

Fender®

**custom
amplification**



P/N 048749

**Dual
Professional™
Owner's Manual**

DUAL PROFESSIONAL™ OWNERS' MANUAL

INTRODUCTION

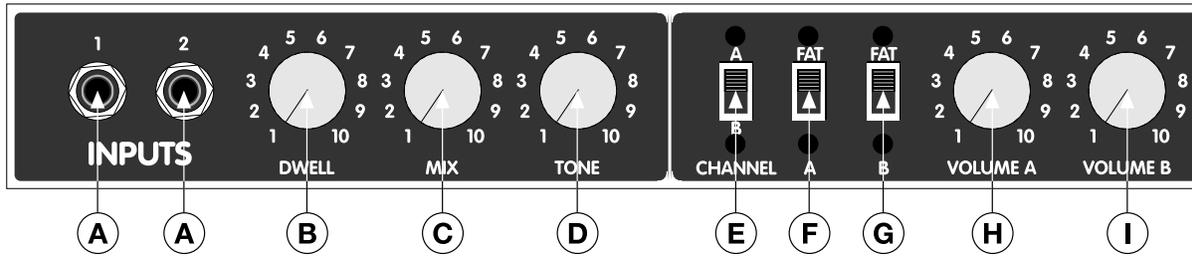
The Fender Amp Custom Shop is dedicated to creating high quality amplification to serve top artists and discriminating players. The Dual Professional is a premiere member of the Custom Shop family of amplifiers.

The first Dual Professional appeared in 1946. It was the first guitar amplifier to have 2 speakers, (10" Special Design). It sported features such as inputs for 2 instruments and a mic. It had 3 knobs controlling mic volume, instrument volume, and tone. With more power than ever before (40 watts), it had the volume to amplify rhythm guitar for the big band and western swing music of the time. And thanks to its new military-proven 6L6 power tubes, the reliability the touring groups needed was assured. It was the top of the line amp for the time.

In the spirit of all the great Fender amps of yesterday, we offer the Dual Professional of today. It is a hand-made, point-to-point wired, tube instrument amplifier. There are no solid-state (transistor) devices in the signal path of any kind. This amplifier was created from the efforts of a handful of top craftsmen, players and designers who saw a need and envisioned a new amplifier. Like the other Fender custom amps, the new Dual Professional is painstakingly built, one at a time, by a select group of craftsmen at the Fender electronics factory in Lake Oswego, Oregon.

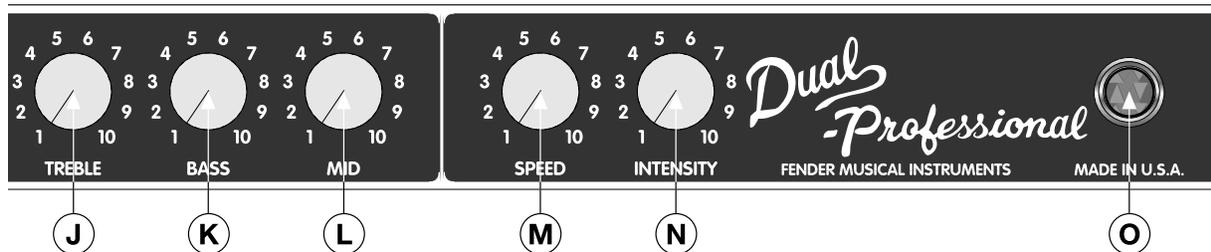
The Dual Professional was created for the player who requires a high power amplifier capable of lots of clean volume and "headroom" while retaining the warm, sweet singing tones of tubes. It is equipped with the 3-knob tube reverb for maximum versatility of reverb effects. The vibrato effect in the Dual Professional is of the direct-coupled oscillator type not heard from since the early 60s, giving a much different effect than the "Blackface" type tremolo, as found in the Twin Reverb®. It has 2 volume controls, switchable via the front panel CHANNEL A/B switch or the footswitch. There is also a corresponding FAT switch for each volume control, so that two separate sounds may be preset and selected during performance. The speakers in the Dual Professional are CELESTION® Vintage 30s, selected for their clear, powerful tone. The 2 button footswitch provided will switch the vibrato on or off as well as toggle between the VOLUME A/ FAT A and VOLUME B/ FAT B controls.

It is suggested that you read this manual thoroughly to understand all the features and functions of this amplifier. This amplifier will provide years of trouble-free service and playing enjoyment.

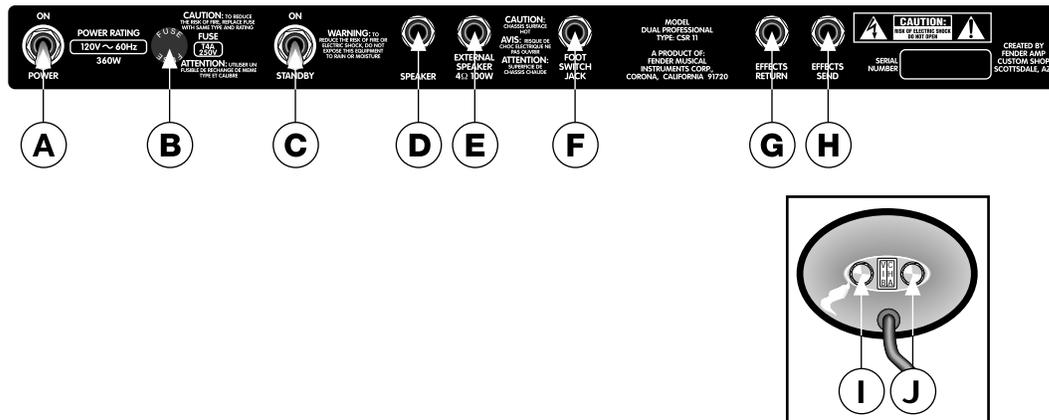


DUAL PROFESSIONAL FRONT PANEL FUNCTIONS

- A. **INPUTS** - Input 1 is the main guitar input for the Dual Professional. Input 2 will work as a 6dB lower gain, low-Z input for hot, active pickups or as a passive output to link amplifiers in a multi-amp set up. For example, when using a Dual Professional with a '59 Bassman, where you do not wish to have reverb on the Bassman, first plug the guitar into the Dual Professional input 1. Then connect a cord between Dual Professional input 2 and the Bassman® input 1, either channel. Now you can play both amps simultaneously.
- B. **DWELL** - This Adjusts the length of the reverb by varying how hard the springs in the reverb pan are driven.
- C. **MIX** - Controls the depth or strength of the reverb.
- D. **TONE** - Adjusts the brightness of the reverb.
- E. **CHANNEL A/B** - Allows front panel selection of CHANNEL A or CHANNEL B.
SPECIAL NOTE: This switch is deactivated by plugging in the footswitch.
- F. **FAT A** - Adds a 3dB boost in gain on the A CHANNEL only.



- G. FAT B - Adds a 3dB boost in gain on the B CHANNEL only.
- H. VOLUME A - Controls the loudness of CHANNEL A.
- I. VOLUME B - Controls the loudness of CHANNEL B.
- J. TREBLE - Adjusts the overall brightness of the amplifier.
- K. BASS - Adjusts the level of low frequencies through the amplifier.
- L. MID - Adjusts the level of midrange frequencies through the amplifier.
- M. SPEED - Adjusts the speed of the vibrato effect.
- N. INTENSITY - Adjusts the intensity of the vibrato effect.
- O. PILOT JEWEL - When this lamp is illuminated, the Dual Professional is receiving power. Should this bulb burn out, unscrew the red jewel and replace the lamp with a type T47 light bulb.



DUAL PROFESSIONAL REAR PANEL FUNCTIONS

- A. **POWER SWITCH** - This switch turns the AC power ON and OFF. When this switch is OFF the amplifier is completely shut down.
- B. **FUSE** - The fuse is in the AC supply of the amplifier and will help to protect the amplifier in the event of an electrical fault or tube failure. If a fuse blows, it should only be replaced by one with the same type and rating. NEVER use a fuse of higher current rating as this could damage the equipment and present a serious safety hazard. If the amplifier repeatedly blows fuses, it should be checked out by an authorized Fender service center.
- C. **STANDBY SWITCH** - This turns the amplifier ON and OFF. In the STANDBY position, the amplifier is off, although power is applied to the tube filaments to keep them warmed up and ready to play. A good rule of thumb is to turn the power switch on and wait at least 50 seconds before turning on the standby switch. Using this switch during short breaks will increase tube life.
- D. **SPEAKER** - Plug in connection for speakers. This jack must be used as the primary connection for speakers.
- E. **EXTERNAL SPEAKER** - Plug in connection for an external speaker. This jack MUST only be used in conjunction with the main SPEAKER JACK (Item D). If the EXTERNAL SPEAKER JACK is used without a cord plugged into the main SPEAKER JACK, there will be no sound.
- F. **FOOTSWITCH JACK** - Plug in connection for the footswitch. The footswitch allows remote control of vibrato on and off, as well as switching from CHANNEL A to CHANNEL B.
- G. **EFFECTS RETURN** - This is a post-reverb amplifier input. It may be used as a reinsertion point in an effects loop, or as a guitar input when no reverb is desired.

- H. EFFECTS SEND - This sends the instrument signal from INPUTS 1 and 2 along with the reverb out of the amplifier at a -20 dB level. It may be used to drive effects units in an effects loop, or it may be used to drive additional amplifiers in a multi-amp set up.
- I. VIB - Push on, push off switch that turns the VIBRATO feature on and off.
- J. CHA - Push on, push off switch that turns the CHANNEL A/B feature on and off.
- K. LINE CORD - (not shown) Your amplifier is equipped with a 3-prong grounding type supply cord to reduce the possibility of shock hazard. Be sure to connect it to a grounded receptacle.
DO NOT ALTER THE AC PLUG!
WARNING: THIS EQUIPMENT MUST BE EARTH GROUNDED.

TUBES

The Dual Professional tube complement consists of 4 Fender special design 5881/6L6WGC's (part# 039214), 5 Fender special design 12AX7WA's (part#013341), and 1 Fender special design 6V6GTA (part# 023564). Fender's special design tubes provide optimum performance in this amplifier. For best performance, replace with Fender special design tubes only. Tube life varies with playing style and application, but for best tone, tubes should be changed after every 500 hours of use. Tube location is printed on the tube label, inside the cabinet.

TOLEX COVERING CARE

DO NOT have the amplifier plugged into a power outlet when cleaning. The exclusive Fender tolex covering on your cabinet may be cleaned periodically with a sponge and a light soapy solution. Be careful not to let liquid come in contact with operating surfaces.

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 fuse blown?
- Are the speakers properly connected to the amplifier?
- Is the amp on standby?
- Are the amplifier VOLUME, TREBLE, MID and BASS controls above 0?
- Is the instrument volume control turned up?
- Is the instrument plugged into the amplifier?

(Eliminate any effects pedals and try another guitar cord.)

Try plugging the guitar into the EFFECTS RETURN jack. Check under all tube covers to see that the tube filaments are glowing a dull orange. If, after checking all of the above, the system is not performing correctly, consult your Fender authorized service center.

DUAL PROFESSIONAL SPECIFICATIONS

PART NUMBER:	081-1075-000 (100V) 081-1005-000 (120V) 081-1065-000 (230V) 081-1035-000 (240V)
POWER OUTPUT:	100 W R.M.S. minimum into 4 or 8 Ω
OUTPUT IMPEDANCE:	4 or 8 Ω
INPUT IMPEDANCE:	Input 1: 1M Ω Input 2: 20k Ω EFFECTS RETURN: 1M Ω
POWER REQUIREMENTS:	100V AC 50/60Hz 360W 120V AC 60Hz 360W 230V AC 50Hz 360W 240V AC 50Hz 360W
FUSE TYPE:	100-120V versions: T4A 250V 230-240V versions: T2A 250V
SPEAKER COMPLIMENT:	2 CELESTION VINTAGE 30 speakers
DIMENSIONS:	HEIGHT: 19-7/8" (50.5 cm) WIDTH: 26-5/32" (66.4 cm) DEPTH: 10-3/8" (26.4 cm)
WEIGHT:	76 lbs (34.5kg)
SOUND:	History in the making.

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

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

A PRODUCT OF:
FENDER AMP CUSTOM SHOP
SCOTTSDALE, AZ 85258-3241