

VOICELIVE Touch 2

REFERENCE MANUAL

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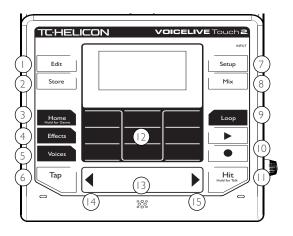
ABOUT THIS MANUAL

This is version 1.0 of the reference manual for the VoiceLive Touch 2.

The information in this manual takes up where the VoiceLive Touch 2 Quick Guide left off, so **please make sure to read the VoiceLive Touch 2 Quick Guide first.**

To make the most of the information in this reference manual, you should be able to navigate the VoiceLive Touch 2 as described in the Quick Guide.

This document has been optimized for on-screen reading. If you still have questions about the product after reading this manual, please get in touch with TC-Helicon Support: http://support.tc-helicon.com/home



- I. Edit button
- Store button
- 3. Home / Hold for Genre button
- 1. Effects button
- . Voices button
- 6. Tap button
- 7. Setup button
- 8. Mix button
- 9. Loop button
- 10. Play & Record buttons (Loop transport controls)
- II. Hit / Hold for talk button
- 12. Matrix (9 buttons)
- 13. Slider FX Bar
- 14. Arrow buttons

THE MIX MENU

This chapter of the VoiceLive Touch 2 reference manual introduces the Mix menu, where you set up the levels of the signals coming into the device, the levels of the effects and the output levels.

There are two pages of faders that control global mix levels of the various inputs and generated effects within the device:

- the FX Mix page and
- the Output Mix page.

To switch Mix pages, either tap the Mix button or use the Arrow buttons on the Slider FX bar.

To display mix levels, tap on any Matrix button corresponding to a mix level. The value will be shown briefly.

FX Mix page

Guitar parameter

The Guitar parameter sets the level of the guitar signal plus all applied effects.

Aux parameter

The Aux parameter sets the level of audio received on the Aux input jack.

Roomsense parameter

The Roomsense parameter sets the level of the Roomsense microphones *for the headphones only.* When the Roomsense parameter in the Setup menu is set to Voice, this control is unavailable.

Harmony parameter

The Harmony parameter trims the global mix level of the Harmony and Doubling effects. Factory presets were created with this parameter set to 0 dB. There is an additional 6 dB of gain available.

Delay/Reverb parameter

The Delay/Reverb parameter trims the global mix level of the Delay and Reverb effects. Factory presets were created with this parameter set to 0 dB. There is an additional 6 dB of gain available.

Loops parameter

The Loops parameter sets the level of loop playback. Note that if you set this parameter below 0 dB, your initial recording pass will sound louder than the looped playback, though this may be desirable.

Using the Loops parameter creatively

The Loops parameter in the FX Mix page can also be useful for fading out loop playback: Slowly slide your finger along the Slider FX bar while the Loops parameter is highlighted, then release. Once you get the slide rate correct, the level will continue to drop. The same is true for *fading in* loop playback.

Output Mix page

USB In parameter

The USB In parameter sets the mix level for the audio signal arriving from a computer via the USB connector.

USB Out parameter

The USB Out parameter sets the output level of the overall main mix output going to a computer via USB.

Headphone parameter

The Headphone parameter controls headphone volume. This level is independent of the Analog Out control.

Analog Out parameter

The Analog Out parameter sets the main output level for the XLR and TRS Left and Right outputs. If you set the Analog Out parameter to 0 dB and with the input gain set correctly, the outputs will deliver approximately the same level as a microphone. There is 6 dB of additional gain available from this level control if required. Please be careful when raising the output level as feedback can occur.

THE STORE MENU

Preset edits can be saved for later use and named in the Store menu. Please note that changes to parameters on the **Setup** and **Mix** pages do not require storing.



- 1. Selects the preset destination number.
- 2. Deletes the currently highlighted letter.
- 3. Selects the letter for the current cursor position.
- 4. Inserts empty letter at the current cursor position.

When you have selected either the Delete, Letter or Insert option, you can use the arrow buttons on the Slider FX Bar to set the cursor position.

THE EDIT MENU

This chapter of the VoiceLive Touch 2 reference manual details the nine effect blocks of the VoiceLive Touch 2, the editing screens and all effect parameters.

Chapter overview

Making changes to the preset effects in VoiceLive Touch 2 and storing them to use later is called editing. The Edit menu is where you make these changes.

Anatomy of a preset

Each VoiceLive Touch 2 preset is made up of:

- nine different vocal effects
- an assignment for the Slider FX bar.

You can...

- turn effects on or off within presets,
- edit them and
- store each preset to any of 300 preset locations for recall later.

There is no limit to how many of the effects shown in the Matrix display can be active at one time.

Editing basics

Locating the Edit menu

A single menu containing all effect pages can be accessed in two ways:

- Tap the Edit button, then use the arrow buttons to scroll left or right to see the desired effect's edit page.
 - For convenience, the edit page you were on previously is always shown first when you tap the Edit button.
- Tap the Effects button then hold the Matrix button corresponding to an effect to jump directly to the edit page for this effect. For example, to access the Mod Edit page, tap and hold the upper left Matrix button.

When you access an effect page using the Matrix buttons, the effect will temporarily switch on/off state before displaying the edit menu. If you do not want to interrupt audio during effect editing, use the Edit button to access edit the menu instead

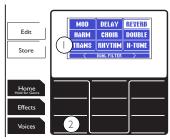
Main and Advanced edit pages

Most effects have a main page and an advanced edit page containing additional settings. You can switch between these two pages by tapping the Edit button.

The main effect pages are numbered to help with navigation such as "Transducer 7/9" showing this page is 7th of a total of 9 effect pages. When no arrow is shown to the left or to the right of the current effect page, you have reached the first or last page in the menu.

Selecting edit parameters with the Matrix

When the Effects page is displayed, each effect shown corresponds to one of the nine Matrix buttons. In the example below, the leftmost button in the lowest row corresponds to the Transducer effect.



The leftmost button in the bottom row (2) of the Matrix corresponds to the Transducer effect (1).

Understanding effect styles

Styles allow you to quickly load different variations of a particular effect without editing a large number of individual parameters.

Most Styles have editable **modifiers** that can be stored as part of a preset – for example Speed in the Mod effect.

Understanding levels

The mix level – or "volume" – of effects and inputs is displayed in decibels (dB).

- Full level is 0 (zero) dB.
- Lower levels are shown as negative values, e.g. -10 dB.
- Off is shown as "Off".

This is true for levels displayed in all menus, including Mix, Setup and Voices.

Linked vs. unlinked effect parameters

Some edit parameters are linked and will change with the current style – e.g. Speed in the Mod effect. This ensures that the style sounds as intended when it was created.

Other parameters are not linked to the current style such as Reverb Width, which allows you to browse a number of effect styles while Width is set to mono for example.

In the following descriptions of all effect parameters, effect parameters that *are* linked to the style are shown with an asterisk (*).

Lead Level

This setting is available on the advanced edit pages of the Mod, Delay, Reverb, Harmony and Double effects. It sets your dry voice level when that individual effect is turned on. This allows a unique wet/dry mix for individual effects. When multiple effects are active, the lowest Lead Level value is used.

The Mod effect

The Mod (modulation) effect is where you will find lush chorus, detune and flanger effects plus a collection of bizarre pitch effects.

Mod effect – main edit page **Style** parameter

The Style parameter lets you select from a range of preauthored styles.

Level parameter

The Level parameter controls the output level of the effect.

Speed parameter*

The Speed parameter sets the speed of modulation *if* the currently selected style uses modulation *and* the Depth parameter is set to a value greater than zero.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Mod effect – advanced edit page

Lead Level parameter

The Lead Level parameter sets the dry voice level.

Depth parameter*

The Depth parameter sets the amount of modulation. Speed may have to be increased to hear the Depth effect.

Width parameter

The Width parameter sets the stereo pan width from mono (0%) to full (100%).

The Delay effect

The Delay effect block produces tap tempo echo, fixed time echoes and quick slap echo effects.

Delay effect – main edit page Style parameter

The Style parameter selects from a range of pre-authored styles.

All styles with the exception of Classic Slap and Set Time are synced to the tempo you have tapped in with the Tap button. Classic Slap and Set Time delay times are not controlled by the Tap tempo. These delay times are set on the Delay edit page.

Level parameter

The Level parameter controls the output level of the effect.

Feedback parameter*

The Feedback parameter sets the number of echo repeats: 0: no repeats

100: continuous/self oscillation.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Delay effect - advanced edit page

The last two parameters on this page vary depending on the current Delay style.

Lead Level parameter

The Lead Level parameter sets the dry voice level.

Filter Style parameter

The Filter Style parameter determines the tone of the echoes by applying a filter to the echo path. The filters range from none (setting "Digital") to steep (setting "Lo-Fi").

Mod to Delay parameter

The Mod to Delay parameter determines the amount of signal sent from the Mod block to the Delay block. At 0 dB, this will pass modulation effects into the echoes. Set to Off, modulation effects will not be heard in the echoes.

Width parameter

For Ping Pong and Multitap styles only, the Width parameter sets the stereo pan width from mono $(0\,\%)$ to full $(100\,\%)$.

Tempo

For Tap tempo styles only, the Tempo parameter sets the delay tempo in beats per minute. This is most useful when the Global Tap parameter (on the System page of the Setup menu) is set to Off and you want to store a pre-set tempo in each preset.

Division*

For Tap tempo styles only, the Division parameter sets the echo time to divisions of the bar.

Delay Time*

For the Slap and Set Time styles only, the Delay Time parameter sets the exact delay time from 0 to 2500 milliseconds.

The Reverb effect

The Reverb effect block contains a high-end TC Electronic reverb algorithm. Reverb simulates hearing your voice in acoustic spaces, such as a small reflective room or a large concert hall.

Reverb effect – main edit page Style parameter

The Style parameter selects from a range of pre-authored styles.

Level parameter

The Level parameter controls the output level of the effect.

Decay parameter*

The Decay parameter sets the length of time it takes for the effect to fade out.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Reverb effect – advanced edit page

Lead Level parameter

The Lead Level parameter sets the dry voice level.

Pre Delay parameter*

The Pre Delay parameter introduces a short delay between the dry audio signal and the onset of the reverb to help simulate larger spaces and separate the voice from reverb.

Width parameter

The Width parameter sets the stereo pan width from mono (0 %) to full (100 %)

Delay to Reverb parameter

The Delay to Reverb parameter determines the amount of signal sent from the Delay block to the Reverb block.

The Harmony effect

The Harmony effect block produces the famous TC-Helicon harmony sound. Your voice is multiplied up to four times at musical intervals to simulate a group of singers.

"Using the Harmony and Hardtune effects" in the Quick Guide explains the different guide methods that make the harmonies sound musically correct.

Harmony effect – main edit page Style parameter

The Style parameter selects from a range of pre-authored harmony effects.

- The styles from "High" through "Lower Choir" are called the **Naturalplay** styles. Each offers a unique voicing arrangement. These styles follow the Key setting to guide the harmony voices. See the following description of the Key parameter:
- The styles from "Lower Monks" through "Octave Down Group" are called the **Shift styles**. These styles *ignore* the Key setting.

 The four Notes styles ("Humanized", "Tight", "Male" and "Female") shift your voice to any four notes played on a connected MIDI keyboard to produce harmony. These styles ignore the Key setting.

Level parameter

The Level parameter controls the output level of the effect.

Key parameter

The Key parameter sets whether detected chords or a fixed key is used to guide the Harmony and Hardtune effects.

- When you set the Key parameter to "Auto", VoiceLive Touch 2 adjusts harmony automatically by analyzing chords detected from a connected guitar, music player, MIDI keyboard, or the Roomsense mics.
- When you set the Key parameter away from Auto (C, C#, D ... to B), VoiceLive Touch 2 will ignore chordal input and instead will be guided by a combination of the displayed key and the Major or Minor scale set in the Advanced edit page. The Key parameter continues to guide the Hardtune effect even when Harmony is off or when the selected Harmony style ignores chords (Shift or Notes styles).

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Harmony effect – advanced edit page Lead Level parameter

The Lead Level parameter sets the dry voice level.

Human Style parameter*

The Human Style parameter lets you select from a range of Humanization styles that introduce subtle and not-so-subtle variances to Harmony pitch and timing. To hear the effects of the selected humanization style, the Human Amount parameter has to be set to a value greater than zero.

Vibrato Style parameter*

The Vibrato Style parameter selects from a range of human-modeled vibrato styles that can, at moderate Vibrato Amount values, add a distinct pitch character to the harmonies.

Scale parameter

The Scale parameter applies when the Key parameter is set to a non-Auto setting to define a fixed key and scale, which is used to produce diatonic harmony.

There are three Major and three Minor scales that can work with different chord progression and melody combinations. See the following table for the Scale definitions.

Human Amount parameter*

The Human Amount parameter sets how much Humanization is applied. The *style* of humanization is defined by the Human Style parameter:

Vibrato Amount parameter*

The Vibrato Amount parameter sets how much Vibrato is applied. The *style* of the vibrato is defined by the Vibrato Style parameter.

* This parameter is linked to the currently selected style.

Scale definitions

The table below shows harmony notes in the key of ${\sf C}$ for the three major and three minor scales.

The shades cells indicate harmony intervals that illustrate the differences between scales. The abbreviation "nc" means "no change". This indicates that the harmony note will remain at the previous interval even though your sung note has changed from the adjacent upper or lower note.

			Input (Sung) Note										
		С	C#	D	Eb	Е	F	F#	G	G#	А	Bb	В
MAJI	3rd ab.	Е	nc	F	nc	G	А	nc	В	nc	С	D	D
	5th ab.	G	nc	А	nc	В	С	nc	D	nc	Е	F	F
MAJ2	3rd ab.	Е	nc	F	nc	G	А	nc	С	nc	С	D	D
	5th ab.	G	nc	Α	nc	С	С	nc	Е	nc	Е	F	F
MAJ3	3rd ab.	Е	nc	F	nc	G	А	nc	Bb	nc	С	D	D
	5th ab.	G	nc	Α	nc	Bb	С	nc	D	nc	Е	F	F
MINI	3rd ab.	Eb	nc	F	G	nc	Ab	nc	ВЬ	С	nc	D	nc
	5th ab.	G	nc	Bb	Bb	nc	С	nc	D	Eb	nc	F	nc
MIN2	3rd ab.	Eb	nc	F	G	nc	Α	nc	ВЬ	С	nc	D	nc
	5th ab.	G	nc	Α	Bb	nc	С	nc	D	Eb	nc	F	nc
MIN3	3rd ab.	Eb	nc	F	G	nc	Ab	nc	В	С	nc	D	nc
	5th ab.	G	nc	Α	Bb	nc	С	nc	D	Eb	nc	F	nc

Scales definition table.

Harmony and the Voices menu

Tapping the Voices button enters a menu where you can choose combinations of the nine harmony "voicings". **Voicings** are pre-set pitch intervals between your lead voice and a harmony voice generated by the VoiceLive Touch 2. The Voices menu offers the quickest way to experiment with harmony arrangements.

To hear the voicings, ensure the Harmony block is on in the Effects menu. Up to four voices may be active at a time. When four voices are active, turning on an additional voice will turn off one of the four active voices.

When a **Notes** harmony style is loaded, pressing the Voices button will **not** display voicing selection. With Notes styles, the MIDI notes you play determine the voicing.

Each preset may have a different selection of voicings and their names and intervals can vary according to the combination of Harmony Style and Key as shown in the table following.

The Voice Edit pages 1/9 through 9/9

Up to nine different voicings are possible, though only four may be active at one time. The following describes the parameters available for each voicing button.

To edit a voicing selection, tap the Voices menu button and hold any voicing button.

Level parameter

The Level parameter sets the output level of the current voicing.

Pan parameter

The Pan parameter sets the stereo placement of the voicing.

Porta (portamento) parameter

The Porta parameter sets values up to 200 ms (milliseconds) that slow pitch transitions as you sing from note to note. Values from 30-70 can help "humanize" harmonies.

(NP, Scale, Shift) Voicing parameter

This parameter sets the voicing interval. The name of this parameter and the value range changes according to the table following.

Gender parameter

The Gender parameter determines whether the voicing has deeper, male characteristics (values lower than 0), or female characteristics (values higher than 0).

Smooth parameter

Setting the Smooth parameter to low values compresses the pitch variations of your singing as they apply to the harmony voices. High values follow your singing more closely.

This parameter is used to differentiate your dry lead voice's pitch against the harmonies and serve to increase humanization. This table shows how Harmony style and the value of the Key parameter affect voicing selection:

Style range	Key parameter	Voicing names	Harmony type
"High" to "Lower Choir"	Auto	2 Oct Dn, Oct Dn, Bass, Lower, Low, Uni, High, Higher, Oct Up	Naturalplay (NP)
"High" to "Lower Choir"	СВ	-2ve,72, -1ve, -7th2nd, Uni, 2nd7th, +1ve, ++2++7th, +2ve	Scale

Style range	Key parameter	Voicing names	Harmony type
"Lower Monks" to "Octave	(Ignored)	-24, -23 Uni +24	Shift
Down Group"			

Naturalplay, Scale and Shift harmony Naturalplay

Most of the factory presets in VoiceLive Touch 2 are set to Naturalplay. Naturalplay is the easiest method of producing musically correct harmony over the largest number of chord sequences and melodies. Naturalplay follows the moment-by-moment chord changes from an instrument or the Roomsense mics to determine which harmony note is best for your current sung note.

Naturalplay also determines which of the Guitar, Aux input, MIDI input or Roomsense inputs is currently active and should be used for harmony guidance. This process is *dynamic and automatic* – which allows you to play guitar in one song then switch to a MIDI keyboard in the next without changing any parameters. When two or more inputs are simultaneously active, a pre-set hierarchy will choose one.

Scale

When you change the Key setting away from Auto, the moment-by-moment harmony guidance described above is ignored in favor of a fixed Key and Scale that you set. This is known as Diatonic harmony. A single Key and Scale e.g. E Maj2, is typically used for a whole song or section when no instrument is available or when the sound of Scale harmony is preferred.

The pitch interval between your voice and a generated harmony voice varies between 3, 4 or 5 semitones away, depending on the scale tone you're singing at any moment. This produces more harmony note changes per octave than Naturalplay and can sound uncanny in its realism. The downside is that Scale harmony works for fewer chord change and melody combinations than Naturalplay, since it is not "listening" for the ongoing chords in your music. For good results with Scale harmony, avoid 5th voicings and, when a Major key is called for, use the Maj 2 scale.

Shift

With Shift harmony, intervals are solidly fixed. This is in contrast to Naturalplay and Scale harmony, where the pitch interval between your voice and the harmony voices varies according to

chordal input or scale rules. Once you have specified a voicing interval, that harmony voice will remain at exactly that interval no matter what notes you sing.

In the factory presets, Shift mode is mostly used to produce group unison, octaves or 5th intervals. Via the Voices menu, you are able to choose other intervals from I semitone to 2 octaves above or below.

When using voicings other than octaves and fifths, Shift harmony can create unusual voicings and interesting sonic experiments, but it is usually not used for creating typical harmony sounds.

The Choir effect

The Choir effect emulates the detuning, small timing variances and chorusing effects that occur when several people sing together in groups. New with VoiceLive Touch 2 is the ability to apply this thickening effect to both your lead voice and the Harmony and Doubling voices.

Choir effect edit page

Style parameter

The Style parameter selects from a range of pre-authored styles.

Level parameter

The Level parameter controls the output level of the effect.

Lead/Harmony Balance

In presets where your lead voice is turned up and the Harmony and/or Doubling effects are on, the Lead/Harmony Balance parameter lets you tailor the amount of Choir effect on either.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

For this effect, no Advanced edit page is available.

The Double effect

"Doubling" is a time-consuming recorded effect to thicken a singer's voice by having them overdub the same melody several times. The Double effect in VoiceLive Touch 2 recreates this instantly by creating up to four copies of your voice and applying subtle pitch and timing variations.

Double effect – main edit page Style parameter

The Style parameter selects from a range of pre-authored styles.

Level parameter

The Level parameter controls the output level of the effect.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Double effect – advanced edit page Lead Level parameter

The Lead Level parameter sets the dry voice level.

Human Style parameter*

The Human Style parameter selects from a range of Humanization styles that introduce subtle and not-so-subtle variances to pitch and timing. To hear the effects of the selected humanization style, the Human Amount parameter has to be set to a value greater than zero.

Human Amount parameter*

The Human Amount parameter sets how much Humanization is applied. The *style* of humanization is defined by the Human Style parameter:

The Transducer effect

The Transducer effects block uses distortion and steep filters to emulate the sound of radios, phones and devices that generally degrade the quality of an audio signal.

A note about feedback

Sustained squealing (also known as feedback) can occur when the Transducer effect is active and the mic is near a PA speaker or monitor. Each Transducer style has a slightly different susceptibility to feedback. In the case of a particular preset/Transducer style causing feedback, lower the output level of the Transducer effect and try raising the Gate Threshold described below.

Transducer effect – main edit page Style parameter

The Style parameter lets you select from a range of preauthored styles. The last style, "Beatbox", is unique in that it temporarily overrides the global Tone feature to restore bass frequencies specifically for creating bass-heavy vocal beatboxing. **Drive parameter***

The Drive parameter adjusts the amount of distortion for the current style.

Filter parameter*

The Filter parameter adjusts the tone of the current style with the application of steep filters (EQ). Each style has it's own filter sound.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Transducer effect – advanced edit page Routing parameter

The Routing parameter allows you to choose where to apply Transducer filtering. For example, you may want to add distortion to the lead voice, but not the harmony voices. The options are listed below:

Output setting

When the Routing parameter is set to "Output", the lead vocal and all its effects are fed through the Transducer.

FX-Lead setting

When the Routing parameter is set to "FX-Lead", the Transducer effect applies only to effects *fed* by the lead voice: Mod, Delay, Reverb and Choir.

FX-Harmony setting

When the Routing parameter is set to "FX-Harmony", the Transducer effect applies only to effects *fed* by the Harmony and Double voices: Mod, Delay, Reverb and Choir. *Lead setting*

When the Routing parameter is set to "Lead", the Transducer effect applies only to the lead voice and its effects.

Harmony setting

When the Routing parameter is set to "Harmony", the Transducer effect applies only to the Harmony and Double voices and their effects

Low Cut parameter*

The Low Cut parameter adjusts the frequency of the low cut filter applied by the current style. This and the High Cut filter are steep (4 pole) filters.

Gate Threshold parameter

This gate protects against feedback by shutting off the input signal when you're not singing. Around -60 to -50 dB, the slightest whisper will open the Transducer gate. At higher settings (e.g. -40 to -30 dB) you will need to sing loudly to open the gate.

Gain parameter*

The Gain parameter adjusts the output level of the current style. Be very careful when adding gain (above 0 dB) as serious feedback levels can occur!

High Cut parameter*

The High Cut parameter adjusts the frequency of the high cut filter.

The Rhythm effect

Rhythm produces chopping, panning and stuttering effects on your lead, Harmony and Double voices in various beat divisions of the current Tap Tempo.

This effect block actually offers two different effect variations: **Rhythm** and **Stutter/Sample** – each with slightly different settings.

Stutter/Sample styles require the Rhythm block to be turned on at the exact moment when you want to capture a short sound clip. Once captured, the clip will repeat indefinitely.

Rhythm effect — main edit page Style parameter

The Style parameter selects from a range of pre-authored styles.

The styles from "Chopper" to "Flutter Pan" are modulation-type effects, followed by the Stutter and Sample effects.

Depth parameter

This parameter is only available for the *Rhythm* styles.

The Depth parameter varies the intensity of the Rhythm effect.

Target parameter*

This parameter is only available for the *Rhythm* styles.

The Target parameter sets what paths will be modulated by the Rhythm effect (Lead voice, Harmony/Double voices) and what the pre-set Rhythm effect will be (Level or Gender modulation, panning).

Division parameter*

This parameter is only available for the *Stutter/Sample* styles. The Division parameter trims the length of the captured and repeated audio clip to divisions of the current Tap Tempo.

Direction parameter*

This parameter is only available for the *Stutter/Sample* styles. The Direction parameter sets Forward or Reverse playback of the captured audio clip.

Control parameter

The Control parameter sets Hit on/off status. See "Assigning Hit effects using the Control parameter".

Rhythm effect – advanced edit page Division parameter*

This parameter is only available for the Rhythm styles.

The Division parameter sets the resolution of the effect, defined as beat divisions of the current Tap Tempo. When the value is shown as "N/A", the Type parameter has been set to a non-editable syncopated pattern.

Type parameter

This parameter is only available for the Rhythm styles.

The Type parameter sets the waveform for the rhythmic modulation applied to the signal. You can choose from standard waveforms ("Square" to "Sawtooth Down"), "Sample and Hold" (random), and syncopated patterns.

Sample Capture*

This parameter is only available for the Stutter/Sample styles of the Rhythm effect.

The Sample Capture parameter determines when audio sampling occurs as detailed following:

End setting

Sampling occurs previous to the point when you enable the Rhythm effect block.

Start setting

Sampling occurs after you enable the Rhythm effect block.

Path parameter*

This parameter is only available for the Stutter/Sample styles. The Path parameter sets how the other effects (all effect blocks except for Harmony, Double and Hardtune) are applied to the sample.

Post setting

When the Path parameter is set to Post, effects that are enabled when the audio clip is sampled will be integrated into the sample, but further effects cannot be layered upon it.

Pre setting

When the Path parameter is set to Pre, the audio clip is sampled without effects, but once the clip is playing back, other effects can be layered on the fly.

The Hardtune effect

The Hardtune effect block corrects the pitch of the Lead voice by gently or not-so-gently nudging it to a target pitch.

This effect block can produce everything from the (in)famous Auto Tuning effect used by Cher and Kanye West to gentle pitch correction.

As with the Harmony effect, it requires either a stream of chords from an instrument or a fixed key and scale in order to sound musically-related to your songs. The Key and Scale parameters are found in the main and advanced edit pages of the Harmony effect respectively.

Hardtune effect edit page Style parameter

The Style parameter lets you select from a range of preauthored styles.

Pop setting

The pop setting creates the classic full-on Hardtune sound. Country Gliss setting

The Country Gliss setting leaves between-note pitch "slides" uncorrected – but closer to scale tones, hard correction is applied.

Robot setting

The Robot setting forces anything you sing or say to a single target note. For this setting, Key is ignored.

Correct Natural setting

The Correct Natural setting applies more subtle values for a natural correction sound.

Correct Chromatic setting

The Correct Chromatic setting allows you to use correction without setting Key and Scale. This is the same as the Pitch Correct Amount setting found in the Setup menu. However, using the Hardtune block with this setting gives you the luxury of using simple pitch correction just when you want it as opposed to having it set globally and active full-time.

Drone setting

When the Key parameter of the Harmony effect is set to Auto, the Drone setting forces your pitch to the root note of an instrument chord.

Gender Bender

The Gender Bender setting applies no pitch correction but instead enables pitch shifting and Gender manipulation.

Shift parameter*

The Shift parameter applies a pitch shift. The range is ± 36 semitones.

Gender parameter*

The Gender parameter makes the voice sound deeper (settings -50 to -1) or more feminine (settings 1 to 50).

Control parameter

The Control parameter sets Hit on/off status.

See "Assigning Hit effects using the Control parameter".

For this effect, no Advanced edit page is available.

Assigning effects to the Hit button

When you tap the Hit button, the effect status will change, allowing for some dramatic changes in your vocal sound. This provides a quick way of turning multiple effects on and off. Depending on the preset, there could be two completely different effect combinations: one for Hit On and another for Hit Off. You could also use Hit On to simply add one effect to your sound.

Please note that the Hit button only turns one or several effects on or off – it does not change the settings of those effects.

The following graphics show the difference between effect-on status and effect-off status and how Hit can affect a preset.



Hit off - only one effect is active



Hit on – four additional effects are activated.

Assigning Hit effects in Effects mode

- Tap the Effects button to enter Effects mode.
- Toggle the Hit button so its LED goes off.
- Tap any effects you want to be active when Hit is off (e.g. Reverb).
- Toggle the Hit button so it turns on.
- Tap any effects you want to be active when Hit is on (e.g. Reverb and Harmony).

Assigning Hit effects using the Control parameter

Each effects has a parameter called Control which also sets Hit assignment.

- Tap the Edit button to enter Edit mode.
- Select the Control parameter and set it to the desired setting.

Off Setting

When you set Control to Off, the effect is always off – regardless of Hit on/off status.

On Setting

When you set Control to Off, the effect is always off – regardless of Hit on/off status.

Hit+ Setting

 When you set Control to Hit+, this effect becomes active only when Hit is on.

Hit- Setting

 When you set Control to Hit, this effect becomes active only when Hit is off.

THE SLIDER FX

In this chapter we describe the amazing Slider FX bar as it pertains to the vocal effects. For the Loop FX descriptions, see What are Loop FX?

Chapter Overview

In Effects and Loop modes, the Slider FX Bar can be used to activate and modulate an effect. The selection of effects is different when in the Effects menu from when you're in the Loop menu. The name of the effect is shown at the bottom of the display. Slide your finger over the Slider FX bar, drag and stop or tap to use the effect.

Using and assigning the Slider FX is described in the "Slider FX Bar effects" section of the VoiceLive Touch 2 Quick Guide.

Following are descriptions of each effect that can be assigned to the Slider FX bar in the Effects menu.

Gender Warp effect

Tap the Slider FX Bar to activate the Hardtune effect at its current settings.

Slide your finger over the Slider FX Bar to sweep the lead voice Gender setting from more male at the left to more female at the right.

Delay Feedback effect

Tap the Slider FX Bar to activate the Delay effect at its current settings .

Slide your finger over the Slider FX Bar to change the *Feedback*, which extends or shortens the length of the echo effect.

Harmony Hold effect

Tap the Slider FX Bar to activate the Harmony effect and apply Harmony Hold which produces infinite sustain of the harmony voices as long as you hold your finger on the Slider bar. Slide your finger over the Slider FX Bar to control the *volume* of the held harmony notes.

Dual Filter effect

Tap the Slider FX Bar to activate the Transducer effect at its current settings.

Slide your finger over the Slider FX Bar to sweep the $\it Low Cut$ and $\it High Cut$ settings.

Harmony Bend effect

Tap the Slider FX Bar to activate the Harmony effect at its current settings.

Slide your finger over the Slider FX Bar to sweep the \emph{pitch} of the Harmony voices.

Shift Wide effect

Tap the Slider FX Bar to activate the Hardtune effect at its current settings.

Slide your finger over the Slider FX Bar to sweep the *pitch* over a ±3 octave range in semitones. If Hardtune is already applying a pitch shift, the Slider bar will apply the balance of effective pitch range.

Shift Narrow effect

Tap the Slider FX Bar to activate the Hardtune effect. Slide your finger over the Slider FX Bar to sweep the $\it pitch$ over a ± 1 octave range in semitones.

Rhythm Div effect

Tap the Slider FX Bar to activate the Rhythm effect. Slide your finger over the Slider FX Bar to modulate the **Chopper effect** faster or slower.

Rhythm Depth effect

Tap the Slider FX Bar to activate the Rhythm effect. Slide your finger from left to right over the Slider FX Bar to increase the *intensity* of the effect.

Stutter effect

Tap the Slider FX Bar to hold to sustain a short snippet of vocalization.

Slide your finger over the Slider FX Bar to change the *Division* value upwards from the initial value.

Hmny (Harmony) Rhythm effect

Tap the Slider FX Bar to apply the Rhythm effect to the Harmony voices only.

Slide your finger over the Slider FX Bar to change the *Division value*.

While holding the Slider FX bar, you can still turn other effects on and off using the Matrix buttons.

Slider FX actions

The *initial placement* of your finger on the Slider FX bar, the *direction* you slide over it and the resulting effect modulation is called the **action**.

There are four different action options to offer the widest range of control. The current effect action is indicated by the arrows on either side of the Slider FX name at the bottom of the display. These are detailed below.

Action	Left	Center pos.	Right
< (Slider FX) >	Min. value	Middle of value range	Max. value
> (Slider FX) >	Middle value	¾ value	Max. value
< (Slider FX) <	Max. value	¾ value	Middle value
> (Slider FX) <	The middle value is defined from where you first tap and hold on the Slider FX Bar. This offers higher resolution in one direction.		

THE LOOP MENU

This chapter of the VoiceLive Touch 2 reference manual introduces the Looper.

Looping is an interesting topic. Even using the basic looping features can be a lot of fun, but there's a real treasure trove of features here allowing you to layer, reverse, mute, merge and tweak your loops in all sorts of ways. Have fun experimenting!

Loops – Overview

Making loops is fun

Whether you just want to create some accompaniment when there are no other musicians around, or whether you're a serious performer in front of an audience: The Loop features in VoiceLive Touch 2 can help you make exciting layers of melodies, harmonies and sounds.

There are **six loop layers** (or tracks) to record upon. Each of these layers can be...

- muted,
- overdubbed upon,
- reversed,
- cleared.
- re-recorded and
- triggered.

The length of your first loop determines the length of all subsequent loops and the number of layers that you can record.

When you are on the Loops Tools page, a counter shows the remaining loop time when you are recording the first loop.

Once the loop length has been set, the number of overdubs on any loop is **unlimited**.

Loop Assist

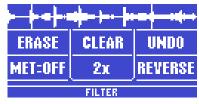
The Metronome and its ability to quantize your Record and Play button presses as well as the Auto Re-sync feature are known as Loop Assist. These help you make better-sounding and more consistent loops.

The Loop menu pages

There are two pages containing features for the looper. While not labeled onscreen, the two pages are thus:

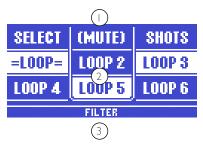


Loop menu - Layers page



Loop menu - Tools page

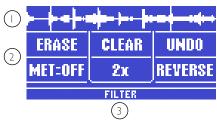
The Loop Layers page



- I. Mode selection buttons
- 2. Loop layer selection
- 3. Current Loop FX assignment.

The main feature of this page is the collection of six slots containing the loop layers. Above the slots are modes in which you can interact with the various layers: Select, Mute and Shots. Shown at the bottom of this and the Tools page is the current Loop FX assignment which by default, is the Filter effect.

The Loop Tools page



- 1. Selected loop waveform display
- 2. Loop Tools
- 3. Current Loop FX assignment

Also see the "Loop page" and "Metronome page" section in the Setup menu chapter for additional loop configuration options. Note that there are MIDI CCs that can remotely control the looper as well.

The following sections add detail to the tutorials in the VoiceLive Touch 2 Quick Guide. The order is from simple to advanced operation.

Recording a basic loop

- Press the Home button.
- Find a preset you like using the Slider FX bar.
- Prepare a short rhythmic phrase before recording for example, singing "Boom" and "Cha" a few times.
- When you're ready, press the Record button on your sung downbeat ("Boom").
- After singing the phrase a few times (multiples of 2 is best), press the Record button again to set the loop point and hear the loop play back.
 - This is your basic loop. Now you can sing over it while it plays.

Stopping and starting loops

- Whenever a loop is present, press the Play button to either stop or start loop playback.
 - You can also assign this function (and many other important Loop-related functions) to:
 - a microphone supporting Mic control,
 - to a Switch-3 footswitch or
 - to an external MIDI device.
 - Please refer to these sections:
- "Mic Control parameter"
- "Switch-3 page"
- "MIDI Implementation"

Erasing loops

If the loop you just made isn't to your liking, or when you want to start completely from scratch, you use the Erase function. There are two ways to erase:

- In Home mode, hold the Record button for a second at any time to erase the loop.
 - Please note that there is **no undo** or "Are you sure?" prompt when erasing in Home mode.
- On the Loop Tools page, tap the Matrix button corresponding to Erase. A prompt is shown, allowing you to cancel if desired. Press Erase again to complete the procedure.

Notes about erasing loops

Other than Clear, the Erase feature deletes all information about a loop, including its length.

Overdubbing

Once you have a basic loop you're satisfied with, you'll likely want to overdub – i.e., record more parts on top of it.

Please note that while you may be overdubbing many times over, you are still creating *one single loop* without the ability to go back and listen to a particular, previously recorded "take". If this is what you want (creating layers that can be selected and muted independently), you will have to record a multitrack loop

- see the "Recording multitrack loops" section.
- Record a basic loop.
- As the loop plays, practice a part you would like to add.
- Press the Record button a little before the loop reaches the start again.
- Add your new part.
 If you like, you can add more layers while in overdub record mode.
- Press Record again to end overdubbing and continue playing the loop.

When the transport is stopped, you can tap Record to arm the device and start recording immediately upon pressing Play.

Notes about overdubbing

You can record as many overdubs as you like without consuming memory, but adding too many overdubs will eventually end up as noise.

Undo

What can be undone?

When you have made a mistake while overdubbing, you do not have to delete the whole loop and start from scratch. You can always delete the last recording you made, keeping the previous recording(s) intact.

Actually, using Undo will not really delete the last recording, but only mute it. So if you should change your mind after deleting the last recording, you can bring it back. This is called "Redo".

There are also two other operations that can be undone:

- Using the Clear feature (see "Clear")
- Using the 2x feature (see "Extending loop length with 2x").

Undoing and redoing a recording

- Record a basic loop, then record an overdub.
- Press the Loop mode button once or twice to display the Loop Tools page.
- To undo your previous recording, press Undo.
- To redo a previously deleted/muted overdub, press Undo again.

You can do this as often as you like. In fact, it is an easy and useful way to build and remove preceding layers while using the Loop feature creatively.

Limitations of the Undo feature

You can only undo the *last* operation – whether it's recording an overdub, using the Clear feature or using the 2x feature.
You cannot undo the Reverse or Mixdown features

You may switch off the Undo feature on the Loop page of the Setup menu. Doing this will effectively double the recording time available for Loops – see "Undo parameter".

Extending loop length with 2x

Use the 2x feature when you have just created a short, hypnotic loop and you would like to record a longer musical phrase on top of it. This is especially useful when you like to start your loop sessions with a repetitive percussive pattern.

- Record a two-beat "Boom Cha" loop. Overdub if you like.
- Press 2x to multiply the length of the loop you just recorded. When the Loop Tools page is displayed, you will see the waveform display updating to show the new length.
- Press 2x again to continue multiplying, or press Undo to revert to the previous length.

Notes about using the 2x feature

Every time you are using the 2x feature to double loop length, the memory available for recording additional loop layers is reduced. Keep this in mind when creating very long loops. The ability to multiply loop length becomes unavailable when you select a different loop slot and record a new loop layer there.

Reverse

Reversing a recording is a classic studio trick to create interesting effects. You can use it as part of your loop sessions in real-time.

- Press the Loop mode button.
 - When the Loop Layers page is displayed, press the Loop mode button again to bring up the Loop Tools page.
- Press the Reverse button any time to reverse the content of the currently selected loop slot. This includes all overdubs.
- When you have recorded multiple loop layers (see "Recording multitrack loops"), using the Reverse feature will only reverse the currently selected slot.
- Press Reverse again to play the loop forwards again.

Clear

The Clear feature allows you to erase a loop layer while keeping the original loop start and end points.

This is most useful when there is at least one other loop layer that you would like to keep.

Using the Clear feature is undo-able.

- Press the Loop mode button.
 - When the Loop Layers page is displayed, press the Loop mode button again to bring up the Loop Tools page.
- Press the Clear button any time to clear the content of the currently selected loop slot. This includes all overdubs.

Metronome

The Metronome is a component of Loop Assist.

Recording loops by singing or playing in time with a metronome has distinct advantages:

- The metronome helps you create more natural-sounding loop points by correcting your button taps to the nearest beat. This is called quantizing.
- Your loops will be in sync with the other effects based on Tap Tempo, Delay and Rhythm.
- The metronome will help you record loops that play in sync to an external MIDI clock source such as tracks played back on a computer or a drum machine. See "<u>Synching loops to</u> MIDI Clock".

There are three Metronome settings.

- Press the Loop mode button.
 When the Loop Layers page is displayed, press the Loop mode button again to bring up the Loop Tools page.
- Tap the "Met:" button to cycle through the three choices:

Metronome – Off setting

When set to off, the metronome is muted and quantizing is off.

Metronome – On setting

When set to on, the metronome is audible. This will also activate the quantize feature, which will correct your record and loop button presses to the nearest beat.

Metronome – Shh setting

When set to the Shh, the metronome is not audible, but the quantize feature is activated.

This setting is useful if you are on stage and you don't want the audience to hear the metronome. Note that you can still see the current tempo indicated by the LED of the Tap button. Also, if you are synced to a computer playback, you likely won't need to hear the metronome.

Other metronome-related parameters

Please see the "Loop page" section in the Setup menu chapter to learn about other features such as adjusting the metronome's volume and sound, sending the metronome to headphones only or synching it to MIDI Clock.

Recording a loop using the metronome

- Press the Loop mode button once or twice to show the Loop Tools page.
- Tap the Met:Off button once to unmute the metronome. It will display Met:On, and you should hear the default metronome sound (Kick drum).
- Set the tempo by tapping the Tap button rhythmically a few times.
- Tap the Record button near a metronome beat to start recording your loop.
- Sing a short rhythmic phrase in time with the metronome beat.
- Tap the Record button near a metronome beat to set the loop point. This will switch from recording to playback.
 If the loop is satisfactory, this can become your base loop to overdub upon or to add more loop layers to.
- Tap the Met button once to set it to Shh or twice to set it to Off. This will switch off the metronome sound and allow you to add overdubs and layers with your original recording as a beat reference.

Notes about using the metronome

If the Metronome is set to On or Shh and a loop is present, playback will wait until the next beat before commencing. In that case, the Loop button LED will flash temporarily to show that playback is waiting for the next beat.

Once you have recorded a loop and the metronome is set to On or Shh, you cannot change Tap Tempo anymore – trying to do so will result in a "Loop Synched" message. This is to ensure that Delay and Rhythm effects stay in sync with your loop. To change Tap Tempo, set Metronome to Off.

When you have recorded a loop using the metronome, and you have switched off the metronome later, changing Tap Tempo results in the metronome and the timing of your loop going out of sync. To restore Tap Tempo-to-loop sync after Tap Tempo has been changed:

- Set the metronome to Off.
- Tap the tempo of your previous recording.
 If you can't get the tempo just right, you can trim it to the exact BPM value using the Arrow buttons (you'll need to have remembered the initial tempo).
- Set metronome to On or Shh.
- Press the Play button.
 Transport will wait until the next beat before starting.

Recording multitrack loops

In the "<u>Overdubbing</u>" section of the this chapter, we said that when overdubbing, all your overdubs are "baked" into one single loop. You can always undo the immediately preceding recording (see "<u>Undo</u>") – but other than that, you cannot mute or delete a particular take.

Now if you want more flexibility, you'll like the loop layers feature of the VoiceLive Touch 2. It allows you to work with six independent loop layers in selectable slots that allow you to individually delete, undo and reverse them to your heart's content. These six distinct loop layers share the same loop length – but other than that, you have all creative freedoms.

Recording your first multitrack loop

- Start by recording a loop. This will serve as your base layer.
 This first loop will define the length of the resulting multi-track loop. If you want to change the length, you'll have to erase the loop and start again see "Erasing loops".
- Press the Loop mode button.
 When the Loop Tools page is displayed, press the Loop mode button again to bring up the Loop Layers page.
- Tap the Select mode button.

The Label "Select" will be surrounded by brackets, indicating that you are now in Select mode.

The currently selected loop slot is shown as "=Loop=" By default, the first loop you recorded (the base layer) is stored in loop slot 1. This means that at this point, the display will look like this:



	(SELECT)	MUTE	SHOTS
2	=L00P=	L00P 2	L00P3
	L00P 4	L00P 5	L00P6
	FILTER		

- Loop Layers page set to Select mode (indicated by the brackets around the word "Select").
- Loop slot one selected as the current loop slot (shown as "=Loop=").

Let's move to another loop slot and record something else. Note that you can remain recording or stop and start recording with each new loop layer.

- Tap Loop 2.

- Record another part on Loop 2.
- You can repeat this process until you have filled up all six available loop slots.

In Select mode, you can select any recorded layer. You can then overdub upon, reverse, clear or mute the selected layer.

Muting loop layers

Loop layers can be muted (i.e., silenced temporarily) using Mute mode.

- Record several loop layers to the loop slots as described in the "Recording multitrack loops" section.
- Make sure the Loop Layers page is displayed.
- Tap the Mute mode button.
 - The Label "Mute" will be surrounded by brackets, indicating that you are now in Mute mode.
- Tap the button of any loop layer you want to mute.
 You can press multiple buttons simultaneously.
- Tap again to unmute.

Muted loops are shown with the Loop text reversed.

SELECT	(MUTE)	SHOTS
=L00P=	L00P 2	L00P3
L00P 4	L00P 5	LOOP 6
FILTER		

Mute mode with loop layers 2, 4 and 6 muted.

Muting vs. selecting loops

Muting loop layers does not affect selection. This means that you could select, for example, Loop I in Select mode, then switch to Mute mode, mute one or several loop slots and continue overdubbing the still selected Loop I.

Muting and recording

It is possible to record one or all layers while they are muted.

Muting loops in Select mode

You can mute loop layers while in Select mode, although the mute action is not instantaneous. To mute in Select mode, hold any single loop slot button to mute it. You cannot mute or unmute multiple loop layers simultaneously in Select mode.

Synching loops to MIDI Clock

VoiceLive Touch 2 can sync to MIDI Clock received at either its USB or physical MIDI inputs. This allows you to make new loops and play them back in time with a computer audio sequencer (DAW), a drum machine or an arranger keyboard. Note that MIDI Clock is not MIDI Time Code (MTC), which VoiceLive Touch 2 does not support.

- Connect VoiceLive Touch 2 to your DAW or MIDI Clock source via USB or physical MIDI cable.
- When using the physical MIDI In on Touch 2, set the MIDI CTRL setting in the MIDI page of the Setup menu to MIDI. Otherwise, leave it set to Merge.
- Ensure that your clock source is set to transmit MIDI Clock to Voice-Live Touch 2.
- Set MIDI Tempo in the Setup menu Metronome page to Slave.
- Set Met:Off in the Loop Tools menu to On or Shh.
- Initiate playback on your clock source.
- Record and play back loops as you would using the Metronome. Your Record and Play button presses will be quantized to the closest beat. Note that VoiceLive Touch 2 syncs to beats only, not bars.

Triggering loops in Shots mode

Normally, looping is all about having rhythm, harmonies and melodies play back in consistent patterns. But sometimes, it's fun to trigger the beginning of a loop instantaneously. This is what Shots mode is there for: to start playback the instant you tap a loop button.

- Record loops to several loop slots (see "<u>Recording multi-track loops</u>").
- Continue playback.
- Make sure the Loop Layers page is displayed.
- Tap the Select mode button.
- Select the one loop that will be soloed when you enter Shots mode.
- Tap the Shots mode button.
 The Label "Shots" will be surrounded by brackets, indicating that you are now in Shots mode.
- Whichever loop you have previously selected will now become soloed – i.e., only the selected loop will be heard.
- Tap any other loop button to retrigger playback of the loop stored in that loop slot.

Shots mode and playback

When you are in Shots mode and the Play button is lit, each loop will continue playing when you release its button.

When you are in Shots mode and the Play button is not lit (i.e., when transport is stopped), a loop will only play back as long as you hold its button.

Multiple buttons can be held and started at different times. This allows you to create interesting sonic collages from your loops.

Loop FX

What are Loop FX?

The VoiceLive Touch 2 comes with four special effects that have been specifically designed to modify loop playback. You can select one of these effects and control it using the Slider FX Bar when you are playing back loops.

Using Loop FX

The name of the current Loop FX is shown at the bottom of the two Loop menu pages.

- Record a loop.
- To control the currently selected Loop FX, drag your finger up and down the Slider FX bar while the loop plays.

Loop FX will modify all loop layers currently playing.

Changing Loop FX

- To change the current Loop FX assignment, hold the Loop menu button and tap either arrow button.
 - The name of the current Loop FX is shown at the bottom of the display.

 Slide your finger over the Slider FX Bar to hear the new Loop FX.

Loop FX descriptions Loop FX - Filter

This setting activates a resonant filter that creates a "swooshing" sweep as you drag your finger down the Slider bar. You can adjust the filter resonance on the Loop page of the Setup menu – see "Filter Resonance parameter".

Loop FX - Slow Speed

This setting allows you to drastically slow down loop playback (with appropriate sonic degradation) by dragging your finger over the Slider FX Bar.

Loop FX - Squeeze Select

This setting retriggers the beginning of the loop. The length of the repeated snippet (and thus the frequency of repeats) is defined by the position on the Slider FX Bar where you are holding down your finger.

Loop FX - Squeeze Auto

This setting retriggers a snippet from anywhere in the loop, then automatically halves and quarters the retrigger length as you hold the Slider bar.

Making the most of Loop FX

- The Squeeze effects work best when the loop has been recorded to the Metronome. This is because the length of the retriggered clip is a division of the current Tap tempo (and thus, based on the metronome).
- It is possible to hold the Slider bar while tapping other Loop-related buttons. This allows you to slow down playback using the Slow Speed FX setting and then stop playback/recording at the slowest speed. You could also mute and unmute loops while holding a particular Filter setting.
- There are no "action" settings for Loop FX.

Re-sync

Re-sync is another component of Loop Assist.

If you use any of the time-altering loop effects (Slow Speed, Squeeze or Shots), you don't want your loop timing to stumble. Re-sync works automatically in the background to keep track of the correct order of beats when using these effects. Upon releasing the effect, loop playback continues where it would have been as though there had been no interruption.

This is especially useful if you are syncing the looper to a computer with MIDI Clock.

Re-sync also returns loop playback to the correct position when you have triggered loops "wildly" or un-synched in Shots mode. When you return from Shots mode to Select mode, playback is automatically synched to the previous rhythm. Resync will occur whether the metronome is on or off.

Layer Mixdown

The ability to mute and erase loop layers independently is useful but eventually you may run out of layers. In that case, you can mix multiple loop layers down to one slot, freeing up loop slots. Mixdown is also useful when you want to Reverse or trigger Shots of all your tracks. Mixdown is not undo-able.

- Record several loops into several loop slots (see "<u>Recording multitrack loops</u>").
- Press the Loop mode button.
 When the Loop Tools page is displayed, press the Loop mode button again to bring up the Loop Layers page.
- Tap the Select button.
- Tap the button of the target slot, i.e. the loop slot that you want to mix down to.
- Hold the Select button.
- Tap Select to confirm mixdown action.

All *audible* loop layers will be mixed down to the selected target slot, and the original layers will be cleared.

If the selected target loop layer is audible when you perform the mixdown, its content will be mixed down along with all other loop layers. If the selected target loop slot is muted when you perform the mixdown, the other loops will **overwrite** whatever was there.

THE SETUP MENU

This chapter of the VoiceLive Touch 2 reference manual introduces the setup menu, where you make global settings.

Setup Menu Overview

The Setup menu allows you to make changes to global settings. Typical settings control phantom power, MIDI, global effect settings and more. Global settings are not affected by preset changes.

To enter the Setup menu, press the Setup button.

To exit the Setup menu, press any other menu button

The Setup menu has II numbered pages, each relating to a specific function group. For example, "Input I/II" indicates that the Input page is the first of eleven pages.

INPUT_1/11 ▶		
INPUT	MIC CONTROL	
DYNAMIC MIC	N/A	
ROOMSENSE	TONE STYLE	
Ambient	NORMAL	
GUITAR	PITCH COR AMT	
10 dB	Off	

Making changes in the Setup menu do not require storing – they are automatically applied and stored.

Input page

The input page offers settings relating to how audio signals enter VoiceLive Touch 2 and how they are processed.

Input parameter

The Input parameter determines which input feeds the vocal effects and controls phantom power.

Dynamic Mic setting

If you are using a dynamic (non-condenser) microphone without the Mic Control feature, set the Input parameter to Dynamic Mic.

Condenser Mic setting

If you are using a condenser microphone, set the Input parameter to Condenser Mic. This applies phantom power to the microphone.

MP-75 Mic setting

If you are using a TC-Helicon MP-75 microphone, set the Input parameter to MP-75 Mic. This applies phantom power to the microphone and lets you use the Mic Control feature.

E835fx Mic setting

If you are using a Sennheiser E835fx microphone, set the Input parameter to E835fx Mic. This applies phantom power to the microphone and lets you use the Mic Control feature.

USB setting

If you want to add effects to an audio signal from a computer connected to your TC-Helicon device, set the Input parameter to USB. This disables the hardware microphone and guitar inputs. The left audio channel from the USB in is routed to the voice effects, and the right audio channel from the USB in is routed to the guitar path for guiding harmony and guitar effects. (Roomsense setting)

When the Roomsense parameter on the Input page is set to Voice, this Input setting is automatically set to Roomsense.

Roomsense

This feature allows you to route the audio signals from the two onboard microphones to various destinations. Note that Roomsense audio signals are never routed to the main outputs to prevent feedback.

Ambient setting

The Ambient setting sends sounds from around VoiceLive Touch 2 to the headphone output only. This allows singers using headphones for monitoring to hear music and audience sounds. Ambient/Auto setting

The Ambient/Auto setting sends sounds from around VoiceLive Touch 2 to the headphones and to the NaturalPlay feature in order to derive musical information that drives the Harmony and Hardtune effects.

Voice setting

The Voice setting replaces the Mic input with the Roomsense mics. This allows you to use the vocal effects without connecting a microphone. However, external sounds will also be detected, so a quiet environment is essential. Setting the Roomsense parameter to Voice also automatically overrides the Input parameter to show Roomsense.

Guitar parameter

The Guitar parameter calibrates the Guitar input sensitivity to the level of your guitar. Please note that this is not a mix level control. If you are hearing distortion, or if you see the red clip LED light on your loud strums, reduce the default gain of 10 dB to a smaller value until the distortion/clip indication stops.

If your guitar seems too quiet in relation to your vocal and effects and the Guitar parameter in the Mix menu is already set to full. increase this value.

Mic Control parameter

The Mic Control parameter sets the target feature you want to control using the Mic Control button.

To use this feature, you will need to connect a Mic Controlcompatible microphone to the VoiceLive Touch 2 and set the Input parameter to the correct setting.

N/A

This is shown when the Input parameter is set to a microphone or input type not supporting Mic Control. In this case, no target may be set.

Hit setting

When Mic Control is set to Hit, tapping the Mic Control button has the same effect as tapping the Hit button with no hold function.

Hit + Talk setting

When Mic Control is set to Hit + Talk, *tapping* the Mic Control button has the same effect as tapping the Hit button. *Holding* the Mic Control button activates the Talk function. Tap to exit Talk.

Hit + Tap setting

When Mic Control is set to Hit + Tap, *tapping* the Mic Control button has the same effect as tapping the Hit button. *Holding* the Mic Control button activates a temporary mode where you can tap the tempo used by Delay, Rhythm and Metronome features. The mode will exit automatically after your last tempo tap. *Hit Moment setting*

When Mic Control is set to Hit Moment, *tapping* the Mic Control button momentarily activates the Hit feature with no hold function.

Favorite setting

When Mic Control is set to Favorite, *tapping* the Mic Control button scrolls forward through the 9 Favorite presets. *Holding* the Mic Control button will enter reverse scroll mode. Hold the Mic Control button *again* to scroll forward.

Loop setting

When Mic Control is set to Loop, the Mic Control button acts as a **I Button Looper**. See the <u>I Button Looper setting</u> section for details.

Loop Start/Stop setting

When Mic Control is set to Loop Start/Stop, the Mic control button allows only starting and stopping of an existing loop with no hold functions.

Harm + H. Hold setting

When Mic Control is set to Harm + H. Hold, *tapping* the Mic Control button latches the Harmony effect on or off with each tap. *Holding* the Mic Control button while Harmony is active engages the Harmony Hold effect.

Tone Style parameter

The Tone feature engages four automatic audio signal processors that adjust the EQ and dynamic nature of your vocals.

The overall effect is to reduce mud, brighten your vocal sound and reduce level peaks to make your live voice sound more like a studio recording. There is also a noise gate that helps reducing problems when you *aren't* singing, such as feedback and harmony chattering.

These processes are automatic and respond to your specific voice. When active, Tone remains on, even in Talk mode.

Off setting

When the Tone Style parameter is set to Off, Tone is disengaged. *Normal setting*

For most voice types and PAs, Normal is the correct setting. This is also the default setting.

Less Bright setting

If feedback is a problem, or when you are using a condenser mic, you can try the Less Bright setting to reduce high frequencies slightly.

Norm + Warmth setting

The Norm + Warmth setting restores a small amount of lows while still reducing muddiness. Use this setting when you feel your voice sounds thin, or when you are singing vocal parts in the Bass range.

More Comp setting

The More Comp setting reduces level peaks even more for a slightly more compressed sound.

Norm No Gate setting

The Norm No Gate setting is the same as the Normal setting, but with the gate turned off.

Less Bright NG setting

The Less Bright NG setting is the same as the Less Bright setting, but with the gate turned off.

Norm + Warmth NG setting

The Norm + Warmth NG setting is the same as the Norm + Warmth setting, but with the gate turned off.

More Comp NG setting

The More Comp NG setting is the same as the More Comp setting, but with the gate turned off.

Pitch Cor Amt

The Pitch Cor Amt (Pitch Correction Amount) parameter applies a small amount of chromatic pitch correction to gently improve the accuracy of your output pitch. No scale reference is required for this feature.

When Pitch Correction is engaged, you will hear a slight chorusing as you sing, which is illustrating the difference between your sung pitch and the corrected pitch. This is normal.

In Talk mode, Pitch Correction is turned off. Note that even at maximum, this is not intended to sound like the typical "Auto Tune" effect. If this is what you want, engage the Hardtune effect.

Output page

Output parameter

Stereo setting

When you set the Output parameter to Stereo, the left and right audio channels are output to the left and right ¼"TRS jacks when connected to a stereo monitor or PA system.

The XLR jack will output the left side audio only.

Mono setting (default)

The factory setting is that the left TRS output and the XLR output contain the summed mono mix including effects. The right TRS jack outputs your dry voice with Tone applied to the mic input signal but no effects. Sending both a mono mix of the effects and the dry signal to a mixing desk is useful when a live sound engineer wants to control the balance of wet/dry mix at the mix position. In this case, set the Lead Mute parameter to On.

Dual Mono setting

When you set the Output parameter to Dual Mono, the left TRS output and the XLR jacks output the effected vocal, and the effected guitar signal is output from the right TRS jack. In this

configuration, a sound engineer can control the level balance between the mono wet vocal (i.e. vocal with harmonies and effects) and the mono wet guitar signal.

Vocal Cancel feature

The Vocal Cancel parameter engages signal processing on the Aux input only that can reduce the vocal in a stereo music and vocal recording.

Lead Mute parameter

When you have connected your microphone to an external preamp that is feeding a PA, and VoiceLive Touch 2 is fed from that PA mixer's aux send, set the Lead Mute parameter to On. This removes your dry voice from the mix. With Lead Mute on, only the effects are heard on the outputs.

Headphone Limiter parameter

If you set the Headphone Limiter parameter to values less that 0 dB, a peak limiting processor is engaged on the headphone output only that can prevent hearing damage from unexpected loud peaks.

Lead Delay parameter

The Lead Delay parameter inserts a short delay on the dry voice to make up for the slight processing delay when using the Harmony and Double effects.

None setting

When you set the Lead Delay parameter to None, no dry voice delay is added.

Voice Sync setting

When you set the Lead Delay parameter to Voice Sync, a short, fixed delay is inserted on dry vocal. This is preferable when you are using the device to process a recorded track, not the signal from a live mic. In live performances, the delay may be noticeable.

Auto setting

When you set the Lead Delay parameter to Auto, the dry vocal is only delayed when the Harmony or Double effect blocks are active.

Guitar page (I)

A guitar connected to the Guitar In jack can have separate Reverb, Modulation and Compression effects, which are adjusted on this page. The resulting processed signal will be output via the main TRS outputs.

Please note that if you connect the Guitar Thru jack of the VoiceLive Touch 2 to another device, the processed guitar signal will be removed from the mix output of the VoiceLive Touch 2 automatically.

Reverb Style parameter

The Reverb Style parameter on the Guitar page offers the same styles as the Reverb effect block for vocals does.

Reverb Level parameter

The Reverb Level parameter sets the amount of the Reverb effect applied to the guitar signal in the mix.

Mod Style parameter

The Mod Style parameter offers the first seven styles from the Mod effect block, ranging from "Micromod Clone" to "Mono Chorus". These effects are useful for chorusing/thickening effects.

Mod Level parameter

The Mod Level parameter sets the amount of the Mod effect applied to the guitar signal in the mix.

Compressor Ratio parameter

The Compressor Ratio parameter adds audio compression to the guitar by simultaneously lowering peaks and raising quieter details.

At the 1.0 setting, the Compressor is off.

For the Compressor to have any effect, the Compressor Threshold parameter must be set to a value lower than 0 dB.

Compressor Threshold parameter

The Compressor Threshold parameter sets how loud your guitar chords have to be in order to trigger compression as set by the Compressor Ratio parameter.

A note regarding compression on an acoustic guitar

Because the compressor effect automatically adds considerable gain as you adjust the Ratio and Threshold controls, feedback can become an issue. Modest compression settings, e.g. Ratio @ 2.0, Threshold @ -10, can produce contained, pleasing dynamics for acoustic guitars without excessive feedback.

Guitar page (2)

A three band, semi-parametric EQ built into the VoiceLive Touch 2 allows you to shape the sound of the guitar connected to the Guitar input.

The range of the three EQ bands is ± 12 dB.

High Frequency parameter

The High Frequency parameter sets the frequency above which the High Shelf EQ takes effect.

High Gain parameter

The High Gain parameter sets the amplification or attenuation of the high frequencies in dB.

Mid Frequency parameter

The Mid Frequency parameter sets the center frequency for the mid band.

Mid Gain parameter

The Mid Gain parameter sets the amplification or attenuation of the mid frequencies in dB.

Low Frequency parameter

The Low Frequency parameter sets the frequency below which the Low Shelf EO takes effect.

Low Gain parameter

The Low Gain parameter sets the amplification or attenuation of the low frequencies in ${\rm dB.}$

Loop page

There are several useful Loop-related parameters on the Loop page of the Setup menu.

Input parameter

While VoiceLive Touch 2 has vocal, guitar and aux inputs, you can separate out which inputs you want to loop.

Lead + Guitar setting (default)

Your voice plus the guitar and its EQ and effects are looped. Input coming from the Aux in jack is not looped.

Guitar setting

Only the EQ'd and effected guitar is looped. Your voice and input coming from the Aux in jack are not.

Lead setting

Only your voice and the vocal effects are looped. Guitar and aux input are not.

Aux setting

Only audio arriving at the Aux in jack is looped.

Filter Resonance parameter

The Filter Resonance parameter changes the sound of the Loop FX filter by reducing or increasing the mid boost at the filter frequency.

Undo parameter

Setting Undo to On allows you to undo the previous recording when recording loops. Setting Undo to Off doubles the amount of looping time — but of course, at the expense of the ability to undo overdubs.

Loop Feedback parameter

At the default setting (98%), the Loop Feedback parameter helps prevent overdriving and distortion that can occur when a large number of overdub layers exceed the output capability of the unit. Any setting less than 100% will gently reduce the amount of audio fed back into the loop during each successive overdub.

MIDI Control parameter

The VoiceLive Touch 2 Looper can be remotely controlled using MIDI CC messages. If you want to ensure that no received MIDI CC messages will accidentally start or stop Loop features, set this parameter to Off.

Queued Mode parameter

When you set Queued Mode to On, the Looper will wait until the next loop point before entering or exiting Overdub mode. You can use this feature to prepare for recording or punch out in advance. If you set Queued Mode to Off, you can punch in and out freely.

Metronome page

The Metronome page controls the settings for the Loop Metronome feature.

Routing parameter

Use the Routing parameter to define where the sound of the built-in metronome click should be heard.

All setting

If you want to hear the Metronome on the main outputs and the headphone outputs, set the Routing parameter to All. Headphone setting

If you want to hear the Metronome on the headphone outputs only, set the Routing parameter to Headphone. This allows you to build loops synced to a predefined tempo (which you can hear over headphones) without the metronome disturbing the audience.

MIDI Tempo parameter

The MIDI Tempo parameter allows you to synchronize the Loop Metronome and the queued loop features of the Voice-Live Touch 2 to an external MIDI Clock signal.

Off setting

When you set the MIDI Tempo parameter to Off, the Metronome is synced to Tap Tempo.

Slave setting

When you set the MIDI Tempo parameter to Slave, the Metronome is synced to incoming beats from an external MIDI Clock signal.

Sound parameter

The Sound parameter allows you to choose from three different metronome sounds: Sine, Kick Drum and HiHat.

Level parameter

The Level parameter sets the volume of the metronome.

MIDI page (I)

This is one of two pages of MIDI settings.

MID Channel parameter

The MIDI Channel parameter sets the MIDI channel that VoiceLive Touch 2 uses for preset change messages and MIDI harmony control.

Filter parameter

Use the Filter parameter to filter out and block MIDI messages that you would like VoiceLive Touch 2 to ignore.

None setting

No MIDI messages are filtered.

PRG Change setting

MIDI Program Change messages are filtered.

SYSEX setting

MIDI System Exclusive messages are filtered.

PC+SYSEX setting

MIDI Program Change and System Exclusive messages are filtered.

CC Channel parameter

If you want the VoiceLive Touch 2 to receive MIDI CC messages on a specific channel (different from the channel used for transferring MIDI notes), use the CC Channel parameter to set this channel.

Transpose parameter

In MIDI NOTES mode, the Transpose parameter is used to transpose the harmony voices. The value corresponds to octaves.

This allows you to control harmony voices using the upper or lower sections of a MIDI keyboard if required and ensure the resulting harmony voices are in the correct range.

SplitDir (Split Direction) parameter

If you have defined a split point using the Split Note parameter, the Split Direction parameter sets whether MIDI notes above or below the split point are used to control harmony voices. This parameter is applied in MIDI Notes presets only.

Split Note parameter

Use the Split Note parameter to define a split point. Only notes above or below this split point are used to control harmony voices.

This parameter is applied in MIDI Notes presets only.

MIDI page (2)

SysEx ID parameter

The SysExID parameter sets the MIDI System Exclusive ID number of the VoiceLive Touch 2. When addressing *multiple* VoiceLive Touch 2 units on the same MIDI In/Thru chain with a SysEx editor, each device should have its own ID – or they all will be edited in the same way.

PB Range parameter

The PBRANGE (Pitch Bend Range) parameter sets the range (in semitones) that MIDI pitch bend information will alter voice pitch shifts.

MIDI CTRL parameter

The MIDI CTRL (Control) parameter defines which ports (USB and/or the physical MIDI input) are used by VoiceSupport software and for MIDI keyboard input and control.

Merge setting (default)

When you set the MIDI Control parameter to Merge, a computer running VoiceSupport software can be connected to the

USB port to control and update the device. MIDI notes, control messages and MIDI Clock are received via the physical MIDI Input jack on the device.

MIDI setting

When you set the MIDI Control parameter to MIDI, the USB port is ignored. MIDI notes and control messages are received via the physical MIDI Input jack on the device. You can also use MIDI System Exclusive messages on the MIDI Input jack to import presets using librarian software on a computer. USB setting

On this setting, the physical MIDI In is ignored. The USB port on the VoiceLive Touch 2 is used for both VoiceSupport and MIDI notes and control messages.

Switch-3 page

The optional three button footswitch, Switch-3, offers handsfree control of VoiceLive Touch 2. You can assign individual functions to any footswitch to control presets, looping, Hit etc.

Customizing Switch-3 footswitch assignments

- Connect Switch-3 to the Footswitch jack.
- Set the Control parameter on the Switch-3 page to "Custom".
- Adjust any of the Switch 1, 2, or 3 settings.

Control parameter

Allows quick switching between pre-set footswitch profiles and your custom profile.

Default setting

Set the Control parameter to Default for the following settings:

- Switch I = Preset Down
- Switch 2 = Preset Up
- Switch 3 = Hit & Talk

Looping setting

Set the Control parameter to Looping for the following settings:

- Switch I = Loop Record / LoopPlay
- Switch 2 = Loop Stop/Clear
- Switch 3 = Loop Undo

Custom setting

Set the Control parameter to Custom to assign the three footswitches of the Switch-3 freely. Cycling between the other profiles and back to Custom will retain your custom settings.

Harm Moment (Harmony Momentary) parameter

On setting

When a footswitch is assigned to Harmony and you set the Harmony Momentary parameter to On, harmony voices are only produced while the footswitch is held.

Off setting

When a footswitch is assigned to Harmony and you set the Harmony Momentary parameter to Off, you can use that footswitch to latch harmony voices on or off.

Delay Moment (Delay Momentary) parameter

On setting

When a footswitch is assigned to Delay and you set the Delay Momentary parameter to On, a delay effect is only produced while the footswitch is held.

Off setting

When a footswitch is assigned to Delay and you set the Delay Momentary parameter to Off, you can use that footswitch to latch the delay effect on or off.

Switch 1, Switch 2 and Switch 3 parameters

These parameters can be used to assign the three footswitches on a Switch-3 individually to the following features:

Preset Down setting

When a footswitch is assigned to Preset Down, tapping that footswitch will switch to the previous preset.

Preset Down & Key setting

When a footswitch is assigned to Preset Down & Key, *tapping* that footswitch will switch to the previous preset. *Holding* the footswitch allows Harmony key input via a special menu.

Preset Up setting

When a footswitch is assigned to Preset Up, tapping that footswitch will switch to the next preset.

Preset Up & Tap setting

When a footswitch is assigned to Preset Up, tapping that footswitch will switch to the next preset. *Holding* the footswitch temporarily enters Tap Tempo mode.

Hit & Talk setting

When a footswitch is assigned to Hit & Talk, tapping that footswitch will cycle Hit mode. *Holding* the footswitch enters Talk mode.

Loop Record/Play setting

When a footswitch is assigned to Loop Record/Play, tapping that footswitch will switch to Loop Record mode. Tapping the footswitch again will switch to loop playback.

Loop Stop/Clear setting

When a footswitch is assigned to Loop Stop/Clear, tapping that footswitch will stop playing the loop. Holding the footswitch will clear the loop.

Loop Undo setting

When a footswitch is assigned to Loop Undo, tapping that footswitch will immediately undo the previous Loop recording. Tapping the footswitch again will restore (redo) the recording.

Loop Start/Stop setting

When a footswitch is assigned to Loop Start/Stop and a loop exists, tapping the footswitch will start playback. Tapping the footswitch again will stop playback. There are no record or hold functions in this mode.

I Button Looper setting

The I 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).

- 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.
- A short portion of audio is played when erasing a loop.

Tap Tempo setting

When a footswitch is assigned to Tap Tempo, tapping that footswitch will set the tempo for the tempo-based effects.

Mod setting

When a footswitch is assigned to Mod, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Delay setting

When a footswitch is assigned to Delay, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Reverb setting

When a footswitch is assigned to Reverb, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Harmony setting

When a footswitch is assigned to Harmony, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Choir setting

When a footswitch is assigned to Choir, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Doubling setting

When a footswitch is assigned to Doubling, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Transducer setting

When a footswitch is assigned to Transducer, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Rhythm setting

When a footswitch is assigned to Rhythm, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Hardtune setting

When a footswitch is assigned to Hardtune, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Guitar Reverb setting

When a footswitch is assigned to Guitar Reverb, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Guitar Mod setting

When a footswitch is assigned to Guitar Mod, tapping that footswitch will activate or deactivate this effect. There is no hold function for this setting.

Guitar All setting

When a footswitch is assigned to Guitar All, tapping that footswitch will activate or deactivate the Guitar Reverb and Guitar Mod effects. There is no hold function for this setting.

System page

LCD Contrast parameter

The LCD Contrast parameter adjusts the display to best match ambient lighting.

Mic Boost parameter

The Low and High settings for the Mic Boost parameter add digital gain to the incoming mic signal so that quiet singing and/ or low output microphones can use the middle, broader adjustment range of the Input knob.

Global Key parameter

The Global Key parameter can be useful when you've found a good fixed key for your song but want to try different presets. On setting

When Global Key is set to On, all presets are set to the same Harmony Key – whether it is set to Auto or a fixed key such as E Major 2. Global Key can be set by either the Key parameter in the Harmony edit menu (there is no need to store) or via the Switch-3.

Off setting (default)

When Global Key is set to Off, individual presets may be stored with any Key setting.

Tune Reference parameter

The Tune Reference parameter trims the overall tuning reference for the Harmony and Hardtune effect blocks with respect to A = 440 Hz. This parameter is very useful when an accompanying instrument has changed overall pitch, such as a piano that is in tune with itself – but not with A = 440 Hz.

Aux In Type parameter

The Aux In Type parameter helps reduce Harmony chord change latency when you're singing to music coming from an MP3 player connected to the Aux input. It does so by delaying the MP3 audio signal slightly.

Live setting

When setting the \mbox{Aux} In Type parameter to Live, no delay is added.

Tracks setting (default)

When setting the Aux In Type parameter to Tracks, delay is added to the incoming audio.

Global Tempo parameter

On setting (default)

When you set the Global Tempo parameter to On, all presets adhere to the most recent Tap Tempo. This is so that Rhythm, Delay and the Loop Metronome can all synchronize to the same tempo as you change presets. Note that the Slap and Set Time styles within the Delay block will remain at their own settings.

Off setting

When you set the Global Tempo parameter to Off, the individual tempo for each preset is recognized as you change presets.

Product Info page

The Product Info page displays the current firmware version, the product serial number and the manufacturing date. Having this information handy allows for quicker troubleshooting with TC-Helicon support.

Factory initialization procedure

This returns the unit to all of its default system and preset values. If you want to preserve your presets, back them up using VoiceSupport. You can view the VoiceSupport manual on the support page of the TC-Helicon website.

- Power up the unit.
- When the display shows text, hold the *left bottom* and *left top* Matrix buttons until the display shows the initialization prompt.

MIDI IMPLEMENTATION

This chapter of the VoiceLiveTouch 2 reference manual contains the MIDI implementation of the device.

MIDI Implementation

Parameter	CC no.	Range	Comments
Effect Block			
On/Off			
Harmony On/Off	110	0-63 = off,	
		64-127 = on	
Double On/Off	111	"	
Reverb On/Off	112	"	
MicroMod On/	116	"	
Off			
Delay On/Off	117	",	
Rhythm On/Off	102	"	
Transducer On/	103	"	
Off			
Choir On/Off	113	"	
Hardtune On/Off	108	"	
Block Edits			
Mod Style	50	0-23	
Mod Level	90	0-127	
Mod Speed	18	0-127	
Mod Depth	93	0-127	
Delay Style	51	0-18	
Delay Level	62	0-127	
Delay Feedback	20	0-128	
Delay Filter	28	0-12	
Reverb Style	52	0-27	
Reverb Level	91	0-127	
Reverb Decay	63	0-127	
Doubling Style	53	0-11	

Parameter	CC no.	Range	Comments
Doubling Level	15	0-127	
Transducer Style	55	0-8	
Transducer Gain	105	0-127	
Transducer Low	41	0-127	
Cut			
Transducer High	57	0-127	
Cut			
Choir Style	118	0-14	
Choir Level	22	0-127	
Hardtune Style	24	0-6	
Hardtune Shift	60	0-127	
Rhythm Style	115	0-14	
Rhythm Division	83	0-19	Only when style is not
			Stutter/Sample
Rhythm Depth	80	0-127	'
Rhythm Type	104	0-22	Only when style is not
, , , ,			Stutter/Sample
Rhythm Stutter	26	0-19	Only for Stutter/Sample
Division			styles
Harmony Style	56	0-19	,
Harmony Level	12	0-127	
Harmony Key	30	0-11	0=C, I=C#, 2=D,
			3=Eb, 4=E, 5=F, 6=F#,
			7=G, 8=G#, 9=A,
			10=Bb, 11=B

MIDI Implementation

Parameter	CC no.	Range	Comments
Harmony Scale	31	0-5	0 = Maj I, I = Maj2,
			2 = Maj3, 3 = Min1,
			4 = Min2, 5 = Min3,
Voice Level	46	0-127	
Voice 2 Level	17	"	
Voice 3 Level	21	"	
Voice 4 Level	25	"	
Harmony Master	59	"	
Gender			
Voice I Gender	29	"	
Voice 2 Gender	19	"	
Voice 3 Gender	23	""	
Voice 4 Gender	27	",	
Voice I Voicing	89	0-8 (NP styles:	N/A for Notes styles
		Key = Auto),	
		0-28 (NP styles:	
		Key = CB), 0-48	
		(Shift styles)	
Voice 2 Voicing	61	"	
Voice 3 Voicing	88	"	
Voice 4 Voicing	3	"	
Harmony Hold	119	0-64 = Off,	
		65-127 = On	
Harmony Master	10	0 = Left 127	Pans all active voices.
Pan		= Right	
Looping			

Parameter	CC no.	Range	Comments
Master Loop	44	0 = Play button	
Control		press, I = Rec	
		button Press, 2 =	
		Stop, 3 = Undo,	
		6 = 2X, 10 =	
		Clear, 26 = Erase,	
		27 = Reverse	
Loop Play	47	any 2 values	
		toggle Play/Stop	
Loop Stop	48	any	
Loop Rec	49	any 2 values	
		toggle state	
Loop Play Re-	54	any	
trigger			
Overdub	57	0-64 = Off,	
		65-127 = On	
Setup			
Tone Style	106	0-8	
Guitar Gain	109	0-127	
Pitch Correct	107	0-64 = Off,	
On/Off		65-127 = On	
Lead Mute	13	"	
Talk Mode	114	"	
Analog Out Level	7	0-127	
Aux Level	58	"	
Harmony Level	85	"	

Parameter	CC no.	Range	Comments
Delay/Reverb	86	,,	
Level			
Talk Mode +	14	0-64 = Off,	
Tuner		65-127 = On	
Hit On/Off	87	0-64 = Off,	
		65-127 = On	
Non-CC mes-			
sages			
Pitch Bend			Applied to Harmony
			voices only
Bank select		0-2 =	
		presets 1-127,	
		=	
		presets 128-256,	
		2 =	
		presets 257-300	
Preset select		0-127	0 = preset #1,
			I = preset #2 etc.
			Favorites are loaded
			by loading associated
			preset.

PRESET LIST

This chapter of the VoiceLive Touch 2 reference manual shows the pre-programmed factory presets of the VoiceLive Touch 2. Please note that this device has 300 preset slots. The first 200 preset slots contain the pre-programmed factory presets. The remaining 100 slots are empty and can be used for variations of the factory presets or your own creations. Every preset can be overwritten.

1: 2: 3: 4: 5: 6: 7: 8: 9: 10: 11: 12: 13: 14: 15: 16: 17: 18: 19: 20: 21: 22:	WE WILL ROK U KATY'S AWAKE CHUMBATHUMPNG I AM EGGMAN FEELING PEAS BLUE TOWER 65 ABBA MIA ANOTHER BRICK FEELGD GORILLAS BEST OF MY LUV PUMP UP VOLUME LAZY BRUNO SABOTAGE BEASTI BABY MIXALOT FLEET HYMNAL STAYING A LIVE CALLING MAROON BKEYS TIGHTN UP GALAXIES OWL CT HONKY TONK WMN MUM&SONS WINDS DJ GOT US FALLN	24: 25: 26: 27: 28: 29: 30: 31: 32: 33: 34: 35: 36: 37: 38: 39: 40: 41: 42: 43: 44:	JAYLO ON FLOOR ANTE JUSTAKISS BROWN ID GIRL ELLIE LIGHTS FRIENDS LO PLCS GOOD VIBES MMRK EDGE OF GAGA GEDDIT STARTED AMERICA HORSE OW! CITY FLIES CRAZY GNARLES PMORE IGNORANCE ABC LOVE WOOD STOCK HILLS OF BEVRLY YOU BELONG W/ME ICE BABY YMCA PEOPLE BNL I WEEK I OF THE TYGER LUMPY PREZ USA REDNECK WMN
22: 23:	DJ GOT US FALLN DIGITAL U DANCE	45: 46:	REDNECK WMN LOSE YOUR M+M

47:	CLUB CANT HNDL	70:	WAYNE'S MIRROR
48:	BREAKEVEN	71:	MAKING AIR SPPL
49:	BLUE RHIMES	72:	BURNNG DN HOUSE
50:	CLOSER NIN	73:	AINT OVER LENNY
51:	TAYLOR SPARKS	74:	METRIC ALIVE
52:	MAMA SAID COOL	75:	SOLDIER DIXIES
53:	WHERE THEM GRLS	76:	INTER GALACTIC
54:	UM BRELLA RIH	77:	BILLIE GENE
55:	WITCH E. WOMAN	78:	CAN'T TOUCH DIS
56:	PB&J YOUNGSTRS	79:	CALI HOTEL
57:	BAREFOOT BLUEJN	80:	EASY FLATTS
58:	FIGHT POWER	81:	M&M NOT AFR8D
59:	TICKTOCK	82:	CRASH TEST FEET
60:	BRIT WMNIZER	83:	ENTER METALLICA
61:	DUSTIN THE WIND	84:	BET DANCE FLOOR
62:	AWOL SAIL	85:	LIKE U WERE DNG
63:	BOYS O' FALL	86:	DIED IN ARMS 2N
64:	STREET DIGGITY	87:	WKIN ON THE SUN
65:	BREAKIN' ACHY	88:	BNL MILLION
66:	ROCKY MTN WAY	89:	DIED IN ARMS 2N
67:	CAN SEE CLEARLY	90:	LOAD ME UP MATT
68:	C&COLOUR BIRD	91:	TWICE S HARD
69:	TAKE A B ROAD	92:	MOMENT SHANIA

93: 94:	50 CENT CANDY AS GOOD AS I WS	6: 7:	LIVING ON PRAYR MOM&POP DREAMS
95:	SUMMER 1969	118:	JUNGLE GUNS
96:	B4 HE CHEATS	119:	F LIPS YAYA SNG
97:	GANGAM	120:	I LOVE R&R
98:	AMERICAN GRNDAY	121:	NEED U NOW
99:	STORY OF TAYLOR	122:	TAINTED MARILYN
100:	GENIE BOTTLE	123:	PCAT BUTTONS
101:	IN AIR 2NIGHT	124:	HOW U REMIND
102:	ELVIRA O-R BOYS	125:	PURPLE PRINCE
103:	GOOD TIME	126:	HEART NERVE ANA
104:	TALKING N SLEEP	127:	SINK GONNA B
105:	GIVE HART BREAK	128:	CH SUPERNOVA
106:	PINK MONEY	129:	SOUNDS O SILENC
	JB-BF	130:	SCORPION WINDS
108:	GTTA B SOMEBODY	131:	UP WEAR W BLONG
	JUDAS	132:	i wanna sheryl
110:	SURRENDER	133:	HOLD ON CORN
	MATERIAL GRRRL	134:	I ALONE LIVE
	SHOOK ALL NIGHT	135:	UNBELIEVABLE
113:	MAD MUSIC	136:	BOBA FETT
114:	skull diamonds	137:	JABBA
115:	MJ PYT	138:	BARI WHITE

139: 140: 141: 142: 143: 144: 145: 146: 147: 148: 149: 150: 151: 152:	EMJAY 2011 TINKER BELL POPEYE MALE TO FEMALE DEEP TALKER LOOP-IST CHORD LOOP-BASS TUNED LOOP-BASS RHYTHM CHOP LOOP-ETHEREAL LOOP-SING SOLO LOOP-MEGAPHONE LOOP-LG CHOIR	162: 163: 164: 165: 166: 167: 168: 169: 170: 171: 172: 173: 174: 175:	ROCKABILLY SLAP LO FI ECHO SHOPPING CENTER SLAP ROOM VERB GROUP SHOUT DOUBLE DOWN DOUBLE UP GORGEOUS HALL MONO SPRING VRB PRACTICE ROOM NATURAL CORR CLOSE UP 3RD TUNED UP + DOWN TWO HIGH
152: 153:	LOOP-LG CHOIR LOOP-MED HARMNY	175: 176:	TWO HIGH RADIOHARMNYDLY
154:	BIG JAZZ GROUP	177:	FEMALE TO MALE
155: 156: 157:	MIDI NOTES WARTIME RADIO UNISON CHOIR	178: 179: 180:	CLOSE BELOW COUNTRY GIRLS POPTRIO
157: 158: 159:	CHORDS CHOIR ECHO VERB HIT DOUBLING	181: 182: 183:	LOWER + DOUBLE SLAP ABOVE BEACH BOYS
161:	STEREO GOLD DBL	184:	TUNED 2 UP

- 185: AUTOTUNE RADIO
- 186: ROBO DELAY
- 187: MEGAPHONE
- 188: DISTORT DOWN
- 189: DISTORTED RADIO
- 190: TOTALLY ALIEN!
- 191: FLANGER
- 192: STRANGE ECHO
- 193: FFFFMINATE
- 194: STEREO ECHO
- 195: OCTAVE FLANGE
- 196: BUNCH O BASS
- 197: OL' BLUE EYES
- 198: MFDIFVAL MONKS
- 199: VALKERIE
- 200: POWER CHORD

STYLES LIST

This chapter of the VoiceLive Touch 2 reference manual shows the styles of the VoiceLive Touch 2 effects.

Mod Styles

See "The Mod effect".

- 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 Wah

- Underwater
 - Cylon Mono
- Cylon Stereo
- Alien Voiceover

Delay Styles

See "The Delay effect".

- Half
- Ouarter
- Eighth
- Triplet
- Dotted 1/8
- Dotted I/4
- 1/4 Triplet
- Sixteenth
- Ping Pong I
- Ping Pong 2
- Ping Pong 3
- MultiTap I
- MultiTap 2
- MultiTap 3

- MultiTap 4
- MultiTap 5
- MultiTap 6
- Classic Slap
- Set Time

Reverb Styles

See "The Reverb effect".

Please note that the reverb styles are the same for voice and guitar.

- 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

Harmony Styles

See "The Harmony effect".

- High
- Low
- High & Low

- High & Higher
- Low & Lower
- Higher & Lower
- Bass & High
- Gospel Choir
- Upper Choir
- Lower Choir
- Lower Monks
- Upper Monks
- +7 Semitones
- -5 Semitones
- Octave Up Group
- Octave Dwn Group
- Humanized Notes
- Tight Notes
- Male Notes
- Female Notes

Doubling Styles

See "The Double effect".

- I Voice Tight
- I Voice Loose
- 2 Voices Wide
- 4 Voices Tight
- 4 Voices Wide
- Mixed Doubles
- 4 Voices Mono
- Oct Dn Double
- Oct Up Double
- Oct Dn Group
- Oct Up Group
- Mixed Octaves

Hardtune Styles

See "The Hardtune effect".

- Pop
- Country Gliss
- Robot

- Correct Natural
- Correct Chromatic
- Drone
- Gender Bender

Transducer Styles

See "The Transducer effect".

- Megaphone
- Radio
- On the Phone
- Overdrive
- Buzz Cut
- Stack
- Tweed
- Combo
- High Pass
- Beatbox

Delay Filter Styles

See "The Delay effect".

- Digital
- Tape
- Analog
- Radio
- Megaphone
- Cell phone
- Lo-Fi
- Hi Cut I
- Hi Cut 2
- Hi Cut 3
- Low Cut I
- Low Cut 2
- Low Cut 3

GETTING SUPPORT

If you still have questions about the product after reading this manual, please get in touch with TC-Helicon Support: http://support.tc-helicon.com/home