

TSG-17

100KHz-150MHZ RF Signal Gemerator

INSTRUCTION MANUAL

LIU & DB ENTERPRISES, INC.

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GENERAL DESCRIPTION

TSG— 17 is an RF signal generator which can generate Hi - frequency from 100KHz - 150MHz. With it's 3th harmonic on range 'F', 450MHz can be reached. As the modulating frequency can be adjusted from 150 Hz to 1.5 KHz and has output terminal for AF as well, it can fulfil most requirement of hobbyist, service station, production and technical instruction.

FEATURES

Wide Frequency range: 100 KHz - 150MHz

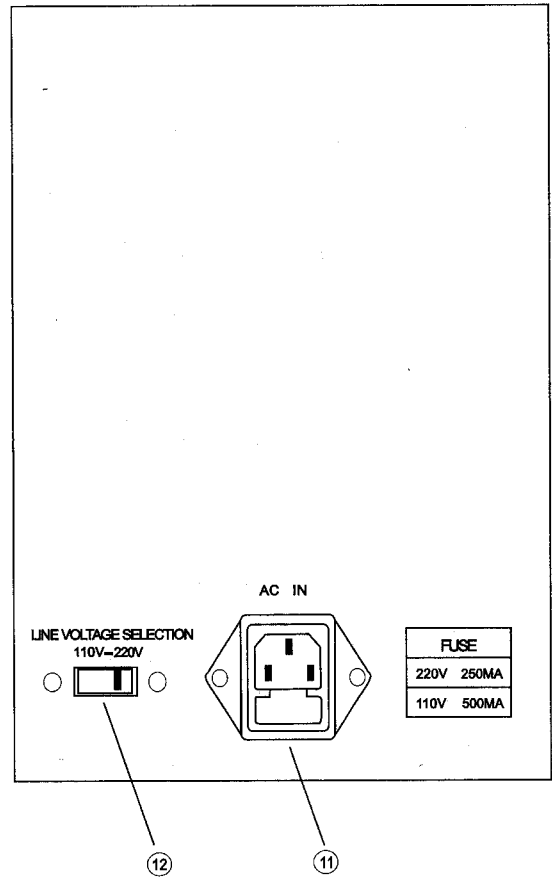
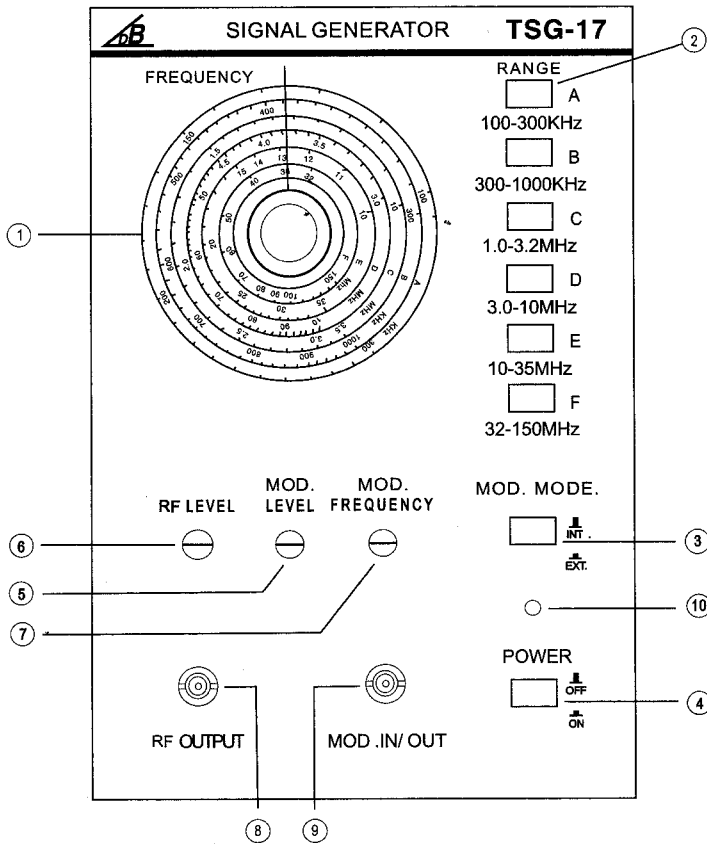
Low distortion AF oscillator installed supplying Amplitude Modulation (AM) with tunable range from 150 Hz - 1.5 K Hz.

AF output terminal works as audio generator as well.

ELECTRICAL SPECIFICATIONS

Range A : 100KHz - 300KHz
 B : 300KHz - 1000KHz
 C : 1 MHz- 3.2 MHz
 D : 3 MHz - 10 MHz
 E : 10MHz - 35 MHz
 F : 32MHz - 150MHz
 (up to 450MHz with 3th harmonics)

Frequency accuracy on scale : $\pm 5 \%$
RF output : Min 100mV rms (up to 35 MHz unloaded.)
Output control : 1m V to 100mV (measured from output terminal)
Modulation : Amplitude modulation (AM) 30% approx.
Audio output : Min 2 V rms.
Audio frequency : 150Hz - 1.5KHz
External audio input : 50 Hz - 20 KHz at less than 1 V rms input.
Power Requirement : AC 110/220 V 50/60Hz approx. 6VA
Dimension : 142(W) \times 233(D) \times 197 (H)mm 3.5kg
Accessories : Power Cord 1 pc
 Test Clip 1 pc
 Instruction Manual 1 pc



- (1) **Dial scale. Frequency tuning knob.**
- (2) **Frequency range selector A - F.**
- (3) **Internal / External modulation selector.**
- (4) **Power On / Off.**
- (5) **Modulation level adjust.**
- (6) **RF level control.**
- (7) **Modulation frequency adjust.**
- (8) **RF output terminal.**
- (9) **AF output / Input terminal.**
- (10) **Power ON indicator.**
- (11) **AC power input socket with fuse holder.**
- (12) **Input voltage selector.**

OPERATION

Before input power to power socket (11), make sure TSG- 17 has voltage selector (12) placed on suitable position.

- (1) Press (4) down, (10) will be lit to show AC power is on.
- (2) Press (2) from A to F to select the frequency range which you desire to work on.
- (3) Tune (1) to the actual frequency what you need. For accuracy tuning, a frequency Counter (TFC-1250) may be needed to indicate the actual output frequency.
- (4) To obtain the internal modulation, (3) should not be pressed down. In the internal modulation mode, (9) will have AF signal out which have frequency controlled by (7).
- (5) In internal modulation mode, modulating frequency can be adjusted by (7) while fully anti-clockwise to lowest frequency and fully clockwise for highest frequency, modulation depth is controlling by (5).
- (6) Terminal (9) acts as AF output in internal modulation mode while acts as AF input in external modulation mode.
- (7) To have RF signal output, simply plug in the BNC to crocodile clip cord to (8) as accessed. Output level can be controlled by turning (6) fully clockwise for maximum & fully anti-clockwise for minimum output.