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REVISIONS

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FENDER MUSICAL INSTRUMENTS CORP.
RESEARCH & DEVELOPMENT
CORONA, CALIFORNIA U.S.A.

TITLE

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REV

A

MUSTANG™ MICRO



OWNER'S MANUAL

Fender®

INTRODUCTION

This manual is a guide to the features and functions of Mustang Micro—a plug-and-play headphone amplifier and interface that connects directly to your guitar and bass to deliver amp models, effects models, Bluetooth capability and more. With fantastic Fender Mustang amplifier sound and yet no larger than a deck of cards, Mustang Micro is easily portable and provides up to six hours of battery-operated playing time.

Mustang Micro is simple and intuitive. Plug into any popular instrument model using the rotating 1/4" jack. Choose an amp. Choose an effect and effect level. Set volume and tone controls. Turn Bluetooth on and stream music to play along with. Mustang Micro delivers it all straight to your earbuds, headphones or digital recording software.



FEATURES



- A. ROTATING INPUT PLUG:** Standard 1/4" plug rotates up to 270 degrees for easy compatibility with all popular guitar models.
- B. MASTER VOLUME:** Thumbwheel control adjusts overall output level to headphones/earbuds or recording-software (page 6).
- C. AMP BUTTONS/LED:** Buttons (+/-) select amplifier from 12 models (page 3). LED color indicates amp model in use.
- D. TONE BUTTONS/LED:** Buttons (+/-) adjust tone (page 6); selections include flat setting, two progressively darker settings and two progressively brighter settings. Tone control is post-amplifier. LED color indicates tone setting in use.
- E. FX BUTTONS/LED:** Buttons (+/-) select effect (or effects combination) from 12 different options (page 5). LED color indicates effect model in use.
- F. FX LEVEL BUTTONS/LED:** Buttons (+/-) increase or decrease mix level of one particular parameter of the selected effect (page 6). LED color indicates effect level in use.
- G. POWER/BLUETOOTH SWITCH/LED:** Three-position slider switch turns Mustang Micro on and off and activates Bluetooth (page 7). LED indicates power/Bluetooth/charging status.
- H. USB-C JACK:** For charging, recording output and firmware updates.
- I. HEADPHONE OUTPUT:** Stereo headphone jack.



CONNECTING TO A GUITAR AND POWERING UP

Connecting Mustang Micro to your guitar couldn't be easier—simply rotate the 1/4" INPUT PLUG (A) out from the unit, and plug it into the guitar's input jack.

(image of MM plugged into a guitar)

Slide the POWER SWITCH (G) to the center "on" position. POWER LED will illuminate green for 10 seconds and then extinguish, indicating that Mustang Micro is on and charged (*different LED colors indicate different charging status; see "Charging," page 7*). You're now ready to choose an amp, choose an effect and effect level, adjust volume and tone, engage Bluetooth if so desired, and start playing.



SELECTING AN AMPLIFIER MODEL

Mustang Micro has 12 different amplifier models to choose among, encompassing "clean," "crunch" and "high-gain" types. To choose an amp model, press the +/- AMP BUTTONS (D) on the side of the unit. AMP LED color indicates amp model in use; LED will illuminate for 10 seconds and then extinguish until any button is pressed.

Amplifier types, models and LED colors are:



AMP TYPE	LED COLOR	AMP NAME	AMP DESCRIPTION
CLEAN	Cyan	Studio Preamp	Direct-to-mixing-desk studio-preamp purity with clean, uncolored tonal response.
	Red	'65 Twin + Compressor	Based on the 1965 Fender Twin Reverb®—an indispensable mid-'60s clean-tone favorite—with a medium compression setting.
	Green	'65 Deluxe	Highly popular mid-'60s Fender with great tone, cranked in countless clubs.
	Blue	'57 Twin	Based on a 1957 Twin—an original-era 2x12" Fender tweed classic prized for clean-to-dirty versatility.
	Yellow	'60s British	Inspired by the Vox AC30, which powered the British Invasion and produced remarkable clean and dirty tone.
CRUNCH	Magenta	'65 Deluxe + Greenbox OD	Same as '65 Deluxe above, with Greenbox overdrive based on the Ibanez TS808 Tube Screamer.
	Turquoise	'70s British	Inspired by a late-'60s/early-'70s Marshall Super Lead, the amp that powered the dawn of hard rock.
	Orange	'90s American	Based on the Mesa Dual Rectifier, which featured distinctive distortion that shaped the "nu-metal" sound.
HIGH-GAIN	Raspberry	BB15 High Gain	Based on the high-gain structure setting of the Fender Bassbreaker 15.
	Spring Green	FBE-100	Inspired by both lead channels — BE and HBE — of the Friedman BE-100.
	Violet	Metal 2000	Modern high-gain scorch based on the EVH® 5150 ^{III} .
	White	Uber	Ideal for heavy, aggressive music; inspired by the super-high-gain lead channel of the Bogner Uberschall head.

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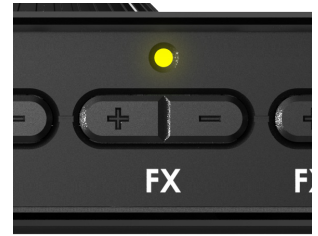
Also when selecting an amplifier model, note that each one is automatically paired with a cabinet simulation model (“CAB SIM”). These are:

LED COLOR	AMP NAME	CAB SIM	CAB DESCRIPTION
Cyan	Studio Preamp	None	NA
Red	'65 Twin + Compressor	'65 Twin	Based on a prized mid-'60s Fender classic with two 12" ceramic-magnet Jensen® speakers.
Green	'65 Deluxe	'65 Deluxe	Based on a popular mid-'60s Fender mainstay with a single 12" Jensen® ceramic speaker.
Blue	'57 Twin	'65 Twin	Based on a prized mid-'60s Fender classic with two 12" ceramic-magnet Jensen® speakers.
Yellow	'60s British	2x12 Blue	Inspired by the pair of 12" Celestion® Alnico Blue speakers in the venerable Vox AC30.
Magenta	'65 Deluxe + Greenbox OD	'65 Deluxe	Based on a popular mid-'60s Fender mainstay with a single 12" Jensen® ceramic speaker.
Turquoise	'70s British	4x12 GB	Based on a Marshall cabinet with four 12" Celestion® Greenback speakers.
Orange	'90s American	4x12 75W	Inspired by the 75-watt Marshall JCM800 cabinet with four 12" Celestion® G12T75 speakers.
Raspberry	BB15 High Gain	4x12 SOL	Based on a closed-back Soldano cabinet with four 12" Eminence® Legend speakers.
Spring Green	FBE-100	4x12B V30	Based on a brighter version of the Fender Super-Sonic cabinet with four 12" Celestion® Vintage 30 speakers.
Violet	Metal 2000	4x12 GB	Based on a Marshall cabinet with four 12" Celestion® Greenback speakers.
White	Uber	4x12 RCT	Based on a closed-back Mesa Boogie Rectifier cabinet with four 12" Celestion® Vintage 30 speakers.

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SELECTING AN EFFECTS MODEL

Mustang Micro has 12 different effects models to choose among (including combined effects). To choose an effect, use the +/- FX BUTTONS (E) on the side of the unit. FX LED color indicates effects model in use; LED will illuminate for 10 seconds and then extinguish until any button is pressed.



Note that it is possible to get “amplifier-only” operation — without any effects, that is — by selecting the “Large Hall Reverb” or “’65 Spring Reverb” effects with the FX LEVEL BUTTON (F) set to the minimal (--) level (page 6). This combination, when used in combination with the “Studio Preamp” amplifier model (page 4), also allows unprocessed audio to be sent a recording interface (page 8).

Effects models and their LED colors are:

LED COLOR	EFFECT NAME	EFFECT DESCRIPTION
Cyan	Large Hall Reverb	Simulates the kind of bright reverb often heard in halls the size of movie theaters.
Red	’65 Spring Reverb	Fender reverb effect built into classic mid-’60s Fender amps.
Green	Modulated Large Hall Reverb	Strong, bright reverb simulating the size of a major performance hall, with lush modulation added to internal reverb structure.
Blue	Sine Chorus/Large Room reverb	Smoothly rounded chorus that uses sine-wave modulation, combined with warm-sounding reverb of larger rooms such as nightclubs.
Yellow	Triangle Flanger/Large Room Reverb	Distinctive flanging effect that uses triangle-wave modulation, combined with warm-sounding reverb of larger rooms such as nightclubs.
Magenta	Vintage Tremolo/Spring Reverb	Classic Fender “stuttering” photoresistor tremolo, combined with classic early-to-mid-1960s spring reverb.
Turquoise	Vibratone/Large Room Reverb	Classic late-’60s/early-’70s Fender rotating speaker baffle effect, combined with warm-sounding reverb of larger rooms such as nightclubs.
Orange	Harmonic Tremolo/Large Hall Reverb	Based on distinctive tremolo of certain early-’60s Fender amps, combined with warm-sounding reverb of larger rooms such as nightclubs.
Raspberry	Slapback Delay/Large Room Reverb	Classic slapback delay combined with warm-sounding reverb of larger rooms such as nightclubs.
Spring Green	Tape Plex Delay	Faithful recreation of the Maestro Echoplex EP-3 echo.
Violet	Sine Chorus/Mono Delay/ Large Hall Reverb	Smoothly rounded chorus that uses sine-wave modulation, combined with clean, simple delay and warm-sounding reverb of larger rooms such as nightclubs.
White	2290 Delay/Large Room Reverb	Inspired by the 1980s TC Electronic TC 2290 digital delay—prized for its crisp repeats and versatile panning/modulation options—combined with warm-sounding reverb of larger rooms such as nightclubs.

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SETTING EFFECTS LEVEL

For each Mustang Micro effects model, five different level settings of one particular effect parameter can be chosen using the +/- FX LEVEL BUTTONS (F) on the side of the unit. These consist of a middle default setting, two progressively weaker level settings (- and --) and two progressively stronger level settings (+ and ++). FX LEVEL LED color indicates effect level setting in use; LED will illuminate for 10 seconds and then extinguish until any button is pressed.



Effects models, effect parameters and level LED color indicators are:

EFFECT NAME	LEVEL PARAMETER	FX LEVEL -- COLOR	FX LEVEL - COLOR	FX LEVEL DEFAULT COLOR	FX LEVEL + COLOR	FX LEVEL ++ COLOR
Hall Reverb	Reverb level	Yellow	Green	White	Blue	Red
'65 Spring Reverb	Reverb level	Yellow	Green	White	Blue	Red
Modulated Large Hall	Reverb level	Yellow	Green	White	Blue	Red
Sine Chorus/Large Room	Chorus depth	Yellow	Green	White	Blue	Red
Triangle Flanger/Large Room	Flanger rate	Yellow	Green	White	Blue	Red
Vintage Tremolo/Spring Reverb	Tremolo rate	Yellow	Green	White	Blue	Red
Vibratone/Large Room	Vibratone rotor speed	Yellow	Green	White	Blue	Red
Harmonic Tremolo/Large Hall	Tremolo rate	Yellow	Green	White	Blue	Red
Slapback/Large Room	Delay level	Yellow	Green	White	Blue	Red
Tape Plex Delay	Delay mix	Yellow	Green	White	Blue	Red
Sine Chorus/Mono Delay/Large Hall	Delay level	Yellow	Green	White	Blue	Red
2290 Delay/Large Room	Delay time	Yellow	Green	White	Blue	Red

SETTING MASTER VOLUME AND TONE CONTROLS

Once amplifier and effects models are chosen, overall volume and tone are easily adjusted. For overall volume level, simply turn the MASTER VOLUME wheel (B) to preference (*image at right*).



MASTER VOLUME

To adjust overall tone, five different settings can be chosen using the +/- TONE BUTTONS (C) on the side of the unit (*image below*). These consist of a flat middle default setting, more dark (--), less dark (-), less bright (+) and more bright (++). Tone control affects signal *after* an amplifier and effect are chosen. TONE LED color indicates tone setting in use (*table below*); LED will illuminate for 10 seconds and then extinguish until any button is pressed.



TONE	TONE SETTING	LED COLOR
More dark	--	Yellow
Less dark	-	Green
Flat	Middle (default)	White
Less bright	+	Blue
More bright	++	Red

BLUETOOTH

Mustang Micro easily streams Bluetooth audio, so you can play along in your headphones or earbuds. The device is discoverable as “Mustang Micro” on smart phones and other Bluetooth devices.

To activate Bluetooth pairing mode, push the POWER SWITCH (G) to the left, where the Bluetooth symbol is, and hold it there for two seconds. The POWER SWITCH Bluetooth position is spring-loaded for momentary contact only, and will return to the center “ON” position when button is released. In pairing mode, the POWER SWITCH LED will flash blue for two minutes or until a connection is established.



When connection is successful, the LED will turn solid blue for 10 seconds and then extinguish until any button is pressed.

To disconnect a Bluetooth device from Mustang Micro, hold the POWER SWITCH in the Bluetooth position for two seconds and then release it (as when pairing). This will end the Bluetooth connection and return Mustang Micro to pairing mode with a flashing blue LED; pairing mode will expire within two minutes if no other Bluetooth connection is made, and the blue LED will extinguish. Alternately, disconnect using the external device.

Mustang Micro automatically pairs with the last connected Bluetooth device if that device is available.

CHARGING

Mustang Micro provides up to six hours of battery-powered operation. Recharge Mustang Micro using the USB-C jack (H) on the bottom of the unit and the included USB cable.



POWER SWITCH (G) LED color indicates charging status:

POWER SWITCH LED COLOR	CHARGING STATUS
Green (Solid)	Power is on, USB is connected and battery is fully charged.
Yellow (Solid)	USB is connected and unit is charging whether power is on or off.
Green (Flashing)	Battery is at high power (greater than 50 percent) but not fully charged, and USB is not connected. LED flashes green for one second every five seconds.
Yellow (Flashing)	Battery is at medium power (20 percent-50 percent) and USB is not connected. LED flashes yellow for one second every five seconds.
Red (Flashing)	Battery power is low (less than 20 percent) and USB is not connected. LED flashes red for one second every five seconds.

If power is on but no instrument input is detected for 15 minutes, Mustang Micro will automatically switch to a low-power “sleep mode.” Press any button to “wake up” from sleep mode.

RECORDING

Mustang Micro can be used as digital recording software output by using a USB cable to connect the USB-C jack (H) on the bottom of the unit to the USB port on the user's Mac or PC.



FIRMWARE UPDATE

To perform a Mustang Micro firmware update, follow these three steps:

1. With Mustang Micro *off*, press and hold the "+" TONE BUTTON (D).
2. With one end of a USB cable connected to a Mac or PC, connect the other end to Mustang Micro's USB-C jack.
3. Release the "+" TONE BUTTON.

Successful initiation of firmware update mode is then indicated by a solid white POWER SWITCH LED (G) for 10 seconds; the white LED will then begin flashing to indicate an update in process.

When a firmware update is complete, the POWER SWITCH LED will illuminate solid green for 10 seconds and then extinguish to indicate a successful update; the LED will illuminate solid red for 10 seconds and then extinguish to indicate a failed update. Mustang Micro is automatically powered up during the firmware update process; when an update is completed successfully, Mustang Micro must then be restarted.



**FIRMWARE UPDATE
INITIATED (SOLID)
IN PROCESS (FLASHING)**



**FIRMWARE UPDATE
SUCCESSFUL (SOLID)**



**FIRMWARE UPDATE
FAILED (SOLID)**

FACTORY RESET

A Mustang Micro factory reset can be performed that resets all buttons (AMP, TONE, FX, FX LEVEL) to their original factory values and clears the Bluetooth paired device list.

Initiate factory reset mode by turning Mustang Micro on while holding the "+" FX BUTTON (E) for three seconds.



SPECIFICATIONS



TYPE PR _____
SPEC 1 _____
SPEC 2 _____
SPEC 3 _____
SPEC 4 _____
SPEC 5 _____
SPEC 6 _____

DIMENSIONS AND WEIGHT Width: __" (__ cm) Height: __" (__ cm) Depth: __" (__ cm) Weight: __ lbs. (__ kg)

Product specifications subject to change without notice.

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

Mustang Micro

_____ (120V, 60Hz) NA
 _____ (110V, 60Hz) TW
 _____ (240V, 50Hz) AU
 _____ (230V, 50Hz) UK
 _____ (220V, 50Hz) ARG
 _____ (230V, 50Hz) EU
 _____ (100V, 50/60Hz) JP
 _____ (220V, 50Hz) CN
 _____ (220V, 60Hz) ROK
 _____ (240V, 50Hz) MA

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	O	O	O	O	O	O
喇叭单元*	O	O	O	O	O	O
电子部分	X	O	X	O	O	O
接线端子	X	O	O	O	O	O
电线	X	O	O	O	O	O
附件	O	O	O	O	O	O

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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