



English Manual



Play
Electric

Important safety instructions	1	Setup button/section	28	The Looper	62
		Input page (1/8)	29	What is looping?	63
Before you begin	4	Output page (2/8)	31	Using the Play Electric looper	63
About this manual	5	Guitar page (3/8)	32	Looping tips	64
Getting support	5	System page (4/8)	33	Using a Switch-3 for looping	65
VoiceSupport	5	System page 2 (5/8)	34		
Please register your Play Electric	5	Loop page (6/8)	34	Troubleshooting	66
		Switch-3 page (7/8)	36	General troubleshooting	67
Introduction	6	Product Info page (8/8)	37		
Diagram legend	7			Appendix	68
Diagrams	8			TC-Helicon scales reference chart	69
Basics	9	Vocal FX button/section	38		
Inputs and outputs	10	Harmony page (1/7)	40	Links	70
Gain settings	12	Harmony Advanced page	41		
Switches and operation	14	Double page (2/7)	42	Technical specifications	72
Control knob and arrow buttons	16	Delay page (3/7)	43		
Soft buttons	18	Delay Advanced page	44		
		Reverb page (4/7)	45		
Connection diagrams	20	HardTune page (5/7)	46		
Mixer setup	21	Transducer page (6/7)	47		
Play Electric back panel inputs		Transducer Advanced page	48		
and outputs	21	μMod page (7/7)	49		
Stereo (or mono) vocals and guitar	22	Guitar FX button/section	50		
Mono vocals and guitar amp	23	Guitar amp page (1/5)	52		
Mono vocal and guitar with a TC-Helicon		Advanced Amp page	53		
<u>FX150</u>	24	Guitar compressor page (2/5)	54		
Mono vocals via FX150 and a guitar amp	25	Guitar μMod page (3/5)	55		
Guitar and vocals via FX150 and stereo out		Guitar Delay page (4/5)	56		
to a PA	26	Delay Advanced page	57		
Stereo PA and TC-Helicon		Guitar Reverb page (5/5)	58		
Guitar & Headphone cable	27	Mix button/section	59		
		Mix page (1/2)	60		
		Mix page (2/2)	61		

Product	Play Electric
Product (firmware) version	1.0
Document	Reference manual
Document version/date	2014-07-16

Important safety instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.



14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Caution

You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

Service

- All service must be performed by qualified personnel.
- There are no user-serviceable parts inside.

Warning

- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.
- This apparatus must be earthed.
- Use a three wire grounding type line cord like the one supplied with the product.
- Be advised that different operating voltages require the use of different types of line cord and attachment plugs.
- Check the voltage in your area and use the correct type.

Voltage	Line plug according to standard
110 to 125 V	UL817 and CSA C22.2 no 42.
220 to 230 V	CEE 7 page VII, SR section 107-2-D1/IEC 83 page C4.

- This equipment should be installed near the socket outlet and disconnection of the device should be easily accessible.
- To completely disconnect from AC mains, disconnect the power supply cord from the AC receptacle.
- The mains plug of the power supply shall remain readily operable.
- Do not install this device in a confined space.
- For use at an altitude of 2000 m or lower.
- Do not open the unit – risk of electric shock inside.

EMC/EMI

Electromagnetic compatibility/
Electromagnetic interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▶ Reorient or relocate the receiving antenna.
- ▶ Increase the separation between the equipment and receiver.
- ▶ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ▶ Consult the dealer or an experienced radio/TV technician for help.

For customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Explanation of graphic symbols



The lightning bolt triangle is used to alert the user to the presence of uninsulated “dangerous voltages” within the unit’s chassis that may be of sufficient magnitude to constitute a risk of electric shock to humans.



The exclamation point triangle is used to alert the user to presence of important operating and service instructions in the literature accompanying the product.

Before you begin

About this manual

This manual will help you understand and operate your Play Electric.

You can download the most current version of this reference manual from
tc-helicon.com/products/play-electric/support/

To get the most from this reference manual, please read it from start to finish, or you may miss important information.

Getting support

If you still have questions after reading this reference manual, please read the FAQs, visit the user forums and get in touch with support at:
support.tc-helicon.com/

VoiceSupport

VoiceSupport is the application that allows you to fully unlock the potential of your TC-Helicon product and stay in touch with the latest news, tips and tricks.

VoiceSupport key features include:

- ▶ Professionally authored preset libraries
- ▶ Direct access to product manuals
- ▶ Update messaging – helping you stay up to date with the latest software
- ▶ Drag & drop preset management
- ▶ Customizable content about your products
- ▶ VoiceCouncil feeds for the latest advice for singers
- ▶ Firmware upgrading
- ▶ Account management
- ▶ Access to support

You can download VoiceSupport for Microsoft Windows and Mac OS X from
tc-helicon.com/products/voicesupport/

Please register your Play Electric

To register your Play Electric using the VoiceSupport software, launch VoiceSupport and click on the ACCOUNT button.

Please note that registration of your product is **not** required to use VoiceSupport, download presets, update firmware or contact support.

Introduction

Welcome to the Play Electric manual!

First, thank you so much for purchasing Play Electric. We at TC-Helicon are confident that your vocal and acoustic guitar performances will be positively impacted with this great effects processor.

As you discovered in the Quick Start Guide (the short manual that came in the box), Play Electric is easy to use at the top level, but there is more under the hood of this compact device than you might think. We recommend you treat your Play Electric like any other new instrument and dedicate some time to learning how to use it.

Yes, that means RTFM!

Read the... *full* manual.

And if you ever find yourself without this manual: On the bottom of your Play Electric , you will find a “cheat sheet” explaining the most important functions.

Diagram legend

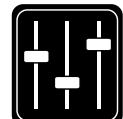
The following icons are used in the diagrams in this manual.



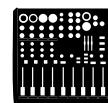
Microphone



Electric Guitar



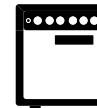
Monitor Mix



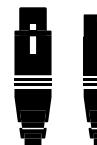
Mixing Board



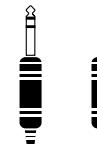
P.A.



Guitar amp



XLR cables



1/4" / 6.5 mm TRS (Tip / Ring / Sleeve)
and TS (Tip / Sleeve) guitar cables



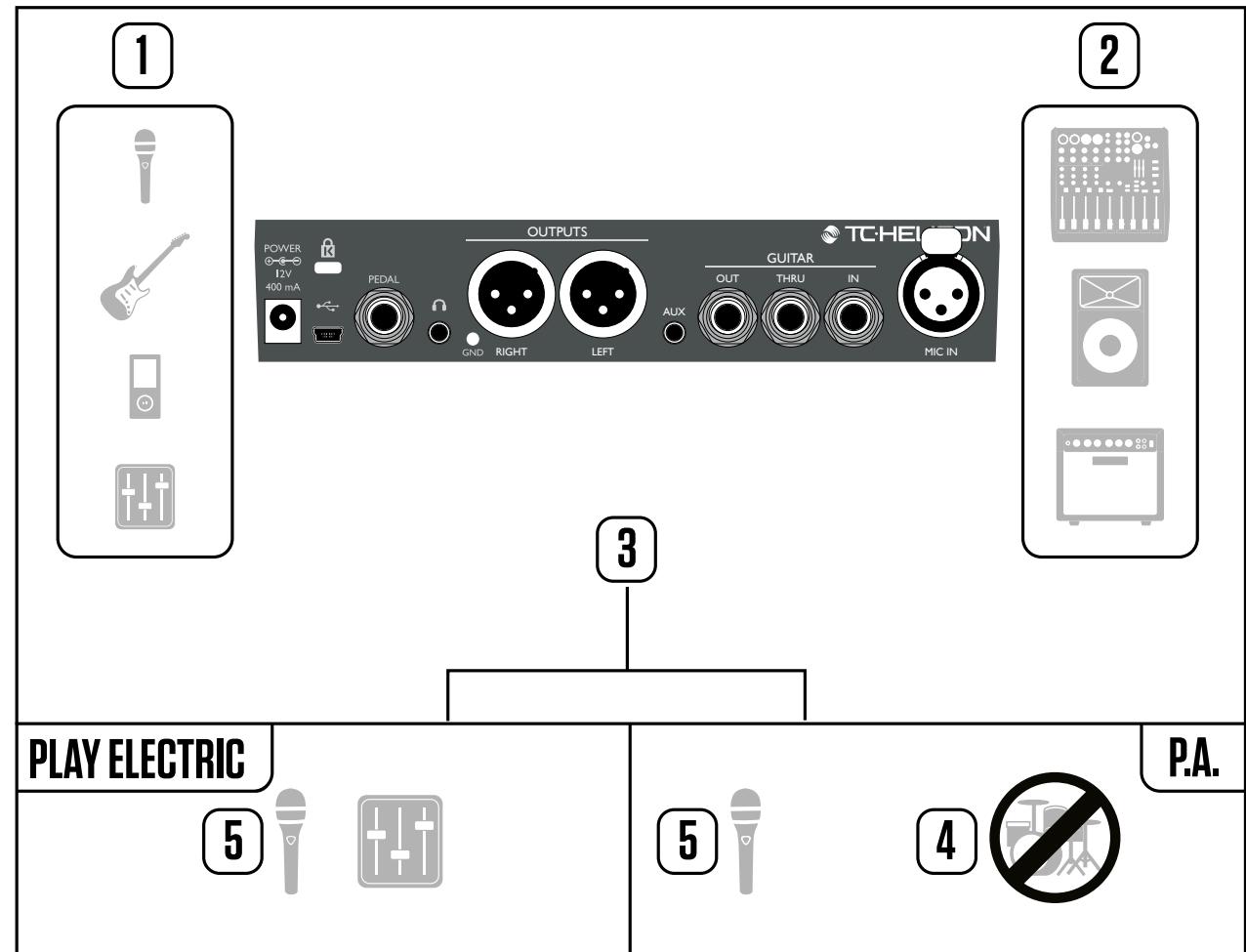
1/8" / 3.5 mm cable

Diagrams

On the following pages, you will see some connection diagrams. We have set things up to give you clear and concise representations of what goes where.

There are a few things we would like you to keep in mind as you look at the diagrams:

1. Inputs to Play Electric will be to the *left* of the back panel image.
2. Outputs from Play Electric will be to the *right* of the back panel image.
3. There are two boxes on the *bottom* of each diagram.
 - The Play Electric box shows “what you hear” from your Play Electric headphone output.
 - The P.A. box shows “what you hear” from the P.A. speakers.
4. We don’t account for other inputs/instruments when showing “what you hear” from the P.A., so you won’t see pictures of drums etc.
5. In a lot of cases, “what you hear” will be the same for both Play Electric headphone output and P.A. – but it can also be different.



Basics



Play Electric – rear panel

Inputs and outputs

Connectors are described from right to left. For setup examples, see "[Connection diagrams](#)".

MIC connector

This is where the magic happens!

Plug your dynamic, condenser, [MP-75](#), or [e835 fx](#) microphone in here. Remember to set the microphone type and level correctly, as described in the Play Electric Quick Start Guide.

GUITAR IN connector

Connect your guitar to this input.

GUITAR THRU connector

The Guitar THRU is intended to pass your guitar signal directly from the input out to an external amp or pedalboard. If you don't want to use any of the onboard guitar effects but want Play Electric to read your chords for NaturalPlay key/scale detection, plug your guitar into the IN connector and connect the THRU connector to your amp/pedalboard. **Any guitar sounds internal to Play Electric are muted when the THRU connector is connected to another device.**

Guitar Out connector

This is a direct guitar out. Connect this to your guitar amp or a channel on your mixer. When Guitar OUT is connected, all guitar signals are removed from the XLR outputs.

AUX connector

Use a 1/8" cable to connect any music source you want to use to your Play Electric (*especially that 8-Track from your 1974 Comet*). When an input is detected here and no guitar is plugged in, Play Electric will use the music signal to figure out key and scale information.

XLR OUTPUTS connectors

These are the main output connectors of your Play Electric. By default, stereo vocal signals are

passed via these outputs. If you do not connect a cable to the Guitar Out jack, guitar signals will also be sent over these outputs.

GND switch

This is a ground lift switch. If you experience hum while using Play Electric, try pressing the GND switch to reduce or remove the hum.

Headphones connector

Connect your headphones to the Phones connector.

PEDAL connector

Use a TRS cable to connect a Switch-3 (optional) to the PEDAL connector. If you use the Switch-3, you have direct access to looping and other effect control. See the Switch-3 menu section for details on assigning controls to each Switch-3 button.

USB connector

Connect to your computer with the included cable. Use the VoiceSupport software to manage presets and update the product's internal software (firmware).

You can download VoiceSupport here:
tc-helicon.com/products/voicesupport/

Stereo audio input and output via USB is also supported at 16 bit resolution with 44.1 or 48 kHz sample rate.

Incoming USB audio signals are **NOT** passed to the USB output, allowing you to sing/play along with tracks from your DAW while recording back “just the vocals and guitar”.

Power socket

Connect the included power supply. Your Play Electric will power up immediately. **Always use a TC-Helicon power supply (12V, 400 mA).** Using any other power supply may damage the unit and will void your warranty.

Gain settings

How the Input LED Level Meter Works

The LED on the top of your Play Electric is used for both vocal and guitar level metering.

When setting the level for your microphone or guitar, make sure that you sing or play separately. If you are setting your vocal level, don't play your guitar – and vice versa.

The meter will show a combined level for both guitar and vocals when you sing and play.

If you see the LED light red – indicating clipping –, it is helpful to play/sing individually to see which input may be getting too much level.

Keep in mind that the combined level of two inputs can clip, even when the individual inputs do not. If this happens for you, it's best to simply turn down each input slightly until the LED no longer lights red when you sing and play simultaneously.

Setting Microphone Gain

Once you have connected your microphone and selected the microphone type (Dynamic, Condenser, MP-75, e835 FX), use the Mic Gain knob on the side of your Play Electric to set the input level for your microphone.

As you increase the level, pay close attention to the LED on top of Play Electric. You want the

input to light the LED green. It's OK if the LED sometimes lights yellow – but it should never turn red. If it does turn red, reduce the level. Red means that a) the input is overloading and b) you've got powerful lungs!



Setting the guitar level

The control for your guitar input is on Page 1 of the Setup menu. You can access the Setup menu by pressing the SETUP button and then use the < or > buttons to move to Page 1. Press the "soft" button next to the "Guitar IN" box and use the Control knob to adjust your level.

Reading the LCD Display



The Play Electric display

The LCD display of your Play Electric displays the following information:

Preset Name

The name of the currently selected preset. In the screen shot above, it is "High Harmony". The Presets concept is explained in "[What are presets?](#)".

Preset Number

The unique preset number – i.e., the number of the slot where the preset is stored. In the screen shot above, it is 1.

"FAV" indicator

The "FAV" indicator is shown in the upper right corner of the display if the current preset has been tagged as a Favorite.

"NP" indicator

The "NP" indicator is shown in the lower right corner of the display when chord information changes have been detected by Play Electric.

You may see the "NP" indicator switch on and off somewhat erratically as it processes incoming musical information. This is normal.

What is NaturalPlay?

NaturalPlay is the voodoo we do inside Play Electric to figure out which key your music is in. If you plug your guitar into the GUITAR IN connector, NaturalPlay will look there first for key/scale info. Next, it will look at the Aux input and listen to the RoomSense microphones.

Once Play Electric "hears" key/scale information from one of these inputs, it will set the key/scale

on the fly. “NP” is only shown when a *change* in key/scale is detected – so don’t panic if you don’t see it all the time.

“LOOP” indicator

The “LOOP” indicator is shown in the lower right corner of the display when a loop is running, but you are currently not on the Loop mode screen.

GB (Guitar Boost) indicator

The GB (“Guitar Boost”) indicator is shown in the lower left corner of the display when guitar boost is active.

Genre indicator

If you have set the Genre selector to any other value than “All”, the currently selected genre is shown in the upper left corner of the display. In the screen shot above, it is “Harmony“.

Switches and operation



The three Play Electric footswitches

DOWN and UP footswitches

From here on, we will refer...

- ▶ to the footswitch with the down-pointing triangle as the DOWN footswitch and
- ▶ to the footswitch with the up-pointing triangle as the UP footswitch.

The DOWN and UP footswitches allow you to navigate through presets.

- ▶ Press a footswitch once to switch to the previous or next preset slot.
- ▶ Press *and hold* a footswitch to quickly move through presets.

HIT / Hold for TALK footswitch

During normal operation, this footswitch acts as a HIT button. What does this mean?

When you activate HIT by tapping the footswitch, a new effect (or several effects) will be added to the current sound. This feature is perfect for spicing up a section of a song with a particular effect, e.g. Harmony.

TALK mode

When you press *and hold* the HIT / Hold for TALK footswitch, Play Electric enters TALK mode.

In TALK mode, all vocal effects are bypassed, and the microphone input is passed directly to the output.

TALK/Tuner mode

If you have a guitar plugged into the GUITAR IN, you will enter TALK/Tuner mode, activating the guitar tuner built into Play Electric. The guitar output is muted to allow tuning, but the dry voice

is still passed to the output, allowing you to tune your instrument and still entertain the crowd with witty banter.

Activating Loop mode

To enter Loop mode, press and hold the DOWN and UP footswitches simultaneously.

For more information on the Looper, see [“The Looper”](#).



Loop mode screen

In Loop mode, the DOWN footswitch controls the following functions:

- ▶ PLAY
- ▶ REC (Record)
- ▶ Overdub

Holding the DOWN footswitch will undo your most recently recorded Overdub.

In Loop mode, the UP footswitch controls the following functions:

- ▶ STOP
- ▶ ERA (HOLD to erase)

To exit Loop mode, tap the HIT footswitch.

You may exit Loop mode while a loop is still playing. That means you can choose a new vocal sound – and then re-enter Loop mode to add a new overdub to the loop.

Loop Undo/Redo

To undo a loop overdub, *press and hold* the DOWN footswitch.

To restore the overdub (Redo), press and hold the DOWN footswitch again. Restoring a loop overdub this way is only possible if you have not recorded another overdub after using Undo.

Looping with a Switch-3

If you connect a TC-Helicon Switch-3 (optional) to the PEDAL connector of your Play Electric, you can use it to control all Loop features.

The benefit of using a Switch-3 is the addition of the dedicated Undo button.

When a Switch-3 is connected, Play Electric's UP and DOWN footswitches are assigned to Set Key/Scale.

For more information, see "[Switch-3 page \(7/8\)](#)".

Using DOWN and UP for setting key and scale

Activating Loop mode by pressing the DOWN and UP footswitches simultaneously is the default mode. There is also an alternative mode

where pressing the DOWN and UP footswitches simultaneously will allow you to set key/scale. You can set this mode on System page 5 under "UP/DN Function".

When you have activated this alternative mode, pressing the UP and DOWN footswitches simultaneously will allow you to set Key and Scale using these two footswitches.

If you don't know which Key and Scale a particular song is in, try using the last chord of the song for the Key and Major 2 for the Scale. It's often correct, especially in popular music.

For more information, see "[TC-Helicon scales reference chart](#)". You can also find this chart on the TC-Helicon website:
support.tc-helicon.com/entries/21051886-scale-chart-for-TC-helicon-products/

To use your newly selected Key and Scale, simply press EXIT.

To save the current preset with your chosen Key and Scale, press STORE twice. Storing presets is covered in more detail later in this manual.

Tap tempo

To access Tap Tempo, press and hold the UP and HIT footswitches simultaneously.



Tap tempo screen

Once you see the current tempo displayed on the LCD screen, tap the HIT button in time with your music.

When you are finished, stop tapping, and the screen will "time out" back to the preset screen.

Control knob and arrow buttons



BACK, STORE, arrow buttons and the control knob

Use the control knob to scroll through presets and to move through various settings in the Edit, System or other menus.

The arrow buttons act similarly, allowing you to move through presets, effect/setup pages, styles, Genres etc.

Quick Tip: You can press and hold the arrow buttons to “jump” to the first or last page in a menu. For example, in the Vocal FX menu, you can move from Harmony (page 1) to Transducer (page 7) directly by pressing and holding the > button.

BACK button

Press the BACK button to exit the current screen or mode.

STORE button

What are presets?

To use Play Electric effectively, you need to understand the concept of Presets.

Essentially, a Preset is a record of all the settings for a group of effects that you can recall quickly and easily.

The Preset concept is extremely flexible. A Preset can be general purpose – like a simple Reverb or Harmony sound. But a Preset can also represent a specific song or portion of a song via multiple effects and settings.

A good modern analogy for a Preset is a user account on a computer. Even though each user has access to the same hardware (CPU, RAM etc.) each user can change their desktop wallpaper,

icons on the desktop, program behaviors and much more. When each user logs in, the computer recalls all of their custom settings.

Depending on how you like to work with effects, you may find that you like to use a few general purpose Presets. Or you might be the kind of guy or girl who likes to spend a bit more time in advance of the performance to create Presets for all sorts of things.

Once you have fine-tuned all settings in the Vocal FX and Guitar FX sections, you should store them as a Preset, so you can later recall them.

Storing presets

When you have made a change to a preset, simply press the STORE button.

Pressing the STORE button once will bring up the name/location display, allowing you to rename and/or relocate the preset.

Pressing the STORE button again will save the preset, along with its new name or location.

Changing preset names

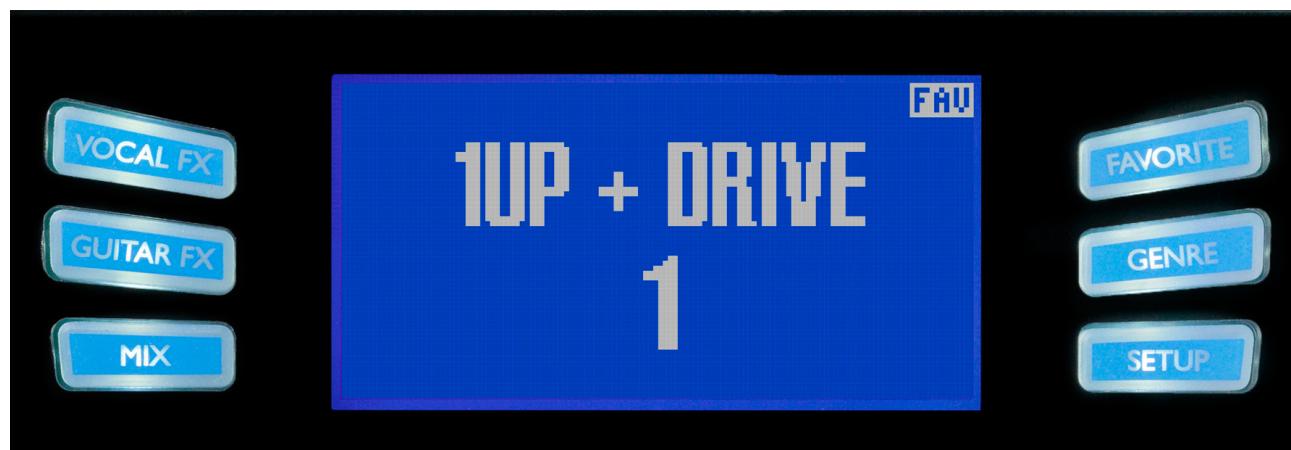
To change the name of a preset, press the STORE button once, then press the left blue soft button and use the control knob to modify the letters/numbers. Press the STORE button again to complete the process.

Storing a preset to another location

To save the current preset to a different preset slot (location), press the store button once, then press the right Blue soft Button and use the control knob to select the destination number for the preset. Press store again to complete the process.

If you change your mind and don't want to save the changes, simply press BACK.

Soft buttons



Soft buttons

There are six “soft” buttons on the Play Electric – three on each side of the LC display.

Each button is context-specific – meaning that when its function is available, you’ll see it lit up with a WHITE or BLUE LED.

When there is no function available, the button will not be lit.

- ▶ In white LED mode, the text on the button refers to its action.
- ▶ In blue LED mode, the button will select the segment of the LCD screen that is directly beside that button.

Not every menu uses all six buttons.

Vocal FX button

Press the Vocal FX button to open the Vocal FX menu, which controls the settings of the vocal effects. This button is described in its own chapter: [“Vocal FX button/section”](#).

Guitar FX button

Press the Guitar FX button to open the Guitar FX menu, which controls the settings of the guitar effects. This button is described in its own chapter: [“Guitar FX button/section”](#)

Mix button

Press the Mix button to open the Mix menu, which allows you to adjust the levels of the signals. This button is described in its own chapter: [“Mix button/section”](#)

Favorite button

You can tag a preset as a “Favorite”. This allows you to e.g. mark all presets you want to use in a show and filter out all others. This means that you can use Favorites to create a set list or simply group all the presets you like, regardless of their Genre.

- ▶ To add the current preset to your Favorites, press the FAVORITE button. “FAV” will be shown in the top right corner of the display.
 - ▶ To remove the current preset from your Favorites, press the FAVORITE button.
 - ▶ To only browse your Favorite presets, press the GENRE button and select FAV as the Genre. Press the BACK button to return to the Home screen.
- If there are no presets tagged as Favorites, the FAV option will not appear in the Genre menu.

GENRE button

Genres allow you to filter your presets by categories, such as musical styles and effect types.

Press the GENRE button to open the Genre menu.

In the Genre menu, use the control knob to navigate through the available options. Select a Genre.

Press the BACK button to return to the main window, where you will see only the presets contained within the Genre that you have selected.

Presets can be associated with multiple genres.

Setup button

Press the SETUP button to open the Setup menu, which controls the general functions of the device. This button is described in its own chapter: [“Setup button/section”](#)

Connection diagrams

The following connection diagrams show you some common ways to hook up Play Electric. For basic information about audio inputs and outputs, see "[Inputs and outputs](#)".

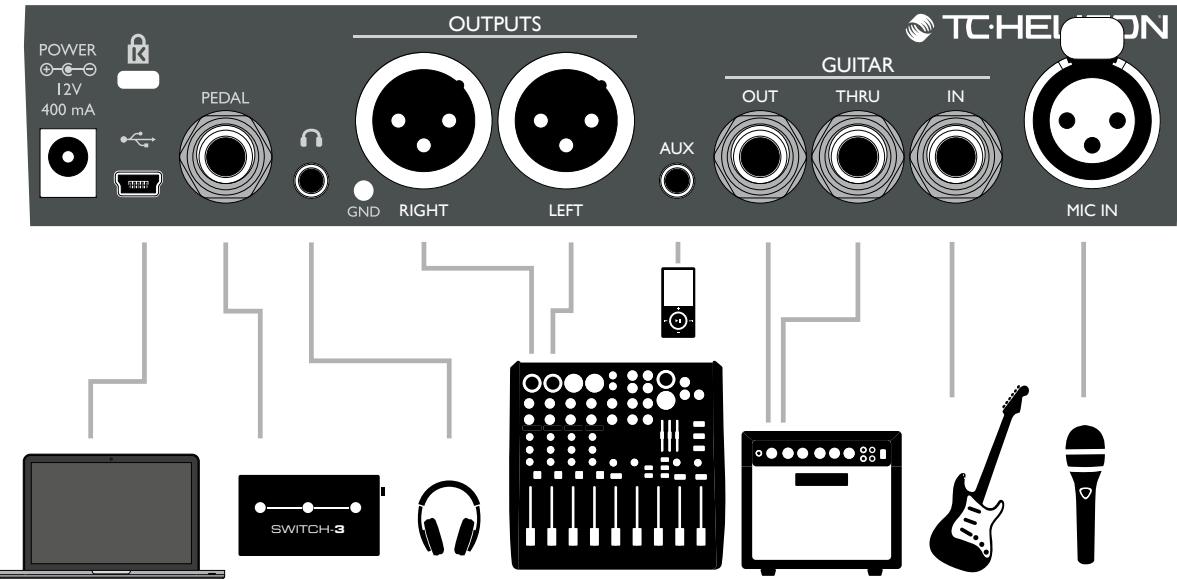
Mixer setup

For connection to your mixer or PA, check out this [Craig's Corner video](#):

[youtube.com/watch?v=qq0AOtafljs](https://www.youtube.com/watch?v=qq0AOtafljs)

It's very important to follow gain-staging instructions in order to get the best signal to noise ratio (SNR) from your device and prevent distortion in the signal chain.

Play Electric back panel inputs and outputs



Play Electric back panel

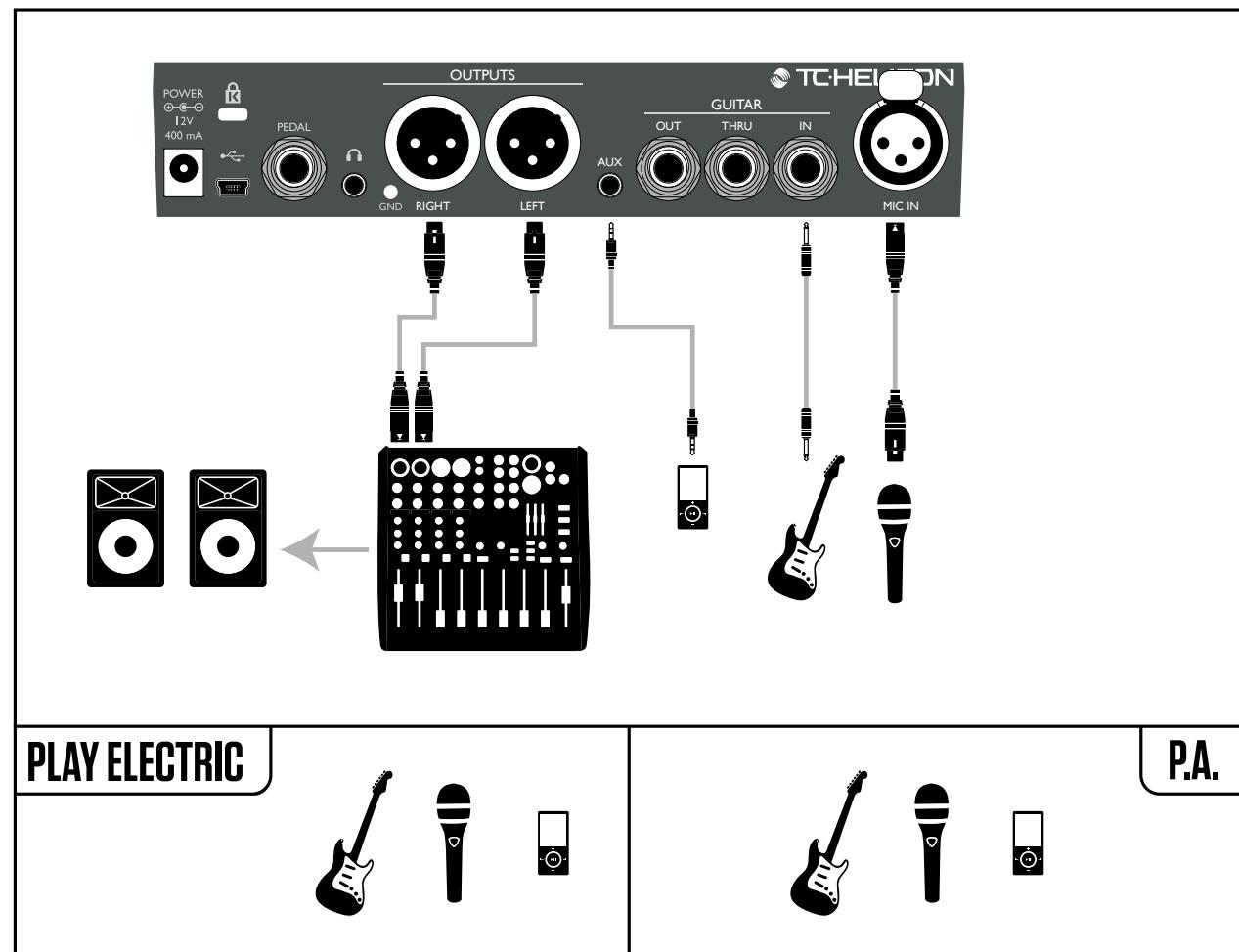
Stereo (or mono) vocals and guitar

This diagram shows connections for both Stereo and Mono PA applications.

If your Play Electric is set to Stereo, you'll need to pan one channel left and the other channel right (or use a single Stereo channel) on your mixer. Vocal/Guitar level mix is achieved within Play Electric.

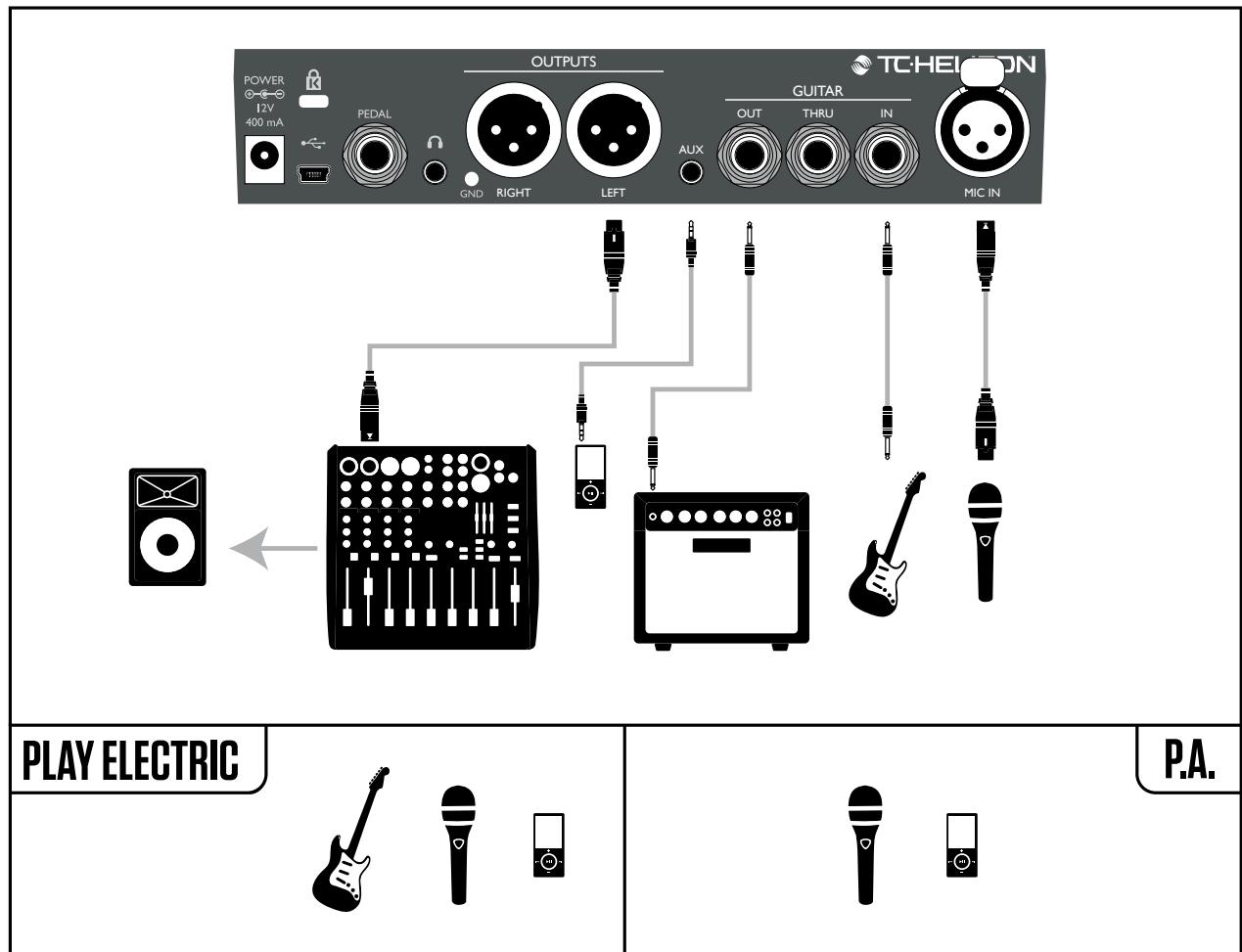
In Mono output mode, you have control over the vocal and guitar sounds independently at the PA mixer. In Mono mode, do not pan the channels left and right.

The Aux input may be removed from the XLR outputs in the setup menu if you wish (Setup – Aux In Type).



Mono vocals and guitar amp

This configuration works well when you want to pass your guitar signals to an amplifier and your vocal signals to a mixer or powered PA speaker.



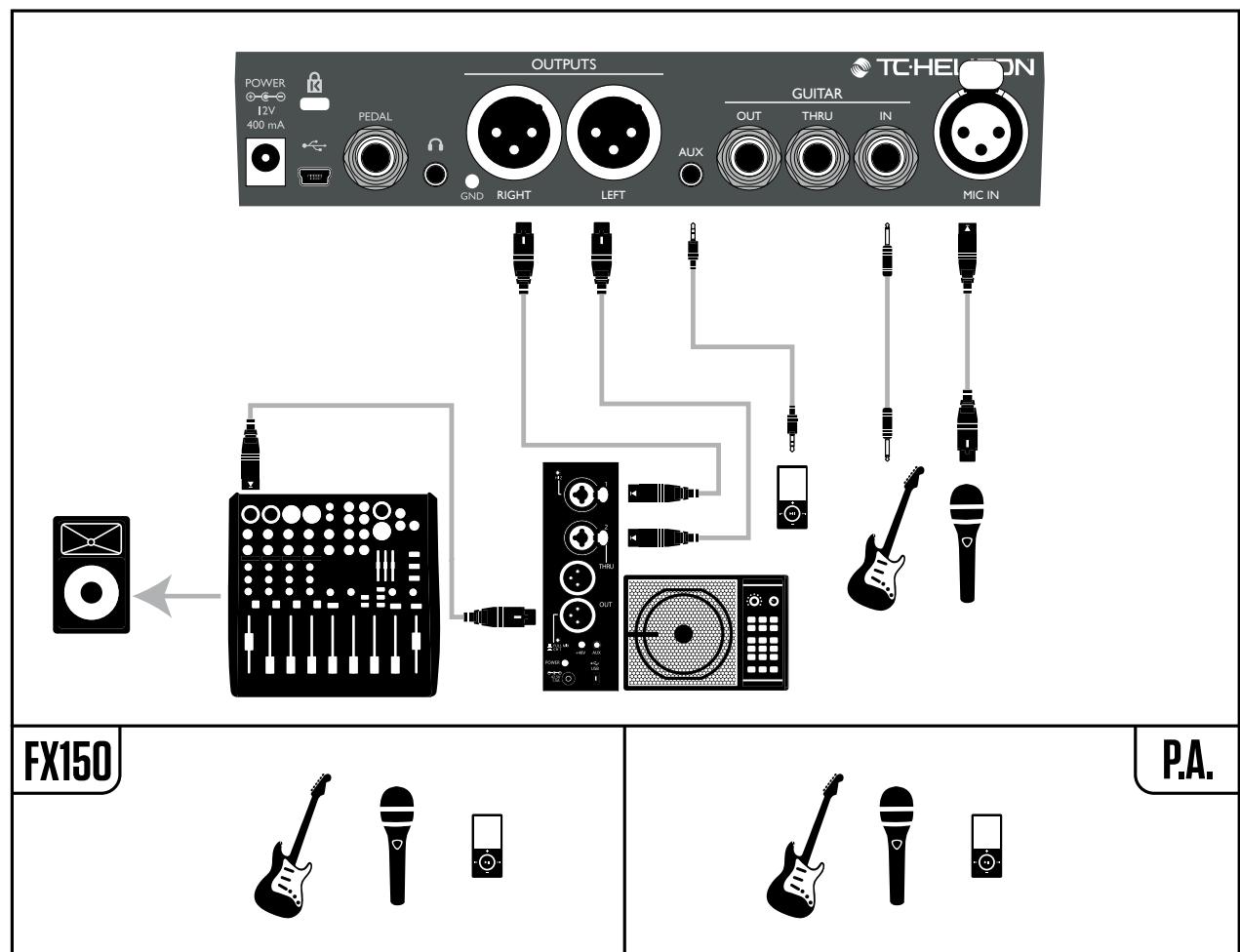
Setup example: Mono vocals and guitar amp

Mono vocal and guitar with a TC-Helicon FX150

This configuration gives you mic-stand-mount monitoring and control over your vocal and guitar channels, while sending a summed mono signal to a mixer or PA.

For additional control, you can opt to plug a music player into the Aux channel on the FX150, instead of Play Electric, giving you control of Vocals, Guitar and Aux independently. Signals will still be summed to mono at the output of the FX150.

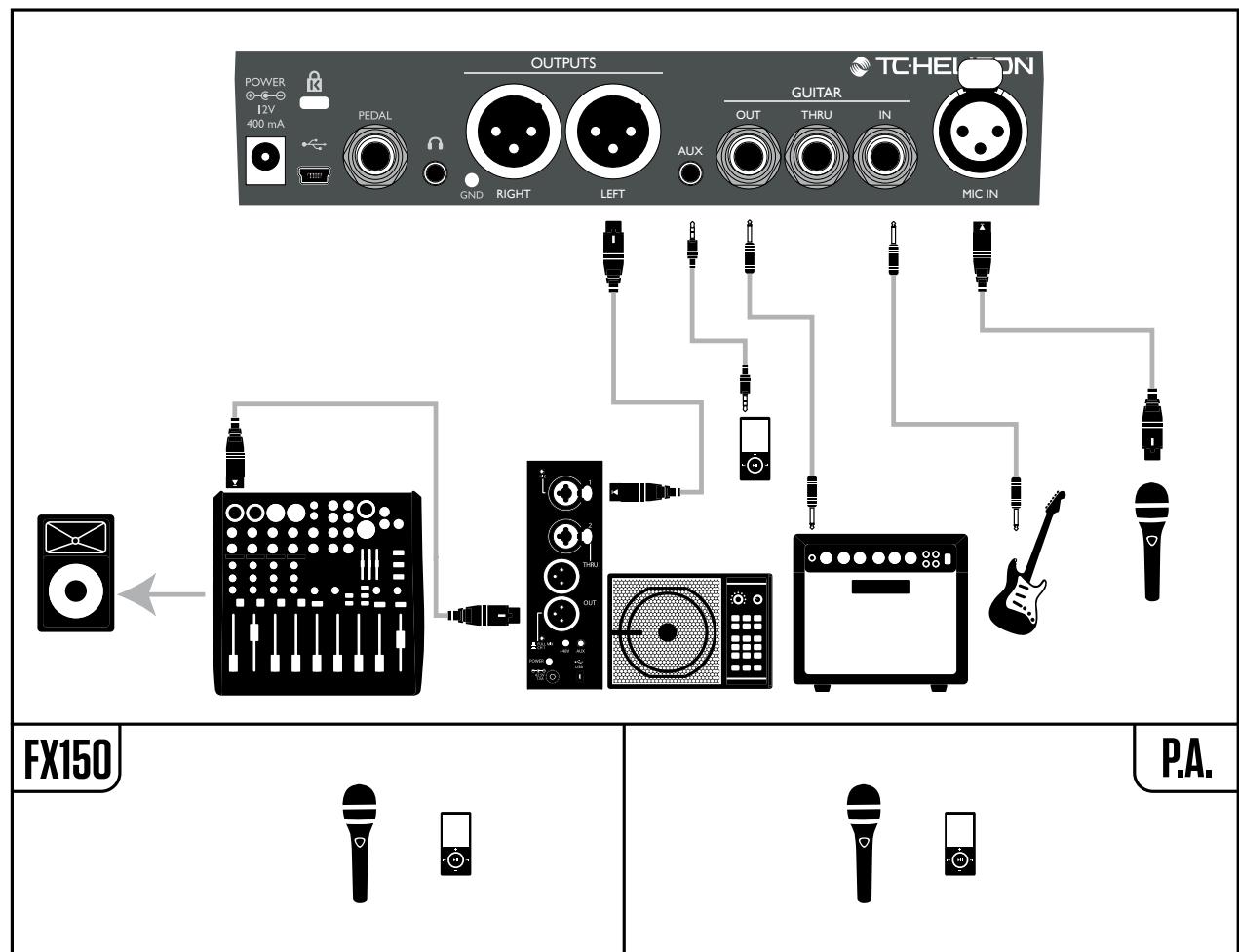
For more information on FX150, see
tc-helicon.com/products/voicesolo-fx150/



Setup example: Mono vocal and guitar with an FX150

Mono vocals via FX150 and a guitar amp

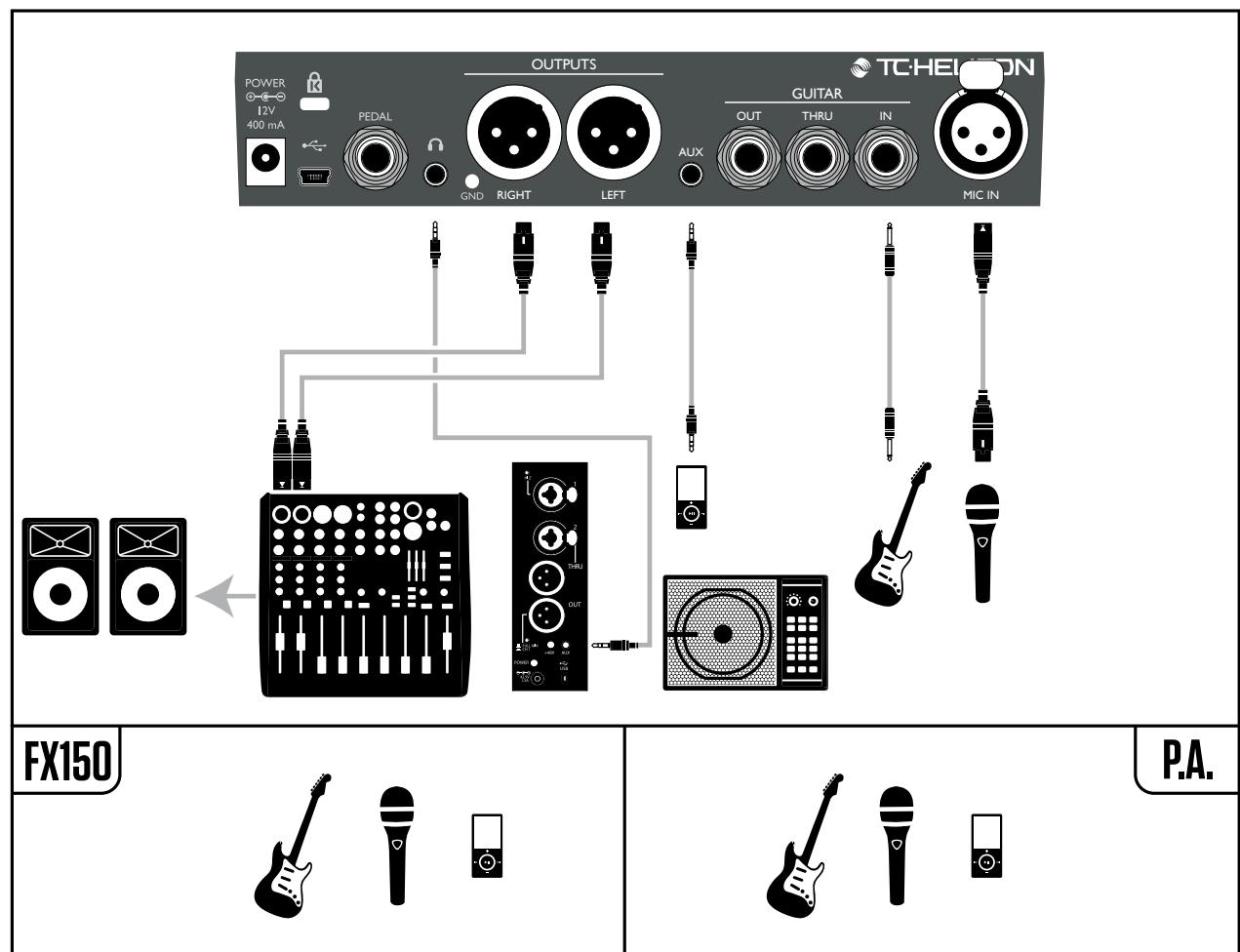
Here, you can send the vocal signals to an FX150 and guitar signals to an amplifier.



Setup example: Mono vocals via FX150 and a guitar amp

Guitar and vocals via FX150 and stereo out to a PA

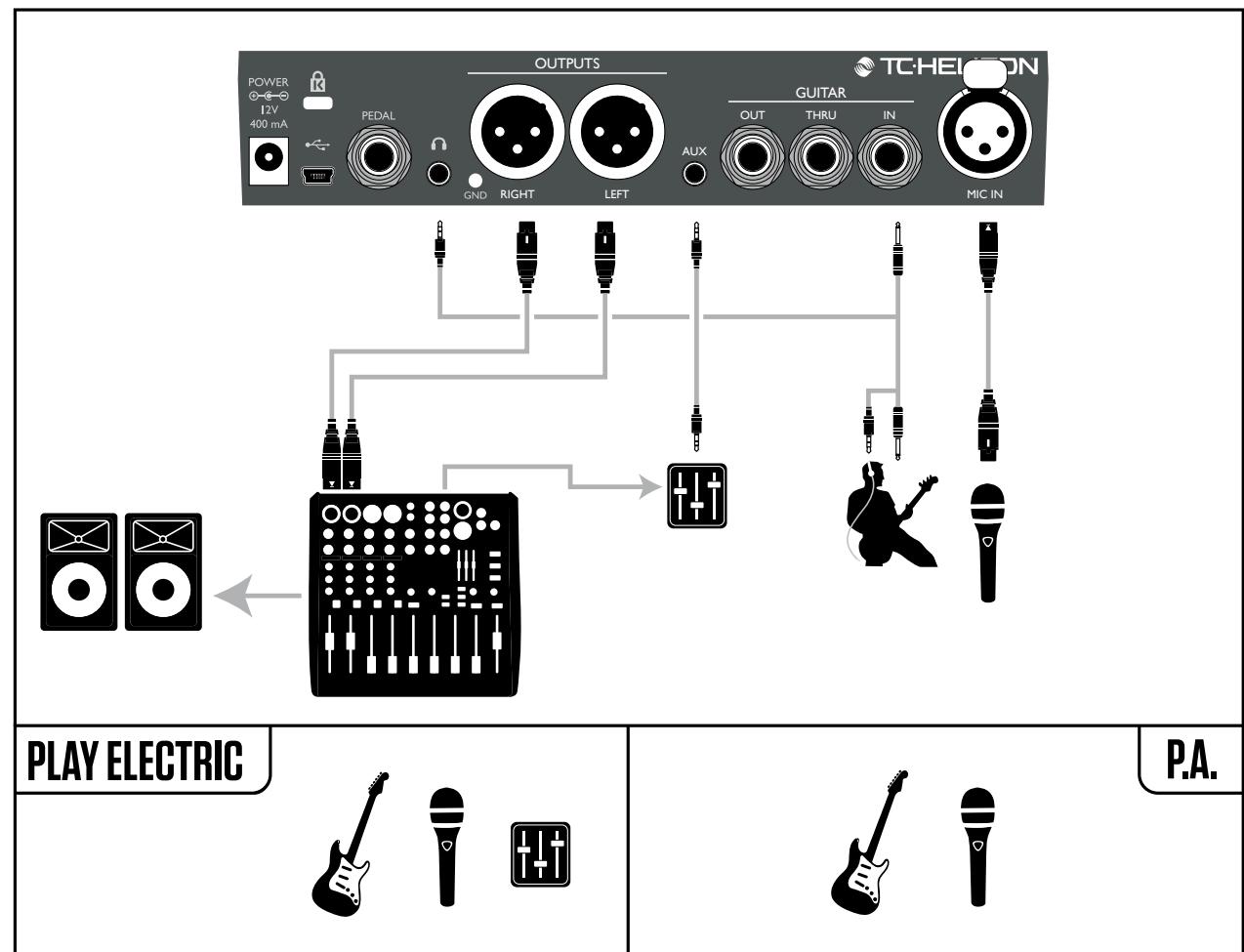
In this setup, you can use the Headphone Out from Play Electric to send Guitar, Vocal and Aux signals to your FX150 and send a stereo mix to the PA via the Play Electric XLR outputs.



Setup example: Guitar and vocals via FX150 and stereo out to a PA

Stereo PA and TC-Helicon Guitar & Headphone cable

If you own our [Guitar & Headphone cable](#) (sold separately), you can use an external monitor send to the Aux in on Play Electric to create a headphone/IEM mix.



Setup example: Stereo PA and guitar/headphone cable (not included)

Setup button/section

Input page (1/8)

Input parameter

Use the Input parameter to select the type of microphone you will be using.

Dynamic Mic setting

Use the Dynamic Mic setting for dynamic microphones (like an SM-58 or OM5).

Condenser Mic setting

Use the Condenser Mic setting for condenser microphones (like a Beta 87a).

MP-75 or e835fx mic setting

Use the MP-75 or the e835fx mic setting with the MP-75 or e835fx microphones, which have an on board switch to control various functions of your Play Electric, such as HIT or LOOP functions.

The Mic Control feature defaults to HIT when Mic Type is set to “MP-75” or to “e835fx”.

USB setting

Digital audio can be passed to Play Electric via the USB port allowing you to send vocals from a DAW to the unit for processing.

When sending “dry” vocals from your DAW, pan the vocal signal hard LEFT in the DAW mixer.

If you have a guitar track recorded and want it to guide harmony, pan it hard RIGHT in the DAW mixer.

RoomSense parameter

Controls the way the two onboard RoomSense microphones work.

Ambient setting

With the Ambient setting, RoomSense uses the onboard microphones and passes that signal via the headphone output.

Control for RoomSense level can be found in the mix section (default OFF).

To avoid feedback, the RoomSense output is only passed to the headphone output and not the XLR output(s).

You can also mix some of the ambient signal into an in-ear monitor mix to give you room sounds with your direct microphone feeds.

Ambient/Auto setting

With the Ambient/Auto setting, RoomSense uses the onboard microphones and passes that signal via the headphone output. The onboard RoomSense microphones will also “listen” to musical information from the surrounding environment (a single chord based instrument or even your whole band will work!) to determine the key/scale for Harmony and HardTune effects.

If you have a guitar plugged in, the Guitar acts as the primary source for chord detection. If you stop playing guitar, RoomSense will try to determine key/scale from “what it hears” in the room.

Voice setting

With the Voice setting, the RoomSense microphones of your Play Electric are used as the primary vocal input. This setting is only available via headphones.

Mic Control parameter

Use the Mic Control parameter to set the action you want to associate with the Mic Button. This parameter can only be set if you are using an MP-75 or e835 fx microphone. If you have set the Mic Type parameter to another microphone type, this parameter will only show “N/A” (not available).

HIT setting

With the HIT setting, pressing the button on you Mic Control-enabled microphone will engage the HIT function in any preset that has a HIT function assigned.

HIT + TALK setting

With the HIT + TALK setting, pressing the button on you Mic Control-enabled microphone will engage the HIT function.

Pressing and holding the button on you Mic Control-enabled microphone will engage TALK mode, bypassing all effects. To exit TALK mode, press the microphone button again.

PRESET UP setting

With the PRESET UP setting, pressing the button on your Mic Control-enabled microphone will cycle through the device's presets, moving forward.

Loop setting

With the Loop setting, pressing the button on your Mic Control-enabled microphone will activates or deactivate the Record/Play/Overdub feature of the Looper.

Tone Style parameter

Use the Tone Style parameter to apply varying amounts of adaptive EQ, Compression and Gate to the signal.

OFF setting

No tone style is applied.

NORMAL setting

Some "bottom", "mid" and "air" EQ, light compression and minor gating is applied to the signal. "Minor gating" means: When the input level gets low enough, the input gain is reduced to improve open-mic feedback resistance.

LESS BRIGHT setting

The LESS BRIGHT setting is similar to normal, but with less emphasis on the high frequency EQ band.

NORM+WARMTH setting

The NORM+WARMTH setting is similar to normal, with a small "mid bump" to add some warmth to the voice.

MORE COMP setting

The MORE COMP setting utilizes the normal EQ and Gating settings, but it has more aggressive compression settings. This is a good setting to try if you have a large dynamic range when singing and want to keep your levels under control.

NORM NO GATE setting

Removes the Gate function from the NORMAL setting.

LESS BRIGHT NG setting

The LESS BRIGHT NG is the same as the LESS BRIGHT setting, but with the Gate function removed (NG = "No Gate").

WARMTH NG setting

The WARMTH NG setting is the same as NORM+WARMTH, but with the Gate function removed.

MORE COMP NG setting

The MORE COMP NG is the same as MORE COMP, but with the Gate function removed.

Pitch Correction

Pitch Cor Amt parameter

Use the Pitch Cor Amt parameter to control the amount of auto-chromatic pitch correction Play Electric applies to all incoming signals from the microphone.

For a natural sound, we find that 50 % or less is a good starting point. If you are having a hard time hitting notes accurately, or want an auto-

tuned sound on all of your vocals, experiment with amounts closer to 100 %, or use the HardTune effect block.

Pitch Cor Amt settings are temporarily overridden when the HardTune block is active.

Pitch correction and (perceived) phasing

If you are new to auto-chromatic pitch correction, you may find that the sound you hear with Correction engaged sounds "doubled". This is due to you hearing both the corrected signal from Play Electric and your own voice (via bone conduction in your noggin). The two sounds have small variances, which can be interpreted as "doubling". This is perfectly normal, but will take a bit of getting used to. The audience will *not* hear the "doubling" that you hear.

For more information about pitch correction phasing, check out this [Craig's Corner](#) video: youtube.com/watch?v=KWrEluiDXsA

Output page (2/8)

Output parameter

Use the Output parameter to set how signals are sent over the XLR outputs of Play Electric.

Stereo setting

If nothing is connected to GUITAR OUT, both vocal and guitar signals are sent in stereo via these outputs. If GUITAR OUT is connected, only stereo vocals will be sent.

Mono setting

With the Mono setting, Mono Vocal signals are sent via the LEFT XLR output.

If GUITAR OUT is connected, Dry vocal signals (with tone and global pitch correction) are sent via the LEFT XLR output and vocal effects only (no dry) are sent via the RIGHT XLR output.

This mode is great if you want to control the wet/dry balance of your vocal signal at a mixing board.

If GUITAR OUT is NOT connected, your effected guitar sounds are added to the LEFT channel, joining your effected vocal.

Dual Mono setting

If GUITAR OUT is connected, your effected vocal sounds are sent via the LEFT XLR output

and your effected guitar sounds are sent via the GUITAR OUT. Guitar sounds in the RIGHT XLR output are muted.

If GUITAR OUT is NOT connected, your effected vocal sounds are sent via the LEFT XLR output and your effected guitar sounds are sent via the RIGHT XLR output.

Vocal Cancel function

The Vocal Cancel function attempts to remove the vocals from a piece of music.

Off setting

With the Off setting, no processing is performed on the Aux input signal.

On setting

With the On setting, Play Electric will attempt to remove lead vocals from a piece of music.

This process can create “Karaoke”-style music for you to sing along to, including key information for harmony generation.

The processing capability can vary quite a bit from song to song, depending on the way the song was originally mixed.

Lead Mute parameter

Use the Lead Mute parameter to mute the lead vocal and only output the processed signals.

Off setting

Lead Vocals are routed to the main mix.

On setting

Lead vocals are removed from the main mix.

Out Level parameter

Use the Out Level parameter to toggle between Mic and Line level output modes. Typically, you will want to use the Mic level setting – but if you are not getting enough signal at your mixer or other destination and you are sure the Mic Input and Mix Out levels are OK, try the Line setting.

USB Out Level parameter

Use the USB Out Level parameter to adjust the overall level of the USB output from Play Electric. Use this parameter to attenuate the signal if your DAW is receiving a signal that is too loud.

Guitar page (3/8)

Guitar parameter

Use the Guitar parameter to control the input level of your guitar. Set the level so that when you are playing your guitar and NOT singing, the In LED lights green/yellow as much as possible but doesn't show red.

Speaker Sim parameter

Use the Speaker Sim parameter to turn on and off Play Electric's Speaker Simulation. If you are connecting to a PA via the XLR output or to an FRFR (full range, flat response) speaker via the Guitar OUT, leave this parameter set to ON. If you are connecting to a guitar amplifier, turn this OFF.

Guitar Gate parameter

Use the Guitar Gate parameter to set the gate threshold for the GUITAR input.

Guitars have varying amounts of "noise" inherent in their signal. Sometimes it is desirable to set a gate to "cut off" or "mute" the guitar when the incoming signal is very low.

We have set the threshold pretty low by default, but you may want to raise it to suit your style. Having a higher gate threshold can be effective when playing quick chords with rests in between.

Global Guitar FX parameter

Use the Global Guitar FX parameter to take the current guitar sound and lock it, preserving the guitar effect settings across ALL presets. This can be good if you're playing an acoustic set and only want one sound.

Here is a tip: If you would like to copy the guitar sound from one preset to another preset, you can use the Global Guitar FX parameter to achieve this:

- ▶ Go to the preset you'd like to copy the guitar effect settings FROM.
- ▶ Set the Global Guitar FX parameter to ON.
- ▶ Go to the preset you'd like to copy the guitar effect settings TO.
- ▶ Press the Store button twice.
- ▶ Set the Global Guitar FX parameter to OFF.

System page (4/8)

LCD Contrast parameter

Use the LCD Contrast parameter to set the contrast of the LCD screen. Depending on the ambient light in the room, different settings may have more or less effect.

UP/DN Function

Use the UP/DN Function parameter to define what should happen when you press the DOWN and UP footswitches *simultaneously*.

Please note that when you connect a TC-Helicon Switch-3 to the PEDAL connector of your Play Electric, the default behavior of the UP/DN function changes from “Loop” to “Set Key.”

Looping setting

Pressing the DOWN and UP footswitches simultaneously will enter and exit Loop mode, allowing you to play and record loops.

Set Key setting

Pressing the DOWN and UP footswitches simultaneously will enter Set Key/Scale mode, allowing you to manually set the key and scale for a song.

Lead Delay parameter

Use the Lead Delay parameter to delay the incoming vocal signal very slightly to compensate for the small amount of latency introduced when effects are processed by the device.

This delay ensures that the processed/generated voices – like harmonies – will be perfectly in sync with the lead vocal.

None setting

No delay compensation is used.

Voice Sync setting

The lead vocal is delayed an amount equal to the maximum latency of the system with *all effects* turned on.

Auto setting

The lead vocal will be delayed by an amount equal to the latency of the *currently enabled effect blocks*. Using more effect blocks will increase the latency compensation amount.

Tune Reference parameter

Use the Tune Reference parameter to define the reference frequency for the guitar tuner and any Harmony or HardTune effects. The default is 440 Hz (A), which can be changed in 0.5 Hz increments.

Aux In Type parameter

The Aux In Type function will perform magical calculations to help make harmonies more accurate.

Live setting

Use the Live setting when you are playing live or processing a recorded vocal track from your DAW using the aux in to provide guide tracks.

Tracks setting

Use the Tracks setting when you are singing along with prerecorded music, e.g. from an MP3 player.

Monitor setting

Use the Monitor setting to remove incoming Aux signals from the main output. This allows you to hear Aux audio via headphones, but not pass that audio to the PA. This is a great solution for cost effective in-ear monitoring.

The TC-Helicon **Guitar & Headphone Cable** is an excellent way to combine your guitar and headphone signals into a single cable. For more information, see:

[tc-helicon.com/products/
guitar-headphone-cable/](http://tc-helicon.com/products/guitar-headphone-cable/)

System page 2 (5/8)

Global Key parameter

Use the Global Key parameter to define if key and scale information for harmony generation and/or pitch correction should be global or preset-specific.

Off setting

Key can be set per individual preset, via direct key setting (C, D, F# etc), Guitar IN via Natural-Play, RoomSense or Aux.

On setting

When a key is chosen within a preset, that key will remain even when you switch to another preset.

Global Tempo parameter

Use the Global Tempo parameter to define if tempo-based effects should follow a global tempo or a preset-specific setting.

Off setting

Tap tempo set within a preset changes from preset to preset.

On setting

When you have set a tempo using tempo tapping within a preset, that tempo will remain even when you switch to another preset.

RoomSense LoCut parameter

Use the RoomSense LoCut parameter to “roll off” undesirable frequencies from your mix.

In some circumstances, the low frequencies “in the room” – such as bass or kick drum – can cause the RoomSense microphones to become muddy sounding. The built-in high-pass filter allows you to reduce this kind of “rumble”.

Mic Boost parameter

If you are a quiet singer, you can use the Mic Boost parameter to increase the microphone gain.

Some artists sing more quietly than others, requiring the Mic Gain knob to be turned up quite far. To offset this, we have added a Mic Boost feature which allows +6 (“Low”) or +12 (“High”) dB of extra gain if you need it. The default value is +6 dB (“Low”).

Loop page (6/8)

Input parameter

Use the Input parameter to set the input source(s) for loop recording. The following settings are available:

- ▶ Guitar
- ▶ Lead
- ▶ Aux
- ▶ Lead + Guitar
- ▶ Lead + Aux
- ▶ Guitar + Aux
- ▶ All: With the All setting, everything you hear will also be recorded as part of the loop.

Undo parameter

Use the Undo parameter to switch the Loop undo function on or off.

On setting

Undo is active and may be used to undo the last change made to your loop. It is common to use undo when you have added a loop section that you are not happy with and want to try it again. You can also press Undo a second time to *redo* your last Undo action. This will bring a loop overdub back that you have removed using Undo.

In this mode, the total available loop time is 15 seconds.

Off setting

Disables undo, freeing some memory for additional looping.

In this mode, available loop time is doubled to 30 seconds.

Loop Feedback parameter

Use the Loop Feedback parameter to control the amount of loop record feedback.

When recording a loop with multiple passes (or parts), the signal from the first loop pass is added to the next, and so on.

If all of these passes were put together at full (100 %) volume, the loop you are working on would get louder and louder and LOUDER, so you would end up with a distorted output signal. The purpose of the Loop Feedback parameter is to prevent this volume increase from happening.

When you record a new pass to the existing loop, it is recorded at 100 % volume, but the existing loop is blended with it at the Loop feedback setting.

The calculation works like this:

Input + (Loop x Loop Feedback) = Loop output

I.e. input + (Loop x 90%) = output

(Run away! Scary math!)

Most users find the default setting of 98% works well, but you may find a different setting that works best for you.

Switch-3 page (7/8)

Control parameter

Switch-3 is an optional, high-quality remote control which you can use with your TC-Helicon device. Use the Control parameter to set the functionality of connected Switch-3.

Loop Mode setting

With the Loop Mode setting, the three footswitches on a Switch-3 will control loop functions:

- ▶ Button 1 activates Record / Play / Overdub.
- ▶ Button 2 stops recording/playback and can be used to erase the loop (by holding).
- ▶ Button 3 is used for Undo.

Custom setting

With the Custom setting, you can assign functions to the three footswitches on a Switch-3 from a list.

Simply press the soft button next to “Switch 1”, “Switch 2” or “Switch 3” on the right side of the display and use the Control Knob to define the function the respective footswitch should control.

The available settings are:

- ▶ Loop Rec/Play
- ▶ Loop Stop/Clear
- ▶ Loop Undo
- ▶ Loop Start/Stop
- ▶ 1 Btn Looper
- ▶ Tap Tempo

- ▶ Set Key
- ▶ Preset Down
- ▶ Preset Up
- ▶ Hit
- ▶ Harmony
- ▶ Harm Moment
- ▶ Doubling
- ▶ Delay
- ▶ Delay Moment
- ▶ Reverb
- ▶ HardTune
- ▶ Transducer
- ▶ μMod
- ▶ Gtr Amp
- ▶ Gtr Boost
- ▶ Gtr Compressor
- ▶ Gtr μMod
- ▶ Gtr Delay
- ▶ Gtr Reverb

- ▶ With no loop present, tap the footswitch once to record.
- ▶ Tap the footswitch again to define the loop length and switch to loop playback.
- ▶ Tap the footswitch again to overdub during playback.
- ▶ Hold the footswitch to undo the last overdub.
- ▶ Hold the footswitch again to restore (redo) the last overdub.
- ▶ Tap the footswitch twice quickly to stop. Please note that when stopping, a short portion of audio is recorded.
- ▶ Tap the footswitch to play or hold to erase the loop.

Tip: If you prefer to have Play Electric up on a music stand, you can use “Preset DN”, “Preset UP” and “HIT” as your custom Switch-3 assignments to replicate the footswitch controls.

Harm Moment and Delay Moment

When you have selected the Custom setting, two menu items work slightly differently from the others: Harm Moment and Delay Moment.

With “Harm Moment” and “Delay Moment”, the respective effect (harmony voices or delay) is active only as long as you press down the footswitch. Some users prefer the precision offered by this mode.

1 Btn Looper setting

The 1 Btn Looper (1 Button Looper) setting is a convenient way to control all relevant Looper functions using a single footswitch. This allows you to assign the two remaining buttons on a Switch-3 for other features (e.g. Hit).

Product Info page (8/8)

The System Info page contains information about...

- ▶ the installed firmware version,
- ▶ serial number and
- ▶ manufacture date for your device.

If you need to contact support, please have this information handy. See "[Support resources](#)".

Vocal FX button/section

Press the VOCAL FX button to open the Vocal Effects menu, which is comprised of seven pages. Each page contains the parameters controlling the respective vocal effect block.

There is one parameter common to all effects pages:

Control parameter

Use the Control parameter to turn an effect block on and off.

Off setting

The effect block is inactive, no signal processing occurs.

On setting

The effect block is active and will process the signal according to the selected style.

HIT setting

The effect block is assigned to the Play Electric HIT button (or the button on a microphone supporting Mic Control) and will become active when the HIT button is lit.

See the Setup section for instructions on how to activate Mic Control.

Harmony page (1/7)

Use the Harmony block to create harmonies that accompany your lead vocal, using up to two additional voices.

Style parameter

The Style parameter determines the number of harmony voices and the way those voices relate to your lead vocal.

Choose from the following styles:

- ▶ High
- ▶ Higher
- ▶ Low
- ▶ Lower
- ▶ Octave Up
- ▶ Octave Down
- ▶ High & Low
- ▶ High & Higher
- ▶ High & Lower
- ▶ Higher & Lower
- ▶ Higher & Low
- ▶ Lower & Low
- ▶ Oct Down & Up
- ▶ Oct Down & Higher
- ▶ Oct Down & High
- ▶ Oct Down & Low
- ▶ Oct Down & Lower
- ▶ Oct Up & Higher
- ▶ Oct Up & High
- ▶ Oct Up & Low
- ▶ Oct Up & Lower
- ▶ +7 Semitones
- ▶ -5 Semitones

- ▶ +7 & -5 Semitones
- ▶ +12 & +7 Semitones
- ▶ +12 & -5 Semitones
- ▶ -12 & +7 Semitones
- ▶ -12 & -5 semitones

Level parameter

Use the Level parameter to control the overall level of the harmonies.

Press the upper right soft button to select this parameter and use the control knob to adjust the level.

0 dB is the maximum volume for the effect.

Key parameter

Key is the most important setting for creating harmonies. Get it right, and things sound amazing. Get it wrong and they will sound, well, bad.

Auto setting

With the Auto setting, key is set automatically based on input from...

- ▶ the Guitar input connector
- ▶ the Aux connector
- ▶ the RoomSense microphones in this particular order.

The priority of inputs is as listed. For example, if you have a guitar plugged into the GUITAR IN and tracks playing via the Aux in, the system will read key/scale information from the guitar. If the

guitar stops playing and the Aux signal continues, the system will then look to the Aux input for chord information.

Key setting

With the Key setting, you can choose any of the 12 keys (C through b) in Western music.

Harmony Advanced page

To enter the Harmony Advanced page, press and hold any of the lit Blue Led soft buttons. To exit the Advanced page, press the BACK button.

Scale parameter

If the Key is set manually (not auto), the advanced menu will allow you set the scale associated with the Key.

Choose one of the following settings:

- ▶ Major 1
- ▶ Major 2
- ▶ Major 3
- ▶ Minor 1
- ▶ Minor 2
- ▶ Minor 3

For more information, see “[TC-Helicon scales reference chart](#)”. You can also find this chart on the TC-Helicon website:

[support.tc-helicon.com/entries/
21051886-scale-chart-for-TC-helicon-products/](http://support.tc-helicon.com/entries/21051886-scale-chart-for-TC-helicon-products/)

Portamento parameter

Use the Portamento parameter to control the amount of “slide” between notes as you sing. The more Portamento you use, the more the Harmony voices will slide, instead of jump, from note to note.

- ▶ The 0 setting turns Portamento off.
- ▶ 100 is the maximum setting.

Using high amounts of both Humanize and Portamento can make your harmony voices sound as if they’ve... well... been drinking... *a lot*. Small amounts are usually preferable.

Humanize parameter

Use the Humanize parameter to “humanize” the Harmony voices by imparting some timing and pitch variances to the voice.

At its core, this is actually the process of making the harmony voices *less* accurate – but imperfection is something that can make voices sound more “real”.

- ▶ The 0 setting turns humanization off.
- ▶ 100 is the maximum setting.

Double page (2/7)

The Double effect block creates the impression that one or more vocalists are singing in unison, with small differences in the timing and timbre of each voice. Some refer to doubling as “thickening” or “double tracking”. The latter references a recording studio method of singing the same vocal part on two separate tracks and playing them back simultaneously.

Style parameter

Use the Style parameter to set the number of voices and the timing of the double.

Choose from the following styles:

- ▶ 1 Voice Tight*
- ▶ 1 Voice Loose*
- ▶ 2 Voices Tight*
- ▶ 2 Voices Loose*
- ▶ Shout
- ▶ 1 Voice Oct Up
- ▶ 1 Voice Oct Down
- ▶ 2 Voices Oct Up
- ▶ 2 Voices Oct Down
- ▶ Oct Up & Oct Down

* “Tight” and “Loose” refers to how closely the double is timed with the lead vocal. Loose timing can feel “larger” or more effected.

Level parameter

Use the Level parameter to control the overall level of the doubling effect. Press the right upper

soft button to select this parameter and use the control knob to adjust the level. 0 dB is the maximum volume for the effect.

Delay page (3/7)

The Delay effect block repeats the input signal based on the style and the current tempo.

Style parameter

Select the Style menu by pressing the lower left soft button. It will be the only one lit on the left side of the display.

Choose from the following styles:

- ▶ Quarter
- ▶ Eighth
- ▶ Triplet
- ▶ Dotted 1/8th
- ▶ Dotted ¼
- ▶ ¼ Triplet
- ▶ Sixteenth
- ▶ Ping Pong 1
- ▶ Ping Pong 2
- ▶ Ping Pong 3
- ▶ Multitap 1
- ▶ Multitap 2
- ▶ Multitap 3
- ▶ Multitap 4
- ▶ Multitap 5
- ▶ Multitap 6
- ▶ Classic Slap
- ▶ Set Time

Level parameter

Use the Level parameter to control the overall level of the delay effect. Press the right upper

soft button to select this parameter and use the control knob to adjust the level. 0 dB is the maximum volume for the effect.

Feedback parameter

Use the Feedback parameter to control the amount of the delayed signal that is fed back into the effect. Higher levels of feedback will make the delay continue for a longer period of time.

Delay Advanced page

To enter the Delay Advanced page, press and hold any of the lit blue LED soft buttons. To exit the Delay Advanced page, press the BACK button.

Dly Filter Style parameter

Use the Dly Filter Style parameter to add filters to the delay signal that will simulate different types of delay hardware or sound.

Choose from the following styles:

- ▶ Digital
- ▶ Tape
- ▶ Analog
- ▶ Radio
- ▶ Megaphone
- ▶ Cell Phone
- ▶ Lo Fi
- ▶ Hi Cut 1
- ▶ Hi Cut 2
- ▶ Hi Cut 3
- ▶ Low Cut 1
- ▶ Low Cut 2
- ▶ Low Cut 3

Some of the delay filter styles are consistent, meaning that the sound is affected (like megaphone) and all subsequent delay “taps” sound the same. Some delay filter are *cumulative* – e.g. “analog” where processing is applied throughout the feedback loop, which changes the sound of the delay over time.

Experiment with the styles to find what works for your particular sound.

Tempo parameter

Use the Tempo parameter to manually set the delay tempo.

Settings are saved per preset. They are overridden (but not overwritten) if Global tempo is on.

If your selected Delay style is Slap or Time, the Tempo parameter will say “Time” instead and be represented by a millisecond value.

Reverb page (4/7)

The Reverb effect block creates “room” around your voice. Essentially, a reverb puts your dry vocal into a simulated space, small or large, to give a sense of depth and distance.

Style parameter

Use the Style parameter to determine the size of the simulated space and also the type of material being used to create the simulation.

Choose from the following styles:

- ▶ Smooth Plate
- ▶ Reflection Plate
- ▶ Thin Plate
- ▶ Bright Plate
- ▶ Real Plate
- ▶ Real Plate Long
- ▶ Jazz Plate
- ▶ Quick Plate
- ▶ Soft Hall
- ▶ Amsterdam Hall
- ▶ Broadway Hall
- ▶ Snappy Room
- ▶ Library
- ▶ Dark Room
- ▶ Music Club
- ▶ Studio Room
- ▶ Warehouse
- ▶ Bouncy Room
- ▶ Cozy Corner
- ▶ Bright Chamber
- ▶ Wooden Chamber
- ▶ St. Joseph Church
- ▶ Dome Chapel

- ▶ Hockey Arena
- ▶ Museum
- ▶ Indoor Arena
- ▶ Warehouse
- ▶ Thin Spring
- ▶ Full Spring

Level parameter

Use the Level parameter to control the overall level of the reverb. Press the right upper soft button to select this parameter and use the control knob to adjust the level. 0 dB is the maximum volume for the effect.

Decay parameter

Use the Decay parameter to define how long it takes for the reverb to fade away. Longer Decay times generally sound like large spaces, while shorter times sound like small spaces.

Each Reverb style has its own decay time, but you can change it.

HardTune page (5/7)

Ah – HardTune...

Some call it the Cher effect and others refer to it as Auto-Tune™. Whatever you name it: If you are looking for that radio-pop tuned sound, this is your effect.

The HardTune effect block can also be used for scale-based, natural pitch correction – so don't discount the effect if you are looking for correction that does *not* sound "robotic"!

Style parameter

Use the Style parameter to determine the accuracy, speed and "aggressiveness" of the tuning effect.

Choose from the following styles:

- ▶ Pop
- ▶ Country Gliss
- ▶ Robot
- ▶ Correct Natural
- ▶ Correct Chromatic (not scale based)
- ▶ Drone
- ▶ Gender Bender

Shift parameter

Use the Shift parameter to shift the note you are singing up or down by one or more semi-tones. You can shift your voice up or down by up to 36 semitones.

Gender parameter

Use the Gender parameter to manipulate the timbre of your voice to sound more male or more female in nature. Extreme settings for this parameter will sound very unnatural – but that may be just the effect you are looking for!

Transducer page (6/7)

The Transducer effect block modifies the sound by adding various filters and overdrive components.

Style parameter

Use the Style parameter to define the Transducer effect style.

Choose from the following styles:

- ▶ Megaphone
- ▶ Radio
- ▶ On The Phone
- ▶ Overdrive
- ▶ Buzz Cut
- ▶ Stack
- ▶ Tweed
- ▶ Combo

Drive parameter

Use the Drive parameter to control the amount of overdrive applied to the signal. More drive will distort the signal and create megaphone-style effects.

Filter parameter

Use the Filter parameter to apply an EQ filter that will make the Transducer sound “thinner” or more “muddy”, depending on the preset. Thinner filter settings sound more like a radio or walkie-talkie.

Transducer Advanced page

To enter the Advanced Transducer page, press and hold any of the lit blue LED soft buttons.

Routing parameter

Use the Routing parameter to define which signal components should be affected by the Transducer effect.

Output setting

With the Output setting, the effect is applied to the lead voice and any voices derived from it, like Harmony or Doubling.

FX setting

With the FX setting, the effect is only applied to voices within an effect. For example, if you are using a delay, no effect will be applied to the initial “tap” of the delay, but subsequent “taps” will have the Transducer effect applied.

Gate Threshold parameter

Transducer effects are very prone to feedback via a PA or monitor. The Transducer block has an independent gate that can be set to help alleviate feedback.

Raising the threshold will cause the effect to “kick in” at a higher input volume, which can help avoid feedback while you are not singing.

For more information about feedback and tips on how to reduce or eliminate it, check out this [Craig's Corner](#) video:

youtube.com/watch?v=VIN1RJ4gcAo

Gain parameter

Use the Gain parameter to control the overall level of the transducer effect.

μMod page (7/7)

μMod stands for “micro modulation”. The μMod effect block is used for creating effects that modulate the signal, such as flanger, phaser, panning or chorus.

Style parameter

Use the Style parameter to select the style of the μMod effect.

Choose from the following styles:

- ▶ Micromod Clone
- ▶ Micromod Wider
- ▶ Thicken
- ▶ Light Chorus
- ▶ Medium Chorus
- ▶ Wide Chorus
- ▶ Mono Chorus
- ▶ Fast Rotor
- ▶ Panner
- ▶ Flanger
- ▶ Flange Feedback
- ▶ Flange Negative
- ▶ Mono Flange
- ▶ Soft Flange
- ▶ Tube
- ▶ Up Tube
- ▶ Down Tube
- ▶ Down & Up Tube
- ▶ Rise and Fall
- ▶ Auto Filter

- ▶ Underwater

- ▶ Cylon Mono
- ▶ Cylon Stereo
- ▶ Alien Voiceover

Level parameter

Use the Level parameter to controls the overall level of the μMod effect. Press the right-middle soft button to select this parameter and use the control knob to adjust the level. 0 dB is the maximum volume for the effect.

Speed parameter

Use the Speed parameter to adjust the speed at which “oscillation” or modulation occurs within the effect.

Guitar FX button/section

Press the GUITAR FX button to open the Guitar Effects menu, which is comprised of five pages. Each page contains the parameters controlling the respective vocal effect block.

Guitar effects are handled in the same way as vocal effects – see “[Vocal FX button/section](#)”.

Guitar sounds in Play Electric are customizable “per preset” – meaning that you can simultaneously change your vocal and guitar sounds when you change presets.

Each guitar effect has a Control parameter, similar to those in the Vocal FX section. However, for guitar effects, the Control parameter only has On and Off settings. There is no Guitar HIT setting/functionality.

Guitar amp page (1/5)

Style parameter

Use the Style parameter to select the style of the amplifier simulation effect. Various amplifier simulations are available to cover a wide range of tastes and styles.

If you wish to have no amp simulation, simply turn the Control parameter to OFF.

Choose from the following styles:

- ▶ Clean Brit
- ▶ Cali Clean
- ▶ UK Clean
- ▶ Deep Clean
- ▶ Bright Switch
- ▶ Warm
- ▶ Little Thing
- ▶ Chicken Picker
- ▶ Brit OD
- ▶ AC Crunch
- ▶ Chunky Brit
- ▶ Lil Champion
- ▶ Chime Drive
- ▶ 2x12 Combo
- ▶ 4x12 Crunch
- ▶ Swamptone
- ▶ Nasaltone
- ▶ Brown
- ▶ Scooped
- ▶ Metallic
- ▶ Dark Matter
- ▶ OD Pedal
- ▶ Dark OD Pedal

- ▶ Distortion Pedal
- ▶ Acoustic
- ▶ Acoustic Shape

Drive parameter

The Drive parameter controls the level going to the preamplifier stage of the amp simulation.

This control is typically used to control the amount of distortion in the amp. Lower values are more “clean”.

Level parameter

The Level parameter controls the level of the power amplifier stage of the amp simulation.

This control is often called “Master” or “Volume” on a real-world amplifier and controls the output volume of the amp.

Advanced Amp page

To enter the Amp advanced editing menu, press and hold any lit “soft button” when on the Amp page.

Treble parameter

The Treble parameter controls the level of a high-band EQ meant to emulate a “high” or “treble” control on an amplifier.

Mid parameter

The Mid parameter controls the level of a mid-band EQ meant to emulate a “middle” or “mid” control on an amplifier.

Bass parameter

The Bass parameter controls the level of a low-band EQ meant to emulate a “low” or “bass” control on an amplifier.

Mid Freq parameter

The Mid Freq parameter controls the operating frequency of the mid-band EQ.

Guitar compressor page (2/5)

Use the Compressor effect block to control the dynamic range of your guitar signal, enhancing attack, sustain or both.

Style parameter

Use the Style parameter to select the type of compression to use. These styles allow you to choose between various common guitar compressor setups, such fast or slow attack times and more or less aggressive compression ratios.

Choose from the following styles:

- ▶ Subtle Tube
- ▶ Subtle Sustain
- ▶ Sustain Attack
- ▶ Sustain Pop

Amount parameter

Use the Amount parameter to adjust the amount of compression added to the signal. This parameter is similar in nature to the “Level” control in other effects, but controls different parameters “under the hood”.

Makeup parameter

After changing the “Amount” setting, you may need to “make up” reduced gain to maintain your output signal level. Makeup gain allows you keep your signal levels consistent from the input of the compressor to the output.

Typically, you set this control by ear when you don't have input and output meters (like some fancy compressors do).

Guitar μMod page (3/5)

Just like the vocal effect of the same name, the μMod effect block in the Guitar section applies minute pitch and timing variations to add depth or thickness to the sound. μMod stands for “Micro Modulation”.

Style parameter

Use the Style parameter to select the style of the μMod effect.

Choose from the following styles:

- ▶ Corona Chorus – based on the [Corona Chorus](#) from TC Electronic
- ▶ Corona Fast
- ▶ Corona Slow
- ▶ Vortex Flanger – based on the [Vortex Flanger](#) from TC Electronic
- ▶ Vortex Fast
- ▶ Silky Detune
- ▶ Medium Detune
- ▶ Mono Chorus
- ▶ Fast Rotor
- ▶ Stereo Panner
- ▶ Flanger
- ▶ Flange Feedback
- ▶ Flange Negative
- ▶ Mono Flange
- ▶ Soft Flange
- ▶ Tremolo
- ▶ Auto Filter

Mix parameter

Use the Mix parameter to controls the overall level of the μMod effect.

Speed parameter

Use the Speed parameter to adjust the speed at which “oscillation” or modulation occurs within the effect. Slower speeds often result in more noticeable effects.

Guitar Delay page (4/5)

Similar to the Delay effect in the Vocal FX section, Delay allows you to add echo style effects to your guitar. Tempo for the Guitar Delay block is shared with the Vocal Delay block, allowing you to keep guitar and vocal delays in time with each other.

- ▶ Ping Pong FX
- ▶ Multitap
- ▶ 300 ms
- ▶ Long & Thin
- ▶ Reverb Tank

Level parameter

Controls the level of Delay effects.

Feedback parameter

Feedback defines how many “taps” of echo there are, which means “how long the delays last” before fading away.

Style parameter

Defines the way the delay sounds, including its division (1/4 note, 1/8th note etc.)

Choose from the following styles:

- ▶ Flashback 2290
- ▶ Flashback analog
- ▶ Flashback Tape
- ▶ Flashback LoFi
- ▶ Flashback Slap
- ▶ Edge-Y Mod
- ▶ Analog Modular
- ▶ Half
- ▶ Quarter
- ▶ Dotted 1/8
- ▶ Ping Pong

Delay Advanced page

On the Delay Advanced page, there are two additional controls:

Tempo parameter

Here, you can manually set your tempo and save that setting with your preset.

If you have selected a “Slap” or “Time” delay style, you will see a time in milliseconds (ms) rather than a BPM value.

If Global Tap Tempo in the Setup menu is set to ON, manually set/saved tempo settings will be temporarily overridden (but not overwritten).

- ▶ Cell Phone
- ▶ Lo Fi
- ▶ Hi Cut 1
- ▶ Hi Cut 2
- ▶ Hi Cut 3
- ▶ Low Cut 1
- ▶ Low Cut 2
- ▶ Low Cut 3

Division parameter

Use the Division parameter to manually select a Delay Division. There are more options here than you will find in the Style list.

Dly Filter Style parameter

Use the Dly Filter Style parameter to add filters to the delay signal that will simulate different types of delay hardware or sound.

Choose from the following styles:

- ▶ Digital
- ▶ Tape
- ▶ Analog
- ▶ Radio
- ▶ Megaphone

Guitar Reverb page (5/5)

Reverb creates “room” around a signal. Essentially, it puts your dry guitar into a simulated space, small or large, to give a sense of depth and distance.

Style parameter

Use the Style parameter to determine the size of the simulated space and also the type of material being used to create the simulation.

Choose from the following styles:

- ▶ Hall of Fame – Hall
- ▶ Hall of Fame – Plate
- ▶ Hall of Fame – Room
- ▶ Hall of Fame – Church
- ▶ Hall of Fame – Spring
- ▶ Hall of Fame – Ambience
- ▶ Hall of Fame – Lofi
- ▶ Hall of Fame – Tile
- ▶ Smooth Plate
- ▶ Reflection Plate
- ▶ Thin Plate
- ▶ Bright Plate
- ▶ Real Plate
- ▶ Real Plate Long
- ▶ Jazz Plate
- ▶ Quick Plate
- ▶ Soft Hall
- ▶ Amsterdam Hall
- ▶ Broadway Hall
- ▶ Snappy Room
- ▶ Library
- ▶ Dark Room

- ▶ Music Club
- ▶ Studio Room
- ▶ Bouncy Room
- ▶ Cozy Corner
- ▶ Bright Chamber
- ▶ Wooden Chamber
- ▶ St. Joseph Church
- ▶ Dome Chapel
- ▶ Hockey Arena
- ▶ Museum
- ▶ Indoor Arena
- ▶ Warehouse
- ▶ Thin Spring
- ▶ Full Spring

Level parameter

Use the Level parameter to control the overall level of the reverb. Press the right-middle soft button to select this parameter and use the control knob to adjust the level.

0 dB is the maximum volume for the effect.

Decay parameter

Use the Decay parameter to define how long it takes for the reverb to fade away. Longer Decay times generally sound like large spaces, while shorter times sound like small spaces.

Each Reverb style has its own decay time, but you can change it.

Mix button/section

Press the MIX button to enter the Mix menu, where various audio signal levels within your Play Electric can be adjusted.

Mix page (1/2)

Harmony parameter

Use the Harmony parameter to control the overall level of all voice-generating effect blocks like Harmony and Double.

Guitar Level parameter

Use the Guitar Level parameter to adjust the output level of the guitar signal. This control is also dependent on the Guitar input level, set in the Setup menu. Make sure to set your input level according to the instructions and use the Guitar Level parameter to set your “overall guitar output volume”.

Out Level parameter

Use the Out Level parameter to control the overall output level of your Play Electric.

Delay/Reverb level parameter

Use the Delay/Reverb level parameter to change the level of Delay/Reverb effects across all presets.

This control is useful if you find yourself in a performance environment that has a lot (or very little) natural reverb and you’d like to “tune” your sound to that room without having to manually adjust all presets.

Headphone Level parameter

Use the Headphone Level parameter to adjust the volume of the headphone output.

RoomSense parameter

Use the RoomSense parameter to control the amount of ambient RoomSense sent to the headphone mix. This parameter does NOT enable RoomSense to be sent to the main mix, as this would cause feedback.

Aux Level parameter

The Aux Level parameter will only be shown if a signal source is connected to the Aux connector.

Use the Aux Level parameter to adjust the level of the signal received at the Aux input.

If you prefer to only hear the Aux input over your headphones, go to the Setup/Output menu and change “Aux to Main Out” to OFF.

If you would like the Aux input to “listen” for chord information but not be heard at via the Main Out or Headphone outputs, set the Aux Level parameter to OFF.

Mix page (2/2)

USB Level parameter

Use the USB Level parameter to adjust the level of the incoming USB audio signal (such as backing tracks).

This control has no effect if Input is set to USB and you are post-processing the received signal via a DAW. The track controls within the DAW itself will determine the output level (and therefore the Play Electric USB input level).

The Looper

What is looping?

At its core, looping is the simple process of taking a small audio recording and playing it over and over seamlessly. When coupled with creativity and musical ability, the results can be astonishing.

Basic looping concepts

Most loopers – including the one in Play Electric – are built around a few basic controls: Record, Play and Overdub. You should be familiar with Record and Play. Overdubbing is the process of recording another “take” to a recording without deleting the first take.

Using the Play Electric looper

Activating Loop mode

To enter Loop mode, press and hold the DOWN and UP footswitches simultaneously.



The Loop mode screen

In Loop mode, the *DOWN* footswitch controls the following functions:

- ▶ PLAY
- ▶ REC (Record)
- ▶ Overdub
- ▶ Undo (removes the most recently recorded Overdub, if there is one)

In Loop mode, the *UP* footswitch controls the following functions:

- ▶ STOP
- ▶ ERA (HOLD to erase)

Exiting Loop mode

To exit Loop mode, tap the HIT footswitch. You may exit Loop mode while a loop is still playing. That means you can choose a new vocal sound – and then re-enter Loop mode to add a new overdub to the loop.

Recording your first loop

- ▶ Press the footswitch assigned to REC/PLAY/ODUB to start a recording.
- ▶ Press the footswitch again to finish recording and immediately begin playback.
- ▶ Alternatively, you can press the footswitch assigned to STOP/ERA(se) to finish recording and *not* switch to playback.
- ▶ Press the REC/PLAY/ODUB footswitch again to record an overdub (another part) onto the initial recording. You can overdub as many times as you want to.

What gets recorded as part of your loop?

Use the Loop Input parameter in the SETUP Menu to define which parts of your performance are captured by the looper. For example, you can set the looper to only record guitar, not vocals, or vice versa, or both.

Here is a good example of why you might want to capture just the guitar while singing and playing your instrument.

You have an 8 bar chord progression that you sing a verse over. After the second 8 bar “verse” section, you want to play a guitar solo. Wouldn’t it be cool if the rhythm guitar part kept playing as you perform the solo? With a looper, you can do just that!

1. Set the looper to record “Guitar”.
2. Play the verse as you normally would.
3. When you get to the second round of the chord progression, keep singing and playing, but press REC on the Looper.

4. At the end of the chord progression, press REC again. Play Electric will immediately begin to play back the guitar chord progression you just recorded.
5. Begin playing your guitar solo over the recorded chord progression.
6. When the solo section ends, simply stop the loop by pressing the Stop/Era(se) footswitch and play/sing again.

This is a very basic example of how a loop can be seamlessly incorporated into your performance. A subtle loop coming “out of nowhere” can be a great experience for your audience.

Stopping loop playback

Press the Stop/Era(se) footswitch to stop loop playback.

Erasing the loop

Press and hold the Stop/Era(se) footswitch to erase the loop completely.

Loop Undo/Redo

To undo a loop overdub, press and hold the DOWN footswitch.

To restore the overdub (Redo), press and hold the DOWN footswitch again. Restoring a loop overdub this way is only possible if you have not recorded another overdub after using Undo.

You can use Undo when you have made a mistake – just remove the overdub that went wrong

and do it again. You can also use Undo and Redo creatively for a part/track that you would like to come and go: Record a basic chord progression for a song, add a catchy melody as an overdub, undo that overdub so you can sing the verse and use Redo to bring the melody back for the chorus.

Looping tips

When it comes to looping, practice is the key!

You might notice that your loops have a small gap between the end of the phrase and when the loop restarts. This happens when you mis-time pressing the PLAY/REC/ODUB button(s). Pay careful attention to coordinating your button press with the down beat, so that the loop beginning and end align seamlessly.

Experiment with exiting Loop mode and picking a different vocal sound for the next ODUB layer. You can get some great results by simply varying the sounds that are part of the loop.

When adding an ODUB layer, you can record multiple passes (ODUB parts) without starting and stopping the Looper. This allows you to add numerous parts, which can all be removed with a single undo action (they can also be brought back by repeating the undo action).

Using a Switch-3 for looping

Connecting a Switch-3 (optional) to your Play Electric will give you permanent access to looping without having to use the DOWN and UP footswitches. It frees up those footswitches, so you can assign them to key/scale selection. This will also allow you to change presets without having to go in and out of Loop mode.

The Switch-3 buttons are mapped as follows:

- ▶ Rec/Play/Odub
- ▶ Stop/Erase (Hold for Erase)
- ▶ Undo

The benefit of having the Undo feature assigned to a separate footswitch is the ability to perfectly time your undo instead of waiting a moment for a “hold” to be registered.

Play Electric footswitch assignments

when using a Switch-3

When a Switch-3 is plugged in and Switch-3 mode is set to Looping, key/scale selection is automatically assigned to the DOWN and UP footswitches of your Play Electric.

When the Switch-3 is unplugged, the DOWN and UP footswitches revert to whatever the UP/DN setting was prior to connecting the Switch-3.

For more info on Switch-3, check out:

tc-helicon.com/products/switch-3/

Troubleshooting

Sometimes, things just aren't working the way you expect them to. Here are a few things to keep an eye on.

General troubleshooting

"I'm singing, but I can't hear anything!"

- ▶ Make sure you have turned up the input gain, so that the input LED is lighting green.
- ▶ Have you plugged in your headphones or connected to a PA?
- ▶ Is the PA turned on, connected to its speakers and receiving signal?
If not, check your PA manual to make sure everything is set up correctly.
- ▶ Are you using a condenser mic?
- ▶ Did you make sure to change the microphone type to condenser in the setup menu?

"I have turned on the harmony effects, but they don't sound right."

- ▶ Did you select a key/scale?
- ▶ Is it the right key for the song?
- ▶ If you are using RoomSense to listen for Key information, make sure it's close to whichever instrument is playing the most clearly defined chords (Rhythm Guitar, Piano etc.).
- ▶ If you are using an MP3 player to sing along with tracks, set the AUX IN TYPE parameter in the Setup Menu to TRACKS. Some tracks

will work better for NaturalPlay than others, based on the mix and instrumentation of the recording.

- ▶ If you are using Guitar to control harmony, make sure you have got the Key set to AUTO on the harmony effect page.

"None of the effects seem to be making any changes to the sound!"

- ▶ Is the unit in Talk/Tuner mode?
- ▶ If the HIT LED is flashing, tap it once to return to normal operation.

"How do I restore all of the factory presets?"

- ▶ When powering up the unit, press and hold the two "arrow" buttons next to the Control Knob. **Any changes you have made to presets will be erased!**
- ▶ Back up your custom presets via VoiceSupport.

"How do I perform a full factory reset?"

- ▶ When powering up the unit, press and hold "Back" and "store".
- ▶ Any changes you have made to presets or setup information will be erased.
- ▶ Back up your custom presets and setup data via VoiceSupport.

"VoiceSupport is a bit confusing – where can I learn more about it?"

- ▶ Go to tc-helicon.com/products/voicesupport/support/

Appendix

TC-Helicon scales reference chart

Harmony notes in the Key of C

Scale	Sung Note	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b	B
Chosen voicing/interval													
Maj 1	3rd (High/Lower)	E	nc	F	nc	G	A	nc	B	nc	C	D	D
Maj 1	5th (Higher/Low)	G	nc	A	nc	B	C	nc	D	nc	E	F	F
Maj 2	3rd (High/Lower)	E	nc	F	nc	G	A	nc	C	nc	C	D	D
Maj 2	5th (Higher/Low)	G	nc	A	nc	C	C	nc	E	nc	E	F	F
Maj 3	3rd (High/Lower)	E	nc	F	nc	G	A	nc	Bb	nc	C	D	D
Maj 3	5th (Higher/Low)	G	nc	A	nc	Bb	C	nc	D	nc	E	F	F
Min 1	3rd (High/Lower)	E _b	nc	F	G	nc	Ab	nc	Bb	C	nc	D	nc
Min 1	5th (Higher/Low)	G	nc	Bb	Bb	nc	C	nc	D	E _b	nc	F	nc
Min 2	3rd (High/Lower)	E _b	nc	F	G	nc	A	nc	Bb	C	nc	D	nc
Min 2	5th (Higher/Low)	G	nc	A	Bb	nc	C	nc	D	E _b	nc	F	nc
Min 3	3rd (High/Lower)	E _b	nc	F	G	nc	Ab	nc	B	C	nc	D	nc
Min 3	5th (Higher/Low)	G	nc	A	Bb	nc	C	nc	D	E _b	nc	F	nc

Highlighted cells show differences between scales.

“nc” = no change

Links

Support resources

There is a large FAQ Knowledge base and forum for you to use. Please make sure to search for your particular issue there before submitting a support ticket. It's likely that someone has already addressed the question and posted an answer.

- ▶ **TC-Helicon Support:**
tc-helicon.com/support/
- ▶ **TC-Helicon user forum:**
support.tc-helicon.com/categories/20073491-User-Forum/
- ▶ **TC-Helicon Play Series forum:**
support.tc-helicon.com/forums/21577876-Play-Series/
- ▶ **TC-Helicon warranty information:**
tc-helicon.com/support/warranty/

TC-Helicon on...

- ▶ **the web:**
tc-helicon.com/
- ▶ **Facebook:**
facebook.com/tchelicon
- ▶ **Twitter:**
twitter.com/tchelicon
- ▶ **YouTube:**
youtube.com/tchelicon

TC-Helicon newsletter

For more information about your TC-Helicon products, latest news and updates, tips and tricks, subscribe to our newsletter:

- ▶ tc-helicon.com/subscribe

Technical specifications

Features	
Vocal Effects	Harmony, Double, Delay, Reverb, HardTune, Transducer, μ Mod
Guitar Effects	Amp and Speaker Simulation, Compressor, μ Mod (including TC Electronic Corona Chorus), Delay (including TC Electronic FlashBack Delay), Reverb (including TC Electronic Hall of Fame Reverb)
VLOOP™	
Control	Preset Up/Down and HIT footswitches Graphic LCD display Bump-protected Mic Level knob Dual-color backlit buttons Dedicated Effect Block On/Off buttons
Design	
Size and weight	
Height	1.8 inches (45 mm)
Width	7.9 inches (200 mm)
Depth	6.1 inches (156 mm)
Weight	2.1 lb. (0.95 kg)
Construction	Dual die-cast clamshell design Acrylic lens Punch-cut metal connection panel Rubberized footings Backlit graphic LCD display
Connections	
Analog Inputs	
Connectors, balanced	Microphone input: XLR Aux input: 1/8" stereo mini jack
Connectors, unbalanced	Guitar input: 1/4"
Impedance	Balanced/Unbalanced: Mic.: 2.14/1.07 kOhm
Mic Input Level @ 0 dBFS	-42 dBu to +13 dBu
EIN @ Max Mic Gain Rg = 150 Ohm	-127 dBu
Mic SNR	> 104 dB
Phantom Power	+48 V (on/off via Setup menu)
Aux Input Level @ 0 dBu	+2 dBu
A to D Conversion	24 bit, 128 x oversampling bitstream, 110 dB SNR A-weighted
Analog Outputs	

D to A Conversion	24 bit, 128 x oversampling bitstream, 115 dB SNR A-weighted
Connectors, balanced	XLR
Connectors, unbalanced	Guitar output and Guitar thru: 1/4"
Output Impedance Balanced/ Unbalanced	300/150 Ohm
XLR Output 0 dBFS	+2 dBu
Dynamic Range	> 109 dB, 20 Hz to 20 kHz
Frequency Response	+0.30/-0 dB, 20 Hz to 20 kHz
Headphone Out	1/8" Mini stereo jack
Control	
USB	USB-B (Firmware Updates, Preset Management, audio I/O)
Pedal	1/4" TRS phone jack
Details	
Power	
External Power Supply Mains Voltage Input	100 to 240 VAC, 50 to 60 Hz (auto-select) 12 V DC 0.4 A max output
Power Consumption	< 14 W
Safety	
EMC – Complies with	EN 55103-1 and EN 55103-2, FCC part 15, Class B, CISPR 22, Class B
Safety – certified to	IEC 65, EN 60065, UL6500 and CSA IEC 65, EN 60065, UL6500 and CSA
Operating Requirements	
Operating Temperature	32° F to 122° F (0° C to 50° C)
Storage Temperature	-22° F to 167° F (-30° C to 70° C)
Humidity	Max. 90 % non-condensing

