

# Series RD

Panel meter 96x48 mm size for parallel BCD code



RD50	5 digits
RD40S	4 digits and negative sign
RD40	4 digits
RD30S	3 digits and negative sign
RD30	3 digits
RD20S	2 digits and negative sign
RD20	2 digits

*Panel meters for signals in parallel BCD code. Meters with 2, 3, 4 and 5 digits, with optional negative sign and selectable decimal point. Independent "Hold" function for multiplexing the control signals to several meters. Positive logic. Standard 14mm display height. Multiple power options available both in AC and DC.*

# Series RD

## Panel meter 96x48 mm size for parallel BCD code

Panel meters with parallel BCD code control, with 5, 4, 3 or 2 digits, with optional negative sign. Decimal point fixed, selectable by solder jumpers. Independent «HOLD» control for each digit, allows multiplexing of the BCD control signals. Several power options available both in AC and DC. The instrument includes both male and female connectors.



### Order Reference

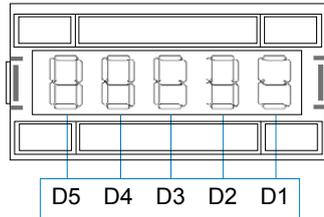
RD	Model	Power
	<b>50</b>	<b>H</b>
	-50 5 digits	-0 (230 Vac)
	-40S 4 digits and sign	-1 (115 Vac)
	-40 4 digits	-2 (24 Vac)
	-30S 3 digits and sign	-3 (48 Vac)
	-30 3 digits	-6 (15 a 30 Vdc isolated)
	-20S 2 digits and sign	-8 (24 a 65 Vdc isolated)
	-20 2 digits	

### Technical Data

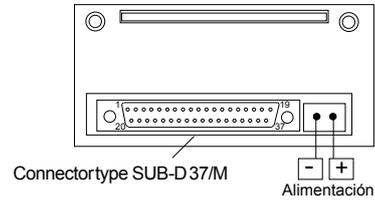
<b>Digits</b>	5, 4, 3, 2 depends on model	<b>Consumption</b>	<5.5VA en AC <3.5W en DC
Type	7 segments, red	<b>Mechanical</b>	
Height	14 mm	Mounting	panel
Display maximum	depends on model	Power connections	plug-in screw terminal
Display minimum	depends on model	Signal connections	SUB-D 37 pins male (female SUB-D terminal included)
Decimal point	selectable 8.8.8.8. by solder jumpers	Weight	<350 grams
<b>Signals</b> accepted	BCD parallel	Front size	96x48mm
Type	positive logic	Panel cut-out	92.5x44.5mm
Levels for "1"	5Vdc, 12Vdc, 24Vdc	Operating temperature	0 to 50°C
Levels for "0"	<3Vdc	Storage temperature	-40 to +80°C
Consumption per input	570 uA at 24 Vdc 212 uA at 12 Vdc 38 uA at 5 Vdc		
HOLD	independent for each digit		
<b>Power</b>			
Power option in AC	230Vac, 115Vac, 48Vac, 24Vac		
Power option in DC	15-30Vdc, 24-65Vdc		

## Front View

The connections indicated are for the 5 digit instrument, and each digit is labeled with D5, D4, D3, D2 and D1 based on its position. For units with negative sign, all BCD codes that will light the central segment of the 7 segment display, will light the sign.



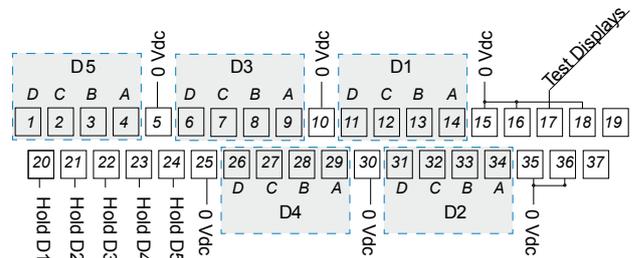
## Rear View



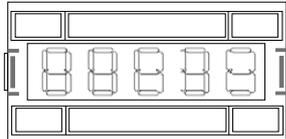
## Signal Connections

Function «HOLD» : Each digit has an independent terminal assigned to control its «Hold» function. This «Hold» function is aimed to multiplex the BCD data channels of the 5 digits. The «Hold» function is activated by changing its logical state from «0» to «1». If the «Hold» function is deactivated («0») the display will visualize continuously the data received.

Function «TEST DISPLAYS» : This function tests the functionality of the segments of the displays. It activates when connecting terminal 17 to negative («0»). All displays will light all the segments.

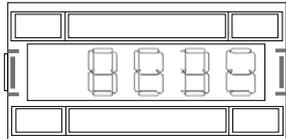


### RD50/A



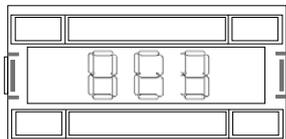
D5 = TENS OF THOUSANDS  
D4 = THOUSANDS  
D3 = HUNDREDS  
D2 = TENS  
D1 = UNITS

### RD40/A



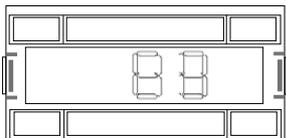
D5 = [Not available]  
D4 = THOUSANDS  
D3 = HUNDREDS  
D2 = TENS  
D1 = UNITS

### RD30/A



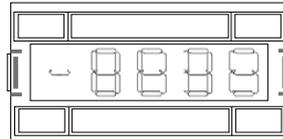
D5 = [Not available]  
D4 = HUNDREDS  
D3 = TENS  
D2 = UNITS  
D1 = [Not available]

### RD20/A



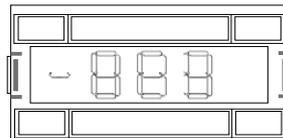
D5 = [Not available]  
D4 = [Not available]  
D3 = TENS  
D2 = UNITS  
D1 = [Not available]

### RD40/A-S



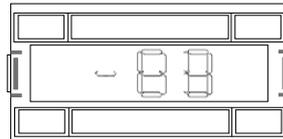
D5 = NEGATIVE SIGN  
D4 = THOUSANDS  
D3 = HUNDREDS  
D2 = TENS  
D1 = UNITS

### RD30/A-S



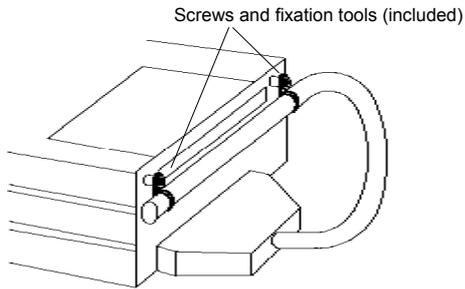
D5 = NEGATIVE SIGN  
D4 = HUNDREDS  
D3 = TENS  
D2 = UNITS  
D1 = [Not available]

### RD20/A-S



D5 = [Not available]  
D4 = NEGATIVE SIGN  
D3 = TENS  
D2 = UNITS  
D1 = [Not available]

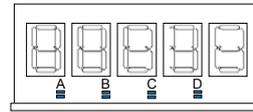
## Fixing the signal cable



**NOTE :** To avoid damages on the connectors and the printed circuit board, do not let the weight of the cables fall free onto the connectors. It is recommended to fix the cables to the housing as indicated in the image above, using the tools provided with the instrument.

## Decimal point selection

Select the decimal point to light by closing the solder jumpers indicated below. To access the jumpers take out the instrument from the housing and unlock the front side.



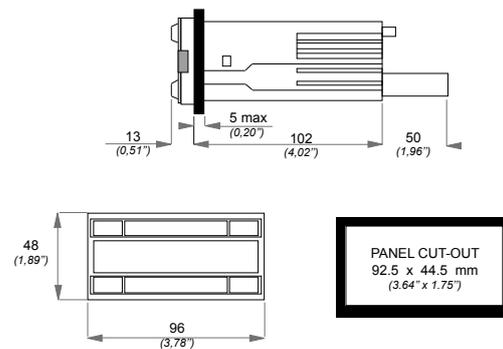
A = X . XXXX  
 B = XX . XXX  
 C = XXX . XX  
 D = XXXX . X

## Power fuses

The RD instruments allow different power options, both in AC and DC. The instrument does not have fuse protection. The value and type of the recommended protection fuses is indicated below for each power type.

Ref.	Power	Recommended Fuse
«0»	230 Vac 50/60 Hz	50 mA Time Lag
«1»	115 Vac 50/60 Hz	100 mA Time Lag
«2»	24 Vac 50/60 Hz	300 mA Time Lag
«3»	48 Vac 50/60 Hz	150 mA Time Lag
«6»	24 Vdc (15/30 Vdc Isolated)	350 mA Fast Fuse
«8»	48 Vdc (24/65 Vdc Isolated)	200 mA Fast Fuse

## Mechanical dimensions (mm / inch)



## CE Declaration of conformity

Manufacturer FEMA ELECTRÓNICA, S.A.  
 Altimira 14 - Pol. Ind. Santiga  
 E08210 - Barberà del Vallès  
 BARCELONA - SPAIN  
[www.fema.es](http://www.fema.es) - [info@fema.es](mailto:info@fema.es)

Products - RD50, RD40S, RD40, RD30S, RD30, RD20S, RD20

The manufacturer declares that the instruments indicated comply with the directives and rules indicated below.

Directive of electromagnetic compatibility 2004/108/CEE  
 Directive of low voltage 73/23/CEE

Security rules 61010-1  
 Emission rules 50081-1  
 Immunity rules 50082-2

Barberà del Vallès October 2009  
 Daniel Juncà - Quality Manager