

M4V

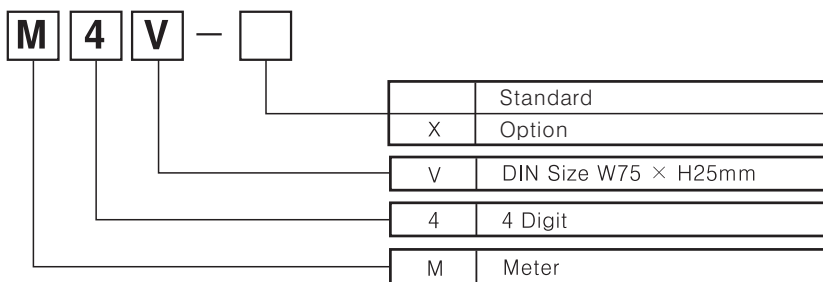
■ Features

- Various input function
(0–2V, 0–10V, 1–5V, 0–1mA, 4–20mA)
- Prescale function (High/Low scale setting)
- Max. display : –999 ~ 9999
- Error display function or self diagnosis function
- High quality by Microprocessor built-in
- Display accuracy : F · S ±0.2%, rdg ±1digit



⚠ Please read "Caution for your safety" in operation manual before using.

■ Ordering information

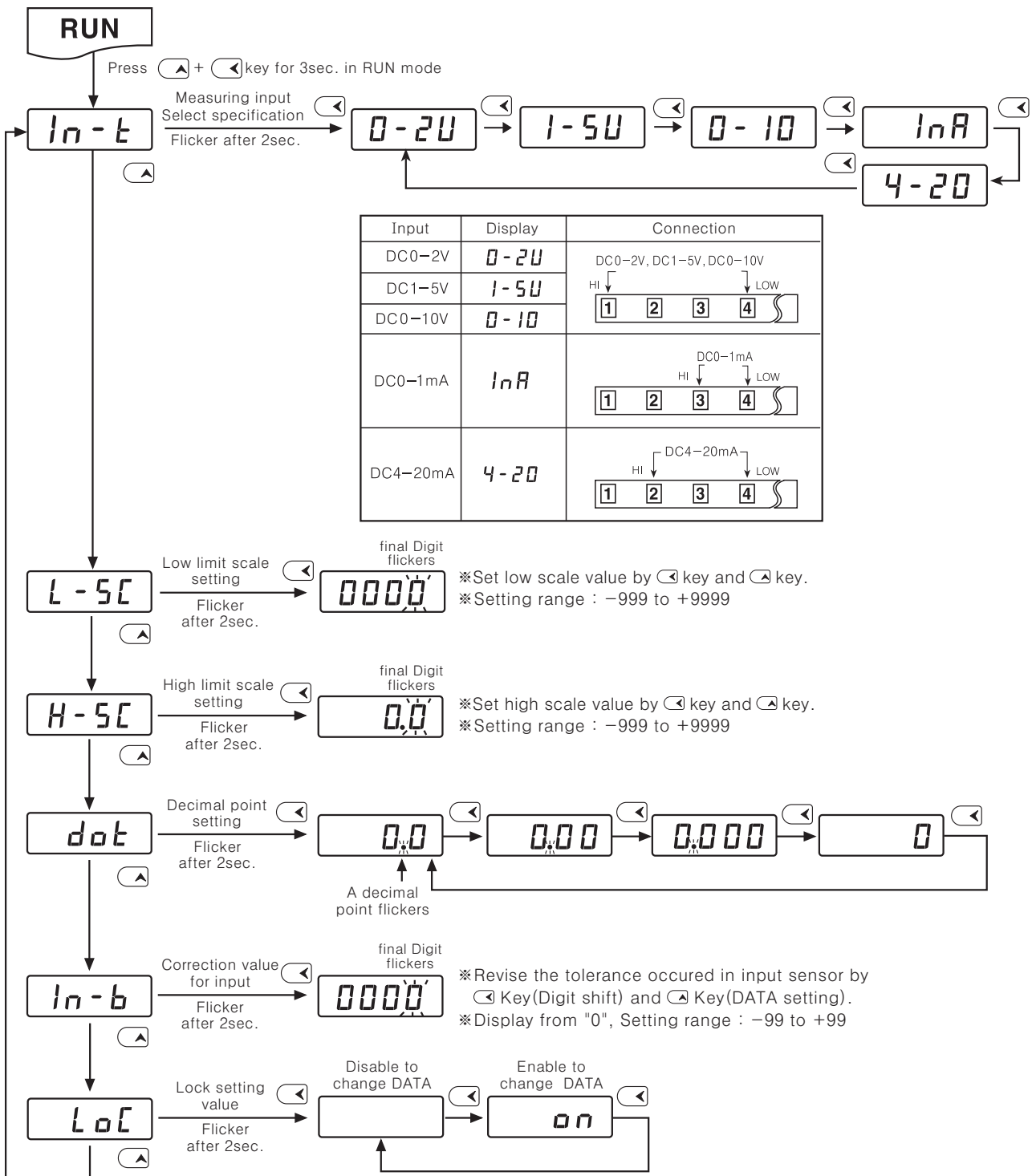


※Other specifications are optional.

■ Specifications

Model	M4V	
Measurement function	DV Volt, DC Ampere, 4–20mADC, 1–5VDC	
Power supply	12–24VDC	
Operating voltage	90 ~ 110% of rated voltage	
Power consumption	Approx. less than 2W	
Display method	7 Segment red LED display (Segment height 14mm)	
Display accuracy	0 ~ +50°C : F · S ±0.2% (rdg ±1digit), –10 ~ 0°C : F · S ±0.3% (rdg ±1digit)	
Sampling time	0.5 sec.	
Setting method	Scale set by front S/W key	
Max. allowable input	150% of measurement input	
Set–diagnosis	Error indication	
Insulation resistance	Min. 100MΩ (at DC500V)	
Dielectric strength	2000VAC 50/60Hz for 1 minute	
Noise strength	±300V the square wave noise (pulse width:1μs) by the noise simulator	
Vibration	Mecanical	0.75mm amplitude at frequency of 10 ~ 50Hz in each of X, Y, Z directions for 1hour
	Malfunction	0.5mm amplitude at frequency of 10 ~ 50Hz in each of X, Y, Z directions for 10minutes
Shock	Mecanical	300m/s ² (30G) in X, Y, Z direction for 3 times□
	Malfunction	100m/s ² (10G) in X, Y, Z directions for 3 times□
Ambient temperature	–10 ~ +50°C (at non–freezing status)	
Storage temperature	–20 ~ +60°C (at non–freezing status)	
Ambient humidity	35 to 85%RH	
Weight	Approx. 83g	

Programming



How to change the setting value

1. When entering into MODE, change digit flickering by \leftarrow Key then set DATA value by \uparrow Key.
2. After complete DATA value setting, please press \uparrow Key for 2sec. then it will move to next MODE saving DATA.
3. Press \leftarrow Key for 2 sec. to return RUN mode after changing(setting) DATA value in each MODE.

※Press \uparrow KEY for 2sec., then it will return to RUN without change setting value.

※When checking the setting value only in each mode. Press \leftarrow Key for 2 sec., then press for 2 sec. again.

(If press continuously, it will not advance to next mode and return to RUN mode)

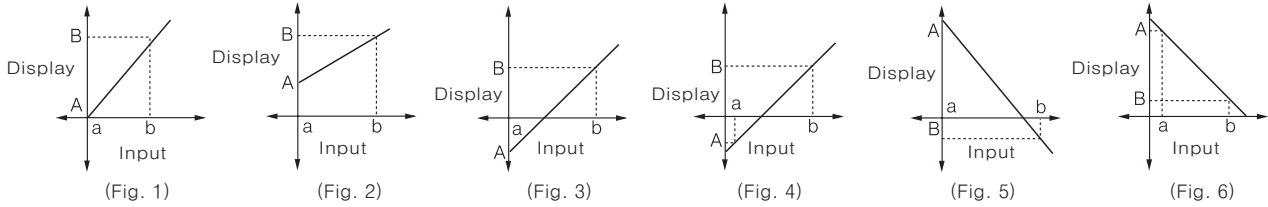
※If no key touched for 60sec., it will return to RUN mode.

Graphic Panel Meter

■ PRESCALE function

This function is to display setting (−999 to 9999) of particular High/Low-limit value in order to display High/Low-limit value of measuring input.

If measuring inputs are a or b and display values are A or B, it will display $a=A$, $b=B$ as below graph.

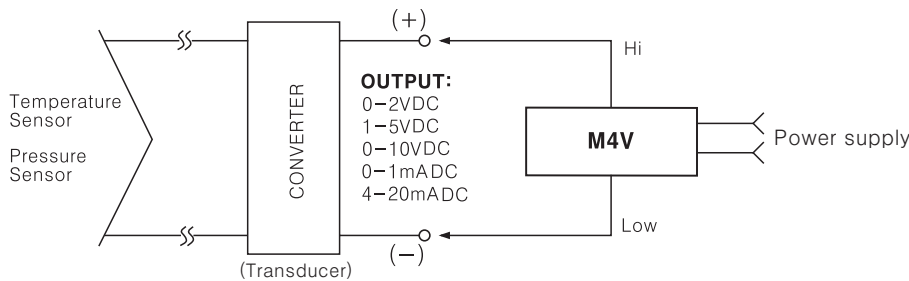


Ex) Able to set the display value for input as certain value (Not "0") by using prescale function.

Measuring input□	Prescale setting value	Display	Graph
DC0-10V	L-scale : 0 H-scale : 200	0 ~ 200	(Fig. 1)
	L-scale : 50 H-scale : 200	50 ~ 200	(Fig. 2)
	L-scale : -100, H-scale : 200	-100 ~ 200	(Fig. 3)
	L-scale : 200, H-scale : -50	200 ~ -50	(Fig. 5)

※L-SC(Low limit) : −999 ~ +9999, H-SC(High limit) : −999 ~ +9999
But, There must be offset "1" between L-SC and H-SC.

■ Application of connections



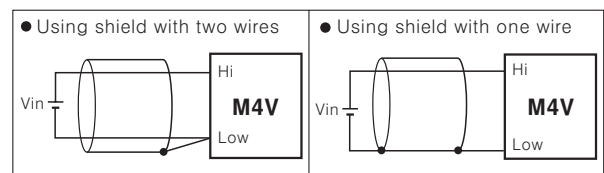
■ Proper usage

- Please read this Catalog before buying Panel Meter.
- Ambient condition
 - Please use this product under $-10\sim 50^{\circ}\text{C}$ of ambient operating temperature and less than $35\sim 85\%$ RH of humidity. Moreover, use this item near normal temperature 20°C , the most important condition, which manages the accuracy.
 - Must avoid the condition of dew status by rapidly changing temperature.
 - Must avoid heavy vibration or shock.
 - Please avoid the place where there are dreg, dust, and chemical agent or gas, which is destructive to electrical parts.
 - Do not use this item where the voltage or noise is over the proper specification.
It may cause malfunction.

- Storage

When you keep it, please avoid a direct ray of light and keep it under $-20\sim 60^{\circ}\text{C}$ of ambient operating temperature and less than $35\sim 85\%$ RH of humidity. Wrapping and keeping it as sold is a good condition.
- Input Line

Shield wire must be used when the measuring input line is getting longer or there are lots of noises.



- (A) Counter
- (B) Timer
- (C) Temp. controller
- (D) Power controller
- (E) Panel meter
- (F) Tacho/ Speed/ Pulse meter
- (G) Display unit
- (H) Sensor controller
- (I) Proximity sensor
- (J) Photo electric sensor
- (K) Pressure sensor
- (L) Rotary encoder
- (M) 5-Phase stepping motor & Driver & Controller