

Model: SMGA-20

Rackmount Sound-masking Generator / Amplifier

Description

Sound-masking generator / amplifier Model SMGA20 provides a digital noise signal (selectable pink or white) and amplifier (20W into 70V, 25V or 8 ohm) for sound masking applications. The generator produces a digital output signal for sound masking that is pink noise (equal energy / octave) or white noise (equal energy / frequency). The selected noise signal is fed to the masking speakers to produce the characteristic "whoosh" sound that "masks" ambient noise in a properly designed masking system to create conversational privacy.

Generator output levels include an independent Low-Z (balanced) line that is switchable to mic level and a Hi-Z (unbalanced) line. Controls include output level and an adjustable low pass filter that shapes frequencies at 9dB per octave with roll off at 300Hz. The 20W amplifier includes an auxiliary Hi-Z input for paging, music, or signaling sources. Controls include level adjustment for the auxiliary input signal, noise level, and three-band tone controls for shaping bass, mid-range, and treble frequencies.

Rackmount chassis is 19"W x 3.5"H (2RU) with barrier strip plug-in terminations. Chassis is formed from 18-gauge steel with a 16-gauge steel front panel finished in Lowell's durable black powder epoxy. Lowell also offers sound masking generators (without amplifier - SMG-1 Series) and a wide selection of 8" and 4" masking speakers for suspended installation above the ceiling or for mounting onto the T-Bar grid.

Features

- Lowell's sound masking generator/amplifier provides an all-in-one source approach for small masking applications.
- 2RU rackmount chassis features phoenix-style plug-in terminations for pre-wire convenience.
- Versatile outputs include a high impedance line and a balanced line that may be switched between line level and mic level.
- Bass, mid-range, and treble controls allow for subjective shaping on site.
- Compatible with Lowell's full selection of masking speakers for suspended or T-bar installation.

A & E Specifications

The sound masking generator/amplifier shall be Lowell Model SMGA20. The generator shall produce a digital noise signal (white or pink) and the amplifier shall provide up to 20 watts of amplification to drive masking system speakers. The generator shall have a balanced low-impedance line output that may be switched between line level (500mv) and mic level (5mv) and a high-impedance unbalanced line output (500mv). Generator controls shall include output level and low pass filter. The amplifier output shall be 20-watts into 70V, 25V, or 8-ohms. Auxiliary amplifier input for paging, music or signaling shall be a plugable barrier strip. Amplifier controls shall include bass,



SMGA-20 rear view

mid, and treble controls; input level; and noise level. Power requirements shall be 117 vac, 60Hz, 65-watts. The chassis shall be formed from 18-gauge steel with a 16-gauge steel front panel on E.I.A. spacing for rack mount installation. Chassis shall measure 19"W x 3.5"H (2RU) x 9"D. The chassis assembly shall be finished in black powder epoxy paint, include silkscreened information, and a 6-foot cordset.

Specifications

- Generator Output Signals:** Pink noise (equal energy/octave) or White noise (equal energy/frequency)
- Generator Output Levels:** 500mv (Hi-Z), 5mv (Low-Z) switchable to mic level
- Generator Connections:** RCA phono jack (unbalanced Hi-Z), Plugable barrier strip (balanced Low-Z)
- Generator Controls:** Output level (0-500mv max.), Low pass filter (flat to approx. 9dB/octave roll-off at 300Hz)
- Amplifier Output Power:** 20-watts into 70V, 25V or 8-ohms
- Auxiliary Input:** 500mv (Hi-Z) line for paging, music, or signaling
- Internal Input:** Noise (connected internally)
- Output Connections:** Plugable barrier strip
- Amplifier Controls:** Bass, mid-range, and treble control; Auxiliary input level; and noise level
- Power Requirements:** 117 vac, 60Hz, 65-watts
- Size:** 19"W x 3.5"H (2RU) x 9"D

Model No.	Description	Chassis H	Chassis W	Chassis D
SMGA-20	Rackmount sound-masking generator / amplifier	3.5" (2RU)	19"	9"

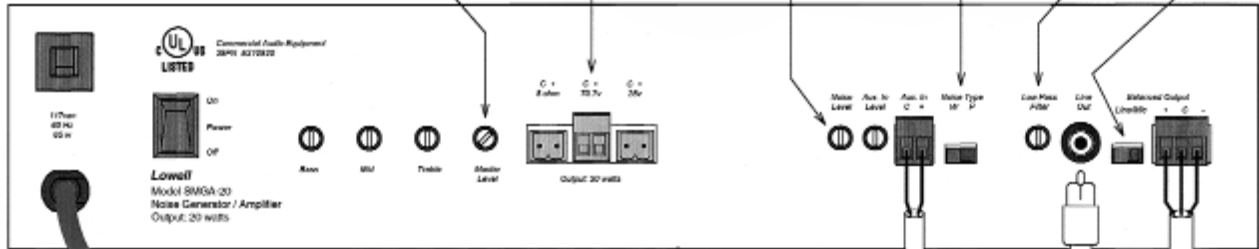
Spec. No. **4c-202**
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Rear Panel Layout

Circuit Breaker
1 Amp



Master Level:
Amplifier input control (has no effect on generator outputs).

20W Output:
Select appropriate output (8 ohm, 70V, 25V) and connect to Lowell sound masking speaker assemblies.

Noise Level:
Sets level of noise signal to amplifier (connected internally). If external equalizer is used, set to minimum (CCW).

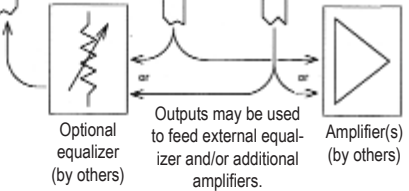
Noise Type:
Select generator output noise type (white or pink).

Low Pass Filter:
Adjusts high frequency roll-off.

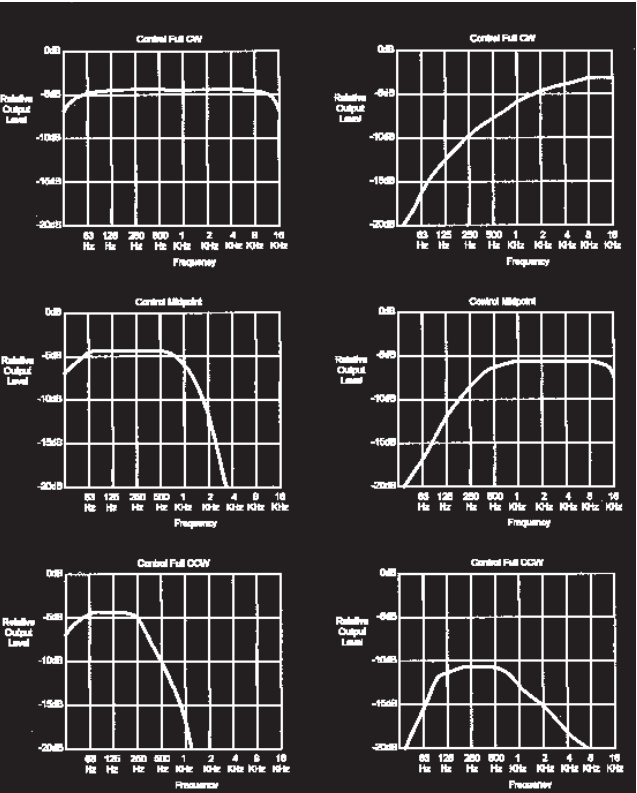
Balanced Output - Line/Mic:
Sets balanced output to mic level (approx. 5mv.) or line level (approx 500mv.).

Auxiliary input:

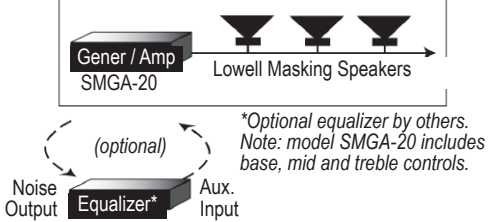
May be used for music, paging and/or tone signaling if required however, if optimum performance of paging or music system is expected, adding it to the masking system is not recommended.



Low Pass Filter Response (approximate representation)



Typical Configuration



*Optional equalizer by others. Note: model SMGA-20 includes base, mid and treble controls.

