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## AV-9000 RECORDER / RECORDING CONTROLLER Innovative Printing Technology for Circular Chart Recording

- *Four inputs recorded in four colors for enhanced legibility*
- *Four additional inputs for indicating, control, switching, alarming*
- *Four PID controllers assignable to any inputs*
- *Prints its own scales and alphanumeric data*
- *No pen lag - all printing to same timeline*

Anderson introduces the AV-9000, a revolutionary circular chart recorder. It features a four-color marker pen cartridge which prints information as it glides across 12 inch charts. Chart reading is simplified by providing color coded trend lines, scales and alphanumeric data. Plain paper charts are far superior for record retention than "fax type" thermal paper used by competitors. Optional PID control is available on any four inputs. The 40 character vacuum fluorescent display coupled with

the integral keypad make the AV-9000 easy to program for users at all skill levels. The case is designed to easily retrofit existing name-brand recorder cutouts.

Complete specifications and ordering information are available on the reverse. For more information please visit our Web Site at [www.andinst.com](http://www.andinst.com), or contact your local Authorized Anderson Distributor.



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# AV-9000 Recorder/Recording Controller Specifications

## PERFORMANCE

<u>Recording Accuracy:</u>	± 0.3% of chart span reference accuracy
<u>Ambient Temperature Error:</u>	0.01% of span per degree C deviation from 25°C
<u>Memory Backup:</u>	Battery, 5 year minimum, 10 years typical
<u>Operating Temperature:</u>	0 to 50°C (32 to 122°F)
<u>Humidity:</u>	10 to 90% RH, non-condensing
<u>Warranty:</u>	2 years
<u>Agency Approvals:</u>	UL approved for USA : UL certified for Canada

## INPUTS

Eight total inputs of any of the following available types:

<u>Analog Input types:</u>	
<u>RTD Types:</u>	Platinum 100 ohm, 2 or 3 wire .00385 coefficient DIN 43760/IEC 751 .00392 coefficient (USA) .00392 coefficient (SAMA)
<u>Voltage Inputs:</u>	0 to 25mV, 0 to 100mV; 0 to 1 VDC, 0 to 10 VDC
<u>Current Inputs:</u>	0 to 20mA, 4 to 20mA
<u>Contact Closure:</u>	Open/closed switch sensing without external voltages or resistors
<u>Scan Rate:</u>	The input scan rate is programmable and dependent upon the number of active inputs present on the recorder. The total scans per second for the instrument is 16 scans/second.

## OUTPUTS

Up to eight on/off relay outputs, and up to four 4 - 20mA analog outputs are available.

Relay Outputs: SPDT, contacts rated 5 amps resistive at 115 VAC, 2.5 amps resistive at 230 VAC, 1/8 HP at 230 VAC (single phase), 250 VA at 115/230 VAC.

Analog Outputs (for control and/or retransmission):  
0 to 20mA into 0-650 ohm load with 12 bits resolution.

## CONTROL

<u>Control Modes:</u>	Proportional, Integral, & Derivative.
<u>Auto/Manual:</u>	Bumpless Transfer
<u>Setpoint:</u>	Local or Remote, Single or Dual Setpoint

## POWER

<u>AC Power:</u>	85 to 265 VAC, 50/60 Hz
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## PHYSICAL

<u>Overall Dimensions:</u>	14.12 inches wide x 17.04 inches high x 7.75 inches deep (358.65 mm wide x 425.96 mm high x 196.85 mm deep)
<u>Weight:</u>	25 lbs. maximum (55 kg)
<u>Vibration:</u>	3 to 100 Hz @ 0.2g
<u>Enclosure:</u>	Gasketed cover, case and windows. Structural foam case, cover material with plastic window areas.
<u>Mounting:</u>	Panel, wall or pipe mounting
<u>Conduit Openings:</u>	Four conduit openings standard
<u>NEMA Rating:</u>	NEMA 4X
<u>Panel Depth:</u>	5.25 inches (133.35 mm)
<u>Panel Cutout:</u>	12.7 inches wide x 12.7 inches high (322.58 mm x 322.58 mm)
<u>Front Panel Protrusion:</u>	2.5 inches ( 63.5 mm)

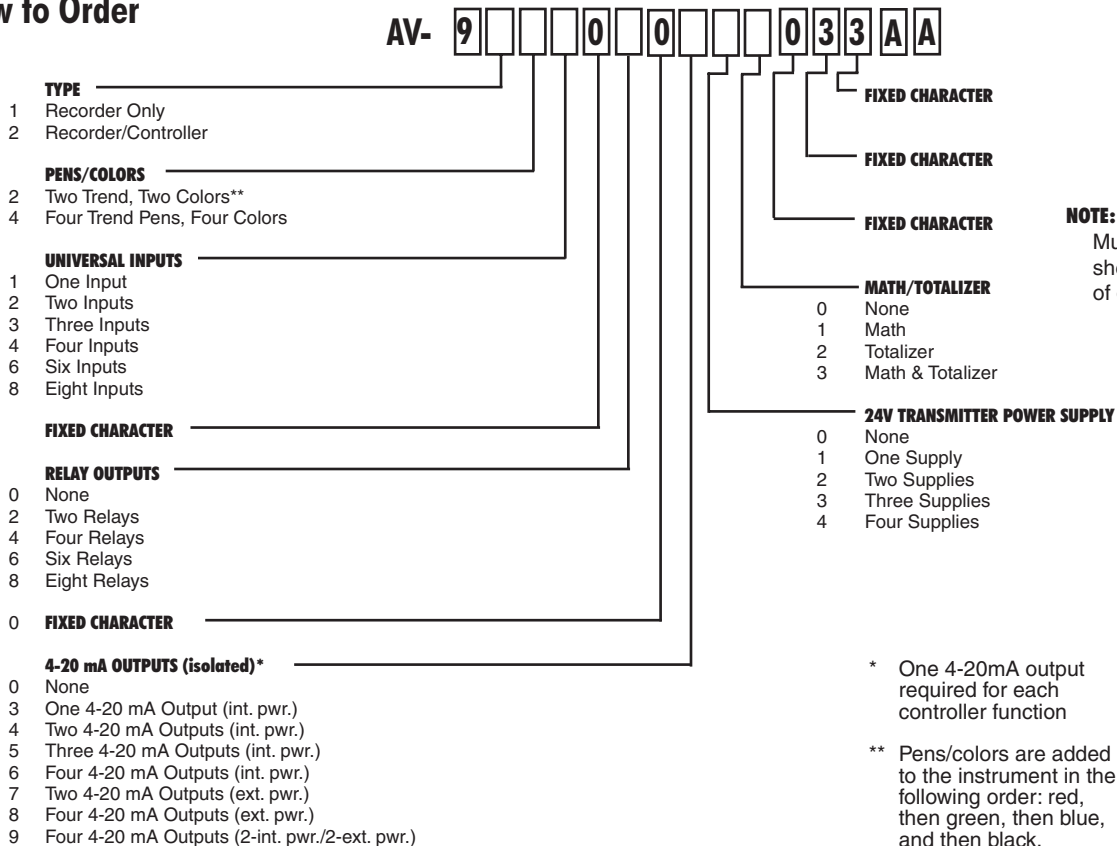
## DISPLAY AND KEYPAD

<u>Primary Display:</u>	2 line, 40 character vacuum fluorescent display with characters .21 inch (5 mm) high.
<u>Status Indicators:</u>	8, user configurable, red LED status indicators
<u>Operator Keypad:</u>	15 keys for programming and unit operation.

## ALARMS

Four alarms available per each of four process variables, adjustable hysteresis.

## How to Order



### NOTE:

Must complete work sheet 1000 at time of order

\* One 4-20mA output required for each controller function

\*\* Pens/colors are added to the instrument in the following order: red, then green, then blue, and then black.