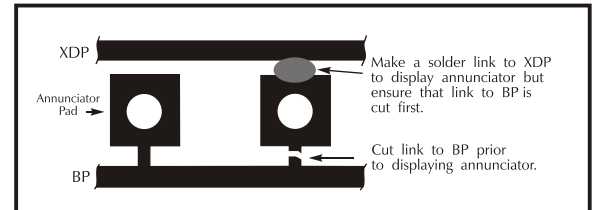


PIN FUNCTIONS

- 0. H N.C.
- 1. VDD Positive power supply connection.
- 2. TEST Connecting this pin to VDD turns on the segments as illustrated. DO NOT operate for more than a few seconds as the DC voltage applied to the LCD may 'burn' the display. This pin is held nominally at 5V below VDD and is the ground for the digital section of the meter. It can be used to power external logic up to a maximum of 1mA.
- 3. IN HI Positive measuring differential input. } Analogue inputs must be no closer than 1V to either the positive or negative supply. The negative
- 4. IN LO Negative measuring differential input. } supply of the DPM 600S is generated internally and mirrors the positive supply voltage.
- 5. VSS Negative power supply connection.
- 6. RFL Negative input for reference voltage (can be connected to COM via Link 3).
- 7. RFH Positive input for reference voltage.
- 8. COM The ground for the analogue section of the A/D converter, held actively at 2.8V (nom) below VDD. COM must not be allowed to sink excessive current (>100µA) by connecting it directly to a higher voltage.
- 9. ROL Negative output from internal reference.
- 10. ROH Positive output from internal reference.
- 11. DP3 DP 199.9
- 12. DP2 DP 19.99
- 13. DP1 DP 1.999 } Connect to VDD to display required decimal point.
- 14. -5V Output from negative rail generator circuit (DPM 600S) which mirrors the voltage applied to VDD. DPM 600 - N.C.
- 15. REF BG Output from bandgap reference (1.22V nom).
- 16. +L N.C.
- 17. -L N.C.
- 28 (BP), 29 (E1), 30 (B1), 31 (G1), 32 (AB): Outputs for autoranging applications.

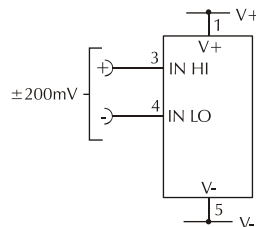
SPECIAL NOTE - ANNUNCIATORS

The DPM 600 annunciators (A, °F, °C, etc.) can be displayed by applying a solder link to the drive pad (XDP) located alongside the annunciator input pads. These input pads are tied via links to the backplane (BP) to suppress the annunciators when not required. Care should be taken to ensure that links to BP are cut before connecting annunciator inputs to the drive pad (XDP).



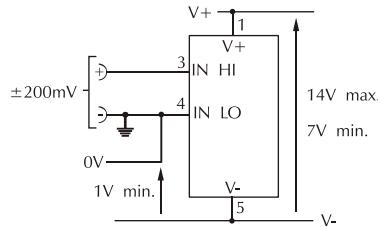
VARIOUS OPERATING MODES

ON-BOARD LINKS: In order to quickly and easily change operating modes for different applications, the meter has several "on-board links". They are designed to be easily cut (opened) or shorted (soldered). Do not connect more than one meter to the same power supply if the meters cannot use the same signal ground. Taking any input beyond the power supply rails will damage the meter.



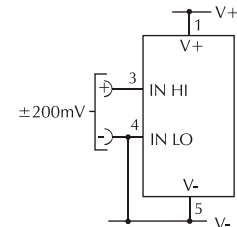
SHORT Link 1, 2, 3 & 5.

Measuring a floating voltage source of 200mV full scale.



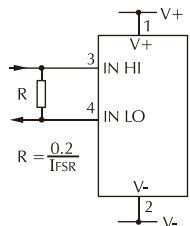
SHORT Link 1, 2 & 3.

Split supply operation (DPM 600).



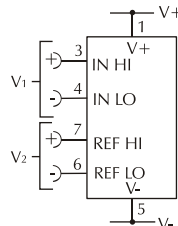
SHORT Link 1, 2, 3 & 5.

Measuring a single ended input referenced to supply (DPM 600S).



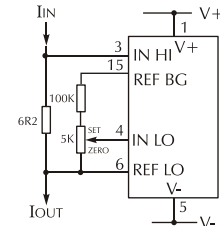
SHORT Link 1, 2, 3 & 5.

Measuring current (supply MUST be isolated).



SHORT Link 5.

Measuring the ratio of two voltages.
 Reading = $1000 V_1/V_2$
 $50\text{mV} < V_2 < 50\text{mV}$
 $V_1 < 2V_2$



SHORT Link 1, 2 & 3.

Measuring 4-20mA to read 0-999 (supply MUST be isolated).