

HEADPHONE / MONITOR AMPLIFIER

MODEL HA-6A



FEATURES

- Powers headphones AND speakers
- New toroidal transformer for studio-quiet operation and low magnetic leakage
- 20 watts per channel, stereo
- 6 headphone outs, each with volume control
- Switches for two sets of speakers
- Automatically switches to mono mode when right channel is not used
- Overload and signal-present LED's for each channel
- Ground lift, on-off switches; power-on indicator
- Provision for remotely located volume controls

DESCRIPTION

The **HA-6A Headphone/Monitor Amplifier** is a unique combination of a headphone amp and a conventional power amp. This combination of functions can save the expense of an extra power amp in many recording studios.

The HA-6A is basically an economical 20 watt per channel stereo amplifier. Unlike a conventional power amp, however, it has six headphone outputs (stereo phone jacks) on the front panel, each with an associated volume control. When used for overdubbing or rehearsal, this provides more than adequate loudness in all headphones (even older low-impedance models), and allows each musician to set his or her own comfortable volume level. When the overdubbing is complete and the musicians remove their headphones, the HA-6A can power the tape playback through either (or both) of two sets of studio monitor speakers, selected by pressing front panel pushbuttons. Without the HA-6A, a separate amp would be needed for the studio speakers.

The HA-6A also features a convenient input level control on the left side of the front panel. A pair of yellow LED's—one for

each channel—light up whenever signal is present (threshold -28 dBu). Another pair of red LED's show an overload condition in either channel.

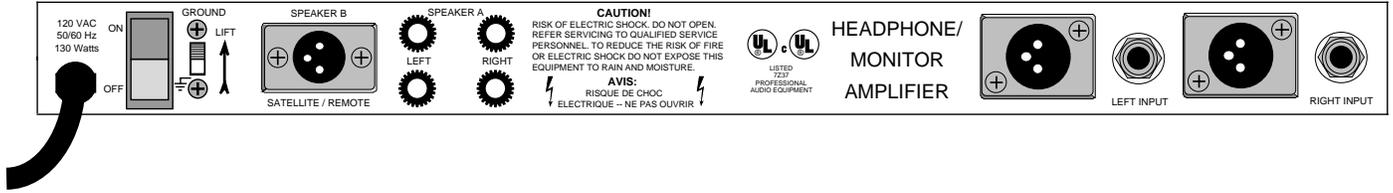
The Furman HA-6A's 20 watts-per-channel make it ideal as a low distortion headphone driver for the most critical listening situations. While most headphone amps provide half a watt or less per headphone channel, the HA-6A's higher power can drive headphones of any impedance to their full rated listening level, and do so with minimal noise and distortion. Its power capacity is also just right for the small "cube" reference speakers used in most recording studios as a comparison with the main control room monitors—it can power them without overpowering them. On the studio floor, a set of small monitor speakers driven by the HA-6A can make a session progress more efficiently by giving the musicians a chance to hear a playback without needing to disconnect themselves from their equipment and walk into the control room.

The HA-6A utilizes an efficient toroidal power transformer for silent operation and low magnetic leakage, as required in a studio environment. It is fully protected against thermal overload, and it can withstand a short circuit on any or all outputs for an indefinite time without damage.

OPTIONS

- **Model HA-6AB:** Provides balanced inputs with XLR connectors in addition to standard 1/4" phone inputs.
- **Accessory: Model HR-2 Headphone Remote Station:** A compact, unobtrusive box that clamps to a mike stand or belt, providing two headphone jacks, each with its own volume control. Any number of HR-2 stations may be connected to a HA-6A using standard microphone cables. Comes with snap-on, snap-off mike stand clamp. See picture on the other side.

HA-6AB Rear View



Architects and Engineers Specifications

The Headphone/Monitor Amplifier shall mount in a standard 19" rack, and shall occupy no more than one rack unit (1 $\frac{3}{4}$ " of rack space. It shall be of stereo design and shall incorporate the functions of a six station headphone amp and a stereo power amplifier. There shall be LED indicators for Signal Present and Overload conditions in each stereo channel. Each headphone output shall have its own volume control. Provision shall be made for extending the number of headphones accommodated by means of accessory Remote Stations, which shall connect to the unit in daisy-chain fashion using standard microphone cords.

In power amp mode, the unit shall accommodate either or both of two sets of speakers, selected with front-panel switches. Connections to the primary speakers shall be via dual banana/binding post terminals. Power output shall be at least 20 watts per channel, into either 4 or 8 ohms, from 20 Hz to 20 KHz. Distortion shall be .01% THD or less at full rated power at 1KHz, and not more than .05% from 20 Hz to 20 KHz. The noise level shall be at least 99 dB below full rated output. The unit shall be protected against thermal overload, and shall be able to withstand a short circuit on either or both outputs for an indefinite time without damage. All functions shall switch automatically to mono (left input routed to both channels) when the right channel is not used. The unit shall be internally fused, and shall have a Ground Lift switch capable of isolating the signal ground from the chassis. There shall also be an on/off switch with a power-on indicator. Inputs shall be equipped with 1/4" phone jacks, and XLR balanced inputs shall be optionally available. Versions shall be available for 120 VAC, 60 Hz or 230 VAC, 50/60 Hz power.

The unit shall be the Furman HA-6A Headphone/Monitor Amplifier.

Three Year Limited Warranty

The Furman HA-6A and HR-2 are protected by a limited three-year warranty covering defects in materials and workmanship.



HR-2 Headphone Remote Box

AVAILABLE FROM:

HA-6A SPECIFICATIONS

OUTPUTS:	Power:	20 watts per channel, stereo, into either 4 ohms or 8 ohms, 20 Hz to 20 KHz.
	Connectors:	Speakers A: 5-way binding posts (accommodates dual banana plugs, spade lugs, bare wires, etc.) Speakers B/Remote Headphone: XLR.
INPUTS:	Input Impedance:	20K ohms.
	Sensitivity:	-1.9 dBu (625 mV) required for full output into 8 ohms.
	Connectors:	HA-6A, 1/4" phone, unbalanced; HA-6AB, both phone (unbalanced) and XLR (balanced).
GENERAL:	Distortion:	.01% THD at full rated power at 1 KHz; .05% THD 20Hz to 20 KHz.
	Dynamic Range:	Greater than 99 dB
	Frequency Response:	+0, -1 dB from 20 Hz to 20 KHz, 1 watt output.
	Dynamic Headroom:	2 dB, stereo, measured with 10 ms tone burst at 1 KHz, 1% duty cycle.
	Damping Factor:	120 at 1 kHz
	Slew Rate:	20V / μ Sec
	Power Requirement:	120 VAC, 60 Hz, 130 watts
	Mechanical:	Dimensions: 1.75" H x 19" W x 7.25" D. Weight: 9 lbs (4.2 kg).
	Agency Approvals:	UL listed; CUL listed
NOTE:		0 dBu equals .775 Vrms.