

Measuring ranges

Voltage (12 ranges)	; 0.02 mV ~ 300 V (Full scales of 0.01 0.003/0.01/0.03/0.1/0.3/1/3/10/30/100 300)
dB	; - 80 ~ + 50 dB (0 dB = 1 V)
dBm	; - 80 ~ + 52 dB (0 dB = 1 mW, 600 Ω)
Indicating accuracy	$\pm 3 \%$ of full scale (as measured using 1 kHz as standard measuring frequency)
Frequency response (with respect to the response at 1 kHz)	
5 Hz ~ 500 kHz	; $\pm 10 \%$
10 Hz ~ 250 kHz	; $\pm 5 \%$
20 Hz ~ 100 kHz	; $\pm 3 \%$
Input impedance	1 M Ω shunted by 32 pF or less.
Power regulation	Within $\pm 1 \%$ of full scale against $\pm 10 \%$ variation of power source voltage.
Temperature coef- ficient	$\pm 0.09 \%/^{\circ}\text{C}$
Operating temperature range	- 10 ~ + 50 $^{\circ}\text{C}$
Maximum input voltage	
DC component	; ± 400 V
AC component	; 300 V rms for ranges 0.3 V or lower 500 V rms for ranges 1 V or higher

o AMPLIFIER CHARACTERISTIC

Gain	Approx. 66 dB
Output voltage	More than 2 V without load
Frequency response	Within ± 1 dB from 5 Hz to 500 kHz
Output impedance	Approx. 600 Ω
Distortion factor	Less than 1 % at full scale
S/N ratio	More than 40 dB at full scale
o Power Supply	
Input voltage	AC 100, 117 or 230 V $\pm 10 \%$, 50 or 60 Hz
Power consumption	2.7 W
o Composition	
Front and rear views	Refer to the Fig 2.

Dimensions	158(W) x 195(D) x 215(H) (mm)
Weight	2.7 kg (5.1 LBS)
Accessories	1 One CA-41 cord (BNC) 2 One fuses 3 One copy of instruction manual

4. CIRCUIT DESCRIPTION

When you read the following descriptions, refer to the block diagram in Fig. 1 and the circuit diagram in Fig. 4.

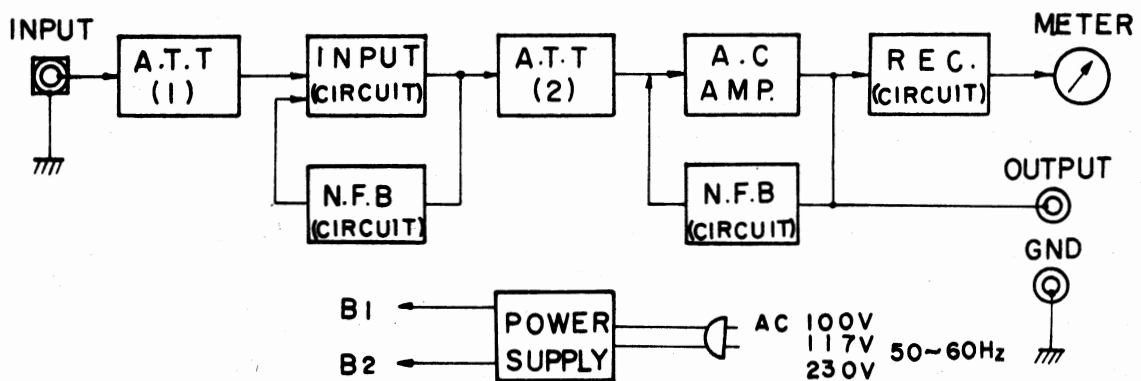


Fig.1 VT-106 BLOCK DIAGRAM

(1) ATTENUATOR (I)

Attenuator (I) is a resistance attenuator with compensating capacitor.

This attenuator provides the same output voltage as the input voltage when its selector switch is set to any of positions of 0.001V to 0.3 V. If the selector switch is in any of positions of 1V to 300 V, the attenuator provides an output voltage which, being voltage divided by resistors R101 and R102, is 60 dB lower than the input voltage.

Trimmer capacitor TC101 is inserted to adjust the performance of this set (pre-set at 100 kHz).

(2) INPUT CIRCUIT