

Fender[®]

**DELUXE 85
OWNER'S MANUAL**

P/N 028896

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The Fender DELUXE 85 amplifier represents the best value of any two channel amplifier in its price class. In addition to a standard *Clean* channel the DELUXE 85 features an *Overdrive Channel* with footswitch selectable Gain Boost effectively creating a third preset sound. You now have, hands free, instant access to *Clean, Crunch, & Screaming Lead* presets. The *Overdrive* channel features Exclusive Fender Pre & De-Emphasis Distortion circuitry plus a unique *distortion-activated* Limiter which provides dynamic interactive control over the distortion characteristic making the Fender DELUXE 85 one of the most "Expressive" amplifiers ever made.

Fender Pre & De-Emphasis Distortion is based on unique Pre and Post clipper voicing filters designed to simulate the preamp tone settings and speaker output of an overdriven tube amplifier. You get the *searing smooth* highs backed by *deep* punch that stack amps are known for. The MID BOOST switch provides a second pre-emphasis voice.

The LIMITER is a new feature which will provide gain compression at the onset of distortion and can be used to dial in the exact degree of distortion without sacrificing sustain. This effect is particularly dramatic at **high GAIN settings**. At high LIMITER and GAIN settings a very dynamic effect can be achieved by varying pick attack. (i.e.: The harder you pick, the cleaner the note. Also harmonic content will increase as notes are allowed to sustain. High output pickups with the instrument tone control turned down can achieve reverse envelope, backwards tape effects and many other sounds.)

The *extended range* three band equalization circuitry is post overdrive and can be used to further modify the overall sound of the amp.

In addition to convenience features like *All Front Panel Mounted Controls and Jacks*, the DELUXE 85 features a detachable footswitch for selecting the Overdrive Mode and switching the *three-spring* Reverb On and Off. These functions are multiplexed over a standard 1/4 inch phone plug for ease of connection or extension of the footswitch to remote pedal boards. The DELUXE 85 also features exclusive Fender *Tri-Mode* inputs which provide standard independent *Dual-Channel* operation, *Switching-Channel* operation, or *Parallel-Channel* operation. A new twist has been added to the *Dual-Channel & Parallel-Channel* modes in that the front panel select switches and footswitch remain active allowing you to switch in Channel Two (and its Boost function) in addition to the Channel One setting.

The PREAMP-OUT & POWER AMP-IN jacks can be used as an EFFECTS LOOP or as Send and Return points while slaving multiple amps together or for direct connection to recording and sound reinforcement mixers. The possibilities are endless. (i.e.: By inserting a Chorus pedal between the PREAMP-OUT of one amp and the POWER AMP-IN of another, a true stereo image effect can be achieved.) The HEADPHONE jack automatically mutes the speaker in addition to driving Stereo or Mono headphones and can also be used as a line out.

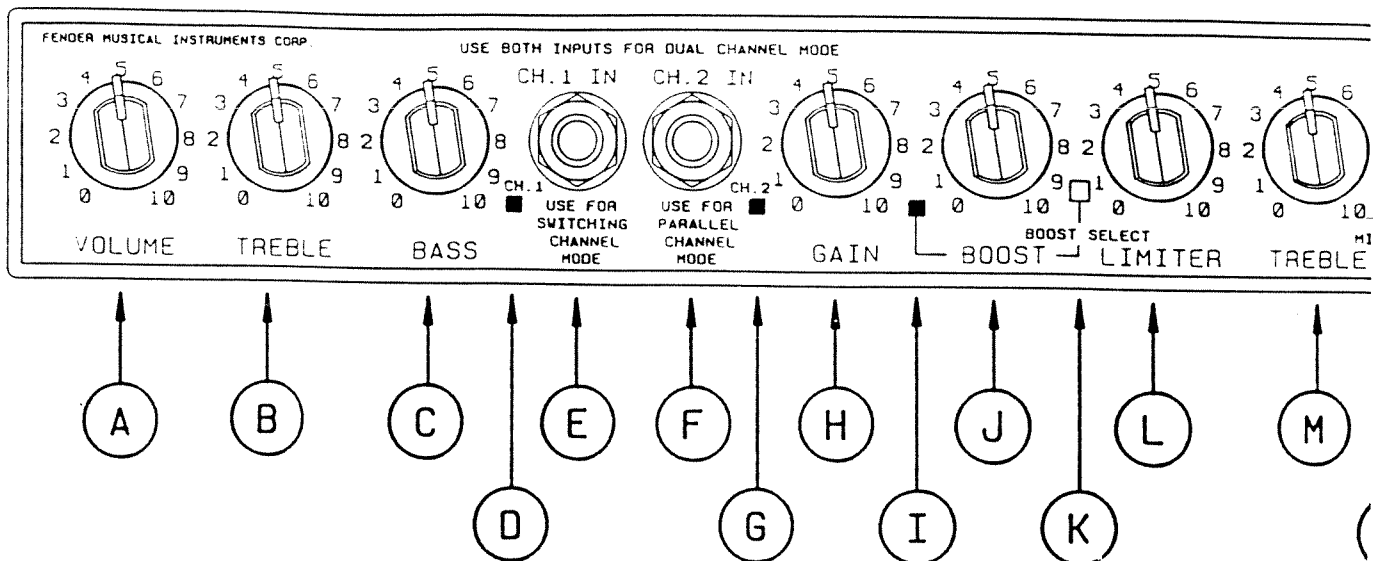
Last, but definitely not least, the Fender DELUXE 85 packs a new power amp utilizing Fender *CURRENT IMPULSE POWER (CIP)* technology and is based on a radically underdamped design that interacts with the speaker in much the same way as a tube amplifier does, producing sparkle and punch with an increase in apparent loudness and power that defies comparison to other similarly rated units. These amps are LOUD, and the Fender Special Design 12 inch speaker can reliably put it out, time after time.

The selection of a Fender amplifier will reward you with years of quality music in a wide range of controlled sounds. This manual is designed to familiarize you with the equipment and to acquaint you with its many fine features. Read it carefully so that you will benefit from all the features as soon as you start using the amplifier.

The built-in quality of a Fender amplifier is the result of over three and a half decades of dedication in the combined skills of research and development by our engineers and musicians.

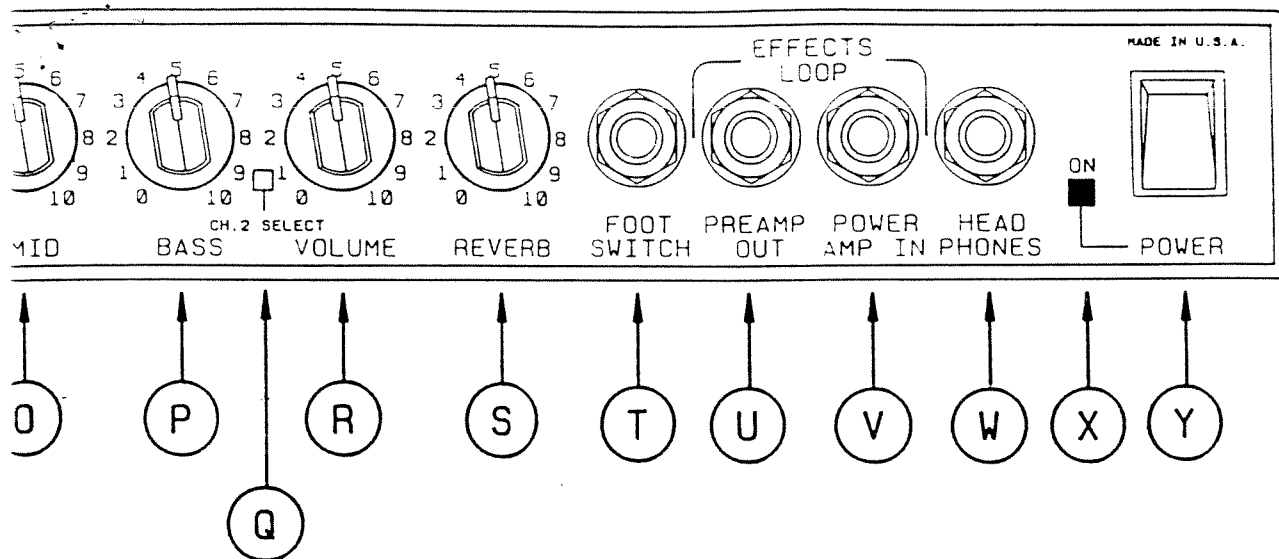
That is why we say, proudly...FENDER, The Sound That Creates Legends.

WARNING: TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE AMPLIFIER TO RAIN OR MOISTURE.



DELUXE 85 FRONT PANEL FUNCTIONS

- A. **VOLUME** — Adjusts the loudness of Channel One.
- B. **TREBLE** — Adjusts the amount of boost (accentuation) or cut (attenuation) in the high frequency range of Channel One.
- C. **BASS** — Adjusts the amount of boost or cut in the low frequency range of Channel One.
- D. **CHANNEL 1 INDICATOR** — This LED is illuminated when Channel One is on.
- E. **CHANNEL 1 INPUT** — Plug-in connection for instruments. When this input is used **alone with nothing plugged into the Channel 2 inputs**, the amplifier is in the *Channel-Switching* mode. The remote footswitch or front panel SELECT switch will route the input signals to either Channel 1 or Channel 2 as indicated by the two channel indicator LEDs on either side of the input jacks. When this input is used **in addition to an instrument plugged into the Channel 2 input**, the amplifier is in the *Dual-Channel* mode, i.e. Channel 1 instruments go through Channel 1 and Channel 2 instruments go through Channel 2. (See F. **CHANNEL 2 INPUT**.)
- F. **CHANNEL 2 INPUT** — Plug-in connection for instruments. When this input is used **alone with nothing plugged into the Channel 1 input**, the amplifier is in the *Parallel-Channel* mode. The input signal is routed to both Channel 1 and Channel 2 simultaneously, allowing a mix of the two channels to be achieved. When this input is used **in addition to an instrument plugged into the Channel 1 input**, the amplifier is in the *Dual-Channel* mode, i.e. Channel 1 instruments go through Channel 1 and Channel 2 instruments go through Channel 2. (**NOTE: The remote footswitch or front panel SELECT switch will still switch Channel 2 and its BOOST function on and off as indicated by the front panel LEDs.**)
- G. **CHANNEL 2 INDICATOR** — This LED is illuminated when Channel 2 is on.
- H. **GAIN** — Adjusts the amount of amplification in the Channel 2 preamp. Cleaner sound is achieved at lower gain settings; high gain settings will produce more sustain and distortion. This control works in conjunction with the **Channel 2 VOLUME** control to set the overall loudness at the output.
- I. **BOOST INDICATOR** — This LED is illuminated when the **BOOST** control is enabled.
- J. **BOOST** — Adjusts the amount of amplification in the Channel 2 preamp. When activated by the remote footswitch or front panel switch this control will provide additional gain to that which is already preset by the **GAIN** control.
- K. **BOOST SELECT SWITCH** — Activates the *Boost* function and simultaneously activates Channel 2 if it has been off. (See Q. **SELECT**.) **NOTE: This switch overrides the front panel SELECT switch and the SELECT & BOOST footswitches.**
- L. **LIMITER** — Adjusts the amount of compression at **high GAIN** settings. **The compression is activated by distortion in the Channel 2 preamp, therefore it is not as noticeable at low gain settings.**



- M. TREBLE—Adjusts the amount of boost or cut in the high frequency range of Channel Two.
- N. MID-BOOST—Activates a special pre-emphasis filter which accentuates mid-range frequencies.
- O. MID—Adjusts the amount of boost or cut in the mid frequency range of Channel Two.
- P. BASS—Adjusts the amount of boost or cut in the low frequency range of Channel Two.
- Q. SELECT—Activates the Channel 2 preamp. **NOTE: This switch overrides the SELECT footswitch.**
- R. VOLUME—Adjusts the overall loudness of Channel Two.
- S. REVERB—Adjusts the overall amount of reverberated signal mixed with the original dry signal. **NOTE: This control is disabled by the Reverb On/Off footswitch.**
- T. FOOTSWITCH—Plug-in connection for the remote three-way footswitch. The SELECT switch will toggle Channel 2 On and Off. The REVERB switch will toggle the reverb On and Off. The BOOST switch will toggle the boost function On and Off and also activate Channel 2 if it has been off. The footswitch SELECT LED indicator will illuminate when Channel 2 is selected; this is useful while in the boost mode to let you know whether Channel 2 will stay on when you exit the boost mode. i.e.: This allows you to switch between Channel 1 and Channel 2, Channel 1 and Boost, or Channel 2 and Boost with one switch actuation. **NOTE: The front panel BOOST and SELECT switches override the footswitch. THEY SHOULD BE OFF FOR PROPER FOOTSWITCH OPERATION. Any good quality patch cord will work with the remote footswitch, however a speaker grade cord is preferable to a coax guitar cord when it's available.**
- U. PREAMP OUT—This jack provides an unbalanced output signal from the preamp. This output can be used in conjunction with the POWER AMP IN jack as a patch point for effect units. This signal can also be used to feed recording and sound reinforcement mixers or to drive other DELUXE 85 amplifiers as slaves. This is done by connecting a standard guitar cord from the PREAMP OUT jack of the master amplifier to the POWER AMP IN jack of the slave.
- V. POWER AMP IN—This unbalanced jack inputs signal directly to the power amp. It automatically disconnects the preamp signal when used. This is useful when using the effects loop option or using the DELUXE 85 as a slave amp.
- W. HEADPHONES—This jack provides an output to standard stereo or mono headphones for private listening. **NOTE: Use of this jack automatically disables the main speaker. CAUTION: Prolonged listening at high levels may be hazardous to your hearing!** This jack can also be used as an unbalanced line output, which is post effects-loop, by using either a stereo or mono 1/4 inch phone plug connection.
- X. POWER INDICATOR—When this indicator is illuminated the DELUXE 85 is receiving power.
- Y. POWER SWITCH—Turns AC power ON and OFF. When the switch is OFF the amplifier is completely shut down.

LINE-CORD

This amplifier is equipped with a grounding type supply cord to reduce the possibility of leakage current. Be sure to connect it to a grounded receptacle. Operation from an ungrounded (two pronged) AC receptacle requires a three to two contact grounding type adaptor. Be sure to connect the adaptor's grounding lead to a good earth ground. **DO NOT ALTER THE AC PLUG.**

VINYL CARE

The exclusive Fender vinyl covering on your cabinet has been especially designed for years of lasting beauty. A very light soapy solution on a sponge may be used to remove dirt and residue that may accumulate in the grain. Be careful not to let any liquid come in contact with operating surfaces. **DO NOT** have the amplifier plugged into the power outlet when cleaning.

Troubleshooter's Checklist

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

- Is the amp power cord properly plugged into an electrical outlet?
- Is there power at the outlet?
- Is the speaker properly connected to the amplifier?
- Are all the control knobs turned up above four?
- Is the volume control on the instrument turned up?
- Is your instrument properly plugged into the amplifier?
(Eliminate any effect pedals and try another guitar cord.)

If, after checking all of the above, the system is still not performing correctly, consult your Fender Service Dealer.

DELUXE 85 SPECIFICATIONS

PART NUMBER: 22-5100

DIMENSIONS: Height: 16½" (41.9 cm)
Width: 20¾" (50.5 cm)
Depth: 9" (22.9 cm)

WEIGHT: 32 lbs. (14.5 kg)

INPUT IMPEDANCE: 1 meg Ohm.

NOMINAL LEVEL: 100 mv.

POWER OUTPUT: 65 Watts R.M.S.

RATED LOAD IMPEDANCE: 8 Ohms.

EFFECTS LOOP: Nominal Level -10dBv.
Output Impedance—1k Ohm.
Input Impedance—110k Ohm.

POWER REQUIREMENTS: 120 Volts AC 60 Hz. 1.67 Amps Max., 200 Watts Max.

SPEAKER COMPLEMENT: One 8 Ohm Fender Special Design 12 inch (P.N. 025923) speaker.

SOUND: "Look Ma, NO TUBES!"