

# Fender<sup>®</sup>

THE SOUND THAT CREATES LEGENDS

Ultra  
CHORUS

Owner's Manual

P/N 039254

# Ultra Chorus Owner's Manual

The Fender ULTRA CHORUS amplifier presents the player with the best value of any amplifier in its price class. The ULTRA CHORUS incorporates the same time proven and music industry accepted circuitry that made the Fender PRINCETON CHORUS such a sonic success. Besides the basic complement of VOLUME, TREBLE, MID, BASS AND REVERB controls in the NORMAL channel, the ULTRA CHORUS offers *completely independent* reverb and tone controls for the DRIVE channel! The DRIVE channel also features exclusive Fender Pre & De-Emphasis Distortion circuitry based on unique Pre and Post clipper voicing filters. These filters were 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 and the PRESENCE control provides continuous variation of the high frequency content in the de-emphasis voicing. The *extended range* three band equalization circuitry is post distortion and can be used to further modify the overall sound of the amp. In addition, a true stereo chorus circuit utilizing two 65-watt power amplifiers gives this amp that lush stereo chorus sound. The Fender ULTRA CHORUS is one of the most "Expressive" amplifiers ever made.

In addition to convenient features like *All Front Panel Mounted Controls and Jacks*, the ULTRA CHORUS features a detachable footswitch for selecting the Drive Channel and for activating the stereo chorus circuitry. 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 versatility of the ULTRA CHORUS is greatly

expanded by the individual mono and true stereo effects loops. These patch points allow for a wide variety of external effects connection schemes and amplifier slaving configurations. They also provide for direct connection to recording and sound reinforcement mixers.

Last, but definitely not least, the Fender ULTRA CHORUS packs a new stereo power amp section based on a radically underdamped design that interacts with the speakers 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 speakers 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 four decades of dedication in the combined skills of research and development by our engineers and musicians.

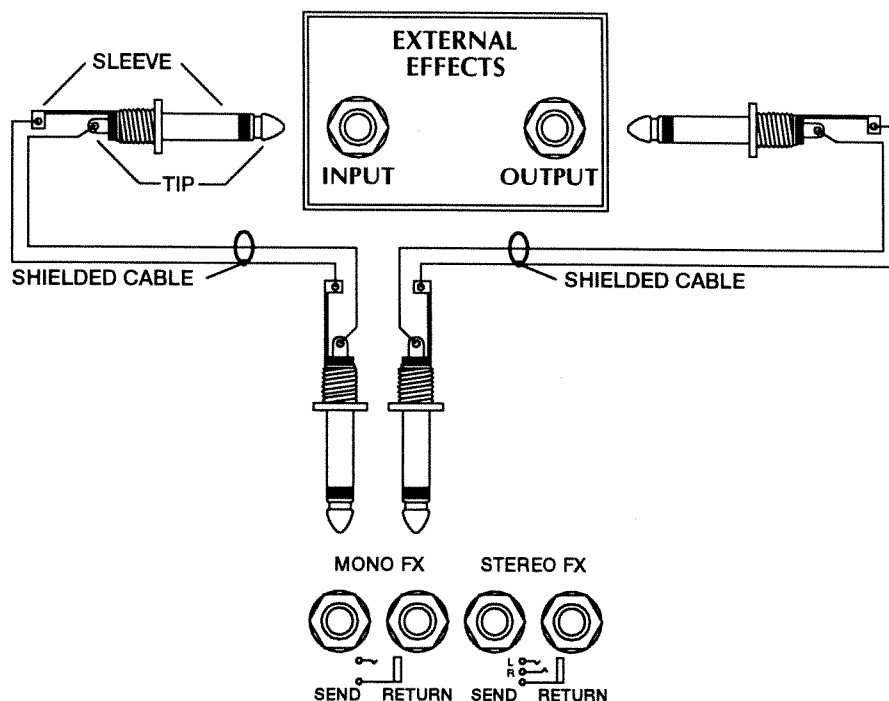
That is why we proudly say...FENDER, *The Sound That Creates Legends.*

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

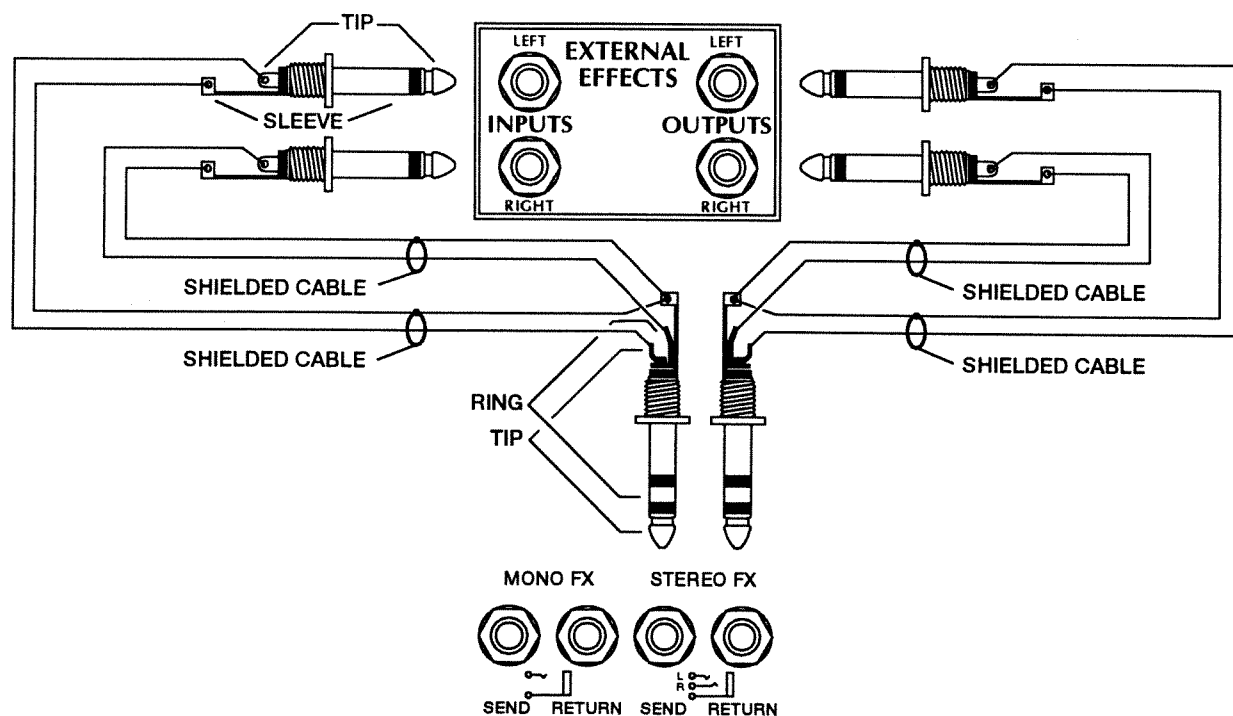
**NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED PERSONNEL ONLY.**

# Ultra Chorus Effects Loop connection diagrams

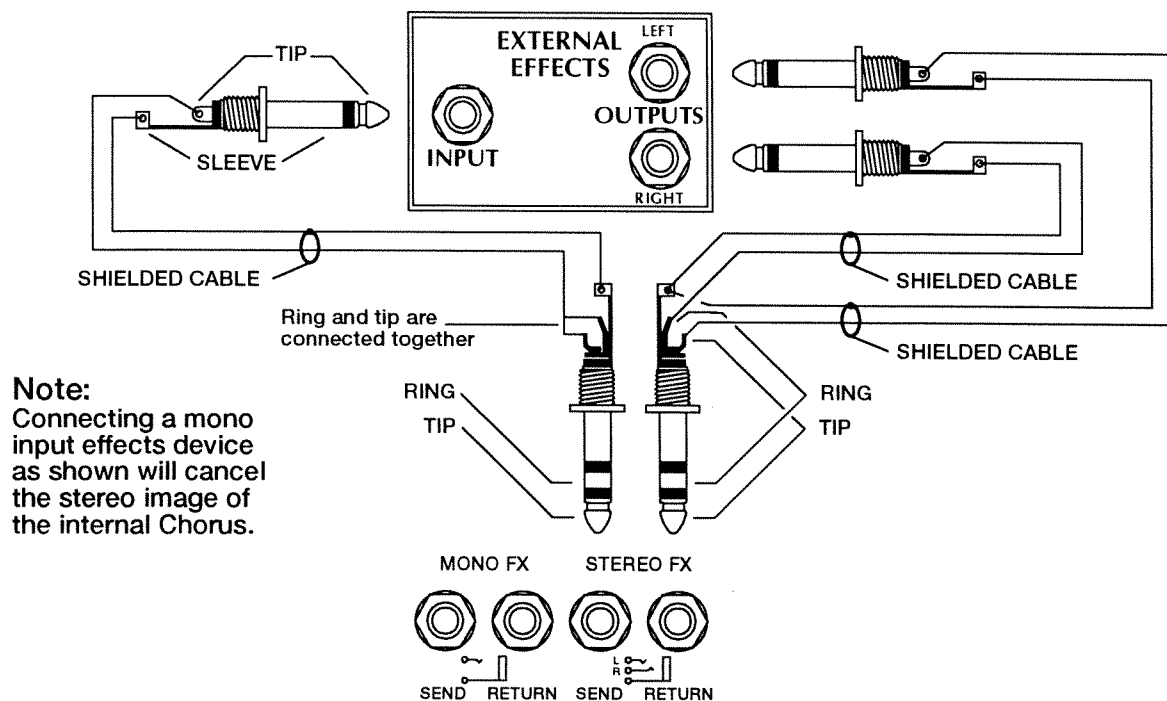
## 1. For mono effects devices



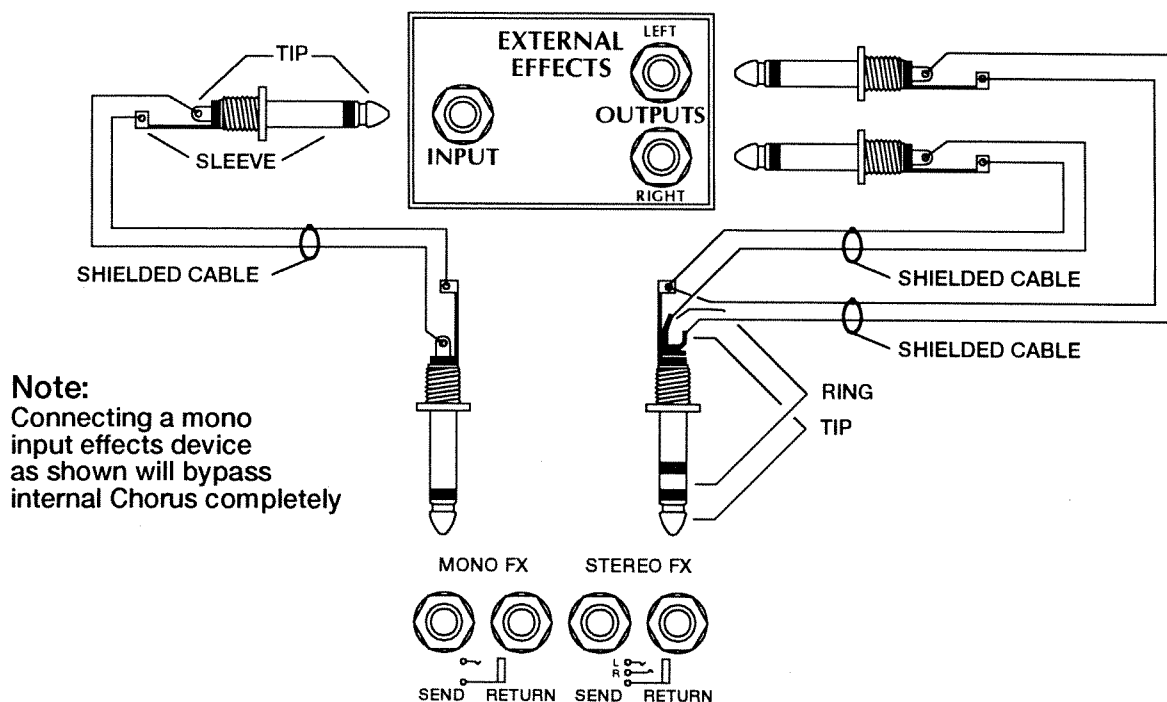
## 2. For stereo in/stereo out effects devices

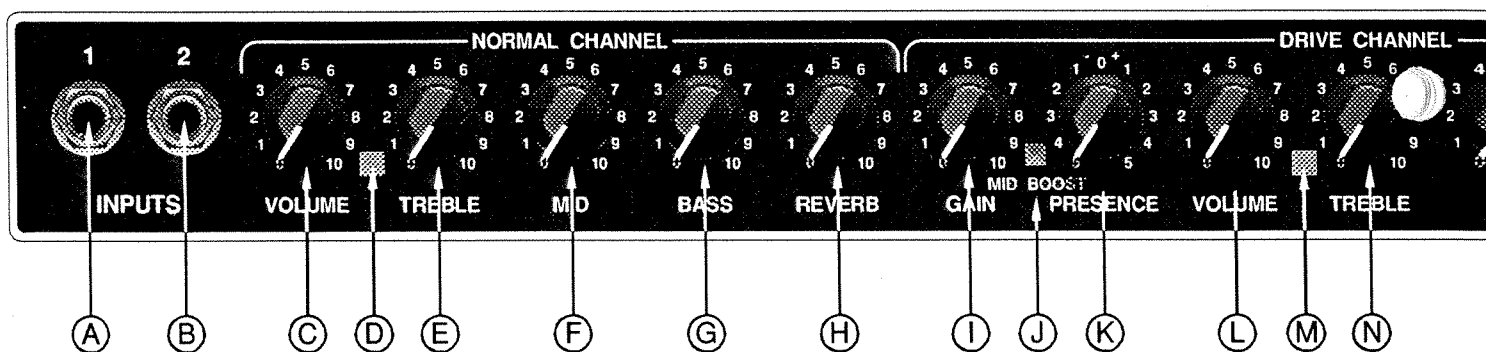


### 3. For mono in/stereo out effects devices



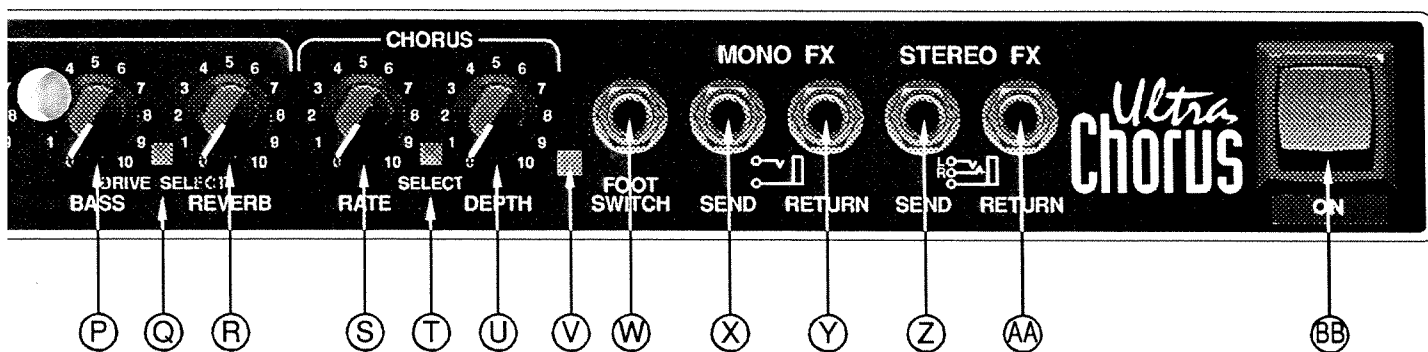
### 4. For mono in/stereo out effects devices (Alternate connection)





## Ultra Chorus Front Panel Functions

- A. **INPUT 1**—A high impedance, high sensitivity plug-in connection for instruments.
- B. **INPUT 2**—Plug-in connection for instruments. This input exhibits a lower input impedance and sensitivity than INPUT 1 and is useful with active preamp guitars, and will provide a darker tone with passive guitars. Both inputs are identical when used simultaneously.
- C. **VOLUME**—Adjusts the overall loudness of the Normal Channel.
- D. **NORMAL CHANNEL INDICATOR**—This LED is illuminated when the Normal Channel is active.
- E. **TREBLE**—Adjusts the amount of boost (accentuation) or cut (attenuation) in the high frequency range of the Normal Channel.
- F. **MID**—Adjusts the amount of boost or cut in the mid frequency range of the Normal Channel.
- G. **BASS**—Adjusts the amount of boost or cut in the low frequency range of the Normal Channel.
- H. **REVERB**—Adjusts the overall amount of reverberated signal mixed with the original dry signal for the Normal Channel.
- I. **GAIN**—Adjusts the amount of preamp amplification in the Drive Channel. Cleaner sound is achieved at lower gain settings; high gain settings will produce more sustain and distortion. This control works in conjunction with the DRIVE VOLUME control (Item L) to set the overall loudness at the output while the Drive Channel is active.
- J. **MID BOOST**—Activates a special pre-emphasis filter which accentuates mid range frequencies. This boost occurs pre distortion in the Drive Channel and will further modify the distortion characteristic.
- K. **PRESENCE**—Adjusts the amount of boost or cut in the upper high frequency range of the Drive Channel. This control occurs post preamp distortion and is useful in adjusting the distortion characteristic from brash, to smooth.
- L. **VOLUME**—Adjusts the overall loudness of the Drive Channel.
- M. **DRIVE CHANNEL INDICATOR**—This LED is illuminated when the Drive Channel is active.
- N. **TREBLE**—Adjusts the amount of boost or cut in the high frequency range of the Drive Channel.
- O. **MID**—Adjusts the amount of boost or cut in the mid frequency range of the Drive Channel.
- P. **BASS**—Adjusts the amount of boost or cut in the low frequency range of the Drive Channel.
- Q. **DRIVE SELECT**—Activates the Drive Channel. NOTE: This switch disables the Channel Select Footswitch and the Normal Channel controls.
- R. **REVERB**—Adjusts the overall amount of reverberated signal mixed with the original dry signal for the Drive Channel.
- S. **RATE**—Adjusts the sweep rate of the chorus generating circuitry. A lower number corresponds to a slower rate of sweep.
- T. **SELECT**—Activates the stereo CHORUS mode for both the Normal and Drive channels. NOTE: This switch disables the Chorus Select Footswitch.
- U. **DEPTH**—Adjusts the intensity of the chorus effect. A lower setting will introduce a subtle yet distinct effect whereas a higher setting will create a more dramatic effect. With both the RATE (Item S) and DEPTH controls set midway or higher, a variety of vibrato/tremolo type effects can be achieved.



**V. CHORUS INDICATOR**—This LED is illuminated when the stereo chorus is active. The color of the LED is modulated red and green by the chorus sweep LFO to give a visual indication of the sweep rate.

**W. FOOTSWITCH**—Plug-in connection for remote footswitch to switch between the Normal and Drive channels and to activate the Stereo Chorus mode. For proper operation of the footswitch, both DRIVE SELECT (Item Q) and CHORUS SELECT (Item T) switches should be out. NOTE: 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 is available.

**X. MONO FX SEND**—This jack provides an unbalanced mono output signal from the preamp at a point before the internal CHORUS circuits. This output can be used in conjunction with the MONO FX RETURN (Item Y) as a patch point for mono effects devices. (SEE EFFECTS LOOP CONNECTION DIAGRAMS.) The MONO FX SEND can also be used to feed recording and sound reinforcement mixers a dry signal. (For a signal with internal CHORUS, use the STEREO FX SEND (Item Z) jack.) Additionally this output can be used to drive another ULTRA CHORUS as a slave amp. This is done by connecting a standard guitar cord from the MONO FX SEND jack of the master amplifier to the MONO FX RETURN jack of the slave.

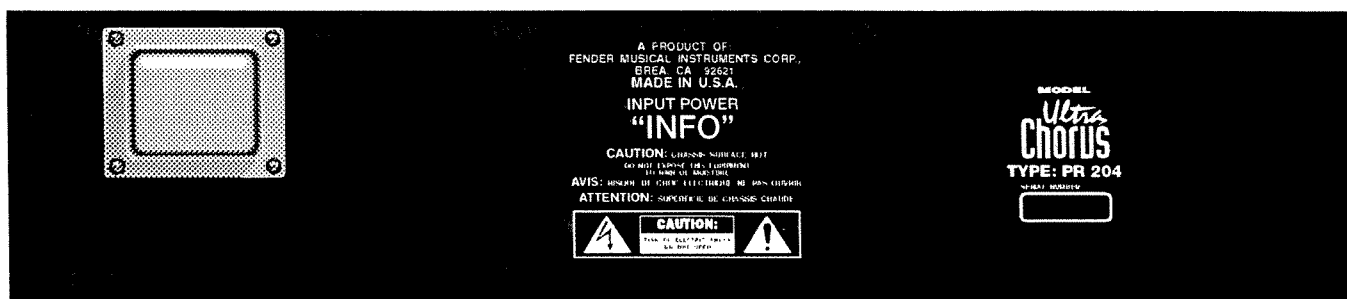
**Y. MONO FX RETURN**—This unbalanced jack inputs signal to the stereo chorus generating circuitry,

which drives the stereo power amp section. It automatically disconnects the preamp and reverb circuitry when used. This is useful when using the MONO FX option or when using the ULTRA CHORUS as a slave amplifier for a **mono** signal source. The CHORUS is active in the slave so that a stereo image will be generated if it is used.

**Z. STEREO FX SEND**—This jack provides an unbalanced stereo output from the preamp, reverb and chorus circuits of the ULTRA CHORUS. This output can be used in conjunction with the STEREO FX RETURN (Item AA) as a patch point for stereo effects devices. (SEE EFFECTS LOOP CONNECTION DIAGRAMS.) The Stereo Effects Loop jacks are standard 1/4 inch Tip-Ring-Sleeve types, with the left channel signal on the tip and the right channel signal on the ring. This send can also be used to feed a stereo signal to two channels of a recording or sound reinforcement mixer. Additionally this output can be used to drive another ULTRA CHORUS as a slave amp. This is done by connecting a shielded stereo cord from the STEREO FX SEND jack of the master amplifier to the STEREO FX RETURN of the slave.

**AA. STEREO FX RETURN**—This stereo jack inputs signal directly to the left and right power amps. It automatically disconnects the preamp, reverb and chorus circuitry when used. This is useful when using the ULTRA CHORUS as a slave amplifier for a **stereo** signal source.

**BB. POWER SWITCH**—Turns AC power ON and OFF. When the switch is OFF the amplifier is completely shut down.



## Ultra Chorus Rear Panel

### LINE CORD

This Amplifier is equipped with a grounding type supply cord to reduce the possibility of shock hazard caused by leakage current. Be sure to connect it to a grounded AC receptacle. **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.

## Trouble Shooter'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?
- Are the speakers 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.

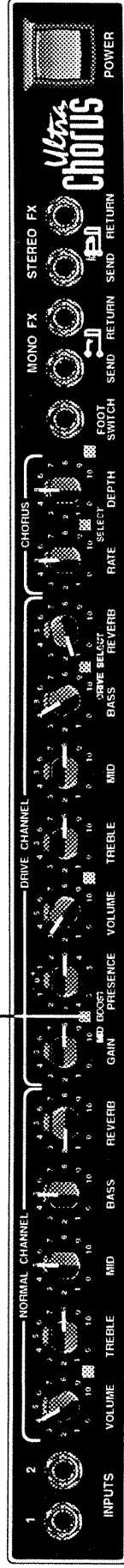
# Ultra Chorus Specifications

<b>TYPE:</b>	PR 204	
<b>PART NUMBER:</b>	120V Version:	22-6701
	230V Version:	22-6731
<b>INPUT IMPEDANCE:</b>	INPUT 1 only:	100 mv
	INPUT 2:	200 mv
<b>POWER OUTPUT:</b>	65 Watts R.M.S. per channel = 130 Watts R.M.S.	
<b>RATED LOAD IMPEDANCE:</b>	8 ohms per channel	
<b>MONO EFFECTS LOOP:</b>	NOMINAL LEVEL:	-10dBv
	SEND OUTPUT IMPEDANCE:	1 Kohm
	RETURN INPUT IMPEDANCE:	25 Kohm
<b>STEREO EFFECTS LOOP:</b>	NOMINAL LEVEL:	-10dBv
	SEND OUTPUT IMPEDANCE:	1 Kohm
	RETURN INPUT IMPEDANCE:	94 Kohm
	Specifications for each channel-- Left on Tip, Right on Ring )	
<b>POWER REQUIREMENTS:</b>	100 - 120VAC, 50 - 60Hz, 4A max 230 - 240VAC, 50Hz, 1.8A max	
<b>SPEAKER COMPLIMENT:</b>	Two 8 Ohm Fender Special Design 12 inch speakers ( P/N 025923 )	
<b>DIMENSIONS:</b>	HEIGHT:	18-1/2" ( 47 cm )
	WIDTH:	26-1/8" ( 66 cm )
	DEPTH:	10-1/4" ( 26 cm )
	WEIGHT:	47Lbs. ( 21.3kg )
<b>SOUND:</b>	"KICKS @\$\$, in STEREO!"	



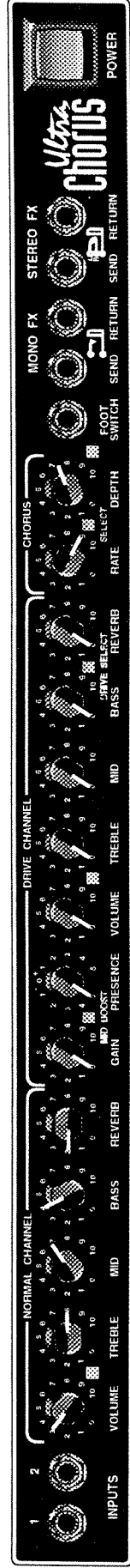
# Standard Strat / Any Pickup Combination

IN



# Bayou Rhythm / Strat / Neck Position

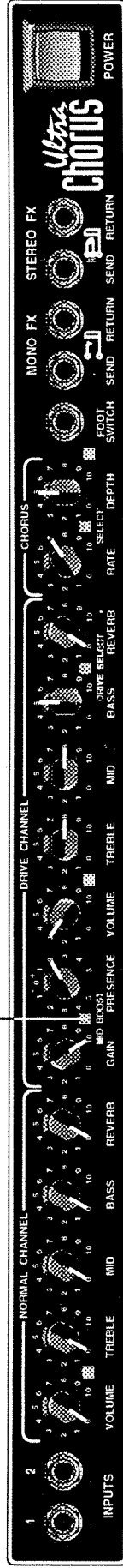
Note: Uses the  
normal channel only.



# Shattering Glass / Humbucking Lead

Note: Uses the  
drive channel only.

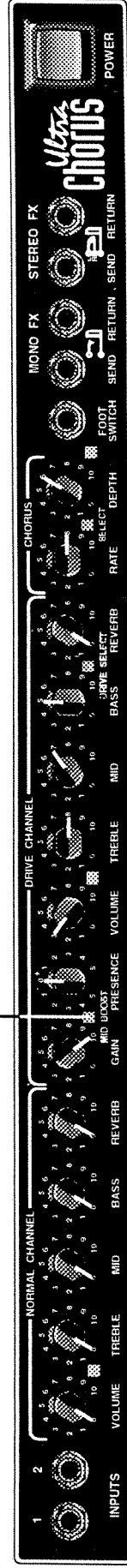
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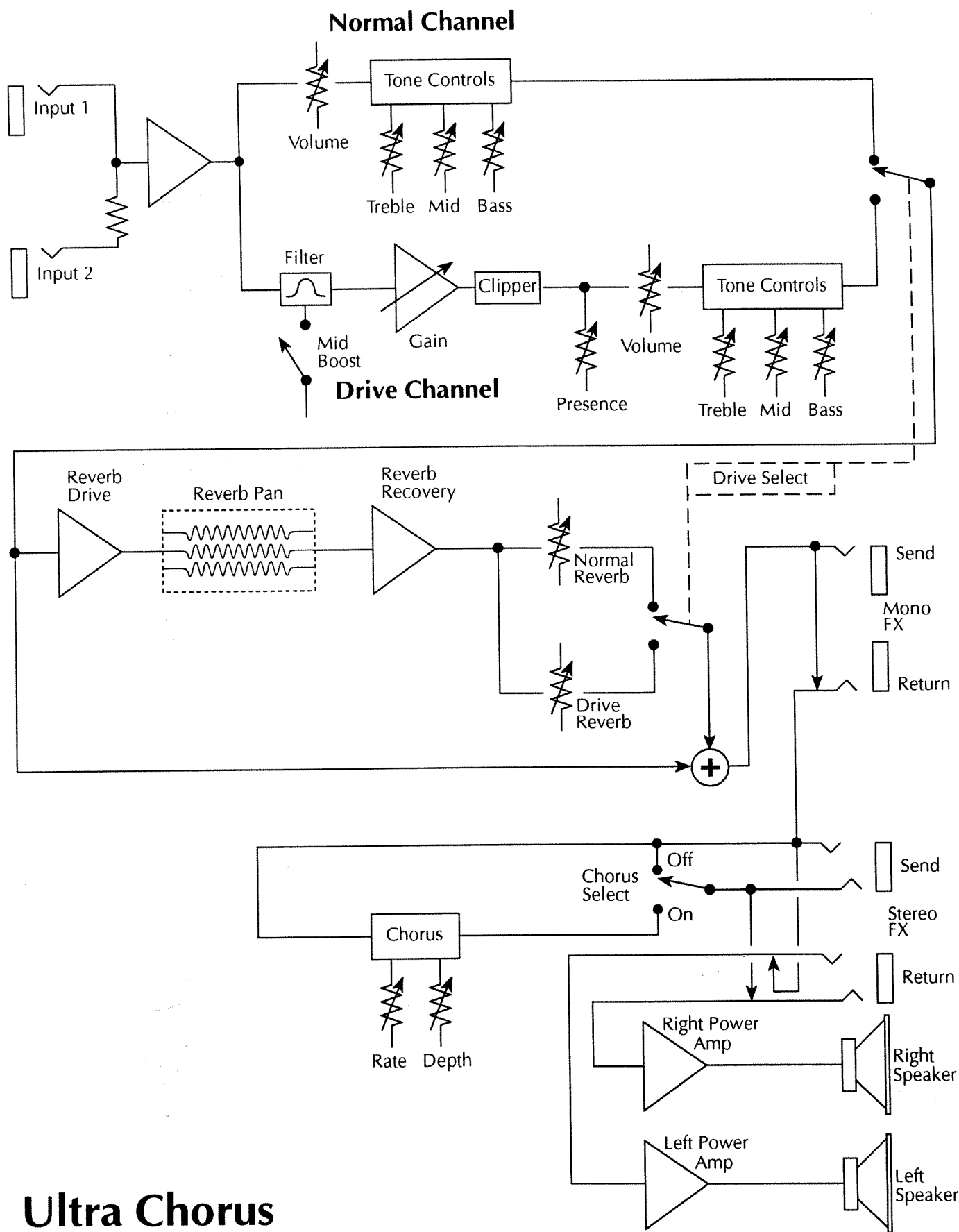


# Snake Rhythm / Humbucking Bridge Position

Note: Uses the  
drive channel only.

OUT





# Ultra Chorus Block Diagram

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