

### 1. INSPECTION

This instrument has been thoroughly tested at the factory before shipment. When you receive it, visually inspect it for damage and check the accessories.

**1.1 Model number and specification check**  
Check to see the model number and specifications on the nameplate attached to the front cover of the transmitter are as ordered.

**1.2 The contents of the instruction manual**  
This instruction manual provides instructions on mounting, external wiring and maintenance.

### 2. GENERAL

This instrument receives DC current or voltage signal and converts it into pulse train signal.

Accessories:

Mounting block	2
Tag number and range label	1 each
Mounting screw M4	2

### 3. MOUNTING METHOD

JUXTA signal conditioners can be mounted on rack, wall or DIN rail.

#### 3.1 Rack mounting

Use panel (FRK-16) and install it on an angle as shown in Fig.1. This is a convenient method for high density mounting of the transmitters on 19-inch rack panel. (See Fig. 6)

#### 3.2 Wall mounting

Use panel (FRK-16) to mount the transmitter as shown in Fig. 2 or directly mount it on the wall. (See Figs. 6 and 7 for mounting dimensions.)

#### 3.3 DIN rail mounting

Insert DIN rail into the upper section of DIN rail groove on the rear of the transmitter and fix the rail with the slidlock at the lower part of the transmitter as shown in Fig. 3.

#### 3.4 Angle mounting

If single unit of transmitter is mounted, refer Fig. 5 for its mounting dimensions.

#### 3.5 Mounting block installation and removal

Insert mounting block into the transmitter groove as shown in Fig. 4 and slide it until it is locked with the stopper. To remove it, lift up the mounting block stopper with (-) screwdriver and slide it along the groove.

### 4. EXTERNAL WIRING

Open the transmitter terminal cover. Wires should connect to M4 screw terminal. Flexible twisted wires and durable round crimp-on terminals (JIS C2805) are recommended to be used.

● Signal cable having more than 0.5mm<sup>2</sup> and power cable having more than 1.25mm<sup>2</sup> of nominal cross-sectional area of connector are recommended.

Fig.1 Rack Mounting

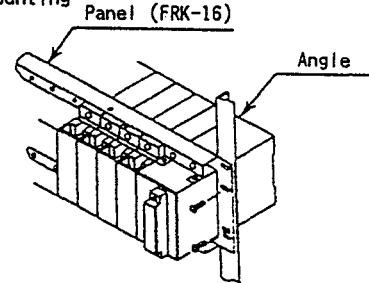


Fig.2 Wall Mounting

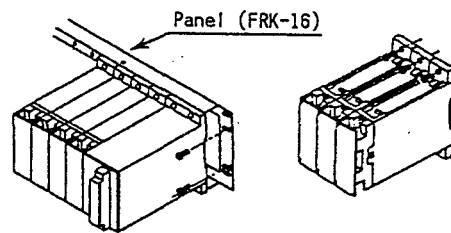


Fig.3 DIN Rail Mounting

Use screwdriver and lower the slidlock to remove the transmitter from DIN rail

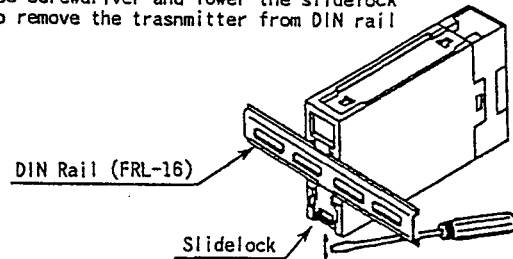


Fig.4 Mounting Block installation and removal

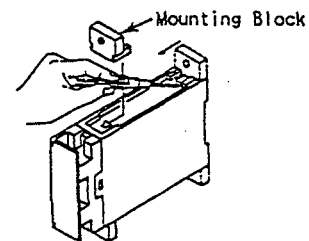
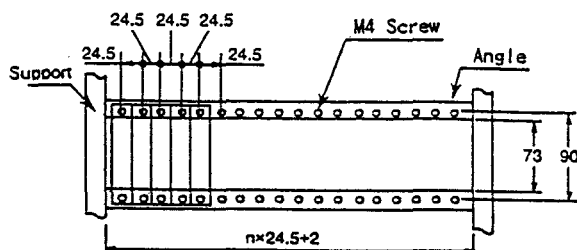


Fig.5 Angle Mounting Dimensions

Unit : mm



#### 4.1 Wiring

- ① See Fig. 8 for terminal arrangement.
- ② Connect input signal cable to transmitter terminals 2(+) and 3(-).
- ③ Connect transmitter output signal cable to its terminals 4(+) and 5(-).
- ④ Connect 24V DC power cable to transmitter terminals 6(+) and 7(-). (See Fig. 9)

#### 5. ITEMS TO BE CHECKED BEFORE TURNING THE POWER SWITCH ON

- ① Make sure that 24V DC power cable of the transmitter is connected with the correct polarities (+) and (-).
- ② Confirm that the external wiring to the terminal board is correct.
- ③ Check that the mounting, ambient temperature, humidity, dust and vibration are normal.

Confirm the above items before turning the power on. The transmitter needs 5 minutes warmup to meet its specified accuracy level.

#### 6. MAINTENANCE

**(Caution)**

Carry out the following calibration after warming up the instruments for more than 5 minutes.

##### 6.1 Calibration equipment

- Counter or Oscilloscope 1  
(Yokogawa Model 2553 or equivalent)
- Voltage/Current Generator 1  
(Yokogawa Model 7651 or equivalent)
- Precision Resistor,  $250\Omega \pm 0.01\%$ , 1W 1  
(in case of current output)

##### 6.2 Calibration

- ① Connect each equipment as shown in Fig. 10.
- ② Input/output characteristic check  
Apply input signal equivalent to 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.  
\*If output signal is out of tolerance, adjust it with Handy Terminal (JHT-100 or JHT200).  
For adjustment and parameter setting, refer parameter list and Instruction Manual of Handy Terminal.  
(JHT200 : IM JF81-02, JHT-100 : IM JF81-01)

Note:

When power of FQ2P is turned on/off, one pulse may be counted by the pulse input device which connects to the FQ2P.

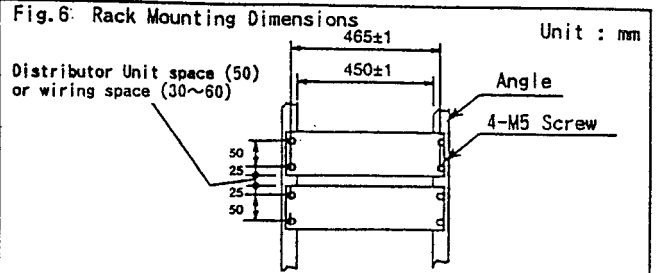


Fig. 6: Rack Mounting Dimensions

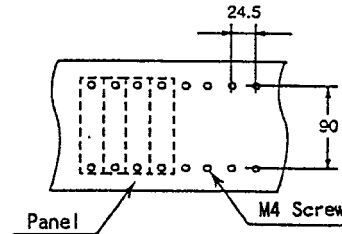


Fig. 7: Panel Mounting Dimensions

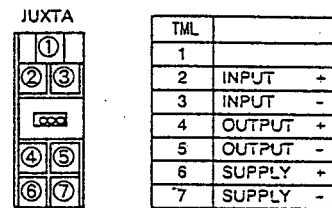


Fig. 8: Terminal Arrangement

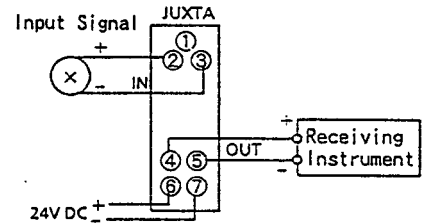


Fig. 9: Wiring Diagram

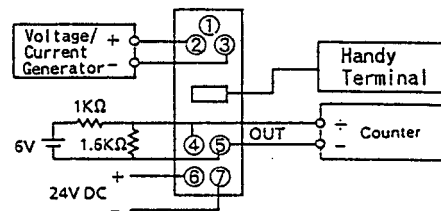


Fig. 10: Wiring of Calibration Equipment

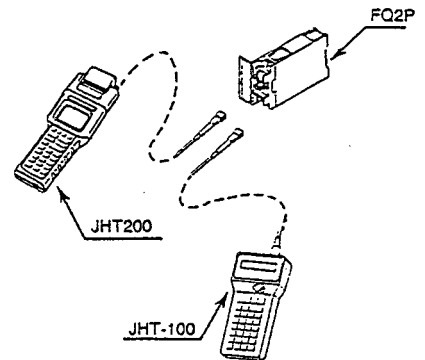


Fig. 11: Connection to Handy Terminal

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