

8-CHANNEL AMPLIFIER WITH DSP



Front view



Rear view

The Stealth Acoustics 8400 is an integrated eight-channel amplifier / speaker optimization system designed as a low distortion power source for Stealth Acoustics wall or ceiling mounted, invisible speaker panels or other unpowered speakers. Intended for whole house audio or home theater amplification applications, the 8400 may stack with other components or mount in a standard 19" (482 mm) equipment rack requiring only two RU spaces-3-1/2" (89 mm). Removable rack mount ears are provided. The 8400 delivers 80 watts per channel into an 8Ω load and adjacent channels are bridgeable to create a 160W output.

A DSP-based equalizer section offers pre-defined EQ settings for optimizing all Stealth speakers. With a full complement of input connectors, the 8400 is easily integrated into any audio system. Inputs include assignable RCA line level inputs per channel and a zone "buss" input, allowing for connection to individual channels, bridged channels or a single stereo buss source. The 8400 amplifier output connection is via detachable phoenix-style connectors designed to accept heavy gauge speaker wires. A selectable automatic turn-on feature activates the amplifier only when audio signals are present. Other features include

an internal, quiet, multi-stage cooling fan that automatically engages as required. Front panel controls include a unique data-wheel parameter selection device for user setup, volume control, tone control, bridging, muting, optimization and input assignments. LED indicators are provided on each channel for signal presence and clip as well as to indicate channel status. IR control and a handheld IR remote control are standard features. 110VAC and 220VAC input line voltages are selectable, via a rear panel switch. The 8400 carries a 2 year manufacturer's warranty.

8400 8-CHANNEL AMPLIFIER WITH DSP

Architectural & Engineering Specifications

The 8400 amplifier shall be an 8-channel device incorporating class AB discreet output circuitry and a "switch-mode" power supply for high-efficiency and high-current output, providing a minimum of 80 watts per channel into 8 ohms with all channels driven and each independent amp channel shall support a minimum 4 ohm load. Each adjacent amplifier channel pair may be bridgeable to increase output power to 160 watts into 8 ohms per paired channel. Signal to noise shall be greater than 86dB below rated power on each channel and THD shall be less than 0.05 percent @1watt/100Hz. Maximum current draw shall be 7.5 amps or 900W/115VAC. The amplifier shall have a switch selectable AC mains power input supporting 115VAC 60Hz and 230VAC 50Hz voltages. Power inlet shall be a standard IEC type to support international power cords and voltages. Dual rear panel fans shall provide heat management control by exiting air at the rear of the unit.

The amplifier shall have an individual, assignable, unbalanced RCA phono jack input for each channel and a common assignable dual-channel buss input to allow any channel to receive either left, right or left+right input signals (buss mono sum). All amplifier parameter functions shall be programmed via the front panel controls, or by the included handheld IR remote control. IR control of the amplifier is provided for all front panel controlled functions via an IR receiver mounted into the front display or via a rear panel 1/8" mini TRS IR input jack, all to support local and 3rd-party control of amplifier parameter functions. The amplifier shall also have 4 assignable IR "groups" (A B C and D) to facilitate ease of remote controlling multiple channels simultaneously.

Each individual channel (or bridged amplifier pairs) shall have the following, DSP-based user selectable functions and features; volume control, mute, low-pass filter 10dB/oct@100Hz, treble shelf control at 10kHz, bass shelf control at 100Hz, display LED brightness, and signal delay adjustable from 0-250 feet. The unit shall also have a "lock" setting to prohibit unintentional parameter adjustment. Each parameter may be selected for each of the 8-channels or globally using the "ALL" channels selection function.

The amplifier shall have an automatic "sleep mode" which shall turn off all displays and indicators when the amplifier is not actively functioning and shall draw a minimum of current when in a quiescent state to conserve energy and to meet certain international conservation metrics.

The unit shall weigh 18 lbs (8.2 kg) and be supplied with removable rack ears. Removable Phoenix-type speaker connectors are provided with the amplifier and support cable sizes up to 12 gauge. The unit shall measure 19" (482 mm) wide with rack ears - 17" (432 mm) wide without ears, 3-1/2" (89 mm) high and 13-5/8" (346 mm) deep.

The amplifier shall conform to the following international standards; CE, C-tick, FC and RoHS.

The Stealth Acoustics 8400 amplifier shall be covered by a 2 year manufacturer's warranty.

Product Specifications

Mono Power Output

80 watts @ 8Ω < 0.05 THD
160 watts @ 4Ω < 0.05 THD
160 watts @ 8Ω < 0.05 THD (bridged)

Total Harmonic Distortion

<0.05 @ 1 watt 4Ω / 100Hz

Signal to Noise Ratio

86 dB below rated output

EQ Section

Pre-defined curves for Stealth Acoustics LR3, LR8, LR6 invisible speakers and B30 (100 Hz high-pass filter for subwoofer) along with treble and bass controls for each channel

System Impedance

8Ω nominal - 4Ω minimum

Current Draw

12A @ full draw - 115-230 VAC/50-60Hz

Dimensions

Width: 19" (482 mm)
Height: 3-1/2" (89 mm) - without feet
Depth: 13-5/8" (346 mm)

Finish

Black anodized aluminum

Shipping Weight

20 lbs. (9.1 kg)

Included Accessories

Removable power cord, removable rack ears, IR remote control

Product Features and Functions

Rack Mountable

(2) RU spaces: 3-1/2" (89 mm)
(Provided rack ears are removable)

DC Protected

Fixed high pass filter @ 18Hz

Power LED

Blue when system is active

Auto-on Power Conservation Function

Saves power by turning off displays, LEDs, and other non-essential functions

Inputs

RCA assignable Line Level Left/Right Inputs per channel
RCA Line Level Left/Right Buss Inputs (assignable per channel)

Amplifier Output Connector

Removable Phoenix-type connector

Front Panel LED's

Signal, clip, bridged, optimization, selected channel and mute (each channel)

Display Window

Main parameter display via easy-to-read back-lit display

Fan Cooled

Dual automatic, multi-stage

115v-60Hz and 230v-50Hz Input Voltages

Stealth Acoustics

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