100MHz VF CONVERTER N2VF-1H USER'S MANUAL

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TSUJICON APPLICATION OF ELECTRONIC DEVICES

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100MHz VF converter N2VF-1H User's Manual [Rev.1]

1. Feature

N2VF-1H is the 100MHz 2CH V-F Converter that is housed in a NIM-1UNIT case. It has the four-levels amplification factor switch and the polarity selector switch.

N2VF-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	2CH
Input Range	-10V/-5V/-2.5V/-1V/+1V/+2.5V/+5V/+10V
Input	Single-end
Input Impedance	$1 \mathrm{M}\Omega$
Output Range	100MHz/50MHz/25MHz/10MHz
Output	TTL level $\ref{eq:total_eq}$ Please use 50 Ω termination to reduce the reflected wave.
Conversion Accuracy	±0.01% FS
Inpur Sampling Frequency	1MHz
Response	$10\mu\mathrm{s}$ or less
Input Connector	BNC connector
Output Connector for Frequency	LEMO connector (equivalent to EPL00250NTN)
Over-Range output	Open collector (normaly close), isolated
Over-Range output Connector	BNC connector
Power supply	+12V/200mA, +6V/600mA
Case	NIM-1UNIT

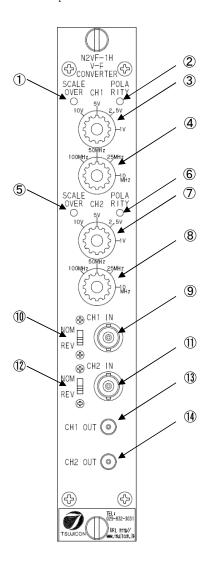
3. Before using

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

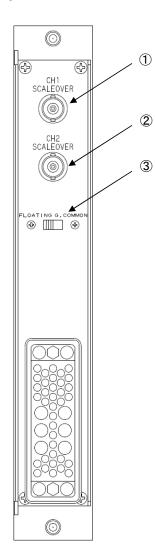


- ① CH1 Scale over LED

 LED lights on when the input level exceeds conversion level.
- ② CH1 Input polarity LED LED lights on if the voltage input polarity is different from the setting.
- ③ CH1 Input voltage range select SW Select input voltage range.
- ④ CH1 Output frequency range select SW Select output frequency range.
- ⑤ CH2 Scale over LED

 LED lights on when the input level exceeds conversion level.
- ⑥ CH2 Input polarity LED LED lights on if the voltage input polarity is different from the setting.
- CH2 Input voltage range select SW
 Select input voltage range.

- ① CH1 Polarity select slide-SW NOM: (+), REV: (-)
- ① CH2 Input connector (voltage, BNC)
- ② CH2 Polarity select slide-SW NOM: (+), REV: (-)
- 3 CH1 Output connector (frequency, LEMO, LVTTL level)
- (4) CH2 Output connector (frequency, LEMO, LVTTL level)



- 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)

 Open collector output. It is isolated from the internal circuit.

 Output becomes off if the voltage input is over than the setting.

 (normaly close)
- ③ Changeover switch for choosing isolation or common between NIM GND and the internal circuit GND. FLOTING: isolation, G.COMMON: common