0 - 10V DC ≥ 10KΩ 0 - 20mA ≥ 250Ω
AUX VOLTAGE REF:	15V DC @ 100mA maximum
OUTPUT:	0 to 10V DC (Minimum 1KΩ load impedance)
ACTION:	Direct or Reverse ( jumper selectable per channel)
AMBIENT TEMP:	0 to 50° C

**WIRING CONFIGURATION - VOLTAGE / mA**



**ORDERING INFORMATION**

**DSAM/XXX**

└─ Input Option Code

**INPUT ORDERING CODE**

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

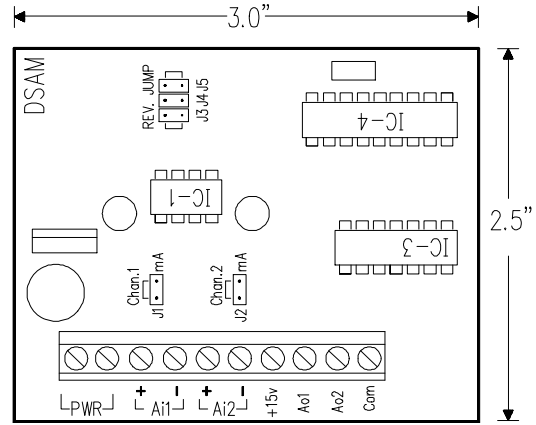
**JUMPER DEFINITION**

- J1 - Ch 1 selects 0-20mA input option
- J2 - Ch 2 selects 0-20mA input option
- J3 - Ch 1 direct/reverse jumper
- J4 - Ch 2 direct/reverse jumper
- J5 - Sequencing the two outputs, single input (ch1)

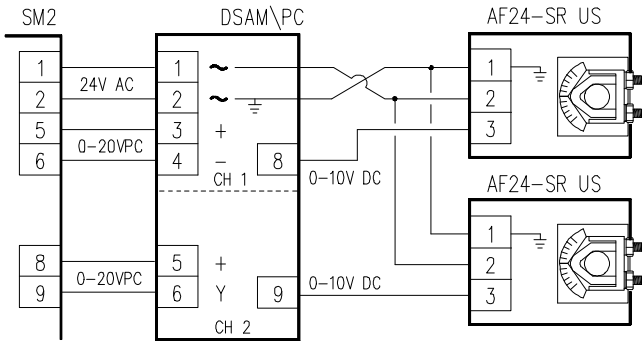
**ORDERING CODE EXAMPLES**

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

**PHYSICAL CONFIGURATION**

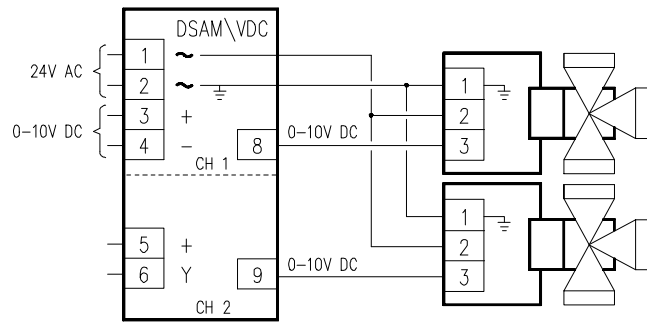


**TYPICAL PHASE CUT APPLICATION**

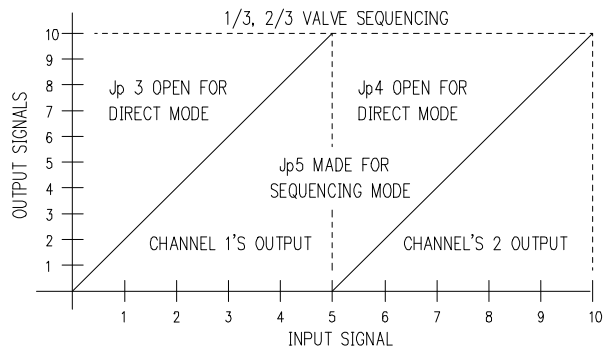
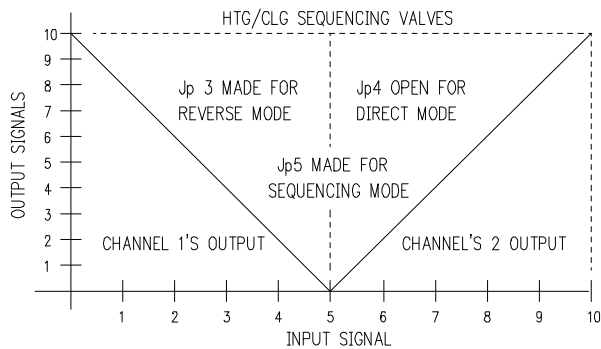


The DSAM/PC version is used to convert two phase cut signals to two 0 to 10V DC signals to drive two actuators or valves.

**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.



Call for other calibration ranges and versions.

If you have a different application or need, please call 1-800-261-3602 and discuss your needs with our Sales Engineers.