Instruction Manual

VJC1
Isolator
without Power Supply

JUXTA

1. PRECAUTION

Please read thorough this Manual before use of 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 specifications check**
Check to see model number and specifications on the plate attached to side face of the isolator are as ordered.

② **Contents of the instruction manual**
This instruction manual provides instructions on handling, external wiring and safety use of the isolator.

2. GENERAL

This compact plug-in type isolator without power supply inputs current signal from signal source and converts it into DC voltage or DC current signals.
Accessories :
Tag Number Label 1

3. MOUNTING METHOD

JUXTA VJ Series Transmitters can be mounted on wall, DIN rail or multi-mounting base.

NOTE: Direction of insertion/extraction
Insertion/extraction of main body into and from socket should be done in vertical direction against face of socket.
Slanting insertion or extraction makes terminals bent causing bad contact with socket.

3.1 Wall Mounting

Loosen the socket's fixing screw as shown in Fig. 1 and pull out the main body from socket. Then fix the socket on the wall with screws. See Fig. 3 for mounting.

3.2 DIN rail mounting

Insert DIN rail into the upper of the DIN rail groove on rear of socket of the isolator and fix the rail with slidelock at the lower of the isolator as shown in Fig.2.

3.3 Multi-base mounting

As for multi-base mounting, refer to Instruction Manual for VJCE (VJ mounting base).

3.4 Duct Installation

Install ducts, if necessary, aparting from top of the isolator more than 30mm.

4. EXTERNAL WIRING

CAUTION Wiring should be done after ensuring power break of cable.
See Fig.4 for terminal arrangement and Fig.5 for wiring.
Wiring should be done to M3 screw terminals of the socket.
Use round crimp-on terminals for connection to terminals.

FIG.1 WALL MOUNTING

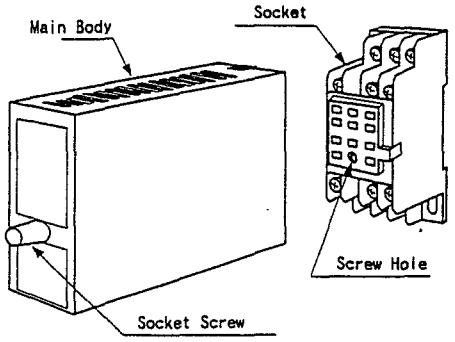
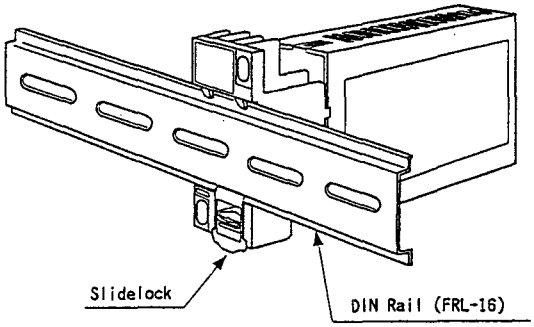


FIG.2 DIN RAIL MOUNTING

When remove the isolator from DIN Rail, lower the slidelock with (-) screwdriver



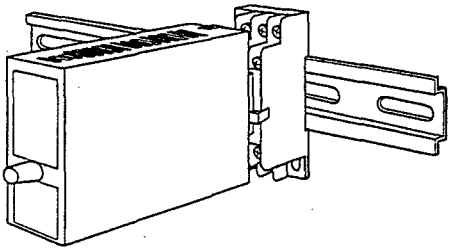
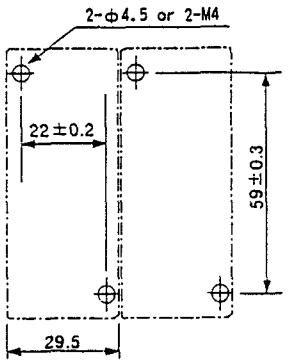


FIG.3 MOUNTING DIMENSION

Unit : mm



- Signal cables having more than 0.5mm² of nominal cross-sectional area of conductor are recommended to be used.

4.1 Wiring

In case of 2 channels type

① Connect input signal cable of Ch-1 to 1(+), 3(-) and output signal cable to 7(+), 9 (-) of the isolator.

② Connect input signal cable of Ch-2 to 4(+), 6(-) and output cable to 2(+), 5(-) of the isolator.

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

5. INSTSLLATION 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 the isolator from thunder surges in signal cables, use arrester between the isolator and equipment installed in the field.

6. SAFETY USE

Following caution for safety should be taken for handling of the isolator. We are not responsible for damage caused by use contrary to caution.

CAUTION

- When install the main body, fix it to the socket with screws after inserting it into socket.
- Do not use the isolator in such dangerous places where exsist inflammable and explosive gas or steam.

7. MAINTENANCE

Carry out the following calibration after warmup the isolator for more than 10~15 minutes to satisfy its specified performance.

7.1 Calibration equipment

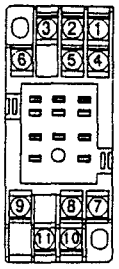
- Voltage/Current Generator ..... 1 (Yokogawa Type 7651 or equivalent)
- Voltmeter ..... 1 (Yokogawa Type 7562 or equivalent)
- Precision Resistor 250Ω±0.01% 1W 1

7.2 Calibration

① Connect each equipment as shown in Fig.6

② Input/output characteristic check
First, check Ch-1 and then check Ch-2.
Use Voltage/Current Generator and apply input signals corresponding 0%, 25%, 50%, 75%, 100% of input span to the isolator. Check to see the corresponding output voltages are 0%, 25%, 50%, 75%, 100% respectively and are within specified accuracy rating. R is used for current output.

FIG.4 TERMINAL ARRANGEMENT & TERMINAL CONNECTION



1	INPUT	(+)	(Ch-1)
2	OUTPUT	(+)	(Ch-2)
3	INPUT	(-)	(Ch-1)
4	INPUT	(+)	(Ch-2)
5	OUTPUT	(-)	(Ch-2)
6	INPUT	(-)	(Ch-2)
7	OUTPUT	(+)	(Ch-1)
8	N.C.		
9	OUTPUT	(-)	(Ch-1)
10	N.C.		
11	N.C.		

FIG.5 WIRING

Wiring for 2 channels type

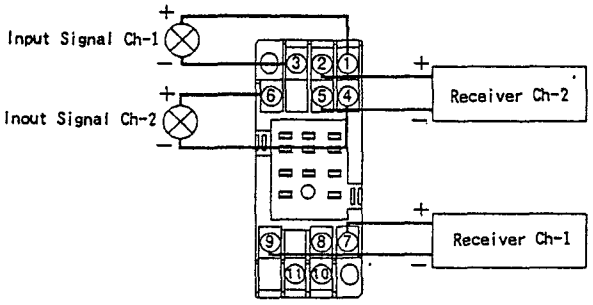
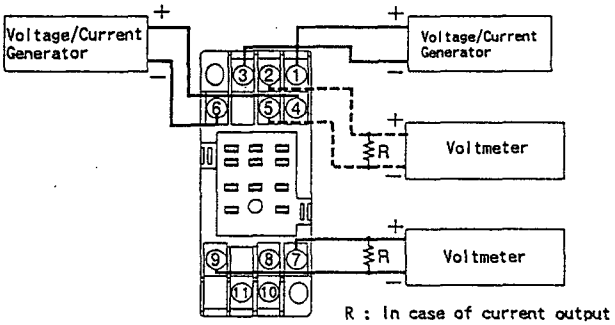


FIG.6 WIRING OF CALIBRATION EQUIPMENT

Wiring for 2 channels type



R : In case of current output

YOKOGAWA ◆
Yokogawa Electric Corporation

Network Solutions Business Division
2-9-32, Nakacho Musashino-shi, Tokyo, 180-8750 Japan
Phone: (81)-422-52-7179 Fax: (81)-422-52-6793