



BN-40 BCD 4 DIGIT Remote BCD Display

5VDC POWERED BCD INPUT LED METER IN DIN 96X24MM CASE

FEATURES

- 4 digit, 5V powered, LED display
- Display range of 0 to 9999
- Accepts parallel BCD inputs
- Accepts multiplexed BCD (bit parallel / word serial)
- Accepts 2-step parallel BCD (for 8 bit microprocessors)
- Short depth case: 2.83" (72mm) behind panel
- Low profile 1/16 DIN 96x24mm case

DESCRIPTION

The BN-40BCD is a 4 digit remote or slave BCD display that is popularly used to display the BCD output from a PLC system.

For applications where a polarity sign is required the 3 1/2 digit BN-35BCD may be used. The BN-40 BCD and BN-35 BCD are ideal solutions for low cost operator interfaces.

Both BN-40 BCD and BN-35 BCD are powered from 5V DC. They are shipped standard with Red LEDs, but green LEDs or super bright LEDs for high ambient light conditions are also offered.

SPECIFICATIONS

Input Configuration:	BCD 1-2-4-8 code, positive logic
Maximum Indication:	9999
Display:	0.56" high red LEDs (standard) 0.56" high green LEDs (optional) 0.56" high extra bright red LEDs (optional)
Display Functions:	Display Dim, Blank and Test provided.
Polarity:	Not displayed
Power Supply:	5VDC $\pm 5\%$ @ 200mA 12VDC $\pm 5\%$ @ 200mA (optional)
Operating Temperature:	0°C to 70°C (5V supply); 0°C to 50°C (12V supply)
Storage Temperature:	-12°C to 80°C
Weight:	approx. 10 g

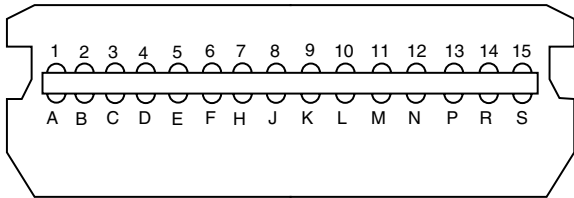
ORDERING INFORMATION

Order Part No.

STANDARD PANEL METER:	4 digit LED BCD INPUT meter	BN-40BCD
	3 1/2 digit LED BCD INPUT meter (with polarity).....	BN-35BCD
ACCESSORIES:	PCB Edge connector (30 pin solder tabs)	CN-L15
OPTIONS:	Optional 12V DC Power Supply	Call Factory
	Green LEDs	BN-GREEN
	Extra Bright Red LEDs	BN-BRIGHT

PIN-OUT DIAGRAM

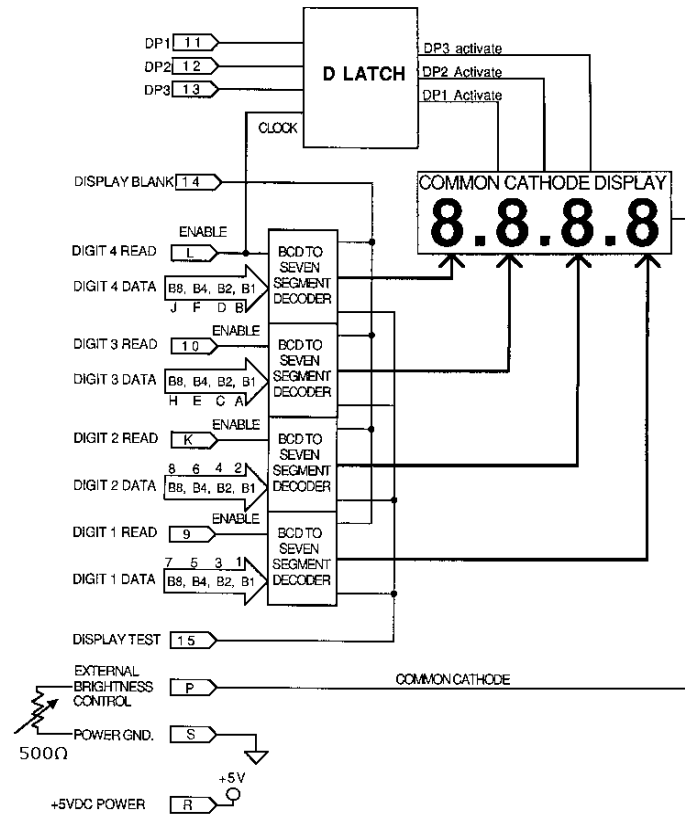
The Texmate model BN-40BCD interconnects by means of a standard PC board edge connector having two rows of 15 pins, spaced on 0.156" centers. Connectors are available from Texmate.



REAR OF METER WITH PCB EDGE CONNECTOR MOUNTED

1	Digit 1 B1	A	Digit 3 B1
2	Digit 2 B1	B	Digit 4 B1
3	Digit 1 B2	C	Digit 3 B2
4	Digit 2 B2	D	Digit 4 B2
5	Digit 1 B4	E	Digit 3 B4
6	Digit 2 B4	F	Digit 4 B4
7	Digit 1 B8	H	Digit 3 B8
8	Digit 2 B8	J	Digit 4 B8
9	Digit 1 Read Data	K	Digit 2 Read Data
10	Digit 3 Read Data	L	Digit 4 Read Data
11	DP1 1XXX•X	M	No connection
12	DP2 1XX•XX	N	No connection
13	DP3 1X•XXX	P	Display Dim (Ext. Brightness Control)
14	Display Blank	R	+5VDC power
15	Display Test	S	0V power ground

FUNCTIONAL DIAGRAM



PIN DESCRIPTIONS

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).

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, D, F and J are the B1, B2, B4 and B8 bit of the MSD Digit 4. +5V on this line corresponds to a High Level (1), and 0V on this line corresponds to a Lo Level (0).

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.

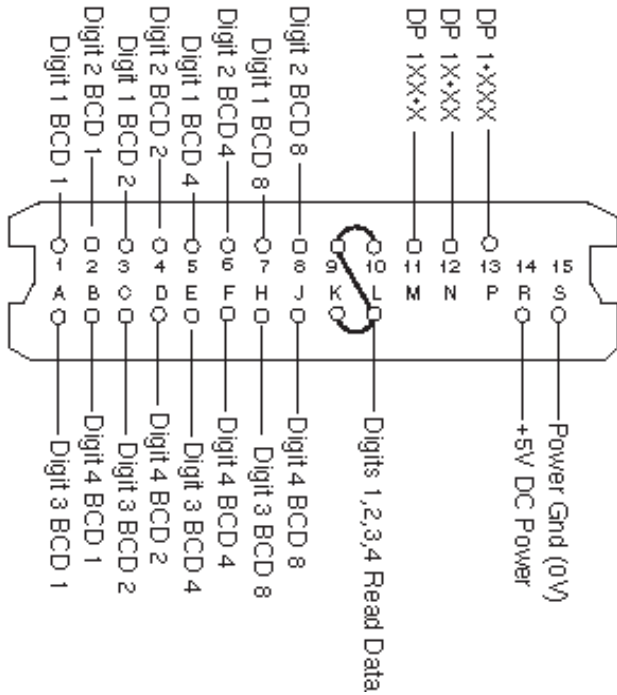
Pin 15 is the Display Test Pin. If Pin 14 is directly connected to Pin S, all segments of the display come on. This is a useful feature to test for missing segments.

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

Pin S is the 0V Power Ground Pin.

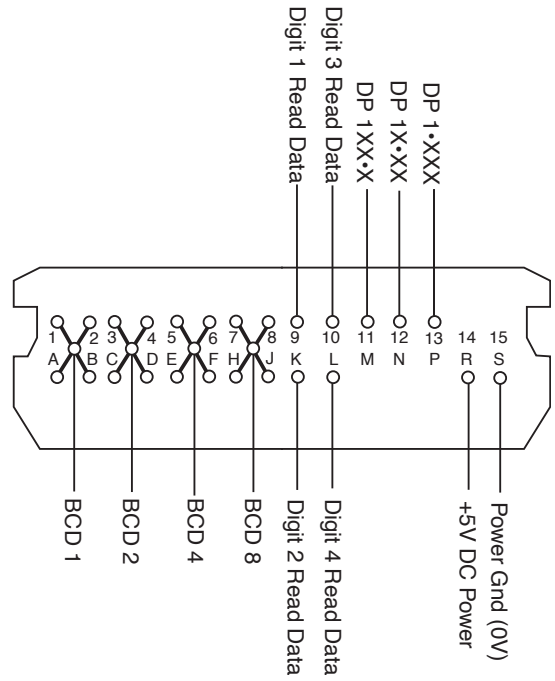
CONNECTION DIAGRAM FOR PARALLEL BCD INPUT

Data is simultaneously latched for all digits, on a single 'Read' command.

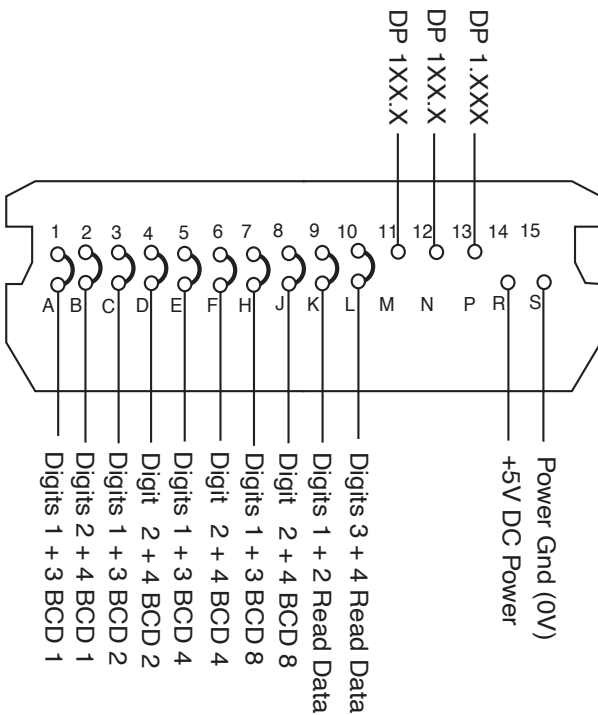


CONNECTION DIAGRAM FOR MULTIPLEXED BCD INPUT

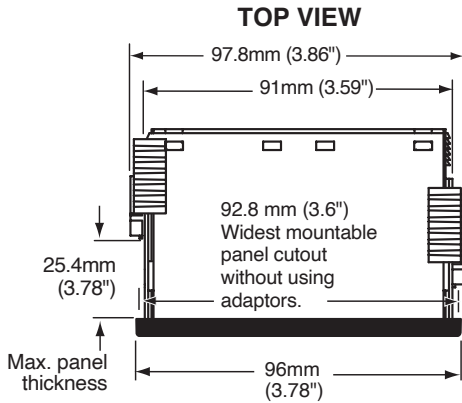
Data is latched into display, one digit at a time.



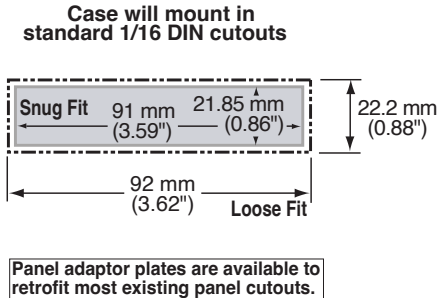
CONNECTION DIAGRAM FOR 2-STEP BCD INPUT



DIMENSIONS AND CUTOUTS

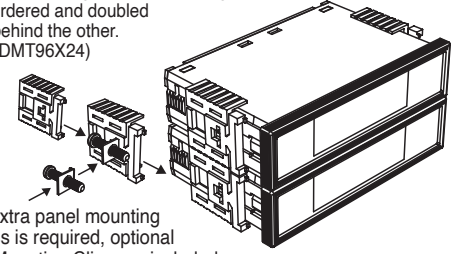


PANEL CUTOUT

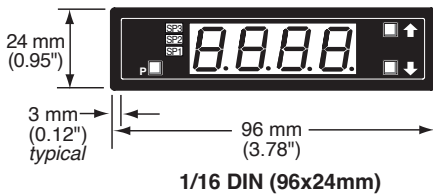


For additional strength, extra Mounting Slide Clips can be ordered and doubled up one behind the other.
P/N: (75-DMT96X24)

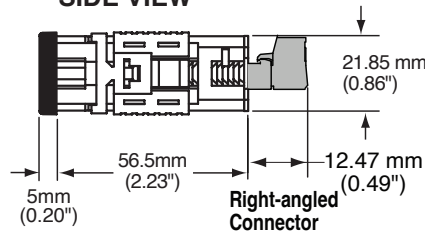
When extra panel mounting tightness is required, optional Screw Mounting Clips are included which fit on the Mounting Slide Clips.



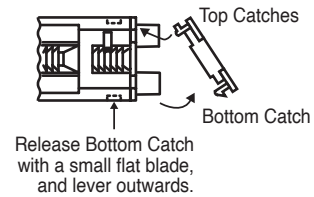
FRONT VIEW



SIDE VIEW



TO REMOVE REAR COVER



WARRANTY

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