

W75×H25mm Digital Graphic Panel Meter For Mosaic Panel

■ Features

- Various input function
: 0-2VDC, 0-10VDC, 1-5VDC,
DC0-1mA, DC4-20mA
- Prescale function (High / Low scale setting)
- Max. display: -999 to 9999
- Error display function and self diagnosis function
- High quality by microprocessor built-in
- Display accuracy: F.S. $\pm 0.2\%$ rdg ± 1 digit



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

■ Ordering Information

M	4	V	-		
Item	Digit	Size	Input	No mark	Standard
				X	Option
	4	V		W75×H25mm	
			9999 (4digit)		
	M	Meter			

※It is enable to customized with another specifications except for standard one.

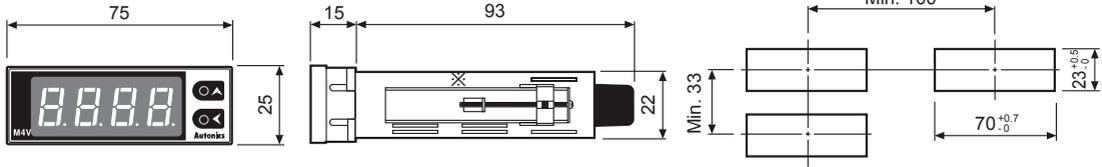
■ Specifications

Model		M4V			
Measurement function	DC voltage			DC current	
Measurement input	0-2VDC	1-5VDC	0-10VDC	DC0-1mA	DC4-20mA
Max. allowable input	110% of measurement input				
Power supply	12-24VDC				
Allowable voltage range	90 to 110% of rated voltage				
Power consumption	Approx. 2W				
Display method	7 Segment red LED display (Segment height: 14mm)				
Display accuracy	0 to 50°C: F.S. $\pm 0.2\%$ rdg ± 1 digit -10 to 0°C: F.S. $\pm 0.3\%$ rdg ± 1 digit				
Sampling period	500ms				
Setting method	Scale set by front switches				
Set-diagnosis	Error indication				
Insulation resistance	Min. 100M Ω (at 500VDC megger)				
Dielectric strength	2000VAC 50/60Hz for 1 minute				
Noise strength	± 300 V the square wave noise (pulse width: 1 μ s) by the noise simulator				
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 50Hz (for 1 min.) in each X, Y, Z direction for 1hour			
	Malfunction	0.5mm amplitude at frequency of 10 to 50Hz (for 1 min.) in each X, Y, Z direction for 10min.			
Shock	Mechanical	300m/s ² (approx. 30G) in each X, Y, Z direction for 3 times			
	Malfunction	100m/s ² (approx. 10G) in each X, Y, Z directions for 3 times			
Environ-ment	Ambient temperature	-10 to 50°C, storage: 20 to 60°C			
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH			
Accessory	Mosaic graphic panel mounting bracket				
Unit weight	Approx. 83g				

※Environment resistance is rated at no freezing or condensation.

Graphic Panel Meter

■ Dimensions



(unit: mm)

※It is attached on mosaic graphic panel. Please mount the unit properly on general panel

■ Input And Connection

Input	Display	Connection
0-2VDC	0-2U	0-2VDC, 1-5VDC, 0-10VDC SOURCE HI ↓ LOW ↓ - + ↓
1-5VDC	1-5U	
0-10VDC	0-10	
DC0-1mA	1nA	DC0-1mA SOURCE HI ↓ LOW ↓ - + ↓
DC4-20mA	4-20	DC4-20mA SOURCE HI ↓ LOW ↓ - + ↓

■ Factory Default Setting

1n-t	0-2U	dot	0.0
L-5C	0.0	1n-b	00
H-5C	100.0	LoC	OFF

■ Error Display

Display indicates "Error" when wrong measuring input value is applied.

◎ Display an Error

- In case of lower value than measuring input value.
E.g.)In case of applying DC2mA when measuring input range is selected as DC4-20mA: LLLL flashes.
- In case of higher value than measuring input value.
E.g.)In case of applying DC22mA when measuring input range is selected as DC4-20mA: HHHH flashes.
- In case of damaging the memory chip by high frequency noise, strong surge noise: Er - E flashes.

◎ Cancellation of Error

- HHHH and LLLL Error is to exceed measuring input range, therefore if measuring input value is applied with in input range, Error message will be cleared automatically.
- 00Er is indicated by mis-connection or in case of occurring something wrong in measuring input. Please cut off the power and then check measuring input.
- Er - E indicates data damage programmed in memory chip, and damaged data can not be recovered.
Ask a dealer shop for A/S.
It is impossible to clear Er - E by end-user, therefore it must be repaired by our engineer.

(A) Photoelectric Sensors

(B) Fiber Optic Sensors

(C) Door/Area Sensors

(D) Proximity Sensors

(E) Pressure Sensors

(F) Rotary Encoders

(G) Connectors/ Sockets

(H) Temperature Controllers

(I) SSRs / Power Controllers

(J) Counters

(K) Timers

(L) Panel Meters

(M) Tacho / Speed / Pulse Meters

(N) Display Units

(O) Sensor Controllers

(P) Switching Mode Power Supplies

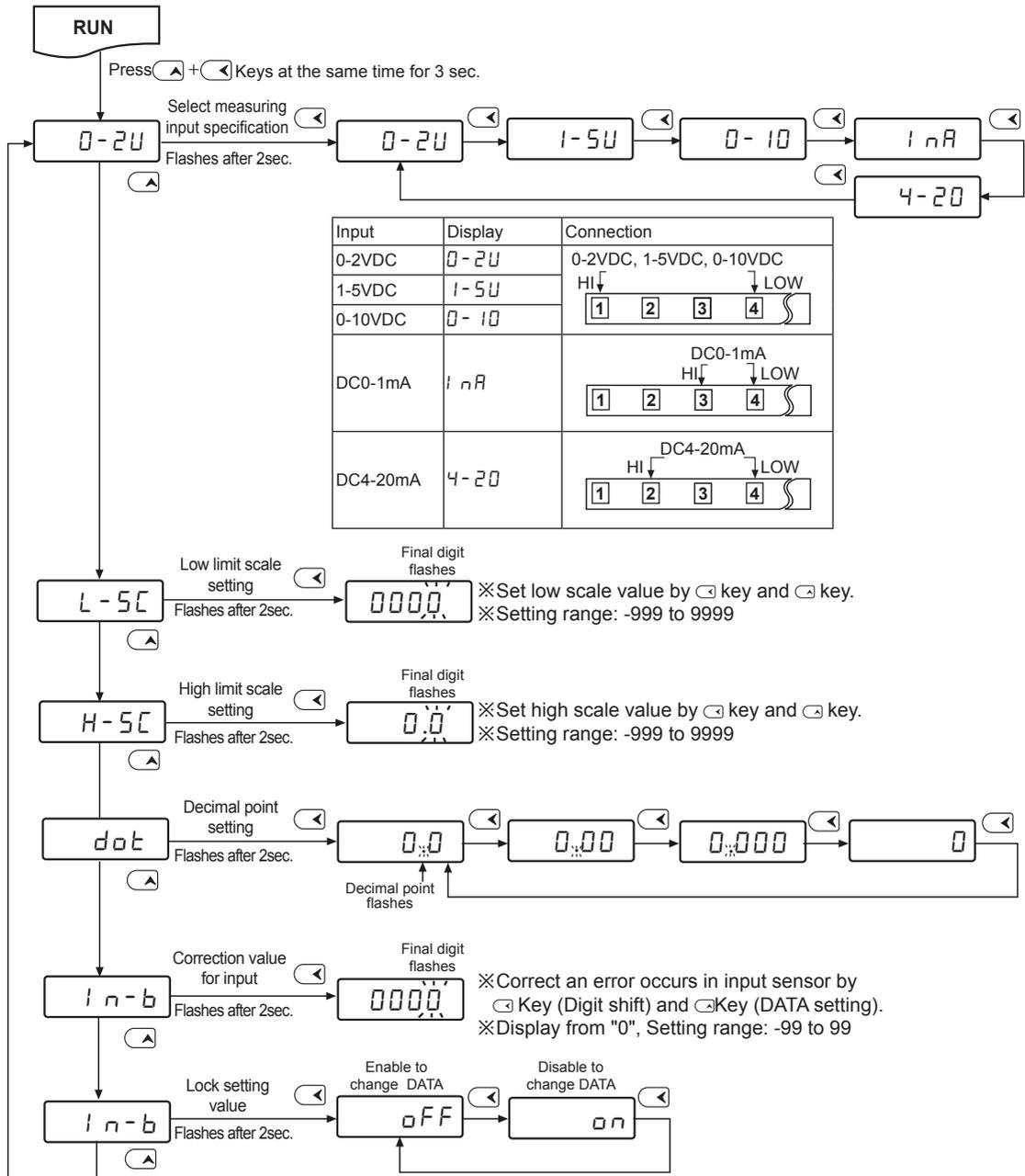
(Q) Stepper Motors & Drivers & Controllers

(R) Graphic/ Logic Panels

(S) Field Network Devices

(T) Software

Parameter Description



How to change the setting value

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

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

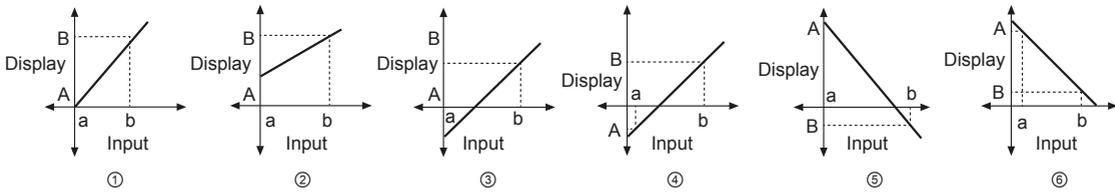
※ When checking the setting value only in each mode. Press \leftarrow Key for 2sec., then press \rightarrow for 2sec. again.

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

※ If any key is untouched for 60sec., it will return to RUN mode.

■ Prescale Function

This function is to display setting 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.

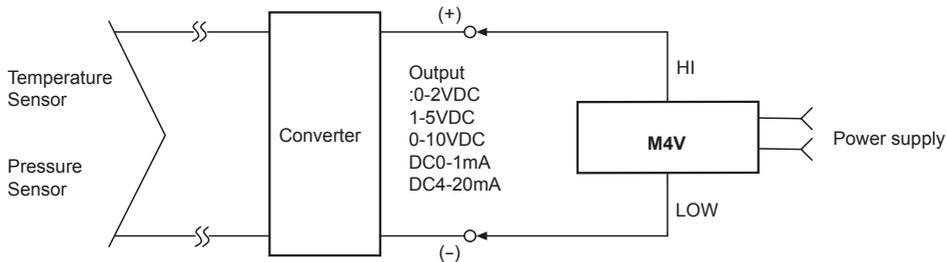


E.g.) Enables to set the display value for input as certain value (Not "0") by using prescale function.

Measuring input	Prescale setting value	Display	Graph
0-10VDC	L-Scale: 0 H-Scale: 200	0 to 200	①
	L-Scale: 50 H-Scale: 200	50 to 200	②
	L-Scale: -100 H-Scale: 200	-100 to 200	③
	L-Scale: 200 H-Scale: -50	200 to -50	⑤

※ Prescale value setting range → L-SC (Low limit): -999 to 9999, H-SC (High limit): -999 to 9999
But, there must be offset "1" between L-SC and H-SC.

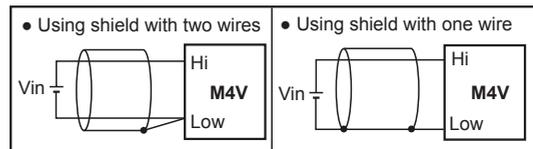
■ Application Of Connections



■ Proper Usage

- Please read this catalog before purchase Panel meter.
- Ambient condition
 - Please use this product under -10 to 50°C of ambient operating temperature and less than 35 to 85%RH of humidity. Moreover, use this item near normal temperature 20°C, the most important condition, which manages the accuracy.
 - Please avoid the condition of dew status by rapidly changing temperature.
- Please avoid too much vibration or shock.
- Please avoid the place where there are drag, 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 to 60°C of ambient operating temperature and less than 35 to 85%RH of humidity. Wrap and keep it as initial state.
- Input Line
 - Shield wire must be used when the measuring input line is getting longer or there are too much noise.



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