

# DPM 72 x 144 4 ½ DIGIT VDC - C / F

## Operating Manual

The DPM 72 x 144 VDC is a Digital Panel Meter (DPM) in 72 x 144 size for measurement of DC mV with 4 ranges And DC Voltage with 5 ranges. Four ranges for power supply are available.

## Operation :

By changing short links decimal point can be adjusted as shown in sticker on page 2.  
The full scale value on the display can be adjusted on site with potentiometer at the rear side of the instrument from 10% to 100% of FSD (FSD = 19999). Similarly it is possible to adjust the zero with the help of potentiometer at the rear side.

Further DPM 72x144 ADC version from the series :  
DPM 72 x 144 ADC Instrument for DC Voltage measurement

## Technical Data:

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<b>Display</b>	Display range	19999
	Decimal point position	selectable by short links at the Rear side.
	Negative display indication	"_"
	Digit height	26 mm / 7- segment digits
	Overload indication	last 4 digits blank (1     ).
<b>Measuring ranges</b>	Accuracy for mV	< 0.1 % + 1 digit.
(Max overload	Accuracy for Voltage	< 0.1 % + 1 digit
20% of Full scale range value)	DC mV	0 ... 60 mV / 0 ... 75 mV
	(Input Current < 300 uA)	0 ... 150 mV
		0 ... 200 mV.
	DC Voltage	0 ... 2 V.
		0 ... 20 V.
		0 ... 200 V.
		0 ... 500 V.
		0 ... 1000 V.
	Temperature coefficient	300 ppm / °C, plus.
	zero point drift	200 ppm / °C.
	Range adjustment span	from 10% to 100% of range.
<b>Power supply</b>	Direct voltage DC	24 V +/-15 % max.5.5 W     (isolated).
	Alternating voltage AC	110 V +10 %, -15% max 5.5 W     (isolated).
	(47 - 60 Hz)	110 V +10 %, -15% max.5.5 W     (isolated).
		230 V +10 %, -15% max.5.5 W     (isolated).
<b>Environmental conditions</b>	Climatic class	Class 2 to VDE / DIN 3540.
	Operating temperature	0 ... 55 °C.
	Storage temperature	-25 °C ... +65 °C.
	Safety class	II to IEC 348 / VDE 0411.
	IP Protection	IEC EN 60 529.
		For Back : IP 20.
		Front : IP 50 ( IP 54 on request ).
	Device safety	According to IEC EN 61 010.
	EMC immunity	According to IEC / EN 61 000-4-1 up to 4.
	EMC radiated interference	According to IEC / EN 61326 class B.
<b>Dimensions and weights</b>	Front bezel size	72 mm x 144 mm DIN 43 700.
	Panel cut-out	68 + 0.7 mm x 138 + 1.0 mm.
	Overall depth	94 mm.
	Weight Approx.	approx. 500 gm.
<b>Sundry</b>	Connections	Plug and screw terminal blocks.



# DPM 72 x 144 4 1/2 DIGIT VDC - C / F

## Sample sticker

DPM 72x144 4 1/2 VDC - C		Sr. No. / /			
Range: 0... 150mV		Display: 19999			
<b>Aux Supply</b>	A N(-) B L(-)	230 VAC, 50 Hz (+10 % -15 %)			
<b>Input Voltage</b>	1 LO	COMMON			
	2 HI	0... 60 mV DC / 0.... 75 mV DC			
	3 HI	0... 150 mV DC			
	4 HI	0... 200 mV DC			
<b>Decimal Point Adjustment</b>	XXXXX	X.XXXX	XX.XXX	XXX.XX	XXXX.X
Decimal Point	Zero Adj.	Span Adj.	Short Link	Measuring Input	Aux. Supply +(-) -(-)
10 9 8 7	0	0	6 5	4 3 2 1	B A

## Connection Diagram

DPM 72x144 4 1/2 VDC - F		Sr. No. / /			
Range: 0... 500 V		Display: 19999			
<b>Aux Supply</b>	A N (-) B L (+)	110 VDC (+10 % -15 %)			
<b>Input Current</b>	1 LO	COMMON			
	4 HI	0... 2V DC, 0... 20V DC, 0... 200 V DC, 0... 500 V DC, 0... 1000 V DC.			
<b>Decimal Point Adjustment</b>	XXXXX	X.XXXX	XX.XXX	XXX.XX	XXXX.X
Decimal Point	Zero Adj.	Span Adj.	Short Link	Measuring Input	Aux. Supply +(-) -(-)
10 9 8 7	0	0	6 5	4 3 2 1	B A

## Measuring Input

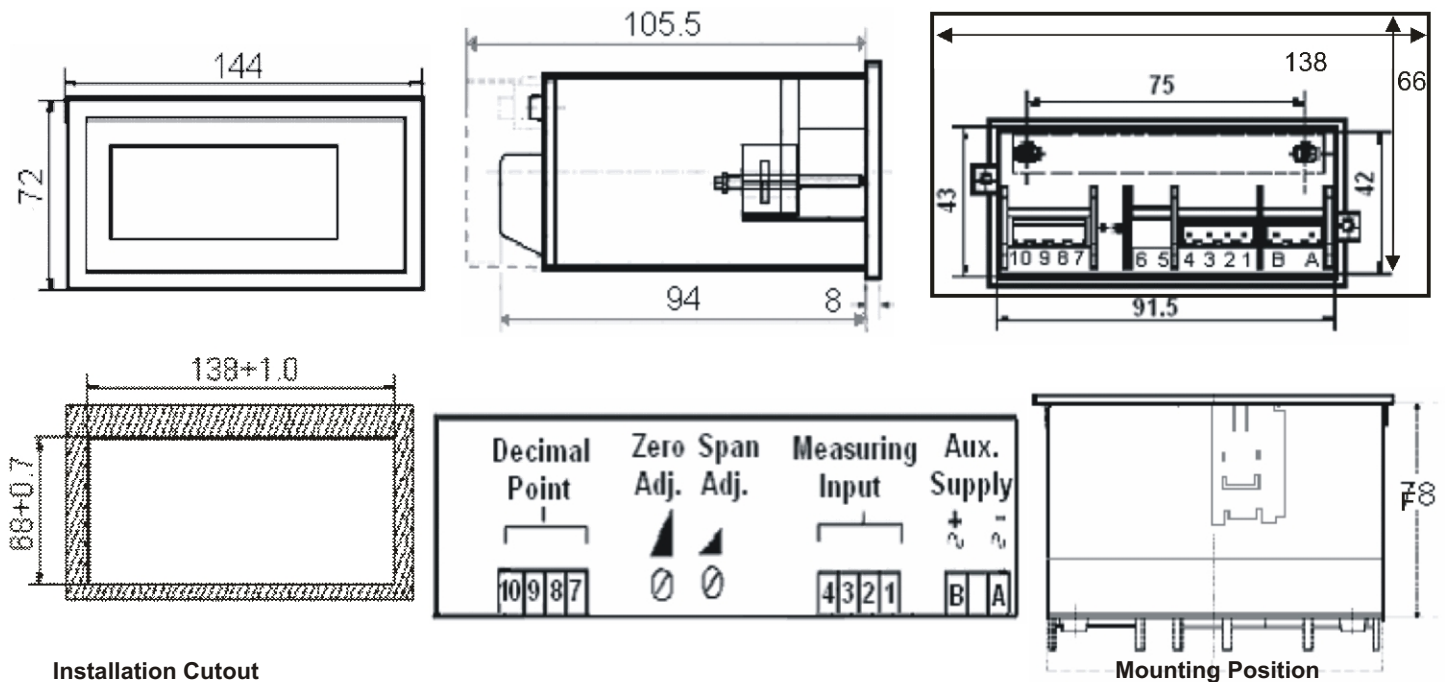
Aux. Supply  
Current DC : 0... 20 mA

4... 20 mA

Display adjust (with external calibrator)  
Decimal point programming

Terminals A (-/N) and B (+/L)  
Terminals 1 and 2 with  
terminals 5 and 6 open.  
Terminals 1 and 3 plus  
jumper between terminals 5 and 6.  
With zero and span pots.  
With short links at rear side.

## Design & Installation



### Installation Cutout



**Caution :** Do not change the short links on Display (for decimal point adjustment) when the input is applied to the DPM.



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**RISHABH INSTRUMENTS PVT.LTD.**  
F-31, MIDC, Satpur, Nashik-422 007, India.  
Tel.: +91 253 2202160, 2202202 Fax : +91 253 2351064  
E-mail : India :- marketing@rishabh.co.in  
International :- exp.marketing@rishabh.co.in  
www.rishabh.co.in