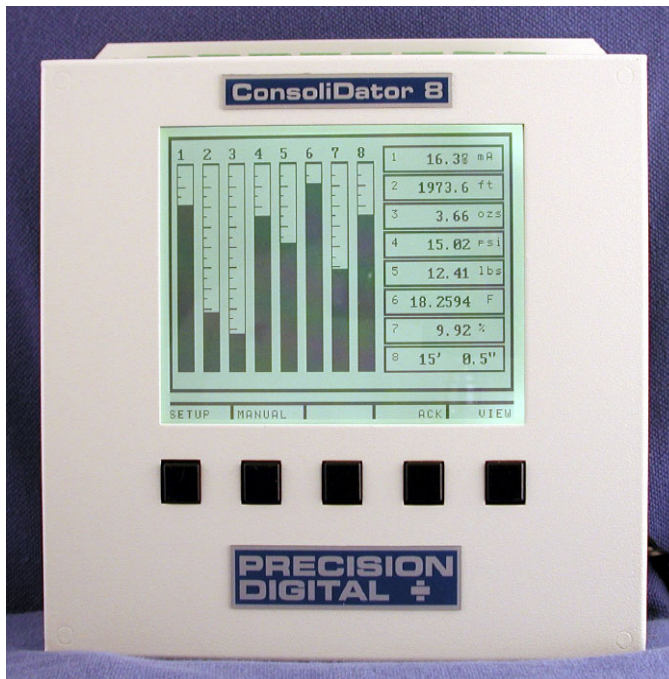


ConsoliDator 8 MULTI-CHANNEL CONTROLLER



ConsoliDator Common Features

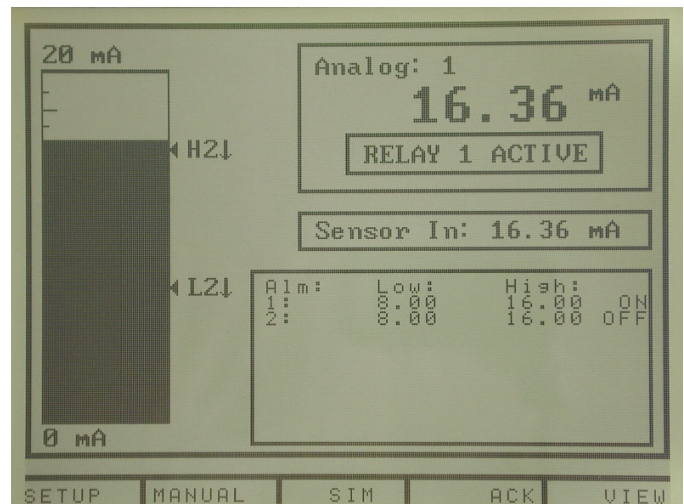
- Multiple screens show everything
- Master screen shows all inputs
- Individual screens for each input
- Multiple setup & programming screens
- Easy on-screen programming
- Panel or wall mounting
- Easy to read LCD screen
- Visible in direct sunlight
- Backlit for dimly lit areas
- Modbus RTU communications
- Transient voltage protection
- Powered from AC *and* DC

Your Local Distributor is:

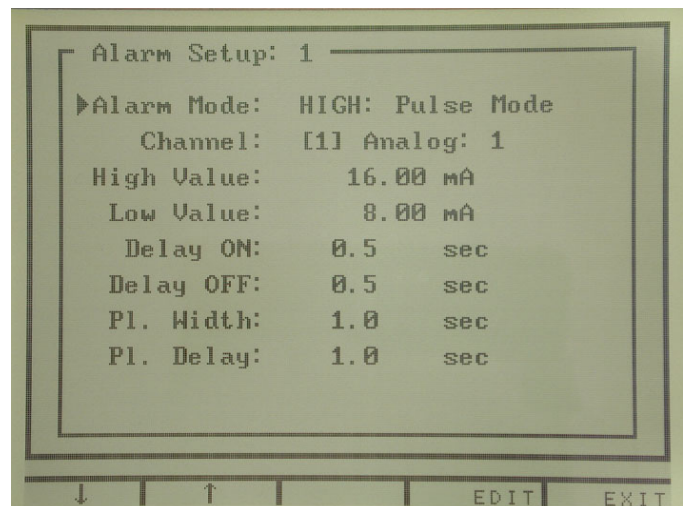
ConsoliDator 8 Specific Features

- Four pulse inputs
- Nine 10 A relays
- Four digital inputs
- Eight 4-20 mA inputs
- Two 4-20 mA outputs

Individual Screens for Each Input



On-Screen Relay Programming



PRECISION DIGITAL CORPORATION

19 Strathmore Road • Natick, MA • 01760 • USA • Tel: (800) 343-1001 • Fax (508) 655-8990

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SPECIFICATIONS

Except where noted all specifications apply to operation at +25°C

General

Display: LCD; 4.75" x 3.50" (120 x 89 mm) backlit

Enclosure: Powder-coated steel

Color: Warm gray

Programming method: Five front panel buttons

Power: AC: 90-264 V, 50/60 Hz, 20 VA & DC: 8-30 V, 15 W

Surge Protection: Analog inputs have chokes & TVSs.
Power inputs have MOVs.

Mounting: Panel or wall mount models

Connections: Removable screw terminals

Dimensions: (H x W x D)

Wall Mount: 8.75" x 8.00" x 3.00"

(222 mm x 203 mm x 76 mm)

Panel Mount: 8.66" x 9.36" x 3.10"

(220 mm x 238 mm x 79 mm)

Weight: 5.5 lbs (2.5 kg)

Environmental:

Operating Temp Range: 0 to 50°C (32 to 122°F)

Relative Humidity: 0 to 90% non-condensing

Warranty: 1 year parts & labor

Extended Warranty: 1 or 2 years, contact factory for details

Screen Displays

Numeric Display: Six digits, ±999999 or feet & inches

Engineering Units: ppm, gal, M, lbs, g/h, psi, ozs,
ft, mA, °C, °F, f&i, %, or user definable

Bargraph: 20 divisions

Numeric & Bargraph Screen:

Numeric Displays: Eight (user selectable)

Bargraphs: Eight (user selectable)

Individual Inputs Screen:

Numeric Display: 1 (w/ sensor input value in mA)

Bargraphs: 1 (with setpoint markings)

Relay Status: Low & high values and status

Process Inputs

Number: Eight

Input: 4-20 mA

Accuracy: ±0.03% of span ±1 Count

Short Circuit Protection: Current limited to 40 mA max

Transmitter Supply: 24 VDC @ 20 mA per input

ORDERING INFORMATION

| Model | Description | Mounting |
|--------------|---------------------------------------|--------------------|
| PD980-8K9-15 | ConsoliDator Multi-Channel Controller | Wall |
| PD981-8K9-15 | ConsoliDator Multi-Channel Controller | Panel |
| PDA2901 | NEMA 4X enclosure for one PD981 | For use with PD981 |

Pulse Inputs

Number: Four

Input: 100 mV to 15 Vp-p; 1 Hz to 10 kHz

Programmable Conversion Factor: 0.00001 to 999999

Totalizer: Calculates total based on rate

4-20 mA Analog Output

Number: Two, assign to any process or pulse input

Accuracy: ± 0.05% of reading (± 0.01 mA)

Output Loop Resistance: 10 to 300 Ω, 12 VDC minimum

Isolation: Line power isolated to 1500 VAC

Modbus

Type: RS232 Modbus RTU **Baud Rate:** 1200 to 38400

Data: 8 bits **Parity:** No **Stop bit:** 1 **Address:** 1 to 247

Programmable Transmit Delay: 0 to 300 ms

Relays

Type: SPDT (Form C) with built in MOVs

Number: Nine

Rating: 10 A @ 120/240 VAC resistive load; 1/3 HP @ 120/240 VAC inductive loads: 10 A @ 28 VDC.

Voltage Load minimum: 50 mA for AC, 10 mA @ 5 VDC.

Assignment: Any relay may be assigned to any channel.

Multiple relays may be assigned to one channel.

All relays are programmed independently.

Duty: Controller tracks time relay has been active and number of times relay has cycled ON/OFF.

Time Delay: 0-999 sec, on and off delays; programmable

Operation:

High or Low Alarm: Assign to analog or pulse channel for on/off relay control. 100% adjustable deadband.

Annunciator High or Low: Assign to analog or pulse channel for on/off relay control with reset capability from digital input switch. 100% adjustable deadband. Automatic or manual reset.

Supervisory Alarm: Indicate CPU failure or analog input loss.

High or Low Pulse Action: Assign to analog or pulse input channel for pulsing on/off relay control. 100% adjustable deadband.

Trigger: Assign to pulse channel for indication of user-defined total increment. User selectable pulse width.

Plunger Lift: Assign to analog and/or pulse channels to control a plunger lift system.

Lead-Lag Alternation (Sequence): Link multiple relays for sequential operation. Programmable override setpoints to turn on additional relays.

Pulse Width Modulation: Assign to analog or pulse channel for on/off signal modulated based on input. User selectable cycle time

PI Control: Assign to analog or pulse channel for Proportional plus Integral on/off modulated duty cycle. Manual tuning required

Manual Override: Override any relay (Password restricted)

LDS980-9_A 09/03