LIVE5

Vocal Harmony & Real-Time Pitch Correction for Guitarists

Vocalist®

Owner's Manual

Professional audio equipment

WARNING FOR YOUR PROTECTION
READ THE FOLLOWING:

KEEP THESE INSTRUCTIONS

HEED ALL WARNINGS

FOLLOW ALL INSTRUCTIONS

THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING LIQUID AND NO OBJECT FILLED WITH LIQUID, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS

CLEAN ONLY WITH A DRY CLOTH.

DO NOT BLOCK ANY OF THE VENTILATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.

ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

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

MAINS DISCONNECT: The plug shall remain readily operable. For rack-mount or installation where plug is not accessible, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated into the electrical installation of the rack or building.

If connected to 240V supply, a suitable CSA/UL certified power cord shall be used for this supply.

The symbols shown above are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash with arrowpoint in an equilateral triangle means that there are dangerous voltages present within the unit. The exclamation point in an equilateral triangle indicates that it is necessary for the user to refer to the owner's manual.

These symbols warn that there are no user serviceable parts inside the unit. Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service. Disconnect the unit during storms to prevent damage.

ELECTROMAGNETIC COMPATIBILITY

This device complies with part 15 of the FCC Rules and the Product Specifications noted on the Declaration of Conformity. Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Operation of this unit within significant electromagnetic fields should be avoided.

- use only shielded interconnecting cables.

DECLARATION OF CONFORMITY

Manufacturer's Name: Harman Music Group
Manufacturer's Address: 8760 S. Sandy Parkway
Sandy, Utah 84070, USA

declares that the product:
Product name: Vocalist® Live 5

Product option: all (requires Class II power adapter that conforms to the requirements of EN60065, EN60742, or equivalent.)

conforms to the following Product Specifications:

Safety: IEC 60065 -01+Amd 1

EMC: EN 55022:2006
EN 55024:1998
FCC Part 15

Supplementary Information:

The product herewith complies with the requirements of the:
Low Voltage Directive 2006/95/EC
EMC Directive 2004/108/EC
RoHS Directive 2002/95/EC
WEEE Directive 2002/96/EC

With regard to Directive 2005/32/EC and EC Regulation 1275/2008 of 17 December 2008, this product is designed, produced, and classified as Professional Audio Equipment and thus is exempt from this Directive.

With regard to Directive 2005/32/EC and EC Regulation 278/2009 of 6 April 2009, this regulation applies to Class A (single output) external power supplies. The external power supply used with this product is a multi-output power supply and thus is exempt from this Directive.

Roger Johnsen
Vice-President of Engineering
8760 S. Sandy Parkway
Sandy, Utah 84070, USA
Date: September 22, 2010

European Contact: Your local DigiTech/Vocalist Sales and Service Office or
Harman Music Group
8760 South Sandy Parkway
Sandy, Utah 84070 USA
Ph: (801) 568-8800
Fax: (801) 568-7583

If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 25 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

Warranty

We at **Vocalist®** are very proud of our products and back up each one we sell with the following warranty:

1. The warranty registration card must be mailed within ten days after purchase date to validate this warranty.
2. Vocalist warrants this product, when used solely within the U.S., to be free from defects in materials and workmanship under normal use and service.
3. Vocalist liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to Vocalist WITH RETURN AUTHORIZATION, where all parts and labor will be covered up to a period of one year. A Return Authorization number may be obtained from Vocalist by telephone. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.
4. Proof-of-purchase is considered to be the burden of the consumer.
5. Vocalist reserves the right to make changes in design, or make additions to, or improvements upon this product without incurring any obligation to install the same on products previously manufactured.
6. The consumer forfeits the benefits of this warranty if the product's main assembly is opened and tampered with by anyone other than a certified Vocalist technician or, if the product is used with AC voltages outside of the range suggested by the manufacturer.
7. The foregoing is in lieu of all other warranties, expressed or implied, and Vocalist neither assumes nor authorizes any person to assume any obligation or liability in connection with the sale of this product. In no event shall Vocalist or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

NOTE: The information contained in this manual is subject to change at any time without notification. Some information contained in this manual may also be inaccurate due to undocumented changes in the product or operating system since this version of the manual was completed. The information contained in this version of the owner's manual supersedes all previous versions.

Overview

Introduction

Congratulations on your purchase of the Vocalist® Live 5. The Vocalist Live 5 is a breakthrough processor that automatically generates live multi-part vocal harmony by analyzing guitar chord progressions. Armed with patent pending musIQ® Harmony Technology (which includes both musIQ note detection and musIQ harmony generation), the Vocalist Live 5 gives you accurate vocal harmonies even with complicated songs because only Vocalist Live tracks guitar chords, along with your voice.

musIQ® Technology

musIQ is a revolutionary technology that eliminates the need to program key and scale information to generate Harmony Voices. In real time musIQ technology analyzes the Lead Voice as well as the notes and chords played on a guitar and automatically generates accurate and musically correct vocal harmonies that both complement the Lead Voice and fit the music being played. With musIQ technology, you can focus on your singing and playing performance and eliminate song programming.

Vocalist® Live 5 Main Features

- musIQ harmony technology
- Up to four voices of automatic harmony with selectable voicing or a manually selected key and scale/mode
- Selection of lead voice effects (Preamp, Reverb, Echo/Delay, Compressor, EQ, modulation and pitch effects)
- Next-generation vocal pitch detection, pitch shifting, and humanization processing.
- Built-in guitar tuner
- Built-in microphone preamp
- Stereo XLR balanced and 1/4" unbalanced line outputs
- 50 factory presets (each with a Part A and Part B) and 50 user (editable) presets (each with a Part A and Part B)
- Expression pedal input for real-time control of most performance parameters
- XLR ground lift function
- 1/4" Headphone output
- +48V phantom power
- 24-bit/44.1kHz audio quality

Included Items

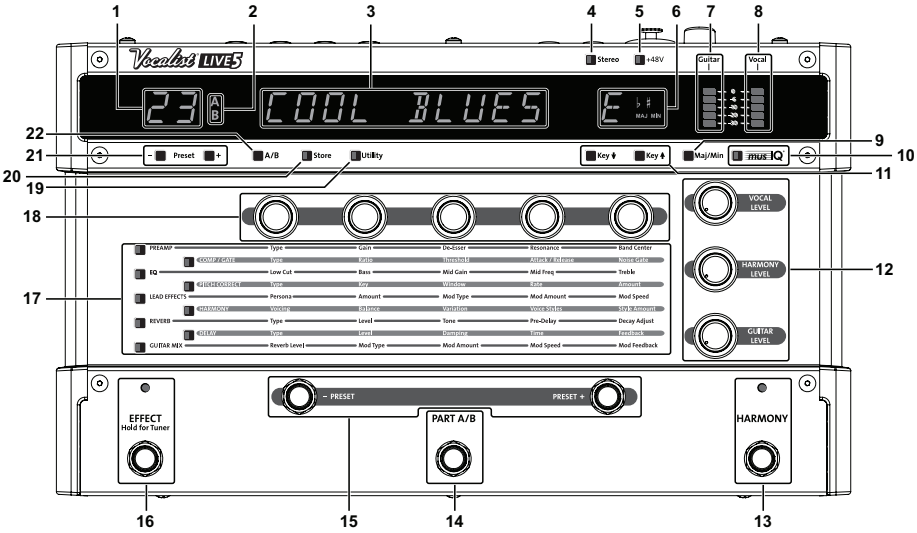
Before you get started, please make sure that the following items have been included:

- The Vocalist Live 5
- PS0913B Power Supply
- This owner's manual
- Warranty Card

The utmost care was taken while your Vocalist® Live 5 was being manufactured. Everything should be included and in perfect working order. If anything is missing, contact the factory at once. Please help us become acquainted with you and your needs by completing your warranty card or registering online at www.vocalistpro.com. It is your safeguard should a problem arise with your Vocalist Live 5.

Important safety tip: Always turn on amplifiers AFTER all other connections are made to the Vocalist Live 5 and AFTER the Vocalist Live 5 is powered on.

Front Panel



1. Numeric Display

Shows the number of the selected preset.

2. Part A/B Display

Shows which part is currently active, Part A or Part B.

3. Alphanumeric Display

Shows the name of the selected preset. While editing, it will show the parameter name and value being edited.

4. Stereo Button

When Stereo is the selected output mode (Stereo button is lit), the harmony voices are panned slightly left and right, and certain effects (chorus, flanger, and reverb, for example) operate in stereo. When Mono is the selected output mode (Stereo button is off), the output mix is mono and the outputs all carry the same signal.

5. Phantom Power Button

Enables 48 volt phantom power on the XLR mic input. **Note:** Phantom power is normally only needed with condenser microphones and should never be used with ribbon microphones. To avoid damaging the microphone, please consult your microphone documentation to ensure phantom power is applied only when appropriate.

6. Key Display

Shows the selected root key (E, F, F#, etc.) for generating harmonies when musIQ is off. The Key display includes accidental symbols (sharp and flat) as well as the scale modes major or minor.

7. *Guitar Signal LED Ladder*

Shows the signal strength from the guitar input. Green indicates that a signal is present, amber indicates the signal is approaching levels that may clip and red indicates clipping. Clipping may degrade the ability of the Vocalist® Live 5 to detect the guitar notes.

NOTE: Adjust the guitar input sensitivity in the Utilities menu to optimize the signal level that works best with your guitar (see page 25).

8. *Vocal Signal LED Ladder*

Shows the signal strength from the Mic input. Green indicates a signal is present, amber indicates the signal is approaching levels that may clip and red indicates the built-in limiter is active. The limiter generally prevents clipping unless a very large input is applied.

9. *Major/Minor Button*

Toggles between major and minor scale types when the musIQ® button is not lit.

10. *musIQ® Button*

Turns automatic harmony generation on or off. When turned on, harmonies will be generated by analyzing the Lead Vocal and guitar inputs.

11. *Key Up/Down Buttons*

Used to select a key for the harmonies to be generated (when the musIQ® is off).

12. *Level Knobs*

Vocal Level – Controls the lead vocal level in the mix.
Harmony Level – Controls the harmony vocal level in the mix.
Guitar Level – Controls the guitar level in the mix.

13. *Harmony Footswitch*

Enables and disables the vocal harmonies. You can configure the Harmony Footswitch to be a toggle or momentary control. See the Utility Parameters menu on page 25 for more information.

14. *Part A/B Footswitch*

Use this to toggle between Part A and Part B of the preset.

15. *Preset +/- Footswitches*

Use these to step through the presets. Hold either down to scroll quickly through the presets.

16. *Effects Footswitch*

Enables and disables the selected effects. Press and hold this footswitch for at least one second to enable the guitar tuner. Press the Effects/Tuner footswitch again to disable the guitar tuner.

17. Effects Matrix

The Effects Matrix provides information regarding the current preset and parameter edit functions. The buttons running down the left side of the Matrix provide a visual indication of which effects are in use for the selected preset. While editing a preset, the flashing button LED indicates that the Effect row is selected for editing. Use the five Parameter knobs above the Effects Matrix columns to edit the parameters for the selected effect row. For more information about the Effects matrix, see page 14.

18. Effect Parameter Knobs

Use these to adjust parameters for the selected row in the Effects matrix.

19. Utility Button

Press to access the Utility Parameter menu. For more information on the Utility menu, see page 25.

20. Store Button

Press to save changes you make to a preset. For more information on storing presets, see page 12.

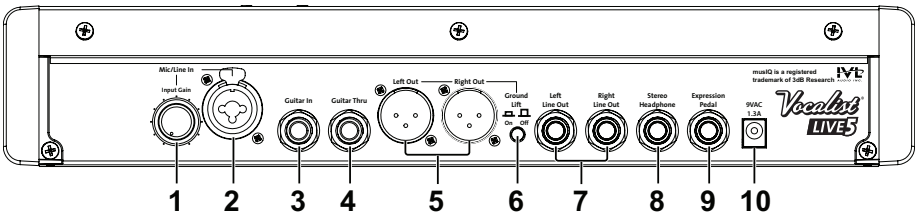
21. Preset +/- Buttons

Use these to step through the presets. Hold either down to scroll quickly through the presets.

22. Part A/B Button

Use this to toggle between Part A and Part B of the preset.

Rear Panel



1. Mic/Line Input Level

This knob adjusts the gain of the Mic and Line inputs. Turn clockwise to increase gain, or counter-clockwise to decrease gain. If the Vocal Signal LED ladder reaches red while you sing, you need to decrease the Mic gain.

2. Mic/Line In

This is a combination Mic (XLR) and Line (1/4") input and is the lead voice for the Vocalist® Live 5. Connect a dynamic or condenser microphone here with an XLR cable. If the mic signal is line level (coming from the output of a pre-amp before the Vocalist Live 5), connect the line output of the preamp here using a 1/4" balanced or unbalance cable.

3. Guitar In

Connect a guitar directly to this high-impedance input. Note that there is no loss of quality between the Guitar In and Guitar Thru jacks.

4. Guitar Thru

Connect this output to the input of a guitar amplifier or mixer channel (if the guitar uses active electronics).

5. Left Out and Right Out (XLR Outputs)

Connect these XLR balanced outputs to a powered speaker or mixer. XLR outputs can be run in stereo (Stereo button on front panel is lit) or mono (Stereo button is off). Either output can be used in mono mode.

6. Ground Lift

The XLR Ground Lift switch can be used to eliminate most hum and ground loop noise problems when the VL5 is connected to a both a P.A. and a guitar amp. If you hear a humming sound or buzz coming from your amp or P.A., try pressing this button.

7. Line Out L/R

Connect both these balanced/unbalanced outputs to a mixer, powered speakers or P.A. system. If only a single output is to be used, be sure the output mode is set to Mono (Stereo button on front panel is off).

8. Headphones

Use this jack to hear the Line Out L/R mix through headphones.

9. Expression Pedal

The Vocalist® Live 5 can use either a standard passive guitar volume pedal or a resistance-based expression pedal. If using a standard guitar volume pedal, it should use a 250 kOhms or higher pot. If using an expression pedal, it must offer a TRS connection and offer a minimum resistance of 10kOhms.

See the Utility Parameters menu on page 25 for information on expression controllable parameters.

10. Power

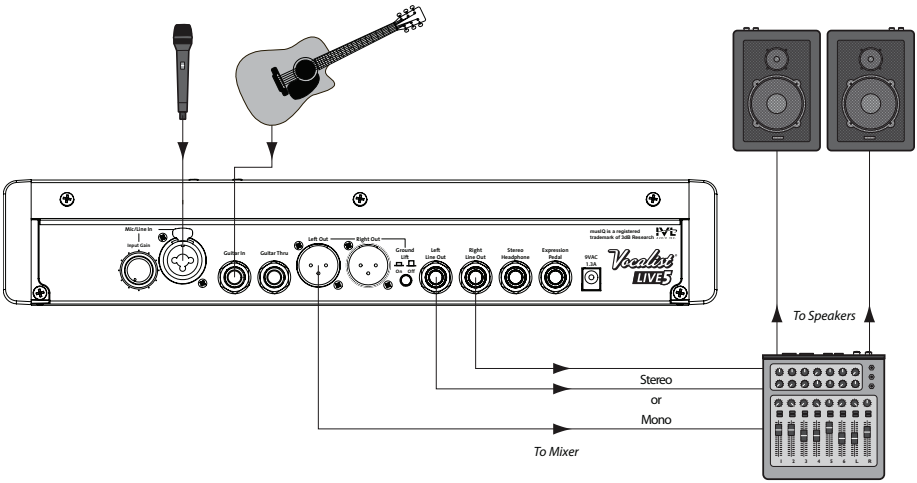
Connect only the PS0913B power supply to this jack.

Getting Started

Before connecting the Vocalist® Live 5 to your amplifier, make sure that the power to your amplifier is off and that the Vocalist Live 5 is plugged into the wall and powered on. There is no power switch on the Vocalist Live 5. To turn the Vocalist Live 5 on or off, connect or disconnect the included power supply from the Power Input jack.

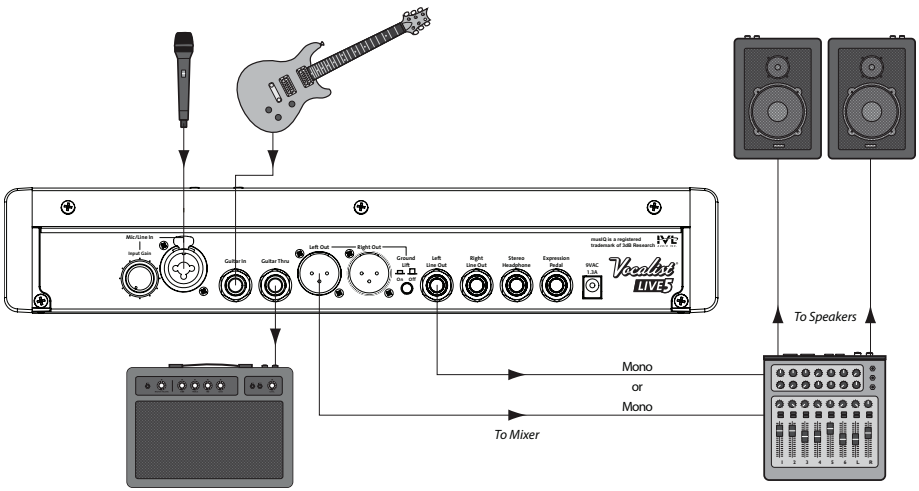
Connecting a Microphone and Guitar to a PA (Mono or Stereo)

This is a basic setup for stereo or mono outptut. For stereo output, enable the **Stereo** button on the front panel. For mono output, turn the **Stereo** button on the front panel off. For the Mic/Line input, use the XLR input for the Microphone in order to utilize the Vocalist Live 5's preamp. Note that the XLR outputs can also be used for stereo output.



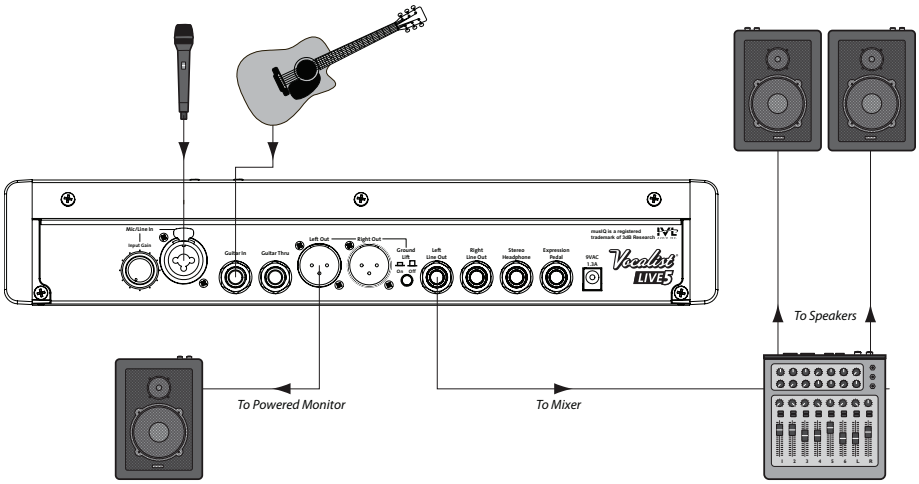
Connecting a Microphone and Guitar to a Guitar Amp and PA (Mono)

This setup bypasses the Vocalist® Live 5 guitar effects via the Guitar Thru output. A mono vocal and guitar signal is sent to the mixer. Turn the **Stereo** button off on the front panel for mono operation.



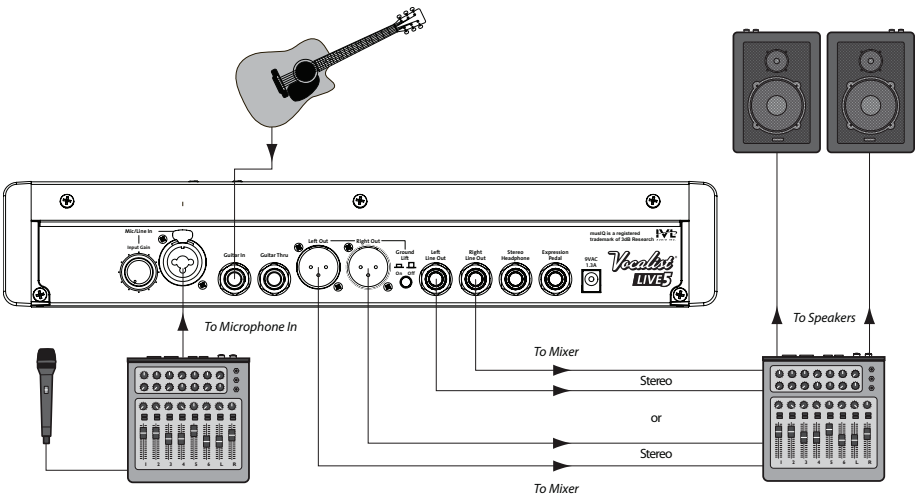
Connecting a Microphone and Guitar to a PA and Powered Monitor (Mono)

This setup sends guitar and vocals to the mixer as well as an onstage monitor. Turn the **Stereo** button off on the front panel for mono operation.



Connecting a Guitar and Microphone from a Mixer/Preamp to a PA (Stereo)

This setup includes a preamp or mixer between the microphone and the Vocalist® Live 5. Use the ¼" input of the Mic/Line input as the Microphone is running through a preamp. Turn the **Stereo** button on the front panel on for stereo operation.



Adjusting the Guitar Sensitivity

While playing the guitar, the **Guitar Signal LED Ladder** should be bouncing in the green or amber range. If the **Guitar Signal LED Ladder** does not light when you play, or only the bottom green LED of the ladder lights, the guitar signal level may be too low and the Guitar Sensitivity should be changed to Hi in the Utility menu. If the **Guitar Signal LED Ladder** bounces in the red, then the Guitar Sensitivity should be changed to LO in the Utility menu (See page 25 for Utility menu).

Tuning Your Guitar

It is important for your guitar to be properly tuned in order for the musIQ® technology to generate the best sounding harmonies. Alternate tunings (for example, DADGAD or tuning down) are fine, as long as the built-in tuner shows each string as in tune. If you are using an external tuner, make sure that the reference is set to 440 Hz.

To use the built-in tuner, press and hold the **Effect Footswitch** to start the Guitar Tuner. The Effect LED will flash and the display will show TUNER while the Tuner mode is active. Tune each string until a star (*) without arrows (› or ‹) appears in the center of the display for each string, indicating it's in tune.

Note: For the Tuner to work properly it needs to receive adequate guitar signal strength, as indicated by the **Guitar Signal LED Ladder**.

Adjust the Vocal Level

Using the Input Gain knob on the rear of the unit adjust the level so the **Vocal Level LED Ladder** bounces around amber when you sing loudly and bounces in the green when you sing quietly. Avoid having the **Vocal Level LED Ladder** bouncing in the red.

Adjust the Guitar Level

Ideally the **Guitar Signal LED Ladder** should be in the green or amber range while playing. Most electric and acoustic/electric guitars send their signal at a level appropriate for the Vocalist Live 5. If you have a volume control on your guitar (for example, an acoustic guitar with a pre-amp built in), you should adjust the volume so that the **Guitar Signal LED Ladder** is in the green or amber range most of the time while playing.

Once the guitar level is set with your guitar's volume control, you can adjust how much guitar is heard in the mix with the **Guitar Level** knob.

Choose a Preset

Using the **Preset +/-** footswitches and buttons you can cycle through the different presets (for a full preset list see page 29). Some presets to try:

- 03 CSN - Contains a three part harmony: your lead vocal, a 3rd and 5th above to create a triad.
- 05 GOLD PC – Studio quality vocal enhancement and pitch correction with a simple 3rd above harmony.
- 06 4 UNISONS – Uses four harmony voices in unison to create a fat thickening effect.
- 09 ACCAPELLA C - Features 5th down, 3rd down and 3rd up harmonies in the key of C without the need for a guide instrument.
- 10 OTTOTUNE! - Uses the Chromatic Pitch Correction to get that chart topping sound best suited for Pop and R & B.

Cycle through different presets to get an idea of the range of effects contained in the Vocalist® Live 5.

Using the Vocalist® Live 5

Each preset has two parts, an A part and a B part that can be toggled with the A/B footswitch or button. This can be helpful for subtle changes within a song. For example, you could have different harmony settings for the Verse and Chorus of a song. Each preset has a name, number, part, as well as a set of harmonies and/or other effects assigned to it.

- You can cycle through all the different presets by pressing the **Preset +/-** footswitches or buttons
- Toggle between the A and B parts of each preset by using the **Part A/B** footswitch or button.
- You can turn a preset's harmonies on or off with the **Harmony** footswitch.
- You can turn a preset's effects on or off with the **Effects** footswitch.

Mono and Stereo

You can output the lead vocal and harmonies in either mono or stereo. To use a mono signal, enable the **Stereo** button on the front panel, and connect the **Line Out Left/Right** or **Left/Right Out XLR** output to your P.A.

To use a stereo signal, enable the **Stereo** button on the front panel and connect both XLR outputs or Line outputs to your P.A.

Regarding External Effects Pedals

Do not hook up any other effects pedals to your guitar prior to plugging it into the Vocalist® Live 5, as this could affect vocal harmony generation. The only thing between your guitar and the Vocalist Live 5 should be the guitar cable. Use the Guitar Thru to connect your effects and stomp boxes.

Creating and Modifying Presets

In addition to creating vocal harmonies, the Vocalist Live 5 also offers a wide variety of effects you can apply to your voice. You can quickly change the harmonies and effects by changing the presets. Use the **Effects Matrix** and **Parameter Knobs** to edit effects and harmonies. To start, press an effect button to the left of the matrix, the button LED will blink indicating that you are in Edit Mode. Then use the parameter knobs to adjust the current value for each parameter. While editing a parameter the **Alphanumeric Display** will show its name and the **Numeric Display** will show its current value. Once you are finished editing, press the effect button again to exit edit mode. Effects and parameter descriptions are described later in this manual.

How to Store Presets

Note: The Vocalist Live 5 has two parts to each preset, an A part and a B part. Each part of the preset is edited separately, but they are stored together.

1. Select a preset with the **Preset +/-** footswitches or buttons.
2. Press the **Store** button. The **Alphanumeric Display** briefly reads STORE TO, then the currently selected preset name and number appear.
3. Use the first parameter knob to choose which preset you would like to save to

4. Change the Preset Name (if desired). To change the preset name:
   - Turn the second Parameter knob to select a letter in the Alphanumeric display (or use the **Key Up/Down** buttons). The selected letter will flash.
   - Turn the third Parameter Knob to change the selected letter.
5. Press the **Store** button again to save your settings (or press any button other than Store to cancel).

Note: There are two kinds of presets: **User** and **Factory**. You can change User presets (numbers 1A/B-50A/B), but you can't change Factory presets (numbers 51A/B-00A/B). When the Vocalist® Live 5 ships from the factory, the User and Factory presets are identical.

Warning: Do not disconnect the power from the Vocalist Live 5 when storing a preset (when the Alphanumeric display reads STORING . . .). Doing so may erase your user presets. In the event that this happens, perform a Factory Reset, described on page 26.

Copying Presets

The Vocalist Live 5 allows you to copy the A part to both A and B parts and vice versa. This can be helpful when making massive changes to a preset and you want it copied to both parts.

To copy the A or B part to both parts:

1. Follow Steps 1-4 for storing a preset above.
2. Press the **A/B** footswitch or button (Display shows STOR A>AB, STOR B>AB, depending on which part was selected when you pressed **Store**). Press the A/B Footswitch again to select STOR AB>AB.
3. STOR A>AB will store Part A settings to both Part A and B.
4. STOR B>AB will store Part B settings to both Part A and B.
5. STOR AB>AB will store Parts A and B to Parts A and B.
6. Press the **Store** button again to copy the preset to both parts (or press any button other than Store to cancel).

Effects and Parameter Descriptions

Preamp

The Preamp row includes a model of a tube-based preamp, a De-esser and audio frequency band limiting. The preamp is controlled by the Type and Gain parameters. The De-esser is controlled by the De-esser parameter, and band limiting is controlled by the Resonance and Band Center parameters. In order to turn the preamp row off, you need to set Type to Pre Bypass, De-esser to 0, and Band Resonance to 0.

Type	PRE BYPASS	Bypasses the preamp model (turns it off).
	PRE TUBE	Selects a tube preamp model, which provides mild distortion to give your vocals more warmth.
	PRE HARSH	Selects a preamp with heavy distortion and low susceptibility to feedback.
Gain	PRE GAIN	Adjusts the preamp's gain. Range: 0-99
De-esser	DE-ESSER	Increasing this value applies more gain reduction to sibilant sounds. Range: 0-99
Band Resonance	BAND RES	Controls the narrowness of the selected audio frequency band (see Band Center, below). All frequencies outside the band are attenuated while all frequencies inside the band have no attenuation. There is no band limiting applied when this parameter is set to 0. As this parameter is turned up, the band becomes narrower, and the effect of the band limiting becomes more prominent. Range: 0-99.
Band Center	BNDCENxxxx	Controls the location of the audio frequency band center, where xxxx is the band center in Hz. Range: 80-7650 Hz.

Comp/Gate

The Comp/Gate affects the incoming vocal dynamics. The Comp/Gate can be used to smooth out a vocal performance by adjusting the output gain of the signal based on the incoming amplitude of the vocal. The Gate function is useful for removing background noise from the incoming signal, or for muting the signal when it falls below a certain threshold. In order to turn the Comp/Gate row off, you need to turn Type to OFF and Noise Gate to GATE OFF.

Type	CMP OFF	Turns the compressor off.
	CMP HARD	Abruptly reduces gain when the input level rises above the threshold. (Hard knee)
	CMP SOFT	Gently reduces gain when the input level rises above the threshold. (Soft knee)
	CMP SOFTER	Very gently reduces gain when the input level rises above the threshold. (Softer knee)
Ratio	CRATIO x.x	The ratio (x.x) of the change in input level to the change in output level, measured in decibels (dB). For example, a 2:1 ratio means that for every 2 dB the input level changes, the output level changes 1dB. Range: 1.0 - 5.0 Warning: Using a high compression ratio increases susceptibility to feedback due to the higher gain used.
Threshold	CMP THRESH	This parameter determines the input level of the "knee". A value of 0 corresponds to 0 dB and a value of 99 corresponds to –40 dB. Range: 0-99
Attack/ Release	CMP RATE	Controls how quickly the compressor begins and ends its effect on the signal. Range: 1-9
NoiseGate	GATE OFF	Turns the gate function off.
	GATE-xxDB	The Gate function triggers at –xx decibels. Range: -80dB to -20dB

EQ

The EQ parameters allow the tone of the incoming vocal to be adjusted as indicated by the table below. This function cannot be entirely bypassed via a single parameter, instead the Low Cut must be turned OFF and the remaining gains (DB BASS, DB MID GAIN, DB TREBLE) must be set to 0 DB to bypass this feature.

Low Cut	LOCUT OFF LOCUT xxxHZ	Low cut feature is turned off. All frequencies below xxx Hertz are attenuated. Range: 60Hz – 120Hz
Bass	DB BASS	Reduces or increases the volume of bass frequencies. Range: -12dB to 12dB
Mid Gain	DB MID	Reduces or increases the volume of midrange frequencies. Range: -12dB to 12dB
Mid Frequency	MIDF xxxxHZ	Selects the frequency (xxxx) that is reduced or increased with Mid Gain. Range: 80Hz – 7650Hz
Treble	DB TREBLE	Reduces or increases the volume of the treble frequencies. Range: -12dB to 12 dB

Pitch Correct

Pitch correction detects the note you're singing and processes it to make it more precise. For example, if you're singing a C, and it's a little flat (but not quite B), pitch correction alters the note so that a more precise C is heard through the mixer or P.A. Pitch correction requires you to choose a scale (or mode) and a key (or root note) so the Vocalist® Live 5 knows what notes to correct to. The parameters below control how pitch correction is applied to the lead vocal.

Typically, most singers use the PC CHROM scale for pitch correction. In this case, the Key parameter is not used, and there is no need to change the pitch correction scale between songs.

Scales and modes are described below using degrees, where the number 1 represents the root of the scale or mode, and is determined by the Key parameter. A lowercase "b" indicates the note is flat.

Type	1 PC OFF	Pitch correction is turned off.	15 PC PHRYG	Phrygian Mode [1 b2 b3 4 5 b6 b7]
	2 PC CHROM	12 Note Chromatic Scale [1 b2 2 b3 3 4 b5 5 b6 6 b7 7]	16 PC LYDIAN	Lydian Mode [1 2 3 b5 5 6 7]
	3 PC MAJOR	Major Scale [1 2 3 4 5 6 7]	17 PC MIXOLYD	Mixolodian Mode [1 2 3 4 5 6 b7]
	4 PC MIN NAT	Natural Minor Scale [1 2 b3 4 5 b6 b7]	18 PC AEOLIAN	Aeolian Mode [1 2 b3 4 5 b6 b7]
	5 PC MIN HRM	Harmonic Minor Scale [1 2 b3 4 5 b6 7]	19 PC LOCRIAN	Locrian Mode [1 b2 b3 4 b5 b6 b7]
	6 PC MIN MEL	Ascending Melodic Minor Scale [1 2 b3 4 5 6 7]	20 PC IN-SEN	Japanese In Sen Scale [1 b2 4 5 b7]
	7 PC BLUES	Blues Scale [1 b3 4 b5 5 b7]	21 PC ARABIC	Arabic Scale [1 b2 3 4 5 b6 7]
	8 PC PENTMAJ	Major Penatonic Scale [1 2 3 5 6]	22 PC NEAPOL	Neapolitan Scale [1 b2 b3 4 5 6 7]
	9 PC PENTMIN	Minor Penatonic Scale [1 b3 4 5 b7]	23 PC NEAPMIN	Neapolitan Minor Scale [1 b2 b3 4 5 b6 7]
	10 PC DIMIN	Diminished Scale [1 2 b3 4 b5 b6 6 7]	24 PC HUNGMIN	Hungarian Minor Scale [1 2 b3 b5 5 b6 7]
	11 PC BEBPMAJ	Major Bebop Scale [1 2 3 4 5 b6 6 7]	25 PC ENIGMA	Enigmatic Scale [1 b2 3 b5 b6 b7 7]
	12 PC BEBPDOM	Dominant Bebop Scale [1 2 3 4 5 6 b7 7]	26 PC MAJ TRI	Major Triad Scale [1 3 5]
	13 PC WHLTONE	Whole Tone Scale [1 2 3 b5 b6 b7]	27 PC MIN TRI	Minor Triad Scale [1 b3 5]
	14 PC DORIAN	Dorian Mode [1 2 b3 4 5 6 b7]	28 PC NOTE	Single Note [1]

Key	PC X	Selects the key or root of the scale. For example, if the Type is set to MAJOR, and Key is set to PC C, the notes that will be corrected to are C, D, E, F, G, A, and B. **Note:** This parameter is ignored when the scale type is set to PC CHROM.
Window	PC WINDOW	The window parameter controls the window or extent around each note that pitch correction will be applied. If the window is small, then your pitch will only be altered if your input pitch is close to the note already. If the window is large, then pitch correction will be applied even if your input pitch is far from the note. Range: 1-99
Rate	PC RATE	The pitch correction rate controls how aggressively your pitch is corrected. If the rate is low, then all of your rapid pitch variations (e.g. vibrato, scoops etc) will be left untouched, and only long sustained notes will be corrected. If the rate is high, then all of your pitch variations will be removed resulting in a very flat robotic sounding voice. Range: 1-99
Amount	PC AMOUNT	The amount parameter scales the amount of pitch correction applied to the input voice. The range is 0 to 99. When set to 99, the full pitch correction amount is applied, but as the amount control is turned down, the amount of pitch correction is reduced in proportion to how close you are to the target note. So, larger deviations are corrected more than smaller deviations, and small intentional pitch deviations are preserved. This is probably best understood through the following examples: With the amount set to 99, a 10 cent flat input will be corrected by 10 cents and a 50 cent flat input will be corrected by 50 cents. With the amount set to 80, a 10 cent flat input will be corrected by approximately 5 cents and a 50 cent flat input will be corrected by approximately 40 cents. With the amount set to 0, a 10 cent flat input will not be corrected and a 50 cent flat input will be corrected by approximately 10 cents.

Lead Effects

The Lead Effects modify the incoming vocal by changing its pitch or timbre in real time. There are Persona effects, which change the character of the voice, and Mod effects which add modulation changes such as tremolo or chorus to the incoming vocal signal. The effects in the Lead Effects row can be turned off by setting the Persona to OFF, and the Mod Type to OFF. Note that Lead Effects apply to the lead vocal (your voice) only. To modify the harmony voices, use the Voice Styles parameter in the Harmony effect (described on page 20).

Persona	1 PER OFF	Effect is off.
	2 PER BORG	Metallic ringing.
	3 PER PIxEL	Stepped pitch.
	4 PER ROBO	Fixed pitch.
	5 PER BIG	Bigger person.
	6 PER SMALL	Smaller person.
	7 PER GIANT	Very large person (with octave down shift).
	8 PER ELF	Very small person (with octave up shift).
	9 PER CHIP	Instrumental shift sound.
	10 PER VIBR1	Light, natural sounding vibrato.
	11 PER VIBR2	Slower vibrato.
	12 PER VIBR3	Ballad-type vibrato.
	13 PER OPERA	Tenor opera vibrato.
	14 PER ROCK	Vibrato and some gender.
	15 PER ELVIS	Big vibrato, scoop, and some gender.
	16 PER BOB	Scoops into notes.
	17 PER SHEEP	"Baaa" sound.
	18 PER GRANNY	Wavery voice.
Amount	PER AMT	Determines the amount of persona effect heard in the output. Range: 0-99

Mod Type	1 VMOD OFF	No mod effect.
	2 VMOD THICK	Thicken.
	3 VMOD CHOR	Chorus.
	4 VMOD ANG	Flanger.
	5 VMOD TREM	Tremolo.
	6 VMOD STUTR	Stutter.
Mod Amount	VMOD AMT	Determines the amount of mod effect heard in the output. Range: 0-99
Mod Speed	VMOD SPEED	Determines the speed of the mod effect's modulation. Range: 1-99

Harmony

These settings let you select the number and type of background voices that are generated by the Vocalist® Live 5. You can add 1-4 voices of harmony or duplicates (unison) to your lead vocal. The different harmony combinations appear as abbreviations in the Alphanumeric display. Each abbreviation represents one voice. The combinations are numbered; each combination's number appears in the Numeric display.

The abbreviations stand for:

U	Unison. Creates a copy of the lead vocal.
UC	Unison corrected. Creates a copy of the lead vocal with pitch correction.
3U	Harmony is one third up from the lead vocal.
3D	Harmony is one third down from the lead vocal.
5U	Harmony is one fifth up from the lead vocal.
5D	Harmony is one fifth down from the lead vocal.
8U	Harmony is one octave up from the lead vocal
8D	Harmony is one octave down from the lead vocal.

Note: The 3U and 5U (third up and fifth up) settings produce harmonies that are only nominally third up and fifth up. They vary depending on the guitar chord and input vocal pitch.

Note: Turning on either a Lead Effect, persona or pitch correction requires the use of a harmony voice. If all harmony voices are being used in the current preset, the least important harmony voice is automatically selected for this purpose.

Voicing	1 OFF	No harmonies.	17 U U	Two voices of unison.
	2 8D	Octave down.	18 3U 3U	Third up, third up.
	3 5D	Fifth down.	19 3U 5U	Third up, fifth up.
	4 3D	Third down.	20 8D 5D 3D	Octave down, fifth down, third down.
	5 U	Unison.	21 8D U 8U	Octave down, unison, octave up.
	6 UC	Unison w/ pitch correction.	22 5D 3D U	Fifth down, third down, unison.
	7 3U	Third up.	23 5D 3D 3U	Fifth down, third down, third up.
	8 5U	Fifth up.	24 5D U 5U	Fifth down, unison, fifth up.
	9 8U	Octave up.	25 3D U 3U	Third down, unison, third up.
	10 8D 8U	Octave down, octave up.	26 3D 3U 5U	Third down, third up, fifth up.
	11 5D 3D	Fifth down, third down.	27 U 3U 5U	Unison, third up, fifth up.
	12 5D 3U	Fifth down, third up.	28 3U 5U 8U	Third up, fifth up, octave up.
	13 5D 5U	Fifth down, fifth up.	29 5D 5D 5U5U	Fifth down, fifth down, fifth up, fifth up.
	14 3D 3D	Third down, third down.	30 5D 3D 3U5U	Fifth down, third down, third up, fifth up.
	15 3D 3U	Third down, third up.	31 3D 3D 3U3U	Third down, third down, third up, third up.
	16 3D 5U	Third down, fifth up.	32 U U U U	Four voices of unison.

Balance	HARM BAL	Controls the balance between the generated harmony voices. If there is only one voicing, then this control has no effect. But if there is more than one voicing on, then this parameter controls the balance between these voices. A value of 50 gives approximately the same output level for all the voices. Values less than 50 increase the level of the lower voicings compared to the higher voicings, while values over 50 increase the level of the higher voicings compared the lower voicings.
Variation	When the musIQ™ button is lit: 1 MUSIQ MAIN 2 MUSIQ ALT When the musIQ button is NOT lit: 1 KEY VAR1 2 KEY VAR2 3 KEY VAR3	 The main musIQ harmony mode. This is an alternate musIQ mode that follows the melody note changes in the lead more than the main mode. For some songs, this mode will produce an interesting alternative to the main musIQ mode, but because it is more aggressive in following the lead melody, it can also produce some unexpected harmonies. Each key variation (KEY VAR) selects a scale that sounds correct with your song. The difference between the 3 Major or 3 Minor scales is fairly subtle and may not be obvious right away but, for some songs, one scale will sound "right" where another might not. Whether a certain scale "works" or not depends on what note you sing in relation to the key you have chosen.
Voice Styles	1 VST TIME 2 VST TM PCH 3 VST ONSET 4 VST GOSPEL 5 VST MIXED 6 VST GALS 7 VST GUYS 8 VST DRUNK	Time decoupling. Harmony voices begin and end with varying delays relative to the lead vocal. Pitch and time decoupling. Harmony voices vary slightly in pitch as well as timing. Pitch and time decoupling with onset scoops. Pitch and time decoupling with onset scoops and vibrato. When there is more than one harmony voice on, this style sends a mix of the first four styles to the individual harmony voices. Gender modified to make harmonies sound more feminine. Gender modified to make harmonies sound more masculine. Extreme pitch and time decoupling.
Style Amount	VSTYLE AMT	Determines the amount of voice style applied to the harmony. Range: 0-99

Reverb

Reverb affects both the processed vocal signals and harmonies as well as the Guitar Mix, as set with the Guitar Mix Reverb Level (see below). There are five reverb types (Studio, Club, Hall, Stadium, and Coarse), each reflecting different decay times and diffusion settings. Reverb can be bypassed by setting the Reverb Type to RVB OFF.

Type	1 RVB OFF 2 RVB STUDIO 3 RVB CLUB 4 RVB HALL 5 RVB STAD 6 RVB COARSE	Reverb is turned off. Sounds like reverb in a recording studio. Sounds like reverb in a medium sized club. Sounds like reverb in a concert hall. Sounds like reverb in a stadium. This reverb style is similar to studio, except there is less diffusion in the reverb tail, producing a coarse grainy sound.
Level	RVB LEVEL	Adjusts the amount of reverb applied to the lead vocals and harmonies. Range: 0-99
Tone	RVB TONE	Adjusts the tone of the reverb. Range: 1-5
Pre-Delay	RVB PREDEL	Determines the amount of pre-delay. Range: 0-9
Decay Adjust	RVB DECADJ	Increases or decreases the rate at which the reverb decays. Range: 1-99

Delay

Delay affects the processed vocal signals. Delay can be bypassed by setting the Delay Type to DELAY OFF.

Type	1 DELAY OFF 2 DELAY MONO 3 DELAY ALT 4 DELAY ALT2 5 DELAY ALT3	Delay is turned off. This style produces a pan-center echo. The three ALT styles produce variations of ping-pong echoes that alternate between the left and right channel
Level	DELAY LEVEL	Adjusts the level of the echo effect heard in the output. Range: 0-99
Damping	DELAY DAMP	Controls how damped (lowpass filtered) the echoes sound. Range: 0-99
Time	DELAY TIME	Controls the delay between the echoes. Range: 1-70
Feedback	DELAY FDBCK	Controls how much of the echo is fed back into the delay line. If this parameter is set high, then the level of each consecutive echo drops very little. Range: 0-99

Guitar Mix

Guitar Mix affects the amount of Guitar signal that is processed through the two guitar effects. The guitar effects are Reverb and Mod. The Reverb is shared with the main Vocal and Harmonies; hence the only parameter for the guitar is GTRRVB LVL (Guitar Reverb Amount). Reverb settings are programmed in the Reverb row. Reverb can be bypassed by setting the GTRRVB LVL to zero. If Reverberation Type is OFF in the Reverberation row, then the Studio Type is used by default.

The Mod effects refer to Chorus and Flange effects that are programmed in the Guitar Mix row. Mod Effects can be bypassed by setting the GMod Type to GMOD OFF.

Reverb Level	GTRRVB LVL	Determines the amount of reverb applied to the guitar signal. Range: 0-99
Mod Type	1 GMOD OFF 2 GMOD CHORM 3 GMOD CHORS 4 GMOD FLANG 5 GMOD TREM	Turns the modulated effect off. Mono chorus. Stereo chorus. Flanger. Tremolo.
Mod Amount	GMOD AMT	Adjusts the level of the mod effect heard in the output. Range: 0-99
Mod Speed	GMOD SPEED	Adjusts the speed of the modulation. Range: 1-99
Mod Feedback	GMOD FDBCK	Controls the feedback on the delay line for chorus and flange. Does not affect the Tremolo modulation type. Range: –19 to 19

Utility Parameters

The Utility parameters are accessed by simultaneously pressing the **Edit Up/Down** arrow keys in the **Effects Matrix**. The main display will show UTILITY and the Numeric Display flashes U. Once this occurs, each knob controls the value of a particular system parameter, as shown below.

FX Footswitch Control	1 FXFS ALL	**When the Effects LED is off:** All effects are disabled: Preamp, Comp/Gate, EQ, Pitch Correction, Lead Effects, Reverberation, Delay, and Guitar Mix.
	2 FXFS MOST	All vocal effects are disabled except reverb, comp/gate and EQ.
	3 FXFS -DIS	All vocal effects are disabled except distortion.
	4 FXFS -CMP	All vocal effects are disabled except compression.
	5 FXFS -EQ	All vocal effects are disabled except EQ.
	6 FXFS -RVB	All vocal effects are disabled except reverb.
Harmony Footswitch Control	1 HARMFS TOG	Harmony toggles on and off when you hit the footswitch.
	2 HARMFS MOM	Harmony comes on only when you hit the footswitch and then goes off as soon as you release the footswitch.
Guitar Sensitivity	1 GTRSENS LO	Low guitar sensitivity - used for most guitars.
	2 GTRSENS HI	High guitar sensitivity - used for older guitars with weak output levels.

Expression Pedal Controls	1 EP=NONE	Expression pedal is disabled	13 EP=MOD SPD	Voice Mod Speed
	2 EP=HRM LVL	Harmony Level	14 EP=HRM BAL	Harmony Balance
	3 EP=GTR LVL	Guitar Level	15 EP=RVB LVL	Reverb Level
	4 EP=PREGAIN	Pre-amp Gain	16 EP=RVB DCY	Reverb Decay
	5 EP=BND RES	Band Resonance	17 EP=DLY LVL	Delay Level
	6 EP=BND CEN	Band Center	18 EP=DLY DMP	Delay Damping
	7 EP=BASS	Bass	19 EP=DLY TIM	Delay Time
	8 EP=MIDGAIN	Mid Gain	20 EP=DLY FBK	Delay Feedback
	9 EP=TREBLE	Treble	21 EP=GTR RVB	Guitar Reverb Amount
	10 EP=PC AMT	Pitch Correct Amount	22 EP=GMOD AM	Guitar Mod Amount
	11 EP=PER AMT	Persona amount	23 EP=GMOD SP	Guitar Mod Speed
	12 EP=MOD AMT	Voice Mod Amount	24 EP=GMOD FB	Guitar Mod Feedback

Note: The settings for FX Footswitch Control, Harmony Footswitch Control and Guitar Sensitivity apply to ALL presets. The setting for the Expression Pedal Control applies to the current preset only. If you modify the Expression Pedal setting and wish to store it you must Store the preset (see page 12). When you load another preset, its setting for Expression Pedal Control will take effect.

Factory Reset

If you want to restore the Vocalist® Live 5 to the state it was in when first delivered, you can use the Factory Reset function. This will:

- Copy all Factory presets to the corresponding User presets, overwriting all changes you may have made to the user presets
- Restore the state of the Utility parameters to the factory defaults (FXFS ALL, HARMFS TOG, GTRSENS LO)
- Set the Stereo/Mono state to Stereo

To perform a Factory Reset procedure

1. If you are editing a preset, press the **Up** or **Down footswitch** to exit edit mode.
2. Press and hold the **Major/Minor** button and then press and release the **Store** button. The display will read FAC RESET- WILL ERASE ALL YOUR PRESETS . . . , then STORE=RST.
3. Press the **Store** button again to continue with the factory reset. If you don't want to do the factory reset, just wait 5 seconds, or press almost any other button, to cancel.

Troubleshooting

I don't hear any sound coming from the Vocalist® Live 5.

- Make sure the power supply is plugged in to both the Vocalist Live 5 and the power outlet.
- Make sure the guitar amp, P.A. system, or mixer is plugged in and turned on.
- Make sure the guitar amp, P.A. system, or mixer volume levels aren't turned all the way down.
- Make sure the guitar volume isn't turned all the way down, and the microphone isn't turned off (if it has an on/off switch).
- Make sure the Mic/Line Input Level knob isn't turned all the way down.
- Make sure all the cables are completely plugged into their proper places (see pages 8 through 10 for instructions and diagrams).

The harmonies aren't tracking properly.

- Make sure the Guitar Signal LED is green or amber while playing (see Setting the Guitar Level on page 11 for more information).
- Tune the guitar with the Vocalist Live 5 tuner (see page 10).
- Make sure you're not in Tuner mode while singing.

The guitar signal is too quiet.

- Turn up the volume on your guitar.
- Make sure the guitar cable is properly connected to the guitar and the Vocalist Live 5.

The guitar signal is too loud.

- Turn down the volume on your guitar.
- Turn down the Guitar Level knob.

The lead vocal is too quiet.

- Turn up the Vocal Level knob.
- Turn up the Mic/Line Input Level knob.
- If you're using a P.A. system or mixer, turn up the channel that the Vocalist Live 5 is connected to, or turn up the master level (volume) controls.
- Try singing closer to the microphone.

The lead vocal is too loud.

- Turn down the Vocal Level knob.
- Turn down the Mic/Line Input Level knob.
- If you're using a P.A. system or mixer, turn down the channel that the Vocalist Live 5 is connected to, or turn down the master level (volume) controls.

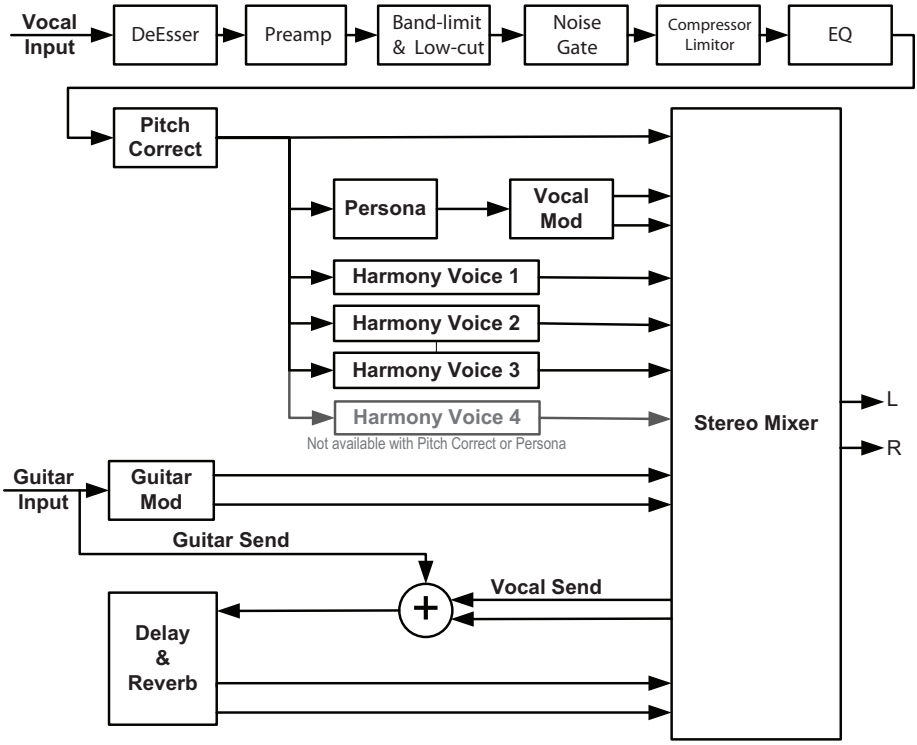
I don't hear any harmonies, or the harmonies are too quiet.

- Make sure the Harmony footswitch is pressed so that the LED just above it is lit.
- Turn up the Harmony Level knob.
- Make sure the Voicing parameter (in the Harmony row of the Effects Matrix) is not set to OFF.

The harmonies are too loud.

- Turn down the Harmony Level knob.

Effects Block Diagram



Preset List

3RD ABOVE	1A	A simple 3rd above your lead vocal. Great for 60s duet folk songs. Utilizes a stereo chorus effect for the guitar.
	1B	Same as Part A but add a 5th up harmony voice.
3RD BELOW	2A	The same preset as #1 but now the harmony is a 3rd down from the lead vocal.
	2B	Same as Part A but add a 3rd up harmony voice.
CSN	3A	Contains three part harmony: your lead vocal and a 3rd and 5th above to create a triad. Notice that VST GALS is used for the voice style. Female vocalists should probably use VST GUYS to keep the harmonies sounding natural and not too high.
	3B	Uses a 3rd down and 5th up harmony with similar settings in Part A.
GOLD CHAN	4A	Models a studio vocal channel using the tube amp, compressor and EQ to create a sound that will sweeten any vocal.
	4B	The same as Part A but with Delay on the lead vocal. Try part A on the verse and Part B on the chorus of a song.
GOLD PC	5A	Same as GOLD CHAN, but with chromatic pitch correction. This is very useful for singers with less-than-perfect singing abilities.
	5B	Similar to GOLD CHAN delay is used on Part B.
4 UNISONS	6A	Adds four harmony voices in unison to create a fat thickening effect.
	6B	The same as Part A but two of the voices are changed to 3rd up and 3rd down harmonies.
PC A MAJOR	7A	Demonstrates major-scale pitch correction that can make even the most vocally-challenged singers sound good. Set the key and scale in the pitch correction row to match your song (this preset is set to A Maj). The faster you set the rate, the harder it will be to sing off key!
	7B	Same as part A but modulates the key to Bb Major.
GALS GUYS	8A	Uses a 5th down and a 5th up to create male/female harmonies.
	8B	Same as Part A but with a stereo chorus effect on the guitar.
ACAPELLA C	9A	Excellent for songs with multi-layered acapella harmonies and no guide instrument. Features 5th down, 3rd down and 3rd up with some Gospel styling to the voices. Harmony is scalic in C Major.
	9B	Same as part A but modulates the key to F Major.
OTTOTUNE1	10A	Uses the Chromatic Pitch Correction to get that chart topping sound best suited for Pop and R & B.
	10B	Same as Part A but with 2 unison harmonies for thickening.
RADIO	11A	Combines a tube preamp with band limiting to create an old radio lead vocal effect.
	11B	Radio lead vocal effect combined with a unison harmony to create a really unique sound.

GTR TREM	12A	Demonstrates a guitar tremolo effect with reverb. Play around with the speed and feedback parameters to customize your sound. The harmony has unison, octave down and octave up voices.
	12B	The same as Part A but with a 2 unison harmony on the lead vocal.
BLIND BOYS	13A	Very gospel-like, and utilizes a 5th down, 3rd down, 3rd up and 5th up. Including your voice, you have 5 part harmony. The lead vocal effect is a bigger persona to give you a huskier older male vocal.
	13B	Same as Part A but with a smaller persona.
TAKE 5	14A	Feels like a jazzy vocal group. Uses a 5th down, 3rd down, 3rd up, and 5th up plus your voice to create 5 part harmony. It also uses the musIQ Alt harmony variation feature to sound jazzier.
	14B	The harmony changes to use a 3rd down, Unison and 3rd up plus your voice. It keeps the musIQ Alt harmony variation as above.
BASS ALTOS	15A	Covers the lower ranges of male vocals with an Octave down, 5th down and a 3rd down from the melody vocal (your voice). Also uses a stereo chorus effect on the guitar.
	15B	Same as Part A only without the chorus effect on the guitar.
TENORS	16A	Covers the middle and higher ranges of male vocals with a 5th down, 3rd down and a 3rd up from the melody vocal. Also uses a mono chorus effect on the guitar.
	16B	Same as Part A only the 3rd above harmony changes to a Unison.
LITE WORLD	17A	Utilizes three part harmony (3rd above / 5th above) with a unison vocal to help thicken your voice. Also uses a stereo chorus effect on the guitar. Chromatic pitch correction is used.
	17B	Uses a 3rd down and 5th above harmony with similar settings in Part A.
CAN WE STL	18A	This preset uses female backing vocals, a 3rd down (doubled) and a 3rd above (doubled), and a stereo chorus effect on the guitar. Try using it on the verses of a song. Chromatic pitch correction is used.
	18B	Covers a higher vocal range with a 3rd above, 5th above and an octave above. Also uses a stereo chorus effect on the guitar. Try using this preset on the "la la la" part of a song.
ALT HRMNY	19A	Uses the ALT variation again with a 5th below, 3rd below, 3rd above and 5th above, and some pitch and timing variations.
	19B	Also uses the ALT variation but with 3rd below (doubled) and 3rd above (doubled) for a thicker sound.
BIG GOSPEL	20A	Offers a different variation of gospel backgrounds than the BLIND BOYS preset. It doubles the 3rd below and 3rd above to fatten up your sound. It also uses the bigger persona to give you a huskier older male lead vocal. Chromatic pitch correction is used and a tremolo effect is used on the guitar.
	20B	Same as Part A but with a chorus effect on the guitar instead of tremolo.

PURPLE RN	21A	Uses a thicker stereo chorus effect on the guitar and a smaller younger lead vocal effect. Utilizes a mixture of male and female background vocals with doubled 3rds below and 3rds above.
	21B	Same effects but using 3rd below and 5th above harmonies.
BIG GUY	22A	The ultimate blues singer preset. Great for singing bar-room blues and R&B standards with that big blues voice.
	22B	That same ultimate blues sound with Unison harmony.
EAGLETS 1	23A	Reminiscent of 2-part 70s country-rock vocals. Try singing with your best country vocal. Utilizes a 3rd above. A mono chorus effect is used on the guitar.
	23B	Adds a 5th up harmony, everything else is the same as above.
EAGLETS 2	24A	Reminiscent of 3 part 70s country-rock vocals. Utilizes a 3rd above and a 5th above as well as a unison to help thicken the lead vocal. A mono chorus effect is used on the guitar.
	24B	The same as Part A only with an octave up instead of unison.
DUST WIND	25A	A 2-part harmony good for well-known acoustic duet hits from the 70s and 80s. Utilizes a timing variation on the 3rd above harmony.
	25B	The same as part A but with delay on the Lead Vocal.
THREE UP	26A	A smooth, fat 3-part vocal sound using a 3rd above, 5th above and an octave above. A stereo chorus effect is used on the guitar.
	26B	The same as Part A but with tremolo on the guitar.
KISS	27A	3 part harmony (3rd and 5th above and an octave above) is used. A stereo chorus effect is used on the guitar.
	27B	The same as Part A but with a 2 part harmony (3rd and 5th above).
ALT GOSPEL	28A	Similar to the BIG GOSPEL preset, but uses the musIQ Alt harmony style to get slightly different voicings. Also, there is no tremolo on the guitar this time.
	28B	Same as Part A but with Chorus on the guitar.
GTR ST CHORUS	29A	Demonstrates a nice stereo guitar chorus effect with reverb. Try experimenting with the speed and feedback parameters to get the sound you're looking for. The harmony is a single unison voice that is chromatically pitch corrected to give an interesting doubled sound.
	29B	The same as Part A but with a 2 unison harmony on the lead vocal.
GTR FLANGE	30A	Demonstrates a guitar flange effect reverb. The harmonies are unison plus 3rds and 5ths up.
	30B	The same guitar effects as Part A but with a 2 unison harmony on the lead vocal.
OCTAVES	31A	Uses octave doubling for the harmonies. The unison voice is combined with the lead vocal shifted up and down one octave.
	31B	The same as Part A but with mixed vocal style.

GRLS DUET	32A	Makes a male lead singer sound female. The harmony voice sounds like a female singer singing up one octave from the lead.
	32B	Similar to Part A but with a 2 Unison harmony.
LOOSE DBLS	33A	Creates a fat doubling by combining 4 unison voices with lots of decoupling.
	33B	The same as Part A but with chorus on the guitar.
BANDERO	34A	Provides a band limited voice that is often heard as a vocal effect.
	34B	Bandero lead effect combined with a unison harmony.
BORG	35A	Creates a metallic sounding lead effect.
	35B	A less extreme version of the metallic lead effect.
BIGGER	36A	Makes your lead voice sound larger. Try playing with the "amount" parameter in the Lead Effects row to become just the size you want.
	36B	Bigger voice combined with an octave down harmony for a giant sound.
SMALLER	37A	Similar to BIGGER, but works in the opposite direction.
	37B	Smaller voice combined with an octave up harmony for an elf-like sound.
LUSH GTR	38A	Demonstrates a swirling guitar effect.
	38B	The same swirling guitar effect but with a unison harmony.
TUNE A MAJ	39A	Similar to OTTOTUNE1 but with a major scale.
	39B	Same as Part A but with 2 unison harmonies for thickening.
VIB SLOW	40A	Adds a slow vibrato to your voice during sustained vocal sections.
	40B	Adds a bit faster vibrato to your voice than Part A.
CHORUS	41A	Adds a stereo chorus effect to the lead vocal.
	41B	A different variation of the chorus effect in Part A.
TUBE-FLANGE	42A	Uses the tube pre-amp with flange lead effect to create a surreal lead vocal effect.
	42B	The same as Part A but with delay on the lead vocal.
CHIPMUNK	43A	Has a large female gender shift combined with an octave up pitch shift.
	43B	Same extreme gender shift as part A, but with a two part harmony (3rd & 5th above).
STUTTER	44A	Adds a stutter effect to the lead vocal.
	44B	Adds stutter and delay on the lead vocal.
TREMOLO	45A	Adds a tremolo effect to the lead vocal.
	45B	Adds tremolo and delay on the lead vocal.
PING PONG	46A	Demonstrates a short stereo ping pong delay effect.
	46B	Same as Part A but with a longer delay time.

BOB	47A	Demonstrates large pitch onset effects. Try it while singing your favorite 60s solo folk songs.
	47B	Adds a 5th up harmony, everything else is the same as above.
ELVIS	48A	Demonstrates a slow ballad sound, with strong stylized vibrato and slow pitch scooping at note onsets.
	48B	Adds a 5th down harmony, everything else is the same as above.
7 BRIDGES	49A	Excellent for songs with multi-layered acappella harmonies. Features 3rd down, 3rd up and 5th up, as well as some fairly strong harmony voice decoupling.
	49B	Similar to Part A but with a 5th down, 3rd down and 3rd up harmonies.
TUNE A MIN	50A	Similar to OTTOTUNE1 but with a minor scale.
	50B	Same as Part A but with 2 unison harmonies for thickening.

Specifications

Mic Input

Connector:	XLR portion of XLR-1/4" Combo Jack
Input Sensitivity @ -3 dBFS	-35 dBu to 0 dBu
Equivalent Input Noise (EIN):	-126 dBu, 20 Hz - 20 kHz (A-weighted)
Impedance:	1.2 kOhms balanced

Line Input

Connectors:	¼" portion of XLR-1/4" Combo Jack
Input Sensitivity @ -3 dBFS:	-20 dBu to +15 dBu
Input Impedance:	14.8 kOhms balanced, 9.7 kOhms unbalanced

Guitar Input and Thru

Connectors:	¼" unbalanced TS (tip/sleeve) connectors
Max Input Level Thru:	11 V peak-peak
Sensitivity @ 0 dBFS digital:	6 V peak-peak
Impedance:	1 MOhms unbalanced

Line Input to Line Output (1/4" TRS) Performance:

Output Level @ 0 dBFS:	+12.5 dBu balanced, +6.5 dBu unbalanced
Dynamic Range:	>106 dB, 20 Hz - 20 kHz (A-weighted)
THD + Noise @ Min gain:	<0.005% @ 1 kHz
Frequency Response @ max gain:	-3 dB @ 30 Hz and 21 kHz

Line Input to XLR Output Performance

Output Level @ 0 dBFS:	-5 dBu balanced
Dynamic Range:	>106 dB, 20 Hz - 20 kHz (A-weighted)
THD + Noise @ Min gain:	<0.005% @ 1 kHz
Frequency Response @ max gain:	-3 dB @ 30 Hz and 21 kHz

Stereo Headphone Output

Connector:	¼" TRS stereo (tip left/sleeve right) unbalanced
Output Power @ 0.5% THD and 32 Ohm Load:	170 mW RMS continuous
Dynamic Range:	>106 dB (A-weighted)
Output Impedance:	18 Ohms

Expression Pedal Input Requirements

Passive TS (tip/sleeve) volume/expression pedal:	250 kOhms or greater*
Passive TRS (tip/ring/sleeve) expression pedal:	10 kOhms or greater *

Analog to Digital and Digital to Analog Converters

Resolution:	24 bits
Sampling Rate:	44.1 kHz

*Consult your manufacturer's pedal specifications

Power

US and Canada:	120 VAC, 60 Hz Adapter: PS0913B - 120
Japan:	100 VAC, 50/60 Hz Adapter: PS0913B - 100
Europe:	230 VAC, 50 Hz Adapter: PS0913B - 230
UK:	240 VAC, 50 Hz Adapter: PS0913B - 240
Australia:	240 VAC, 50 Hz Adapter: PS0913B - 240-AU
AC Power Adapter Output:	9VAC, 1.3 A
Power Consumption:	8.1 Watts
Product Dimensions:	8.33″ (L) x 14.1″ (W) x 2.56″ (H) 211 mm(L) x 358 mm(W) x 65 mm(H)
Weight:	4.8 lbs., 2.18 kg

8760 South Sandy Parkway
Sandy, Utah 84070
PH (801) 566-8800
FAX (801) 566-7005

Vocalist® Live 5 Owner's Manual 18-0776V-A

Printed in China