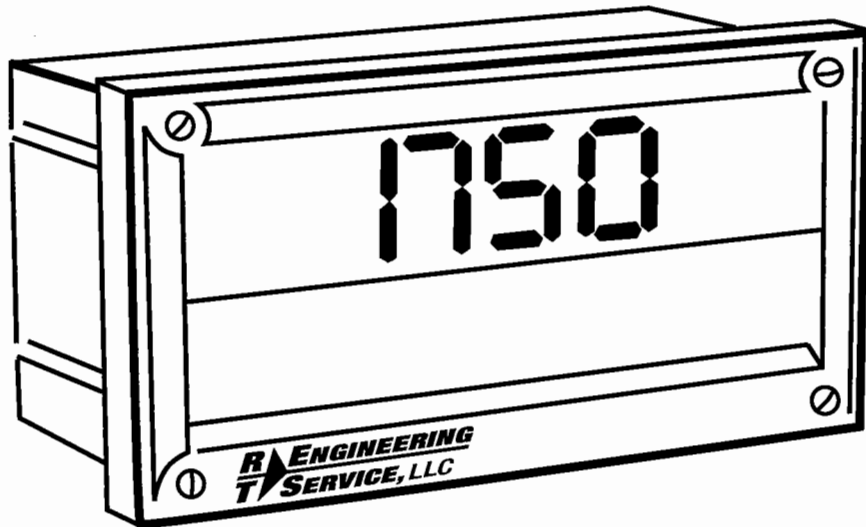


Universatile™

DIGITAL PANEL METERS



INSTALLATION, WIRING & CALIBRATION

FOR THE

DIN2-35

PANEL METERS



(800) 343-1182

www.rteng.com

DIN2-35

Specifications

- Accepts 200 mV through 200 VDC or 4-20mA inputs yielding display of .200 through 1999. Extended signal input ranges available.
- Maximum signal protection: 600 VDC (voltage range); 30 mA (current range)
- Input impedance: voltage range: 1 megohm
current range: 250 ohms
- Scaling method: Coarse: jumper setting
Fine: 20 turn pot
- Display: 3 1/2, bi polar, 0.56" high, 7 segment red LED's.
Selectable decimal point locations (1.8.8.8)
- Over-range indication: "1" in most significant position. Rest of display blank
- Reading rate: 2.5 readings/sec., nominal
- Linear accuracy: 0.1% of reading
+/-1 digit typical
- Maximum common mode voltage: 850VDC/850 VAC peak
- Common mode rejection: >-110 dB
- Normal mode rejection: >-60 dB
- Power: 115 VAC +/-10%, 50/60 Hz, 6 VA (230 VAC optional)
- Operating temperature range: 0-60°C
- Environmental integrity: NEMA 4X
- Construction: bezel: high impact Lexan™
case: aluminum extruded
- Weight: 8 ounces

WARNING: Prior to moving any jumpers, remove power from the meter and any signal generating devices connected to the meter. Use caution not to short internal circuits while turning potentiometers with power on. Use only insulated tools for all adjustments. Remove power from the meter and any signal generating devices connected to the meter while reinstalling the bezel after set-up. Failure to observe these precautions may result in damage to equipment, and/or serious personal injury.



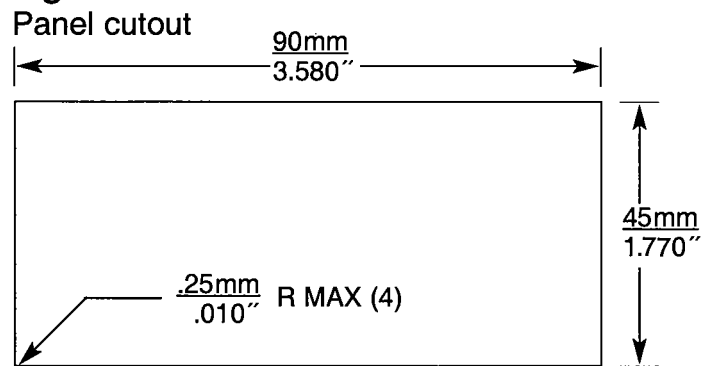
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Mechanical Installation

1. Cut out panel per Figure A.
2. Remove bezel and gasket from meter.
3. Remove sliding brackets from side of meter.
4. Insert meter through front of panel.
5. Re-install sliding brackets. Tighten screws (only one screw per side necessary) until brackets hold meter firmly in panel.
6. When bezel is re-installed after calibration, be careful not to over-tighten screws.

Figure A



Electrical Installation

1. Wire per Figure B.
2. For more specific wiring examples, see Common Hook-Ups on page 3.

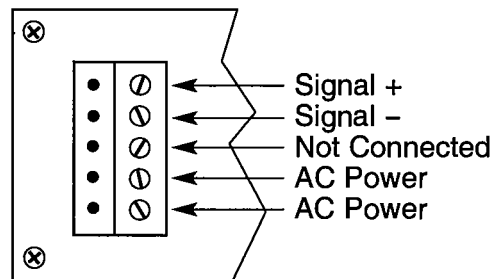


Figure B
Rear of meter

Calibration

Please read "WARNING" thoroughly before continuing:

1. Apply power to meter, then allow 10 minutes for warm-up before proceeding.
2. Select "volts" or "4-20mA" as required by your application. See Figure C-I.
3. If selecting "volts" skip to step 4. If selecting "4-20mA", place coarse jumper to the second position from top. See Figure C-I.
4. With signal at minimum set meter to read "0000" using zero pot. See Figure C-V.
5. With signal input at maximum, use the fine gain pot to set the meter to desired reading. See Figure C-IV.
6. If the fine gain pot does not have sufficient range to attain desired reading, move coarse gain jumper down (for less counts, or if over-ranged) or up (for more counts) as required. See Figure C-I and C-IV. (Be sure to read "Scaling Tips").
7. Repeat steps 4, 5 & 6 until no further adjustment is required.
8. Set decimal point position with jumper as desired. See Figure C-III.

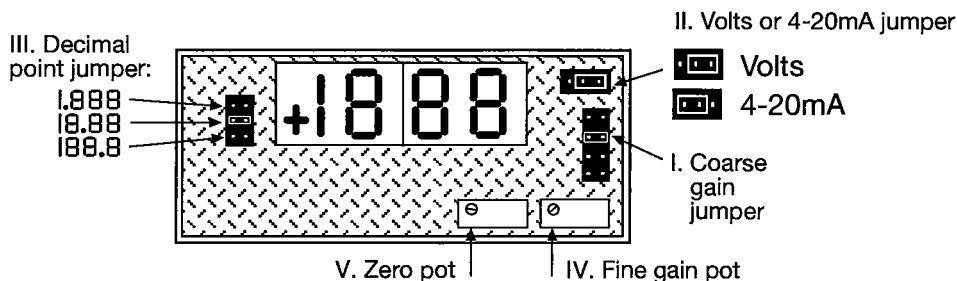
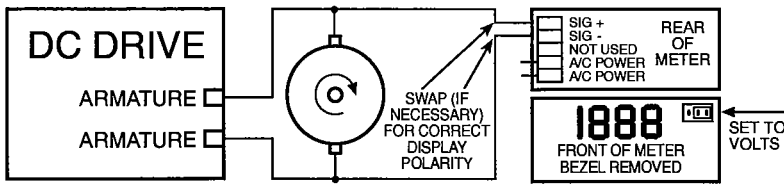


Figure C
Front of meter with bezel removed

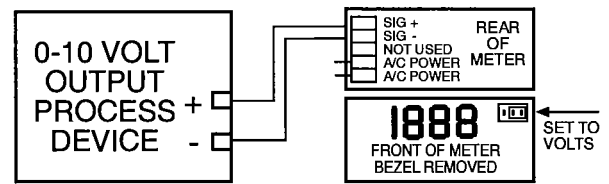


Common Hook-Ups

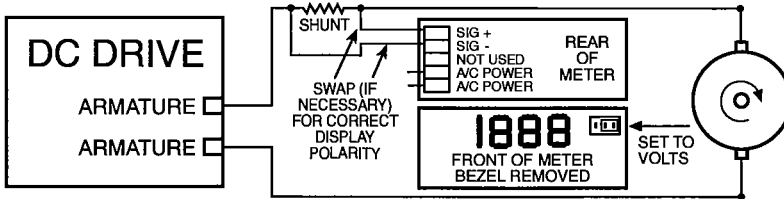
MOTOR SPEED



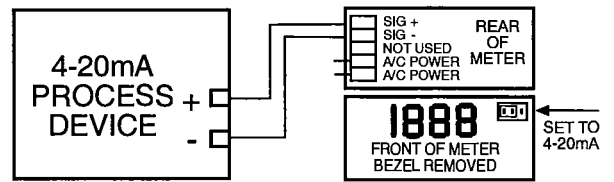
VOLTAGE PROCESS SIGNAL



MOTOR CURRENT

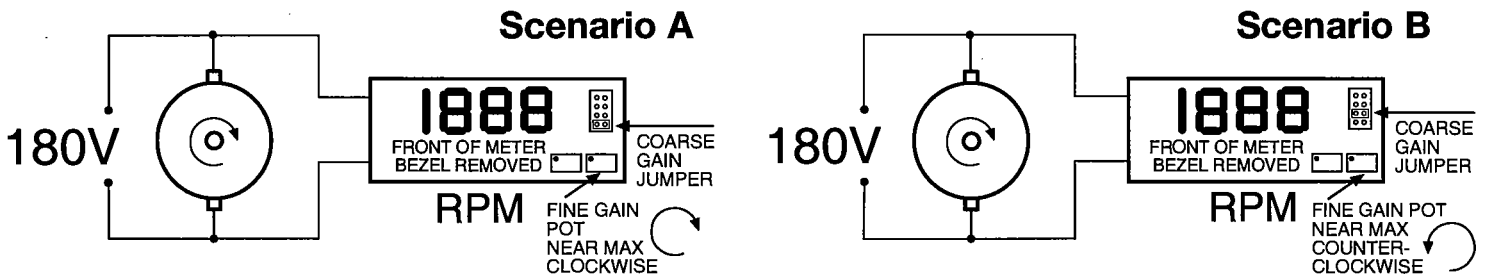


CURRENT PROCESS SIGNAL



Scaling Tips

1. The four coarse ranges have overlap; consider scenario A and scenario B below:



Both ways are correct and will function. However scenario B will give superior performance. Always try to use the uppermost coarse scaling position possible. Move the coarse scaling jumper down only if the fine gain pot has insufficient counterclockwise span to reach your desired reading.

2. In some high voltage or high current applications, the meter may exhibit measurement instability. To increase stability, add resistance in input line as shown in Figure D. Start with 10K ohms and increase until problem is eliminated. Each time resistance is added, meter will require re-calibration. (Note: 4-20mA function will not work with resistance added).

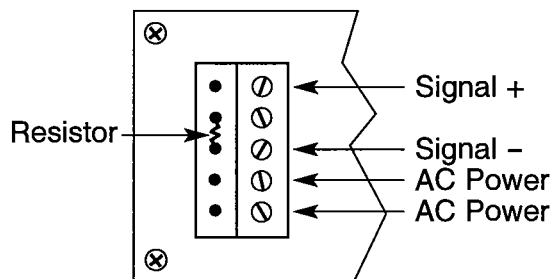


Figure D
Rear of meter