



2002-06-10

## **PRODUKTINFORMATION**

**Vi reserverar oss mot fel samt förbehåller oss rätten till ändringar utan föregående meddelande**

**ELFA artikelnr**

**76-307-18 Tongenerator GAG810**

# RF Generator / Audio Generator



## GRG-450B (RF GENERATOR)

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

## GAG-809/810

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

### SPECIFICATIONS

#### MAIN OUTPUT

|                      |                                                                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Frequency</b>     | 100kHz ~ 150MHz<br>(up to 450MHz on harmonics)                                                                                              |
| <b>Range</b>         | A 100 ~ 290kHz<br>B 290 ~ 900kHz<br>C 0.9 ~ 3.0MHz<br>D 3.0 ~ 11MHz<br>E 10 ~ 35MHz<br>F 32 ~ 150MHz<br>(96 ~ 450MHz, calibrated harmonics) |
| <b>Accuracy</b>      | ±5%                                                                                                                                         |
| <b>Level</b>         | 100mVrms approx up to 35MHz                                                                                                                 |
| <b>Level control</b> | High/Low switchable and fine control                                                                                                        |

#### AMPLITUDE MODULATION

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| <b>Internal</b> | Frequency: 1kHz<br>Percentage: 30% max and adjuster      |
| <b>External</b> | Frequency: 50Hz to 20kHz<br>Sensitivity: less than 1Vrms |

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| <b>AUX OUTPUT</b> | Audio Output Frequency: 1kHz<br>Level: 1 Vrms MIN, fixed |
|-------------------|----------------------------------------------------------|

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| <b>FREQUENCY MONITOR</b> | Frequency: Oscillation frequency<br>Level: 50mVrms MIN |
|--------------------------|--------------------------------------------------------|

|                     |                                |
|---------------------|--------------------------------|
| <b>POWER SOURCE</b> | AC 100/115/230V ±10% , 50/60Hz |
|---------------------|--------------------------------|

|                    |                                                     |
|--------------------|-----------------------------------------------------|
| <b>ACCESSORIES</b> | Power cord x 1, Instruction manual x 1, GTL-110 x 1 |
|--------------------|-----------------------------------------------------|

|                                |                                              |
|--------------------------------|----------------------------------------------|
| <b>DIMENSIONS &amp; WEIGHT</b> | 247(W) x 158(H) x 140(D)mm,<br>Approx. 2.5kg |
|--------------------------------|----------------------------------------------|

### SPECIFICATIONS

#### SINE WAVE CHARACTERISTIC

|                            |                                                                                                                                                                                                                                          |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Frequency Range</b>     | 10Hz ~ 1MHz, 5 Ranges                                                                                                                                                                                                                    |
| <b>Frequency Indicator</b> | Dial Scale                                                                                                                                                                                                                               |
| <b>Frequency Accuracy</b>  | ±(3% + 1Hz)                                                                                                                                                                                                                              |
| <b>Output Voltage</b>      | 5 Vrms (600 load)                                                                                                                                                                                                                        |
| <b>Frequency Response</b>  | 10Hz ~ 1MHz ±0.5dB(at 600 load)<br>Reference Frequency (1kHz)                                                                                                                                                                            |
| <b>Distortion Factor</b>   | 500Hz ~ 20kHz 0.02% or less<br>(GAG-809 0.1%)<br>100Hz ~ 100kHz 0.05% or less<br>(GAG-809 0.3%)<br>(x 10 range for 100Hz, x 1k range for 100kHz)<br>50Hz ~ 200kHz 0.3% or less<br>20Hz ~ 500kHz 0.5% or less<br>10Hz ~ 1MHz 1.5% or less |

#### SQUARE WAVE

|                             |                                  |
|-----------------------------|----------------------------------|
| <b>Output Voltage</b>       | 10Vp-p or more (no load)         |
| <b>Overshoot</b>            | 2% or less (at 1kHz, max output) |
| <b>Rise &amp; Fall Time</b> | Less than 200nS                  |
| <b>Duty Ratio</b>           | 50%±5%                           |

#### EXT. SYNCHRONIZATION

|                             |                    |
|-----------------------------|--------------------|
| <b>Synchronizing Range</b>  | ±1%/Vrms           |
| <b>Max. Allowable Input</b> | 15V (DC + AC peak) |
| <b>Input Impedance</b>      | 150k ohm           |

#### OUTPUT

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| <b>Output Impedance</b>  | 600                                                                 |
| <b>Output Attenuator</b> | 0, -10, -20, -30, -40, -50dB<br>6 ranges (accuracy±1dB at 600 load) |

|                     |                                   |
|---------------------|-----------------------------------|
| <b>POWER SOURCE</b> | AC 100/120/220/230V±10% , 50/60Hz |
|---------------------|-----------------------------------|

|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| <b>ACCESSORIES</b> | Power cord x 1<br>Instruction Manual x 1<br>Test Lead GTL-103 x 1 |
|--------------------|-------------------------------------------------------------------|

|                                |                                         |
|--------------------------------|-----------------------------------------|
| <b>DIMENSIONS &amp; WEIGHT</b> | 130(W) x 210(H)x292(D)mm<br>Approx 3 kg |
|--------------------------------|-----------------------------------------|