

# JUXTA F Series Instruction Manual

Model FQOP  
Analog/Pulse Transmitter

JUXTA

## 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 specification on the nameplate attached to the front cover of the instrument are as ordered.

### 1.2 Contents of the instruction manual

This instruction manual provides instructions on how to mount, wire externally and maintain the instrument.

## 2. GENERAL

This instrument receives current and voltage signal from generator and converts it to isolated pulse signal.

Accessories:	Mounting block	2
	Tag number label	1
	Mounting screw M4	2

## 3. MOUNTING METHOD

JUXTA signal conditioners can be mounted on racks, walls or DIN rails.

### 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 instrument on 19-inch rack panel. (See Fig. 7.)

### 3.2 Wall mounting

Use panel (FRK-16) to mount the instrument on the wall as shown in Fig. 2 or directly mount it on the wall. (See Figs. 7 and 8 for mounting dimensions.)

### 3.3 DIN rail mounting

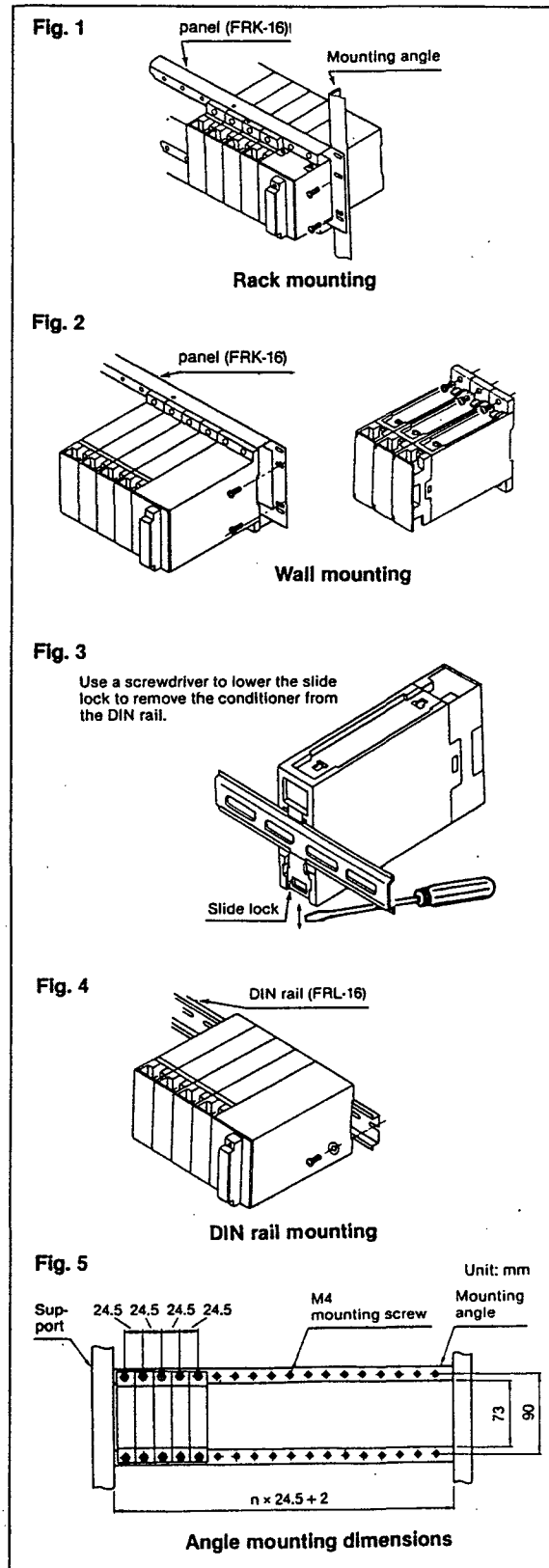
Insert a DIN rail into the upper section of the DIN rail groove on the rear of the instrument and lock the rail in position by the slide lock at the base of the instrument as shown in Figs. 3 and 4.

### 3.4 Angle mounting

If the instrument is mounted without using the panel (FRK-16), refer to Fig. 5 for its mounting.

### 3.5 Mounting block installation and removal

Insert a mounting block into groove of the instrument and slide it until it locks in position by the stopper as shown in Fig.6. To remove it, lift up stopper by the screwdriver (-) and slide the mounting block along the groove.



#### 4. EXTERNAL WIRING

Open the terminal cover of the instrument and wire the terminals. Flexible twisted wire and good contact of durable round crimp-on terminals (JIS C2805) are recommended to be used.

##### 4.1 Signal cable

Nominal cross-sectional area of conductor:  
0.5 to 0.75 mm<sup>2</sup>

Example of suitable cable:

Twisted vinyl cord (VSF) (JIS C3306)

##### 4.2 Power cable

Nominal cross-sectional area of conductor:  
1.25 to 2.00 mm<sup>2</sup>

Example of suitable cable:

Twisted 600V vinyl cord (IV) (JIS C3307)

##### 4.3 Wiring

- ① See Fig. 9 for the terminal arrangement.
- ② Connect input voltage signal cable from generator to transmitter terminals 2(+) and 3(-).
- ③ Connect transmitter output signal cable to its terminals 4(+) and 5(-).
- ④ Connect 24V DC power supply to transmitter terminals 6(+) and 7(-). (See Fig.10)

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

- ① Make sure that 24V DC power supply of the transmitter is connected to 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 on the power supply. The transmitter needs 5 minutes warmup to meet its specified accuracy levels.

#### 6. MAINTENANCE

(Caution)

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

##### 6.1 Calibration equipment

- Counter or Oscilloscope (YHP Model 5334A or equivalent) 1
- Voltage/current generator (Yokogawa model 2553 or equivalent) 1
- Resistor and battery (1KΩ, 1.6KΩ resistors, 6V battery) 1 each

##### 6.2 Calibration

① Connect equipment as shown in Fig.11.

② Input/output characteristic check

Use voltage/current generator and apply input signals equivalent to 0, 25, 50, 75 and 100% to the transmitter. Check that corresponding output pulses of transmitter are 0, 25, 50, 75 and 100% respectively and are within ±1% of accuracy rating range.

\*If output signal is out of tolerance, adjust it by the span and zero adjustment trimmers on the front panel of the instrument.

Fig. 6

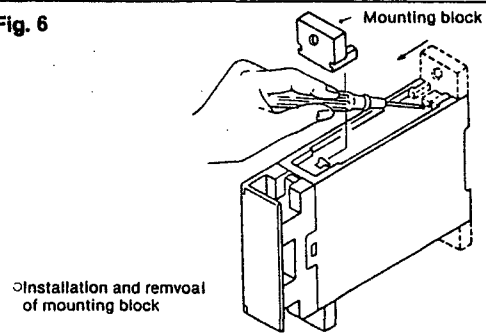


Fig. 7

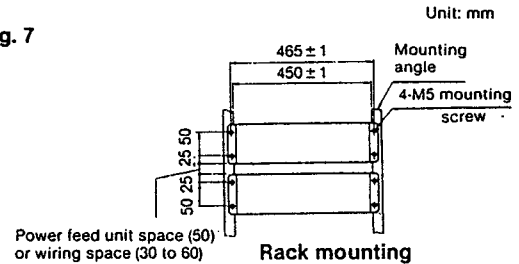


Fig. 8

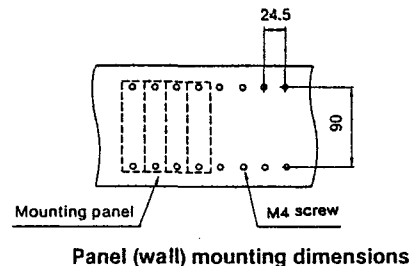


Fig. 9

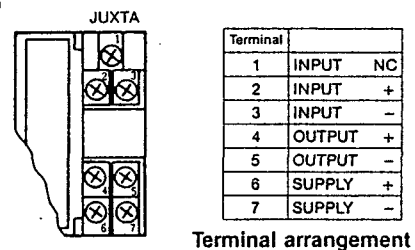


Fig. 10

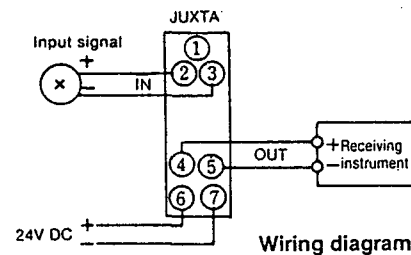
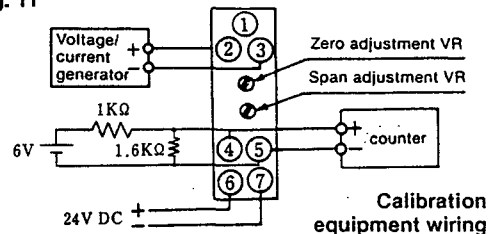


Fig. 11



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