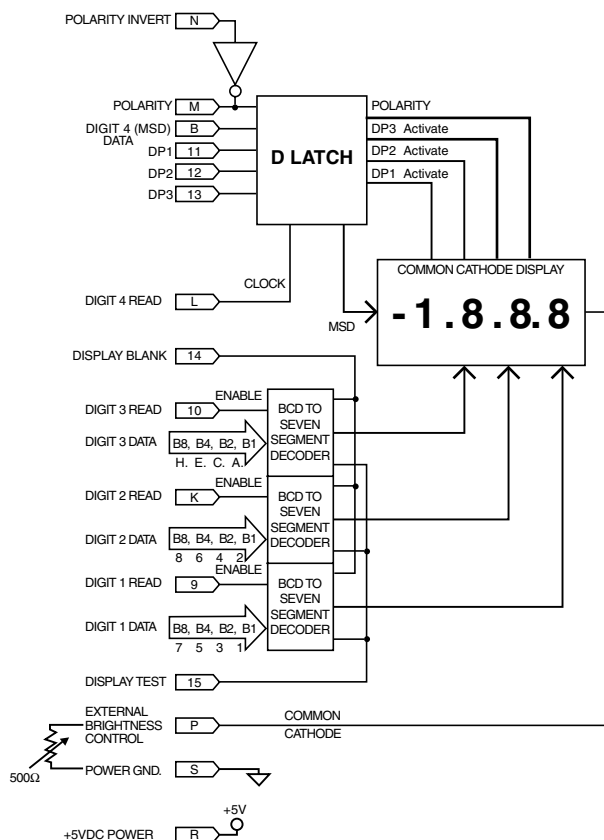


Functional Diagram



Pins A, C, E and H are the B1, B2, B4 and B8 bits of Digit 3 respectively. +5V on these lines corresponds to a High Level (1), and 0V on these lines corresponds to a Lo Level (0).

Pin B is the B1 bit of the MSD Digit 1. +5V on this line corresponds to a High Level (1), and 0V on this line corresponds to a Lo Level (0).

Pin M is the Polarity input to the meter. +5V on this line corresponds to a +ve Polarity, and 0V on this line corresponds to a -ve Polarity. The polarity information is read into the meter along with the Digit 4 data. The meter only displays a -ve polarity sign, as the +ve sign is assumed.

Pin N is the Polarity Invert input to the meter. +5V on this line corresponds to a -ve Polarity, and 0V on this line corresponds to a +ve Polarity. The polarity information is read into the meter along with the Digit 4 data. The meter only displays a -ve polarity sign, as the +ve sign is assumed.

Pins 9, K, 10 and L are the Read Data lines for the Digit 1, Digit 2, Digit 3 and Digit 4 data respectively. Data is read into the meter whenever the corresponding Read Data line is at +5V (Hi Level).

Pins 11, 12 and 13 are the Decimal Point Inputs to the meter. They correspond to Decimal 1, 2 and 3 respectively. When any of these pins is at a +5V (Hi Level) the corresponding Decimal is turned ON.

Pin P is the Display Dim or External Brightness Pin. If an external potentiometer (approx 500Ω) is connected between Pin P and Pin S, the brightness of the display can be adjusted. If no adjustment is required Pin P should be directly connected to Power Ground Pin S.

Pin 14 is the Display Blank Pin. If Pin 15 is directly connected to Pin S, all segments of the display are turned OFF. This feature is used to conserve power in "push to read" applications.

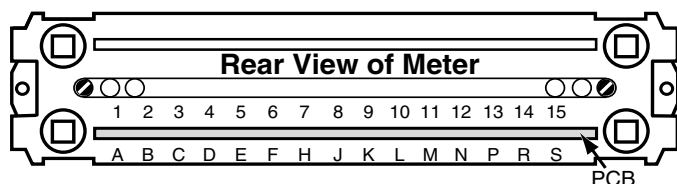
Pin 15 is the Display Test Pin. If Pin 14 is directly connected to Pin S, all segments of the display come on. This is a useful feature to test for missing segments.

Pin R is the +5V DC Power Pin. The current required is approx 200mA

Pin S is the 0V Power Ground Pin.

Connector Pinouts

The Texmate model BN-35BCD interconnects by means of a standard PC board edge connector having two rows of 15 pins, spaced on 0.156" centers. Connectors are available from Texmate.



METER REAR WITH PCB EDGE CONNECTOR MOUNTED

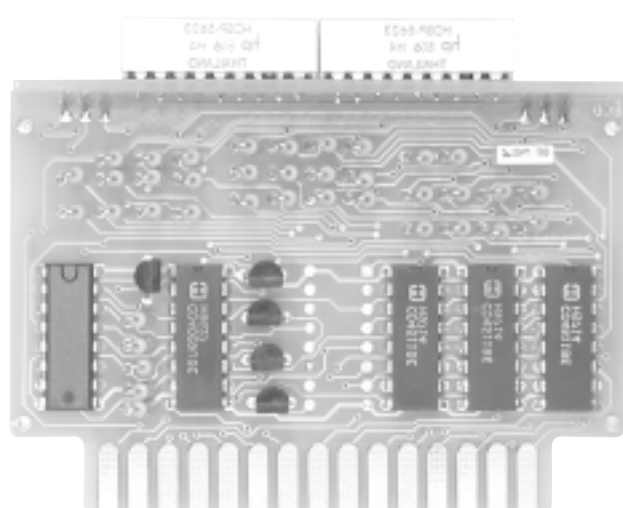
(For mounting of screw terminal blocks see rear page)

COMPONENT SIDE PINS		SOLDER SIDE PINS
B1 Bit of LSD Digit 1 - 1		A - B1 Bit of Digit 3
B1 Bit of Digit 2 - 2		B - B1 Bit of MSD Digit 1
B2 Bit of LSD Digit 1 - 3		C - B2 Bit of Digit 3
B2 Bit of Digit 2 - 4		D
B4 Bit of LSD Digit 1 - 5		E - B4 Bit of Digit 3
B4 Bit of Digit 2 - 6		F
B8 Bit of LSD Digit 1 - 7		H - B8 Bit of Digit 3
B8 Bit of Digit 2 - 8		J
Read Data - 9		K - Read Data
Read Data - 10		L - Read Data
Decimal Point - 11		M - Polarity Input
Decimal Point - 12		N - Polarity Invert
Decimal Point - 13		P - External Brightness
Display Blank - 14		R - Power
Display Test - 15		S - Ground

Pins 1, 3, 5 and 7 are the B1, B2, B4 and B8 bits of the LSD Digit 1 respectively. +5V on these lines corresponds to a High Level (1), and 0V on these lines corresponds to a Lo Level (0).

Pins 2, 4, 6 and 8 are the B1, B2, B4 and B8 bits of Digit 2 respectively. +5V on these lines corresponds to a High Level (1), and 0V on these lines corresponds to a Lo Level (0).

Component Layout



Opening Back Panel

Unscrew the knurled collars, and remove the mounting clips. Snap out the rear plastic plate. The BN-35BCD printed circuit board can then be easily removed by sliding it out from the rear of the case.

Power Supply

The BN-35BCD ships from the factory with a non-isolated 5VDC power supply. For applications where isolation is required between the power and signal grounds, use the Texmate model BN-35-ISO. This model is available with 5V, 12V, 15V, and 24V power options and generates an internally isolated supply.

Custom Face Plates

Texmate Produces Thousands of Custom OEM Face Plates. Have Texmate Design and Build a Custom Face Plate to Suit your Next project!

- Custom face plates have a non-recurring artwork charge. A serial number is then assigned to each artwork, to facilitate re-ordering.
- Small Run or One-Off custom face plates incur an installation charge, and are generally printed on a special plastic film, which is then laminated to custom faceplate blanks as required.
- Large Run (250 pieces min): custom face plates are production silk screened, issued a part number, and held in stock for free installation as required by customer orders.
- OEMs may also order Custom Meter Labels, Box Labels, Custom Data Sheets and Instruction Manuals.



Front Bezel Descriptors

To customize the front bezel, each BN-meter is supplied with a white printed clear adhesive label containing various popular descriptors. Choose the descriptor desired, peel off the adhesive backing and align the descriptor in the center right of the faceplate.

AC	Ω	kV	kVAR	m ³ /hr	Hz	RPM
V	mV	min	PF	°F	°C	CosØ
DC	x10kN	µA	PSIG	mS	kg/cm ²	psi
kW	W	kWH	pH	%	K	kPa
A	mbar	mA	MW	kA	RPS	MWH
mWs	µm	kW/s	I	l/sec	ml	cm
ORP	mm/s	1/min	mm	kg/sec	lbs	kg/hr
FT	bars	min ⁻¹	m/min	Mvars	µV	dB

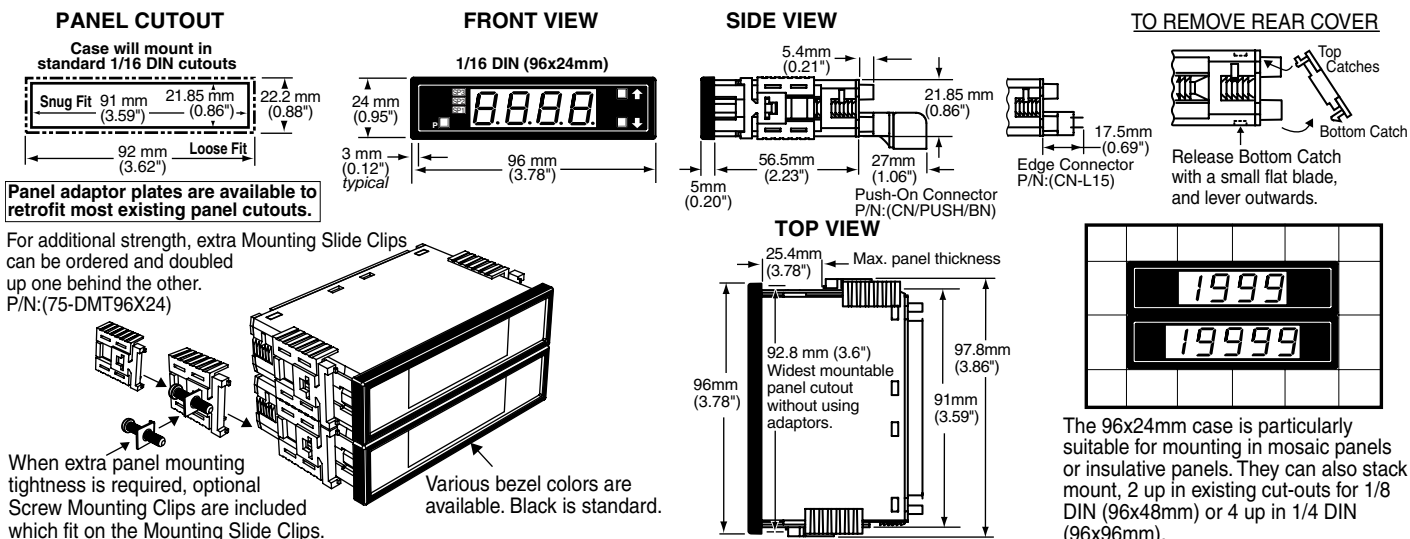
Optional PCB Edge Connector

PCB Edge Connector

A standard 30-pin edge connector (two rows of 15 pins on 0.156" centers) may be used to connect the BN-35BCD meter. Order part no. CN-L15.



BN Case Dimensions and Panel Cutouts



Ordering Information

Standard Options for this Model Number

Part Number	Description
► BASIC MODEL NUMBER Includes standard display and standard power supply unless optional versions are ordered.	
BN-35BCD	..... 3.5 digit, 5VDC Pwr, Parallel or MUX BCD input
► DISPLAY	
STANDARD	..... Red LEDs, 0.56 inch high
BN-GREEN	..... Green LED, 0.56 inch high
BN-BRIGHT	..... Super bright Red LEDs, 0.56 inch high

Special Options and Accessories

Part Number	Description
► ACCESSORIES	
CN-L15	..... PCB Edge Connector, Solder Type, Dual Row 15 Pins
75-DMTC96X24	..... Side Slide Brackets, extra set (96x24mm only)
75-DBBZ96X24	..... Black Bezel for 96x24mm Case, BN and AM series
DN.CAS96X24	..... Din Case 96 X 24 Short Depth with Bezel
OP-MTLCLIP	..... Screw Mounting Clips (2 pc) to screw tighten slide brackets
75-DTP96X24	..... Black Metal Trim Plate (96x24mm Case) 1 Meter
75-DTP2X9624	..... Black Metal Trim Plate (96x24mm Case) 2 Meters
75-DTP3X9624	..... Black Metal Trim Plate (96x24mm Case) 3 Meters

Prices subject to change without notice.

WARRANTY

Texmate warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from date of shipment. Texmate's obligations under this warranty are limited to replacement or repair, at its option, at its factory, of any of the products which shall, within the applicable period after shipment, be returned to Texmate's facility, transportation charges pre-paid, and which are, after examination, disclosed to the satisfaction of Texmate to be thus defective. The warranty shall not apply to any equipment which shall have been repaired or altered, except by Texmate, or which shall have been subjected to misuse, negligence, or accident. In no case shall Texmate's liability exceed the original purchase price. The aforementioned provisions do not extend the original warranty period of any product which has been either repaired or replaced by Texmate.

USER'S RESPONSIBILITY

We are pleased to offer suggestions on the use of our various products either by way of printed matter or through direct contact with our sales/application engineering staff. However, since we have no control over the use of our products once they are shipped, NO WARRANTY WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE is made beyond the repair, replacement, or refund of purchase price at the sole discretion of Texmate. Users shall determine the suitability of the product for the intended application before using, and the users assume all risk and liability whatsoever in connection therewith, regardless of any of our suggestions or statements as to application or construction. In no event shall Texmate's liability, in law or otherwise, be in excess of the purchase price of the product.

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 Texmate has facilities in Japan, New Zealand, Taiwan, and Thailand. We also have authorized distributors throughout the USA and in 28 other countries.

For product details visit www.texmate.com
 Local Distributor Address