

Satellites[®]



Reference and Owner's Manual
for the SFX Satellite



The Fender logo in its signature script font, white on a black background.The Squier logo in script font, with "by Fender" in smaller text below it, all enclosed in an oval.The Fender PA logo, featuring "FENDER" in a bold sans-serif font above "PA" in a larger, stylized font, with "BUILT FROM THE SOUND UP" in a smaller font below.The Sunn logo, consisting of the word "sunn" in a lowercase sans-serif font followed by a graphic of three concentric circles.

Fender Musical Instruments
7975 North Hayden Road, Scottsdale, Arizona 85258 U.S.A.

A Message from the Chairman

Since 1946, Fender realized the importance of your amplifier. You see, your amplifier is more than just a combination of dials, wires and speakers. **It is a finely tuned musical instrument.** And like any fine musical instrument, it should be treated with special care and attention to detail.

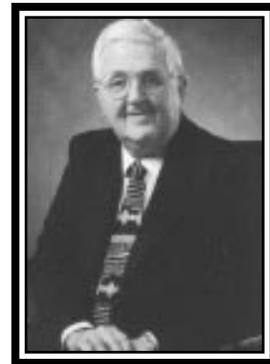
At Fender, we know what building guitar amplifiers is all about. For over half a century, we have been designing and producing some of the world's best amplifiers, helping shape the face of music. In fact, many of the world's most classic and best sounding amplifiers proudly wear the Fender name.

Whether you are after that classic Fender tone, a clean crisp sound for your Bass or Keyboard or the raw driving power of modern distortion, your decision to purchase a Fender amplifier is one you will appreciate with each passing note for years to come.

Wishing you years of enjoyment and a heartfelt *thank you*,

Bill Schultz

Bill Schultz
Chairman of the Board
Fender Musical Instruments Corporation



YOUR FENDER® SFX SATELLITE®

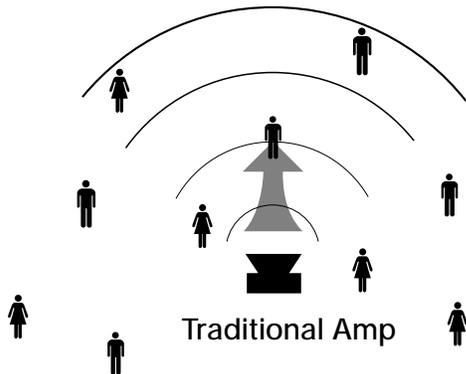


Fig. A The sound waves from a traditional guitar amplifier project forward, focusing their energy in one direction.

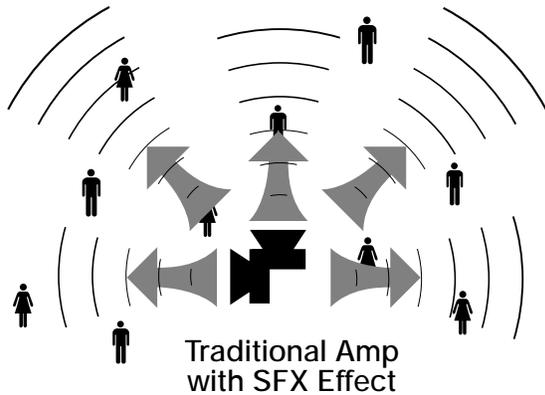


Fig. B Fender's Stereo Field eXpansion circuitry (patent pending) processes the signal through one of 32 available stereo digital effects. The stereo signal is then processed by the exclusive SFX matrix circuit and sent to the speakers creating a psychoacoustic event that results in up to 300° of stereo imaging.

Congratulations on your purchase of a Fender SFX Satellite. Your new Fender SFX Satellite is designed by the same Tone-Team that has created many other classic Fender amps: like the Tone-Master®, Princeton® Chorus and the versatile Hot Rod Series. Built with care and special attention to detail, your SFX Satellite offers you the ability to add the "spatially exciting" Stereo Field eXpansion effect (patent pending) to your traditional guitar rig. (See figures at left for an explanation of the SFX effect.)

Designed to sit under your traditional guitar amplifier, your Fender SFX Satellite features: 80 Watts of power, on-board digital signal processing and a 12" 4-ohm speaker for a full-bodied tone. Moreover, the footswitch circuitry allows for remote on/off selection of the SFX effect.

For the musician who wants to expand the capability of their guitar amplifier, your SFX Satellite is a quality Fender product. To ensure maximum performance from your SFX Satellite, please read through this manual and reference it as needed. Also, please heed all safety warnings relating to your new SFX Satellite Extension.

Take the time to get to know each other... Tune-up, Plug-in and ... Play On!

WARNING:

-TO PREVENT DAMAGE, FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

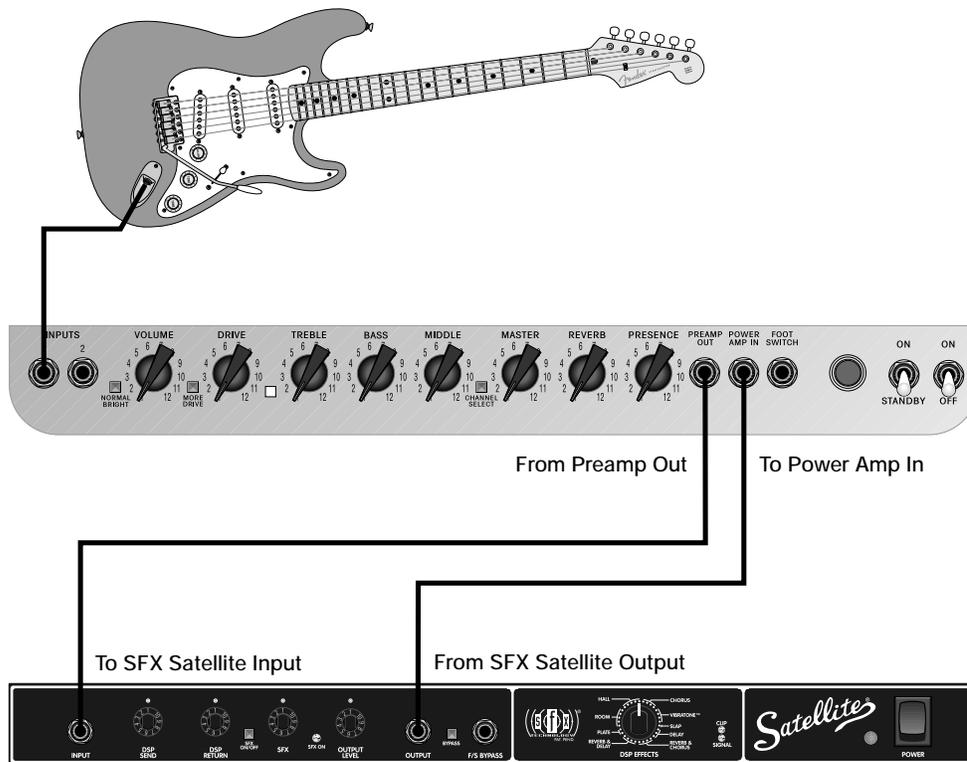
-NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

-THIS UNIT MUST BE EARTH GROUNDED.

SFX SATELLITE SET-UP PROCEDURE

Your Fender SFX Satellite offers endless possibilities for enhancing and creating new and exciting sounds from your traditional guitar rig. By following the set-up procedures listed below and on the following page, in a matter of minutes you will be exploring your SFX Satellite's capabilities.

1. To set up your SFX Satellite, begin by making sure both your amplifier and your SFX Satellite are turned OFF or are in their standby positions. Next, connect your guitar line cords from your amplifier to your SFX Satellite as demonstrated in the illustration below.



2. With the Bypass button in on your SFX Satellite, turn on your SFX Satellite and then your guitar amp. Next, raise the volume and tone knobs on your guitar amp to the volume and sound levels desired.

SFX SATELLITE SET-UP PROCEDURE, CONTINUED

3. Next, place all knobs on your SFX Satellite at 1 or their minimum positions.

4. Make sure the SFX On/Off button pressed in (green light on) and the Bypass button in its out position.

5. Play your guitar at your average volume through your rig. At this point, no sound will emanate from your SFX Satellite. *Refer to the chart below to help determine the SFX Satellite speaker operation modes of your SFX Satellite and guitar amp.*

Switch Control Table		
Bypass	SFX On/Off	Result
Button In	Button In	Guitar Amp Only -No Effects
Button In	Button Out	Guitar Amp Only -No Effects
Button Out	Button Out	Guitar Amp w/ DSP Effects -No Satellite Sound
Button Out	Button In	SFX Effect Active -Sound from Satellite

6. Adjust the DSP Send knob on your SFX Satellite so the "signal" light comes on.

7. Next, play at your hardest strength to ensure the DSP "clip" light does not come on. If the DSP "clip" light does come on, reduce the signal via the DSP Send knob.

8. Set the DSP Return knob at 5. Next, adjust the Output level knob on your SFX Satellite to a level comparable to your guitar amp.

9. Push the Bypass switch in and out to match the volume levels between your SFX Satellite and your guitar amp by itself. The table below offers a few suggestions on setting up the DSP Send and Output Level adjustments. *As a general rule of thumb, when increasing your guitar amp volume it may be necessary to decrease DSP send level on your SFX Satellite.*

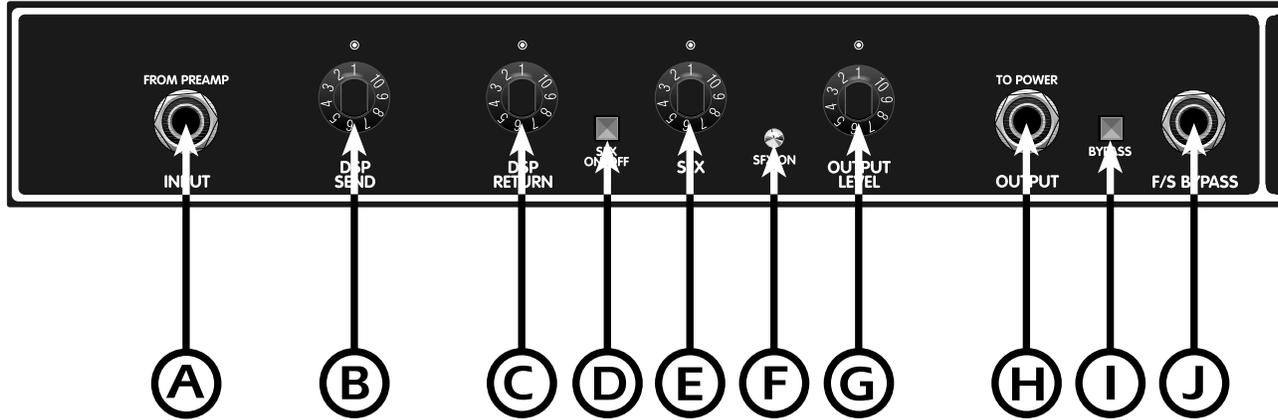
SFX DSP Send / Output Level Configurations			
Amplifier	Guitar Amp Volume	Output Level	DSP Send
Hot Rod Deluxe	3	3	7
Deluxe 112	3	7	3
Vibro-King	3	2	10

10. Adjust the DSP Return knob for the desired effect level or "wetness". *Remember, extreme adjustments to the DSP Receive knob will require an adjustment of Output Level using the Bypass switch.*

11. Finally, *slowly* rotate the SFX knob clockwise for the desired spatial effect.

12. When shutting down your rig, turn off your guitar amp first then your SFX Satellite.

SFX SATELLITE FRONT CONTROL PANEL



A. INPUT - Plug your guitar amplifier's preamp output or its effects send output in here.

B. DSP SEND - This knob adjusts the input level received from your guitar amp to the SFX Satellite, setting the level of signal input to the Digital Signal Processing card. Rotating the knob to the right increases the signal level input to the DSP card. Set the knob so your average playing level lights the yellow "signal" light. Playing peaks should not light the red "clip" light as this will indicate distortion.

C. DSP RETURN - This knob adjusts the output level from the DSP card and the wet dry signal mix prior to the SFX matrix. Rotating the knob to the right increases the signal level input to the SFX Satellite amplifier.

D. SFX ON / OFF - This push-push button is the On / Off control of the **S**tereo **F**ield **eX**pansion or SFX effect. When the button is out, the SFX signal will not emanate from the bottom speaker, however, the SFX front signal is still sent to your traditional amp. Turning off the SFX feature does not impact the DSP effects sent to your amplifier. *Note: Refer to the chart on page 7 for the various configurations available when using the SFX On/Off and Bypass buttons and Footswitch.*

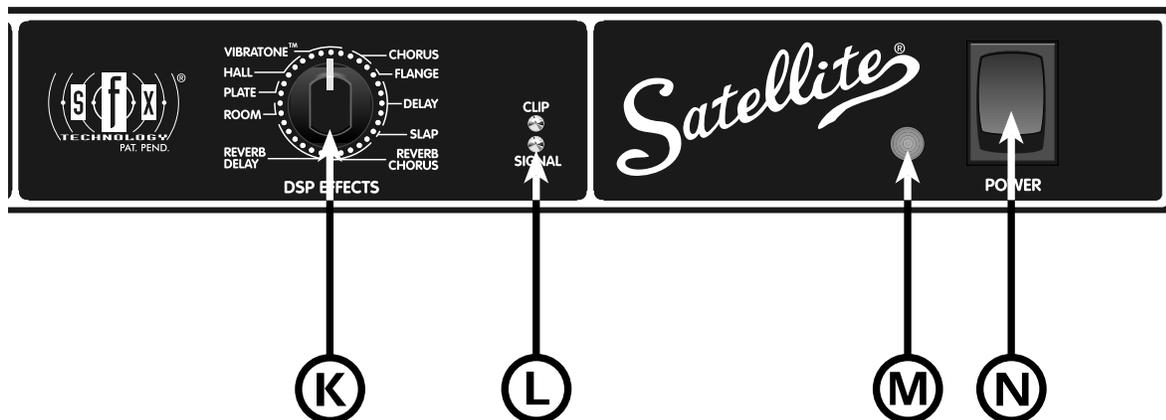
E. SFX - This knob controls the volume level of the bottom speaker. Rotating the knob clockwise increases the volume to the bottom speaker varying the SFX spatial effect.

F. SFX ON - This green LED illuminates when the SFX effect is active on your SFX Satellite.

G. OUTPUT LEVEL - Controls the signal level from the SFX Satellite to your guitar amp's power amp input or effects receive input.

H. OUTPUT - This 1/4 inch jack sends the signal from your SFX Satellite to your guitar amp's power amp input or its effects receive input.

SFX SATELLITE FRONT CONTROL PANEL



I. BYPASS - This push-push button is the On / Off switch for the bypass feature. When this button is pressed, the SFX and DSP effects are bypassed and the guitar amp's signal is routed back to your amplifier. *Note: Refer to the chart below for the various configurations available when using the SFX On/Off and Bypass buttons and Footswitch.*

J. F/S BYPASS - This jack, for the one button footswitch (included), is used for hands free deactivation of the SFX effect. Using this jack overrides the bypass switch. When the footswitch is pressed the SFX and DSP effects are inactive and the guitar's signal is routed directly back to your amplifier.

Switch Control Table		
Bypass	SFX On/Off	Result
Button In	Button In	Guitar Amp Only -No Effects
Button In	Button Out	Guitar Amp Only -No Effects
Button Out	Button Out	Guitar Amp w/ DSP Effects -No Satellite Sound
Button Out	Button In	SFX Effect Active -Sound from Satellite

K. DSP EFFECTS - This 32-position data wheel selects among the various on-board digital effects. These effects will only be heard if the DSP Send and Receive knobs are turned up. For a complete listing of all on-board effects available refer to the chart located on page 8.

L. SIGNAL - This yellow LED illuminates when an adequate signal level exists at the DSP input. **CLIP** - This red LED illuminates when an excessive signal level exists at the DSP input. If this occurs lower the input signal via the DSP Send knob.

M. POWER INDICATOR - This LED illuminates when your SFX Satellite is receiving power.

N. POWER SWITCH - Turns the AC power ON and OFF. When the switch is OFF, the SFX Satellite is completely shut down.

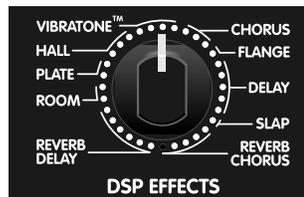
SFX SATELLITE REAR PANEL



LINE CORD - Your SFX Satellite is equipped with a grounding type supply cord to reduce the possibility of shock hazard. Be sure to connect it to a grounded AC receptacle. The line cord should be connected to a suitable power source in accordance with voltage and frequency as shown in the power rating on the rear panel. **DO NOT ALTER THE AC PLUG.**

DSP EFFECTS CHART

Below is a listing of all effects available on the SFX Satellite. To choose among these various effects simply rotate the dial to the desired effect. Remember both the DSP Send and DSP Return knobs must be above their minimum positions in order for the effect to be heard. *(To change from slower to faster sweeps, shorter to longer delays or smaller to larger reverbs, turn the DSP effects selection knob clockwise.)*



Reverb-Delay

- 1 - Medium Room / Short Delay
- 2 - Medium Room / Medium Delay
- 3 - Medium Room / Long Delay
- 4 - Medium Hall / Short Delay
- 5 - Medium Hall / Medium Delay
- 6 - Medium Hall / Long Delay

Reverbs

Room

- 1 - Small
- 2 - Large

Plate

- 1 - Small
- 2 - Large

Hall

- 1 - Small
- 2 - Medium
- 3 - Large

Vibratone*

- 1 - Slow Deep Sweep
- 2 - Medium Slow Deep Sweep
- 3 - Medium Fast Shallow Sweep
- 4 - Fast Shallow Sweep

**Note: For maximum Vibratone effect, turn the DSP Send, DSP Return and SFX knobs fully clockwise and turn the Output Level knob counterclockwise. Experiment with these settings in order to obtain your optimum settings.*

Chorus

- 1 - Slow Deep Sweep
- 2 - Medium Sweep
- 3 - Fast Shallow Sweep

Flange Medium Sweep

Delay

- 1 - Short Delay
- 2 - Short to Medium Delay
- 3 - Medium Delay
- 4 - Medium to Long Delay
- 5 - Long Delay

Slap Quick, Single Echo

Reverb-Chorus

- 1 - Medium Room / Slow Sweep
- 2 - Medium Room / Medium Sweep
- 3 - Medium Hall / Slow Sweep
- 4 - Medium Hall / Medium Sweep
- 5 - Medium Room / Flange-Like

TROUBLESHOOTING



If the SFX Satellite is set up but does not function, check the following items:

- Is the power cord properly plugged into an electrical outlet?
- Is there power at the outlet?
- Are the control knobs turned above 1?
- Is the volume control on the instrument turned up?
- Are the control knobs on your external equipment turned above 1?
- Is the power cord on your external equipment properly plugged into an electrical outlet?
- Are any cords cut, frayed or damaged?
- Are the DSP control knobs turned above 1?
- Is the instrument properly plugged into the amplifier?
- Is the guitar amp properly plugged into the SFX Satellite?
- Are the BYPASS and SFX ON/OFF switches configured correctly?

(Eliminate any effects pedals, external signal processing devices and try using another cord.)

If after checking all of the above your amplifier is still not performing correctly, consult your nearest authorized Fender Service Center.

COVERING CARE



The exclusive covering on your Fender SFX Satellite cabinet has been especially designed for years of lasting beauty. A light soapy solution on a sponge can be used to remove dirt and residue that may accumulate in the fabric. Be careful not to let any liquid come in contact with operating surfaces. **REMEMBER TO UNPLUG THE POWER CORD BEFORE CLEANING AND WAIT UNTIL THE UNIT IS COMPLETELY DRY BEFORE PLUGGING IT IN.**

SFX SATELLITE SPECIFICATIONS

TYPE: PR 378

PART NUMBER: 22-2001 (120V)
22-2031 (240V) Aust
22-2041 (230V) UK
22-2061 (230V) Eur
22-2071 (100V)



POWER REQUIREMENTS: 100V AC, 50/60 Hz 360W
120V AC, 60 Hz, 360W
230V AC, 50 Hz, 360W
240V AC, 50 Hz, 360W

POWER AMPLIFIER SECTION

POWER OUTPUT: 80W R.M.S. into 4 Ω @ <1% T.H.D.

PREAMP SECTION

INPUT IMPEDANCE: 18.2k Ω (@ INPUT jack)

OUTPUT IMPEDANCE: 1k Ω (@ OUTPUT jack)

SPEAKER COMPLIMENT: One Fender Special Design 12" speaker (P/N 048878)

DIMENSIONS: Height: 19.6 in 39 cm
Width: 24.5 in 57 cm
Depth: 15.6 in 26 cm

WEIGHT: 55 lbs 25.2 kg

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The SFX Effect, patent pending, is manufactured under license from Aspen Pittman and Drew Daniels of SFX Technology.

Product specifications are subject to change without notice.

SFX SATELLITE BLOCK DIAGRAM

