

1. PRECAUTION

Please read through this Manual before use the instrument for correct handling. Please keep this Manual carefully after use. This instrument has been thoroughly tested at the factory before shipment. When you receive it, visually inspect it for damage and check the accessories.

- ① Model number and specification check
Check to see the model number and specifications on the nameplate attached to the front face of the instrument are as ordered.
- ② Contents of instruction manual
This instruction manual provides instructions on handling, external wiring and safety use of instrument.

2. GENERAL

This compact plug-in type pulse/analog transmitter has function of distributor. It receives pulse train signal and converts it into isolated DC signal.

Accessories:

- Spacer 1
(Use for DIN rail mounting)

3. MOUNTING METHOD

JUXTA M Series signal conditioners can be mounted on wall or DIN rail.

3.1 Wall mounting

Unlock stoppers and remove the transmitter from socket as shown in Fig.1. Then, fix the socket on the wall. Take installation gap as shown in Fig.3. (Refer Fig.3 for mounting dimensions).

3.2 DIN rail mounting

Insert DIN rail into upper section of the DIN rail groove on rear of socket of the transmitter and fix the rail with slidlock at the base of transmitter as shown in Fig.2. Use furnished spacer and take 5mm gap between transmitters.

3.3

If the wiring duct is used, install it aparting more than 20mm from top of main body.

4. CURRENT PULSE LOAD RESISTOR AND FILTER SETTINGS

In case signal from generator is current pulse, it is necessary to convert it into voltage by using current pulse load resistor internally set. Set load resistor so as relation between current wave height $i(p-p)$ from generator and synthetic load resistor RL would satisfy swing width of $i \times RL \geq 2V$. If there is noise in current pulse input, set filter (SW4) at ON. (See Fig.4)

SW1	SW2	SW3	SW4	Resistance RL
ON	OFF	OFF	F	200Ω
OFF	ON	OFF	I	510Ω
OFF	OFF	ON	L	1kΩ
ON	ON	OFF	T	143Ω
ON	OFF	ON	E	167Ω
OFF	ON	ON	R	338Ω
ON	ON	ON		126Ω

Fig.1 Wall Mounting

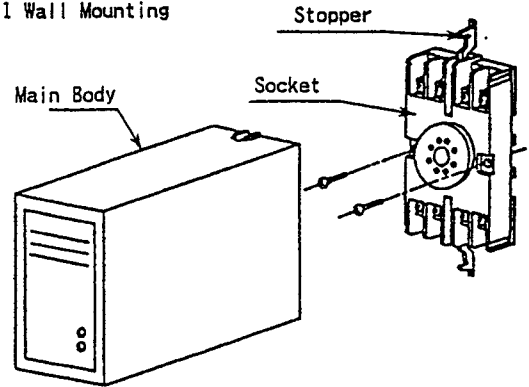


Fig.2 DIN Rail Mounting

To remove transmitter from DIN rail, lower the slidlock with (-) screwdriver.

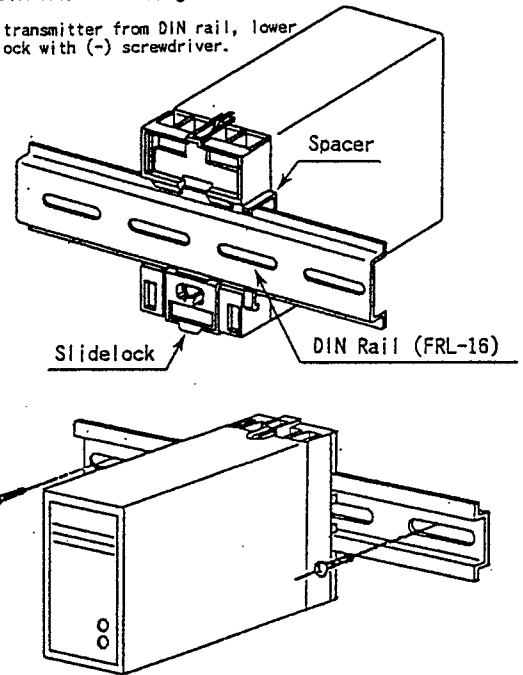


Fig.3 Mounting Dimension

Unit : mm

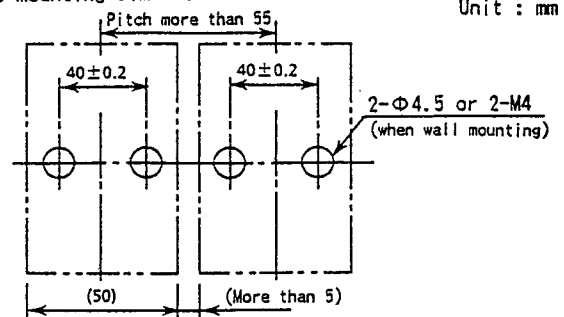
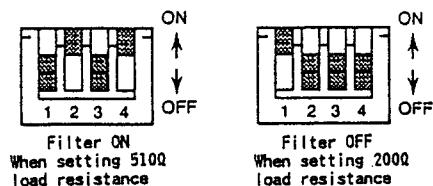


Fig.4



5. EXTERNAL WIRING

CAUTION Wiring should be done after ensuring power break of each cable.

See Fig.4 for terminal arrangement.

Wires should be connected to M3.5 screw terminals by referring Fig.5. For wiring, flexible twisted wires and good contact of durable round crimp-on terminals are recommended to be used.

- Signal cable should have more than 0.5mm^2 and power cable should have more than 1.25mm^2 of nominal cross-sectional area of conductor.

5.1 Wiring

- ① Connect input signal cable to transmitter terminals 3(+) and 4(-).
- ② Connect output signal cable to terminals 1(+) and 2(-).
- ③ Connect power cable to terminals 7(L+), 8(N-) and ground to 6(GND).

NOTE : Apart wiring of power and input/output cables from noise source. Otherwise, accuracy may not be warranted.

6. INSTALLATION AND HANDLING

- ① Avoid installation in such environments as shock, vibration, corrosive gas, dust, water, oil, solvent, direct sunlight, radiation, powerful electric and magnetic fields.
- ② In order to protect instrument from induction of thunder surges in power and signal cables by thunder fall, use arrester between transmitter and equipment installed in the field.

7. SAFETY USE

Following caution for safety should be taken for handling of instrument. We are not responsible for damage incurred by use contrary to caution.

CAUTION

- Be sure to lock the stoppers (top and bottom) after inserting the main body into socket.
- Following items should be checked when turning power on. Use of instrument ignoring specifications may cause overheat or burning.
 - (a) Voltage of power supply and input value be applied to the instrument should meet with required specifications.
 - (b) External wiring to terminals should be connected correctly. (See preceding Article 4)
- Do not use the instrument in such dangerous places where exist inflammable and explosive gas or steam.
- As for instrument having power supply of $85\sim 264\text{V DC}$, these voltages are internally charged. Do not open front cover.

8. MAINTENANCE

10~15 minutes warm up is required to satisfy the specifications of the instrument.

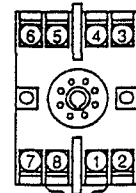
8.1 Calibration Equipment

- Pulse Generator (Hewlett-Packard Model 3114A or equivalent) 1
- Voltmeter (Yokogawa Model 7562 or equivalent) 1
- Precision Resistor $250\Omega \pm 0.01\% 1\text{W}$ 1

8.2 Calibration

- ① Connect each equipment as shown in Fig.7.

Fig.5 Terminal Arrangement



TML	
1	OUTPUT +
2	OUTPUT -
3	INPUT +
4	INPUT -
5	INPUT PS+
6	GND
7	SUPPLY L+
8	SUPPLY N-

Fig.6 Wiring Diagram

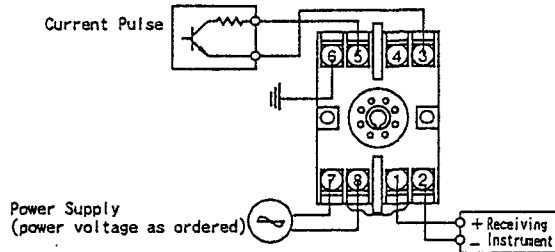
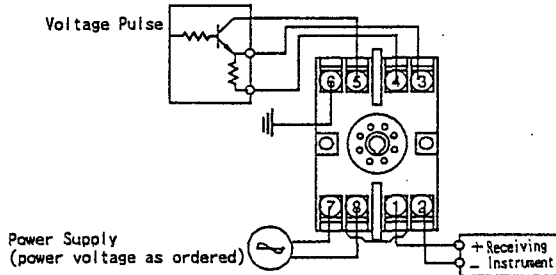
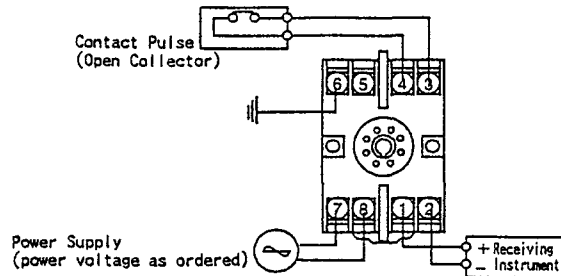
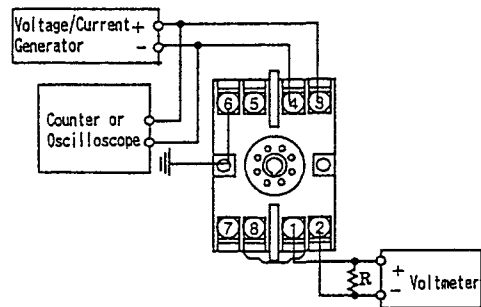


Fig.7 Wiring of Calibration Equipment



- ② Input/output characteristics check
Apply input signals equivalent 0, 25, 50, 75, 100% of input span to transmitter through Voltage/Current Generator. Check that corresponding transmitter outputs are 0, 25, 50, 75 and 100% respectively and are within accuracy rating range. Use R for current output only.
 - If output signal is out of tolerance, adjust it through span and zero adjustment trimmer on front face of transmitter.

Subject to change without notice for grade up quality and performance.