

# RF Generator / Audio Generator



## GRG-450B (RF GENERATOR)

### FEATURES

- \* Frequency Range from 100kHz ~ 150MHz (up ~ 450MHz on Harmonics)
- \* Int/Ext AM Modulation, 0 ~ 100%
- \* Frequency Monitor Output for EXT Frequency Counter

### SPECIFICATIONS

<b>MAIN OUTPUT</b>	
Frequency	100kHz ~ 150MHz (up to 450MHz on harmonics)
Range	A 100 ~ 290kHz B 290 ~ 900kHz C 0.9 ~ 3.0MHz D 3.0 ~ 11MHz E 10 ~ 35MHz F 32 ~ 150MHz (96 ~ 450MHz, calibrated harmonics)
Accuracy	±5%
Level	100mVrms approx up to 35MHz
Level control	High/Low switchable and fine control
<b>AMPLITUDE MODULATION</b>	
Internal	Frequency: 1kHz Percentage: 30% max and adjuster
External	Frequency: 50Hz to 20kHz Sensitivity: less than 1Vrms
<b>AUX OUTPUT</b>	Audio Output Frequency: 1kHz Level: 1 Vrms MIN, fixed
<b>FREQUENCY MONITOR</b>	Frequency: Oscillation frequency Level: 50mVrms MIN
<b>POWER SOURCE</b>	AC 100/115/230V ±10% , 50/60Hz
<b>ACCESSORIES</b>	Instruction manual x 1, Power cord x 1, GTL-110 x 1
<b>DIMENSIONS &amp; WEIGHT</b>	247(W) x 158(H) x 140(D)mm, Approx. 2.5kg

### ORDERING INFORMATION

**GRG-450B** 150MHz RF Generator

## GAG-809/810 (AUDIO GENERATOR)

### FEATURES

- \* Frequency from 10Hz ~ 1MHz
- \* 0.02% Low Sine wave Distortion (GAG-810 Only)
- \* 6 Steps Output Attenuator
- \* EXT SYNC Function

### SPECIFICATIONS

<b>SINE WAVE CHARACTERISTIC</b>	
Frequency Range	10Hz ~ 1MHz, 5 Ranges
Frequency Indicator	Dial Scale
Frequency Accuracy	±(3% + 1Hz)
Output Voltage	5 Vrms (600Ω load)
Frequency Response	10Hz ~ 1MHz ±0.5dB (at 600Ω load) Reference Frequency (1kHz)
Distortion Factor	500Hz ~ 20kHz 0.02% or less (GAG-809 0.1%) 100Hz ~ 100kHz 0.05% or less (GAG-809 0.3%) (x 10 range for 100Hz, x 1k range for 100kHz) 50Hz ~ 200kHz 0.3% or less 20Hz ~ 500kHz 0.5% or less 10Hz ~ 1MHz 1.5% or less
<b>SQUARE WAVE</b>	
Output Voltage	10Vp-p or more (no load)
Overshoot	2% or less (at 1kHz, max output)
Rise & Fall Time	Less than 200nS
Duty Ratio	50%±5%
<b>EXT. SYNCHRONIZATION</b>	
Synchronizing Range	±1%/Vrms
Max. Allowable Input	15V (DC + AC peak)
Input Impedance	150k ohm
<b>OUTPUT</b>	
Output Impedance	600Ω
Output Attenuator	0, -10, -20, -30, -40, -50dB 6 ranges (accuracy ±1dB at 600Ω load)
<b>POWER SOURCE</b>	AC 100/120/220/230V±10% , 50/60Hz
<b>ACCESSORIES</b>	Instruction Manual x 1, Power cord x 1, GTL-103 x 1
<b>DIMENSIONS &amp; WEIGHT</b>	130(W) x 210(H)x292(D)mm , Approx 3 kg

### ORDERING INFORMATION

**GAG-809** 1MHz Audio Generator  
**GAG-810** 1MHz Audio Generator with 0.02% Low Sine Wave Distortion