

4CH 100MHz VF CONVERTER
(Rack Mount Type)

VF4-1H

USER'S MANUAL

#3903(ver.2) 2022.05.19



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4CH 100MHz VF Converter Rack Mount Type: VF4-1H User's Manual [Rev.2]

1. Feature

VF4-1H is the 100MHz 2CH V-F Converter that is the Rack Mount type.

It has the four-levels amplification factor switch and the polarity selector switch.

VF4-1H is easy to be monitored.

i.e., the over-range and polarity are displayed on LED and also outputted as open-collector outputs.

Therefore, V-F conversion is always performed at the optimum conditions.

2. Specification

Channels	4CH
Input Range	-10V/-5V/-2.5V/-1V/+1V/+2.5V/+5V/+10V
Input	Single-end
Input Impedance	1M Ω
Output Range	100MHz/50MHz/25MHz/10MHz
Output	TTL level ※ Please use 50 Ω termination to reduce the reflected wave.
Conversion Accuracy	$\pm 0.01\%$ FS
Input Sampling Frequency	1MHz
Response	10 μ s or less
Input Connector	BNC connector
Output Connector for Frequency	LEMO connector (equivalent to EPL00250NTN)
Over-Range output	Open collector (normally close), isolated
Over-Range output Connector	BNC connector
Power supply	AC100V
Case	EIA-2U: 88H x 482W x 430D

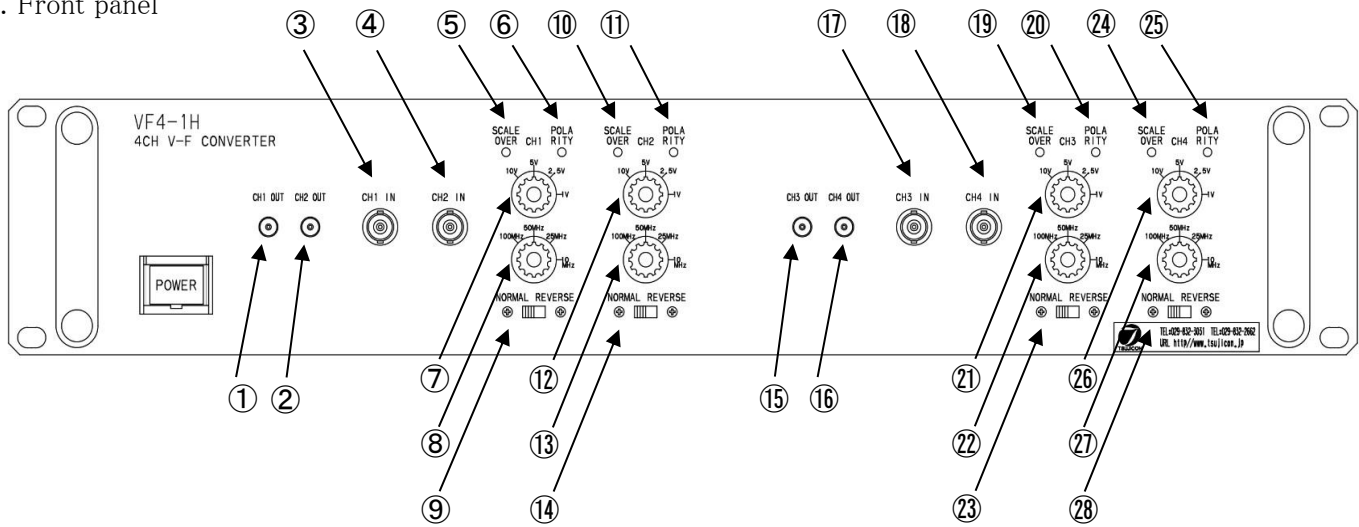
3. Before using

Before using, please power about 2 hours on for a warm-up.

The frequency deviation becomes large, if warm-up has not been made.

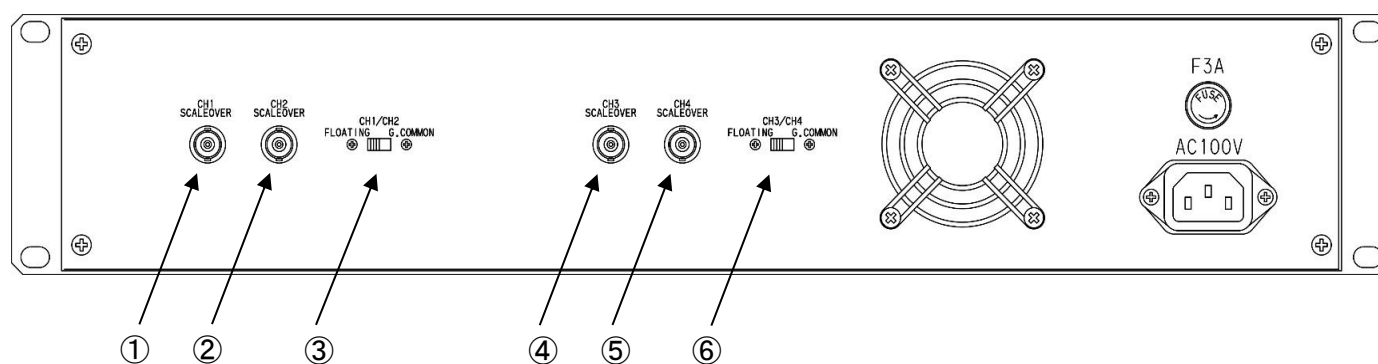
4. Usage

4-1. Front panel



- ① CH1 Output connector (frequency, LEMO, LVTTTL level)
- ② CH2 Output connector (frequency, LEMO, LVTTTL level)
- ③ CH1 Input connector (voltage, BNC)
- ④ CH2 Input connector (voltage, BNC)
- ⑤ CH1 Scale over LED
LED lights on when the input level exceeds conversion level.
- ⑥ CH1 Input polarity LED
LED lights on if the voltage input polarity is different from the setting.
- ⑦ CH1 Input voltage range select SW
Select input voltage range.
- ⑧ CH1 Output frequency range select SW
Select output frequency range.
- ⑨ CH1 Polarity select slide-SW
NOM: (+), REV: (-)
- ⑩ CH2 Scale over LED
- ⑪ CH2 Input polarity LED
- ⑫ CH2 Input voltage range select SW
- ⑬ CH2 Output frequency range select SW
- ⑭ CH2 Polarity select slide-SW
- ⑮ CH3 Output connector (frequency, LEMO, LVTTTL level)
- ⑯ CH4 Output connector (frequency, LEMO, LVTTTL level)
- ⑰ CH3 Input connector (voltage, BNC)
- ⑱ CH4 Input connector (voltage, BNC)
- ⑲ CH3 Scale over LED
- ⑳ CH3 Input polarity LED
- ㉑ CH3 Input voltage range select SW
- ㉒ CH3 Output frequency range select SW
- ㉓ CH3 Polarity select slide-SW
- ㉔ CH4 Scale over LED
- ㉕ CH4 Input polarity LED
- ㉖ CH4 Input voltage range select SW
- ㉗ CH4 Output frequency range select SW
- ㉘ CH4 Polarity select slide-SW

4-2. Rear panel



- ① CH1 Scale over output connector (BNC)
Open collector output. It is isolated from the internal circuit.
Output becomes off if the voltage input is over than the setting.
(normaly close)
- ② CH2 Scale over output connector (BNC)
- ③ CH1/CH2 Changeover switch for choosing isolation or common between
NIM GND and the internal circuit GND.
FLOTING: isolation, G.COMMON: common
- ④ CH3 Scale over output connector (BNC)
- ⑤ CH4 Scale over output connector (BNC)
- ⑥ CH3/CH4 Changeover switch for choosing isolation or common between
NIM GND and the internal circuit GND.
FLOTING: isolation, G.COMMON: common