



FA SERIES

FA-250.4

FA-125.4

FA-125.2

4- and 2-channel

Power Amplifier

Operating Manual



Important Safety Instructions • *Consignes de sécurité à lire attentivement*

Avis - Risque de Choc Electrique - Ne Pas Ouvrir



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons. The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the device.

Le symbole de la foudre est prévu pour sensibiliser l'utilisateur à la présence de tension de voltage non isolée à l'intérieur de l'appareil. Elle pourrait constituer un danger de risque de décharge électrique pour les utilisateurs. Le point d'exclamation dans le triangle équilatéral alerte l'utilisateur de la présence de consignes qu'il doit d'abord consulter avant d'utiliser l'appareil.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
6. Do not use this apparatus near water.
7. Clean only with dry cloth.
8. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
9. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus.
10. Do not defeat the safety purpose of the polarized or groundingtype plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
11. Protect the power cord from being walked on or pinched particularly at plugs,

convenience receptacles, and the point where they exit from the apparatus.

12. Only use attachments/ accessories specified by the manufacturer.
13. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
14. Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
1. Lisez ces instructions.
2. Conservez ces instructions.
3. Observez les avertissements.
4. Suivez ces instructions.
5. Pour réduire le risque de feu ou la décharge électrique, ne pas exposer cet appareil pour pleuvoir ou l'humidité.
6. Ne pas utiliser l'appareil près de l'eau.
7. Le nettoyer à l'aide d'un tissu sec.
8. Ne pas bloquer les ouvertures de ventilation, installer selon les consignes du fabricant.
9. Eloigner des sources de chaleur tel: radiateurs, fourneaux ou autres appareils qui produisent de la chaleur.
10. Ne pas modifier ou amputer le système de la mise à terre. Une prise avec mise à terre comprend deux lames dont une plus large ainsi qu'une mise à terre: ne pas la couper ou la modifier. Si la prise murale

n'accepte pas la fiche, consulter un électricien pour qu'il remplace la prise désuète.

11. Protéger le cordon de secteur contre tous bris ou pincement qui pourraient l'endommager, soit à la fiche murale ou à l'appareil.
12. N'employer que les accessoires recommandés par le fabricant.
13. N'utiliser qu'avec les systèmes de fixation, chariots, trépied ou autres, approuvés par le fabricant ou vendus avec l'appareil.
14. Débrancher l'appareil lors des orages électriques ou si inutilisé pendant une longue période de temps.
15. Un entretien effectué par un centre de service accrédité est exigé si l'appareil a été endommagé de quelque façon: si il a été exposé à la pluie,, l'humidité ou s'il ne fonctionne pas normalement ou qu'il a été échappé.

WARNING: THIS APPARATUS MUST BE GROUNDED (EARTHED)

FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in both a commercial and residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unpacking

After unpacking, please inspect for any physical damage. Save the shipping carton and all packing materials, as they were carefully designed to reduce to a minimum the possibility of transportation damage should the unit again require packing and shipping. In the event that damage has occurred, immediately notify your dealer so that a written claim to cover the damages can be initiated.

The right to any claim against a public carrier can be forfeited if the carrier is not notified promptly and if the shipping carton and packing materials are not available for inspection by the carrier. Save all packing materials until the claim has been settled.

About Ashly

Ashly Audio was founded in 1974 by a group of recording engineers, concert sound professionals, and electronics designers. The first products were elaborate custom consoles for friends and associates, but business quickly spread to new clients and the business grew.

The philosophy we established from the very beginning holds true today: to offer only the highest quality audio tools at an affordable cost to the professional user – ensuring reliability and long life. Years later, Ashly remains committed to these principles.

Ashly's exclusive five-year, worry-free warranty remains one of the most generous policies available on any commercial-grade product. The warranty covers every product with the Ashly brand name, and is offered at no extra cost to you.

Please read this entire manual to fully understand the features and capabilities of this product.

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1 Introduction

Thank you for your purchase of this Ashly FA power amplifier. This product uses state of the art, light weight, high efficiency switching technology developed through years of design and testing. FA amplifiers are available in two power levels, designed to meet the most demanding live sound and fixed installation sound systems in stadiums, arenas, performance venues, restaurants, worship spaces and conference centers.

1.2 Features

- 2 x 125W (half-rack), 4 x 125W (half-rack), or 4 x 250W (full-rack) models
- Active power factor correction (PFC)
- Power-sharing on 125W models
- Low-Z (minimum 4Ω, also 25V) or High-Z (70V/100V) output mode per channel
- Euroblock input and output connectors
- Front panel soft-power switch
- Front panel level controls, fully off = mute
- Front panel status LED per channel for signal, limit, mute, input clipping, protect
- Input sensitivity select: +4dBu or -10dBv
- Standby mode contact closure with normally open/normally closed polarity switch
- Automatic sleep mode (non-defeatable)
- Front panel lock
- Remote DC level control per channel (2 channel model), per channel pair (4 channel models)
- Protect mode fault logic output

- Universal 100-240VAC operation, 50-60Hz
- Detachable AC connector
- USB connector for firmware update
- Variable cooling fan
- Rack mount or table/wall mount kit available for half-rack models
- Rear support kit available for all models
- Protection: Over-temperature, output short-circuit/over-power, output DC, mains fuse
- Safety/Compliance: UL, CE, FCC Class B, RoHS
- Ashly five year warranty

2 Requirements

Before connecting to AC mains power, make sure that the mechanical installation, wiring, cooling requirements, and controls are all set to the configuration needed for your particular application. Failure to do so could result in damage to the unit or to other components in the system.

2.1 AC Mains Requirements

This amplifier will auto-detect AC mains voltage from 100-240VAC, 50-60Hz. At nominal 120VAC mains, the allowed operating range is 85-135VAC to allow for brownouts or power surges, and for nominal 240VAC operation the range is 170-265VAC. Use only the provided AC cord to connect to AC mains. The power consumption is indicated on the back panel near the AC inlet. To reduce the risk of ground loop hum, all sound system ground references should originate at the same AC power distribution point. *Do not lift or remove the amplifier power cord ground pin.*

2.2 Input Signal Wire Requirements

Use shielded wiring for balanced or unbalanced audio signals. Shielding which is properly grounded will protect the signal from outside electrical interference such as RF, fluorescent lighting, and computer/video emissions.

Unbalanced lines of less than 10 feet are generally ok, but for greater distance or noisy field environments, always use balanced signal wiring.

If using an unbalanced input source, wire the hot signal to the amplifier's (+) input Euroblock pin, and connect the (-) input pin to ground. Do not leave the (-) input pin unconnected.

Avoid running low level signal wires in close proximity or parallel to long speaker cables, AC power cables, or power transformers, as they can induce hum or oscillation.

2.3 Speaker Wire Requirements

Note: The sound system installer is responsible for using loudspeaker wiring that is in compliance with local electrical code. The following recommendations for speaker wiring are based on UL 60065 section 5.2-d and the US National Electrical Code Article 725. These are only guidelines, consult your local code for specific up to date requirements.

- Class 2 wiring is typically used when the maximum measured open-circuit speaker output voltage is less than 120V rms.

Speaker wire gauge: FA amplifiers are capable of delivering high levels of output current, so the wire gauge used for speaker outputs is important. Inadequate wire gauge, especially over long distance, adds significant resistance to the speaker's own impedance, reducing the power which is actually delivered to the

speaker. It could also result in a decreased damping factor and potential fire hazard. Since power at the speaker load is of primary concern in system design, refer to the table below to best determine appropriate wire gauge for your application.

The following table lists the resistance per 100 feet of common copper wire gauges, and also lists the percentage of the speaker load power which would be lost as heat in an arbitrary 100 ft run of different gauges of 2-conductor copper speaker wire.

Wire Gauge	Ohms /100ft	8Ω load	4Ω load	2Ω load
#8	0.0605Ω	0.8%	1.5%	3%
#10	0.1018Ω	1.3%	2.5%	5%
#12	0.1619Ω	2.0%	4.0%	8%
#14	0.2575Ω	3.2%	6.4%	12.8%
#16	0.4094Ω	5.1%	10.2%	20.4%
#18	0.6510Ω	8.1%	16.3%	32.6%

This table expresses the power loss as a percentage of the load's power rather than the total amplifier output power in order to accurately determine power loss at other cable lengths. For example, if you plan to deliver 150 watts to an 8 Ohm load through 50 ft of 14 ga. cable, the power loss in the cable would be half that of a 100 ft run of #14 wire as shown in the table, or 1.6% of 150W, which is an insignificant 2.4 watts. However, if you were to run 200 ft of 18 ga. cable to a 2 Ohm load, the loss would be twice that of the 100 ft run shown in the table, or 65.2% of 250W, which is 163 watts lost as heat. Always be sure to use adequate gauge speaker wire.

2.4 Remote Control Wire

- Remote DC level control - Bell or telephone wire is sufficient for DC level control to an Ashly WR-1 or similar equivalent. CAT5 cable can also be used. The +3V and Gnd pins can be shared among remote control potentiometers, *however do not connect remote control ground to any external grounds.*
- Remote Standby - This is a logic level signal which can use unshielded low gauge wire.

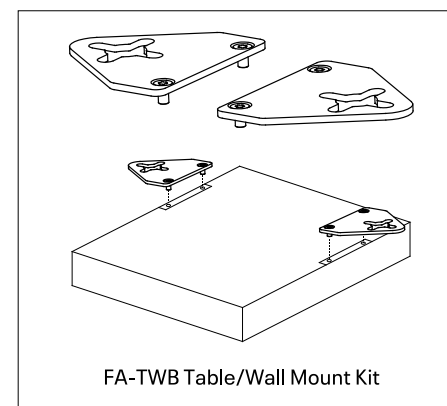
2.5 Mechanical

FA-125.2 and FA-125.4 models come in a 1RU half-rack chassis. The FA-250.4 comes in a 1RU full rack chassis. See the specifications for dimensions.

For half-rack models, two different hardware kits are available for purchase from Ashly for mounting to a 19" rack or table/wall surface.

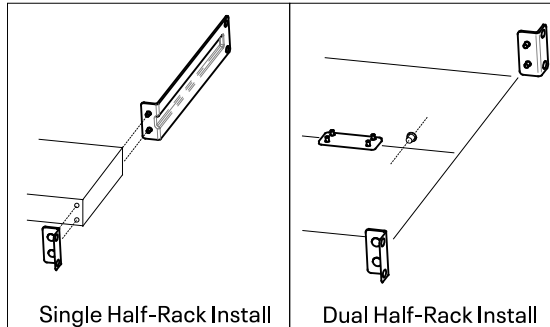
For the FA-250.4, rack ears are included in the box with each amplifier, but not installed.

A rear support kit is available for all models.

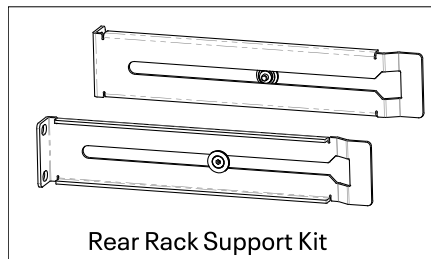


- **FA-TWB kit** (sold separately): For mounting a half-rack unit to a table or wall. Not available for full-rack unit:

- **FA-1.2RM kit** (sold separately): For installing one or two half-rack units into a 19" equipment rack:



- **FA-2.2RPM kit** (sold separately): For adding additional rear rack support to any FA amplifier:



Use all four screws when mounting the amplifier to the front rack rails. In some installations where the sound system is exposed to a high level of RF noise or system-induced oscillation, it may be necessary to ground the amplifier's chassis to the rack enclosure. This is accomplished using star type lockwashers on the four rack mounting screws, placed between the amplifier chassis and the rack rails. These star washers will penetrate through the amplifier and rack rail finish to adequately ground the chassis to the rack.

2.6 Cooling

Air vents on the amplifier rear panel must have access to free flowing room temperature air between 32°F and 104°F (0°C-40°C). Air is drawn in through the side and blown out the back. It is not necessary to leave empty rack spaces above or below the amplifier. See the specifications section for amplifier thermal output characteristics in BTU/hour.

3 Amplifier Protection

Thermal Protection - Thermal protection will engage at an internal estimated component temperature of 185°F (85°C). The amplifier will mute and maintain that state until the internal estimated component temperature drops below 176°F (80°C).

Overpower Protection - Overloading the unit's output will cause the DSP to limit the signal. Once the amplifier is no longer signaling an overload, the DSP will slowly increase the volume back to the desired level. Continuously overloading the output will ultimately cause a "pumping" sound, which will give a reduced listening experience, but isn't harmful for the amplifier. Note that long-term overload of the output may cause the thermal protection to engage.

Output DC and Rail Fault Protection - If DC is detected on the output, the amplifier will mute for a brief period and then try to resume a normal state. The amplifier will cycle this a total of 3 times, but if a DC is still present, the power supply turns off and latches, requiring a power cycle or removal of the AC cord to reset the protection circuitry.

AC Mains voltage - The amplifier should always be used in its intended voltage range of 100-240 VAC and may never exceed the approved safety limits of 85-265 VAC. Minimum startup voltage is 85VAC. A fail-safe shutdown circuit engages at 290VAC, however the amplifier may be damaged and require servicing if the mains voltage exceeds 265VAC.

4 Front Panel Features

4.1 Level Controls

Each channel has its own level control. This control also sets the maximum level allowed before any further attenuation is applied using remote DC level control. Level controls can be disabled using the Lock/Unlock DIP switch on the rear panel.

4.2 Status LEDs

Each channel uses a single three-color status LED to indicate signal, limit, mute, input clipping, and protect.

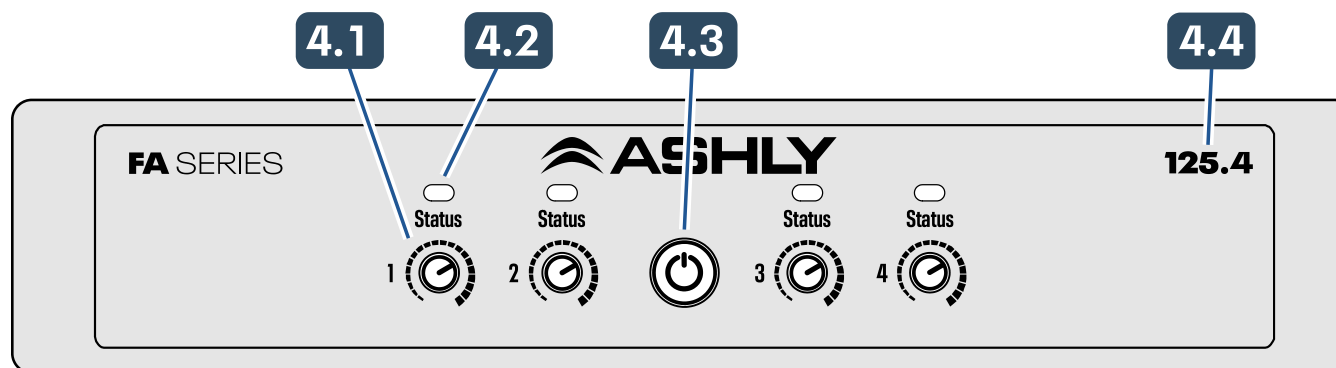
- **GREEN (signal):** The green LED lights when signal reaches 45dB below full output.
- **AMBER (limit):** The amber LED lights when output has reached full power, and indicates that automatic signal limiting is being used to prevent output clipping.
- **RED (mute, input clipping, protect):**

Mute: A status LED will be solid red when its channel is muted. Muting occurs when level controls are turned fully CCW, or when the amplifier has entered pre-sleep mode after 15 minutes of inactivity.

Input Clipping: Status LEDs will flash red when there is clipping detected at the input stage.

Protect: On 125W models, status LED pairs (ch. 1-2, 3-4) turn solid red to indicate the channel pair is in protect mode, shutting down their shared power supply. The 250W model uses a dedicated power supply on each channel, so protect mode applies to individual channels.

FA-125.4 shown, other models have similar features



4.3 Power Switch/LED

This switch is used for powering the amplifier on or off, and can be disabled using the Lock/Unlock DIP switch on the rear panel. Its white LED indicates power on, off, pre-sleep, sleep, or standby mode. The possible power switch LED states are:

- **Fully off:** The amplifier is completely off.
- **Fully lit:** The amplifier is powered up.
- **Fully lit with all status LEDs solid red:** The amplifier is in pre-sleep mode, muting all channels after 15 minutes of inactivity.
- **Brief flash every two seconds:** The amplifier is in Energy Saver sleep mode, resulting from 29 minutes of inactivity.
- **Flashing evenly @ 1Hz:** The amplifier is in standby mode due to contact closure.

Pre-Sleep Mode: The amplifier automatically mutes all channels after 15 minutes of inactivity, however remains powered up for instant wake-on-audio. Input signal greater than -45dBu will wake the amp from pre-sleep mode.

Energy Saver Sleep Mode: The amplifier will power down after 29 minutes of inactivity, then automatically wake-on-audio when it detects input signal greater than -45dBu.

If the power switch is used to turn off the unit while it is in sleep mode, the amplifier will enter the full OFF state and disable automatic wake-on-audio. The amplifier can only power up again by pressing the power switch.

Sleep and pre-sleep mode settings are non user-adjustable.

Standby Mode: The amplifier is put into standby mode using the rear panel contact closure, either by connecting or disconnecting the standby pin to ground, depending on the standby polarity DIP switch setting. *When placed in standby mode, automatic wake-on-audio is disabled.* The standby contact closure circuit has priority over automatic wake-on-audio.

4.4 Model Number

The first three numbers of the model number express the power rating per channel of the amplifier. The last number is the channel count.

5 Rear Panel Features

FA-125.4 shown, other models have similar features

5.1 Maintenance

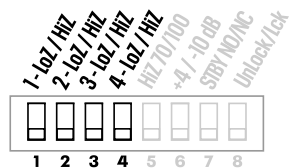
The USB micro-B connector is used for firmware update.

5.2 DIP Switches

The DIP switches set Low-Z or Hi-Z mode per channel, 70V/100V output when in Hi-Z mode, +4dB/-10dBV Input Sensitivity, Standby Polarity, and Front Panel Lock. The illustrations below show four-channel models, but are similar to the two-channel model.

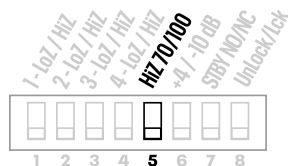
5.2a Low-Z/High-Z Select

Each channel can be individually set for "Low-Z" low impedance output (4Ω, 8Ω, 25V†) or "Hi-Z" high impedance (70V or 100V) for driving constant voltage speaker lines. Set the switch ↓ for Low-Z and ↑ for Hi-Z.



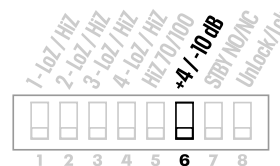
5.2b Hi-Z 70V/100V Select

On channels set for Hi-Z output, this switch sets the output voltage to either 70V or 100V. This is a global switch, meaning all channels set to Hi-Z will be either 70V or 100V. Set the switch ↓ for 70V and ↑ for 100V.



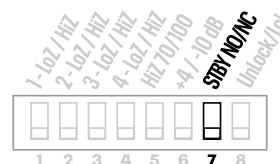
5.2c Input Sensitivity Select

Input sensitivity is the input signal level which will drive the amplifier to full output. This switch sets input sensitivity for all inputs to either +4dBu for typical pro audio device outputs, or -10dBv for typical hi-fi level devices. Set the switch ↓ for +4dBu, or ↑ for -10dBv sensitivity.



5.2d Standby Polarity Select

This switch sets the polarity requirement for placing the amplifier into standby using the contact closure pin (sec. 5.3b).



Set the switch to the ↓ position (normally open), for the amplifier to go into standby mode when the standby pin is connected to ground.

Set the switch to the ↑ position (normally closed) for the amp to go into standby mode

when the standby pin is pulled high or left unconnected.

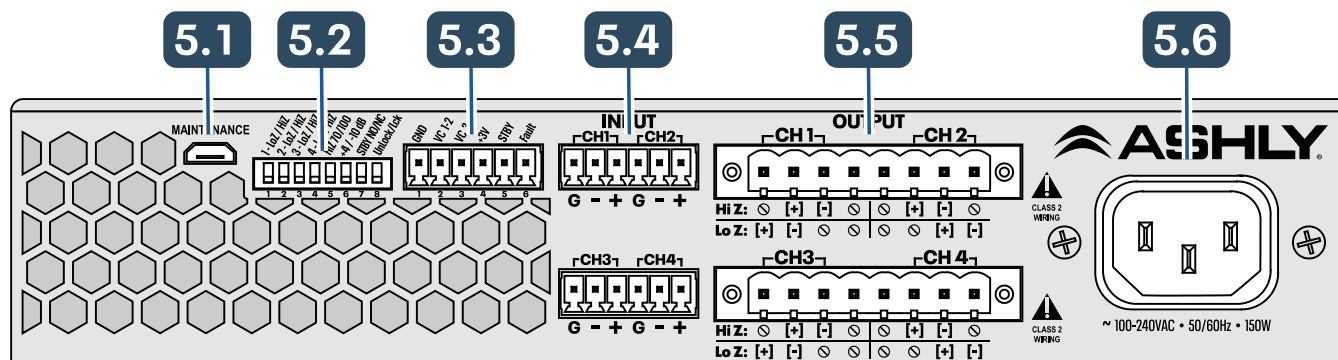
5.2e Front Panel Lock

To lock all front panel controls, set the switch to the ↑ position. Set the switch ↓ to unlock.

When the front panel level controls become locked, their current values are saved. **In order to avoid high volume when unlocking the unit, the volume will not change until the level control positions are at or lower than their initial saved values.** If unsure, turn level controls all the way down before unlocking.

Note: Remote DC level (VC) inputs continue to work normally even when front panel controls are locked.

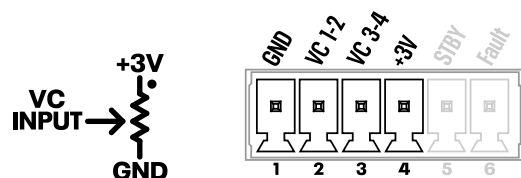
Locking the power switch only prevents the amp from being turned off. If the switch is locked and AC power gets interrupted while the unit is on, the amp will automatically power up again when AC is restored.



†see [specifications](#) section for 25V application details

5.3 Utility Function Connector

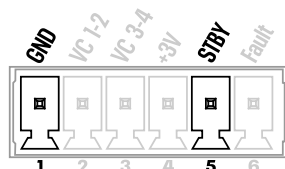
5.3a Remote DC Level Control



On the two-channel model (not shown), each VC input controls its own channel. On four channel models (shown), each VC input controls a channel pair. The maximum volume when using remote DC voltage control is set by the front panel level knobs. See the diagram above for proper wiring.

5.3b Standby

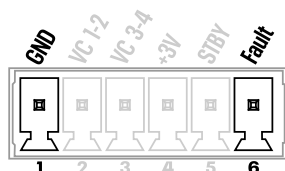
This pin is used for contact closure control of standby mode, placing the amplifier into a low power consumption state. There is also a switch that sets standby circuit polarity (see [sec. 5.2d](#)).



When the amplifier is put into standby mode using the STBY contact closure, automatic sleep mode wake-on-audio is disabled, and the front panel power switch is also disabled.

5.3c Fault Logic Output

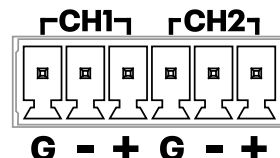
In normal operation the Fault output pin remains high (+3V). The Fault pin transitions to logic-low output (OV) if the



amplifier goes into protect mode. Use this pin to drive an external logic monitoring device.

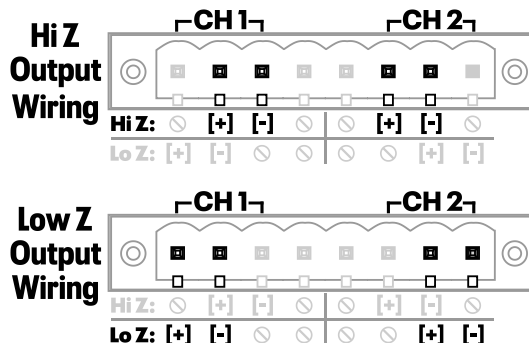
5.4 Balanced Input

A Euroblock connector is used for wiring a balanced input. If using an unbalanced signal source, wire the input signal to the (+) pin, shield to (G), and also wire the (-) input pin to ground. Maximum input level is +24dBu.



5.5 Speaker Outputs

Caution: Never connect a [+] or [-] speaker output to external ground or shared wiring panel. All speaker wire connections must be made directly to the Euroblock connector pins as shown below:



Speaker connections are configured for either high impedance output (Hi-Z), or low impedance output (Lo-Z) using the DIP switches as shown in [section 5.2a](#).

Lo-Z is for 4 Ohm or higher loads, Hi-Z is for 70V or 100V loads.

Hi-Z (70V / 100V) speaker connections use different Euroblock pins than Lo-Z. Be sure to use the correct pin connections for Hi-Z or Lo-Z applications as shown. The two innermost pins are NOT USED.

Note: Output channel pairs on 125W models utilize Power-Sharing, see power amp [specifications](#) for details.

5.6 AC Mains Connector

Always use the AC cord provided with your unit for connecting to AC power.

The amplifier will auto-detect AC voltage from 100-240VAC, 50-60Hz.

WARNING: Do not remove or lift the AC connector ground.

6 Troubleshooting

No AC Power

- Is the detachable AC power cord fully installed? Is it plugged into a known live outlet?
- Has the amplifier been powered off while in sleep mode? Press power switch again.

Unit Won't Power Off

- Are front panel controls disabled using the rear-panel DIP switch?

Level Controls Don't Work

- Are front panel controls disabled using the rear-panel DIP switch?

No Amplifier Output

- Is the amplifier in pre-sleep or sleep mode due to audio inactivity?
- Is the amplifier in standby mode?
- Is signal getting to the amplifier?
- Is the input signal properly wired?
- Are Lo-Z / Hi-Z DIP switch settings and speaker wire connections all correct?
- Are front panel or remote DC control attenuators turned down?
- Is the amplifier in protect mode?

Status LED Stays Red

- Is a front panel level control or remote DC Level control turned fully off forcing the channel to mute?
- Is the amplifier in pre-sleep mode?

- Is the amp in protect mode due to over-temperature, excess power, shorted output, or output DC?
- Is the input sensitivity switch set incorrectly for the current input signal level, causing input stage clipping? If so, increase the input sensitivity or turn down the input source level.

VC Inputs Don't Work

- Are the front panel level controls turned down?
- Were front panel level controls disabled after being turned down?

Still Not Working?

- Contact Ashly technical support at (800) 828-6308, or (585) 872-0010, or email service@ashly.com

7 Specifications

Typical Output Power

(per channel, measured in Watts)

CEA-2006/490A, 20ms 1kHz 1%THD+N, 480ms 1kHz -20dB, 120VAC, all channels driven at rated load

	FA125.2	FA125.4	FA250.4
Low Z output			
4 Ohm	125	125	250
8 Ohm	125	125	250
25V [†] (3.9 Ohms min)	125	125	160
70V/100V output			
70V	125	125	250
100V	125	125	250
Maximum Output Power during Power-Sharing*			
(per channel, in Watts)			
Power Sharing	Yes	Yes	n/a
Low Z output			
4 Ohm	250	250	n/a
8 Ohm	250	250	n/a
25V [†] (3.9 Ohms min)	160	160	n/a
70V/100V output			
70V	250	250	n/a
100V	250	250	n/a

*Power-Sharing is available on 125W models only. Each channel pair has a power supply which cannot exceed 250W. Either channel can deliver 250W if the supply allows. For example, you can pull out 250W from CH1 if you don't use CH2. Similarly, you could pull 50W from CH1 and 200W from CH2, or 125W from both channels. In any combination, the maximum power for each channel pair is 250W.

[†]For 25V output applications, set amplifier for Low Z output. Load impedance for 25V applications must be no less than 3.9 Ohms.

Power Draw

(1/8 full power, 1kHz sine-wave on all channels, in Watts)

	FA125.2	FA125.4	FA250.4
Sleep mode	<0.5	<0.5	<0.5
Idle Lo-Z (no signal)	8	15	25
Idle Hi-Z (no signal)	13	25	30
1/8 max power, 4 Ohm	52	104	196
1/8 max power, 8 Ohm	49	96	186
1/8 max power, 70V	51	101	191
1/8 max power, 100V	48	96	181

Thermal Dissipation

(BTU/hour with typical input, all channels driven, 120VAC)

Sleep mode	<1.7	<1.7	<1.7
Idle Lo-Z (no signal)	28	52	86
Idle Hi-Z (no signal)	45	85	103
1/8 max power, 4 Ohm	72	144	243
1/8 max power, 8 Ohm	62	116	209
1/8 max power, 70V	69	133	226
1/8 max power, 100V	58	116	191

Voltage Gain

(per output mode and input sensitivity setting, in dB)

Lo-Z @ -10dBV	43.1	43.1	43.1
Hi-Z 70V @ -10dBV	46.9	46.9	46.9
Hi-Z 100V @ -10dBV	49.1	49.1	49.1
Lo-Z @ +4dBu	31.3	31.3	31.3
Hi-Z 70V @ +4dBu	35.1	35.1	35.1
Hi-Z 100V @ +4dBu	37.3	37.3	37.3

Specifications (continued)

Audio Performance	
Distortion (SMPTE, typical)	<0.5%
Distortion (THD-N, typical)	<0.5%
Signal to Noise (+4dBu sensitivity, 20Hz-20kHz, unweighted)	>102dB
Crosstalk	<65dB
Frequency Response	20Hz-20kHz, +/-0.05dB
High Pass Filter	80Hz, HiZ mode only, non-defeatable
Clip Limiter	at clip threshold of 24dBu, non defeatable
Damping Factor (8 Ohm load, <1 kHz)	>250
Connections	
Remote DC Level Control (Gnd, VC, +3V)	Euroblock (3.5mm), +3V fully on, Gnd fully attenuated
Standby Contact Closure	Euroblock (3.5mm), set DIP switch for polarity
Fault Logic Output	Euroblock (3.5mm), +3V output normal, 0V for amp protect mode
Balanced Input (per channel)	Euroblock (3.5mm)
Input Impedance	10k Ohm
Maximum Input Level	+24dBu
Speaker Output (per channel)	Euroblock (5.08mm)
DIP Switch Settings	
Switch 1-2 or 1-4: Output Mode	per channel, low impedance (Lo-Z) or high impedance (Hi-Z)
Switch 5: High Impedance Mode	Hi-Z channels only, 70V or 100V
Switch 6: Input Sensitivity	all channels, +4dBu or -10dBV
Switch 7: Standby Polarity	down = normally open (NO) up = normally closed (NC)
Switch 8: Front Panel Lock	unlock (down), lock (up)
Front Panel	
Power Switch LED (white)	On, off, flashing during sleep/standby
Attenuators (per channel)	Recessed front panel, fully off = mute
Front Panel Status LED (per channel)	
Green	On at 45dB below full power
Amber	On at full power, output limiting engaged
Red	On for input overload, amp protect, mute

General	
Pre-Sleep Mode	>15 minutes inactivity, all channels muted, wake-on-audio
Sleep Mode	>29 minutes inactivity, Energy Saver sleep mode, power LED blinks every two seconds, wake-on-audio
Standby Mode	contact closure activated, power LED flashes evenly @1Hz
Remote Control Options	WR-1, WR-1.1 DC level control
Amplifier Protection	Over-temperature, output DC, output over-power, AC mains voltage, mains fuse
Cooling	variable speed fan, air vented out back
Power Cable Connector	IEC
Power Supply	100-240VAC, 50-60Hz
Minimum Startup Voltage	85VAC@ 120V nominal, 170VAC@ 240V nominal
Environmental	32°F-104°F, (0°C-40°C) noncondensing
Safety/Compliance	UL, CE, FCC Class B, RoHS
Dimensions and Weight	
Unit Dimensions	
FA125.2	8.66"W x 1.72"H x 10.32"D (220 x 43.7 x 262mm)
FA125.4	8.66"W x 1.72"H x 13.3"D (220 x 43.7 x 338mm)
FA250.4	17.33"W x 1.72"H x 11.54"D (440 x 43.7 x 293mm)
Unit Weight	
FA125.2	3.55lbs (1.61kg)
FA125.4	5.36lbs (2.43kg)
FA250.4	7.89bs (3.58kg)
Shipping Dimensions	
FA-125.2 and FA-125.4	23" x 19.4" x 8.94" (585 x 492 x 227mm)
FA-250.4	28.7" x 23.2" x 8.94" (729 x 590 x 227mm)
Shipping Weight	
FA125.2	5.66lbs (2.57kg)
FA125.4	7.14lbs (3.24kg)
FA250.4	10.12lbs (4.59kg)

LIMITED WARRANTY (USA ONLY)

For Customers outside of the United States, please contact the distributor or dealer from whom the unit was originally purchased.

For units purchased in the USA, warranty service for this unit shall be provided by ASHLY AUDIO, INC. in accordance with the following warranty statement.

ASHLY AUDIO, INC. warrants to the owner of this product that it will be free from defects in workmanship and materials for a period of FIVE years from the original date of purchase, with the exception of certain touch-screen displays and motorized faders for which the warranty extends THREE years from the original date of purchase, and ONE year from the original date of purchase for Ashly EXP products.

Ashly Audio Inc. will, at its discretion and at no charge, either repair or replace any defective product or component upon prepaid delivery of the item to Ashly Audio Inc. service department. All warranty claims and returns of product must be accompanied by proof of the original date of purchase in the form of a valid sales receipt. This warranty confers specific legal rights, and additional rights pertaining to repair or replacement may vary by state.

WARRANTY EXCLUSIONS:

1) This warranty does not apply to damage resulting from misuse, neglect, improper installation, unauthorized modifications, or operation outside the product's intended use (failure to follow instructions in the operator's manual)

2) The warranty excludes defects or damages caused by external factors, including but not limited to accidents, environmental conditions, power surges or improper handling.

3) This warranty does not cover normal wear and tear, cosmetic damage, or consumable components that are expected to degrade over time.

4) The warranty does not extend to products that have been altered, repaired, or serviced by any party not authorized by the manufacturer.

5) Any damage arising from the use of incompatible accessories, attachments, or electrical supplies is excluded from coverage.

6) This warranty does not apply to equipment that has been subjected to installation related damage, improper storage, or transportation related impacts incurred during consumer-initiated transport after the product has been originally received.

This warranty is void if the serial number is altered, defaced, or removed. ASHLY AUDIO, INC. reserves the right to make changes in design, or make additions to, or improvements upon, this product without any obligation to install the same components as those installed on previously manufactured products.

Ashly Audio reserves the right to assess a fee for shipping and handling, should a product be determined non-defective upon completion of testing and thorough evaluation, regardless of warranty status.

Handling and storage fees will accrue on any product for which payment is not remitted within the required timeframe, in accordance with applicable state regulations.

In accordance with applicable state laws, any product deemed abandoned, left unclaimed, uncollected, or without customer response beyond the specified holding period may be used, sold or disposed of at the discretion of Ashly Audio Inc.

To the extent permitted by applicable state law any implied warranties, including the implied warranty of merchantability and the implied warranty of fitness for a particular purpose, are limited to the term of this written warranty. Some states do not allow limitations on the duration of implied warranties, so these limitations may not apply to you. Nothing in this warranty is intended to limit or exclude any rights or remedies available to the consumer under applicable state or federal warranty laws.

OBTAINING WARRANTY SERVICE INSIDE THE USA:

For warranty service in the United States, please visit the Ashly website, or [click here](#).

OBTAINING WARRANTY SERVICE OUTSIDE THE USA:

Please contact the authorized Ashly Distributor in your country. [Click here for a list of International Distributors](#).

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