



Powerflex Multichannel Amplifiers

SRA-120 Convection Cooled Amplifier

FTX MOS-FET Amplifiers

MFA Bipolar Amplifier

PowerCards

P r o d u c t I n f o r m a t i o n

Powerflex Amplifiers

POWERFLEX 4400 FOUR CHANNEL



With a vast array of multimedia products now incorporated into a most diverse mix of installations (each with its multiple zones and sub zones) the need for multichannel amplification has never been greater. Ashly rises to the occasion with the Powerflex—a revolutionary line of intelligently designed multichannel power amplifiers.

Using a state of the art, high-speed MosFet switching design with spread spectrum switching technology, the Powerflex provides uncompromised power with an efficiency of up to five times greater than conventional Class A or AB linear power amplifiers. The exceptional efficiency of Powerflex greatly reduces wasted power (heat) and delivers clean audio fidelity through four or six independent channels!

These channels may be used as individual, independent power amplifiers with more than enough power for nominal audio applications. Channels may be bridged in pairs—the Powerflex 6250, for instance, has been designed to function as six independent 25 Volt or, when configured in bridged mode, up to three independent 70 Volt amplifiers without the need of external transformers. Of course, Powerflex is covered by our exclusive 5-year, Worry-Free warranty.

FEATURES:

- Six Channel Amplifier -150W/Ch @ 8ohms, 250W/Ch @ 4ohms
- Four Channel Amplifier— 275W/Ch @ 8ohms, 400W/Ch @ 4ohms
- 25V and 70V System Applications (6250 only)
- High-Speed Switched MosFet Output Design with Spread Spectrum Switching Technology
- Superior Efficiency Over Conventional Linear Amplifiers
- Input Module with Level Controls Located on Rear Panel
- Switchable HPF on Inputs
- XLR—1/4", Euroblock Input Connections
- 5-Way Binding Post Output Connections
- Individual Channel Front Panel Level and Protection Indicators
- Multiple Protection Circuits
- Exceptional Audio Fidelity
- Bridgeable Channel Pairs
- Internal Modular Design
- Quiet, Three-Speed Fan
- Front In/Rear Out Channeled Air- Flow

POWERFLEX 6250 SIX CHANNEL



POWERFLEX AMPLIFIER SPECIFICATIONS:

6250: Power output: (per channel, six channels driven at 1kHz, 0.1%THD)
 8ohms: 150 Watts RMS
 4ohms: 250 Watts RMS
 (bridged mono mode)
 8ohms: 500 Watts RMS
 70V: 500 Watts RMS

4400: Power output: (per channel, four channels driven at 1kHz, <0.1%THD)
 8ohm: 275 Watts RMS
 4ohm: 400 Watts RMS
 Mono Bridged (2 channels)
 8ohm: 800 Watts RMS
 Frequency response:
 8ohm: +/-0.5dB 20Hz-20kHz
 4ohm: +/-1.5dB 20Hz-20kHz

Full power input sensitivity: 1.05V RMS (2.6dBu) (6250)
 1.25V RMS (4.15dBu) (4400)

Total harmonic distortion: <0.2% (rated power, 8ohms, 20Hz-20kHz)

SMPTE IM distortion (60Hz/7kHz 4:1): <0.2%, 8ohms

Output hum and noise: -100dB from full output (20Hz-20kHz, A-weighted)
 High Pass Filter: 50Hz, 12dB/octave
 Voltage Gain: 32X (30.1dB)
 Crosstalk: < -80dB (20Hz - 1kHz)
 Signal Present Signal Sensitivity: 13mV RMS (-35.5dBu)
 Input impedance: 10kOhm balanced, 37kOhm unbalanced
 Cooling: Forced Air, Thermal Sensitive 3-Speed Fan, Front Inlet/Rear Outlet

Connections: Input: XLR - 1/4" (Pin 2 Hot, Tip Hot), Euroblock
 Output: 5-Way Binding Post

Power requirements: 110-125VAC, 220-250VAC, 50/60Hz
 Typical Idle Current 6250 (4ohm load x 6 Channels):
 120V: 0.81A
 240V: 0.42A

Typical Idle Current 4400 (4ohm load x 4 Channels):
 120V: 0.9A
 240V: 0.5A

Current with Typical Audio Program Material 6250 (4ohm load x 6 Channels):
 120V: 12A
 240V: 6A

Current with Typical Audio Program Material 4400 (4ohm load x 4 Channels):
 120V: 7A
 240V: 3.5A

Size: 19"W x 5.25" H x 16.5" D
 Shipping weight: 45lbs

Specification conditions are: 120VAC mains at 60Hz, 25° C



Powerflex Amplifiers

POWERFLEX 470 FOUR CHANNEL 70V



Today's 70 Volt commercial amplification systems are likely to be a multi-zoned system requiring more than one channel or a pair of channels of amplification. Powerflex models 470 and 670 provide four and six channels of power amplification with power ratings sufficient to drive multiple speakers and eliminate the need for external output transformers on the power amplifier.

The Powerflex-470 is a four channel amplifier capable of 4 zone operation delivering 250W per channel and the Powerflex-670 has six channels capable of a 6 zone operation with a 200W per channel rating. Channels of both amplifiers may be bridged in pairs for 140 Volt applications.

Both amplifiers use the Powerflex Series high-speed MOSFET switching design with spread spectrum switching technology and are housed in a 3RU high chassis. Modular input panels with level controls and euroblock connectors are installed on the rear panel. Speaker connections are made with screw terminal output connectors. A two speed cooling fan maintains airflow from front to back. Each channel has signal, clip, thermal and protect LEDs located on the front panel.

FEATURES:

- Four Channel Amplifier— 250W/Ch @ 70V, 500W/Ch @ 140V
- Six Channel Amplifier -200W/Ch 70V, 400W/Ch @ 140V
- All 70V Multichannel System Applications
- High-Speed Switched MosFet Output Design with Spread Spectrum Switching Technology
- Superior Efficiency Over Conventional Linear Amplifiers
- Input Module with Level Controls Located on Rear Panel
- Switchable HPF on Inputs
- Euroblock Input Connections
- Screw Terminal Output Connections
- Individual Channel Front Panel Level and Protection Indicators
- Multiple Protection Circuits
- Exceptional Audio Fidelity
- Bridgeable Channel Pairs
- Internal Modular Design
- Quiet, Two-Speed Fan
- Front In/Rear Out Channeled Air- Flow

POWERFLEX 670 SIX CHANNEL 70V



POWERFLEX 70V AMPLIFIER SPECIFICATIONS:

470 Rated Per Channel, Two Channels Driven
70V: 300 Watts RMS
140V (Mono Bridged, 1-Channel): 600 Watts RMS

470: Rated Per Channel, Four Channels Driven
70V: 250 Watts RMS
140V (Mono Bridged, 2-Channels): 500 Watts RMS

670 Power Output: (Rated Per Channel, Two Channels Driven)
Rated Per Channel, Two Channels Driven
70V: 300 Watts RMS
140V (Mono Bridged-1, Channel): 600 Watts RMS

670: Rated Per Channel, Six Channels Driven
70V: 200 Watts RMS
140V (Mono Bridged, 3 channels): 400 Watts RMS

Frequency response: ± 0.5 dB (20Hz-20kHz, full power)

Input impedance: 10kOhm balanced, 37kOhm unbalanced

Full power input sensitivity: 1.4V RMS (5.1dBu)

Total harmonic distortion: <0.2% (rated power, 8ohms, 20Hz-20kHz)

SMPT E IM distortion (60Hz/7kHz 4:1): <0.2%, 8ohms

Output hum and noise: -100dB from full output (20Hz-20kHz, A-weighted)

High Pass Filter: 80Hz, 12dB/octave

Voltage Gain: 50X (34.0dB)

Crosstalk: < -80dB (20Hz - 1kHz)

Signal Present Signal Sensitivity: 14mV RMS (-34.9dBu)

Cooling: Forced Air, Thermal Sensitive 2-Speed Fan, Front Inlet/Rear Outlet

Connections:
Input: Euroblock
Output: Screw Terminal

Power requirements: 110-125VAC, 220-250VAC, 50/60Hz

Typical Idle Current 470:
120V: 0.94A
240V: 0.48A
Current with Typical Audio Program Material 470: (4 Channels Driven)
120V: 10.0A
240V: 6A

Typical Idle Current 670:
120V: 0.9A
240V: 0.5A
Current with Typical Audio Program Material 670 (6 Channels Driven)
120V: 10.0A
240V: 5.0A

Size: 19"W x 5.25" H x 16.5" D

Weight 470: 45 lbs. net, 52 lbs. shipping

Weight 670: 47 lbs. net, 54 lbs. shipping

Specification conditions are: 120VAC mains at 60Hz, 25° C



Two Channel Amplifiers

SRA-120 CONVECTION COOLED AMPLIFIER



Some applications require only moderate amounts of power, and sometimes acoustical considerations preclude the use of even the quietest fan available. For these applications, Ashly offers the compact SRA-120 professional stereo amplifier. It offers superior sonic quality, rugged construction, and many useful features in a single rack space chassis. The amplifier will deliver 60 watts per channel into 4 ohms stereo, 40 watts per channel into 8 ohms stereo, or 120 watts total into 8 ohms mono-bridged. The amplifier design is based on "Class A" voltage amplifier stages with a complementary bipolar output section for low distortion and excellent overload behavior. Features include turn-on delay circuitry and instantaneous turn-off to eliminate any transients to the speaker. Each channel will also independently turn off its output if an overheated condition occurs.

The back panel provides both balanced 1/4" jacks and balanced screw terminal inputs. Three push-button switches allow selection of stereo, mono, bridged mode, and input sensitivity, allowing the amplifier to be applied in any configuration. The amplifier's signal ground can also be lifted from chassis ground via a barrier strip jumper.

Features:

- U.L. Listed
- Class-A Full Complementary Front End
- Stereo, Mono & Bridging Modes
- Barrier Strip and 1/4" Inputs
- Input Sensitivity Select Switch
- Turn-on Delay
- Instantaneous Turn-off
- Independent Thermal Protection
- Convection Cooled

The SRA-TR2 60W/70V Transformer Option is an accessory for the SRA-120 providing two 60W transformers and a screw terminal block mounted on a 2RU panel. The SRA-TR2 is capable of converting the power output of the SRA-120 to drive 70 Volt lines. Primary leads are 14" and the secondary leads are terminated to a screw terminal block mounted on the back of the panel. Input impedance is 4 ohms.

Features:

- Designed Specifically for the SRA-120
- Mounted, Dual 60W/70V Transformers and Terminal Strip
- Secondary Wiring Terminated to #8 Screw Terminal Block
- 14" 20 ga. Input Wire



SRA-TR2 60W/70V TRANSFORMER OPTION



SRA-120 AMPLIFIER SPECIFICATIONS:

Output power* (per channel, both channels driven at 1kHz, <0.1% THD):

- 8 ohms: 40 Watts RMS
- 4 ohms: 60 Watts RMS
- 8 ohms (bridged mono): 120 Watts RMS

FTC Continuous power (20Hz–20kHz):
8 ohms: 40 Watts RMS

Frequency response: 20Hz–20kHz, ± 0.2 dB;

Total harmonic distortion (at rated power, 8ohms): 0.01%, 1kHz; .05%, 20Hz–20kHz

IM distortion (at rated power, 8ohms): 0.01%, SMPTE

Output hum and noise (20Hz–20kHz unweighted): –100dB from full output

Damping factor: >200 into 8ohms <1kHz

Crosstalk: –90dB (20Hz–1kHz)

Input sensitivity: Switchable .775 Vrms/.245 Vrms

Bandwidth: 100kHz

Slew rate: 20V/ μ S

Rise time: 2 μ S 10–90%

Voltage gain: Switchable 26.0dB/36.0dB

Input impedance: 15k Ohm balanced

Amplifier protection: Fuseless short-circuit protection, ultrasonic and RF protection, advanced thermal protection

Load protection: Turn-on delay with level ramp-up, DC fault protection, ultrasonic limiting, clip limiting

Cooling: Convection cooled

Power requirements: 120VAC, 50–60Hz (240V available)

Shipping weight: 20lbs

Dimensions: 19" L x 1.75" H x 16.5" D

SRA-TR2 SPECIFICATIONS:

Maximum Wattage: 60 Watts (RMS)

Input: 4 ohms

Output: 70.7 Volts RMS

Frequency Response: 50–15,000 Hz, +/- 2dB

Insertion Loss: 0.5dB

Termination: 14", UL1015, 20 ga. lead wire

Dimensions: 19.0" W x 3.5"H x 3.0"D

Weight: 5.0 lbs. Net 7.0 lbs shipping



Two Channel Amplifiers

FTX-1501 MOS-FET AMPLIFIER



Ashly's FTX Series III power amplifiers are world renowned for both their excellent sound and rugged reliability. In addition to offering the classic sonic excellence and reliability of Ashly's past designs, the FTX Series III amps offer complete compatibility with Ashly's optional Powercard input modules. The FTX Series III models utilize Ashly's proven output stage design, consisting of the latest generation of paralleled power MOS-FETs for current gain. Both models feature improved thermal dissipation and increased performance with extremely low distortion when driving reactive loads like loudspeakers. Protection against DC or ultrasonic signals appearing at the outputs has been incorporated into the design, and output relays have been added to provide turn-on delay. The FTX-1501 puts out 185 watts and 275 watts into eight and four ohms, respectively. Additionally, it may be used as a 70V amplifier, delivering 550 watts without the need for transformers. The top-of-the-line FTX-2001 delivers a full 300 watts per channel at eight ohms, 475 watts into four, and 550 watts when confronted with a true two ohm load. All models may be mono-bridged, at a power rating of twice their four ohm per channel capability. The unmatched reliability of power MOS-FET technology, combined with the integrity of Ashly's rugged mechanical design, ensures many years of trouble-free service. The FTX-1501 and FTX-2001 models are *THX™ approved for use in cinema and home theater applications. All Ashly FTX amplifiers are U.L. listed, and are covered under our exclusive Five Year Worry-Free Warranty program, offered at no extra cost to the user.

FEATURES:

- Turn-on Delay
- Fuseless Short Circuit Protection
- U.L. Listed
- MOS-FET Output Devices
- Class-A Full Complementary Front End
- Modular Construction
- XLR, 1/4", and Barrier Strip Inputs
- Stereo, Parallel Mono & Bridging Modes
- LED Level Meters
- Forced Air Cooling
- Perfect Overload and Square Wave Response
- Stable Into Any Load
- Self Protecting Under Virtually All Conditions
- Input Transformers Optionally Available
- PowerCard Input Option Ready



FTX-2001 MOS-FET AMPLIFIER



FTX AMPLIFIER SPECIFICATIONS:

Output power (per channel, both channels driven at 1kHz, <0.1% THD):

FTX-1501:	
8 ohms:	185 Watts RMS
4 ohms:	275 Watts RMS
2 ohms:	275 Watts RMS
8 ohms, bridged mono:	550 Watts RMS
4 ohms, bridged mono:	550 Watts RMS

FTX-2001:	
8 ohms:	300 Watts RMS
4 ohms:	475 Watts RMS
2 ohms:	550 Watts RMS
8 ohms, bridged mono:	950 Watts RMS
4 ohms, bridged mono:	1100 Watts RMS

FTC Continuous power (per channel from 20Hz–20kHz, <0.1% THD):

FTX-1501:	
8 ohms:	175 Watts RMS
4 ohms:	250 Watts RMS

FTX-2001:	
8 ohms:	250 Watts RMS
4 ohms:	400 Watts RMS

Frequency response: 20Hz–20kHz, ±0.2dB; 8Hz–100kHz, ±3dB

Total harmonic distortion (at rated power, 8 ohms): 0.01%, 1kHz; 0.05%, 20Hz; 0.1%, 20kHz

IM distortion (at rated power, 8ohms): <0.01% SMPTE, <.05% IHF

Output hum and noise (20Hz–20kHz unweighted):
 FTX-1501: –100dB from full output
 FTX-2001: –105dB from full output

Damping factor: >250 into 8ohms <1kHz
 Crosstalk: –90dB (20Hz–1kHz)

Input sensitivity:
 FTX-1501: 1.3 Vrms
 FTX-2001: 1.7 Vrms

Bandwidth: 100kHz
 Slew rate: 50 V/μS
 Rise time: 2 μS 10–90%
 Voltage gain: 29dB

Input impedance: 15k Ohms, balanced ±20%, level control full CW

Amplifier protection: Fuseless short-circuit protection, ultrasonic and RF protection, thermal protection

Load protection: Turn-on delay with level ramp-up, DC fault protection, ultrasonic limiting

Cooling: Forced air

Power requirements: 120VAC, 50–60Hz (240 V available)

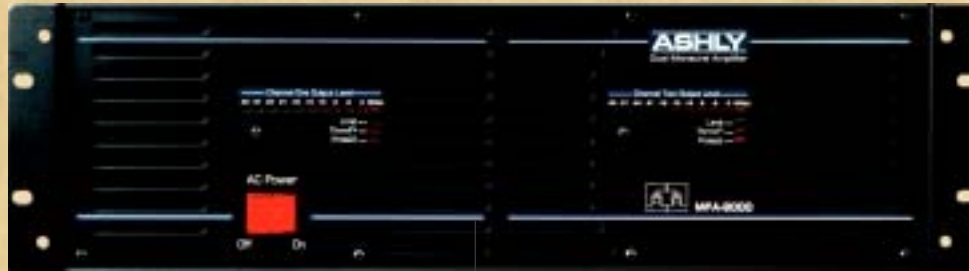
Shipping weight:
 FTX-1501: 46 lbs.
 FTX-2001: 60 lbs.

Dimensions:
 FTX-1501: 19" L x 3.5" H x 16.5" D
 FTX-2001: 19" L x 5.25" H x 16.5" D



Two Channel Amplifiers

MFA-8000 BI-POLAR AMPLIFIER



Digital audio sources have quickly become the accepted standard of contemporary music, sometimes requiring massive amounts of raw power to reproduce the extended dynamic range of this technology faithfully. Recognizing the challenge presented by these innovations, Ashly engineers have developed the MFA-8000, a high-powered amplifier designed to meet the needs of today's demanding sound professionals. The Ashly design team took a fresh new approach to the design of the MFA-8000. A three-level MOS-FET power supply is employed for maximum power efficiency and minimum AC power requirements. All power and gain stages use discrete, full complementary, class-A circuitry for very low distortion and clean overload behavior. The MFA-8000 includes sophisticated fault monitoring circuits to detect abnormal conditions. Advanced thermal protection circuitry senses the temperature at four different locations within the amp and adjusts fan speed accordingly. Each channel's limiting, thermal, and protection management are completely independent of the other channel. The powerful MFA-8000 puts out 750 watts per channel continuous into 8 ohms, 1200 watts into 4, and a thundering 1500 watts into 2 ohm operating conditions. Our 5-year, Worry-Free warranty comes standard.

FEATURES:

- Turn-on Delay
- 5-Year Worry-Free Warranty
- Bipolar Output Devices
- Class-A Full Complementary Front End
- Modular Construction
- XLR, 1/4", and Barrier Strip Inputs
- Stereo, Parallel Mono & Bridging Modes
- LED Level Meters and Status LEDs
- Stable Into Any Load
- Self Protecting Under Virtually All Conditions
- Input Transformers Optionally Available
- PowerCard Input Option Ready
- Speakon and Binding Post Outputs
- High-efficiency 3-Step Power Supply

MFA AMPLIFIER SPECIFICATIONS:

Output power* (per channel, both channels driven at 1kHz, <0.1% THD):

8 ohms:	750 Watts RMS
4 ohms:	1200 Watts RMS
2 ohms:	1500 Watts RMS
8 ohms (bridged mono):	2400 Watts RMS
4 ohms (bridged mono):	3000 Watts RMS

FTC Continuous power (20Hz–20kHz):

8 ohms:	720 Watts RMS
4 ohms:	1100 Watts RMS

Frequency response: 20Hz–20kHz, ± 0.2 dB; 8Hz–100kHz, ± 3 dB

Total harmonic distortion: 0.025% (450 watts into 8ohms, 20Hz–20kHz, increasing to <.25% at 12kHz)

Output hum and noise (20Hz–20kHz unweighted): –105dB from full output

Damping factor: >200 into 8 ohms <1kHz

Crosstalk: –90dB (20Hz–1kHz)

Input sensitivity: 1 Vrms

Bandwidth: 100kHz

Slew rate: 25 V/ μ S

Rise time: 2 μ S 10–90%

Voltage gain: 80x (38dB)

Input impedance: 20kOhm balanced

Amplifier protection: Fuseless short-circuit protection, ultrasonic and RF protection, advanced thermal protection

Load protection: Turn-on delay with level ramp-up, DC fault protection, ultrasonic limiting, clip limiting

Cooling: Forced air with 2-speed fan

Power requirements: 120VAC, 50–60Hz (240 V available)

Shipping weight: 68lbs

Dimensions: 19" L x 5.25" H x 16.5" D



Amplifier Option Cards

POWERCARDS

Designed to fit into MFA and FTX Series amplifiers, Ashly's compact Powercard Modules allow you to add powerful and versatile features—from mixing to compression to crossover functions—directly to your amp. Not only does this give you a more integrated, cost-effective system by eliminating the need for many off-board devices; it also provides unparalleled performance with the modules built to exploit the amps' fullest potential and operate flawlessly.



MM-6 Mic/Line Mixer
 Features two stereo or four mono line inputs, two mic inputs with low-cut filtering, switchable phantom power, stereo/mono/bridged mono switching, and insertion points on both channels.



XR-1 Two-way Crossover
 Features 24dB/octave filters, 20Hz low-cut filter, 360° phase control, internally-adjustable frequency, CD horn EQ switching, auxiliary outputs, and a mode switch for biamped or low-only configuration.



CL-2 Compressor/ Limiter
 Features adjustable threshold (peak detect) with indicator LED, 10:1 ratio for driver protection, stereo/mono/bridged mono operation, and tamperproof recessed controls.



TR-2 Transformer-isolated Input
 Features transformer isolation of inputs, stereo/mono/bridged mono switch, 1/4" TRS, XLR, and barrier strip connectors, and individual gain potentiometers.

amp-0803



Ashly Audio, Inc. 847 Holt Road, Webster, NY 14580-9103 USA
Toll Free: 800.828.6308 • Tel: 585.872.0010 • Fax: 585.872.0739 • <http://www.ashly.com>