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RF GENERATOR

MODEL GRG - 450B

82RG-450BOMB

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1. SPECIFICATION MAIN OUTPUT 1

2. OPERATOR'S CONTROL AND INDICATORS 3

3. OPERATING INSTRUCTION 6

4. BLOCK DIAGRAM 10

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SPECIFICATION

MAIN OUTPUT

Frequency Range : 100KHz to 150MHz (up to 450MHz on harmonics)

A) 100KHz–290KHz
B) 290KHz–900KHz
C) 0.9MHz–3MHz
D) 3MHz–10MHz
E) 10MHz–35.0MHz
F) 32MHz–150MHz (96–450MHz calibrated harmonics)

Frequency Accuracy : ± 5%

RF Output : 100mVRMS Approx (up to 35MHz)

Frequency monitor : Frequency 100KHZ–150MHZ, level 50mVRMS typical

Output Control : HIGH-LOW switch and FINE adjuster

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AMPLITUDE MODULATION

Internal : 1KHZ At 30% or higher

External : Frequency 50HZ to 20KHZ
Sensitivity less than 1VRMS

AUX OUTPUT

Audio Output : Frequency 1KHZ
Level 1VRMS MIN. (FIXED)

POWER SOURCE

AC100V,115V,230VAC +/-10% 50/60HZ

ACCESSORIES

GTL-110x1 , AC POWER CORD

DIMENSIONS 247(W)x158(H)x140(D) m/m

WEIGHT TYPICAL 2.5 Kg

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OPERATOR'S CONTROL AND INDICATORS

(Refer to Figure. 1)

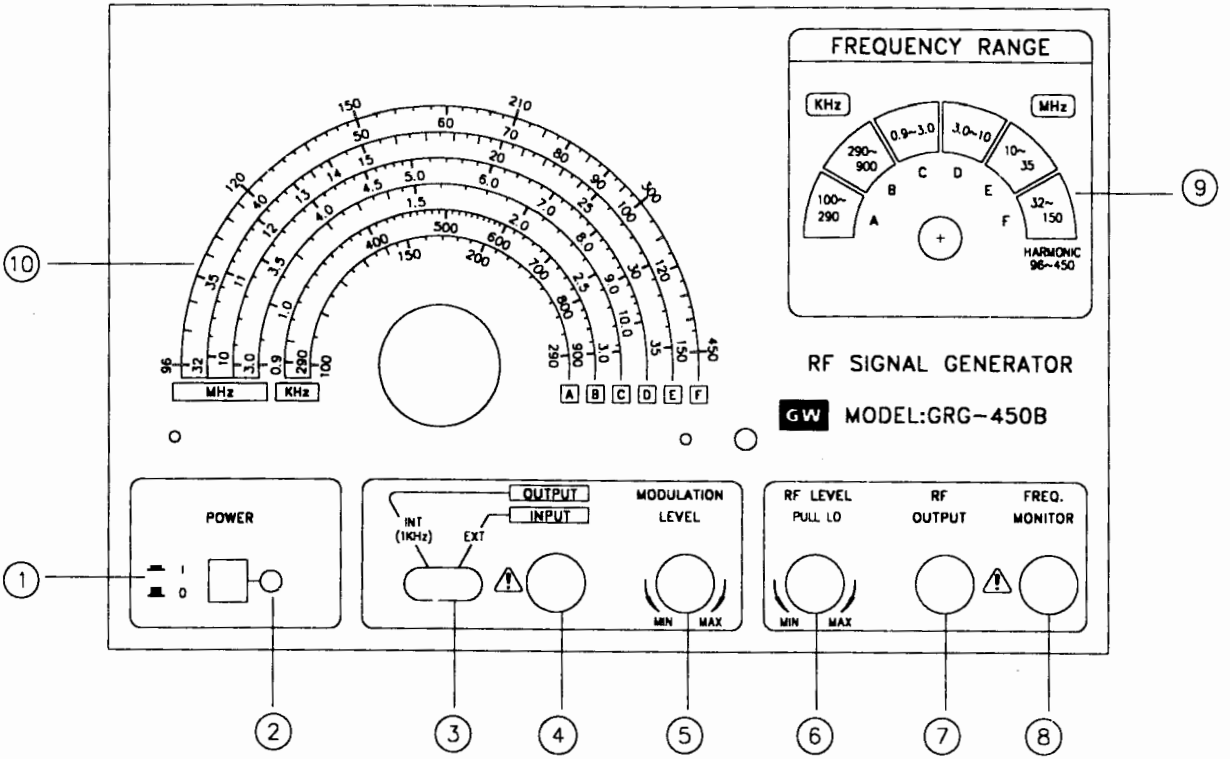
1. Power switch - Push the power switch for turning on the generator.
2. Pilot lamp - Lights continously When signal generator is turned on.
3. INT/EXT switch - INT position provides 1KHZ internally modulated output.
   EXT position provides externally modulated input.
4. INPUT-OUTPUT- For external modulation input or output from internal 1 KHZ oscillator.
5. INT MOD AMPLITUDE- Adjust modulated percentage.
6. Hi/Lo & FINE - Sets the RF output level; at LO, output is lowered by 1/10. "FINE" continuous adjust RF output Voltage.
7. RF Output - Connector for output signal.
8. Freq monitor - Moniter RF output frequency.
9. RANGE switch - Select freguency range for the output signal

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10. **Frequency Dial** - Indicates the frequency of the output signal. Use the scale which corresponds to the RANGE switch position.

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FIGURE 1.



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OPERATING INSTRUCTION

1. PRELIMINARY SET-UP

1) Check your power source voltage before connecting plug of the power cord to an AC power outlet.
2) Set the power switch off.
3) Set the modulation switch to the external position.
4) Connect the output cable to the RF output BNC jack.
5) Set the fine control at center and pull RF level switch at low.
6) Set the frequency range switch at the operating band and rotate the frequency dial knob to the desired frequency.
7) To turn on the signal generator then the pilot lamp should light.
8) The equipment being tested or aligned should display signal which was set preliminarily.

2. CONNECTIONS

The RF leads are connected to the input of the circuit

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under test.

For the RF signal at the receiver antenna input, connect a 50--200Ω 1/4w resistor in series. When checking sets with a rod antenna, connect leads to a coil with sets a few turns of wire and couple the coil to the antenna.

In checking RF and IF amplifier circuits. connection should be made through a small capacitor, 1-5 pf, in order to prevent detuning effects.

NOTE: When connecting directly to the input circuit. make certain that there is no high DC voltage present, otherwise, connect a blocking capacitor, 100PF-0.05UF depending on the frequency.

3. MODULATED CARRIER INTERNAL SOURCE

Set the mode switch at INT MOD.

By tuning the receiver to the generator frequency, or vice versa, an audio tone will be heard in the loudspeaker. an audio voltmeter should be connected across the speaker terminals when aligning the internal circuit. a dummy resistor with suitable power rating can be used in place of the moving

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coil repair the measurements.

It's advisable to keep the RF signal level as low as possible in order to prevent the transistors or IC from overloading in the circuit. excessive input voltage will cause AGC action and two resonance points to appear, and proper alignment or adjustment would be impossible.

4. MODULATED CARRIER, EXTERNAL SOURCE

Set the mode switch at EXT MOD.

Connect leads from an external audid generator to the input.

Frequency up to 20KHZ can be used for modulation at RF above 3 MHZ. The audio input voltage should not exceed 1 VRMS; This is to provent modulation distortion.

5. UNMODULATED CARRIER

Set the mode switch at EXT MOD. There should be no connection to the input.

The RF signal can be used in testing a receiver equipped with a beat oscillator, or circuits that do not require a

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modulated signal.

The RF signal can be applied to a sweep generator for the marker signal

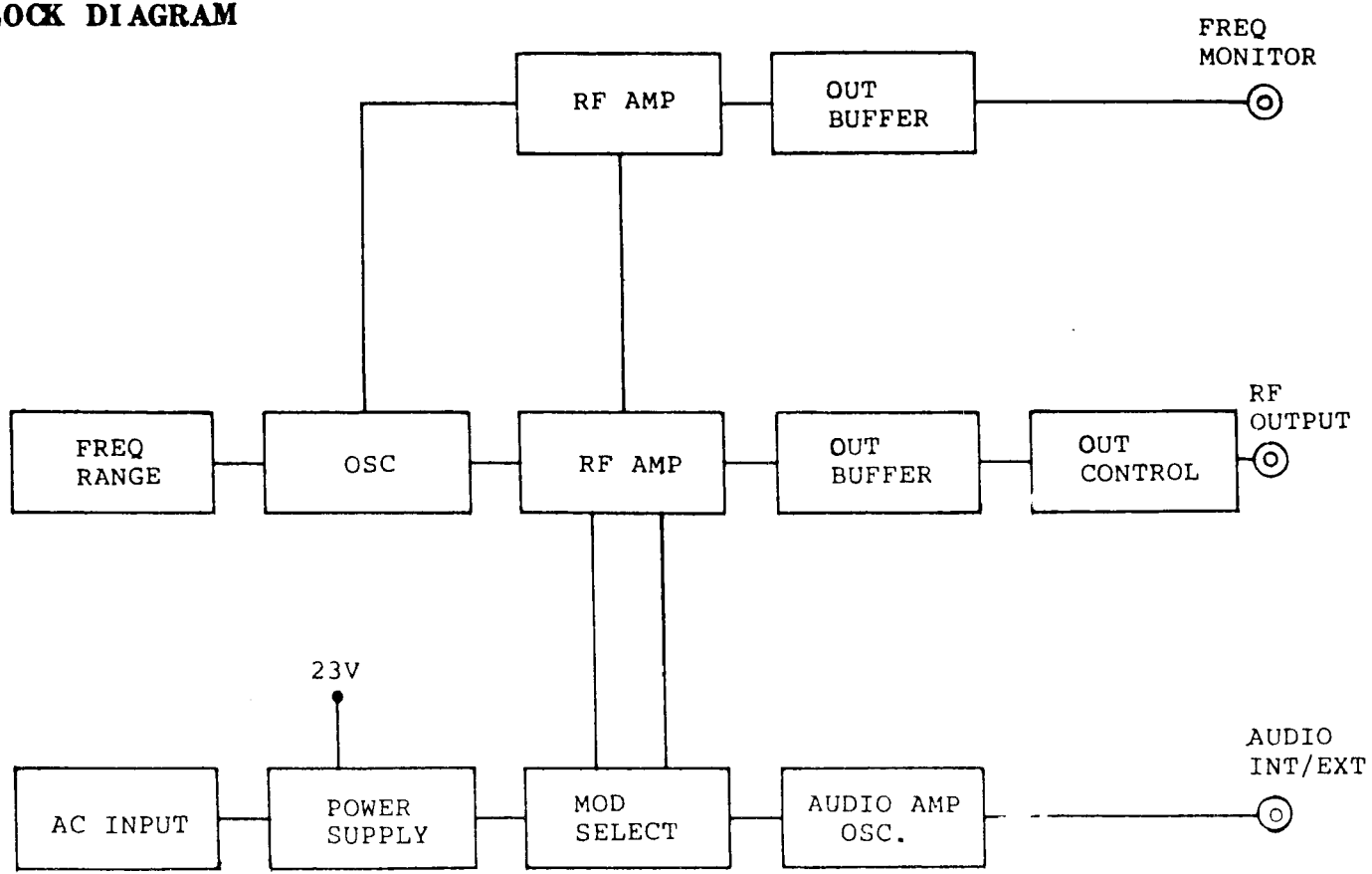
6. **AF OUTPUT 1 KHZ**

Set mode switch at INT MOD.

Frequency range switch at "A" and frequency dial at 150KHz. Connect leads from output to the test circuit Use an external potentiometer, 100kΩ - 1M Ω. to lower the voltage

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BLOCK DIAGRAM



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