Synchronized
2ch NIM V/F CONVERTER
SN2VF-01

(2376 Ver.2)

SER No.

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NIM V-F CONVERTER USER'S MANUAL

Type SN2VF-01

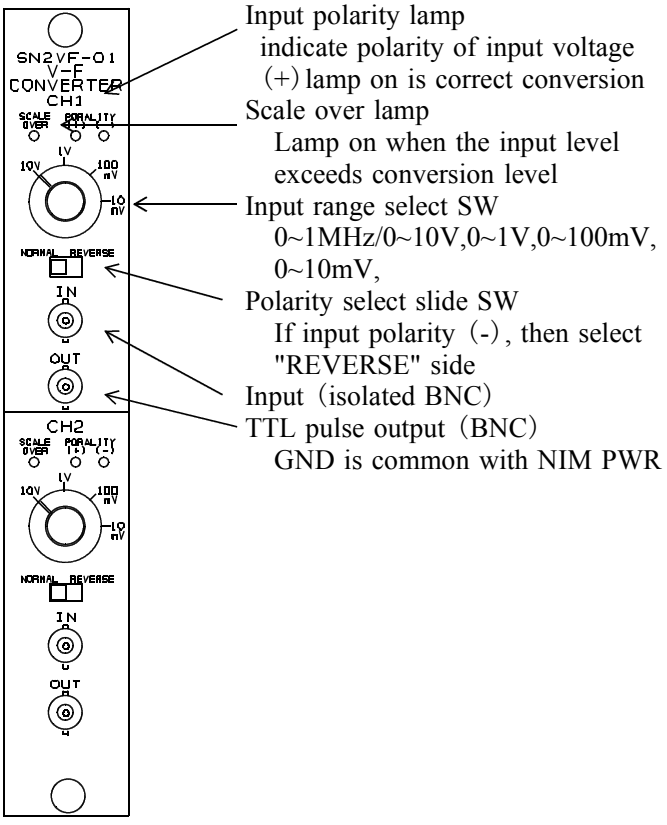
A X'tal synchronized [1] V-F Converter constructed in a NIM-1 UNIT case has two channels outputs and include a four stage amplification factor switch and a polarity selector switch. In addition, with over range and polarity displayed, V-F conversion is always performed at the optimum conditions. The over range signal is output as a transistor open-collector signal which can be used as a warning. The DC amplifier can be used under isolated (floated) condition from the NIM power source, providing higher noise tolerance. Analog output that is the signal just before V/F conversion can be used as an amplified signal monitor.

1. Specification

1) Gain	1MHz/10V, 1MHz/1V, 1MHz/100mV, 1MHz/10mV
2) Input Voltage	0 ～ 10V (Acceptable input ± 100V Max)
3) Input Resistance	1M Ω
4) Output	TTL level positive logic 0 ～ 1MHz
5) Conversion Accuracy	< ± 0.02%/FS
6) Power Supply	+12V about 600mA (From NIM Connector)
7) Case	NIM-1

2. Panel lay out

1) Front panel layout



Input polarity lamp
indicate polarity of input voltage
(+) lamp on is correct conversion

Scale over lamp
Lamp on when the input level exceeds conversion level

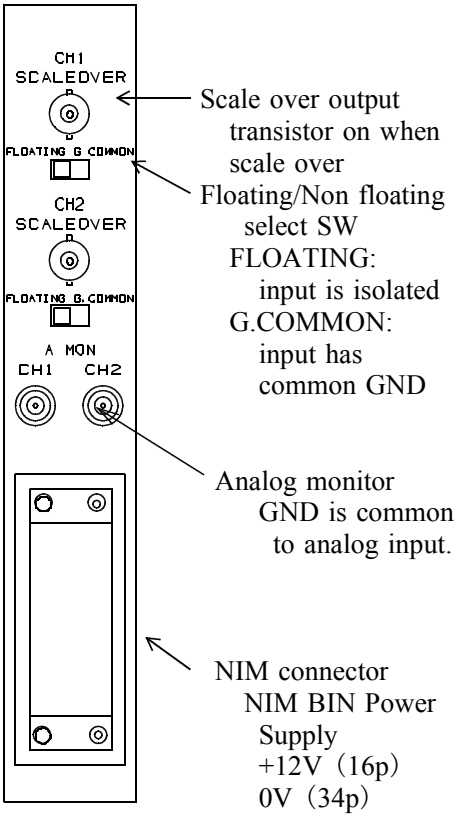
Input range select SW
0~1MHz/0~10V,0~1V,0~100mV, 0~10mV,

Polarity select slide SW
If input polarity (-), then select "REVERSE" side

Input (isolated BNC)

TTL pulse output (BNC)
GND is common with NIM PWR

2) Rear panel layout



Scale over output transistor on when scale over

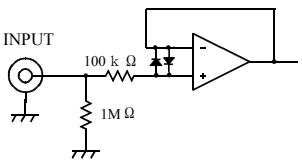
Floating/Non floating select SW
FLOATING: input is isolated
G.COMMON: input has common GND

Analog monitor
GND is common to analog input.

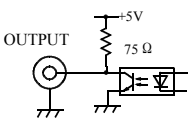
NIM connector
NIM BIN Power Supply
+12V (16p)
0V (34p)

3. Circuit of input/output

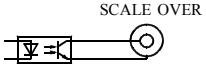
1) Voltage input



2) Pulse out



3) Scale over out



[1] About X'tal synchronized V/F converter
Using the stability of X'tal enables low cost performance of V/F conversion.
Output frequency may be the mixture of some periods of pulse signals because of digital processing.