# MUSTANG<sup>™</sup>LT50 Guitar Amplifier



**EXPANDED OWNER'S MANUAL** 



## CONTENTS

Introduction	1
Control Panel	2
Presets Basics	3
Editing and Saving Presets	4
Accessing Preset Contents	4
Editing and Saving Amplifier Control Settings	4
Changing the Amplifier Model in a Preset	7
List of Mustang LT50 Amplifier Models	8
Editing and Saving Effects Control Settings	9
Replacing, Adding and Deleting Effects	10
Setting Delay Times with the Tap Button	12
List of Mustang LT50 Effect Models	13
Menu Functions	15
Tuner	16
Footswitch	17
Levels	21
Restore	21
About	22
Auxiliary Input and Headphone Output	22
USB Port	23
Mono Line Output	23
Fender Tone App	23
Specifications	24

## INTRODUCTION

This expanded owner's manual is a thorough user's guide to the features and functions of the Mustang LT50 amplifier.

As a complement to the Mustang LT50 Quick Start Guide that comes with each amplifier, this manual presents a detailed look at the amp's versatile features, including navigation and modification of the onboard presets, and comprehensive descriptions of the amplifier and effect models. It also includes illustrated step-by-step instructions for using Mustang LT50's onboard tuner, footswitch, USB port and other functions. Further, Mustang LT50 offers even more tonal possibilities when paired with the Fender Tone<sup>™</sup> app (*page 23*).

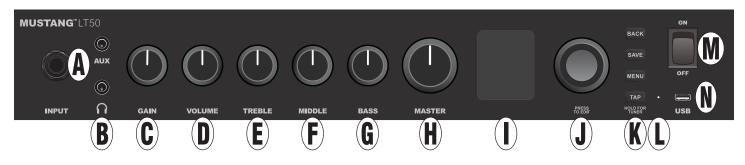
While this expanded manual presents the most current version of the amplifier, also check back for updated manual versions that will serve as even more helpful guides as Mustang LT50 and its capabilities evolve.

Be sure to check **fender.com/firmware/support** regularly for firmware updates that improve and enhance the Mustang LT50 experience.



## **CONTROL PANEL**

The Mustang LT50 top control panel consists of an INSTRUMENT INPUT, six CONTROL KNOBS, a DISPLAY WINDOW, an ENCODER wheel, four UTILITY pushbuttons, a FOOTSWITCH INPUT, an AUXILIARY INPUT (1/8"), a HEADPHONE OUTPUT (1/8"), a TAP LIGHT and a USB PORT.



- A. INPUT: Plug instrument in here.
- **B.** AUXILIARY INPUT, HEADPHONE OUTPUT: 1/8" auxiliary input for connecting external audio devices, and 1/8" output for headphone use (*page 22*). Headphone output mutes speaker.
- C. GAIN: Affects gain setting in active preset.
- D. VOLUME: Affects individual volume of active preset.
- E. TREBLE: Affects treble tone setting in active preset.
- F. MIDDLE: Affects midrange tone setting in active preset.
- G. BASS: Affects bass tone setting in active preset.
- H. MASTER VOLUME: Controls actual overall volume.
- I. **DISPLAY WINDOW:** Shows preset in use, preset contents and parameters, and other functions (i.e., tuner and other menu functions).
- J. ENCODER: Rotary control with press-switch function. For viewing, selecting and adjusting Mustang LT50 presets, controls and other functions.

#### **K. UTILITY BUTTONS**

BACK: Returns user to the previous screen or original preset screen.
SAVE: For saving preset modifications, renaming presets and saving presets to a new location.
MENU: For accessing tuner, footswitch and other functions (*page 15*).
TAP: For setting delay times (*page 12*) and accessing built-in tuner (*page 16*).

- L. TAP LIGHT: Flashes in time with delay effects.
- M. POWER: Turns amplifier on and off.
- **N. USB PORT:** Amp connection point for USB audio recording (*page 23*).
- **O. IEC POWER INLET (REAR PANEL; NOT SHOWN):** Using the included power cord, connect to a grounded outlet in accordance with the input power voltage and frequency specified at the power inlet.
- P. FOOTSWITCH (REAR PANEL; NOT SHOWN): Connect optional four-button footswitch here (page 17).
- **Q. MONO LINE OUT (REAR PANEL; NOT SHOWN):** Mono line output for connection to external sound and recording equipment (*page 23*).

## **PRESET BASICS**

Mustang LT50 features 30 sequentially numbered factory presets. It also features 30 empty preset "slots" for presets created by the user and presets dowloaded using the Fender TONE<sup>™</sup> app (*page 23*).

Each preset consists of an amplifier and one or more effects (or, in some cases, no effects). Note that when turning the amplifier on, the default active preset is always preset 01. All 60 presets slots can be customized by the user, and the original 30 factory presets can always be restored if needed by using the "REPLACE" function in the SAVE menu (*page 7*).

To scroll through presets, turn the ENCODER; whichever preset is displayed becomes active:



Mustang LT50's 30 factory presets are:

01 FENDER CLEAN	11 METAL LEAD	21 TOUCH WAH
02 SILKY SOLO	12 VINTAGE TREMOLO	22 SUPER ROCK
03 CHICAGO BLUES	13 SUPER DRYCLEAN	23 NICE FLANGER
04 CLASSIC ROCK	14 THRASH OVERKILL	24 VIBRA DOOM
<b>05</b> DREAMY	15 CLEAN DELAY	25 SURF MUSIC
06 COUNTRY PICKING	16 OCTOBOT ONE NOTE	26 BLUES LEAD
07 SKATE PUNK	17 LITTLE CHAMP	27 ROCK A BILLY
08 SOLO MIDBOOST	18 PHASER SWIRL	28 GARAGE FUZZ
<b>09</b> JAZZ AMP	<b>19</b> 60S FUZZ	29 SPACE TRAVEL
10 BRIT 64 RHYTHM	20 MYTHIC CRUNCH	30 ACOUSTIC SIM

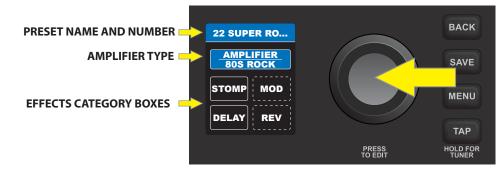
## **EDITING AND SAVING PRESETS**

Presets can be easily edited and, if desired, renamed and saved in place or saved in a different location. The controls of each amplifier type can be adjusted, or an amp model can be replaced with a different one. Similarly, various effects controls can be adjusted, or effects can be removed from or added to a preset.

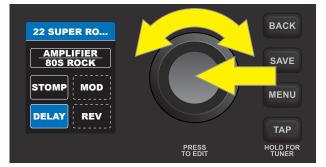
When a preset is active, the box containing its number is blue, indicating that no edits have been made. Once an edit is made, the box containing the preset number turns red and the preset title screen will read "UN-SAVED". When edits are saved, the preset number box returns to blue and the "UNSAVED" title clears.

## ACCESSING PRESET CONTENTS

To access the contents of a preset, press the ENCODER. From the top down, the DISPLAY WINDOW will then show the number and name of the preset, the amplifier type in use, and four boxes that organize the effects used for that preset (if any). These effects category boxes are labeled STOMP (stompbox), MOD (modulation), DELAY and REV (reverb). When first accessing preset contents, the preset name and amplifier type are highlighted in blue:

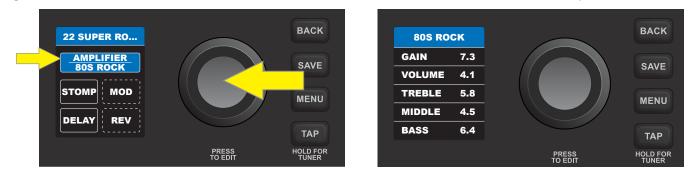


Select the amp model or one of the effects category boxes by turning and pressing the ENCODER. The active selection is then highlighted in blue:



## EDITING AND SAVING AMPLIFIER CONTROL SETTINGS

To edit and save individual control settings of a preset's amplifier model, first select the amp model by pressing the ENCODER on it. The DISPLAY WINDOW will then show a list of controls for the amp model in use:



There are two ways to adjust an amp control knob setting. A control parameter that corresponds to an actual physical knob on the control panel can be adjusted simply by turning the physical control knob until the desired value is reached in the DISPLAY WINDOW. In the example below, the amp model's TREBLE setting is adjusted by turning the physical TREBLE control knob on the control panel:



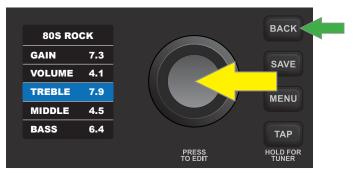
Alternately, select a control parameter by turning and pressing the ENCODER; its surrounding box will turn from blue to red:



The control can then be adjusted by turning the ENCODER or by turning a corresponding physical control knob on the control panel:

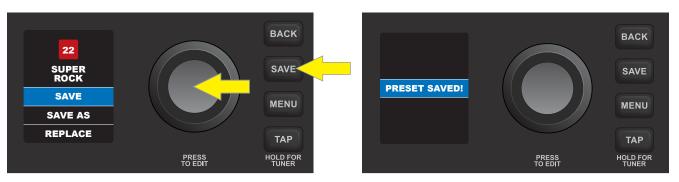


At this point, press the ENCODER or the BACK utility button (*green arrow*) to accept the adjusted control values. Pressing BACK returns the user to the preset contents screen; pressing the ENCODER lets the user continue making controls setting changes, and the box surrounding the control setting will return to blue. When control setting edits are complete, press the SAVE utility button to save the changes to the preset.



**IMPORTANT:** If edited amp control settings are not saved, the preset will revert to its original amp control settings when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save edited amp control settings, press the SAVE utility button and use the ENCODER to scroll to one of three options—SAVE, SAVE AS or REPLACE. Each is detailed below.

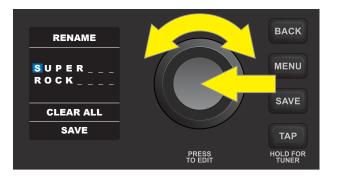
**SAVE:** Keeps an edited preset in the same location with the same name. To do this, press the SAVE utility button and use the ENCODER to scroll to "SAVE". Press the SAVE utility button again or press the ENCODER. A brief "PRESET SAVED!" screen will then flash before returning to the original preset screen:



**SAVE AS:** Enables saving a preset in a different position, with or without a different name. To do this, press the SAVE utility button and use the ENCODER to scroll to "SAVE AS". Press the ENCODER to access a "CHOOSE SLOT" list of locations where the preset can be moved. Select a new location by turning and pressing the ENCODER:

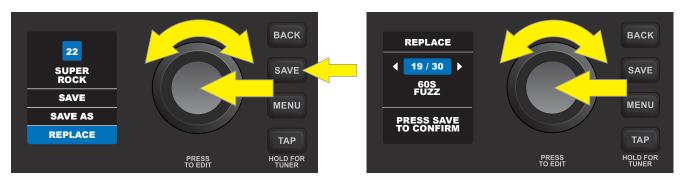


Whether renaming the preset or not when using "SAVE AS", a name must be entered by pressing the ENCOD-ER to activate a cursor, then spelling out the name by turning and pressing the ENCODER to scroll through and select characters. All characters can be cleared by using the ENCODER to scroll to and select "CLEAR ALL". When name entry is completed for the new location, save it by pressing the SAVE utility button or by using the ENCODER to scroll to and select "SAVE". A brief "PRESET SAVED!" screen will then flash before returning to the original preset screen:





**REPLACE:** Any existing preset can be replaced with another by pressing the SAVE utility button, using the ENCODER to scroll to and select "REPLACE" and choosing among the 30 original factory presets (*page 3*). After selecting "REPLACE", use the ENCODER to scroll to any of the 30 presets; each one is automatically "previewed" so the user can hear it before the preset is loaded. Press the ENCODER to select the preset, confirm it by using the ENCODER to scroll to and select "NO CANCEL" or "YES REPLACE" (*not shown*) and save it in the chosen slot:



## **CHANGING THE AMPLIFIER MODEL IN A PRESET**

The amplifier model in a preset can be replaced with another one (*see list of Mustang LT50 amplifier models on page 8*). To do this, acess the contents of a preset by pressing the ENCODER on it; the amp model will automatically be highlighted. Press the ENCODER again to see a list of controls for the amp model in use; the name of the amp model appears at the top of this list.

Press the ENCODER once more to activate the amplifier replacement function; the box surrounding the amp name will turn from blue to red, and white arrows will bracket the amp name. Turn the ENCODER to scroll to a new amp model. Press the ENCODER to accept the amp model change, after which the box surrounding the amp name will return to blue; or press the BACK utility button accept the amp model change and return to the preset contents screen:



**IMPORTANT:** If an amplifier replacement is not saved, the preset will revert to its original amp type when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save a preset amp replacement, follow the SAVE, SAVE AS or REPLACE instructions on page 6 and at the top of this page.

#### **MUSTANG LT50 AMPLIFIER MODELS**

This table lists the amp models in Mustang LT50. The amp label used in each preset appears in the lefthand column, followed by the amp type and a brief description in the righthand column.

PRESET AMP LABEL	AMP TYPE AND DESCRIPTION			
SUPER CLEAN	Direct-to-mixing-desk studio-preamp purity with clean, uncolored tonal response			
СНАМР	Based on the '57 Champ <sup>®</sup> —the small but mighty late-'50s Fender recording great			
DELUXE DIRT	Based on a 1957 Deluxe <sup>™</sup> —a medium-power late-'50s Fender tweed classic known for thick, compressed overdrive			
50S TWIN	Based on a 1957 Twin—an original-era 2x12" Fender tweed classic prized for clean-to-dirty versatility			
BASSMAN	Based on the venerable '59 Bassman <sup>®</sup> —one of Fender's greatest tweed amps, which began life as a bass amp before being adopted by countless guitarists			
PRINCETON	Based on a 1965 Princeton <sup>®</sup> —a mid-'60s Fender studio favorite with the snappy tone of a single 10" speaker			
DELUXE CLN	Based on the highly popular 1965 Fender Deluxe Reverb <sup>®</sup> —an amp with great tone whether clean or dirty, and cranked in countless clubs			
TWIN CLEAN	Based on the 1965 Fender Twin Reverb <sup>®</sup> —an indispensable mid-'60s stage-and- studio favorite prized for producing the Fender clean tone			
EXCELSIOR	An elegantly eccentric modern-day Fender model with the distinctive thump of a 15" speaker			
SMALLTONE	Inspired by the garage-classic 1960s Sears Silvertone beloved of retro/alternative players			
70S UK CLN	Inspired by the original 100-watt Hiwatt DR103, which is the classic cleaner-tone British stack			
60S UK CLN	Inspired by the Vox AC30, which powered the British Invasion and produced remarkable clean and dirty tone			
70S ROCK	Inspired by a late-'60s/early-'70s Marshall Super Lead, the amp that powered the dawn of hard rock			
80S ROCK	Inspired by the Marshall JCM800, which produced quintessential '80s metal tone			
DOOM METAL	Inspired by the "sludgy" majesty of the Orange OR120			
BURN	Based on the "burn" channel of the modern Fender Super-Sonic amp, which has two cascading preamp gain stages for pronounced sustain			
90S ROCK	Based on the Mesa Dual Rectifer, which featured distinctive distortion that shaped the "nu-metal" sound			
ALT METAL	Based on the distinctive nu-metal-defining distortion of the Mesa Dual Rectifier, gat- ed with a very fast attenuation curve especially ideal for high-gain metal			
METAL 2000	Modern high-gain scorch based on the EVH® 5150 <sup>III</sup>			
SUPER HEAVY	Modern high-gain scorch based on the EVH <sup>®</sup> 5150III, gated with a very fast attenua- tion curve especially ideal for high-gain metal			

Champ, Deluxe, Bassman, Princeton, Deluxe Reverb and Twin Reverb are trademarks of FMIC. All other non-FMIC product names and trademarks appearing in this manual are the property of their respective owners and are used solely to identify the products whose tones and sounds were studied during sound model development for this product. The use of these products and trademarks does not imply any affiliation, connection, sponsorship, or approval between FMIC and with or by any third party.

## EDITING AND SAVING EFFECTS CONTROL SETTINGS

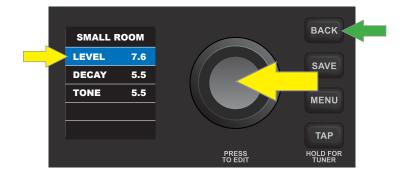
To edit and save individual control settings of a preset's various effects (if any), first select the effect *category* box containing the effect to be edited by turning and pressing the ENCODER. There are four effects category boxes that can each contain one effect: STOMP (stompbox), MOD (modulation), DELAY and REV (reverb):



The DISPLAY WINDOW will then show a list of controls for the effect model in use in that category; use the EN-CODER to scroll to a particular effect control. Press the ENCODER to select the effect control; its surrounding box will turn from blue to red. Turn the ENCODER to set a new value for the selected control value:



At this point, press the ENCODER to accept the adjusted effect control value and exit edit mode; the surrounding box will then return to blue. Alternately, press the BACK utility button (*green arrow*) to accept the effect control value change and return to the preset contents screen:

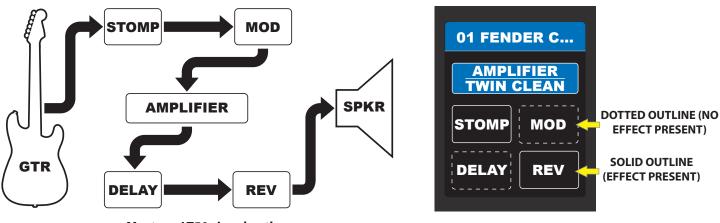


**IMPORTANT:** If an edited effect control setting is not saved, the preset will revert to its original effect control settings when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save edited effect control settings, follow the SAVE, SAVE AS or REPLACE instructions on pages 6 and 7.

## **REPLACING, ADDING AND DELETING EFFECTS**

As noted, each of the four effect category boxes can contain one effect. If an effect is present, it can be replaced with another effect *in that category*, or it can be deleted. If no effect is present, one can be added (*see list of Mustang LT50 effects models on pages 13-14*). The signal path is *Instrument—Stompbox—Modulation— Amplifier—Delay—Reverb—Speaker*, as illustrated at left below.

Note that effects category boxes that already contain an effect have a solid outline, whereas effects category boxes that *do not* contain an effect have a dotted outline, as seen in the image at right below:

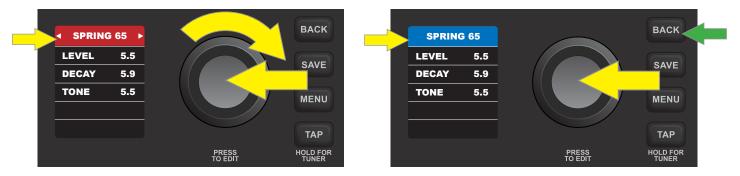


Mustang LT50 signal path

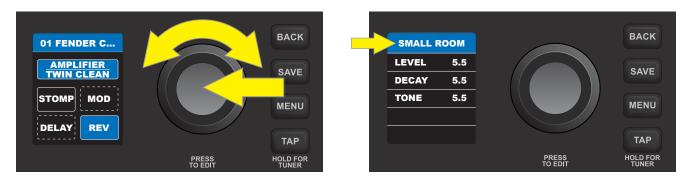
To **replace** an effect, access the contents of a preset by pressing the ENCODER on it, then use the ENCODER to scroll to one of the four effect category boxes. Press the ENCODER again to see the effect contained in the effect category box; the name of the effect model is highlighted at the top of the DISPLAY WINDOW:



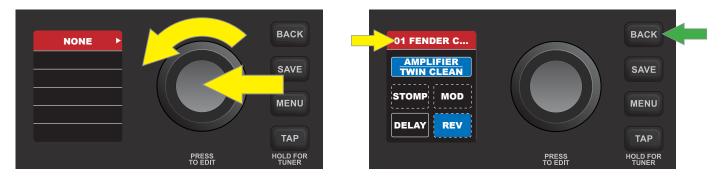
Press the ENCODER once more to activate the effect replacement function; the box surrounding the effect name will turn from blue to red, and white arrows will bracket the effect name. Turn the ENCODER *clockwise* to scroll through other effects models in that category. Press the ENCODER to accept a replacement effect and exit edit mode; the surrounding box will return to blue. Alternately, press the BACK utility button (*green arrow*) to accept the replacement effect and return to the preset contents screen:



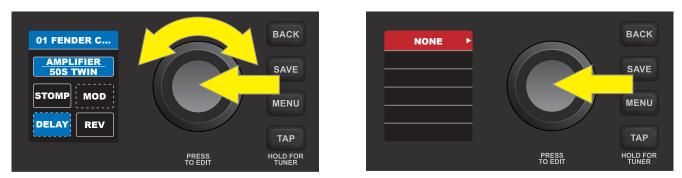
To **delete** an effect, the steps are very similar to those on page 10. As before, access the contents of a preset by pressing the ENCODER on it, then use the ENCODER to scroll to an occupied effect category box. Press the ENCODER again to see the effect contained in the effect category box; the name of the effect model is highlighted at the top of the DISPLAY WINDOW:



Press the ENCODER once more to activate the effect replacement function; the box surrounding the effect name will turn from blue to red, and white arrows will bracket the effect name. Turn the ENCODER *counter-lockwise* until the red-highlighted effect label at the top of the DISPLAY WINDOW reads "NONE". Press the ENCODER on "NONE" (or press the BACK utility button), after which the user is returned to the preset screen with the previously occupied effect category box now empty:



To **add** an effect to an empty effect category box, first access the contents of a preset by pressing the ENCODER on it, then use the ENCODER to scroll to the empty effect category box. Press the ENCODER again to access the empty effect category box; the red-highlighted label "NONE" will appear at the top of the DISPLAY WINDOW:



Turn the ENCODER *clockwise* to scroll through effects models in that category. Press the ENCODER on the desired effect, after which the box surrounding the effect name will return to blue and the effect is added—although not yet saved—to that effect category box. Alternately, press the BACK utility button (*green arrow*) to return to the preset contents screen (*see illustrations on next page*):



**IMPORTANT:** If an effect is not saved once it has been replaced, deleted or added, the preset will revert to its original effect model(s) when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save a changed, deleted or added effect model, follow the SAVE, SAVE AS or REPLACE instructions on pages 6 and 7.

## SETTING DELAY TIMES WITH THE TAP BUTTON

There are three ways to set delay times for effects in Mustang LT50's "DELAY" effects category box. The first way is to use the "Editing and Saving Effects Control Settings" instructions found on page 9, using the EN-CODER to scroll to, select and adjust individual effect settings, including delay time.

The second way is to use Mustang LT50's TAP utility button (*yellow arrow*). If a preset includes a delay effect, the TAP LIGHT (*green arrow*) flashes in time with that effect's default delay time. This time setting can be modified by tapping the TAP utility button two or more times at the desired tempo, regardless of what screen is shown in the DISPLAY WINDOW:



The third way to set delay times is to use the four-button footswitch; see page 19 for instructions on how to do this.

**IMPORTANT:** If an edited delay time is not saved, the effect will revert to its original delay time when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save an edited delay time, follow the SAVE, SAVE AS or REPLACE instructions on pages 6 and 7.

## **MUSTANG LT50 EFFECT MODELS**

This table lists the effect models in Mustang LT50, organized into the four categories that appear in each preset—STOMP (stompbox), MOD (modulation), DELAY and REV (reverb). The effects labels used in each preset appear in the lefthand column, followed by the effects types and a brief description in the righthand column.

OVERDRIVE	Versatile Fender overdrive specially designed for Mustang LT50		
BLUES DRIVE	Overdrive effect inspired by the original late-'70s Ibanez TS808 Tube Screamer		
MYTH DRIVE	Overdrive effect inspired by the '90s-era Klon Centaur		
ROCK DIRT         Distortion effect inspired by the Pro Co RAT			
FUZZ	Versatile Fender fuzz with variable low-end response specially designed for Mustang LTS		
BIG FUZZ	Distortion effect inspired by the Electro-Harmonix Big Muff		
остовот	Synth-like combination of octave-down effect plus octave-up fuzz		
COMPRESSOR	Compressor effect inspired by the classic MXR Dyna Comp		
SUSTAIN	Inspired by the MXR M-163 Sustain, a rare 1980s compressor pedal with an especial strong compression effect and short attack time		
METAL GATE	Noise gate with a very fast attenuation curve especially ideal for high-gain metal		
5-BAND EQ	Five-band graphic equalizer		

#### **STOMPBOX EFFECTS**

#### **MODULATION EFFECTS**

CHORUS	Distinctive chorus effect that uses a triangle wave for modulation		
FLANGER	Distinctive flanging effect that uses a triangle wave for modulation		
VIBRATONE	Classic late-'60s/early-'70s Fender effect with a rotating speaker baffle		
TREMOLO	Smoothly pulsating tube bias tremolo, as heard in amps such as the Fender Princeton Reverb		
PHASER	Long-indispensable jetliner "whoosh" heard on countless recordings		
STEP FILTER	Rhythmically choppy effect that dices notes into distinctly alternating "steps"		
тоисн ман	Wah effect controlled by picking dynamics rather than an expression pedal		

All non-FMIC product names and trademarks appearing in this manual are the property of their respective owners and are used solely to identify the products whose tones and sounds were studied during sound model development for this product. The use of these products and trademarks does not imply any affiliation, connection, sponsorship, or approval between FMIC and with or by any third party.

#### **DELAY EFFECTS**

Note that the control panel TAP utility button and TAP LIGHT work in connection with effects in this category only.

DELAY	Clean, simple and pristine signal repetition		
REVERSE	Reverses the delayed signal for the classic "backwards guitar" effect		
ЕСНО	Tape delay effect based on the analog classic Maestro Echoplex, which had tape im- perfections that created distinctive "wow" and "flutter"		

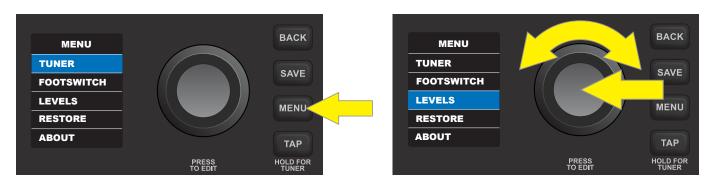
#### **REVERB EFFECTS**

LARGE HALL	Strong, bright reverb simulating the size of, for example, a major performance hall and other large, cavernous spaces		
SMALL ROOM	Warmer, less echo-y reverb typical of smaller spaces and classic echo chambers		
SPRING 65	Fender reverb effect built into classic mid-'60s Fender amps		
PLATE	The reverb type heard on countless recordings, based on the classic (and pool table-sized) EMT 140		
ARENA	Simulates the long-trailing reverberation typical of large stadiums and arenas		

All non-FMIC product names and trademarks appearing in this manual are the property of their respective owners and are used solely to identify the products whose tones and sounds were studied during sound model development for this product. The use of these products and trademarks does not imply any affiliation, connection, sponsorship, or approval between FMIC and with or by any third party.

## **MENU FUNCTIONS**

Mustang LT50 features five convenient MENU functions—TUNER, FOOTSWITCH, LEVELS, RESTORE and ABOUT—all easily accessed by pressing the MENU utility button. The first function (TUNER) is automatically highlighted; use the ENCODER to scroll to and select any MENU function:



**TUNER:** Enables use of Mustang LT50's built-in chromatic tuner (*page 16*).

**FOOTSWITCH:** For configuring the quick-access preset, effects on/off and tuner functions of Mustang LT50's optional four-button footswitch (*page 17*).

**LEVELS:** Level control with signal-strength meter for use when recording using the USB audio port on the control panel, or when using the rear-panel mono line output to send signal to external sound and recording equipment (*page 21*).

**RESTORE:** Enables restoration of factory presets and amplifier settings (*page 21*).

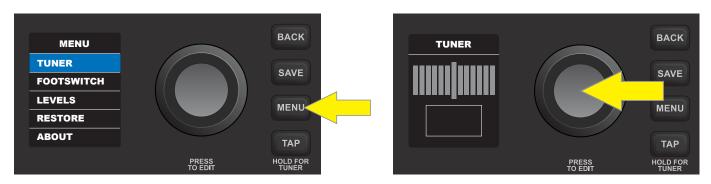
**ABOUT:** Displays the amp's current firmware version (*page 22*).

## **MENU FUNCTION: TUNER**

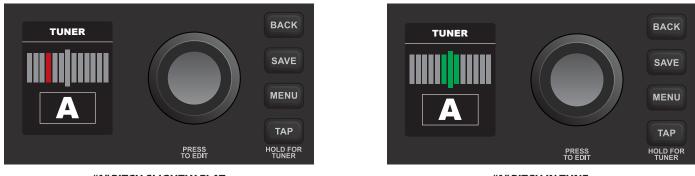
There are three ways to access Mustang LT50's built-in chromatic tuner. The first way is to press and hold the TAP utility button on the control panel until the tuner screen appears in the DISPLAY WINDOW:



The second way is to press the MENU utility button on the control panel; the list of MENU functions will appear in the DISPLAY WINDOW with the TUNER function automatically highlighted atop the list. Press the ENCODER on TUNER to access the tuner screen:



To use the TUNER, sound a note; the letter name of the pitch will appear in the box at bottom and the shorter vertical bars on either side of the longer vertical center bar will illuminate red to indicate varying degrees of sharpness (to the right) or flatness (to the left). When a pitch is precisely in tune, the longer vertical center bar and the two shorter vertical bars on either side of it will illuminate green:



**"A" PITCH SLIGHTLY FLAT** 

**"A" PITCH IN TUNE** 

Note that speaker output is muted when tuning, and that the volume control *on the instrument being tuned* must be turned up sufficiently to register a TUNER reading.

The third way to access the tuner is by using the footswitch. To use the footswitch for hands-free chromatic tuning, see the instructions on page 20.

## **MENU FUNCTION: FOOTSWITCH**

Connect the optional four-button MGT-4 footswitch by plugging it into the "FOOTSWITCH" jack on the rear panel; note that Mustang LT50 comes with a magnetic footswitch overlay that provides correct footswitch labeling for the MGT-4 and other compatible four-button Fender footswitches\*. The footswitch provides convenient quick-access preset selection, effects on/off switching and delay tap tempo control, and a hands-free tuner function. When the footswitch is connected and the amplifier is on, the footswitch is automatically synched with the active preset, and the red "BANK 1" LED at far left will illuminate. For example, if preset 9 ("Jazz Amp") is active and the footswitch is connected to the amp, the footswitch will synch up with that preset, as indicated by "P09" in the footswitch's own display window:



## FOOTSWITCH: QUICK ACCESS PRESETS

The four-button footswitch can be configured for hands-free switching among up to eight "quick-access" presets, arranged in two "banks" of four presets each. To do this press the MENU utility button and use the ENCODER to scroll to and select "FOOTSWITCH."



Both quick-access preset banks will appear in the DISPLAY WINDOW below the header "QUICK ACCESS"; the upper bank ("BANK 1") is automatically highlighted in blue. Press the ENCODER on it, and the four preset slots in the first bank appear with their default settings, labeled "A", "B", "C" and "D" to correspond to the "A", "B", "C" and "D" buttons on the footswitch. The first preset slot ("A") will be highlighted in blue:



\* Older Fender MS-4 and ULT-4 four-button footswitches are also compatible with Mustang LT50. The magnetic footswitch overlay that comes with Mustang LT50 fits both footswitches.

To assign a different preset to slot "A", for example, press the ENCODER on it. A "CHOOSE SLOT" screen then appears with a numbered list of 30 presets, the first of which is highlighted in red. Use the ENCODER to scroll to and select a new preset for slot "A" (preset 18 in the example here):





The new preset now occupies preset slot "A". Use the same steps to replace the presets in slots "B", "C" and "D" in BANK 1if so desired. To set four more quick-access presets, use the ENCODER to scroll to and select the second bank ("BANK 2"), then follow the same steps:



Once configured, all eight quick-access presets are easily accessible using the footswitch. When the amp is on and the footswitch is connected, BANK 1 is automatically active, and the four presets contained in it are assigned to footswitch buttons "A", "B", "C" and "D".

Simply step on the button corresponding to the desired preset. In the example here, preset 18 has been assigned to slot "B" in BANK 1 (as indicated by the illuminated red BANK 1 LED at far left, illuminated red LED above switch "B" and in the footswitch display window); step on footswitch button "B" to activate it (*yellow arrow*):



To access the presets in BANK 2, step on buttons "A" and "B" simultaneously. The green "BANK 2" LED at far left will illuminate, indicating that the four presets in BANK 2 have been assigned to footswitch buttons "A", "B", "C" and "D". As before, step on the button corresponding to the desired preset. In the example here, preset 5 has

been assigned to slot "A" in BANK 2 (as indicated by the illuminated green BANK 2 LED at far left, illuminated red LED above switch "A" and in the footswitch display window), so step on footswitch button "A" to activate it:



## FOOTSWITCH: EFFECTS ON/OFF

Effects in a preset (if any) can be turned on and off using the footswitch. To do this, step on buttons "A" and "B" simultaneously until the amber "EFFECTS" LED illuminates at far left (*see illustration below*). Footswitch buttons "A", "B", "C" and "D" are also respectively labeled as "STOMP" (A), "MOD" (B), "DELAY" (C) and "REVERB" (D). Since one effect only from each of these four categories can appear in a preset, any effects used in a preset are automatically assigned to the four footswitch buttons.

In the example here, active preset 9 contains one stompbox effect and one reverb effect. Consequently, with the footswitch in "EFFECTS" mode, the stompbox effect is automatically assigned to footswitch button "A" and the reverb effect is automatically assigned to button "D" (the preset has no modulation or delay effects, so footswitch buttons "B" and "C" are inactive). Merely step on these buttons to turn these effects on and off:



## FOOTSWITCH: TAP TEMPO FOR DELAY EFFECTS

For presets with a delay effect, the footswitch has a tap tempo function for hands-free adjustment of delay rates. To do this, first put the footswitch in BANK 1 or 2 mode as described above. Select a preset with a delay effect; step on the footswitch button corresponding to the current selected preset twice or more at the desired tempo. This changes the delay time in the same manner as tapping the TAP tempo utility button on the amp's control panel (*page 12*).

**IMPORTANT:** If delay rate changes are not saved, the preset in use will revert to its original delay rate when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save delay rate changes in a preset, follow the SAVE, SAVE AS or REPLACE instructions on pages 6 and 7.

#### **FOOTSWITCH: TUNER**

To use the footswitch for hands-free tuning, step on buttons "C" and "D" simultaneously to activate chromatic tuner mode. Note that putting the footswitch in tuner mode also activates the tuner display on the Mustang LT50 control panel (*page16*).

The pitch letter closest to the sounded note will appear in the footswitch display window (symbols to the right of each pitch letter denote sharp and flat notes; when tuning to, for example, C sharp or E flat). When sounding a note, the LEDs above footswitch buttons "A" and "B" illuminate red to indicate degrees of flatness; the LEDs above footswitch buttons "C" and "D" illuminate red to indicate degrees of sharpness. When correct pitch is attained, the center LED beneath the footswitch display window will illuminate green.

When tuning is complete, step on any button to exit tuner mode. Note that footswitch tuner use mutes speaker output.



To activate the footswitch tuning function, step on buttons "C" and "D" simultaneously (double yellow arrow). In the example above, a "G" note is displayed as being particularly flat, as indicated by the illumination of the red LED above button "A" (green arrow).



Here, the "G" note is displayed as slightly sharp, as indicated by the illumination of the red LED above button "C" (green arrow).

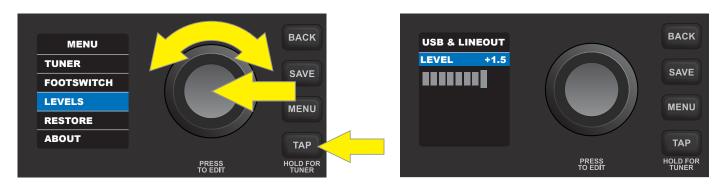


Here, the "G" note is at correct pitch, as indicated by the illumination of the green center LED (green arrow). When tuning is complete, step on any button to exit footswitch tuner mode.

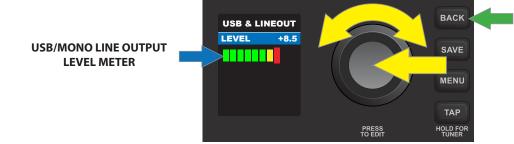
## **MENU FUNCTION: LEVELS**

The third MENU function—LEVELS—features a level control for use when recording using the USB port (*page 23*) on the control panel, and for the mono line output (*page 23*) when connected to external sound and recording equipment. Note that the MASTER VOLUME control does *not* control USB and mono line output volume.

To access this option, press the MENU utility button and use the ENCODER to scroll to and select LEVELS. The level control is automatically highlighted:



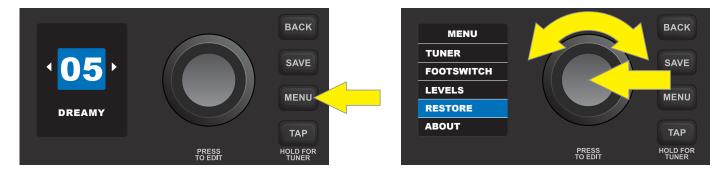
Turn the ENCODER to set a new "LEVEL" value. Press the ENCODER to accept the new value and exit the menu. Alternately, press the BACK utility button (*green arrow*) to accept the new value and return to the MENU function screen:



For best sound quality, set the "LEVEL" so that signal stays within the green bars, barely reaches the single yellow bar at right, and *does not* reach the single longer red clipping bar at far right (*all bars shown illuminat-ed in illustration above*). Note that changing presets can change individual volume; "LEVEL" readjustment may be necessary when changing presets.

## **MENU FUNCTION: RESTORE**

The fourth MENU function—RESTORE—enables restoration of all original factory presets and amplifier settings. To do this, press the MENU utility button, then use the ENCODER to scroll to and select RESTORE:



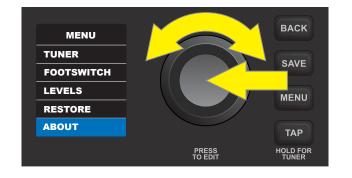
To initiate restoration use the ENCODER to scroll to and select "YES RESTORE". To cancel restoration, press the EN-CODER on "NO CANCEL", or press the BACK utility button. While restoration is in progress, a blue waiting screen with a progress bar will appear. When restoration is complete, the user is returned to the first preset screen:





## **MENU FUNCTION: ABOUT**

The fifth MENU function—ABOUT—displays the amp's current firmware version. To do this, press the MENU utility button, then use the ENCODER to scroll to and select ABOUT; the current firmware version will be displayed:





## **AUXILIARY INPUT AND HEADPHONE OUTPUT**

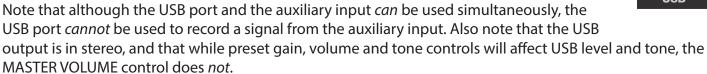
The Mustang LT50 control panel features two 1/8"-inch jacks: an auxiliary input for connecting external mobile/audio devices and an output for convenient headphone use.

Note that when using the auxiliary input, volume levels for external devices are set using volume controls on the external devices themselves (the amp's volume controls are for overall volume level only and do not affect individual volume of external devices connected to the auxiliary input jack). Also note that speaker output is muted when headphones are plugged in, and that the auxiliary input signal is not sent to the USB port or mono line output.



## **USB PORT**

The Mustang LT50 control panel features a USB port for audio recording and Fender TONE use (*see "FENDER TONE" below*). Using a micro USB cable (not included), connect a computer with recording software to this port. No external driver is needed to connect to an Apple computer. To connect to a Windows-based computer, the user must download the ASIO driver setup with Fender Mustang device, available at **https://support.fender.com/hc/en-us/arti-cles/214343123-How-do-l-know-which-ASIO-Driver-to-use**.



When recording using the USB port, a level control is located in the LEVELS menu function (page 21).

## **MONO LINE OUTPUT**

Mustang LT50 has a rear-panel 1/4" mono line output for connection to external sound and recording equipment.

When using the rear-panel mono line output, a level control for it is located in the LEV-ELS menu function (*page 21*).

Note that preset gain, volume and tone controls will affect mono line output level and tone; the MASTER VOLUME control does *not* affect mono line output level. Also note that a TRS (stereo) cable can be used to reduce or eliminate hum.



## **FENDER TONE™**

**Fender Tone**—the ultimate desktop companion to Mustang LT amplifiers for Mac and PC—is available as a free download from **fender.com/ToneDesktop**. With an easy-to-use interface, Tone users can have convenient control over existing Mustang LT50 functions, plus access to additional presets and many other features, including:

- Firmware updates
- Dozens of additional Fender presets for auditioning and downloading
- Preset creation and editing with convenient "undo" feature
- Preset editing (replacing amp and effect models, and modifying parameters)
- Preset saving, renaming, moving and clearing
- Preset backup and restore
- Effect bypass

Learn more about **Fender Tone** at **fender.com/ToneDesktop,** and find support materials at **fender.com/ToneSupport**.

ON

## **SPECIFICATIONS**

TYPE POWER REQUIREMENTS POWER OUTPUT INPUT IMPEDANCE SPEAKER FOOTSWITCH DIMENSIONS AND WEIGHT PR 5674 110 watts 50 watts into 8Ω 1MΩ (instrument) 15kΩ (aux) One 12" Fender Special Design speaker (8Ω) Four-button MGT-4 (optional, PN 0994071000) Width: 17" (43.1 cm) Height: 16.5" (41.9 cm) Depth: 8.5" (21.6 cm) Weig

n) Weight: 19.8 lbs. (9 kg)

Product specifications subject to change without notice.

Be sure to check **fender.com/firmware/support** regularly for firmware updates that improve and enhance the Mustang LT50 experience.

#### PART NUMBERS / REFERENCIAS / RÉFÉRENCE / NÚMERO DAS PEÇAS / NUMERO PARTI / TEILENUMMERN NUMERY REFERENCYJNE / REFERENČNÍ ČÍSLA / REFERENČNÉ ČÍSLA / REFERENČNE ŠTEVILKE / 部品番号 / 型号

#### Mustang LT50

2311200000 (120V, 60Hz) NA 2311201000 (110V, 60Hz) TW 2311203000 (240V, 50Hz) AU 2311204000 (230V, 50Hz) UK 23112005000 (220V, 50Hz) ARG 2311206000 (230V, 50Hz) EU 2311207000 (100V, 50/60Hz) JP 2311208000 (220V, 50Hz) CN 2311209000 (220V, 60Hz) ROK 2311213000 (240V, 50Hz) MA

产品中有害物质的名称及含量

		有害物质				
部件名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
箱体	0	0	0	0	0	0
喇叭单元*	0	0	0	0	0	0
电子部分	Х	0	Х	0	0	0
接线端子	Х	0	0	0	0	0
电线	Х	0	0	0	0	0
附件	0	0	0	0	0	0
本表格依据 SJ/T 11364 的规定编制。 O:表示该有毒有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。				o		

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

注: 含有有害物质的部件由于全球技术发展水平限制而无法实现有害物质的替代。

\*产品含有喇叭单元时有效。

A PRODUCT OF FENDER MUSICAL INSTRUMENTS CORP. 311 CESSNA CIRCLE CORONA, CALIF. 92880 U.S.A.

AMPLIFICADOR DE AUDIO IMPORTADO POR: Fender Ventas de México, S. de R.L. de C.V. Calle Huerta #279, Int. A. Col. El Naranjo. C.P. 22785. Ensenada, Baja California, México. RFC: FVM-140508-Cl0 Servicio al Cliente: 01(800) 7887395, 01(800) 7887396, 01(800) 7889433

> Fender® and Mustang™ are trademarks of FMIC. Other trademarks are property of their respective owners. Copyright © 2020 FMIC. All rights reserved.