FLOW
LEVEL
PRESSURE
ANALYTICAL
TEMPERATURE
INSTRUMENTATION
PASTEURIZATION CONTROLS

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

- Four inputs recorded in four colors for enhanced legibility
- Four addilitional 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 alphnumeric 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, or contact your local Authorized Anderson Distributor.


## AV-9000 Recorder/Recording Controller Specifications

## PERFORMANCE

Recording Accuracy:
Ambient Temperature Error:
Memory Backup:
Operating Temperature:
Humidity:
Warranty:
Agency Approvals:
$\pm 0.3 \%$ of chart span reference accuracy
$0.01 \%$ of span per degree C deviation from $25^{\circ} \mathrm{C}$
Battery, 5 year minimum, 10 years typical
0 to $50^{\circ} \mathrm{C}$ ( 32 to $122^{\circ} \mathrm{F}$ )
10 to $90 \%$ RH, non-condensing 2 years
UL approved for USA: UL certified for Canada

## INPUTS

Eight total inputs of any of the following available types:
Analog Input types:
RTD Types:
Platinum 100 ohm, 2 or 3 wire
. 00385 coefficient DIN 43760/IEC 751
.00392 coefficient (USA)
.00392 coefficient (SAMA)
Voltage Inputs: $\quad 0$ to $25 \mathrm{mV}, 0$ to $100 \mathrm{mV} ; 0$ to $1 \mathrm{VDC}, 0$ to 10 VDC
Current Inputs:
Contact Closure:
Scan Rate: 0 to 20mA, 4 to 20mA
Open/closed switch sensing without external voltages or resistors
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: $\quad$ SPDT, contacts rated 5 amps resistive at 115
VAC, 2.5 amps resistive at 230 VAC, $1 / 8 \mathrm{HP}$ at 230 VAC (single phase), 250 VA at $115 / 230$ VAC.
Analog Outputs (for control and/or retransmission):
0 to 20 mA into $0-650$ ohm load with 12 bits resolution.

## CONTROL

Control Modes: Proportional, Integral, \& Derivative.
Auto/Manual:
Setpoint:

## POWER

AC Power:

## PHYSICAL

Overall Dimensions: 14.12 inches wide $\times 17.04$ inches high $\times 7.75$ inches deep
( 358.65 mm wide $\times 425.96 \mathrm{~mm}$ high x 196.85 mm deep)
Weight:
Vibration:
Enclosure:

Mounting: Panel, wall or pipe mounting
Conduit Openings: Four conduit openings standard
NEMA Rating: NEMA 4X
Panel Depth: $\quad 5.25$ inches ( 133.35 mm )
Panel Cutout: $\quad 12.7$ inches wide $\times 12.7$ inches high ( 322.58 mm $\times 322.58 \mathrm{~mm}$ )
Front Panel Protrusion: 2.5 inches ( 63.5 mm )

## DISPLAY AND KEYPAD

Primary Display:
Status Indicators:
Operator Keypad:

2 line, 40 character vacuum fluorescent display with characters .21 inch ( 5 mm ) high. 8, user configurable, red LED status indicators 15 keys for programming and unit operation.

## ALARMS

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

NOTE:
Must complete work sheet 1000 at time of order

One Input
Two Inputs
Three Inputs
Four Inputs
Six Inputs
Eight Inputs
FIXED CHARACTER

## RELAY OUTPUTS

None
Two Relays
Four Relays
Six Relays
Eight Relays
FIXED CHARACTER

## 4-20 mA OUTPUTS (isolated)*

None
One 4-20 mA Output (int. pwr.)
Two 4-20 mA Outputs (int. pwr.)
Three 4-20 mA Outputs (int. pwr.)
Four 4-20 mA Outputs (int. pwr.)
Two 4-20 mA Outputs (ext. pwr.)
Four 4-20 mA Outputs (ext. pwr.)
Four 4-20 mA Outputs (2-int. pwr./2-ext. pwr.)

* 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.

