Instruction Manual

VJSS
High-Low Selector
(isolated 1 output/2 outputs type)

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 selector are as ordered.

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

2. GENERAL

This compact plug-in type selector selects either higher or lower signal from 2 input DC voltage signals and converts it into isolated DC voltage or DC current signal.
Accessories :
Tag Number Label 1
Module Resistor (use for current input).. 2

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 selector and fix the rail with slidelock at the lower of the selector 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 and bottom of the selector 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

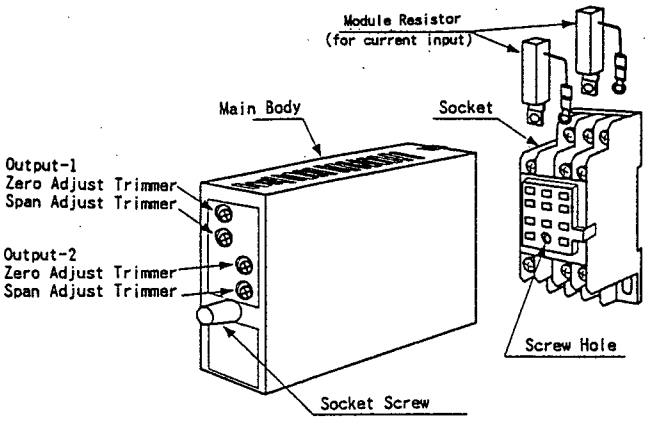
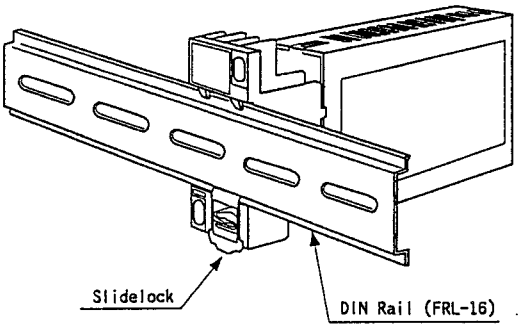


FIG.2 DIN RAIL MOUNTING

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



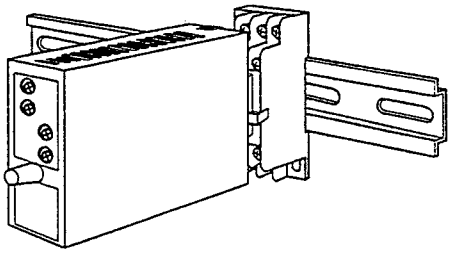
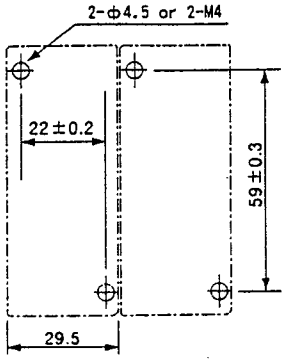


FIG.3 MOUNTING DIMENSION

Unit : mm



- Signal cable having more than 0.5mm² and power cable having more than 1.25mm² of nominal cross-sectional area of conductor are recommended to be used.

4.1 Wiring

In case of 2 output type

① Connect Input-1 signal cable to 1(+), 3(-) and Input-2 cable to 4(+), 6(-) of the selector.
② Connect Output-1 signal cable to 7(+), 9(-).
③ Connect Output-2 signal cable to 2(+), 5(-).
④ Connect power cable to 8(GND), 10(L+), 11(N-).
⑤ In case of current input, connect Input-1 module resistor to 3(-) and cable side to 1(+). Connect Input-2 module resistor to 6(-) and cable side to 4(+).

NOTE : Apart wiring of power cable and input/output cable from noise source. Otherwise, accuracy may not be warranted.
Be careful for break of lead line applying excessive power on lead line of module resistor.

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 selector from thunder surges in power and signal cables, use arrester between the selector and equipment installed in the field.

6. SAFETY USE

Following caution for safety should be taken for handling of the selector. 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.
- Following items should be checked before power on. Use of the selector by ignoring the specifications may cause overheating and burning.
  (a) Voltage of power supply and input signal be applied to the selector should meet with required specifications.
  (b) External wiring to terminals should be connected correctly (See Article 4).
- Do not use the selector in such dangerous places where exsist inflammable and explosive gas or steam.

7. MAINTENANCE

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

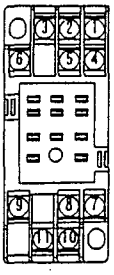
7.1 Calibration equipment

- Voltage/Current Generator 2
  (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 output-1 and then check output-2. Use Voltage/Current Generator and apply -5%～0% (when high select) or 100%～+105% (when low select) to input-1 and apply input corresponding 0%, 25%, 50%, 75%, 100% of span to input-2 of the selector.

FIG.4 TERMINAL ARRANGEMENT & TERMINAL CONNECTION



1	INPUT 1	(+)
2	OUTPUT 2	(+)
3	INPUT 1	(-)
4	INPUT 2	(+)
5	OUTPUT 2	(-)
6	INPUT 2	(-)
7	OUTPUT 1	(+)
8	GND	
9	OUTPUT 1	(-)
10	SUPPLY	(L+)
11	SUPPLY	(N-)

In case of one output type, OUTPUT2 is N.C.

FIG.5 WIRING

Wiring for 2 outputs type

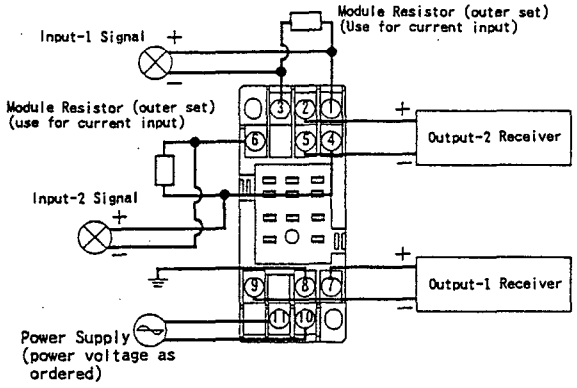
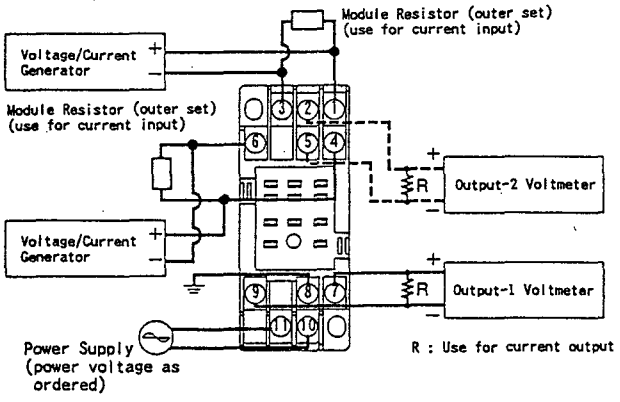


FIG.6 WIRING OF CALIBRATION EQUIPMENT

Wiring for 2 outputs type



Check to see the corresponding output voltages are 0%, 25%, 50%, 75%, 100% respectively and are within specified specified accuracy rating.
R is used for current output.

- If output signal is out of accuracy rating range, adjust it using span and zero adjust trimmer on front face of selector. (See Fig.1)

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