RACK MOUNT TYPE
8 CHANNEL V-F CONVERTER
(TYPE: VF8-01Z)
USER'S MANUAL

4482 (Rev1/2024.12.06)

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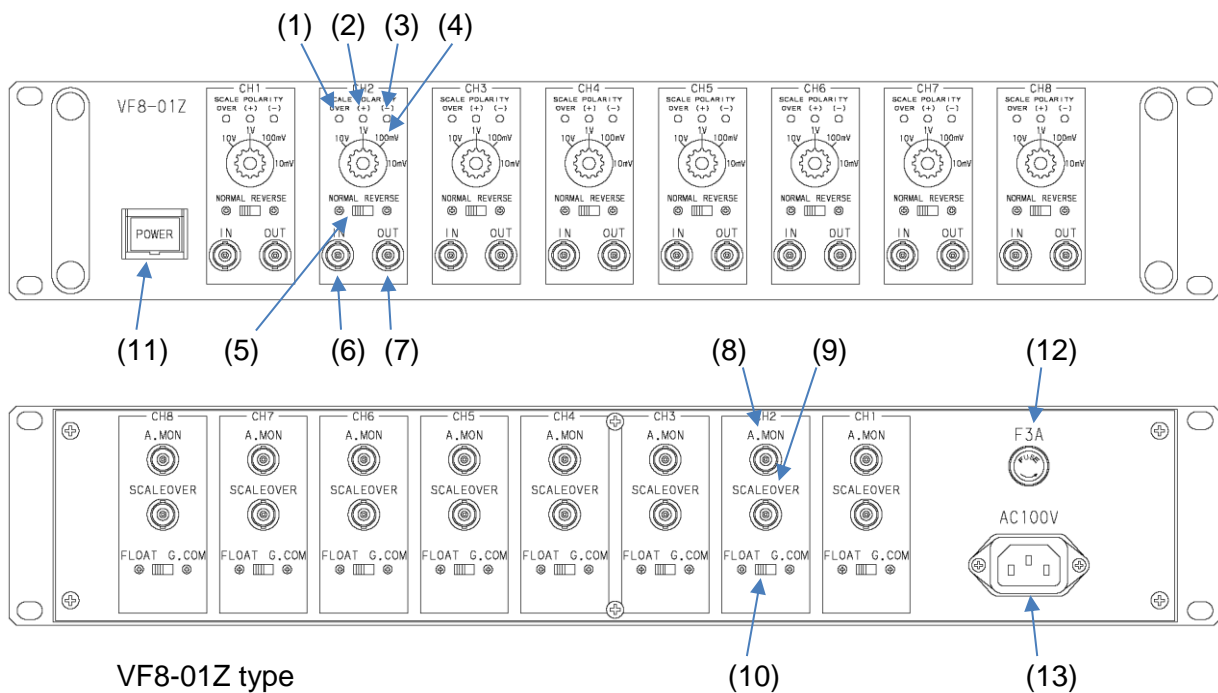VF8-01Z is constructed in a EIA 2 unit rack mount case.
VF8-01Z has eight channels outputs include a four stage amplification factor switch
and a polarity selector switch.
In addition, with over range and polarity displayed, V-F conversion is always performed at
the optimum conditions.

1. Specification

1)	Gain	:	10V, 1V, 100mV, 10mV
2)	Input Voltage	:	0 ~ 10V (Acceptable input ±100V Max)
3)	Inpur Resistance	:	1MΩ or more
4)	Output	:	TTL level, Positive Logic, Pulse Width 100ns or more
5)	Output Frequency	:	0 ~ 1MHz
6)	Conversion Accuracy	:	0.05%FS
7)	Scale Over	:	Open collctor transistor = ON (Insulation)
8)	Input / Case Isolation	:	Select either Isolation or GND
9)	Analog Monitor Output	:	Monitor analog value before V-F conversion
10)	Input / Output Connctor	:	Isolated BNC
11)	Power Supply	:	AC100V
12)	Case	:	EIA 2 unit W482xD430xH88mm

2. Front Panel / Rear Panel

VF8-01Z type

Front Panel

(1) Scale over LED lamp (RED)
        LED lights on if the input level exceeds conversion level.
        If Scale over LED lights on, the conversion is not done correctly.

(2) Polarity (+) LED lamp (GREEN)
        The polarity of the analog signal that is before V-F conversion is (+).
        And VF conversion is done correctly.

(3) Polarity (-) LED lamp (RED)
        If its LED lights on, the polarity of the analog signal before the VF conversion is negative.
        And for correct conversion, the signal polarity must be changed by input polarity selection.

(4) Input range select SW
        Select SW in response to the analog value of the input signal.

Input rage		Analog input signal		
10V	:	0	~	10V
1V	:	0	~	1V
100mV	:	0	~	100mV
10mV	:	0	~	10mV

        Analog signal can be converted by VF polarity switching of (5), even if input polarity is (-).

(5) Select input polarity
        Input polarity (Normal or Reverse) must be selected by the polarity of input signal
        as follow.
        When VF conversion is not working by incorrect input polarity, LED (RED) is lighted on.

Analog input signal				Input polarity selection
0	~	10V	:	NORMAL
0	~	-10V	:	REVERSE

(6) Input BNC connector
        Input analog signal of V-F conversion.
        Input will be isolated from case GND, if the FLOATING is selected in the switch (10).

(7) Output BNC connector
        Output is TTL positive pulse.
        The output has been isolated from the internal circuit because there is photocoupler.

(8) Analog monitor BNC connector
        Analog value before VF conversion has been output through the buffer.
        GND level is the same as analog input (6).

Rear Panel

(9) Scale over output BNC connector
        Transistor (open collector) tuens on, if scale over.
        Output is isolated.

(10) Floating / Non Floating (G.COMMON) select SW
        Selected the below.
            Floating   : Isolates the input signal's GND and case.
            Non Floating : Unites the input signal's GND and case.

Power

(11) Power SW
      Power On/Off switch.
      LED lights on at power on.

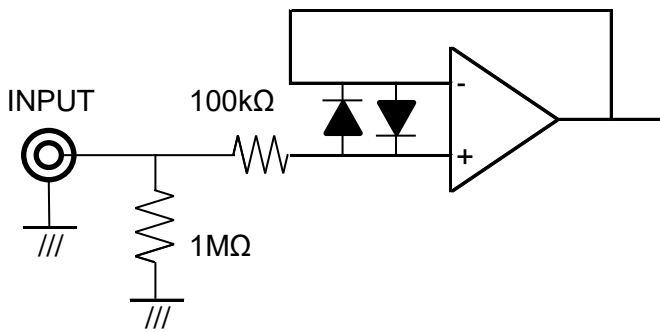(12) Fuse
      There is 3A fuse inside of it.

(13) AC input connector
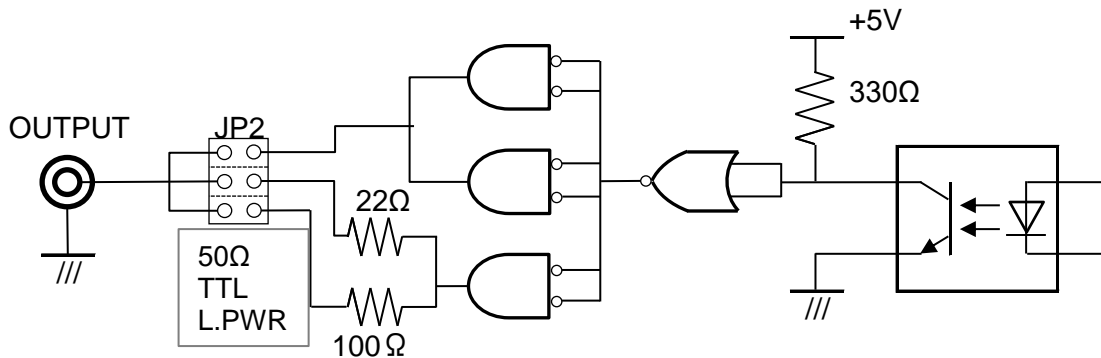   Inlet type of 3PAC connector.
      Must connect AC100V (Line, Neutral, and earth ground).
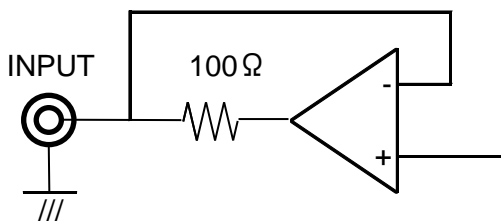
3. Block Diagram of Input / Output Stage

Analog Input

Pulse Output

Analog Monitor Output

Scale Over Output