

ENGLISH

ESPAÑOL

FRANCAIS

ITALIANO

DEUTCH

PORTUGUÊS

日本語

Fender *Passport*
audio

PD-500

OWNER'S MANUAL
INSTRUCCIONES DE FUNCIONAMIENTO
MODE D'EMPLOI
IISTRUZIONI OPERATIVE
BEDIENUNGSANLEITUNG
MANUAL DE INSTRUÇÕES
操作方法

innovativePORTABLEaudio



IMPORTANT SAFETY INSTRUCTIONS

This symbol warns the user of dangerous voltage levels localized within the enclosure.



This symbol advises the user to read all accompanying literature for safe operation of the unit.

- Δ Read, retain, and follow all instructions. Heed all warnings.
- Δ CAUTION: No user serviceable parts inside, refer servicing to qualified personnel only.
- Δ WARNING: To prevent damage, fire or shock hazard, do not expose this unit to rain or moisture.
- Δ Do not drip nor splash liquids, nor place liquid filled containers on the unit.
- Δ Only connect the power supply cord to an earth grounded AC receptacle in accordance with the voltage and frequency ratings listed under INPUT POWER on the rear panel of this product.
- Δ This product may be equipped with a polarized plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of this plug.
- Δ During operation: Maintain at least 6 inches (15.25 cm) of unobstructed air space around the unit to allow for proper ventilation and cooling of the unit; do not block any vents in the unit chassis.

- Δ This product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- Δ This product should be serviced by qualified service personnel when: the power supply cord or the plug has been damaged; or objects have fallen, or liquid has been spilled onto the product; or the product has been exposed to rain; or the product does not appear to operate normally or exhibits a marked change in performance; or the product has been dropped, or the enclosure damaged.
- Δ Protect the power supply cord from being pinched or abraded.
- Δ The power supply cord of this product should be unplugged from the outlet when left unused for a long period of time, or during electrical storms.
- Δ Unplug the power supply cord before cleaning the unit exterior (use a damp cloth only). Wait until the unit is completely dry before reconnecting it to power.
- Δ This product should only be used with a cart or stand that is recommended by the manufacturer.
- Δ Fender® amplifiers and loudspeaker systems are capable of producing very high sound pressure levels which may cause temporary or permanent hearing damage. Use care when setting and adjusting volume levels during use.

INTRODUCTION

- 500 Watts of Clear Stereo Sound
- Custom Designed Neo-Precision Loudspeakers with Celestion® drivers
- Built in 32 bit DSP Digital Effects:
 - Room Reverb •Studio Reverb •Hall Reverb •Plate Reverb •Echo
 - Room Reverb+Echo •Studio Reverb+Echo •Hall Reverb+Echo
- Patent Pending Feedback Killer™ - Automatically detects and eliminates feedback
- Six Mono Microphone / Line Inputs each With An XLR, a 1/4" Balanced Line Input and Line/Mic Switch, +48V Phantom Power for microphone inputs 1-6
- Switching Power Supply Allows Use Almost Anywhere In the World
- Power Amp In/Out Connections
- Everything You Need To Get Started:
 - Passport Powered Mixer Section
 - Two P-51 Dynamic Microphones & Cables
 - Two 22' (6.5m) Speaker Cables with Neutrik® Speaker connectors
 - IEC Power Cable
 - Rugged, Portable Enclosure

Congratulations on your purchase of the Fender Passport Deluxe PD-500. The PD-500 is the most innovative portable PA of its type. The PD-500 is perfect if you're playing in a band, making a presentation, using it for a school play, law enforcement and military training or as a second PA for your church.

The PD-500 outclasses its competition in its easy to transport, black luggage style case. The case protects the PD-500 from the elements while moving or in storage, providing you with years of use. Unlatch the top hinges to discover that the PD-500 expands into three pieces; two speakers and one center tower. The tower conveniently holds an 8 channel mixer, digital FX and a lightweight power amp.

The PD-500's mixer features 6 mic/line channels and 2 stereo line/mic channels. Channels 7 and 8 can be used for either stereo or mono operation. The mixer also features +48 Volt phantom power, one touch patent pending Feedback Killer™ and 32-bit DSP professional digital FX. Enclosed in the center tower is a 500 Watt class D power amp that provides powerful, full sound without the hassle of the extra weight of an ordinary amplifier.

Rounding out the PD-500 are the specially designed Neo-Precision speakers, powered by Celestion® drivers. The long excursion NeoPrecision speakers use neodymium motor structures for high performance and dramatically reduced weight.

EASY SETUP DIAGRAMS



LIVE BAND PERFORMANCE SETUP

The above diagram shows a typical band setup. Microphones and instruments are plugged into separate channels. An external effects processor is connected to the Insert jacks as described in the "Power Amp Insert - Further Explanation" section under External Loop Back Configuration. Finally a 1270P powered monitor takes advantage of the Monitor Line Out jack.



LIVE BAND RECORDING SETUP

Use the tape out to record your performance as shown above. The "recording device" can be a computer, or a tape recorder, or anything that can accept a line level signal.



Got Feedback?

Simply press in the Feedback Killer™ button! Your PD-500 comes equipped with (patent pending) Feedback Killer™ circuitry that targets and eliminates the annoying "squeal" that's triggered by microphones or instruments coming too close to the system speakers.



PRESENTATION SETUP

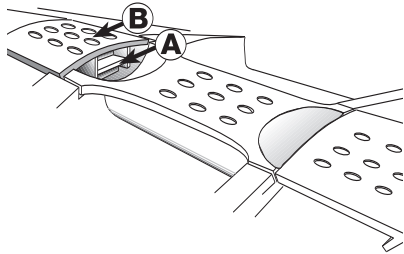
The PD-500 is shown above in a presentation scenario. Use the headphones output on your laptop computer as output to the PD-500. Connect to the RCA jacks of channel 7 or 8 using 1/8" stereo-to-dual RCA adapter cables. Note: Some computers require a direct box with a "ground lift" to eliminate noise generated from the computer's power supply.

For more information on Passport products and accessories log on to:
www.fender.com/passport

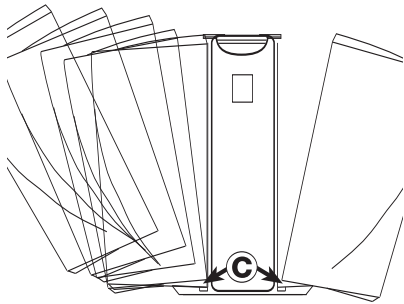
GETTING STARTED

Read this manual completely to determine appropriate connections and switch positions.

- To Open: release the Safety Latch {A} with your finger tip, then lift up on Main Latch {B}. Remove both speakers from the tower.



•To close: position the speaker on the tower foot {C} then tilt the speaker up towards the tower and close the Main Latch. The Safety Latch automatically engages. Note: Your Passport case is precision engineered and careful alignment of the parts will ensure easy operation.

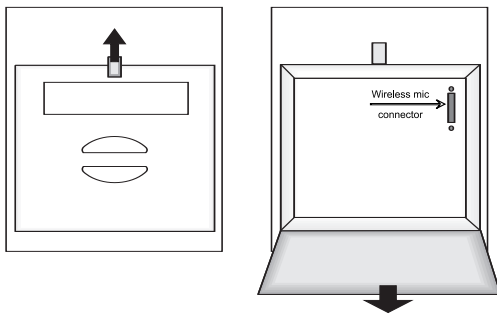


The Passport case is weather resistant in the closed transport mode. However, when operating

outdoors, take care to fully protect the Power Tower in the event of exposure to rain. Remember to allow free air flow through the front air inlet located at the bottom of the front panel on the Passport power tower.

MIC & CABLE STORAGE

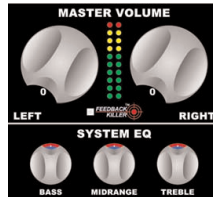
Located on the rear of the Passport tower, simply lift the latch to pull open the door.



If you remove the microphones and cables, you will see a narrow metal strip located on the back wall of the storage compartment.

This protective cover for the optional wireless mic receiver module connector should only be removed if the module is to be installed.

CONNECTIONS



Before plugging in, turn both Master Level controls down to their zero "0" positions (fully counterclockwise). Next, make sure all EQ, Pan and Balance controls are set to the center notched positions.

Position the speakers so that the cables can be routed to them safely, and no microphones are aimed into the speaker. Connect the speakers to the appropriate Speaker Outputs on the rear of the Passport using the provided cables. Plug in all sources, such as microphones, tape decks, keyboards, to the Passport Inputs. After all connections are made, adjust the volume up from 0 as described in the Setting Levels section.

POWER ON

NOTE: Plug all sound system equipment into the same outlet or power strip to enhance system safety and performance. TIP: If you have other powered equipment connected to the Passport, it is important to switch the Passport ON last when setting up and then OFF first when finished to prevent harmful popping sounds from the Passport speakers each time something is switched on or off. Switch the Power Switch to the ON position. The Power LED should illuminate GREEN, if not, see TROUBLESHOOTING at the end of this section.

SETTING LEVELS



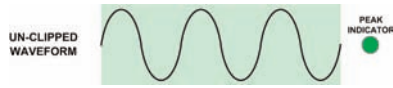
To set system volume and operating levels, it is helpful to have an assistant in the audience area checking levels to ensure full coverage. Slowly rotate the large

Left and Right Master volume controls up to the position at "5." Use a microphone (or other source) in the same position as it will be used on stage and in the same manner in which it will be used for the event. Start out with Feedback Killer™ off, then slowly turn up the channel input level control to the desired level (see Peak Indicator section on the next page). Be ready to quickly turn down the level if you hear the onset of feedback or "howling." Some environments may require that you engage Feedback Killer™ to obtain the desired volume level. Repeat this for each input channel. Once each channel level has been set, you can adjust the volume of all channels together using the Left and Right Master Volume controls.

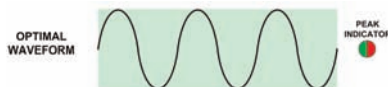
Considering the application and needs of the event, set the system EQ controls and select digital effects as appropriate. This is best achieved by playing recorded material of the same type as your performance and then adjusting levels to accommodate your performance and the space.

PEAK INDICATOR

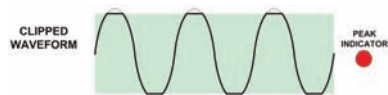
Adjusting the channel volume and channel EQ using the Peak Indicator:



The PEAK indicator will light up green when it senses that there is a signal present on the input connector. You can adjust the channel LEVEL control up or down to achieve the desired volume relative to the other channels. As long as the Peak indicator remains green, the signal is being amplified and mixed appropriately to provide clean output sound.



The PD-500 provides a mechanism to get the maximum level from each channel without distorting the signal. Play your program material, or speak into the microphone and slowly increase the channel volume and EQ levels until the peak indicator occasionally flashes red. It will be easiest to adjust the EQ to the desired levels at lower volume, and then increase the channel volume to the optimal waveform.



The peak indicator will be solid red if you raise the channel volume too high. This indicates that the signal is over-amplified. Turn the LEVEL control down to prevent the signal from being clipped and distorted. Too much clipping can be aurally unpleasant as well as potentially dangerous to your speakers.

CHANNELS (INPUTS) 1-6



- **LEVEL** - Adjusts the volume level for each channel. Use in conjunction with the Master Volume controls. If the LEVEL control is up too high, the PEAK indicator will light up red.

- **PEAK INDICATOR** - The PEAK indicator will light up green when there is a signal present. Reduce LEVEL if the PEAK LED illuminates red, which indicates that the signal may be clipped.



- **FX SEND** - Adjusts the effects level for each channel. Use in conjunction with the Digital Effects FX LEVEL master control.



- **MONITOR** - Adjusts the Monitor volume level for each channel. Use in conjunction with the master Monitor Level control at the MONITOR OUT jack.



- **PAN/BALANCE** - Use the PAN control (BALANCE for channels 7-8) to adjust the amount of signal sent to each speaker (left & right). Adjusting this control allows you to adjust the position of the sound source within the horizontal plane, left or right of center stage. Set to the center dot for equal amounts to the left and right speakers.



- **HIGH and LOW** - These EQ controls allow the user to boost or cut the bass and treble for the individual channel. Start with the channel EQ controls in the center position, then adjust only as much as needed to sound good. (To adjust the sound for all channels, use the System EQ controls.)



- **PHANTOM POWER** - For condenser microphones that require "phantom power" press this switch IN.



- **MIC INPUT** - This three pin XLR balanced female input connector can accept high- and low-level microphone inputs, and also balanced line inputs. Phantom Power will be applied to the XLR connector if the Phantom Power switch is on and the MIC/LINE switch is in the MIC position.

- **1/4" PHONE JACK INPUT** - This 1/4" balanced mono input jack is capable of accepting high- or low-impedance microphones, keyboards, drum machines, outboard effects, etc.

- **MIC/LINE SWITCH** - Set this switch to the MIC position for low-impedance microphones, phantom powered microphones, and very low-level input signals. Set the switch to the LINE position for high-impedance microphones and high-level signals. Always turn down the corresponding channel level control before pressing the MIC/LINE switch to prevent a loud outburst.

CHANNELS (INPUTS) 7-8



• **STEREO/MONO SWITCH** - Selects the mode of operation for the RCA inputs below. MONO mode mixes stereo sources together into a mono signal. TIP: Use MONO mode with sources having only one RCA output to enable output through both of the Passport speakers.

• **RCA INPUT** - The RCA jacks accept either stereo or mono inputs and are intended for use with a tape player, CD player, etc. Note: The RCA inputs are not affected by the MIC/LINE switch.



• **1/4" PHONE JACK INPUT** - This 1/4" balanced mono input jack is capable of accepting high- or low-impedance microphones, keyboards, drum machines, outboard effects, etc.

• **MIC/LINE SWITCH** - Set this switch to the MIC position for low-impedance microphones, and low-level input signals. Set the switch to the LINE position for high-impedance microphones and high-level signals. Note: This switch only affects the 1/4" phone jack.

MASTER CONTROLS

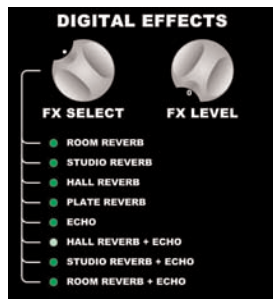


• **MASTER VOLUME** - Adjusts the overall volume output from the Left and Right main Speakers. Optimum Passport performance is generally achieved with LEFT and RIGHT set between 4 and 6, (about half volume). Operate outside the 4-6 range if adjusting the individual channel level controls becomes insufficient.

• **SYSTEM EQ** - Adjusts the overall tone of the amp in three frequency bands. Generally, operate with these controls at their notched center positions. Adjust the individual channel EQ controls first, then adjust SYSTEM EQ controls for overall sound.

• **FEEDBACK KILLER™** - Press this button in to eliminate feedback. Feedback can also be prevented by keeping microphones (and instruments with pickups) behind the system speakers or increasing the distance from the speakers.

DIGITAL EFFECTS



Digital Effects can be used to enhance the sound quality of any performance where appropriate and desired. Keep in mind that while Reverb or effects can enhance a musical performance or presentation, too much can make the same performance unintelligible or "muffled." Keep your audience in mind when setting effects levels.

• **FX SELECT** - Selects the active Digital Effect. Each selection creates the sensation of a different acoustic environment:

Room Reverb - Simulates the warm ambience of a small room. It has the shortest decay time, meaning the reverberation is the shortest. This setting works great with acoustic guitars, or an acoustic combo.

Studio Reverb - Simulates the sound of a medium sized, bright studio recording room. This works great for drums and acoustic guitar.

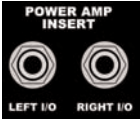
Hall Reverb - Simulates the sound of a large hall or church. This setting has the longest decay time and is best used for vocals. Adjust the Hall Reverb level so the reverb sound is lower than the main vocal sound.

Plate Reverb - Perfect for vocals; this setting simulates a bright analog plate reverb.

Echo - A multi-tap digital delay at 250 ms. Works very well on acoustic guitar.

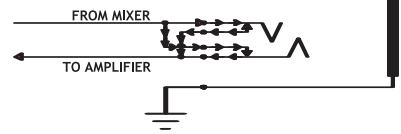
• **FX LEVEL** - Adjusts the level of the selected Digital Effect for all channels together. Optimum performance is generally achieved between 4 and 6. Adjust outside the 4-6 range when the individual FX SEND controls become insufficient.

POWER AMP INSERTS

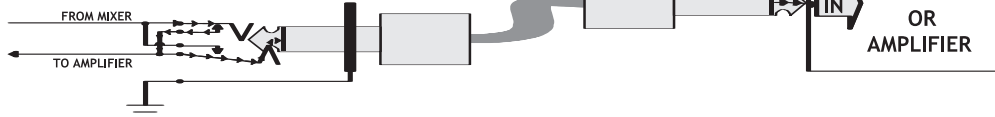


• **POWER AMP INSERTS** - These jacks provide a connection for an equalizer, or other external equipment. Each jack accepts a TRS (Tip/Ring/Sleeve) plug with Send=Tip, Return=Ring and Ground=Sleeve. When nothing is connected to the Power amp insert, the PD-500 operates normally, with the mixer signal going directly to the internal PD-500 amplifier.

**INTERNAL LOOP CONFIGURATION
NO PLUG**



**EXTERNAL AUX AMPLIFIER CONFIGURATION
PLUG INSERTED 50%
(TO FIRST CLICK)**



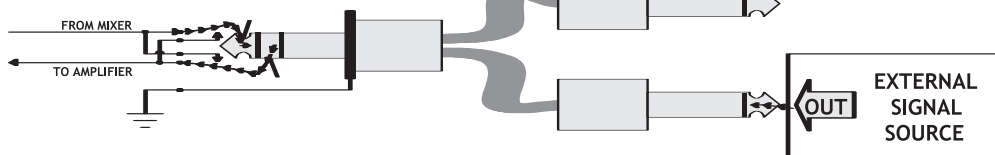
To use the internal amplifier PLUS an external amplifier, plug a 1/4" mono cable half way into the Amp Insert.

**EXTERNAL AMPLIFIER CONFIGURATION
PLUG INSERTED 100%
(TO SECOND CLICK)**



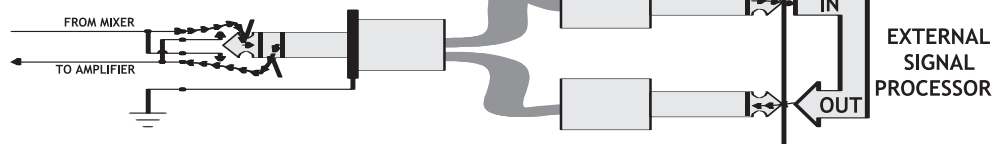
To use just the PD-500 mixer (bypassing the amplifier) and connect to an external amplifier, plug a 1/4" mono cable completely into the amp insert.

**EXTERNAL SOURCE CONFIGURATION
PLUG INSERTED 100%
(TO SECOND CLICK)**



To use an external source with the PD-500 internal amplifier, use a TRS-to-dual-TS cable "Y" adapter. Plug your external mixer into the mono plug connected to the ring of the stereo plug. The other mono plug can be input to a channel of the external mixer to add an input to the PD-500.

**EXTERNAL LOOP BACK CONFIGURATION
PLUG INSERTED 100%
(TO SECOND CLICK)**



To use the amplifier insert as an effects loop, use two TRS-to-dual-TS cable "Y" adapters. Connect the TRS plug ends into left and right Insert jacks. Then connect each "tip" TS plug to the (left/right) inputs of your effects processor, and each "ring" TS plug to the corresponding effect outputs, as shown.

LINE OUTPUTS

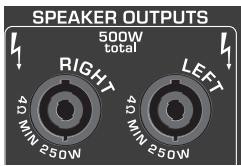


• **MONITOR** - This jack provides an output for connecting a stage monitor speaker. Use the LEVEL control in conjunction with the MONITOR level controls of each channel.



• **TAPE OUT** - These RCA outputs provide an output for connecting recording equipment. Use the LEVEL control to accommodate the input requirements of your external equipment.

REAR PANEL

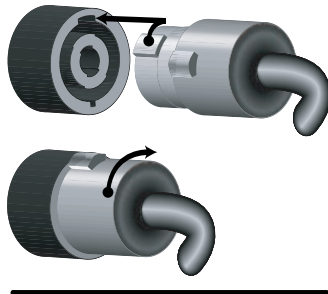


• **SPEAKER OUTPUTS** - Connect these outputs to each of your Passport speaker enclosures using the provided speaker cables.

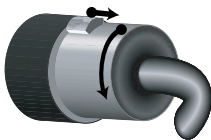
SPEAKON® LOCKING CONNECTORS

Use the supplied Speakon® cables to connect your NeoPrecision Speakers to the PD-500. The PD-500 Speakon® connectors and cables provide superior power transfer efficiency and secure locking connections.

To connect the Speakon® locking connectors, rotate the Speakon® plug to align it with the input slots, then fully insert the plug. Rotate the plug clockwise until it locks into place.



To disconnect the Speakon® locking connectors, pull back on the grey locking ring while rotating the plug counter-clockwise. Pull the plug out from the Speakon® socket.



REAR PANEL



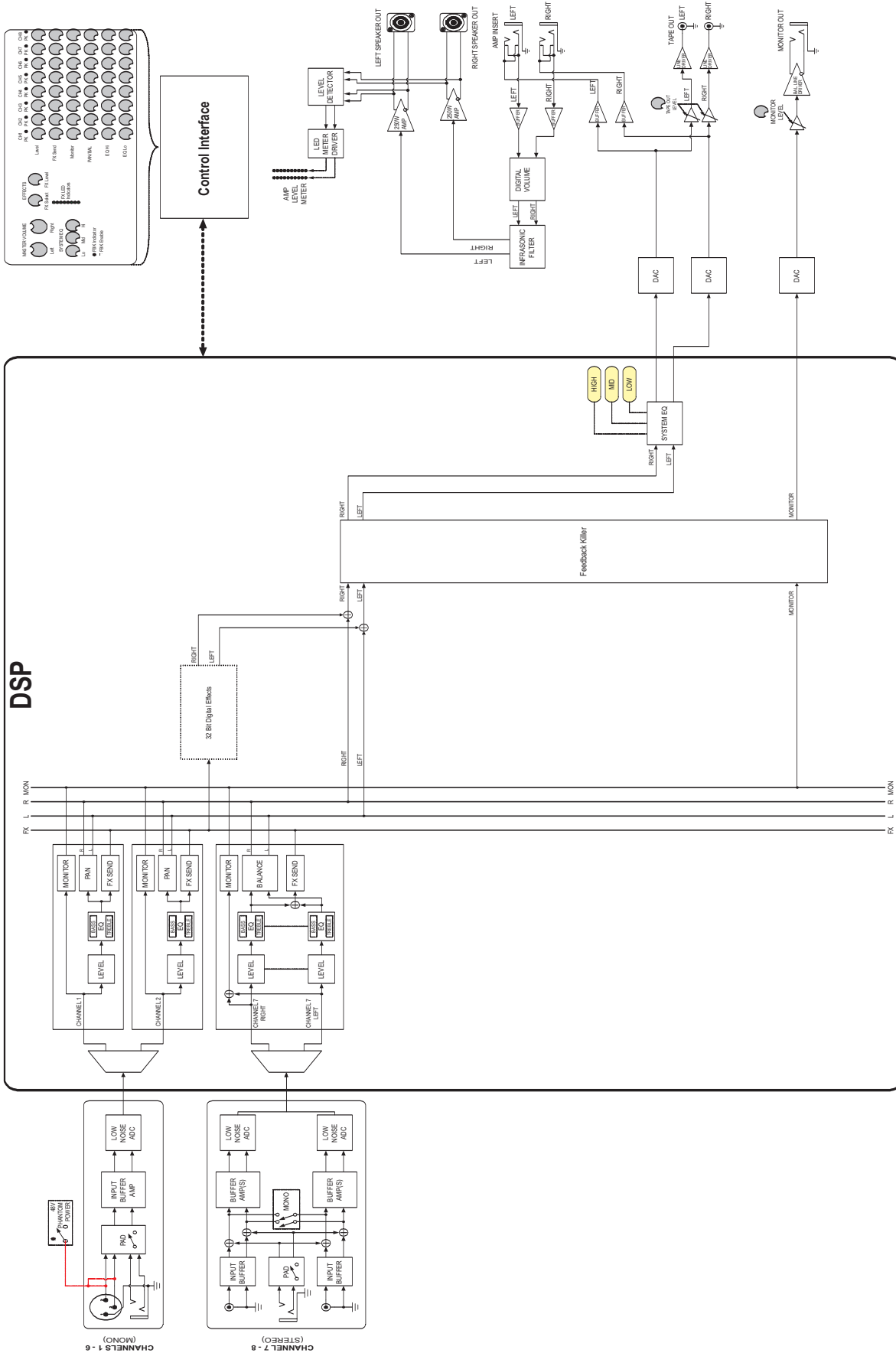
• **POWER SOCKET and FUSE HOLDER** - Connect the Power Socket to a grounded AC outlet using the provided IEC power cord. To replace the main fuse, unplug the power cord from the unit, then pry the fuse holder out from the power socket using a small screwdriver. A spare fuse is located in the holder. Replace fuses only with the type and rating specified. Always carry spare fuses!



• **POWER SELECTOR** - Select the proper voltage according to your local power supply:
 Select 115 for 110V-120V AC power outlets.
 Select 230 for 220V-240V AC power outlets

• **POWER SWITCH** - Turns your Passport PD-500 on-off.

For more technical information, log on to the Passport Glossary at:
<http://www.fender.com/passport/glossary.php>



TROUBLESHOOTING

The POWER LED does NOT illuminate:

Switch the Power OFF, then check the power connections and retry. If the Power LED still does NOT illuminate, disconnect all cables and check the fuse (see FUSE HOLDER above). If the Power LED still does NOT illuminate after 5 seconds, turn off the system and take the Passport to an authorized Fender Service center.

The PROTECT LED illuminates:

The system is in protection mode caused by an overload or overheating. Switch the Power OFF and wait for 10 minutes to allow the system to cool and reset. If the PROTECT LED does not turn off, take the Passport to an authorized Fender Service center.

No audio is present in one of the speakers:

Check to see if your control settings are correct. Next, try switching speaker cables to determine if the cable is at fault.

SPECIFICATIONS

Part Numbers	069-1007-000 (120VAC 60Hz) USA & CAN 069-1007-930 (240VAC 50Hz) AUS 069-1007-940 (230VAC 50Hz) UK 069-1007-950 (220VAC 50Hz) ARG 069-1007-960 (230VAC 50Hz) EUR 069-1007-970 (100VAC 50Hz) JPN
Fuse type	T10A H, 250V
Power Requirement	750Watts
Frequency Response	20Hz to 20kHz ± 1 dB (Tape, Monitor, Amp Insert) 50Hz to 20kHz ± 1 dB (Speaker output)
Distortion	< 0.1%, 50Hz to 20kHz (Tape, Monitor, Amp Insert) < 0.5%, 50Hz to 20kHz (Speaker output)
Signal to Noise Ratio	> 90dB @ 1W, "A" weighted
Power Output	500W (2x 250W @ 4Ω per channel)
Input Impedance	Mic: 2kΩ / Line: 50kΩ (Ch 1-6) Mic: 2kΩ / Line: 100kΩ / RCA: 47kΩ (Ch 7-8)
Maximum Input Levels	Mic: -10dBu / Line: +10dBu (Ch 1-6) Mic: -4dBu / Line: +16dBu (Ch 7-8) RCA stereo: +16dBu / RCA mono: +19dBu (Ch 7-8)
Woofers	8" diameter diaphragm, Neodymium motor structure
Compression Drivers	1" diameter diaphragm, Neodymium motor structure
Microphones	Dynamic Cardioid, balanced output
Microphone Cable	XLR (male) to XLR (female); 6 m (20 ft)
Speaker Cables	Speakon® NL2FC; 6.5 m (22 ft) 16 AWG stranded copper
Passport System	Width: 840 mm (33.7 in) Height: 615 mm (24.2 in) Depth: 300 mm (11.8 in) Weight: 24 kg (53 lb)



Note: 0 dBu is referenced to 0.775 volts rms
Product specifications are subject to change without notice.

PD-500 Passport — Speaker Frequency Response Curve

