

MUSTANG™ GTX

GUITAR AMPLIFIER

MUSTANG GTX50
MUSTANG GTX100



 МУЗЦЕНТР
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EXPANDED OWNER'S MANUAL
REV. B



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INTRODUCTION

This expanded owner's manual is a thorough user's guide to the features and functions of the Mustang GTX50 and GTX100 amplifiers.

As a complement to the Mustang GTX Quick Start Guide that comes with each amplifier, this manual presents a deeper, more detailed look at Mustang GTX's many versatile capabilities. This includes navigation and modification of the many onboard presets, and comprehensive descriptions of the many amplifier and effect models. It also includes step-by-step and fully illustrated instructions for using Mustang GTX's Setlist, WiFi, Bluetooth, USB, onboard tuner, GTX-7 footswitch, EXP-1 Expression Pedal and looping functions.

Mustang GTX's tonal possibilities are virtually endless, especially when paired with the Fender Tone™ app (*page 62*). Be sure to check back regularly for firmware updates that improve and enhance the Mustang GTX experience (*see page 60*). While this expanded manual presents the most current version of the amplifiers, also check back for updated manual versions as Mustang GTX grows and evolves.



Mustang GTX100 (left) and Mustang GTX50 (right).

CONTROL PANEL

The Mustang GTX top control panel consists of an instrument input, seven control knobs, display window, three LAYER pushbuttons, ENCODER wheel, four UTILITY pushbuttons, 1/8" auxiliary input and 1/8" headphone output.

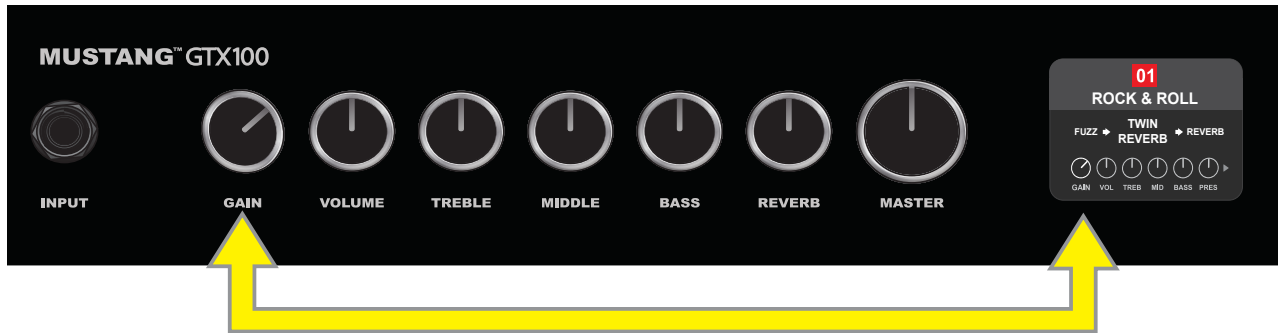


Mustang GTX100 top panel shown; Mustang GTX50 panel shares same features.

- A. INPUT:** Plug instrument in here.
- B. GAIN:** Programmable control knob (*see page 3*) that affects gain setting in each preset.
- C. VOLUME:** Programmable control knob that affects amp model volume setting in each preset.
- D. TREBLE:** Programmable control knob that affects treble tone setting in each preset.
- E. MIDDLE:** Programmable control knob that affects midrange tone setting in each preset.
- F. BASS:** Programmable control knob that affects bass tone setting in each preset.
- G. REVERB:** Programmable control knob that affects reverb setting in each preset.
- H. MASTER VOLUME:** The only non-programmable knob; controls actual overall volume.
- I. DISPLAY WINDOW:** Shows preset in use and all its contents and parameters, amplifier and effects menus, and other functions (i.e., tuner, menu functions, etc.).
- J. LAYER BUTTONS**
 - PRESET LAYER:** Highlights preset layer, where presets are chosen.
 - SIGNAL PATH LAYER:** Highlights signal path in each preset, where amp models, effects types and order of effects can be modified.
 - CONTROLS LAYER:** Highlights controls layer, where control knob settings can be modified (except Master Volume).
- K. ENCODER:** Multipurpose rotary control with press-switch function. For viewing, selecting and adjusting Mustang GTX presets, controls and other functions.
- L. UTILITY BUTTONS**
 - X FX:** Bypasses all effects.
 - SAVE:** For saving preset modifications and new presets.
 - MENU:** For accessing WiFi, Bluetooth, Tuner, Global EQ, cloud presets and other functions (*see page 28*).
 - TAP/TUNER:** For setting delay times and modulation rate settings; hold to access built-in tuner.
- M. AUXILIARY INPUT, HEADPHONE OUTPUT:** 1/8" auxiliary input for connecting external audio devices, and 1/8" output for headphone use. Headphone output disables internal speaker(s).

PROGRAMMABLE CONTROL KNOBS

It's important to note that all top control panel knobs except Master Volume (H) are, as described above, "programmable." That means that when a preset is first selected, the physical position of a top control panel knob *may not* indicate the actual setting contained in that preset (the actual setting appears in the display window). Only the Master Volume control is *not* programmable—its physical position always indicates actual overall volume. Once a programmable top control panel knob is turned, however, it and its digital counterpart within a preset become synchronized to the same value, as illustrated here:



Also note that an adjusted control knob setting can be saved in a new preset, or the original preset can be overridden with the adjusted control knob setting. If the adjusted setting is *not* saved, the preset will revert to its pre-programmed control knob settings when returning to the preset after leaving it, or when turning the amplifier off and back on again (see further info under "Editing and Saving Presets" pages 5-6).

REAR PANEL

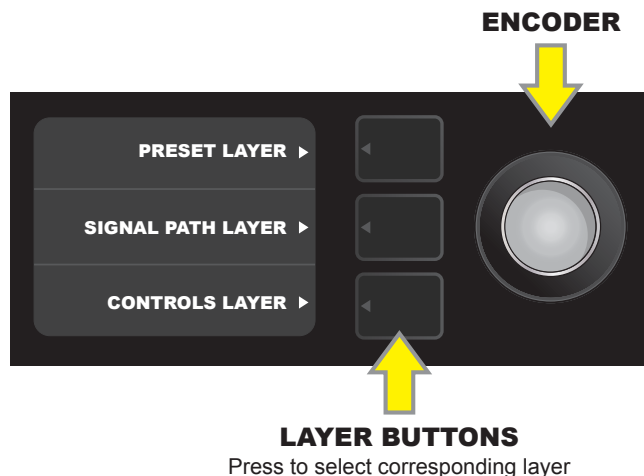


Mustang GTX100 rear panel shown; Mustang GTX50 rear panel has identical features.

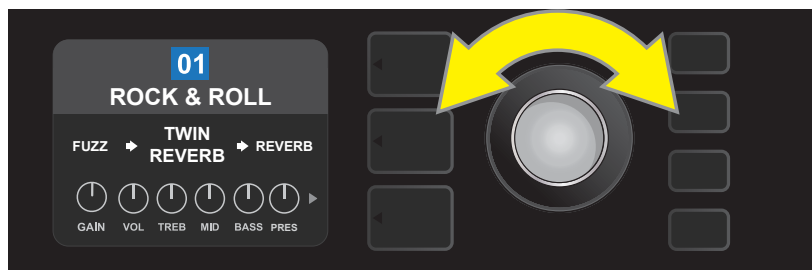
- N. POWER:** Turns amplifier on and off.
- O. IEC POWER INLET:** Using the included power cord, connect to a grounded outlet in accordance with the INPUT POWER voltage and frequency specified at the power inlet.
- P. USB PORT:** Amp connection point for USB audio recording.
- Q. FOOTSWITCH:** Connect the GTX-7 footswitch, MGT-4 footswitch or EXP-1 Expression Pedal here.
- R. LINE OUT:** Balanced line outputs for connection to external recording and sound reinforcement equipment.
- S. FX SEND/RETURN:** Right/left send and return for stereo external effects use. Effects added here are "global" (not preset-specific) and act as the *last* elements in the signal path.

PRESET BASICS

Mustang GTX comes with more than 100 sequentially numbered presets, and users can create and add even more. Each preset has three “layers” that appear in the DISPLAY WINDOW. These are the PRESET LAYER (top), SIGNAL PATH LAYER (middle) and CONTROLS LAYER (bottom); the three LAYER BUTTONS provide access to each layer (see illustration below).



The PRESET LAYER is active when the amplifier is first turned on; the default setting is the first preset (01). To scroll through presets, turn the ENCODER (see illustration below); whichever preset is displayed becomes active. Presets can also be selected by footswitch (see page 40).



The first preset (01) is shown here in the PRESET LAYER.

The SIGNAL PATH LAYER of each preset consists of one of Mustang GTX’s many amplifier models, and one or more of dozens of effects and their order (or no effects in some cases). The amp model appears in the center of the SIGNAL PATH LAYER display. Effects appear to either side of the amp model, representing their position in the signal path—“pre” to the left of the amp model (placed “before” the amp) or “post” to the right of the amp model (as in an effects loop). Select any of these items by turning the ENCODER; the selected item in the SIGNAL PATH LAYER will have a white indicator arrow below it and text describing its position above it (see illustration below).



Flanked by two effects, the amp model within the preset is selected here in the SIGNAL PATH LAYER, as indicated by the white arrow and the word “amplifier.”

The CONTROLS LAYER of each preset displays information on whatever amp or effect is highlighted in the SIGNAL PATH LAYER. Amp control knob settings are displayed by default (*see illustration below*); effects control settings are displayed when an effect is highlighted in the SIGNAL PATH LAYER. Amp and effects controls are selected by turning the ENCODER.



Close-up detail of the CONTROLS LAYER, in which the gain control for the amp model within the preset is selected.

Each preset can be used as is. With many different amp models, effects types and control settings to choose among, however, each preset's SIGNAL PATH LAYER and CONTROLS LAYER settings can easily be modified and saved for personally individualized sounds (*see next section, "Editing and Saving Presets"*).

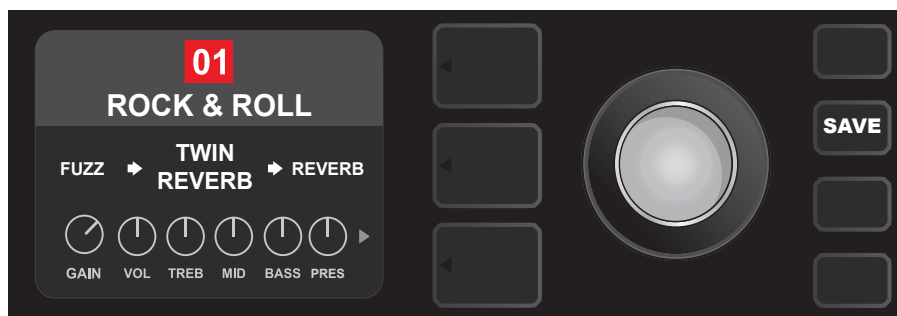
A preset can also be moved to a different position or cleared from the list of presets. Further, the entire list of presets can be restored to its factory state. To perform these functions, see "Preset Organizer" (*page 51*).

EDITING AND SAVING PRESETS

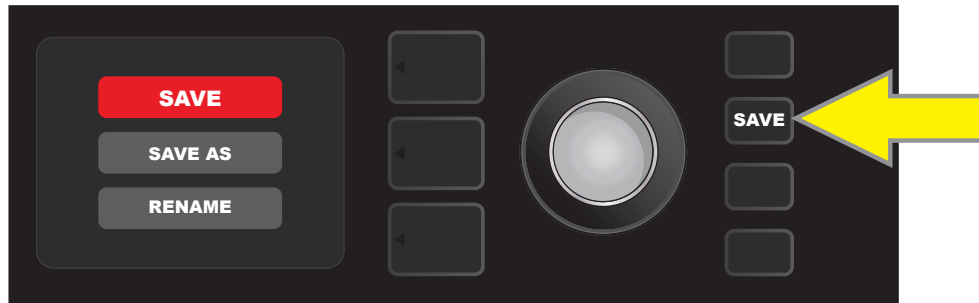
Within each preset, the amplifier control knob settings, amp models, and effects types and parameters can be tailored to individual preference. When a preset is selected, the box containing its number is blue, indicating that no edits have been made to it (*see illustration below*).



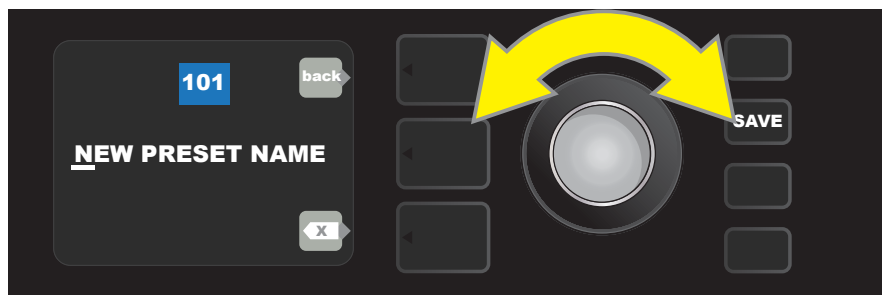
When edits to a preset have been made, the box containing the preset number changes to red, and the SAVE utility button illuminates (*see illustration below*).



If an edited setting is not saved, the preset will revert to its previous settings when returning to the preset after leaving it, or when turning the amplifier off and back on again. To save a preset edit, press the illuminated SAVE utility button to get three options (see illustration below): SAVE (keep preset as edited), RENAME (save preset with a new name in its current position) and SAVE AS NEW (save preset in a new position with a new name). Turn the ENCODER to highlight an option; press it to select one.



To enter a new preset name after choosing RENAME or SAVE AS NEW, use the ENCODER to spell out a new name of your choice. Press the ENCODER once to activate the cursor; turn it to choose a character (see illustration below). Press ENCODER again to enter that character and move to the next. Repeat until new name is complete; press the SAVE utility button to keep completed new name, or press the top LAYER button (corresponding with onscreen prompt “back”) to return to the previous screen. Note that when choosing SAVE AS NEW, the preset will be saved in the next available open position (“101” in the illustration below).

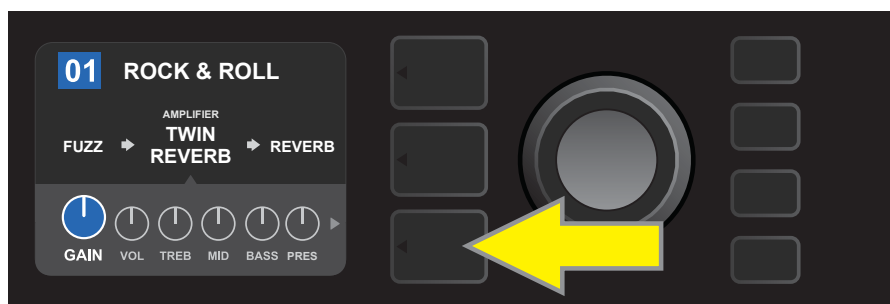


A favorite preset can be saved quickly and conveniently to a “FAVORITES Setlist” (see page 31). Also, note that Mustang GTX includes cloud-based backup and restore functions for presets (see page 56).

EDITING PRESET AMPLIFIER CONTROL KNOB SETTINGS

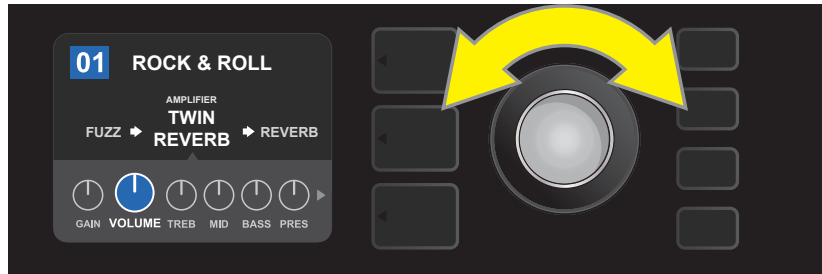
As noted in the “Control Panel” section above, users can change a preset’s amplifier control knob settings by turning the physical control knobs on the top panel (except for Master Volume). This synchronizes the modified settings of the physical control knobs with their corresponding digital counterparts.

These settings can also be changed by editing the digital control knob positions within the CONTROLS LAYER, which displays the controls specific to the amp in use. To do this, first access the CONTROLS LAYER by pressing its LAYER BUTTON (see illustration below).

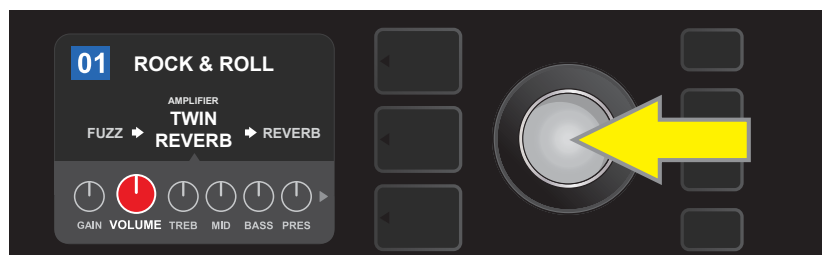


Press the bottom LAYER BUTTON to access the CONTROLS LAYER for the amp model within the preset.

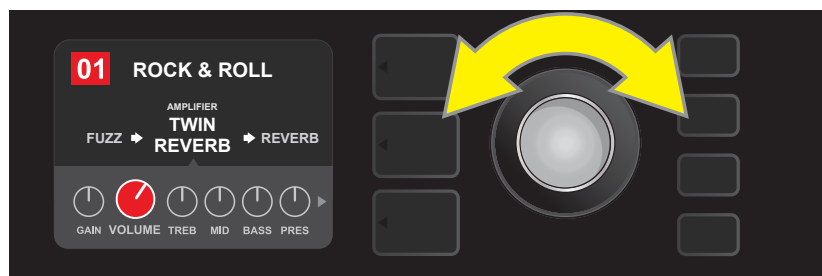
Once in the CONTROLS LAYER, turn and press the ENCODER to scroll through and select a specific digital amp control knob. Then turn the ENCODER again to change that control's setting. When a control setting is changed, the box containing the preset number changes from blue to red (indicating that a preset edit has been made), and the SAVE utility button illuminates. With the new control setting in place, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (*see illustrations below*).



Turn the ENCODER to scroll among amp model control knobs.

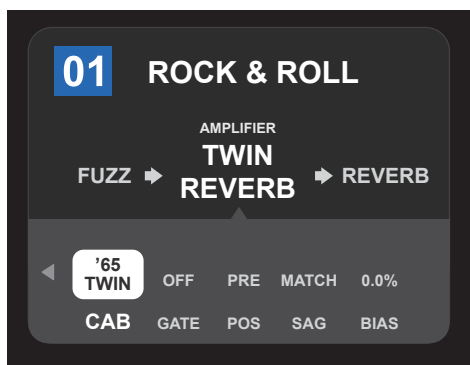


Press the ENCODER to select an amp model control knob for adjustment.

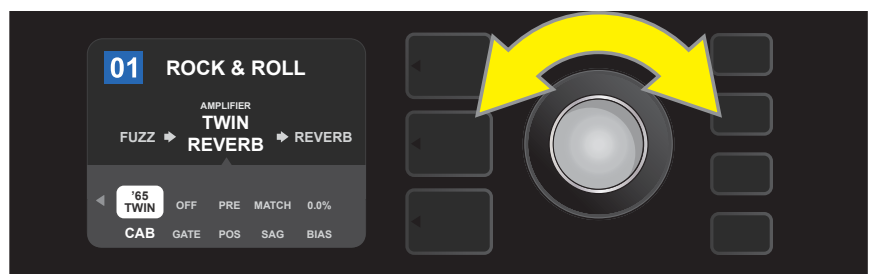


Turn the ENCODER again to adjust the selected amp model control knob to preference.

Additional amp and control settings can be found by continuing to scroll through the CONTROLS LAYER of various amp models within the presets. These consist of "deeper" parameters including sag, bias and gate controls. Different speaker cabinet models are also included. Scroll through, select, adjust and save these additional parameters in the same manner described directly above (*see illustrations below*).



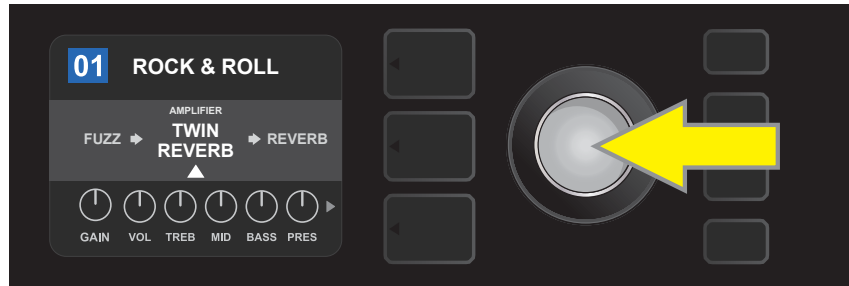
Close-up detail showing additional amp and control settings found in the CONTROLS LAYER; in this case for the Twin Reverb amp model.



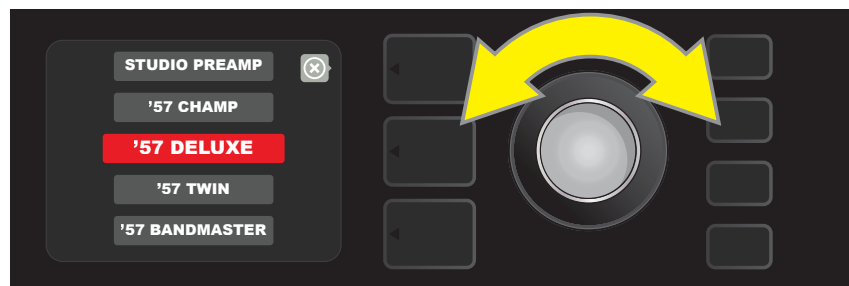
Scroll among, select and adjust additional CONTROLS LAYER amp and control settings using the ENCODER.

REPLACING PRESET AMPLIFIER MODELS

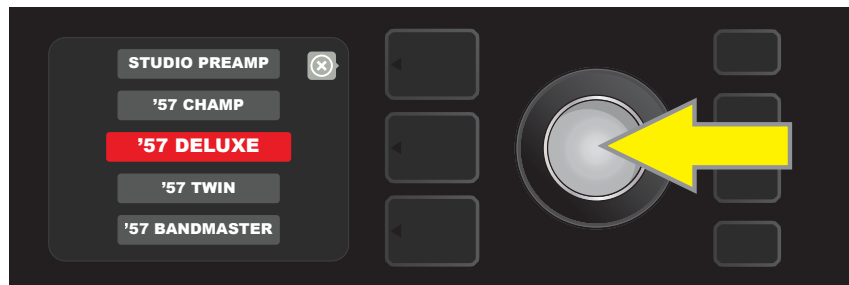
To replace an amplifier model within a preset, access the SIGNAL PATH LAYER by pressing its LAYER BUTTON. The preset amp model will be highlighted. Press the ENCODER to access and scroll through a menu of amp models; select a new amp model by pressing the ENCODER again. When a new amp model is selected, the box containing the preset number changes from blue to red (indicating that a preset edit has been made), and the SAVE utility button illuminates (see illustrations below). With the new amp model in place, further edits can then be made or the SAVE utility button can be pressed to keep completed edits. Note that pressing the PRESET LAYER button corresponding to the circled "X" in the DISPLAY WINDOW closes the amp menu.



To replace preset amp model highlighted in the SIGNAL PATH LAYER (as indicated here by the white arrow below it and the label "amplifier" above it) with a different amp model, first press ENCODER to access a menu of other amp models.



Turn ENCODER to scroll through menu of amp models.



Press ENCODER again to select a new amp model for the preset.



With the new amp model in place, continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

LIST OF AMPLIFIER MODELS

This table lists all the preset amp models in Mustang GTX, with a brief description of each. Mustang GTX amps will be continually revised and updated; this manual indicates current amp models in use.

Studio Preamp	Direct-to-mixing-desk studio purity with clean, uncolored tonal response
'57 Champ®	Small but mighty late-'50s Fender recording great
'57 Deluxe™	Medium-power late-'50s Fender tweed classic known for thick, compressed overdrive
'57 Twin	Original-era 2x12" tweed classic prized for clean-to-dirty versatility
'57 Bandmaster	Triple-speaker Fender narrow-panel tweed classic known for crisp highs
'59 Bassman®	One of Fender's greatest tweed amps, which began life as a bass amp before being adopted by countless guitarists
'61 Deluxe	From the "Brown Panel" era of the Fender Deluxe, this amp splits the difference between tweed and "Black Panel" models
'65 Princeton®	Mid-'60s Fender studio favorite with the snappy tone of a single 10" speaker
'65 Deluxe Reverb®	Highly popular mid-'60s Fender with great tone whether clean or dirty, cranked in countless clubs
'65 Twin Reverb®	An indispensable mid-'60s stage-and-studio favorite prized for producing <i>the</i> Fender clean tone
'65 Super Reverb®	Mid-'60s Fender with the distinctive snap of four 10" speakers
Excelsior	An elegantly eccentric modern-day Fender model with the distinctive thump of a 15" speaker
'66 GA-15	Inspired by a 1966 Gibson GA-15RVT Explorer, known for its cavernous "full-wet" reverb setting
'60s Thrift	Inspired by the garage-classic 1960s Sears Silvertone prized by retro/alternative players
British Watts	Inspired by the original 100-watt Hiwatt DR103, which is the classic cleaner-tone British stack
'60s British	Inspired by the Vox AC30, which powered the British Invasion and produced remarkable clean and dirty tone
'70s British	Inspired by a late-'60s/early-'70s Marshall Super Lead, the amp that powered the dawn of hard rock
'80s British	Inspired by the Marshall JCM800, which produced quintessential '80s metal tone
British Colour	Inspired by the "sludgy" majesty of the Orange OR120
Super-Sonic	Modern Fender amp with two cascading preamp gain stages for pronounced sustain
'90s American	Based on the Mesa Dual Rectifier, which featured distinctive distortion that shaped the "nu-metal" sound
Metal 2000	Modern high-gain scorch based on the EVH® 5150 ^{III}
IIC+Clean	Inspired by the clean channel of the Mesa/Boogie Mark IIC+MB
IIC+Lead	Quintessential mid-'80s metal tones inspired by the Mesa/Boogie Mark IIC+MB lead channel

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LIST OF AMPLIFIER MODELS (CONT'D.)

BB15 Low	Based on the low gain structure setting of the Bassbreaker 15
BB15 Med	Based on the medium gain structure setting of the Bassbreaker 15
BB15 High	Based on the high gain structure setting of the Bassbreaker 15
FBE-100	Inspired by both lead channels (BE and HBE) of the Friedman BE-100
Dual Showman	Based on the '60s/'70s all-tube Fender classic used on big stages everywhere
Tube Preamp	Direct-to-mixing-desk studio purity with increased tube console-like harmonic coloration
Acoustasonic	For use with piezo-equipped electric/acoustic guitars. Based on the preamp of Fender's award-winning Acoustasonic amps; exible string-dynamics feature with selectable notch frequency
Acoustic Sim	Six distinctive acoustic guitar simulations for transforming electric guitar with great-sounding acoustic tone. Paired with Acoustasonic preamp for additional tone shaping
Blues Junior	Based on the highly popular warm-toned, moderately powered 1x12" Fender combo with overdrive and FAT switch
Vibro-King	Modern Fender classic with touch-sensitive dynamics and distinctive natural overdrive
JC-120 Clean	Based on the super-bright clean channel of the classic Roland JC-120 Jazz Chorus
Jubilee Clean	Based on the clean channel of the Marshall Silver Jubilee 50-watt head
Jubilee Rhythm	Based on the Marshall Silver Jubilee 50-watt head with rhythm clip switch engaged
Jubilee Lead	Based on the lead channel of the Marshall Silver Jubilee 50-watt head
Uber	Ideal for heavy, aggressive music as inspired by the super-high-gain lead channel of the Bogner Uberschall head

LIST OF CABINET MODELS

This table lists all the preset speaker cabinet models in Mustang GTX, with a brief description of each. Mustang GTX cabinets will be continually revised and updated; this manual indicates current amp models in use.

None	Amp circuitry uncolored by speaker simulation
'57 Champ®	Based on a late-'50s Fender recording great featuring a low-power 8" speaker with notably snappy tone
'57 Deluxe™	Based on a medium-power late-'50s Fender tweed classic featuring a single 12" alnico-magnet speaker
'65 Twin	Based on a prized mid-'60s Fender classic with two 12" ceramic-magnet Jensen® speakers
'57 Bandmaster	Based on a late-'50s Fender narrow-panel classic with three 10" Jensen® P10R speakers
'59 Bassman®	Based on one of Fender's greatest original-era tweed amps, with four 10" Jensen® P10R speakers
'61 Brown	Based on an early-'60s Fender model featuring a single 12" Oxford speaker with distinct midrange

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LIST OF CABINET MODELS (CONT'D.)

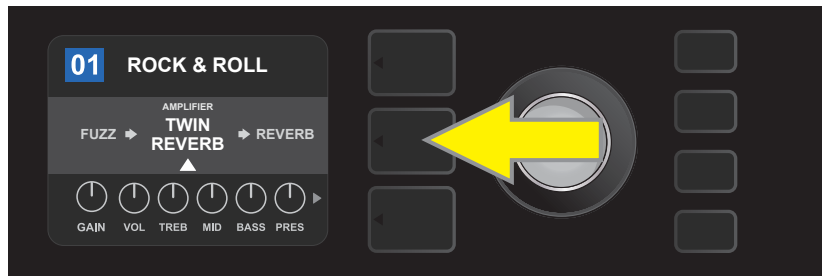
'65 Princeton®	Based on a mid-'60s Fender studio favorite with the snappy tone of a single 10" Jensen® C10R speaker
'65 Deluxe	Based on a popular mid-'60s Fender mainstay with a single 12" Jensen® ceramic speaker
Excelsior	Based on a nonconventional modern Fender amp with a distinctively thumping 15" Special Design speaker
'66 GA-15	Inspired by the single 10" CTS speaker in the 1966 Gibson GA-15RVT Explorer
1x12 EV	Based on an open-back Mesa/Boogie Mark IIC+ bubinga cabinet with a single 12" EVM12L speaker
1x12 BB15	Based on Fender's open-back Bassbreaker 15 cabinet with a single 12" Celestion® V-Type speaker
2x12 Blue	Inspired by the pair of 12" Celestion® Alnico Blue speakers in the venerable Vox AC30
4x12 75W	Inspired by the 75-watt Marshall JCM800 cabinet with four 12" Celestion® G12T75 speakers
4x12B 75W	Brighter version of the Marshall JCM800 4x12" cabinet directly above
1x12 Super-Sonic	Birch-ply Fender combo cabinet with a single 12" Celestion® Vintage 30 speaker
2x12 Super-Sonic	Birch-ply Fender combo cabinet with two 12" Celestion® Vintage 30 speakers
4x12 RCT	Based on a closed-back Mesa Boogie Rectifier cabinet with four 12" Celestion® Vintage 30 speakers
4x12 GB	Based on a Marshall cabinet with four 12" Celestion® Greenback speakers
4x12B GB	Brighter version of the 4x12" Marshall cabinet directly above
4x12 V30	Based on a Fender Super-Sonic cabinet with four 12" Celestion® Vintage 30 speakers
4x12B V30	Brighter version of the 4x12" Fender Super-Sonic cabinet directly above
4x12 SOL	Based on a closed-back Soldano cabinet with four 12" Eminence® Legend speakers
4x12 FRD	Based on a closed-back Friedman 4x12" cabinet with Celestion® Greenback speakers
4x12B FRD	Brighter version of the 4x12" Friedman cabinet model directly above
2x15 D130	Based on a Fender Dual Showman cabinet with the distinctive attack of two 15" JBL® D130F speakers
2x12 Jubilee	Based on a small Marshall slanted cabinet with two Celestion® G12-75 speakers
Blues Junior	Based on the Fender open-back combo cabinet with a single 12" Celestion® A-Type speaker
1x12 LTD	Based on the Fender Blues Junior LTD open-back cabinet with a single 12" Jensen® speaker
2x12 JC	Based on the classic Roland JC-120 Jazz Chorus 2x12" open-back combo
3x10 VKING	Based on the Fender Vibro-King cabinet with three 10" speakers
4x10 SUP	Based on the Fender Super Reverb cabinet with four 10" Jensen® speakers
4x12 Uber	Based on the Bogner Uberkab cabinet with four 12" Celestion® speakers

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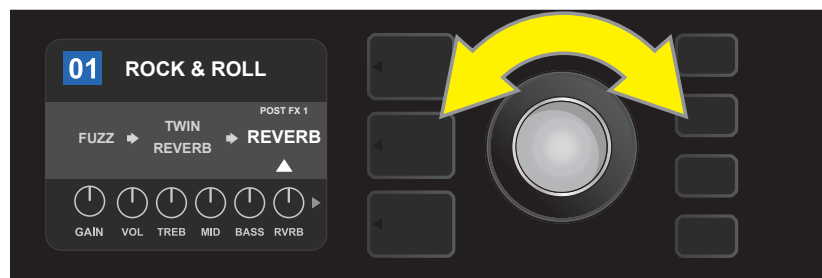
EDITING EFFECTS

In addition to amp models, each preset also features various combinations of effects. Effects can be edited in several ways—they can be **bypassed**, **replaced**, **moved**, **added** or **deleted**. Further, the individual settings of each effect can be modified. Each option is explained below and on the following pages.

Editing the types of effects in use and their position in the signal path happens in the SIGNAL PATH LAYER. To do this, first access the SIGNAL PATH LAYER by pressing its corresponding LAYER BUTTON, which will automatically highlight the *amplifier* model in use first. To highlight an *effect*, turn the ENCODER in either direction (see illustrations below). The effect will be highlighted with a white arrow below it and a label above it.

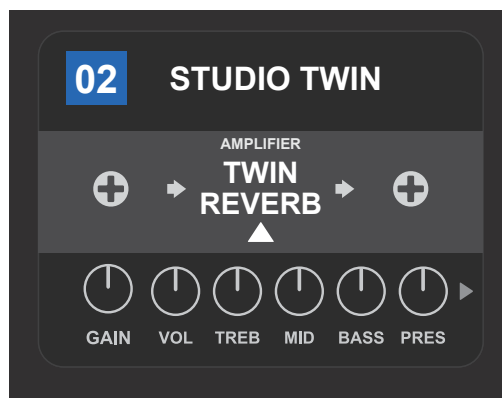


To access effects, first press the middle LAYER BUTTON to enter SIGNAL PATH LAYER.



Turn the ENCODER in either direction to highlight an effect (as indicated here by the white arrow below it and label above it).

For each preset, note that a placeholder symbol consisting of a plus sign (+) in a circle appears at the right and left ends of the SIGNAL PATH LAYER (see illustration below). This symbol indicates an open slot into which an effect can be moved or added (see “Adding an Effect,” page 16). In many presets that include one or more effects, the user must scroll to the far right or far left using the ENCODER in order to see this symbol.

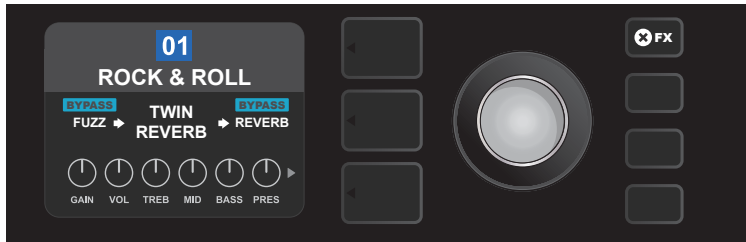


Close-up detail—of a different preset that doesn't include one or more effects—in which open slots that effects can be placed in are marked by a placeholder symbol consisting of a plus sign in a circle at both ends of the SIGNAL PATH LAYER.

BYPASSING AN EFFECT

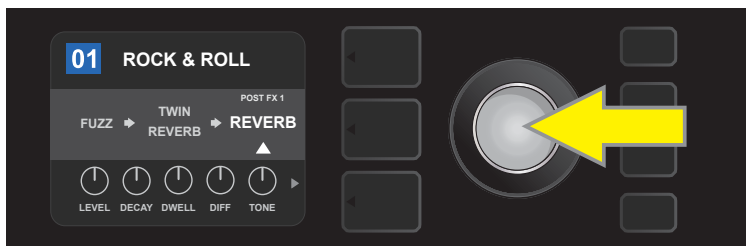
There are two ways to **bypass** effects. The first is a general on-off feature that simply turns off all effects in all presets with a single press of a button. The second lets users bypass specific individual effects within a preset.

To turn off *all* Mustang GTX effects in *every* preset (and turn them back on), press the X FX utility button. There is no option to save; this is merely a quick way to turn all effects off and back on. When the X FX utility button is pressed it will illuminate, and a blue “bypass” label will appear above each effect (*see illustration below*). If specific individual effects have already been bypassed in a preset, use of the X FX utility button will *not* turn them back on.



The “X FX” utility button illuminates when pressed, bypassing all effects in all presets (as indicated by blue “BYPASS” labels above each effect).

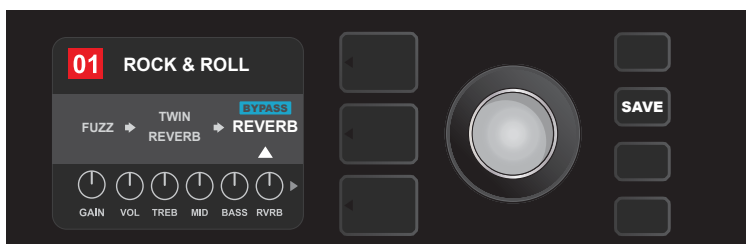
To bypass specific individual effects within a preset, highlight it in the SIGNAL PATH LAYER and press the ENCODER. Select “BYPASS” from the menu of effects placement options and press the ENCODER again. The SIGNAL PATH LAYER will then indicate that the effect has been bypassed; the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now bypassed, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (*see illustrations below*).



To bypass a highlighted effect, first press the ENCODER to access the menu of effects placement options.



Turn ENCODER to highlight “BYPASS” in effects placement options menu, then press the ENCODER to select it.

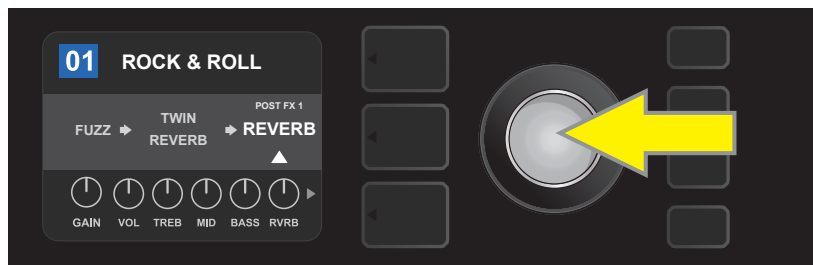


With the effect bypassed (as indicated here by white arrow below it and blue box containing the label “BYPASS” above it), continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

REPLACING AN EFFECT

To **replace** an effect, highlight the effect to be replaced in the SIGNAL PATH LAYER and press the ENCODER. Select “REPLACE” from the menu of effects placement options and press the ENCODER again. Select one of the four effects categories that will appear—Stomp Box, Modulation, Delay or Reverb—and press the ENCODER to access the effects in that category. Scroll through the effects and press the ENCODER to select one as a replacement.

The SIGNAL PATH LAYER will then display the new effect and indicate that the original effect has been replaced; the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now replaced, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (*see illustrations below and on next page*). Note that pressing the PRESET LAYER button corresponding to the circled “X” in the DISPLAY WINDOW closes the effects placement option and effects category menus; pressing it when it corresponds to the label “back” (as on the effects menu) returns the user to the previous screen.



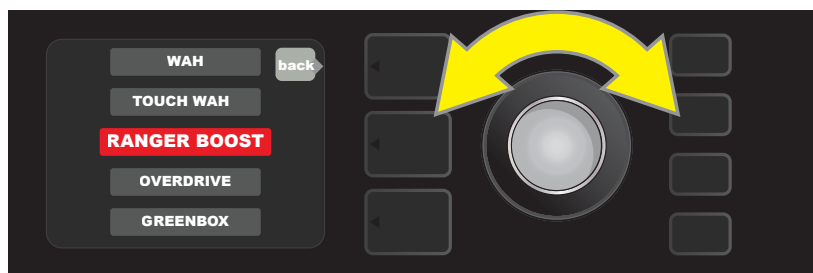
To replace a highlighted effect, first press the ENCODER to access the menu of effects placement options.



Turn the ENCODER to highlight “REPLACE” in effects placement options menu, then press the ENCODER to select it.



Turn the ENCODER to highlight one of four effects categories, then press ENCODER to select effects category.



Turn the ENCODER to highlight a replacement effect, then press ENCODER to select it.



With the effect replaced (as indicated here by white arrow below it and label above it), continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

MOVING AN EFFECT

To **move** an effect to a different position in the signal path, highlight the effect to be moved in the SIGNAL PATH LAYER and press the ENCODER. Select "MOVE" from the menu of effects placement options and press the ENCODER again. An orange box will appear around the selected effect name, along with a blinking white arrow indicating that the effect is ready to be moved. Turn the ENCODER to reposition the selected effect; press the ENCODER to place the effect in a new position.

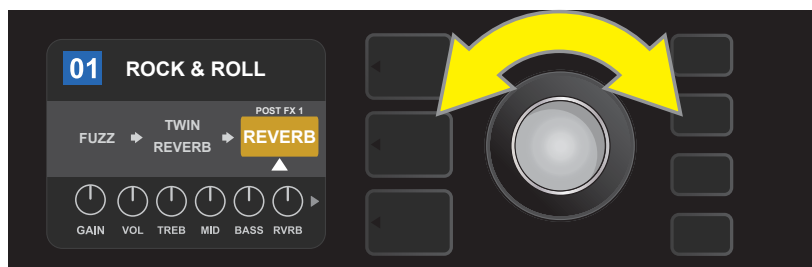
The SIGNAL PATH LAYER will then display the effect in its new position; the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now moved, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (see illustrations below and on next page).



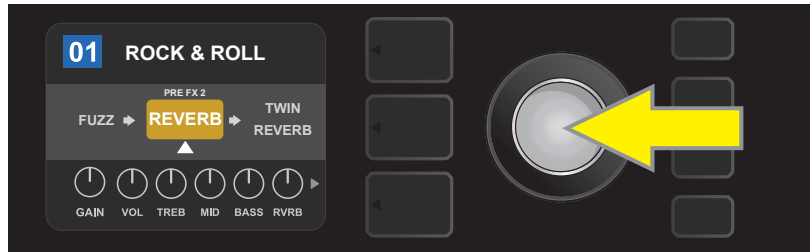
To move a highlighted effect, first press the ENCODER to access the menu of effects placement options.



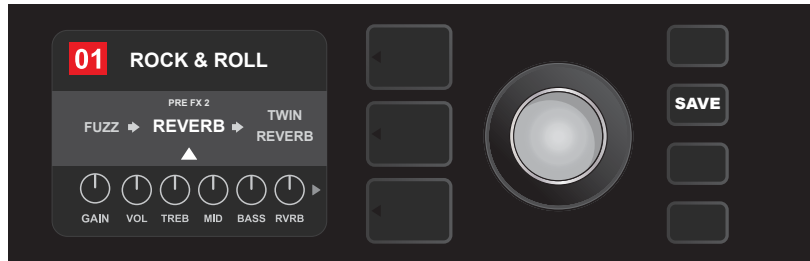
Turn the ENCODER to highlight "MOVE" in effects placement options menu, then press the ENCODER to select it.



The selected effect, highlighted with a white arrow below it and label above it, appears in an orange box indicating that it is ready to be moved to a different position in the signal path by turning the ENCODER.



After moving the selected effect by turning the ENCODER, press the ENCODER to select its new position in the signal path.



With the effect moved to a new position (as indicated here by white arrow below it and label above it), continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

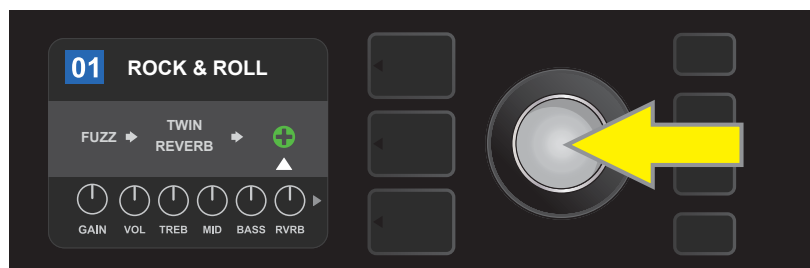
ADDING AN EFFECT

There are two ways to **add** an effect.

In the first method, highlight one of the two placeholder plus-sign symbols in the SIGNAL PATH LAYER by turning the ENCODER. The circle containing the plus-sign symbol will turn green. Press the ENCODER to see a menu of four effects categories—Stomp Box, Modulation, Delay and Reverb. Highlight a category by turning the ENCODER, then press the ENCODER to access the effects in that category. Scroll through the effects and press the ENCODER to select an effect.

The SIGNAL PATH LAYER will then display the newly added effect in a green box with a blinking white arrow below it and a label above it, indicating that the effect can be moved to a different position (if preferred) by turning and then pressing the ENCODER.

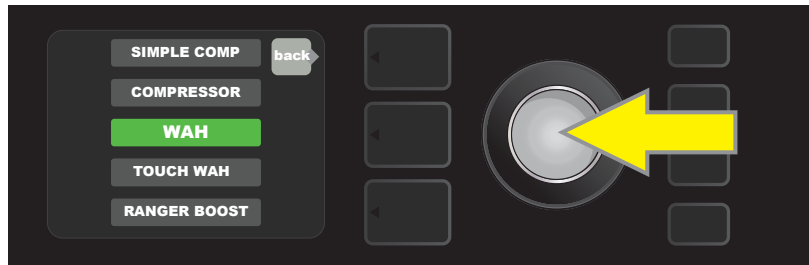
When an effect is added, the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now added, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (*see illustrations below and on next page*). Note that pressing the PRESET LAYER button corresponding to the circled “X” in the DISPLAY WINDOW closes the effects category and effect menus; pressing it when it corresponds to the label “back” returns the user to the previous screen.



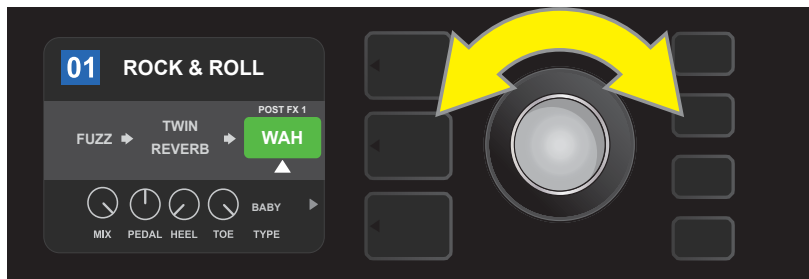
To add an effect, highlight the placeholder plus-sign symbol by turning the ENCODER to it. The circle containing the plus-sign symbol will turn green. Press the ENCODER to access a menu of four effects categories.



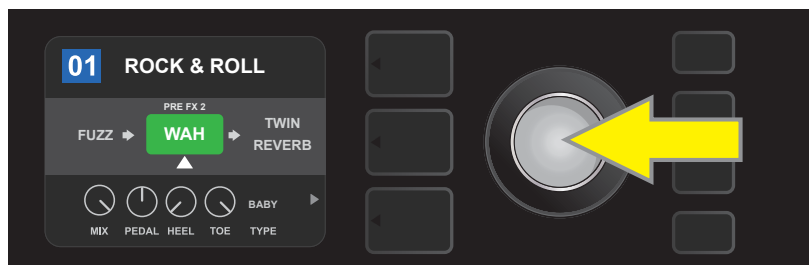
Select an effects category by scrolling to it and pressing the ENCODER.



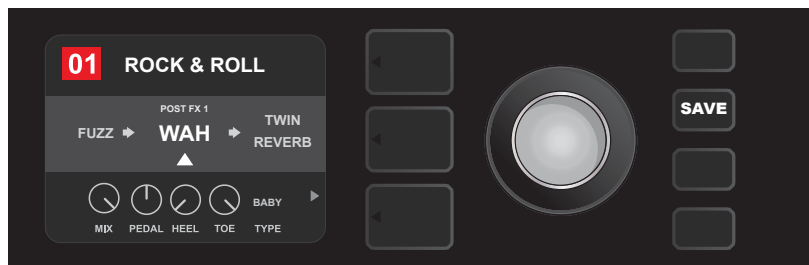
Select an effect by scrolling to it and pressing the ENCODER.



The newly added effect, highlighted with a white arrow below it and label above it, appears in a green box indicating that it can be left in place or moved to a different position in the signal path by turning the ENCODER.



After moving the newly added effect by turning the ENCODER, press the ENCODER to select its new position in the signal path.

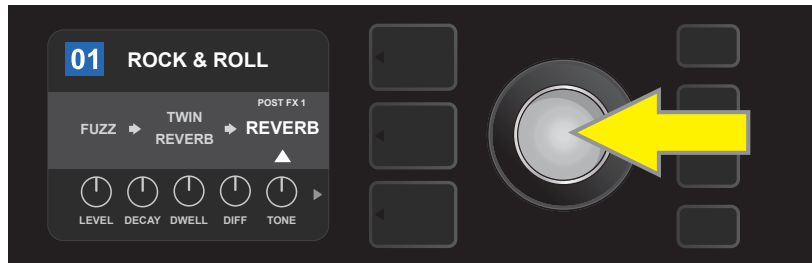


With the added effect in position (as indicated here by white arrow below it and label above it), continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

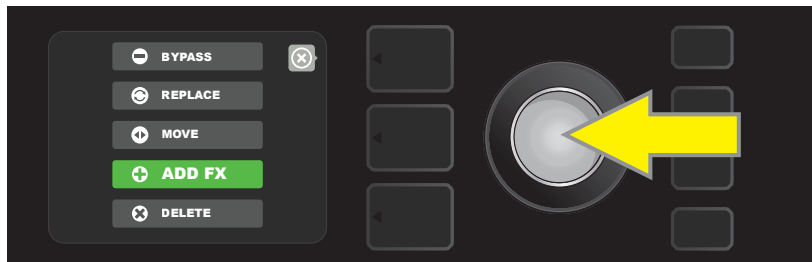
In the second method of adding an effect, highlight an existing effect in the SIGNAL PATH LAYER and press the ENCODER. Select "ADD FX" from the menu of effects placement options and press the ENCODER again. Select one of the four effects categories that will appear and press the ENCODER to access the effects in that category. Scroll through the effects and press the ENCODER to select an effect.

The SIGNAL PATH LAYER will then display the newly added effect in a green box with a blinking white arrow below it and a label above it, indicating that the effect can be moved to a different position (if preferred) by turning and then pressing the ENCODER.

When an effect is added, the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now added, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (*see illustrations below and on next page*).



In another way to add an effect, highlight an existing effect within a preset by turning the ENCODER to it and pressing the ENCODER to see a menu of four effects categories.



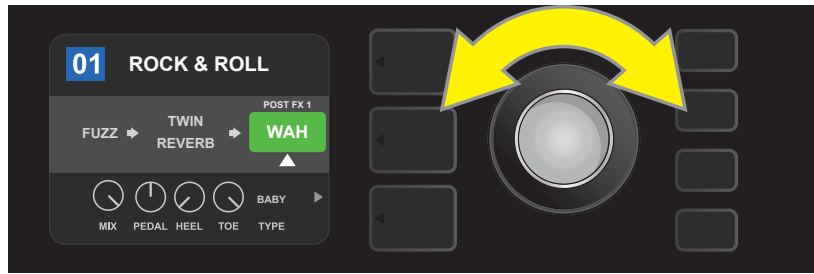
Select "ADD FX" in the effects placement options menu by scrolling to it and pressing the ENCODER.



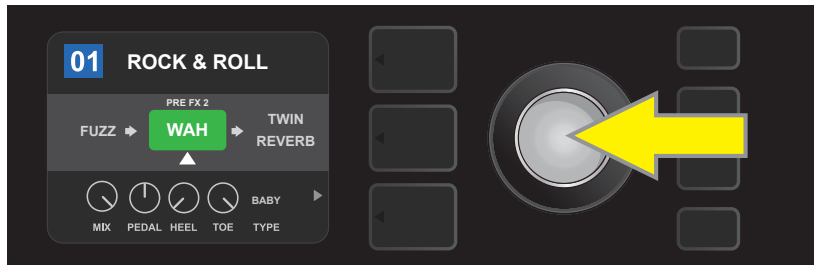
Select an effects category by scrolling to it and pressing the ENCODER.



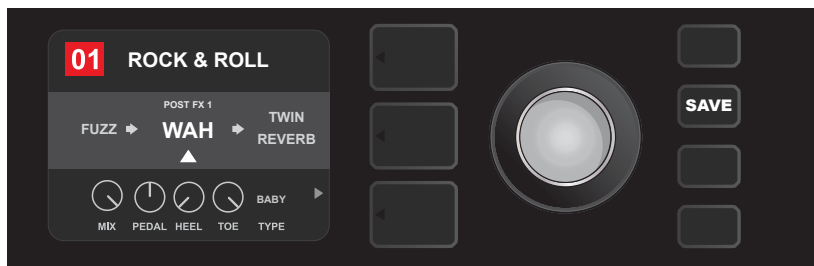
Select an effect by scrolling to it and pressing the ENCODER.



The newly added effect, highlighted with a white arrow below it and label above it, appears in a green box indicating that it can be left in place or moved to a different position in the signal path by turning the ENCODER.



After moving the newly added effect by turning the ENCODER, press the ENCODER to select its new position in the signal path.



With the added effect in position (as indicated here by white arrow below it and label above it), continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

DELETING AN EFFECT

To **delete** an effect from the signal path, highlight the effect in the SIGNAL PATH LAYER and press the ENCODER. Select "DELETE" from the menu of effects placement options and press the ENCODER again; the effect will be removed from the signal path and another effect in use (if any) will shift into its place. If the deleted effect was the only effect in the signal path (pre or post), a placeholder symbol consisting of a plus sign (+) in a circle will appear in its spot.

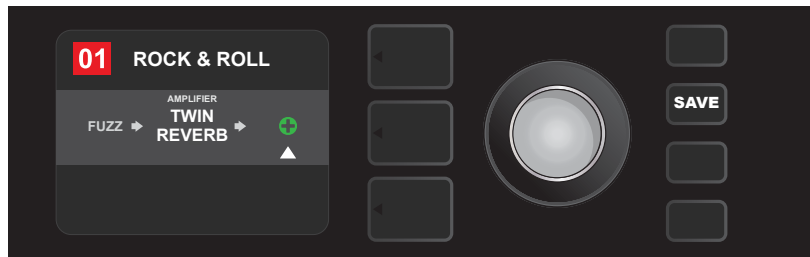
When an effect is deleted, the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now deleted, further edits can then be made or the SAVE utility button can be pressed to keep completed edits (see illustrations below and on next page).



To delete a highlighted effect, first press the ENCODER to access the menu of effects placement options.



Select "DELETE" in the effects placement options menu by scrolling to it and pressing the ENCODER.

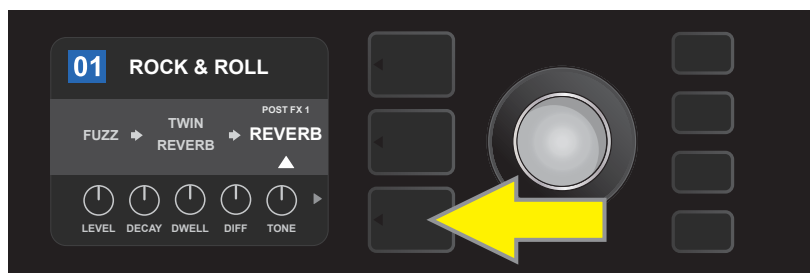


The SIGNAL PATH LAYER will then show the effect has been deleted (as indicated by white arrow), either by replacing it with a plus-sign placeholder symbol (as seen here) or by shifting another effect (if present) into its position.

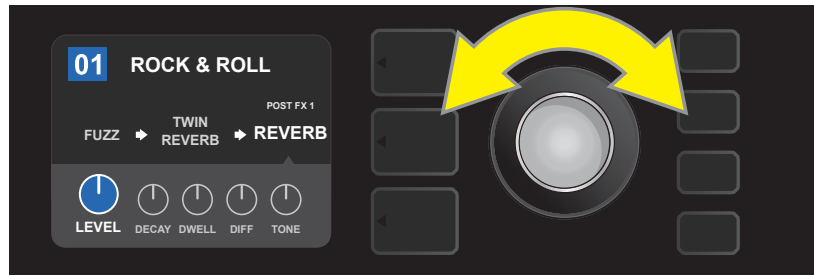
EDITING EFFECTS SETTINGS

To edit the control settings of a particular effect, turn the ENCODER to highlight the effect in the SIGNAL PATH LAYER, then press the CONTROLS LAYER button, which presents the individual controls for each effect. Turn the ENCODER to scroll through available effect controls, which will each turn blue as they're highlighted, and press the ENCODER to select a specific effect control, which will then turn red.

After selecting a specific effect control, turn the ENCODER to edit that specific effect control to preference, and press the ENCODER again to keep the edited effect control setting. The edited effect control will then turn from red back to blue. When an effect control is edited, the box containing the preset number will change from blue to red (indicating that a preset edit has been made), and the SAVE utility button will illuminate. With the effect now edited, further effects control edits can then be made or the SAVE utility button can be pressed to keep completed preset edits (see illustrations below and on next page).



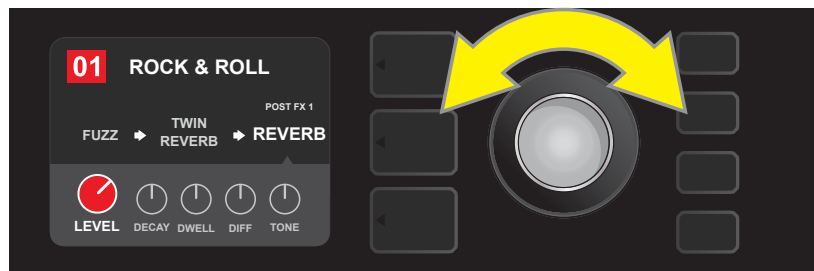
To edit the settings of a particular effect, highlight the effect in the SIGNAL PATH layer by scrolling to it with the ENCODER; then press the CONTROLS LAYER button.



In the CONTROLS LAYER, highlight an effect control by scrolling to it using the ENCODER; each effect control turns blue as it's highlighted.



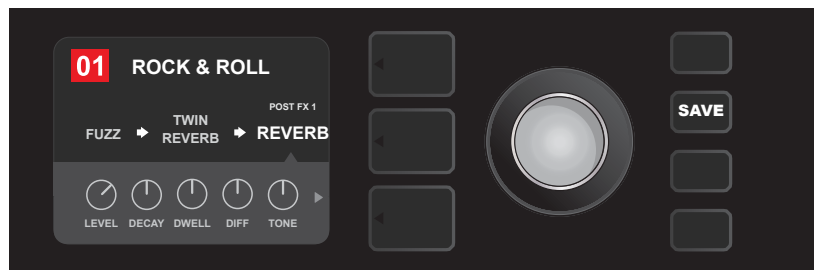
Press the ENCODER to select a specific effect control for adjustment, which will then turn red.



Turn the ENCODER to edit the selected effect control to preference.



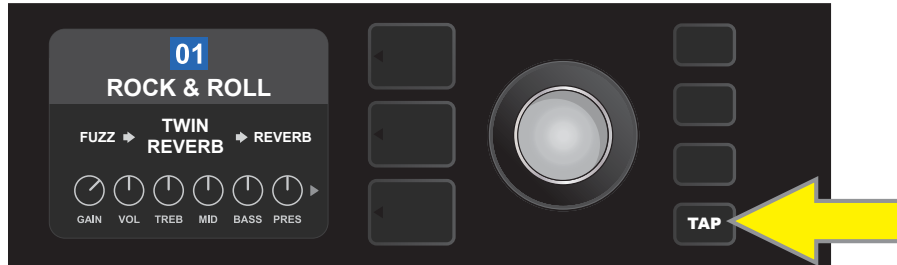
Press the ENCODER to keep the edited effect control setting; the effect control will return to blue.



With the specific effect control edited to preference, continue editing other parameters or press the illuminated SAVE utility button to keep completed edits.

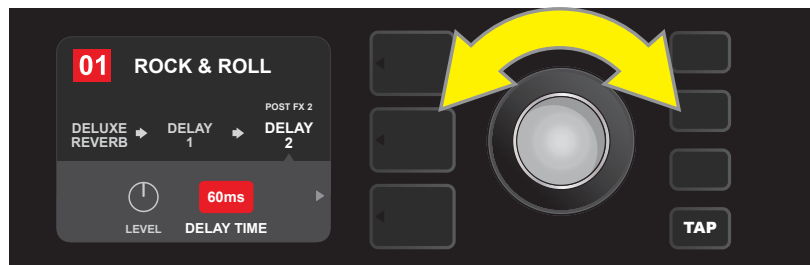
USING THE TAP TEMPO BUTTON

In presets that include **Modulation** effects, **Delay** effects or both*, the TAP utility button flashes in time with the default rate of the *last* delay effect in the signal path (or last modulation effect if no delay effect is present). This rate can be left as is, or it can be modified using the TAP utility button. To set a new TAP tempo, tap the flashing TAP utility button at the desired tempo at least two times (see illustration below). The TAP utility button will function regardless of which layer is highlighted (PRESET LAYER, SIGNAL PATH LAYER or CONTROLS LAYER).



To change the tempo of the first delay effect (or modulation effect if no delay effect is present), tap the TAP utility button at the desired tempo.

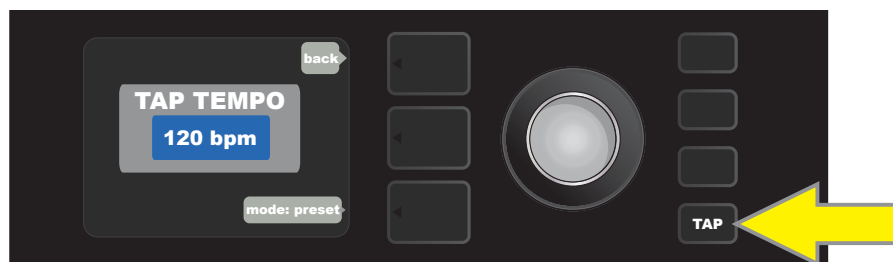
Various time parameters for *all* delay and modulation effects in the signal path can be adjusted in the CONTROLS LAYER without use of the TAP utility button. In the SIGNAL PATH LAYER, use the ENCODER to highlight the delay or modulation effect to be modified; its controls will then appear in the CONTROLS LAYER. Enter the CONTROLS LAYER by pressing its corresponding layer button, and scroll to the time parameter to be changed using the ENCODER. Press and turn the ENCODER to select and adjust the desired time value, during which the window containing the time value will turn red; press the ENCODER again to keep the new time value (see illustration below).



Delay and modulation effects tempos can also be changed by highlighting the time parameter's numerical value in the CONTROLS LAYER, then pressing and turning the ENCODER to set the desired tempo.

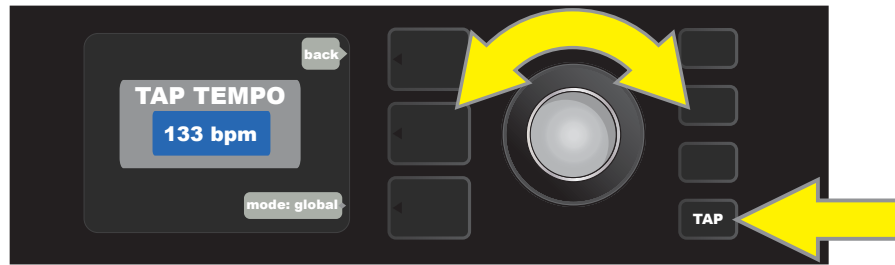
TAP TEMPO SUBDIVISIONS

Mustang GTX delay and modulation effects can be synced to the player's preferred BPM rate. To see the current BPM rate, press the TAP utility button once; the rate will appear in the DISPLAY WINDOW:



* Mustang GTX modulation and delay effects are listed on pages 24-26.

There are two modes for BPM—“global” and “preset”. “Global” mode applies a single BPM to all presets. In “preset” mode, each preset has its own BPM, which can be set individually per preset (the default rate is 120 BPM). To switch from one BPM mode to the other, press the bottom LAYER BUTTON corresponding to “mode: preset” or “mode: global” in the DISPLAY WINDOW; turn the ENCODER to adjust the BPM rate:

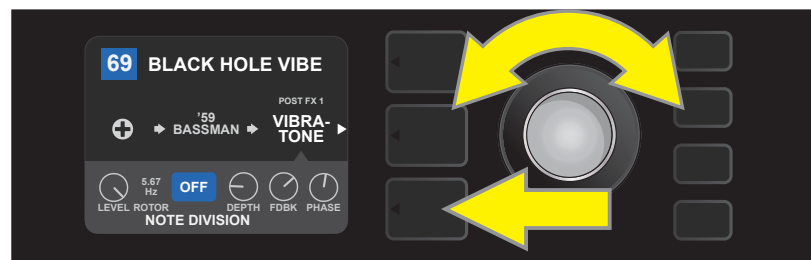


SETTING NOTE DIVISIONS

To synch an effect to the BPM rate, the user can set a specific “note division” for modulation and delay effects. When the note division is set, the time value is automatically calculated to fit with the current BPM setting. If the time parameter is changed, the note division is automatically set to “off”.

Note divisions values are off, whole note, half note, dotted half note, half note triplet, quarter note, dotted quarter note, quarter note triplet, eighth note, dotted eighth note, eighth note triplet, sixteenth note, dotted sixteenth note, sixteenth note triplet, thirty second note, dotted thirty second note and thirty second note triplet.

To set note divisions, go to the CONTROLS LAYER of the selected modulation or delay effect by pressing the corresponding bottom LAYER BUTTON. Use the ENCODER to scroll to and select “NOTE DIVISION” (abbreviated “DIV”); then turn and press the ENCODER to select a note division value:



If all note divisions are off, BPM will correspond to rate of last delay or modulation effect in the signal path.

LIST OF EFFECTS TYPES

Mustang GTX onboard effects are organized into six category menus: **Stompbox** effects (15), **Modulation** effects (15), **Delay** effects (13), **Reverb** effects (14), **Dynamics+EQ** effects (7) and **Filters+Pitch** effects (9). Names and descriptions of each appear below, by category. Mustang GTX effects will be continually revised and updated.

STOMPBOX EFFECTS

Ranger Boost	Distortion effect inspired by the '60s-era Dallas Rangemaster Treble Booster
Overdrive	Versatile Fender overdrive specially designed for Mustang GTX
Mythic Drive	Inspired by the '90s-era Klon Centaur germanium-diode overdrive
Greenbox	Overdrive effect inspired by the original late-'70s Ibanez TS808 Tube Screamer
Blackbox	Distortion effect inspired by the Pro Co RAT
Yellowbox	Distortion effect inspired by the '70s-era MXR Distortion Plus
Orangebox	Distortion effect inspired by the original late-'70s Boss DS-1
Fuzz	Versatile Fender fuzz with added octave specially designed for Mustang GTX
Big Fuzz	Distortion effect inspired by the Electro-Harmonix Big Muff
Varifuzz	Versatile Fender fuzz with bass tightness control
Round Fuzz	Inspired by the classic late 1960s Fuzz Face
Octobot	Synth-like combination of octave-down effect plus octave-up fuzz
Ram Fuzz	Distortion effect inspired by the Electro-Harmonix Big Muff Pi (Ram's Head model)
Russian Fuzz	Same as "Ram Fuzz" above, but based on the Russian-made version of the 1990s
Tube OD	Distortion effect inspired by the B.K. Butler Tube Driver

MODULATION EFFECTS

Note that the TAP utility button works with Mustang GTX modulation effects, and flashes when a preset using one or more modulation effects is in use.

Sine Chorus	Smoothly rounded chorus effect that uses a sine wave for modulation
Triangle Chorus	Distinctive chorus effect that uses a triangle wave for modulation
Sine Flanger	Smoothly rounded flanging effect that uses a sine wave for modulation
Triangle Flanger	Distinctive flanging effect that uses a triangle wave for modulation

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MODULATION EFFECTS (CONT'D.)

Vibratone	Classic late-'60s/early-'70s Fender effect with a rotating speaker baffle
Vintage Tremolo	Classic Fender "stuttering" photoresistor tremolo, as heard in Fender amps such as the Twin Reverb
Sine Tremolo	Smoothly pulsating tube bias tremolo, as heard in amps such as the Fender Princeton Reverb
Ring Modulator	Creatively non-harmonic dissonance from the early era of electronic music
Phaser	Long-indispensable jetliner "whoosh" heard on countless recordings
Phaser 90	Phase shifter effect inspired by the classic '70s MXR Phase 90
Vibe Unit	Based on the late-'60s Uni-Vibe phaser/vibrato pedal
Harmonic Tremolo	Based on the distinctive effect built into certain early-'60s Fender amps
4-Knob Flanger	Based on the MXR M117 Flanger
JC Chorus	Based on the bucket-brigade analog chorus of the classic Roland JC-120 Jazz Chorus amplifier
JC Vibrato	Inspired by the Roland JC-120 amp's onboard vibrato effect

DELAY EFFECTS

Note that the TAP utility button works with Mustang GTX delay effects, and flashes when a preset using one or more delay effects is in use.

Mono Delay	Clean, simple and pristine signal repetition
Mono Echo Filter	Mono echo with an evenly spaced wah-like effect on the signal repetitions
Stereo Echo Filter	Stereo echo with an evenly spaced wah-like effect on the signal repetitions
Tape Delay	Based on an classic analog tape echo unit with imperfections that created distinctive "wow" and "flutter"
Stereo Tape Delay	Similar to Tape Delay above, but with stereo field expansion
Multi Tap Delay	Rhythmic delay that can be subdivided into multiple "taps" with differing time intervals
Reverse Delay	Reverses the shape of notes for the classic "backwards guitar" effect
Ping Pong Delay	Repetitions in the stereo field alternate between right and left, imparting a "ping pong" effect
Ducking Delay	Delayed notes "duck" out of the way while playing, and fill in gaps when not playing

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DELAY EFFECTS (CONT'D.)

2290 Delay	Inspired by the TC Electronic TC 2290 delay, a 1980s studio-standard digital delay still sought after today for its crisp repeats and versatile panning/modulation options
Memory Delay	Inspired by the Electro-Harmonix Deluxe Memory Man, a late-'70s "bucket-brigade" delay pedal that imparts distinctive character to repeats and modulation
Space Delay	Based on the beloved Roland RE-201 Space Echo
Tape Plex	Faithful recreation of the Maestro Echoplex EP-3 echo

REVERB EFFECTS

Small Hall	Simulates the kind of bright reverb often heard in, for example, a hall the size of a movie theater
Mod. Small Hall	Builds on Fender's Small Hall Reverb by adding lush modulation to internal reverb structure. Added high- and low-frequency cut controls further expand creative possibilities
Large Hall	Strong, bright reverb simulating the size of, for example, a major performance hall and other large, cavernous spaces
Mod. Large Hall	Similar to Mod Small Hall Reverb above, with modulation added to internal structure of Fender Large Hall Reverb
Small Room	Warmer, less echo-y reverb typical of smaller spaces and classic echo chambers
Large Room	Warm-sounding kind of reverb heard in larger rooms that aren't halls, such as many nightclubs
Small Plate	Resonantly metallic reverb with more density and flatness than room and hall reverbs
Large Plate	The reverb type heard on countless recordings, based on the classic (and pool table-sized) EMT 140
'63 Spring	Classic early-'60s standalone Fender reverb effect
'65 Spring	Fender reverb effect built into classic mid-'60s Fender amps
Arena	Simulates the long-trailing reverberation typical of large stadiums and arenas
Ambient	Subtle reverb effect typical of notably smaller spaces (even smaller than Small Room reverb above)
Shimmer	Sonically radiant combination of reverb and two-octave pitch shift
GA-15 Reverb	Based on the '60s-era Gibson GA-15 amp reverb, unique in its ability to go "full wet" (no dry signal)

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DYNAMICS+EQ EFFECTS

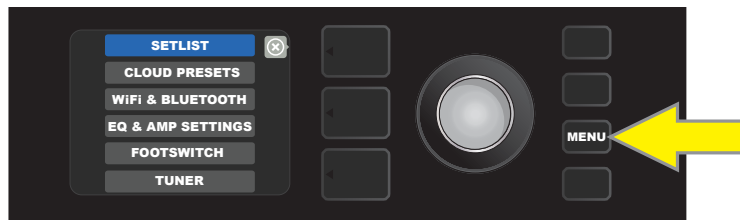
Simple Comp	Compressor effect inspired by the classic MXR Dyna Comp
Compressor	Same as Simple Compressor above, with added gain, threshold, attack and release controls
Sustain	Inspired by the MXR M-163 Sustain, a rare 1980s compressor pedal with a particularly strong compression effect and a short attack time
Metal Gate	Inspired by the ISP Technologies Decimator II G String pedal. Especially ideal for high-gain metal, with a very fast attenuation curve
EQ Parametric	Parametric midrange equalizer plus bass and treble controls
EQ5 Graphic	Similar to the Mesa Boogie Mark IIC+ five-band graphic equalizer
EQ7 Graphic	Seven-band graphic equalizer based on the Boss GE-7

FILTERS+PITCH EFFECTS

Pedal Wah	Dual-mode wah inspired by the Dunlop Cry Baby and '60s-era Vox Clyde McCoy wah pedal
Touch Wah	Similar to Pedal Wah above, but controlled by picking dynamics rather than an expression pedal
Envelope Filter	Inspired by the funktastic 1970s Mu-Tron III
Step Filter	Rhythmically choppy modulation effect that dices notes into distinctly alternating "steps"
Pitch Shifter	Simple pitch shifter that adds another note above or below the dry signal pitch
Diatonic Pitch	Pitch shifter that produces a chosen musical interval to create harmonized notes in key
Pedal Shift	Based on pitch-shift functions of the DigiTech Whammy pedal; best when used with EXP-1 Expression Pedal (<i>page 45</i>)
Pedal Harmony	Based on harmonizer functions of the DigiTech Whammy pedal; best when used with EXP-1 Expression Pedal (<i>page 45</i>)
Pedal Detune	Based on detuning functions of the DigiTech Whammy pedal; best when used with EXP-1 Expression Pedal (<i>page 45</i>)

MENU FUNCTIONS

Just to the right of the ENCODER is a vertical column of four utility buttons. The third one down is the MENU utility button, which enables access to a variety of Mustang GTX special functions (*see illustration below*). These functions are referenced elsewhere in this manual; all are listed and briefly described here.



After pressing the MENU utility button, use the ENCODER to scroll through and select one of Mustang GTX's several different MENU functions. These functions are:

SETLISTS: For creation and use of Setlists containing user-selected groups of presets (*pages 29-32*).

CLOUD PRESETS: Enables cloud preset storage and use (*pages 54-55*).

WIFI & BLUETOOTH: For turning WiFi on/off, selecting and connecting to a network, and adding a password (*pages 32-34*). Also for accessing and using Mustang GTX's Bluetooth functionality (*pages 35-36*).

EQ & AMP SETTINGS: For accessing built-in Global EQ profiles (*pages 49-50*), gain control for USB and line out (*pages 38, 50*), Preset Organizer (*pages 51-52*) and About This Amp feature (*page 54*). Also enables restoration of factory presets and amplifier settings (*page 53*).

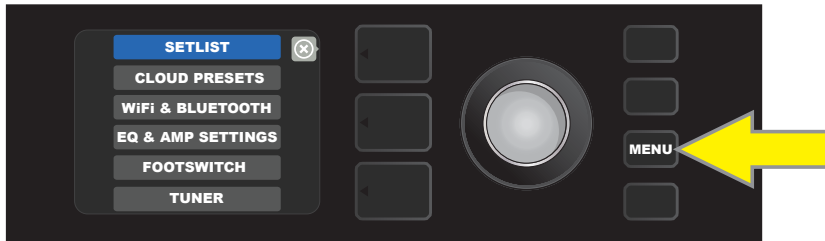
FOOTSWITCH: For use with GTX-7 Footswitch (*pages 39-44*) and EXP-1 Expression Pedal (*pages 45-48*). MGT-4 Footswitch is also compatible with Mustang GTX.

TUNER: Enables use of Mustang GTX's built-in chromatic tuner (*page 37*).

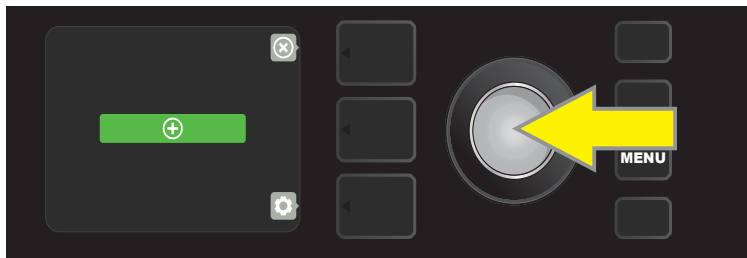
SETLISTS

For individual convenience, presets can be grouped together in “Setlists.” These are user-created groups containing any arrangement of presets ideal for a particular situation—a gig or rehearsal, a favorites list, genre, artist list, etc. Simple to create and edit, Setlists personalize and streamline the Mustang GTX experience so that users can access multiple presets quickly and easily.

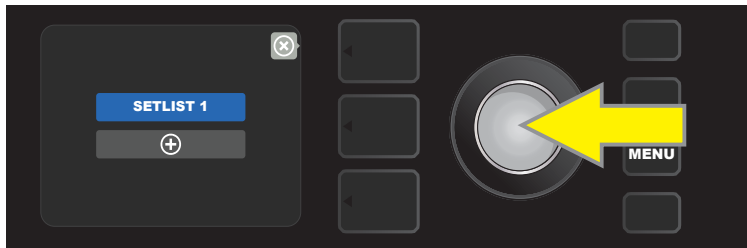
To create a Setlist, first press the MENU utility button and use the ENCODER to scroll to and select SETLIST:



A green plus-sign box will appear; press the ENCODER on it to create a new Setlist:



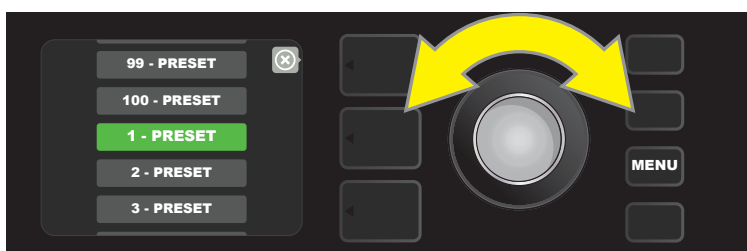
A blue box labeled “SETLIST 1” will appear; press the ENCODER on SETLIST 1 to begin adding presets to it:



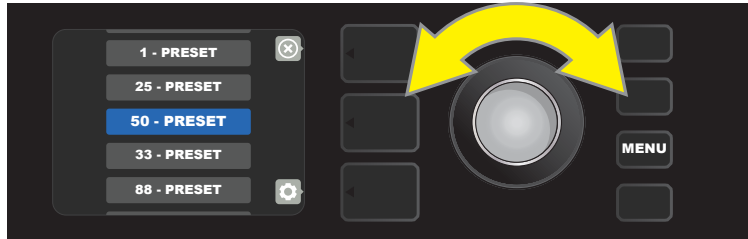
The green plus-sign box will then reappear; press the ENCODER on it to see a list of presets to select from:



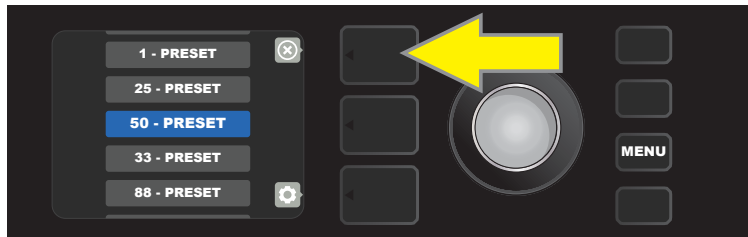
Use the ENCODER to scroll among presets to add to SETLIST 1, then press the ENCODER to select a desired preset:



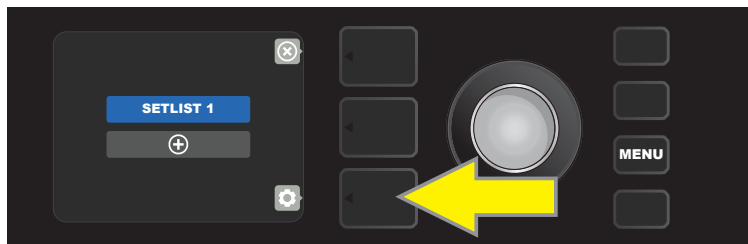
The selected preset is now added to SETLIST 1; repeat the previous two steps to add additional presets to SETLIST 1. Once multiple presets have been added to SETLIST 1, use the ENCODER to scroll through and activate different presets within the selected Setlist:



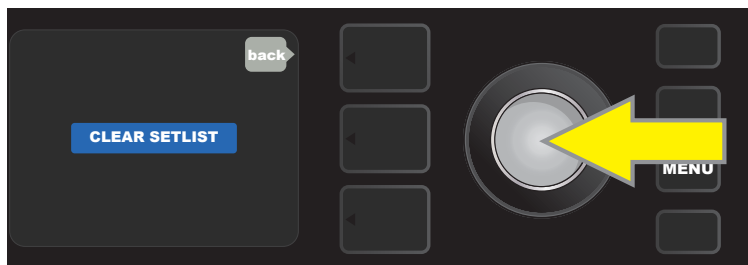
When finished creating and using a Setlist, return to main preset mode by pressing the top LAYER BUTTON. Note that when doing this, the PRESET LAYER will display whichever preset was last highlighted in the Setlist:



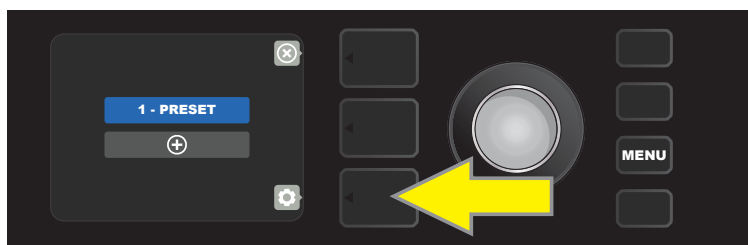
To clear *all* presets from a Setlist, use the ENCODER to scroll to the Setlist to be cleared, then press the CONTROLS LAYER button corresponding with the "gear" icon:



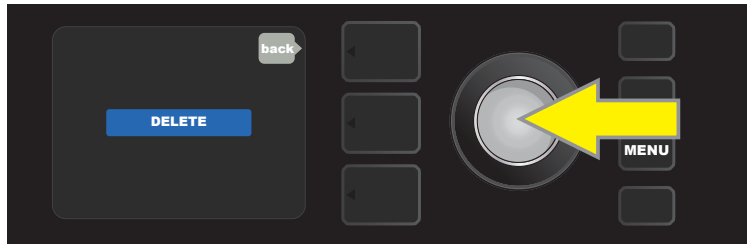
"CLEAR SETLIST" will appear in a blue box; press the ENCODER on it to clear all the presets in that Setlist. Alternately, press the *top* LAYER button corresponding to "back" in the DISPLAY WINDOW to *not* clear a Setlist:



To delete a *single* preset within a Setlist, highlight the preset to be deleted by scrolling to it using the ENCODER; press the CONTROLS LAYER button corresponding with the "gear" icon in the DISPLAY WINDOW:



“DELETE” will then appear in a blue box; press the ENCODER on it to delete that preset. Alternately, press the PRE-SET LAYER button corresponding to “back” in the DISPLAY WINDOW to *not* delete the preset from the Setlist:

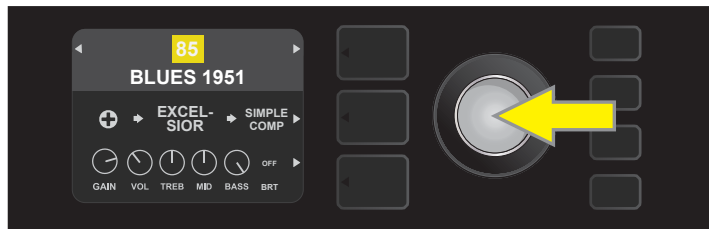


To create subsequent additional Setlists, repeat the steps on pages 29 and 30. These will automatically be labeled “SETLIST 2,” “SETLIST 3” and so on in numerical order.

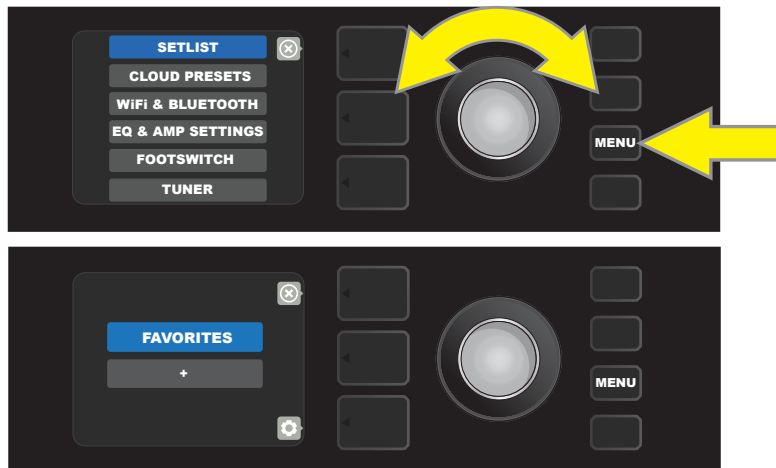
Note that Mustang GTX includes cloud-based backup and restore functions for setlists (*see page 56*).

SETLISTS: QUICK-SAVE PRESET “FAVORITES”

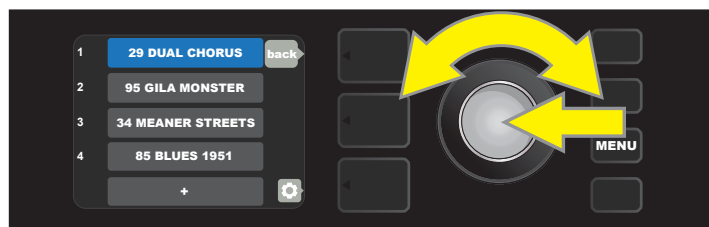
A favorite preset can be saved quickly and conveniently to a “FAVORITES” Setlist. To save a preset in “FAVORITES,” simply press and hold the ENCODER for a few seconds until the preset number block turns from blue to gold:



The preset is automatically added to a Setlist titled “FAVORITES,” which can be accessed by pressing the MENU utility button and using the ENCODER to scroll to and select “SETLIST.” The “FAVORITES” Setlist is always the first one displayed:



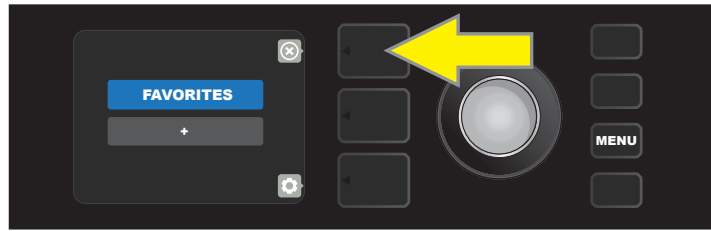
Press the ENCODER on “FAVORITES” to scroll among and select the presets stored there:



To remove a preset from the “FAVORITES” Setlist, press and hold the ENCODER wheel again for a few seconds until the preset number block turns from gold to back to blue.

SETLISTS MENU SHORTCUT

The Setlist menu can be quickly and easily accessed using a shortcut straight from Mustang GTX's top control panel. Simply press and hold the top LAYER BUTTON, and the Setlist view will be displayed:



NOTE: The maximum number of Setlists is 25 (including "FAVORITES"); each Setlist can contain a maximum of 50 presets.

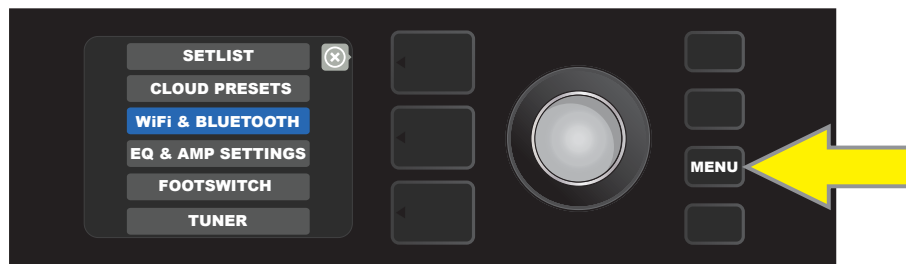
WIFI USE

Mustang GTX's WiFi connectivity delivers easy wireless network access, enabling users to get the latest Mustang GTX firmware updates (*see page 60*). To get started, press the MENU utility button and use the ENCODER to scroll to "WIFI & BLUETOOTH," then press the ENCODER on "WiFi".

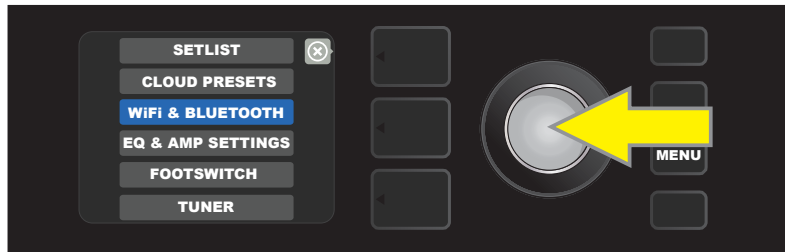
The default WiFi setting is "off," indicated by a red box labeled "WIFI OFF." Press the ENCODER again to turn WiFi on, indicated by a green box labeled "WIFI ON." When WiFi is on, use the ENCODER to scroll through available networks; select a network by pressing the ENCODER on it. If a known network is not displayed, it can be entered manually by selecting the "ADD HIDDEN NETWORK" option at the end of the list of available networks and using the ENCODER to enter the characters (*as shown on page 6*). Once a network is chosen, select "CONNECT" from the menu shown by pressing the ENCODER on it (*other options in this menu are covered on page 34*).

After choosing "CONNECT," the amp will then prompt the entry of a password. To spell out a password, press the ENCODER once to activate the cursor and turn it to choose a character. Press ENCODER again to enter that character and move to the next; repeat until password is complete. When password is complete, press the top LAYER button (corresponding with onscreen prompt "done"). Successful network connection is indicated by a green dot to the left of the network name. All steps are illustrated below and on the following page.

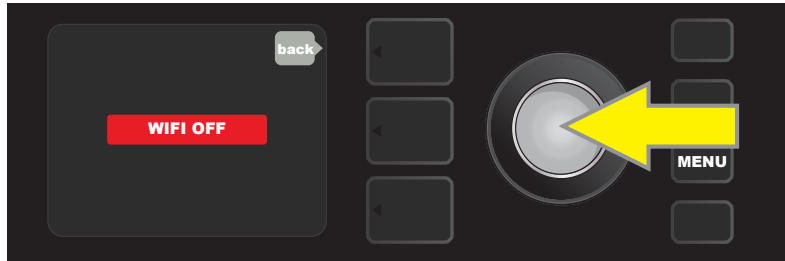
Note that pressing the PRESET LAYER and CONTROLS LAYER buttons also enable closing out of some menus (indicated by an "x") or returning to the previous step (indicated by the label "back").



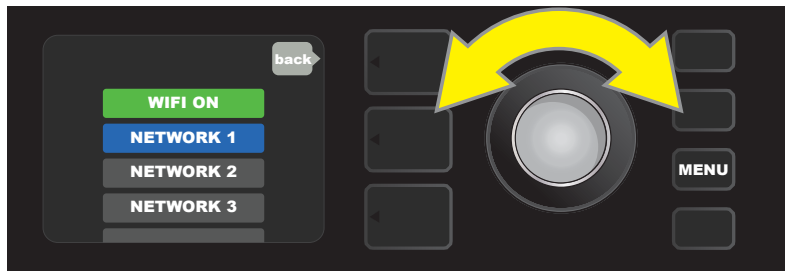
To enable WiFi, first press the MENU utility button.



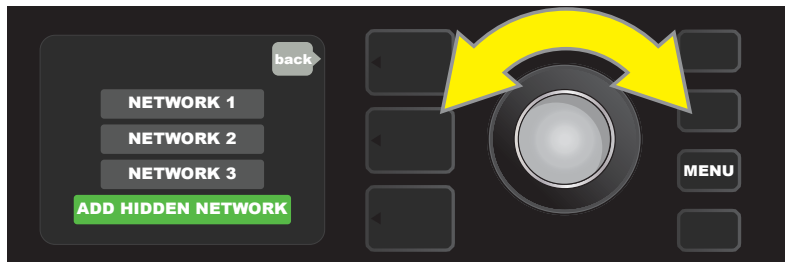
Use the ENCODER to scroll through the menu to "WiFi & Bluetooth," then press the ENCODER and select "WiFi".



The default WiFi setting is "off" (labeled in a red box); press the ENCODER to turn WiFi on (labeled in a green box).



When WiFi is on (as labeled in green box), use the ENCODER to scroll through available networks; select a network by pressing the ENCODER on it.



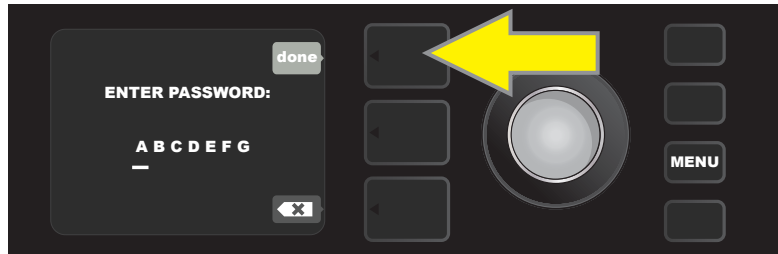
A network can be accessed manually by scrolling to and selecting "ADD HIDDEN NETWORK," and entering characters by turning and pressing the ENCODER.



After choosing a network, select "CONNECT" from the menu shown by pressing the ENCODER on it (other options on this menu are covered on page 34).



After selecting "CONNECT," enter a password by turning and pressing the ENCODER to add each character.

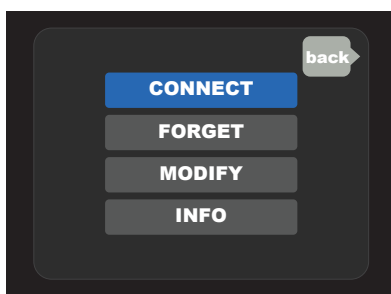


When password is complete, press the PRESET LAYER button (corresponding with onscreen prompt "done").



A green dot to the left of the network name indicates successful network connection.

When WiFi is turned on in Mustang GTX, there are other network menu options in addition to "CONNECT." These are labeled "FORGET," "MODIFY" and "INFO" (see illustration below). Use the ENCODER to scroll through and select one of these options, which are described below.



Close-up detail of DISPLAY WINDOW showing additional WiFi network options "FORGET," "MODIFY" and "INFO".

FORGET: For disconnecting a network and removing it from the amp's memory. To re-establish a connection with a "forgotten" network, follow the steps for "ADD HIDDEN NETWORK" (pages 32-33).

MODIFY: For modifications to the current network's displayed "SSID," "PROTOCOL" and "PASSWORD" parameters. Use the ENCODER to scroll to and select one of these parameters, then turn and press the ENCODER to enter individual characters until modifications are complete.

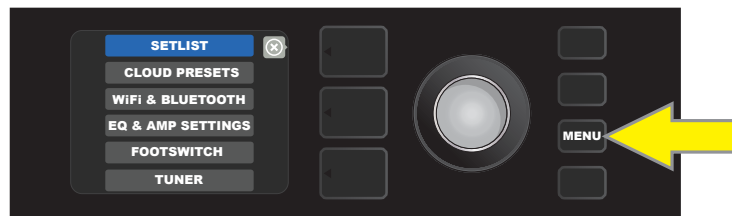
INFO: Displays the current network's name (SSID), signal description, protocol, and connection status. This information can *not* be modified by the user.

BLUETOOTH USE

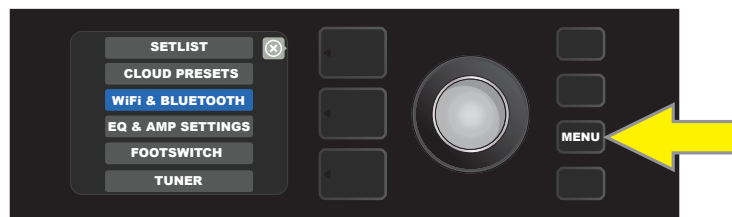
Mustang GTX amplifiers feature Bluetooth connectivity for easy pairing with streaming audio devices and the Fender Tone™ application. Favorite music streaming applications from the user's audio device can be used to stream audio to Mustang GTX.

To enable Bluetooth, press the MENU utility button and use the ENCODER to scroll to "WIFI & BLUETOOTH," then press the ENCODER on "BLUETOOTH." The default Bluetooth setting is "off," indicated by a red box labeled "BLUETOOTH OFF." Press the ENCODER again to turn Bluetooth on, indicated by a green box labeled "BLUETOOTH ON." Once Bluetooth is on, select "MUSTANG GTX" on the external device being connected to the amp. Users who wish to rename Mustang GTX on their external devices can do so by pressing the CONTROLS LAYER button corresponding to the "gear" icon in the DISPLAY WINDOW, and using the ENCODER to enter each character in a new name (*as shown on page 6*). Pressing the PRESET LAYER button enables closing out of a menu (indicated by an "x" in a circle) or returning to the previous step (indicated by the label "back").

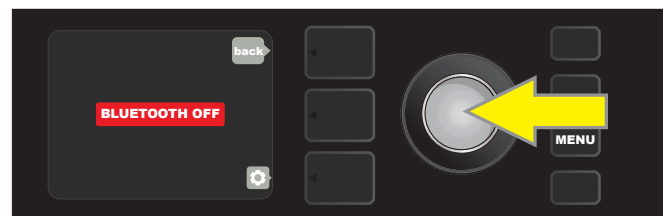
Note that Bluetooth audio streaming and USB audio (*page 38*) can *not* be used simultaneously.



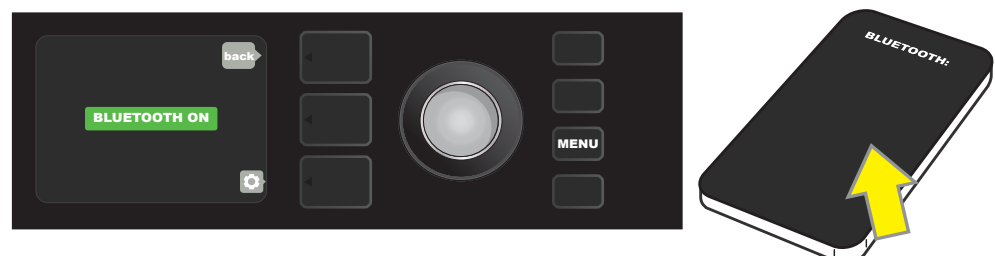
To enable Bluetooth, first press the MENU utility button.



Use the ENCODER to scroll through the menu to "WIFI & BLUETOOTH," then press the ENCODER on "BLUETOOTH."

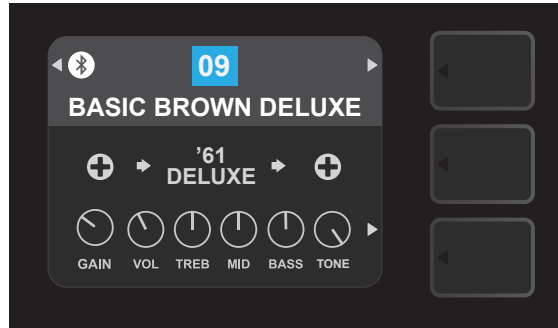


The default Bluetooth setting is "off" (labeled in a red box); press the ENCODER to turn Bluetooth on (labeled in a green box).

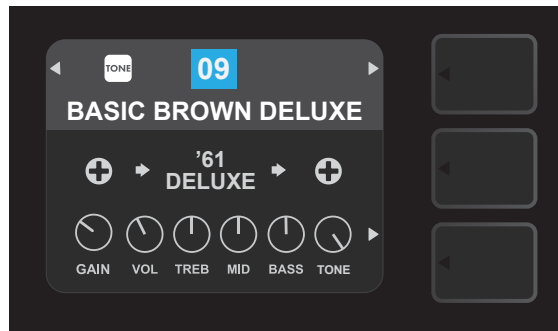


When amp Bluetooth function is on (as labeled in green box), select "MUSTANG GTX" on external device.

When a streaming device is connected to Mustang GTX, a Bluetooth icon will appear at the top left of the DISPLAY WINDOW, indicating streaming readiness:

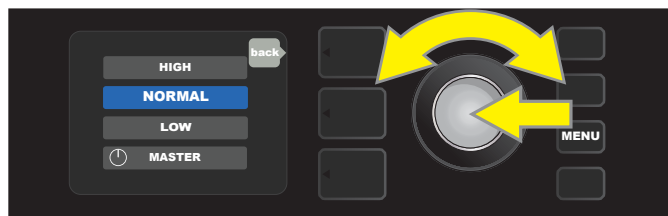
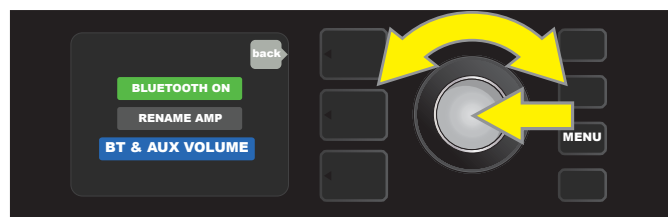


When the Fender TONE app is connected to Mustang GTX, a "TONE" icon will appear at the top left of the DISPLAY WINDOW:



BLUETOOTH VOLUME CONTROL

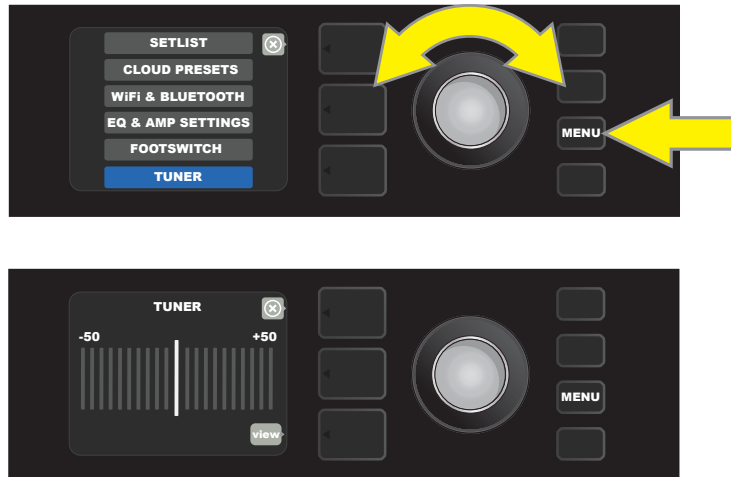
The volume level of a Bluetooth device used with Mustang GTX can be controlled using the volume control on the external device itself, or by using the "BT & AUX VOLUME" menu function. To use this function within the BLUETOOTH menu, use the ENCODER to scroll to and select "BT & AUX VOLUME". Use the ENCODER to scroll to and select one of four options. "MASTER" enables Bluetooth volume to be set using the Mustang GTX top panel MASTER VOLUME control. "HIGH" and "LOW" offer further customized volume levels, and "NORMAL" returns the user to the amp's "medium" default Bluetooth volume setting (*see illustrations below*).



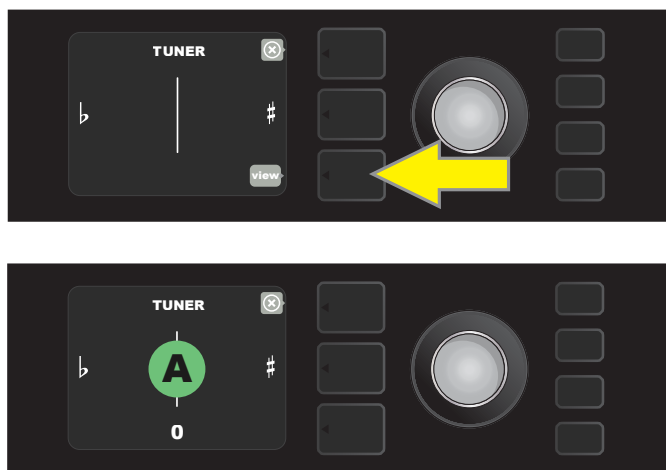
BUILT-IN TUNER

To access Mustang GTX's built-in chromatic tuner, press and hold TAP utility button for two seconds, or press the MENU utility button and select TUNER by turning and pressing the ENCODER (see illustrations below).

The letter name of the note is displayed, and vertical bars on either side of the longer vertical center bar will illuminate red to indicate varying degrees of sharpness (to the right) and flatness (to the left). Precise numerical pitch values (in cents) also appear on both sides of the display. When the note is in tune, the center vertical bar will illuminate in green. When finished tuning, exit tuner mode by pressing the PRESET LAYER button. Note that tuner use mutes speaker output, and that the GTX-7 Footswitch also has a tuning function (see page 44).



Note also that when in TUNER mode, the original Mustang GT "bouncing ball" tuner mode remains available by pressing the bottom LAYER BUTTON corresponding to "view" in the DISPLAY WINDOW (see illustrations below). Mustang GTX automatically saves the user's preferred tuner mode.



AUXILIARY AND HEADPHONE JACKS

The Mustang GTX 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, or by using the Mustang GTX "BT & AUX VOLUME" menu function described on page 36. Also note that when headphones are plugged in, speaker output is muted.

USB CONNECTIVITY

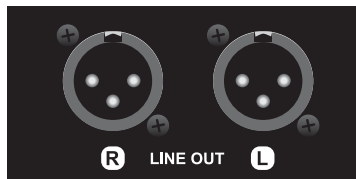
The Mustang GTX rear panel features a USB audio port for recording. Using a micro USB cable (not included), connect a computer with recording software to this port. No external driver is needed to connect to an Apple computer. To connect to a Windows-based computer, the user must download the ASIO driver setup with Fender Mustang device, available at www.fender.com/support/articles/fender-universal-asio-drive. Note that USB audio and Bluetooth audio streaming (page 35) can *not* be used simultaneously.



A gain control for the USB is located in the "EQ & AMP SETTINGS" menu. Press the MENU utility button, then use the ENCODER to scroll to and select "EQ & AMP SETTINGS", and then "LINE OUT/USB GAIN". Use the ENCODER to scroll to and select a new USB gain value (page 50).

LINE OUT AND FX SEND/RETURN

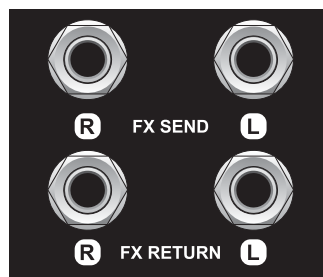
Mustang GTX amplifiers feature rear-panel balanced line output jacks (right and left) for connection to external recording and sound reinforcement equipment (see illustration below).



Close-up detail of rear-panel right and left balanced line outputs.

The gain control described above for the USB audio port can also be used for the line out, using the same steps.

Mustang GTX also features an effects loop. The right/left FX send and right/left FX return jacks on the far right of the rear panel are for mono or stereo external effects use (see illustration below); a mono effect can be plugged into the right or left channel. Note that effects connected to these jacks are "global" (not preset-specific) and will act as the *last* elements in the signal path.



Close-up detail of rear-panel right and left FX send/return jacks.

FOOTSWITCH USE

Three foot-control devices can be used with Mustang GTX amplifiers—the **GTX-7** and **MGT-4** footswitches and the **EXP-1 Expression Pedal**.

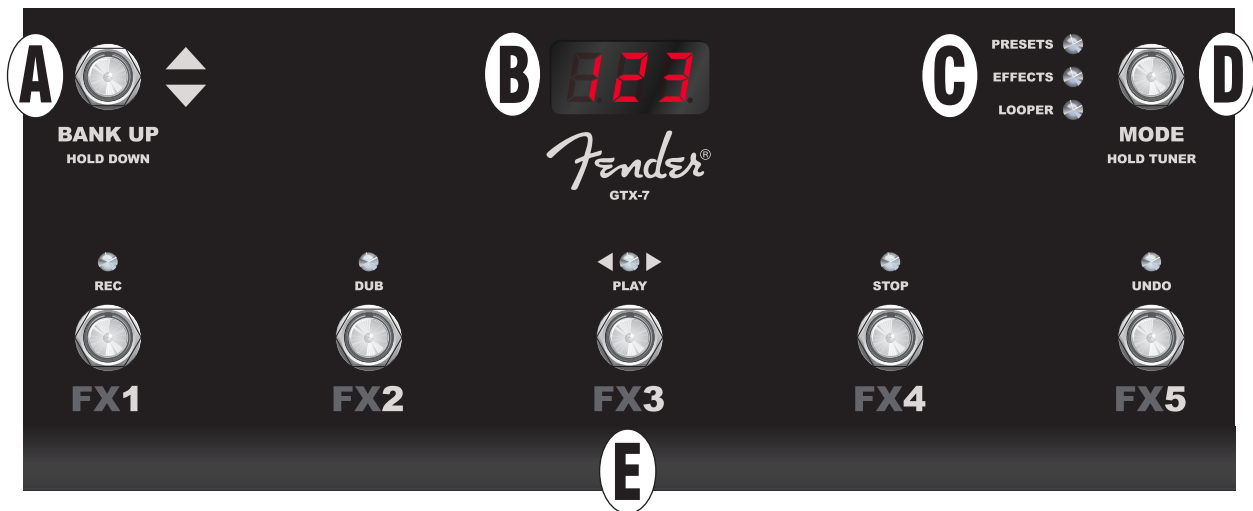
The seven-button GTX-7 Footswitch comes with Mustang GTX100 and is optional for Mustang GTX50. It enables convenient remote foot control of several functions, including the built-in tuner, amp preset selection, effects bypass, 60-second looper and more. The EXP-1 Expression Pedal, optional for both Mustang GTX amps, is a dual-mode digital pedal that controls Mustang GTX volume and amp/effect parameters.

The four-button MGT-4 Footswitch is optional for both Mustang GTX amp models. Note that instructions for using the MGT-4 Footswitch can be found online in the *Mustang GT Guitar Amplifier Expanded Owner's Manual Rev. A* (PN 7712493000), and in the *Mustang GT Guitar Amplifier Addendum to Expanded Owner's Manual Firmware V2.0* (PN 7715279000).

Connect the GTX-7 or MGT-4 footswitch to the FOOTSWITCH jack on the amp's rear panel. The amplifier automatically defaults to the connected footswitch while the amp is fully booted. The GTX-7 or MGT-4 footswitch can be combined with the EXP-1 Expression Pedal by “chaining” the two pedals together.

GTX-7 FOOTSWITCH FEATURES

The GTX-7 Footswitch has seven buttons—a BANK UP button at upper left, a MODE/TUNER button at upper right, and five numbered FUNCTION buttons along the bottom. Three MODE LEDs are at upper right, and five FUNCTION LEDs are arrayed with one above each FUNCTION button. The DISPLAY WINDOW is at top center.



- A. BANK UP BUTTON:** Used to move up and down through consecutive groups (“banks”) of five presets.
- B. DISPLAY WINDOW:** Displays footswitch function currently in use.
- C. MODE LEDs:** Color-coded LEDs indicate which of three modes is in use—PRESETS (red), EFFECTS (amber) or LOOPER (green).
- D. MODE/TUNER BUTTON:** Used to select among PRESETS, EFFECTS and LOOPER modes; press and hold for chromatic TUNER mode.
- E. FUNCTION BUTTONS/LEDS:** Five numbered buttons enable foot control of various Mustang GTX functions, depending on footswitch mode in use. Red LEDs above each FUNCTION BUTTON indicate various functions in use.

GTX-7 FOOTSWITCH: MODES

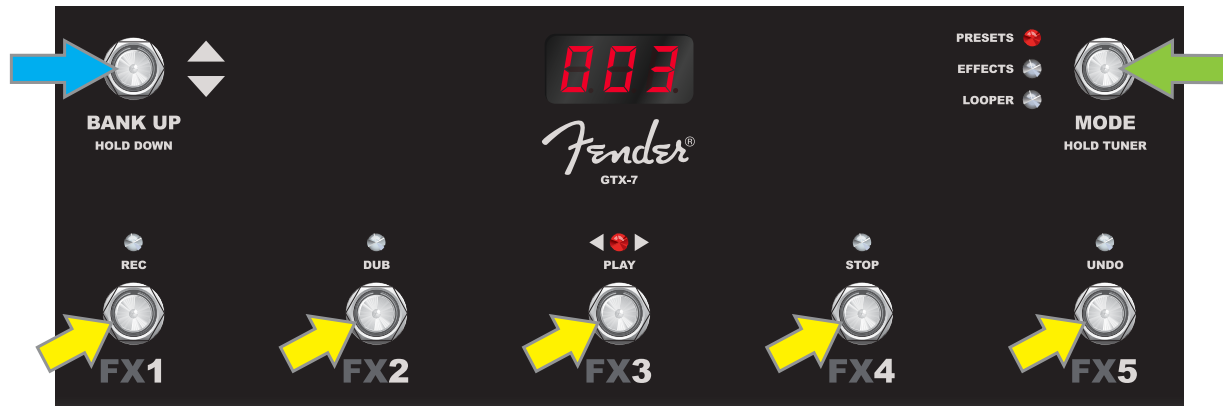
The GTX-7 Footswitch offers three Mustang GTX modes—PRESETS, EFFECTS and LOOPER. To choose one, cycle through them by stepping on the MODE button (D) at the upper right of the footswitch repeatedly until the desired mode is reached, as indicated by its color-coded MODE LED (C).

PRESETS MODE

PRESETS mode enables the user to reach any of Mustang GTX's many presets using the GTX-7 Footswitch. To do this, step on the MODE button (*green arrow in illustration below*) until PRESETS mode is activated, as indicated by the illuminated red MODE LED directly to the right of the label "PRESETS."

When the GTX-7 Footswitch is in PRESETS mode, presets become available in consecutive groups of five called "banks," with each of the five presets in a bank sequentially assigned to FUNCTION buttons 1, 2, 3, 4 and 5. To move "upward" through subsequent banks of five presets, step on the BANK UP button (*blue arrow in illustration below*). To move "downward" to the preceding bank of five presets, step on *and hold* the BANK UP button.

When the bank containing the desired preset is reached, select the desired preset within that bank by stepping on its corresponding FUNCTION button (*yellow arrows in illustration below*). When the desired preset has been selected, its corresponding red FUNCTION LED will illuminate, and the DISPLAY WINDOW will show the preset in use (*see illustration below, in which preset 3 is active*). The PRESETS mode LED will flash at the tempo of time-based effects; to change tempo using the GTX-7, tap twice on the currently selected PRESET footswitch.



Note that when activating PRESETS mode, the GTX-7 Footswitch will automatically set itself to whatever MUSTANG GTX preset is already set on the amp. This preset will be assigned to the footswitch FUNCTION button corresponding to the preset's position within its bank (1, 2, 3, 4 or 5). For example, if the amp is set to preset number 33, the GTX-7 Footswitch in PRESETS mode will also be set to preset number 33 and will assign that preset to FUNCTION button 3 (the third preset in the bank containing presets 31, 32, 33, 34 and 35).

EFFECTS MODE

EFFECTS mode lets the user turn the first five effects in a Mustang GTX preset on and off using the GTX-7 Footswitch (known as the EFFECTS mode default or "first five" setting).

To do this, step on the footswitch MODE button (*green arrow in illustration on next page*) until EFFECTS mode is activated; the MODE LED directly to the right of the label "EFFECTS" will illuminate in amber and "EFF" will appear in the DISPLAY WINDOW (*see illustration on next page*). Any effects in the active preset are then assigned to the footswitch FUNCTION buttons—labeled "FX1," "FX2," "FX3," "FX4" and "FX5" for this purpose (*yellow arrows in illustration below*). When an effect is on, the red FUNCTION LED above its assigned FUNCTION button will illuminate. To bypass an effect, step on its corresponding FUNCTION button; the effect and its red FUNCTION LED will then turn off. To turn the effect back on, step on its FUNCTION button again.

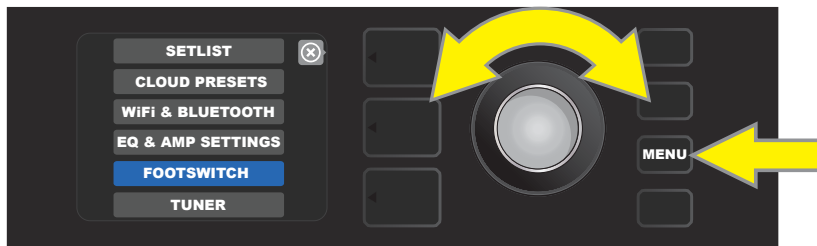
Up to the first five effects in a preset are assigned this way; in a preset with only two effects, for example, they are assigned to FUNCTION buttons “FX1” and “FX2”, as in the example below.



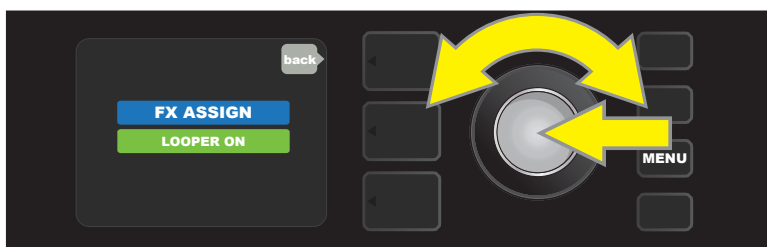
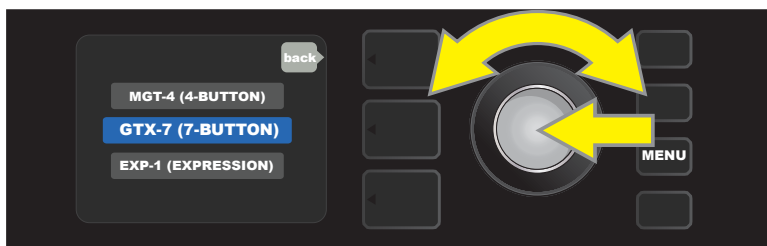
EFFECTS mode example showing a preset with two effects, each assigned to FUNCTION buttons FX1 and FX2. The illuminated red FUNCTION LEDs above FX1 and FX2 indicate that both effects are on; both can be turned off by stepping on their respective FUNCTION buttons.

EFFECTS mode also offers a “category” setting in which five entire categories of effects are assigned to the footswitch FUNCTION buttons, letting the user turn all effects of a particular type on and off in the active preset. In this setting, Stompbox effects are assigned to FUNCTION button FX1, Modulation effects are assigned to FUNCTION button FX2, Delay effects are assigned to FUNCTION button FX3, Reverb effects are assigned to FUNCTION button FX4 and Filters+Pitch effects are assigned to FUNCTION button FX5. Note that the Dynamics+EQ effects category can *not* be assigned to the footswitch.

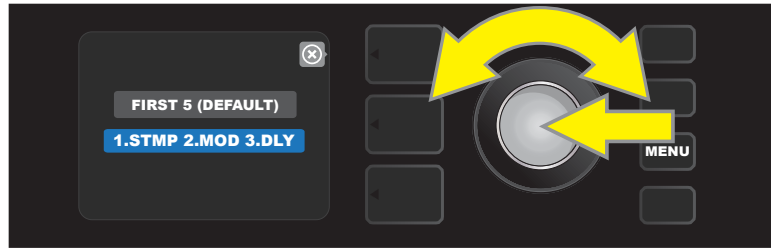
To use this EFFECTS mode setting, press the MENU utility button on the amp control panel and use the ENCODER to scroll to and select the “FOOTSWITCH” menu option:



Use the ENCODER to scroll to and select “GTX-7 (7-BUTTON)” from the menu of devices shown, then use the ENCODER to scroll to and select “FX ASSIGN”:



Use the ENCODER to scroll to and select the “category” setting, shown in the DISPLAY WINDOW as “1.STMP 2.MOD 3.DLY”, then press the MENU utility button to return to the active preset:



The GTX-7 Footswitch has now assigned Stompbox effects to FUNCTION button FX1, Modulation effects to FX2, Delay effects to FX3, Reverb effects to FX4 and Filters+Pitch effects to FX5; each can be turned on and off by stepping on its designated FUNCTION button. Note that Mustang GTX will “remember” EFFECTS mode settings after turning the amplifier off and back on again; in order to return to the default “first five” setting previously described, repeat the steps in this section and select the “FIRST 5 (DEFAULT)” menu option in the final step.

LOOPER MODE

LOOPER mode enables the user to record loops up to 60 seconds long and overdub subsequent parts. Any number of overdubbed parts can be layered over the original recorded part; however, only the *last* overdub created can be undone. To record a loop, step on the MODE button (*green arrow in illustration below*) until “LOOPER” mode is activated; the MODE LED directly to the right of the label “LOOPER” will illuminate in green (*see illustration below*).

To begin recording the first musical passage, step on FUNCTION button 1 (*yellow arrow in illustration below*) labeled “REC” for this purpose. The red FUNCTION LED above the button will begin flashing and the DISPLAY WINDOW will show “REC,” indicating that the LOOPER is in recording mode; play a passage of any time duration up to 60 seconds (*see illustration below*).



When finished playing the first musical passage, stop recording and start playback by stepping on FUNCTION button 3 (*yellow arrow in illustration on next page*), labeled “PLAY”. The red FUNCTION LED above FUNCTION button 1 will stop flashing, the red FUNCTION LED above FUNCTION button 3 will illuminate, and the DISPLAY WINDOW will indicate playback by showing “PLA” (*see illustration on next page*). To stop playback, step on FUNCTION button 4, labeled “STOP” (*green arrow in illustration on next page*); the DISPLAY WINDOW will show “STP” (*not shown in illustration*).



When finished playing the first musical passage, go into overdub mode by stepping on FUNCTION button 2 (yellow arrow in illustration below). The red FUNCTION LED above the button will begin flashing and the DISPLAY WINDOW will show "DUB," indicating that the LOOPER is now in overdub mode and a second musical passage can be recorded over the first (overdub mode can also be activated *during* playback of the first passage by stepping on FUNCTION button 2). Continue overdubbing musical passages as often as desired. After an overdub is recorded, step on FUNCTION button 3 (green arrow in illustration below) to start playback of all recorded parts; press FUNCTION button 4 (blue arrow in illustration below) to stop playback.



While recording, playing back or stopped on the first musical passage, the user can undo the recording if desired by stepping on FUNCTION button 5 (yellow arrow in illustration below), labeled "UNDO." When doing so, recording will stop, the red FUNCTION LED above the button will illuminate and the DISPLAY WINDOW will show the mode is currently in use ("REC" in the illustration below). Once overdubs have been added, however, the UNDO function applies only to the last overdub recorded; preceding overdubs cannot be undone.



TUNER MODE

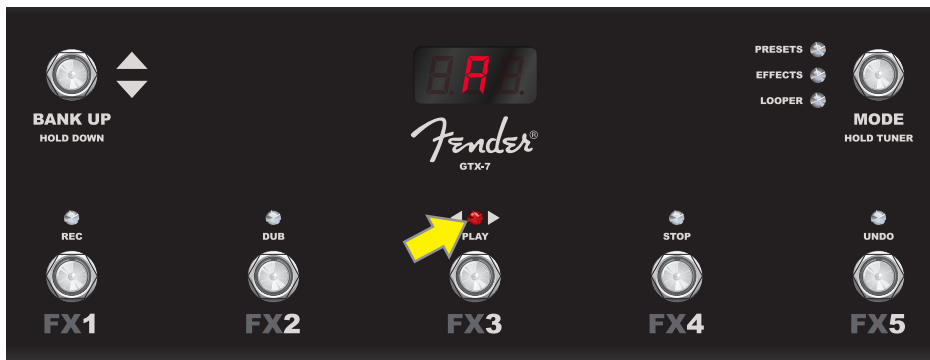
The GTX-7 Footswitch can also be used for hands-free tuning. To do this, step on and briefly hold the MODE button (green arrow in illustration below) to activate the chromatic tuner, upon which the pitch letter closest to the sounded note appears in the DISPLAY WINDOW. FUNCTION LEDs 1 and 2 at left illuminate red to indicate degrees of flatness; FUNCTION LEDs 4 and 5 at right illuminate red to indicate degrees of sharpness. When correct pitch is attained, FUNCTION LED 3 at center illuminates red. When tuning is complete, step on any button to exit tuner mode. Note that GTX-7 Footswitch tuner use mutes speaker output.



To activate the GTX-7 Footswitch tuning function, step on and briefly hold the MODE button (green arrow). In the example shown here, an "A" note is displayed as being particularly flat, as indicated by the illumination of FUNCTION LED 1 at far left (yellow arrow).



Here, the "A" note is displayed as being slightly sharp, as indicated by the illumination of FUNCTION LED 4 (yellow arrow).



Here, the "A" note is at correct pitch, as indicated by the illumination of FUNCTION LED 3 at center (yellow arrow).
When tuning is complete, step on any button to exit footswitch tuner mode.

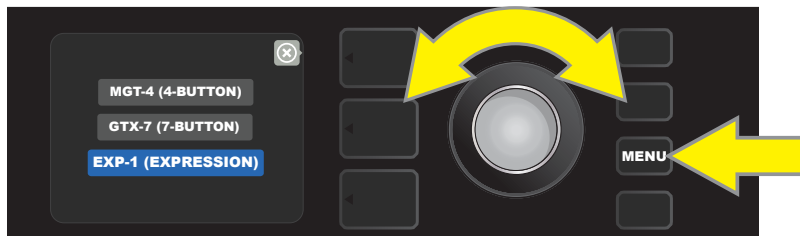
EXP-1 EXPRESSION PEDAL

The EXP-1 Expression Pedal is a dual-mode foot controller that enables the user to control master volume (“Volume” mode) and various amp and effect parameters (“Expression” mode).

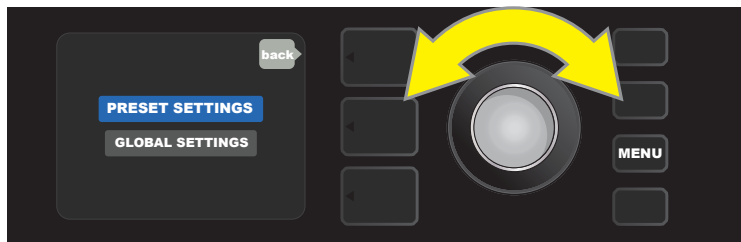


Switch between Volume and Expression modes by stepping on the toe switch (at the top of the pedal). Red and green LEDs indicate the mode in use. Volume mode—indicated by the green LED—controls master volume or can be turned off. Expression mode—indicated by the red LED—controls many Mustang GTX effect parameters such as wah effect frequencies, modulation effect rates, etc.

To set up the EXP-1 for use, connect it to the footswitch jack on the back of the amplifier, turn the amp on. Press the MENU utility button on the amp and use the ENCODER to scroll to and select “FOOTSWITCH” (not shown), and then “EXP-1(EXPRESSION)” on the menu shown (see illustration below).

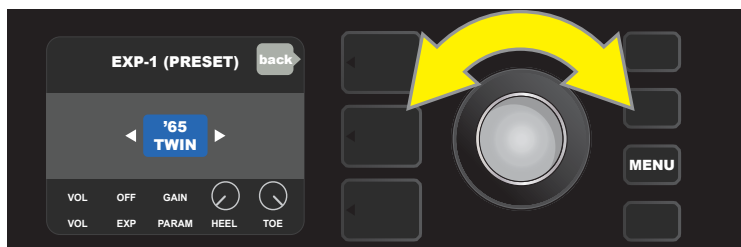


A prompt will appear to select “PRESET SETTINGS” or “GLOBAL SETTINGS” (see illustration below); use the ENCODER to select one. PRESET SETTINGS is used to assign the EXP-1 to a specific amp or effect *within a particular preset*, in which a wide variety of parameters can be modified, depending on the amp or preset in use. GLOBAL SETTINGS is used to configure parameters that will affect *all* presets. Both are described in more detail below.



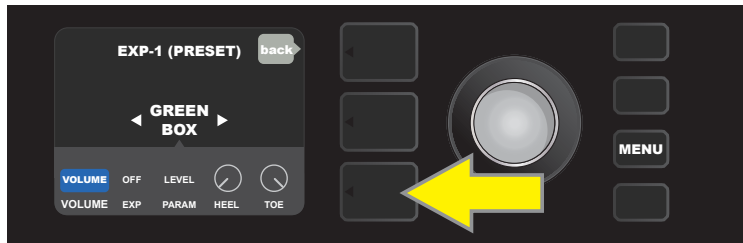
PRESET SETTINGS

As noted above, PRESET SETTINGS is used to assign the EXP-1 to a specific amp or effect within a particular preset. To do this, press the ENCODER on PRESET SETTINGS, and the middle SIGNAL PATH LAYER will show—one at a time—the amp and effects in that preset to which the EXP-1 can be assigned. The user can scroll through these by turning the ENCODER (see illustration below).



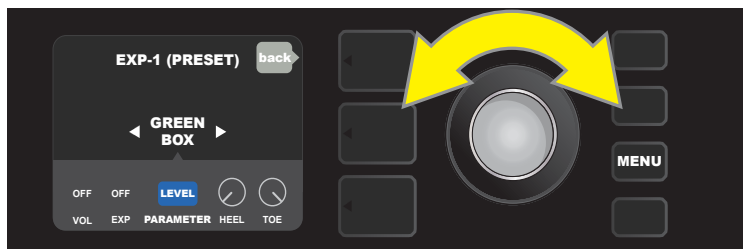
In EXP-1 PRESET SETTINGS, the amp and effects in a preset to which the EXP-1 can be assigned are shown one by one in the SIGNAL PATH LAYER; the ENCODER is used to scroll through them. In the example above, a '65 Twin amp is highlighted.

Once an amp or effect is highlighted in the SIGNAL PATH LAYER, the CONTROLS LAYER below it will show several configurable EXP-1 items for that particular preset. Press the CONTROLS LAYER button to enter the CONTROLS LAYER (see illustration below).



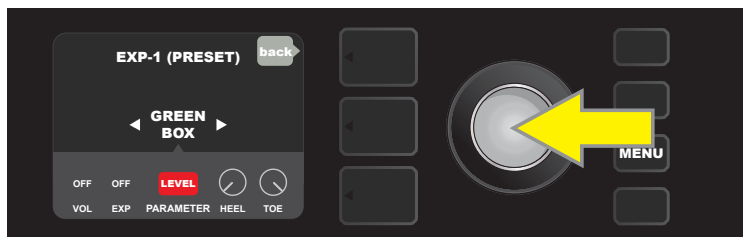
To assign the EXP-1 to a specific effect within a preset, press the CONTROLS LAYER button (yellow arrow) to access items including the parameter settings ("PARAM") for the effect. In the example shown here, the EXP-1 will control a Green Box overdrive stompbox effect.

Use the ENCODER to scroll to and select "PARAMETER," which lets the user select a control parameter of the amp or effect shown in the SIGNAL PATH LAYER to be controlled using the EXP-1 in Expression mode (see illustration below).



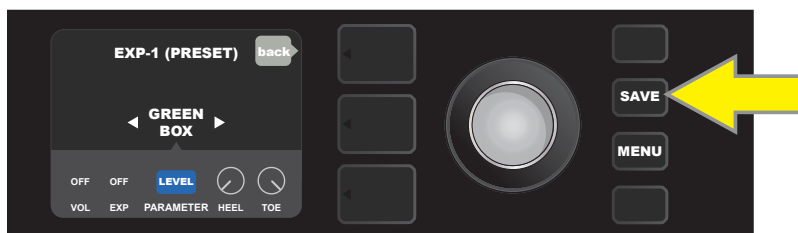
Use the ENCODER (yellow arrow) to scroll to "PARAMETER," which encompasses the individual controls for the effect highlighted in the SIGNAL PATH LAYER. In the example shown here, "LEVEL" is one of the Green Box overdrive parameters that can be assigned to the EXP-1.

When selected, the parameter box will change from blue to red and the ENCODER can then be used to scroll through different control parameters; press the ENCODER on any of these to change their settings for EXP-1 pedal use (see illustration below). When a control is selected, it will turn from blue to red, indicating that it can now be adjusted. When adjustment is complete, press the ENCODER again, and the control will return to blue with the new parameter value in place.



From the example above, press the ENCODER (yellow arrow) on "LEVEL." Its box will change from blue to red, indicating that adjustments can then be made to that parameter of the Green Box overdrive effect for EXP-1 use.

Once a parameter adjustment is complete, press the SAVE utility button to keep parameter changes (see illustration below).



Several other EXP-1 modes reside in the CONTROLS LAYER. Use the ENCODER to scroll among and select these modes and the options within them. These modes are:

VOLUME MODE (“VOL”): Turns off the EXP-1 Volume mode (green LED) pedal function (*see illustrations below*).

EXPRESSION MODE (“EXP”): Allows three different assignments. “OFF” turns off the EXP-1 Expression mode pedal function (red LED). “VOLUME” configures EXP-1 to control master volume (similar to VOLUME MODE above). “AMP/FX” configures EXP-1 to control the amp or effect shown in the SIGNAL PATH LAYER.

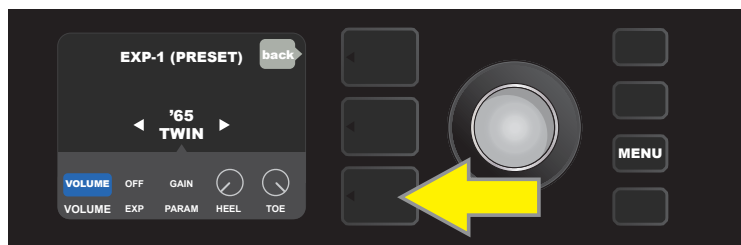
HEEL/TOE MODES: Together, these specify the range of the parameter to be controlled.

LIVE MODE: When ON, the configured parameter immediately jumps to the value “commanded” by the position of the pedal. When OFF, initial pedal position is “ignored” until the pedal is actually moved, after which it’s in synch with the configured parameter.

BYPASS MODE: When ON, effect bypass can be toggled on and off using the EXP-1 toe switch.

REVERT MODE: When ON, the configured parameter is restored to the value stored in the preset when switching from Expression mode to Volume mode using the toe switch.

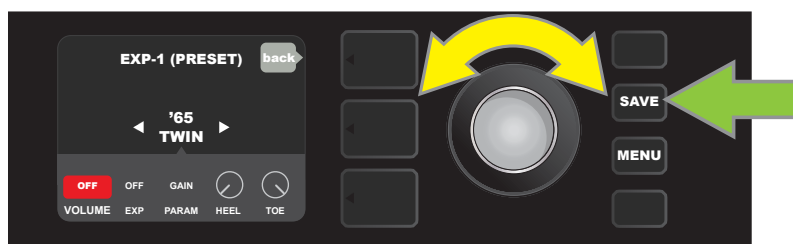
DEFAULT MODE: Configures initial EXP-1 mode (Volume or Expression) for the preset in use. DEFAULT MODE is overridden when the “GLOBAL SETTINGS” function “MODE SOURCE” is set to “PEDAL” (*see “GLOBAL SETTINGS” on following page*).



In this example, to turn off the EXP-1 Volume mode pedal function for the '65 Twin shown in the SIGNAL PATH LAYER, press the CONTROLS LAYER button. “VOLUME” mode will be automatically highlighted in the CONTROLS LAYER.



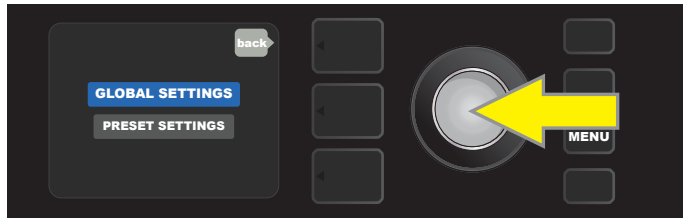
Press the ENCODER on “VOLUME.” The label box will change from blue to red, indicating that an adjustment can now be made.



Turn the ENCODER (yellow arrow) to “OFF,” then press it to select “OFF” setting. EXP-1 Volume mode pedal function for the amp shown in the SIGNAL PATH LAYER is now off, and the label box will return to blue. Press the SAVE utility button (green arrow) to keep changes.

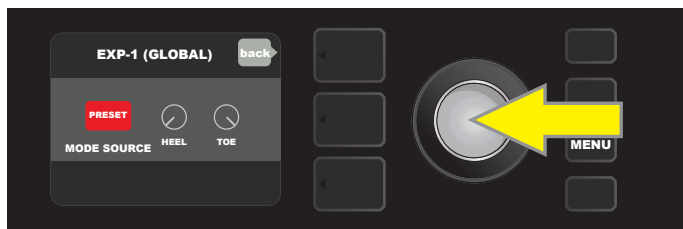
GLOBAL SETTINGS

As noted, GLOBAL SETTINGS is used to assign the EXP-1 to *all* presets. After pressing the MENU utility button and scrolling to and selecting “EXP-1 SETUP,” press the ENCODER again and scroll to “GLOBAL SETTINGS” (see *illustration below*).



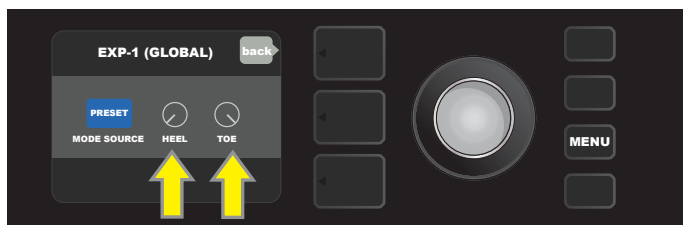
Press the ENCODER on “GLOBAL SETTINGS.” Three parameters can be modified in the menu shown—“MODE SOURCE,” “HEEL VOLUME” and “TOE VOLUME.” “MODE SOURCE” is used to choose between “PRESET” and “PEDAL” settings. “PRESET” means that whatever preset the user is in determines whether the EXP-1 is in Volume mode or Expression mode (this can change from preset to preset). In the “PEDAL” setting, the EXP-1 overrides preset settings and stays in whichever mode (Volume or Expression) it’s currently in.

Press the ENCODER and turn it to select “PEDAL” or “PRESET.” The label box will change from blue to red (see *illustration below*) until a selection is made by pressing the pressing the ENCODER AGAIN, after which the label box will return to blue with the current selection in place.



“HEEL VOLUME” and “TOE VOLUME” are used together to set a volume range covered by the pedal, the default range of which is set at 1-10, with the heel all the way down being 1 (no volume) and the toe all the way down being 10 (full volume). This range can be adjusted to preference, by using the “HEEL VOLUME” control to set a different value for minimum volume and using the “TOE VOLUME” control to set a different value for maximum volume.

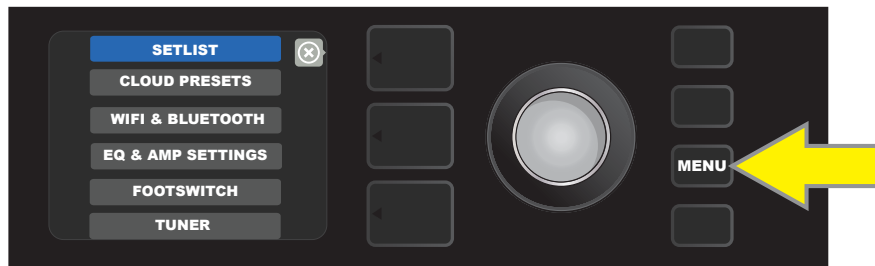
Use the ENCODER to scroll to and select the “HEEL VOLUME” and “TOE VOLUME” controls. When each is selected, it will turn from blue to red, indicating that it can now be adjusted. When adjustment is complete, press the ENCODER again to keep the new control value, and the control will return to blue (see *illustration below*).



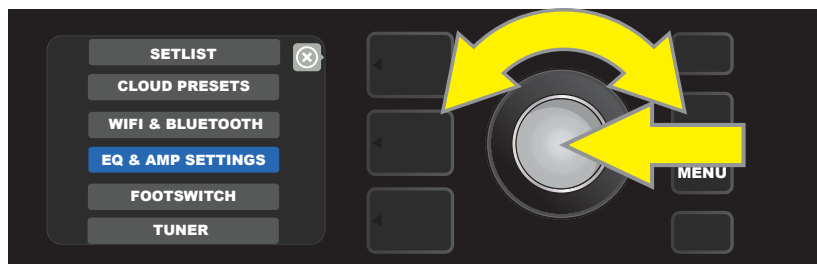
Note that Global Settings changes are saved automatically; no extra “save” step is required.

EQ & AMP SETTINGS

“EQ & Amp Settings” is a MENU utility (see page 28) providing access to several functions, including GLOBAL EQ, LINE OUT/USB GAIN, PRESET ORGANIZER, RESTORE SETTINGS and RESTORE ALL, and ABOUT THIS AMP. All are initially accessed by first pressing the MENU utility button and using the ENCODER to scroll to and select “EQ & AMP SETTINGS.”



To access the Amp Settings function, first press the MENU utility button.

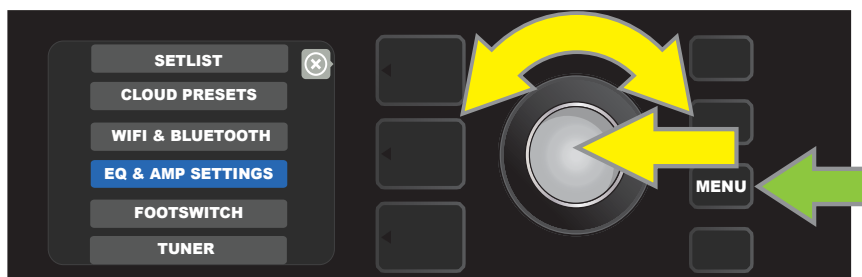


Use the ENCODER to scroll to and select “EQ & AMP SETTINGS.”

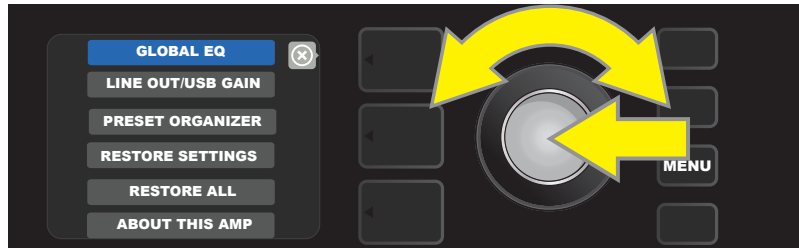
GLOBAL EQ

“Global EQ” is a MENU utility button function within the EQ & AMP SETTINGS menu (see page 28) that provides access to different equalization curves for easier adjustment of overall amp response to different acoustic environments. This is particularly helpful when users have all their favorite presets and settings dialed in, but then find themselves in, for example, brighter- or boomer-sounding rooms, halls, outdoor areas, etc. Rather than re-adjust each and every preset and setting, users can quickly and easily select one of nine different EQ profiles shaped to suit the surroundings at hand.

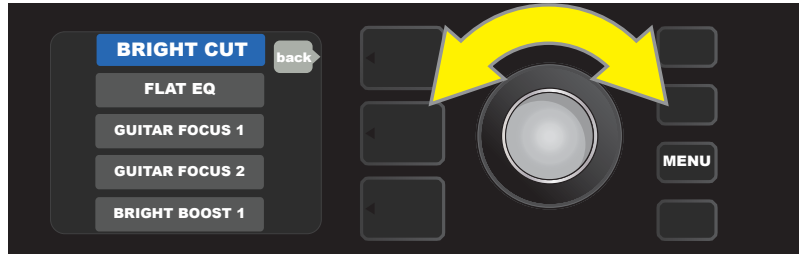
Activate this function by pressing the MENU utility button (green arrow) and using the ENCODER to scroll to and select “EQ & AMP SETTINGS”, and then “GLOBAL EQ.” Scroll to and select any of the nine options presented (see illustrations below and on next page)—“BRIGHT CUT EQ” for de-accentuating top end, “FLAT EQ” (a good default choice that actually provides no additional equalization), two different “GUITAR FOCUS” profiles, two different “BRIGHT BOOST” profiles for accentuating the top end, two “LOW CUT” profiles for trimming bass response, and a “LOW VOLUME BASS BOOST” profile for enhanced bass response at lower volume settings (using this EQ at higher volumes could cause unwanted boominess or speaker distortion).



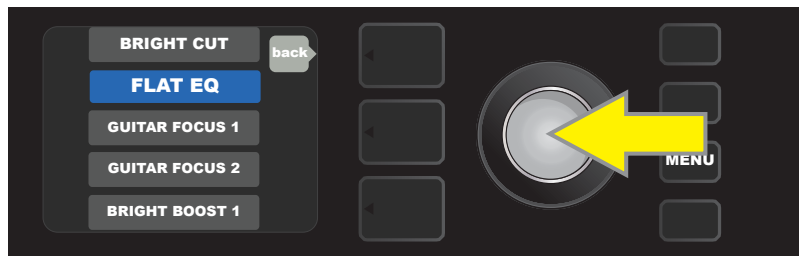
To access the Global EQ function, first press the MENU utility button and use the ENCODER to scroll to and select “EQ & Amp Settings”.



Use the ENCODER to scroll to and select "GLOBAL EQ."



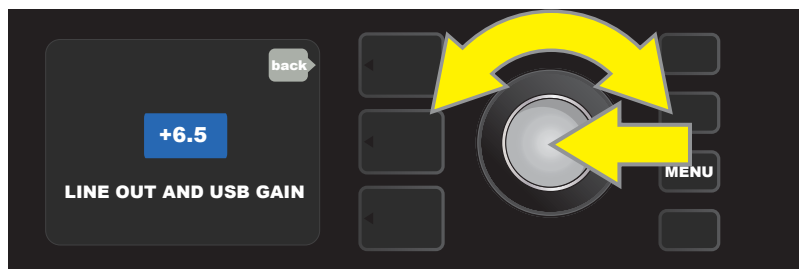
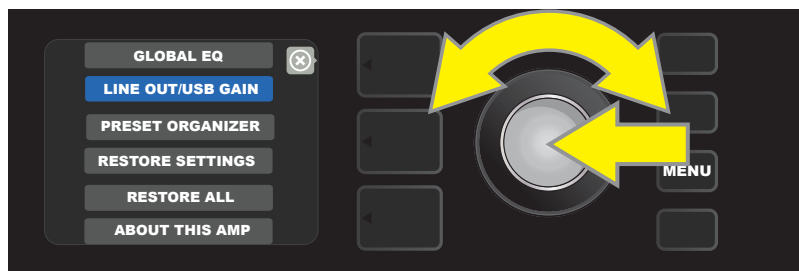
Turn the ENCODER to scroll to one of nine "GLOBAL EQ" options.



Press the ENCODER to select a "GLOBAL EQ" option.

LINE OUT/USB GAIN

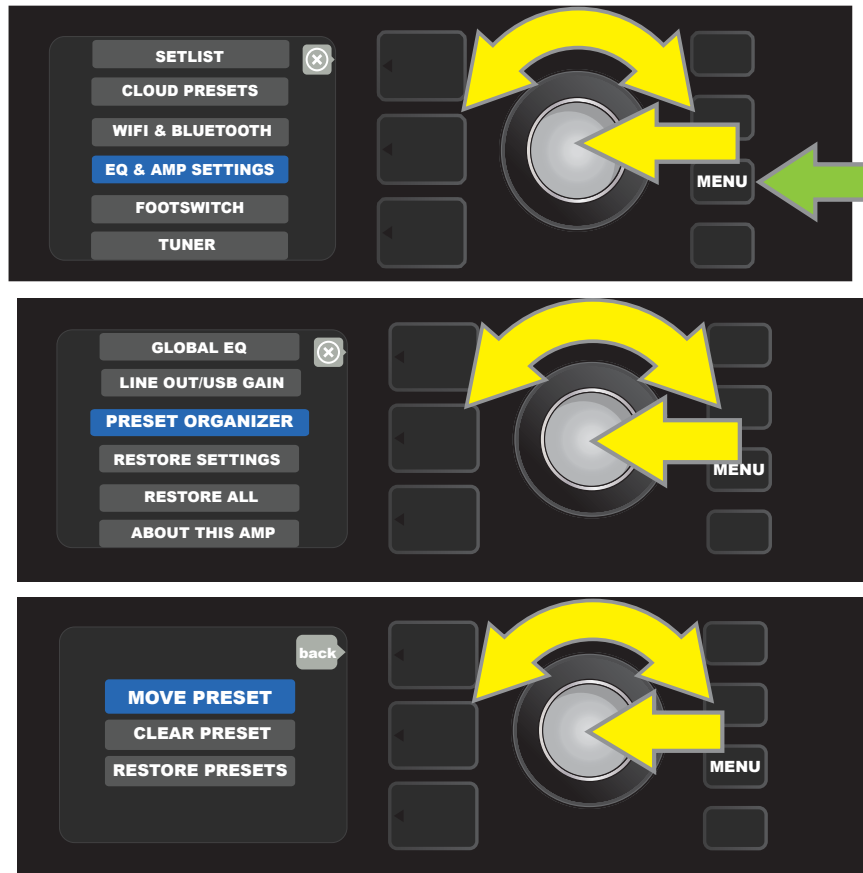
"LINE OUT/USB GAIN" is a MENU utility button function within the EQ & AMP SETTINGS menu (*page 28*) that provides a separate gain control for both USB and line out use (*page 38*). To access it, press the MENU utility button, then use the ENCODER to scroll to and select "EQ & AMP SETTINGS", and then "LINE OUT/USB GAIN". Use the ENCODER to scroll to and select a new USB gain value.



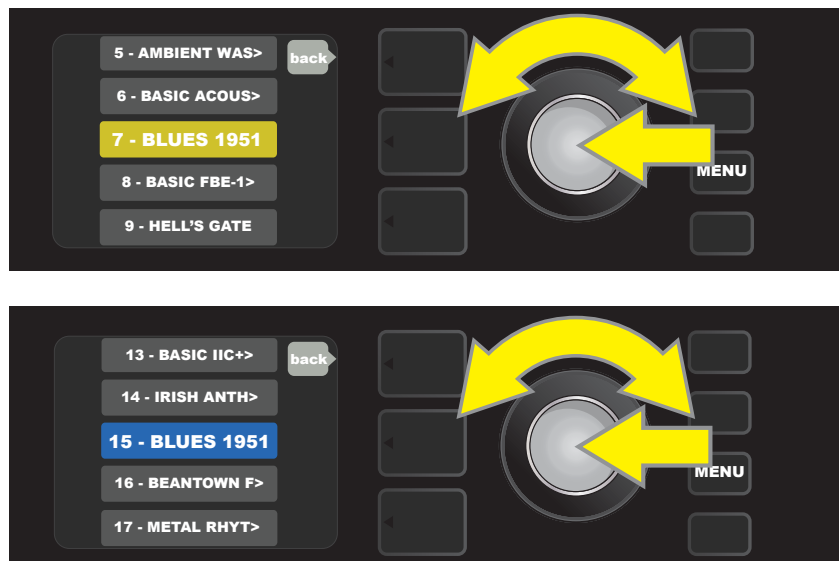
PRESET ORGANIZER

“PRESET ORGANIZER” is a MENU utility button function within the EQ & AMP SETTINGS menu (*page 28*) that lets the user move a preset to different position or clear it from the list of presets. The function also allows the entire list of presets to be restored to its original factory configuration.

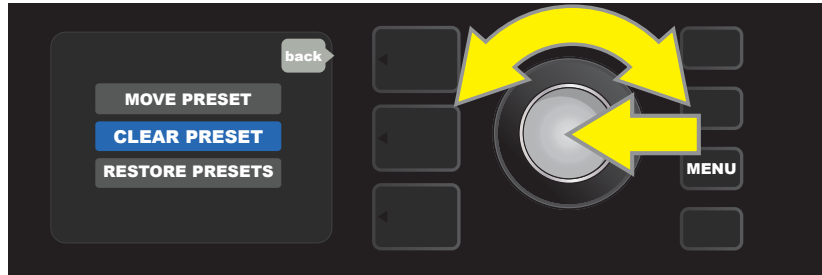
To move a preset to a different position in the preset list, press the MENU utility button (*green arrow*). Then use the ENCODER to scroll to and select “EQ & AMP SETTINGS”, and then “PRESET ORGANIZER”. Use the ENCODER to scroll to and select “MOVE PRESET” (*see illustrations below*).



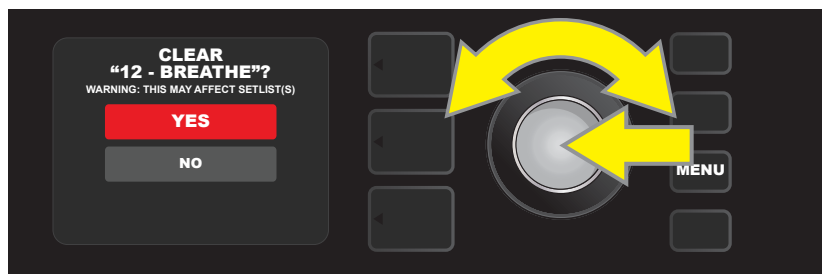
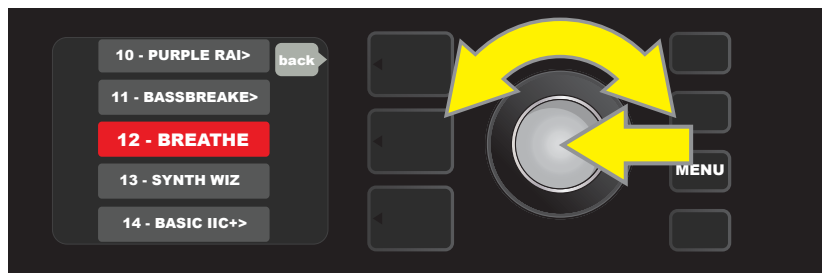
Use the ENCODER to scroll to and select a preset to be repositioned; the preset’s box will turn from blue to amber. Turn the ENCODER to reposition the selected preset; press the ENCODER to place the preset in a new position, after which its box will return to blue (*see illustrations below*).



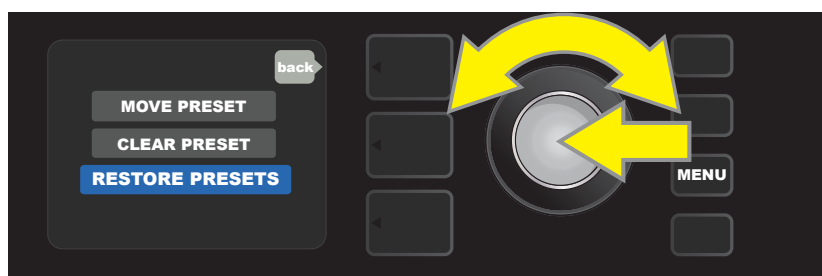
To clear a preset from the preset list, press the MENU utility button, use the ENCODER to scroll to and select “EQ & AMP SETTINGS”, and then “PRESET ORGANIZER” as described on the previous page. Then use the ENCODER to scroll to and select “CLEAR PRESET” (see illustration below).



The selected preset's box will be shown in red. Use the ENCODER to scroll to a preset to be cleared; press the ENCODER on the highlighted preset to clear it. Before clearing the preset, users are prompted to indicate whether they really wish to proceed by choosing “YES” or “NO”, with a warning that doing so may affect setlist(s). If “YES” is chosen by pressing the ENCODER on it, the preset is cleared and its numbered slot is shown as “EMPTY” (see illustrations below). If “NO” is chosen (not shown), users are returned to the previous screen.



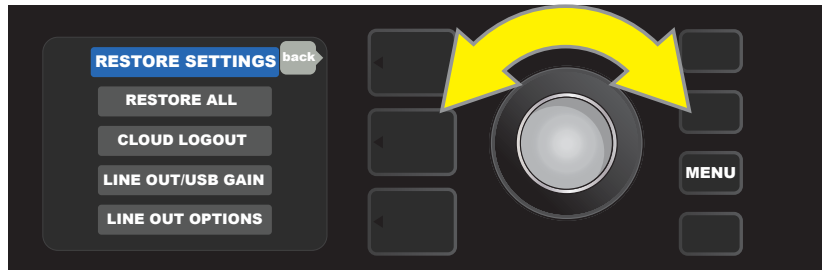
To restore the *entire* list of presets to the original factory configuration, enter the PRESET ORGANIZER menu as described above, and use the ENCODER to scroll to and select “RESTORE PRESETS” (see illustration below). A “YES”/“NO” warning prompt will appear as described above. If “YES” is chosen, the factory presets will be reloaded, after which the amp must be turned off and back on again. If “NO” is chosen, users are returned to the previous screen.



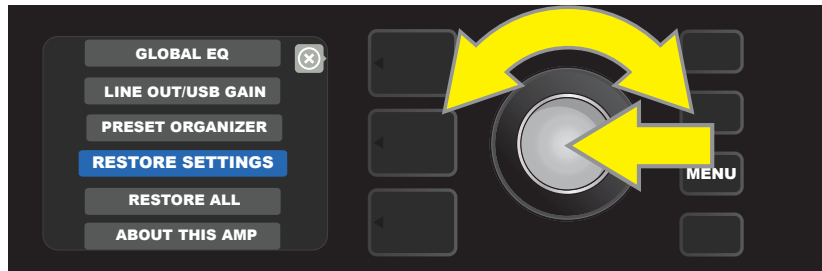
RESTORE SETTINGS AND RESTORE ALL

“RESTORE SETTINGS” and “RESTORE ALL” are MENU utility button function within the EQ & AMP SETTINGS menu (page 28). They enable quick and easy restoration of factory presets and amplifier settings. To do this, press the MENU utility button, then use the ENCODER to scroll to and select “EQ & AMP SETTINGS.” Scroll to and select either option—“RESTORE SETTINGS” for factory amp settings only, or “RESTORE ALL” for factory amp settings and presets (see illustrations below), and use the ENCODER to scroll to and select the “YES/NO” prompts under each (not shown).

The “RESTORE ALL” function is also accessible as a start-up option detailed in the “Firmware Updates and Factory Restore” section (page 60). Note that pressing the PRESET LAYER button corresponding to the circled “X” in the DISPLAY WINDOW enables closing out of each menu.



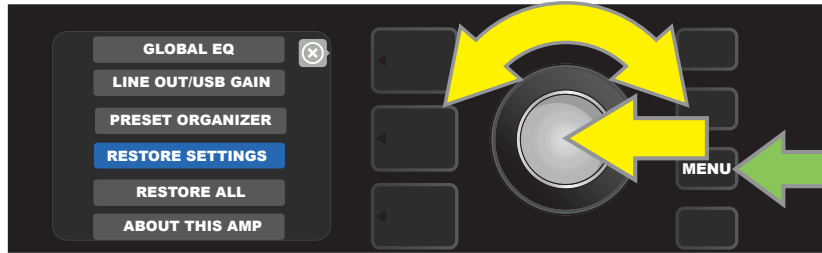
Use the ENCODER to scroll to and select one of the three “Amp Settings” options.



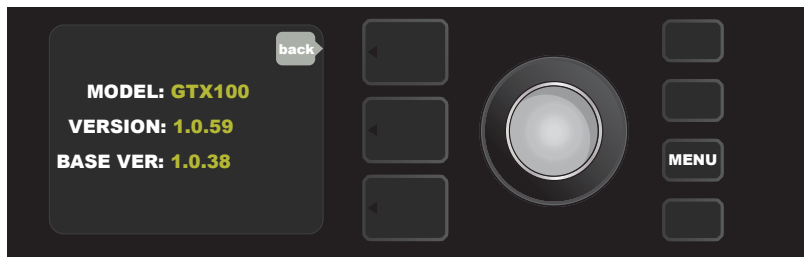
Use the ENCODER to scroll to and select “RESTORE SETTINGS” or “RESTORE ALL” (former shown in the example above).

ABOUT THIS AMP

“About This Amp” is a MENU utility button function within the EQ & AMP SETTINGS menu (*page 28*) that displays the amp’s current firmware version. To view this information, press the MENU utility button (*green arrow in illustration below*) and use the ENCODER to scroll to and select “EQ & AMP SETTINGS”, and then “ABOUT THIS AMP.”



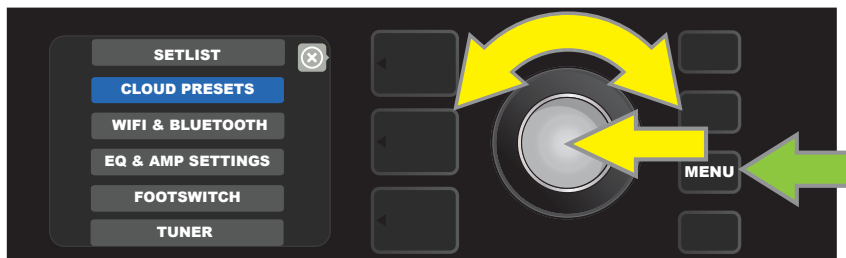
After selecting “ABOUT THIS AMP,” the DISPLAY WINDOW will show the amp model and firmware version information (*see illustration below*).



CLOUD PRESETS

“Cloud Presets” is a MENU utility button function (*page 28*) that gives the user access to an entire world of presets other than those already found in the amp, including featured presets, artist presets and more. Through the amplifier’s WiFi connectivity, users can preview, play, download and share a wealth of cloud-stored Fender presets that enormously expand Mustang GTX’s creative possibilities.

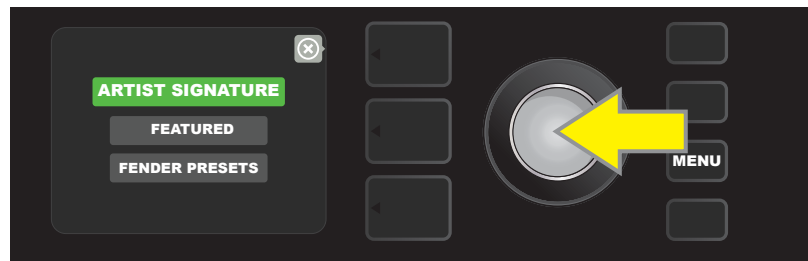
To begin using Cloud Presets, press the MENU utility button (*green arrow*) and use the ENCODER to scroll to and select “CLOUD PRESETS” from the menu shown.



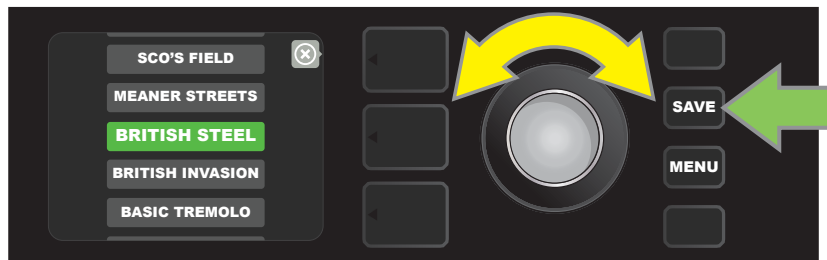
After selecting “CLOUD PRESETS” from the menu, follow the instructions in the DISPLAY WINDOW to enter a log-in code, which the user obtains online by going to tone.fender.com and clicking on “Set Up Amp” (*see illustration below*). The code only needs to be entered once; the user remains logged in once the code is entered. Use the ENCODER to enter each code character (*page 6*).



Once logged in, use the ENCODER to browse cloud preset categories (see illustration below).



Once a cloud preset category is selected by pressing the ENCODER on it, scroll through list of presets shown (yellow arrow in illustration below). The highlighted preset will automatically be played/previewed. To add a highlighted preset to the amp, press the SAVE utility button (green arrow).



To view or edit the individual contents of the highlighted cloud preset before saving it to the amp as described above, press the ENCODER on it (see illustration below).



When viewing or editing the contents of a cloud preset *before saving it to the amp*, the DISPLAY WINDOW will show the contents of the preset along with a green "cloud" symbol (in place of the number that accompanies the onboard presets). The green cloud identifies the preset as a cloud preset *that has not been saved to the amp*. Edits can be made to the cloud preset as they would to any onboard preset. When edits are complete, press the SAVE utility button to save the edited cloud preset to the amp. Note that if the user scrolls to the next or previous preset while on a cloud preset, the cloud preset will disappear since it is not saved to amp (see illustration below).

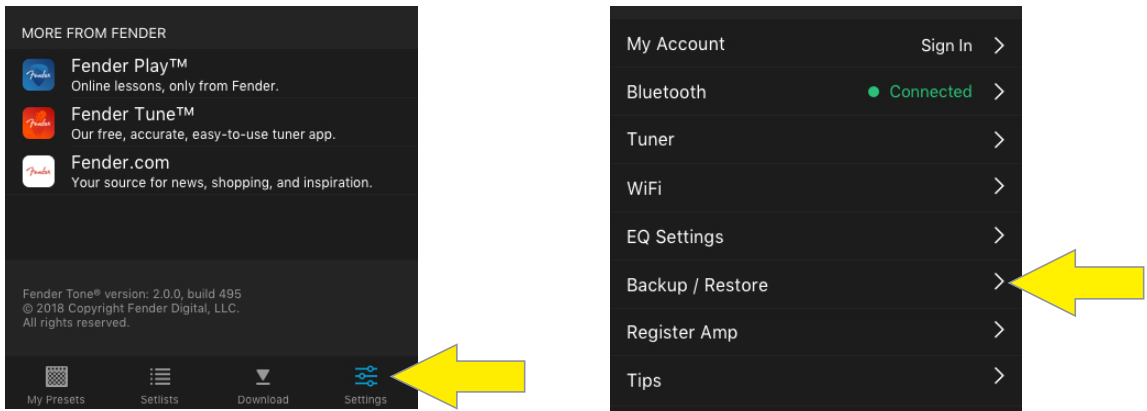


BACKUP/RESTORE FOR PRESETS AND SETLISTS

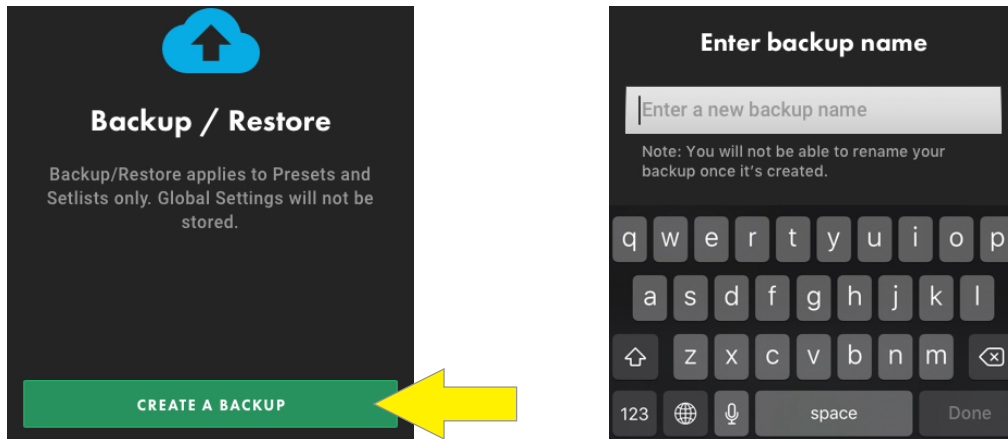
Mustang GTX has cloud-based backup and restore features for presets and Setlists, both using the Fender Tone™ app. A Fender Connect account is necessary to use these features (Fender Connect accounts can be created on the Fender website at fender.com by clicking “Sign In” at top right of the screen, or from the Tone app by tapping “My Account” in the settings screen).

BACKUP FOR PRESETS AND SETLISTS

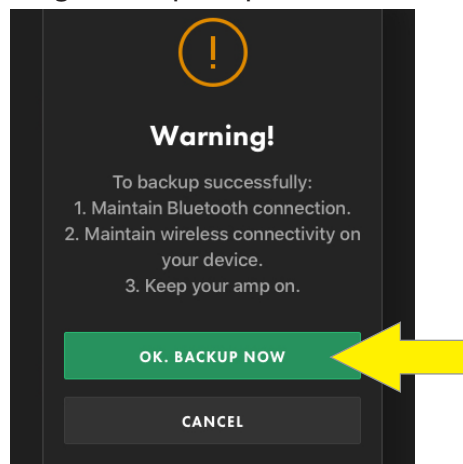
To *backup* all presets and Setlists to the cloud, first connect to Fender Tone and open the app. In the app, go to the “SETTINGS” menu at the bottom of the screen, then select “BACKUP/RESTORE”:



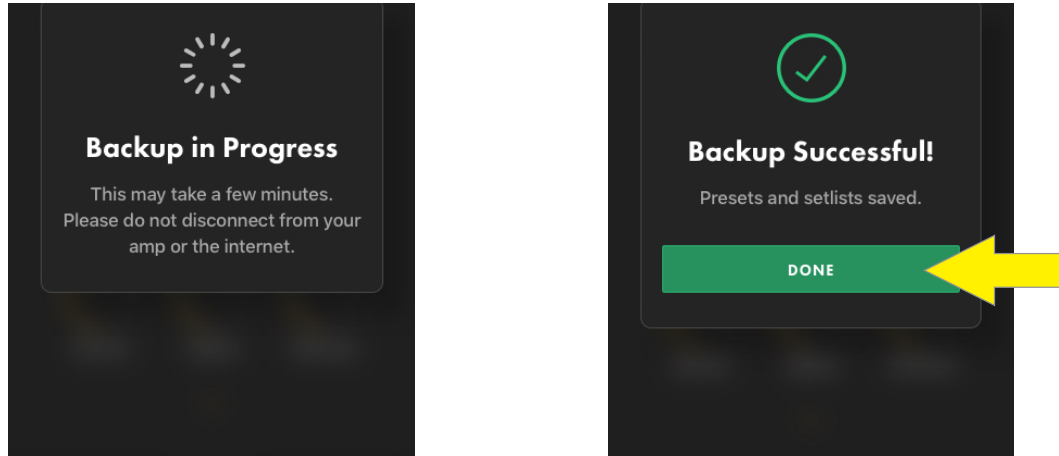
The *first* time a backup is created, the user is prompted to select “CREATE A BACKUP”, then to enter a backup name:



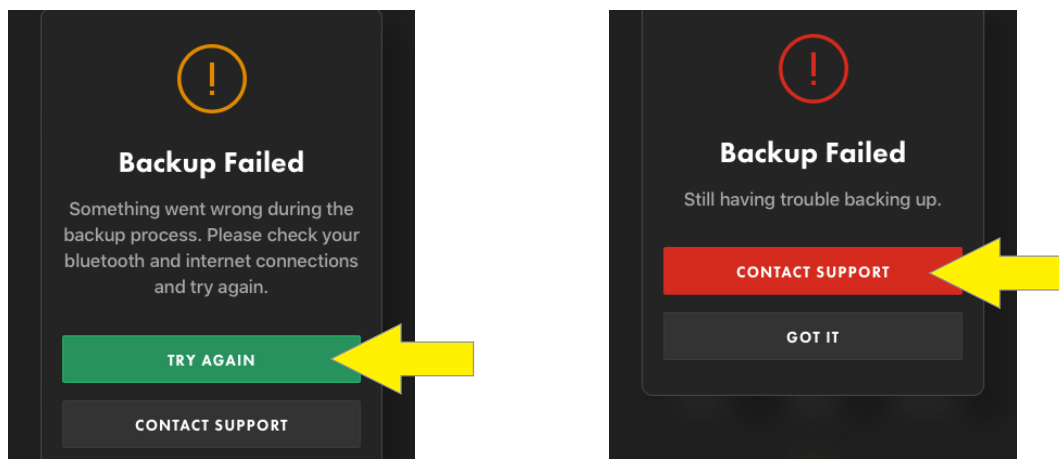
After a backup name is entered, a warning screen prompts the user select “OK BACKUP NOW” or “CANCEL”:



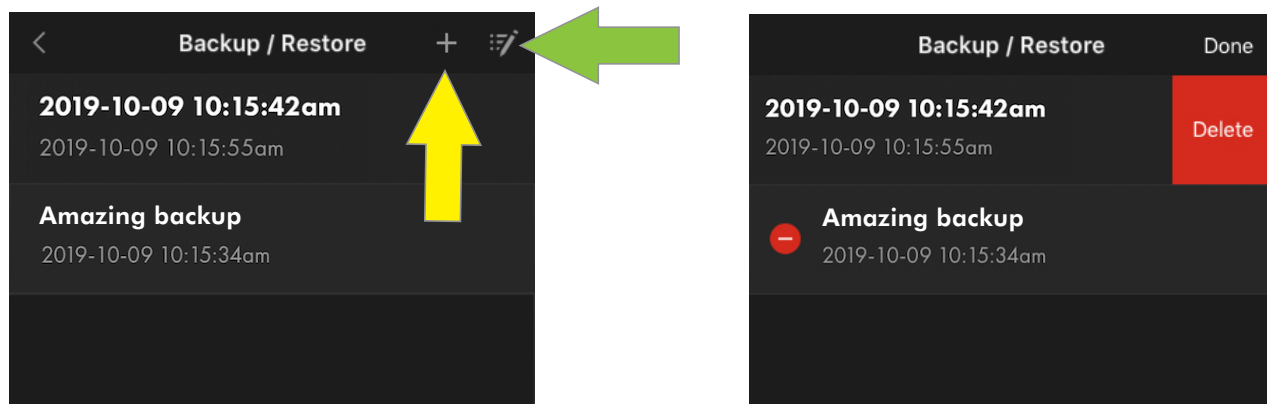
After selecting "OK BACKUP NOW", the "BACKUP IN PROGRESS" and "BACKUP SUCCESSFUL" screens appear, indicating that all presets and Setlists are now backed up. The user then selects "DONE":



Alternately, a "BACKUP FAILED" screen may appear, after which the user selects "TRY AGAIN" or "CONTACT SUPPORT" (the latter directs the user to the Tone app support portal on the Fender website). If the backup fails *again* after selecting "TRY AGAIN", a second "BACKUP FAILED" screen then prompts the user to select "CONTACT SUPPORT", which directs the user to the Tone app support portal on the Fender website, or to select "GOT IT", which returns the user to the "BACKUP/RESTORE" screen:

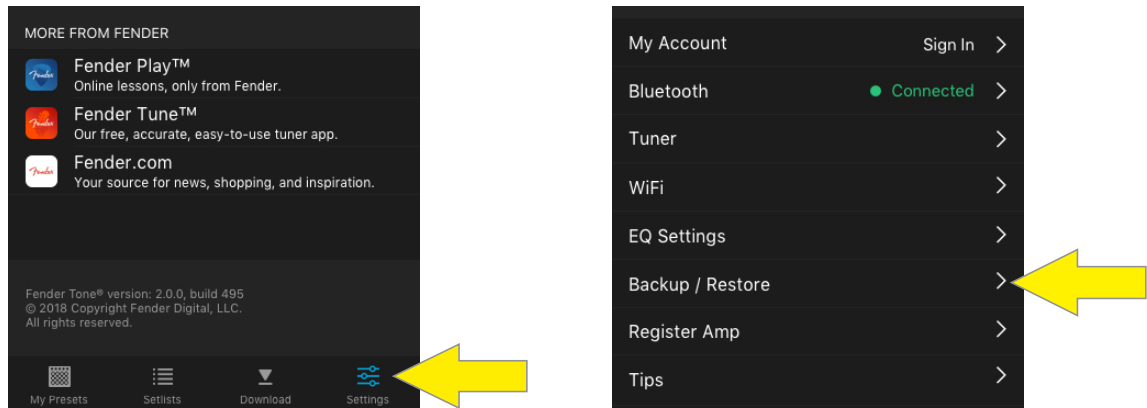


Backups are logged by time and date in the cloud; this backup log can be viewed in the Fender Tone app. By selecting the "edit" symbol at upper right (*green arrow*), a backup can be deleted; note that doing so *deletes the backup from the cloud*, not merely from the backup log. Also note that when creating *subsequent* backups after the first one, the "CREATE A BACKUP" button is replaced by a plus symbol at upper right (*yellow arrow*):

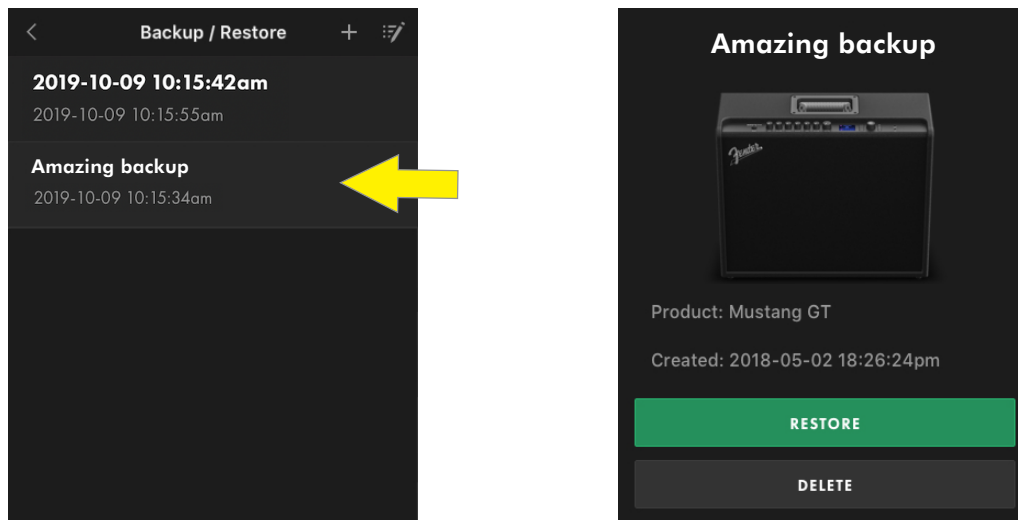


RESTORING/DELETING PRESETS AND SETLISTS

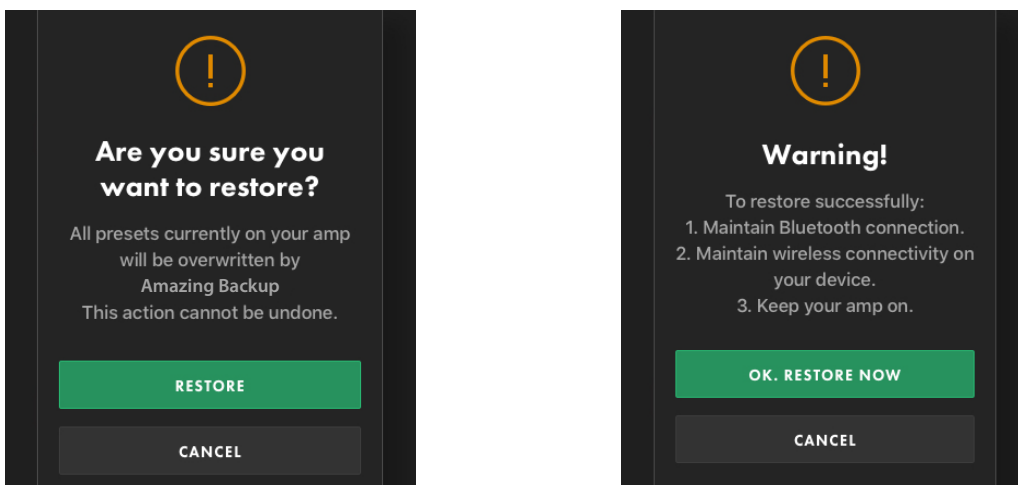
To restore or delete presets and Setlists *from the cloud*, first connect to Fender Tone and open the app. In the app, go to the “SETTINGS” menu and press “BACKUP/RESTORE”:



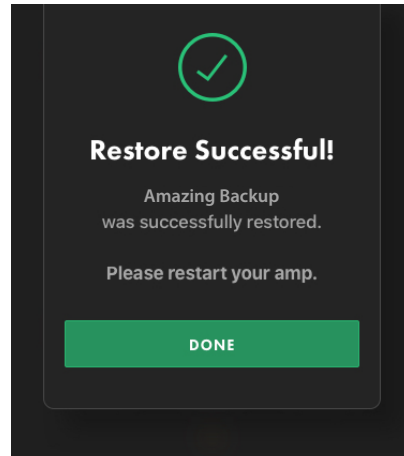
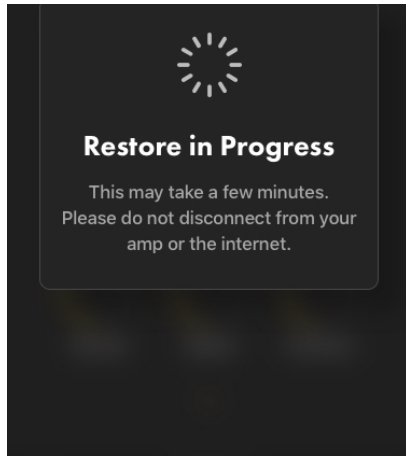
A list of the backups already created will appear; select the one to be restored from the list. A screen detailing the backup will then appear; select “RESTORE” or “DELETE”:



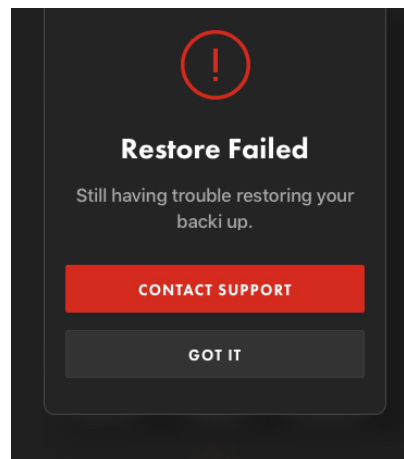
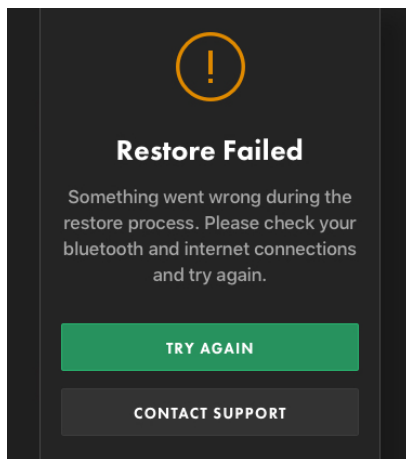
For maximum certainty when selecting “RESTORE,” two successive warning prompts appear for which the user selects “RESTORE” or “CANCEL” two more times:



After selecting “RESTORE” from both warning prompts, the “RESTORE IN PROGRESS” and “RESTORE SUCCESSFUL” screens appear; the user selects “DONE” and then restarts the amplifier:



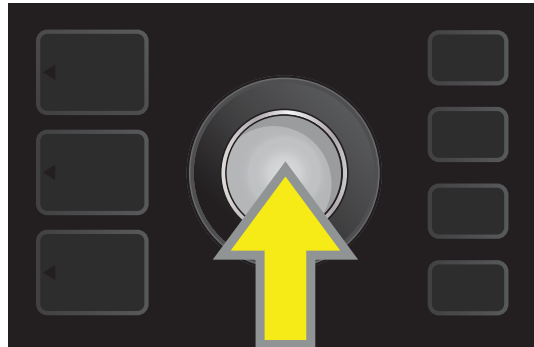
Alternately, a “RESTORE FAILED” screen may appear, prompting the user to select “TRY AGAIN” or “CONTACT SUPPORT” (the latter directs the user to the Tone app support portal on the Fender website). If the restore fails *again* after selecting “TRY AGAIN”, a second “RESTORE FAILED” screen then prompts the user to select “CONTACT SUPPORT” or “GOT IT”, which returns the user to the “BACKUP/RESTORE” screen:



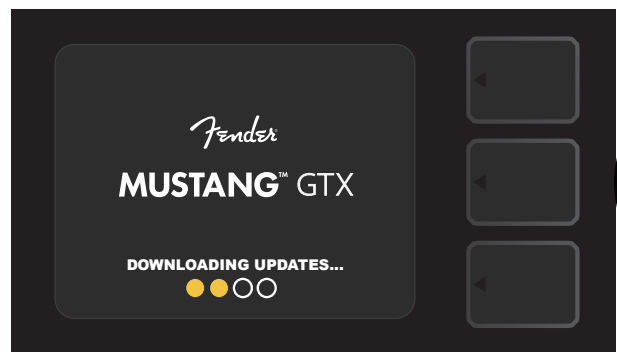
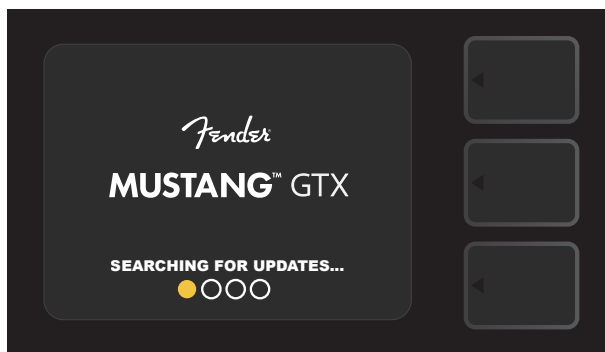
When “DELETE” is selected, the steps are similar to those described above—a “DELETE” warning screen appears, followed by a “DELETE IN PROGRESS” screen. The result will be either a “DELETE SUCCESSFUL” screen in which the user then selects “DONE,” or a “DELETE FAILED” screen. When a delete fails, the user can make two further attempts; if these fail, the user is presented with the “CONTACT SUPPORT” and “GOT IT” options described above.

FIRMWARE UPDATES AND FACTORY RESTORE

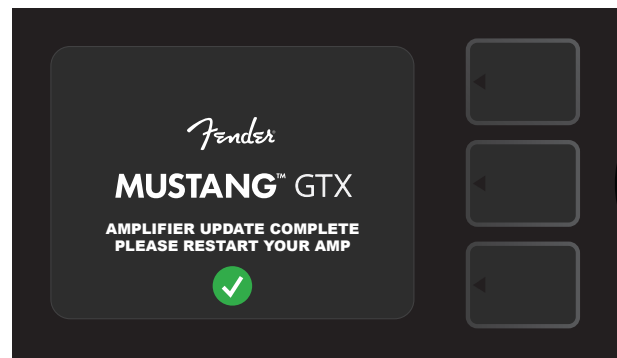
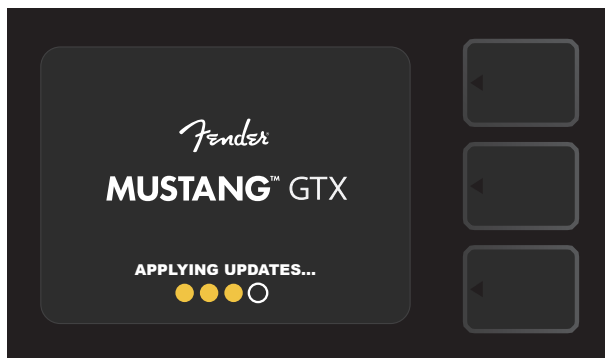
As noted in the introduction, Mustang GTX users should check regularly for firmware updates that improve and enhance the Mustang GTX experience. To perform a Mustang GTX firmware update, put the amp in WiFi update mode by pressing and holding the ENCODER for five seconds (*yellow arrow in illustration below*) while turning the amplifier on.



The DISPLAY WINDOW will then indicate that Mustang GTX is searching for the latest firmware update, followed by indication that the firmware update is downloading (*see illustrations below*).



When the download is complete, the DISPLAY WINDOW will then indicate that Mustang GTX is applying the firmware update, followed by indication that the firmware update is complete and the amp should be restarted (*see illustrations below*).



When performing a firmware update, the user might encounter three scenarios in which a firmware update cannot be initiated. In such cases, the DISPLAY WINDOW will indicate that Mustang GTX's WiFi connectivity is not configured, no update is available, or the amplifier update server is unreachable (see illustrations below).



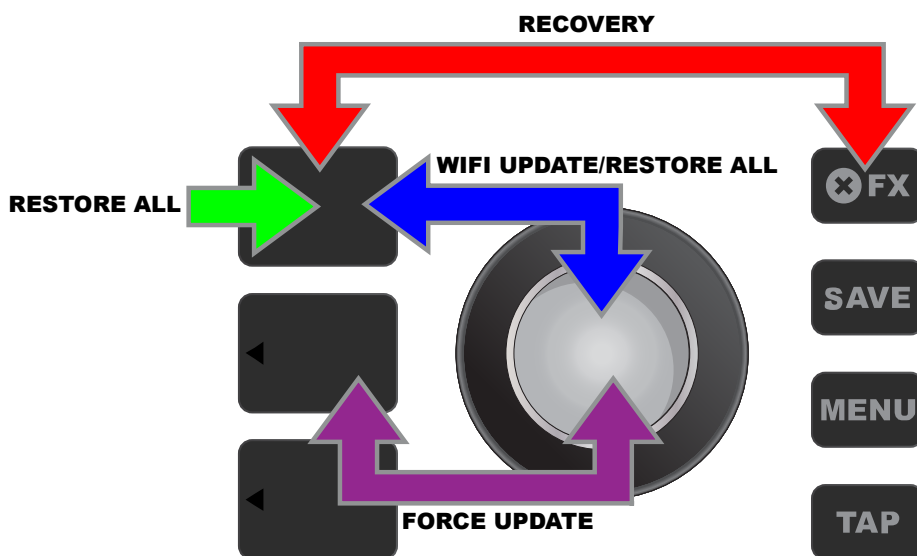
In addition to the firmware update described above, Mustang GTX offers several user-enabled start-up modes encompassing factory restore functions. These are described below.

RESTORE ALL: To restore the factory presets and amp settings contained in the amp's most recent firmware update, press and hold the PRESET LAYER button (green arrow in illustration below) for five seconds while turning the amplifier on. This function is also accessible in the "EQ & Amp Settings" MENU under "RESTORE ALL" (page 53).

WIFI UPDATE/RESTORE ALL: To combine a firmware update and the start-up option directly above (RESTORE ALL), simultaneously press and hold the ENCODER and the PRESET LAYER button for five seconds while turning the amplifier on (blue arrow in illustration below).

FORCE UPDATE: To update Mustang GTX if there is a problem with the previously described firmware update process, a "Force Update" mode can be initiated by pressing and holding the ENCODER and SIGNAL PATH LAYER button while turning the amplifier on (purple arrow in illustration below).

RECOVERY: To recover the base firmware version (displayed in "About This Amp," see page 54) including presets, simultaneously press and hold the PRESET LAYER button and X FX utility button for five seconds while turning the amplifier on (red arrow in illustration below).



FENDER TONE™ APP

Fender Tone—the ultimate companion app for Mustang GTX amplifiers—is available as a free download from the Apple App Store (iPhone) and Google Play Store (Android). Fender Tone users can have convenient control over existing Mustang GTX functions, plus access to additional content from Fender and the Fender Tone user community. These include:

- Preset searching, navigation, filtering and selection
- Creation and sharing of new presets
- Preset signal path editing, re-ordering, additions and deletions
- Amp and effects model parameter adjustments
- Browse, search and download official Fender presets, artist signature presets, player presets, genre presets and more
- Creation, selection and management of Setlists (personalized preset groupings)
- Management of user accounts, product registration, WiFi settings and Bluetooth settings
- EQ setting adjustments
- Tuner functions

Learn more at [fender.com/ToneMobile](https://www.fender.com/ToneMobile).

Specifications



Mustang GTX50

TYPE	PR 5748			
POWER REQUIREMENTS	118 watts			
POWER OUTPUT	50 watts			
INPUT IMPEDANCE	1M Ω (guitar) 18k Ω (aux)			
SPEAKER	One 12" Celestion® G12P-80 (8 Ω)			
FOOTSWITCH	Seven-button GTX-7 (optional, PN 0994072000) Four-button MGT-4 (optional, PN 0994071000) EXP-1 Expression Pedal (optional, PN 2301050000)			
FITTED AMP COVER	Optional (PN 7717475000)			
DIMENSIONS AND WEIGHT	Width: 19.25" (48.9 cm) Height: 17" (43.2 cm) Depth: 9" (22.8 cm) Weight: _19.5 lbs. (8.8 kg)			
PART NUMBERS	2310600000 (120V) NA 2310601000 (110V) TW 2310603000 (240V) AU 2310604000 (230V) UK	2310605000 (220V) ARG 2310606000 (230V) EU 2310607000 (100V) JP	2310608000 (220) CN 2310609000 (220V) ROK 2310613000 (240V) MA	

Mustang GTX100

TYPE	PR 5749			
POWER REQUIREMENTS	300 watts			
POWER OUTPUT	100 watts			
INPUT IMPEDANCE	1M Ω (guitar) 18k Ω (aux)			
SPEAKER	One 12" Celestion® G12FSD-100 (4 Ω)			
FOOTSWITCH	Seven-button GTX-7 (included, PN 0994072000) Four-button MGT-4 (optional, PN 0994071000) EXP-1 Expression Pedal (optional, PN 2301050000)			
FITTED AMP COVER	Optional (PN 7717476000)			
DIMENSIONS AND WEIGHT	Width: 21" (53.3 cm) Height: 18" (45.7 cm) Depth: 10" (25.3 cm) Weight: 22 lbs. (10 kg)			
PART NUMBERS	2310700000 (120V) NA 2310701000 (110V) TW 2310703000 (240V) AU 2310704000 (230V) UK	2310705000 (220V) ARG 2310706000 (230V) EU 2310707000 (100V) JP	2310708000 (220) CN 2310709000 (220V) ROK 2310713000 (240V) MA	

Product specifications subject to change without notice.

MUSTANG™ GTX50 MUSTANG™ GTX100

产品中有害物质的名称及含量

部件名称	有害物质					
	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	X	0	X	0	0	0
接线端子	X	0	0	0	0	0
电线	X	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。
 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。

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 RFC: FVM-140508-CIO
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