HARRIS

Radio Systems Products

AMS-G1

C-QUAM®

AM Stereo Exciter

The Harris model AMS-G1 uses the latest technology available in C-QUAM® AM stereo exciters to provide optimum AM stereo performance from Harris' DX, and Gates line of solid state transmitters. New DX and Gates transmitters can be purchased with the AMS-G1 as complete, ready to broadcast AM stereo transmitters.

The versatile AMS-G1 stereo exciter, rather than just being a circuit card buried somewhere in the transmitter, comes self-contained in its own compact rack-mounted cabinet. If you already own a Harris solid state AM transmitter, it is also possible to purchase the AM stereo exciter separately for your older transmitter to get optimum AM stereo performance. The outputs of the AMS-G1 connect directly to the external oscillator TTL level input and audio input of your transmitter.

The AMS-G1 accommodates all international requirements for channel spacing and is rear panel selectable 100, 120, 220 or 240 volts AC, 50 or 60 Hz.

The Harris AMS-G1 can be used with all DX, Gates and SX transmitters. For other model transmitters, please check with sales technical support.

C-QUAM is a registered trademark of Motorola.

Features/Benefits

- Full performance AM stereo exciter designed to complement Harris transmitters.
- Dual day-night optimization, local or remote selectable.
- Newly designed circuitry enhances stereo separation in solid state Gates and SX transmitters.
- Local and remote selection of stereo or mono operation.
- Auto-ranging LED bar graph provides selectable front panel metering of L+R, L-R, L and R channel signals.

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Stereo System: C-QUAM® AM stereo
Audio Input: Right and Left channels 0 dBm to +10 dBm, balanced 600 ohms
Audio Output: Adjustable 0 dBm to +16 dBm balanced. +10 dBm factory setting
RF Output: Fixed TTL level 5 V into 50 ohm load, BNC
Stereo/Mono: Local or remote switchable. Front panel stereo indicator included
Meter Functions: L+R, L-R range 0% to 150% modulation
Right, Left meter functions switched at front panel
10X autoranging function
Delay Circuit Equalization: Internally adjustable delay equalization is provided to compensate for phase variations in the broadcast chain. Provides up to 56 microseconds of separately adjustable delay for both day and night modes. Delay is also internally strappable to provide up to 112 microseconds of total delay for one mode and 56 microseconds or less for the other.
Frequency Range: 530 to 1705 kHz, accommodates 10 kHz or 9 kHz spacing
Stability: ±10 Hz, 0° to 50°C, crystal controlled, typically ±2 Hz
Voltage Input: 100, 120, 220 or 240 VAC at 50/60 Hz Rear panel selectable
Ambient Temperature: 0° to 50°C
Size: 3 1/2" H x 19" W x 13" D (Fits 19" EIA rack)
8.9 cm H x 98.3 cm W x 33 cm D
Weight: 8 lbs. (3.6 kg)
Humidity: 95% non-condensing
Altitude: up to 13,000 ft. (3962 meters)

Closed Loop Performance

Distortion (THD): L or R at 70% Mod. < 0.7% at 1 kHz < 1% at full bandwidth
L+R at 90% Mod. < 0.25% full bandwidth
L-R at 90% Mod. < 0.5% at 1 kHz < 1.5% at full bandwidth
Separation: L+R, L-R > 40 dB
L-R, L+R > 45 dB
L>R or R>L > 40dB at 1 kHz > 30 dB at 10 kHz

Specifications subject to change without notice.

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