

Precautions

Location

Using the unit in the following locations can result in a malfunction.

- In direct sunlight
- Locations of extreme temperature or humidity
- Excessively dusty or dirty locations
- Locations of excessive vibration
- Close to magnetic fields

Power supply

Please connect the designated AC adapter to an AC outlet of the correct voltage. Do not connect it to an AC outlet of voltage other than that for which your unit is intended.

Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Handling

To avoid breakage, do not apply excessive force to the switches or controls.

Care

If the exterior becomes dirty, wipe it with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

Keep this manual

After reading this manual, please keep it for later reference.

Keeping foreign matter out of your equipment

Never set any container with liquid in it near this equipment. If liquid gets into the equipment, it could cause a breakdown, fire, or electrical shock.

Be careful not to let metal objects get into the equipment. If something does slip into the equipment, unplug the AC adapter from the wall outlet. Then contact your nearest VOX dealer or the store where the equipment was purchased.

THE FCC REGULATION WARNING (for USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

Notice regarding disposal (EU only)



When this “crossed-out wheeled bin” symbol is displayed on the product, owner’s manual, battery, or battery package, it signifies that when you wish to dispose of this product, manual, package or battery you must do so in an approved manner. Do not discard



this product, manual, package or battery along with ordinary household waste. Disposing in the correct manner will prevent harm to human health and potential damage to the environment.

Since the correct method of disposal will depend on the applicable laws and regulations in your locality, please contact your local administrative body for details. If the battery contains heavy metals in excess of the regulated amount, a chemical symbol is displayed below the “crossed-out wheeled bin” symbol on the battery or battery package.

IMPORTANT NOTICE TO CONSUMERS

This product has been manufactured according to strict specifications and voltage requirements that are applicable in the country in which it is intended that this product should be used. If you have purchased this product via the internet, through mail order, and/or via a telephone sale, you must verify that this product is intended to be used in the country in which you reside.

WARNING: Use of this product in any country other than that for which it is intended could be dangerous and could invalidate the manufacturer’s or distributor’s warranty.

Please also retain your receipt as proof of purchase otherwise your product may be disqualified from the manufacturer’s or distributor’s warranty.

*All product names and company names are the trademarks or registered trademarks of their respective owners.

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Introduction

Thank you for purchasing the VOX ToneLab EX Modeling Effect Processor.

In order to get the most out of your new gear, please read this owner's manual carefully and use the product as directed. Keep the owner's manual in a safe place for future reference.

Main features

- The ToneLab EX features a power amp circuit that uses a miniature triode 12AX7 (ECC83) vacuum tube that is normally used in preamps, generating the sound of a real tube amp, and capturing the feel and tone of the original amplifier (Valvetronix technology).
- Thirty-three amp models using sophisticated modeling technology are built-in. There are also eleven speaker cabinet models, giving you an easy way to recall sounds ranging from vintage amps of the past to expensive high-end tube amps.
- Forty-five high quality effects are built-in, allowing you to simultaneously use up to nine effect types including noise reduction and the volume pedal.
- There are one hundred preset sounds (four programs in each of 25 banks) that take advantage of the amps and effects, together with one hundred user-editable programs (four programs in each of 25 user banks), giving you a total of two hundred programs that you can switch between by pressing a foot switch while you perform.

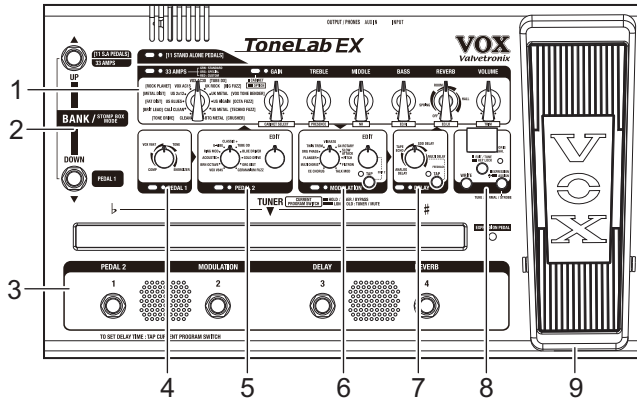
- You can assign any of the eleven stand alone pedals and adjust various parameters using the control knobs in the amp section. In this way, the ToneLab EX enables you to create complex, pro-level sounds featuring abundant effects.
- The expression pedal lets you control wah, volume, or many other parameters with your foot – a great asset during live performance.
- The Quick Assign function makes it easy to assign parameters or other functions to the expression pedal.
- The Amp/Line switch ensures that your sound is correctly optimized whether you're using a guitar amp or line-level system as your audio output device. Setting this switch to Line will activate a Total Equalizer that adjusts the tone of the final output sound.
- A built-in Auto Chromatic Tuner features switchable Normal mode and Strobe mode for easy tuning.
- If you use a commercially available USB cable to connect the ToneLab EX to your computer, you'll be able to use the ToneLab EX librarian software on your computer to manage user programs, or use the ToneLab EX as a USB audio interface.

Panel Tour

(Top and rear panels)

Here we'll introduce you to the switches, controls, and connections on the ToneLab EX's top panel.

Top panel

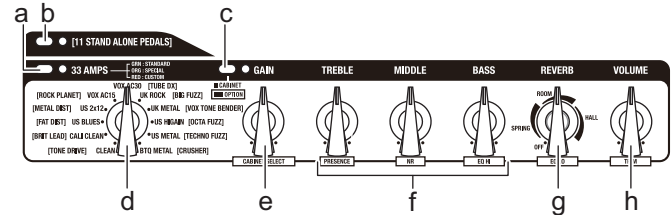


1. Amp section

Here you'll create settings for the amp model and stand alone pedal.

For details on each effect, refer to "Amp models" (p. 15) and "stand alone pedals" (p. 22).

NOTE: You cannot use the amp model and stand alone pedal simultaneously. If you turn one of them on, the other will turn off.



a. AMPS bank select switch and LED

Use this to switch the bank, or to turn the amp model on/off.

Each time you press the switch, the bank will cycle between STANDARD, SPECIAL, CUSTOM, STANDARD...

The color of the LED will indicate the bank that's selected.

- STANDARD: green
- SPECIAL: orange
- CUSTOM: red

The LED will be lit-up if the amp model is on. By holding down this switch for about one second you can switch the amp model on/off.

b. STAND ALONE PEDALS switch and LED

Use this to turn the stand alone pedal on/off.
The LED will be lit-up if the stand alone pedal is on.

c. CABINET ON/OFF switch and LED

This turns the cabinet model on/off. The LED will be lit if the cabinet model is on.

By entering the OPTION parameter setting mode you can set parameters for the cabinet model.

The OPTION parameter setting mode

To enter the OPTION parameter setting mode, hold down the CABINET ON/OFF switch for about one second. You'll be in The OPTION parameter setting mode, and the LED will blink.

The OPTION parameter setting mode lets you adjust the following settings.

- **GAIN control:** cabinet model (CABINET SELECT)
- **TREBLE control:** presence (PRESENCE)
- **MIDDLE control:** noise reduction (NR)
- **BASS control:** Total Equalizer High (EQ HI)
- **REVERB control:** Total Equalizer Low (EQ LO)
- **VOLUME control:** Trim (TRIM)

To return to the previous operation, press the CABINET ON/OFF switch or the EXIT/TUNE switch.

NOTE: Total Equalizer is enabled only when the AMP/LINE switch is set to LINE.

NOTE: Presence is effective only when the amp model or the stand alone pedal is turned on.

d. AMPS/STAND ALONE PEDALS selector

This selects the amp model or the stand alone pedal.

The type you select will determine the response of the gain circuit and tone controls, and the order in which they are located in the circuit.

If the amp model and stand alone pedals are turned off, rotating this selector will turn the amp model or stand alone pedal on.

e. GAIN control

This adjusts the gain of the selected amp model or stand alone pedal.

In the OPTION parameter setting mode, this control selects the cabinet model. If the cabinet model is turned off, turning this control in the OPTION parameter setting mode will turn the cabinet model on.

f. TREBLE, MIDDLE, BASS controls

These adjust the tone of the high, mid, and low frequency ranges. The way these controls affect the tone will depend on the model you've selected.

NOTE: Depending on the selected amp model, there may be almost no sound if you turn all three of these controls to the far left.

In the OPTION parameter setting mode, the TREBLE control adjusts the presence, the MIDDLE control adjusts the noise reduction, and the BASS control enables you to adjust the Total Equalizer High.

g. REVERB knob

Depending on the position of the knob, this selects the reverb type (SPRING, ROOM, or HALL), and adjusts the amount of

reverb in the mix. If you turn the knob all the way to the left, the reverb effect will be turned off.

In the OPTION parameter setting mode, this control knob enables you to adjust the Total Equalizer Low.

For details on each effect, refer to “Reverb types” (p. 29)

h. VOLUME control

This adjusts the volume of the program.

In the OPTION parameter setting mode, it enables you to select Trim.

HINT: You can adjust the volume of the program even when the amp model is turned off.

2. Bank select section

a. BANK UP/DOWN pedals

In program select mode, these pedals enable you to select a program bank (p. 10, “Trying out the ToneLab EX”).

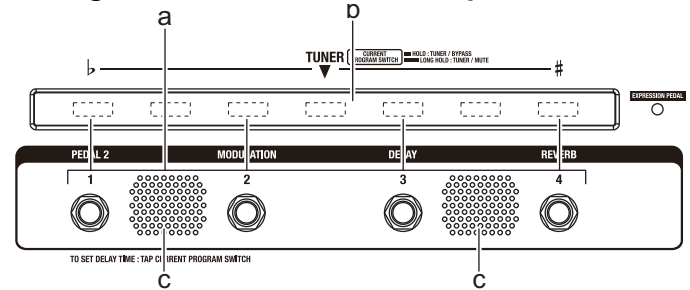
Pressing the BANK UP pedal will increment the bank by one, and pressing the DOWN pedal will decrease the bank by one.

The bank number will be displayed in the Bank/Value display.

If you press the UP and DOWN pedals simultaneously for about one second, the “5t” indicator will appear on the Bank/Value display, and the unit will enter Stomp Box Mode. In Stomp Box Mode, these pedals turn on or off the amp/stand alone pedal and the effect assigned to pedal 1 individually (p. 11, “Stomp Box Mode”).



3. Program Select/Tuner/Stereo Speakers section



a. Program 1–4 pedals and LED

In program select mode, these pedals enable you to select a program from a bank (p. 10, “Trying out the ToneLab EX”). If you select a program, a program LED that corresponds to the selected program will be lit-up red. (Program 1–4 LEDs are located above the program 1–4 pedals and indicate the tuning status.)

HINT: You can set the delay time using the program 1–4 pedals. In this case, the interval at which you tap twice on a program pedal (that corresponds to the selected program) will be assigned as the delay time.

HINT: If you press and hold down the program pedal that corresponds to the current program for about one second, all effects will be bypassed and you’ll be able to use the tuner. If you hold down the program pedal for about two seconds, you’ll be able to use the tuner with the sound muted.

In Stomp Box Mode, these pedals turn on or off the pedal 2 effect, modulation effect, delay effect, and reverb effect individually. When an effect is turned on, the corresponding program 1–4 pedal LED will be lit-up red (p. 11, “Stomp Box Mode”).

b. TUNER LED

These lights are used for tuning (p. 29, “Tuner”). When you’re using the tuner, the LEDs will indicate the tuning status.

c. Stereo speakers

You can listen to the sound output from the built-in stereo speakers. To adjust the volume level, use the SPEAKER LEVEL control on the rear panel (p. 8).

NOTE: The speakers will be muted when a cable is connected to the OUTPUT/PHONES jack.

NOTE: Some programs (especially those with an emphasized low range) may cause the sound from the speakers to be distorted or noisy. In such a case, adjust the volume level using the SPEAKER LEVEL control.

4. Pedal 1 section

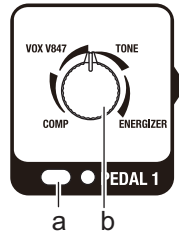
Here you can adjust the settings for the pedal 1 effects. For details on each effect, refer to “Pedal 1” (p. 23)

a. PEDAL 1 ON/OFF switch and LED

This turns the pedal 1 effect on/off. The LED will be lit if the pedal 1 effect is on.

b. PEDAL 1 knob

Rotating this knob enables you to select the pedal 1 effect type and adjusts the effect parameters assigned to each effect. If the pedal 1 effect is turned off, rotating this selector will turn the pedal 1 effect on.



5. Pedal 2 section

Here you can adjust the settings for the pedal 2 effects. For details on each effect, refer to “Pedal 2” (p. 24).

a. PEDAL 2 ON/OFF switch and LED

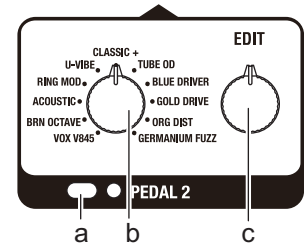
This turns the pedal 2 effect on/off. The LED will be lit if the pedal 2 effect is on.

b. PEDAL 2 selector

This selects the pedal 2 type. If the pedal 2 effect is turned off, turning this selector will turn the pedal 2 effect on.

c. EDIT knob

This adjusts the parameters of each effect.

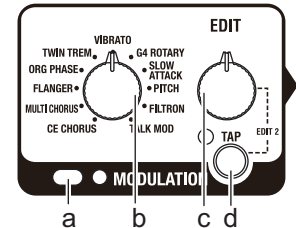


6. Modulation section

Here you can adjust the settings for the modulation effect. For details on each effect, refer to “Modulation” (p. 25).

a. MODULATION ON/OFF switch and LED

This switch turns the modulation effect on/off. The LED will be lit if the effect is on.



b. MODULATION selector

This selects the modulation type.

If the modulation effect is off, rotating this selector will turn the modulation effect on.

c. EDIT knob

This adjusts the parameters of each effect.

You can use this knob to adjust two different parameters, EDIT 1 or EDIT 2. The specific parameters that are adjusted will depend on the selected effect. For details, refer to “Modulation” (p. 25).

- **EDIT 1:** turn the EDIT knob
- **EDIT 2:** hold down the TAP switch and turn the EDIT knob

d. TAP switch and LED

This is used to set the speed of the modulation effect. The interval used to press the TAP switch twice will be assigned as the effects modulation speed.

The LED will blink to indicate the specified speed.

HINT: To set a precise speed that matches the tempo of a song, press the TAP switch several times in rhythm with the song.

- If you’ve selected PITCH, the pitch setting will change each time you press the TAP switch.
- If you’ve selected FILTRON, the envelope up/down setting will change each time you press the TAP switch. The LED will light-up if Up is selected.
- If you’ve selected TALK MOD, the vocal character type (1 or 2) setting will change each time you press the TAP switch. If type 2 is selected, the LED will light up.

You can edit parameters such as SPEED or PITCH by holding down the TAP switch and turning the EDIT knob (EDIT 2). For details, refer to “Modulation” (p. 25).

7. Delay section

Here you can adjust the settings for the delay effect.

For details on each effect, refer to “Delay types” (p. 28)

a. DELAY ON/OFF switch and LED

This switch turns the delay effect on/off.

The LED will be lit if the effect is on.

b. DELAY knob

Rotating this knob enables you to select the delay type or adjust the delay level.

If the delay effect is turned off, rotating this selector will turn the delay effect on.

To adjust the feedback amount, rotate the DELAY knob while holding down the TAP switch.

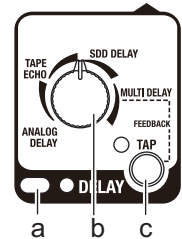
c. TAP switch and LED

This is used to set the delay time of the delay effect. The interval used to press the TAP switch twice will be assigned as the delay time.

The LED will blink to indicate the specified time.

NOTE: You can set the delay time using the program 1–4 pedals. In this case, the interval at which you tap twice on a program pedal (that corresponds to the selected program) will be assigned as the delay time.

HINT: To set a precise time that matches the tempo of a song, press the TAP switch several times in rhythm with the song.



8. Setting/Display section

a. Bank/Value display

This display usually indicates a bank number. When you're using the tuner, it indicates a note name.

While you are selecting a bank, the bank number will blink.

When you're editing a parameter, this shows the parameter value that you're editing.

If the parameter value matches the original value, the decimal point segment in the lower right of the LED will momentarily light up (p. 13, "Parameter original value indication").

In Stomp Box Mode, the "5t" indicator will appear on the Bank/Value display (p. 11).

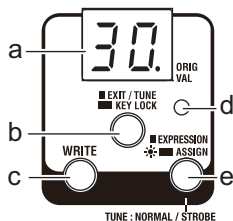
b. EXIT/TUNE switch

Press this if you decide to cancel an operation (such as saving a program). When the CABINET on/off switch LED, the Quick Assign LED, or the bank/value display are not blinking, you can press this switch to use the tuner (p. 29, "Tuning procedure").

By holding down this switch for about two seconds, you can activate the **Key Lock function**, which locks (disables) the operations of the switches, selectors, and knobs on the top panel. To deactivate this function, hold down the switch once again for about two seconds.

c. WRITE switch

Press this if you saved the sound you've edited (p. 15, "Saving a program").



d. Quick Assign LED

This will light when the Quick Assign function is available, and will blink when you're specifying the variable range of the expression pedal.

e. EXPRESSION switch

This lets you specify the maximum value and minimum value of the parameter that's assigned to the pedal. For details, refer to "Expression pedal minimum and maximum values" (p. 32).

If the Quick Assign LED is lit, holding down this switch for approximately two seconds will assign an effect parameter to the expression pedal (p. 31, "Assigning a function to the expression pedal (Quick Assign)").

9. Expression pedal section

a. EXPRESSION PEDAL LED

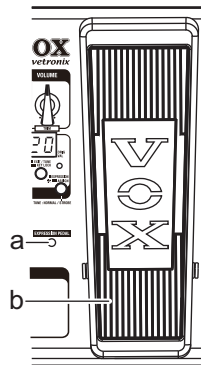
This will light when the effect assigned to the expression pedal is on.

b. Expression pedal

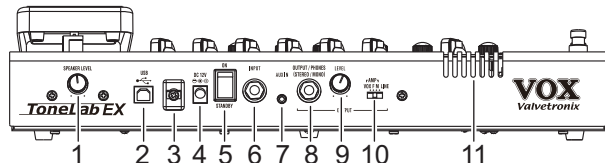
This controls the function that's assigned to the expression pedal (e.g., volume or wah), or controls the parameter of some other effects.

If you firmly advance the expression pedal all the way forward, the effect assigned to the pedal will be switched on/off.

NOTE: If volume is assigned to the expression pedal, advancing the pedal in this way will not turn off the volume pedal.



Rear panel



1. SPEAKER LEVEL knob

This adjusts the output level of the built-in stereo speakers.

NOTE: The speakers will be muted when a cable is connected to the OUTPUT/PHONES jack.

2. USB connector (Type B)

If you use a commercially available USB cable to connect the ToneLab EX to your computer, you'll be able to use librarian software on your computer to manage user programs, or use the ToneLab EX as a USB audio interface.

3. Cable hook

Wrap the cable of the AC adapter around this hook to prevent the AC adapter from being accidentally disconnected.

For details, refer to "Making connections" (p. 9).

4. DC 12V connector

Connect the included AC adapter here.

NOTE: The included AC adapter is only for use with the ToneLab EX. Using it with any other device may cause malfunctions, so you must never do so.

5. ON/STANDBY switch

This turns the power on or off (STANDBY).

6. INPUT connector

Connect your guitar cable here.

7. AUX IN jack

This is a stereo mini-jack where you can connect the output (analog output) of an audio device.

You can connect a CD or MP3 player here, and play along on your guitar while listening to your favorite songs. To adjust the volume, use the controls of the connected device.

8. OUTPUT/PHONES jack

Connect your guitar amp, mixer, or headphones here. This jack will accommodate either stereo or monaural connections.

9. LEVEL knob

This adjusts the output level of the OUTPUT/PHONES jack.

10. AMP/LINE switch

The correct setting of this switch will depend on what is connected to the OUTPUT/PHONES jack.

For details, refer to "Making connections" (p. 9).

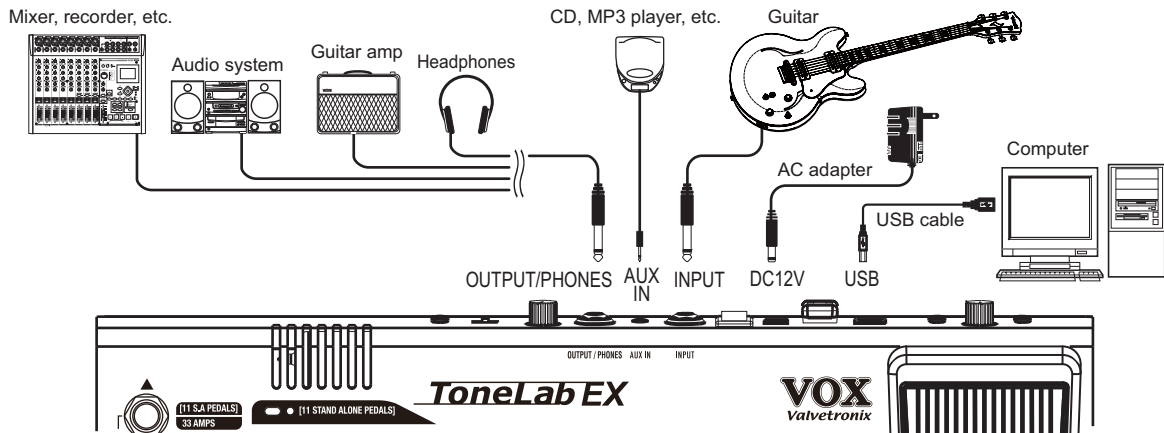
11. Valve

The internal 12AX7 (ECC83) vacuum tube is located here.

NOTE: The vacuum tube may break if it is subjected to physical impact. Be careful not to subject the ToneLab EX to strong physical impact.

Making connections

Here's how to make connections and start using your ToneLab EX.



1. Set the AMP/LINE switch appropriately for the type of device you'll be connecting to the OUTPUT/PHONES jack.

Set the AMP/LINE switch as follows.

AMP (VOX, F, M)

If you're connecting a guitar amp, choose the VOX, F, or M setting. This setting will compensate the output from the amp model as necessary. However, compensation will not be applied if the amp model is off or the stand alone pedal is selected.

- **VOX:** Use this setting if the output is connected to an amp that has a distinctive mid-range such as the AC30 open-backed combo amp made by the VOX Corporation.

- **F:** Use this setting if the output is connected to a typical clean-sounding US-made open-backed combo amp.
- **M:** Use this setting if the output is connected to a higher gain stack-type amp such as a 4x12 closed-back cabinet.

LINE

Use this setting if the output is connected to your guitar amp's power amp, to an audio system, mixer, or recorder, or to headphones, or if the ToneLab EX's built-in speakers are used. When LINE is selected, you can use Total Equalizer. Adjust the output sound in OPTION parameter setting mode (p. 14, "Using Total Equalizer").

2. Use a cable to connect the ToneLab EX's OUTPUT/PHONES jack to your guitar amp, mixer, or other device.

NOTE: Before connecting the ToneLab EX, lower the volume level of your guitar amp or mixer.

The OUTPUT/PHONES is equipped with a stereo output jack. Use a stereo (TRS) cable to enjoy listening to or recording with your ToneLab EX in stereo.

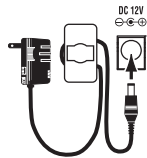
If your amplifier or mixer has only mono inputs, you can purchase a cable that has a stereo plug on one end, and two mono plugs (Left and Right) on the other.

Connecting a mono cable to the OUTPUT/PHONES jack will only pick up the sound from Left channel.

3. Set the LEVEL knob and SPEAKER LEVEL knob on the rear panel to "0" by turning the knob all the way to the left (as seen from the rear panel).

4. Connect the plug end of the AC adapter (included) to the DC12V jack on the rear panel of the ToneLab EX, and the other end into an AC outlet.

Secure the AC adapter cable around the cable hook; this will reduce stress on the plug end of the adapter, and prevent it from disconnecting accidentally.



5. Using a standard guitar cable, connect your guitar to the INPUT jack of the ToneLab EX
6. Make sure that the volume of your amp or mixer is turned down, and then set the ON/STANDBY switch on the ToneLab EX to the "ON" position.

7. Raise the volume controls of your amp or mixer to their normal levels, and use the LEVEL knob or SPEAKER LEVEL knob on the rear panel to adjust the volume to a suitable level.

NOTE: The ToneLab EX uses a vacuum tube, so it may take a few seconds for the vacuum tube to warm up, and for the ToneLab EX to produce sound.

Trying out the ToneLab EX

The ToneLab EX has a total of two hundred programs, consisting of rewritable user programs (Banks 1–25 x 4) and pre-set programs (Banks 26–50 x 4).

Performance modes

The ToneLab EX features two performance modes: Program Select mode enables you to select and play programs; Stomp Box mode enables you to turn on or off individual effects assigned in the selected program.

Switching between modes

Press both the BANK UP and BANK DOWN pedals simultaneously for one second.

Repeat this operation to toggle between Stomp Box mode and Program Select mode.

If the Bank/Value display indicates a bank number, Program Select mode is engaged. If the display indicates " 5 1 ," Stomp Box mode is engaged.

Program Select Mode

This mode enables you to select and play programs.

When you power the ToneLab EX on, it automatically engages this mode, and the Bank/Value display indicates a bank number.

Use the BANK UP, BANK DOWN, and Program 1–4 pedals to select a program.

For example, to select program 3-1 (Bank 3, Program 1), press the BANK UP/DOWN pedals to select “3” on the Bank display, then press the Program 1 pedal to light the LED.

You can press the Program 1–4 pedals to select programs in the same bank. If you want to select a program in other banks, press the BANK UP/DOWN pedals to select a bank, then press the Program 1–4 pedals to select a program.

Each program contains settings that assign the expression pedal to control wah, volume, delay feedback, reverb input level, or some other effect parameter. Use the expression pedal to try out the assigned parameter for each program.

Stomp Box Mode

This mode enables you to turn the effects that are assigned to the currently selected program on or off.

In Program Select Mode, press both the BANK UP and BANK DOWN pedals simultaneously for one second, The Bank/Value display indicates “ 5 1 ” and Stomp Box Mode is engaged.

Each effect on/off is assigned to the following pedals:

Effect	Pedal and LED
STAND ALONE PEDALS/AMPS	BANK UP
PEDAL 1	BANK DOWN
PEDAL 2	Program 1
MODULATION	Program 2
DELAY	Program 3
REVERB	Program 4

For example, if the Program 1 LED is lit, the Pedal 2 effect is on. Pressing the Program 1 pedal will turn the Pedal 2 effect off, and the Program 1 LED will become dark.

In the same way, if the AMPS bank select LED is lit, the amp model is on. Pressing the BANK UP pedal will turn the amp model off, and the AMPS bank select LED will become dark.

Saving the effect on/off status as a program

The effect on/off status in Stomp Box Mode will remain unchanged when you switch to Program Select Mode. However, if you select other programs, or power the ToneLab EX off after you switch to Program Select Mode, the edited effect on/off status will be cancelled and will revert to its initial setting for the program.

If you want to save the effect on/off status in Stomp Box Mode to a program, you must save the setting by pressing the WRITE switch.

For details, refer to “Saving a program” (p. 15).

Creating your own sounds

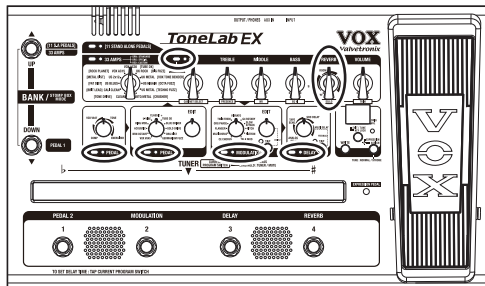
Creating a sound

There are two ways to create your own sound: you can start with a program that's similar to what you have in mind and then edit the parameters as desired, or you can create a program from scratch.

Here we'll explain how to create a program from scratch.

1. Turn off the cabinet model and effect types.

If the CABINET, PEDAL 1, PEDAL 2, MODULATION, and DELAY LEDs are lit, press corresponding switches to turn them off. Set the REVERB knob to the off position.



2. Press the AMPS bank select switch to select a bank, and use the AMPS/STAND ALONE PEDALS selector to select an amp model.

Each time you press the AMPS bank switch, the bank will cycle through STANDARD, SPECIAL, CUSTOM, STANDARD...

For details on the amp models, refer to “Amp models” (p. 15).

3. Use the GAIN, TREBLE, MIDDLE, BASS, and VOLUME controls to adjust the tone and volume.

The GAIN control adjusts the gain.

The TREBLE, MIDDLE, and BASS controls adjust the high, mid, and low-frequency tone.

The VOLUME control adjusts the volume.

HINT: The sound might be distorted in an undesirable way depending on the settings of the TREBLE, MIDDLE, or BASS controls, or depending on other settings. If so, adjust the VOLUME control to an appropriate volume.

4. If desired, select a cabinet model and adjust the high-frequency tone.

To turn the cabinet model on

Press the CABINET on/off switch. The LED will light.

To change the cabinet mode

Hold down the CABINET on/off switch for about one second to enter OPTION parameter setting mode (the CABINET on/off switch LED will blink). Then turn the GAIN control.

For details on the cabinet models, refer to “Cabinet models” (p. 20).

Adjusting the high-frequency tone (Presence)

Hold down the CABINET on/off switch for about one second to enter OPTION parameter setting mode, and then turn the TREBLE control.

5. Select and adjust the effects of other sections.

For example if you want to add TAPE ECHO, turn the DELAY selector to select TAPE ECHO.

If the selector is already positioned at TAPE ECHO, turn it to some other delay type and then back to re-select TAPE ECHO.

Use the TAP switch or EDIT knob to set the delay time, delay level (the mix amount of delay sound), and feedback.

To set the delay time

Press the TAP switch twice (the time will be set to the interval that was used to press the switch).

To adjust the delay level or feedback

Delay level: Turn the EDIT knob.

Feedback: Hold down the TAP switch and turn the EDIT knob.

For details on the effect types, refer to “About the amp models, cabinet models, and effect types” (p. 15).

HINT: If you’ve selected a pedal effect, it might be easier to make adjustments if other effects are not being applied. If so, adjust the pedal effect after you’ve specified the amp model and cabinet model, but before you adjust settings for other effects.

6. When you’ve come up with a sound that you like, save it as a program.

For details, refer to “Saving a program” (p. 15).

NOTE: If you switch to a different program or turn off the power before saving, the changes you’ve made will be discarded, and the settings will revert to their original state.

Parameter original value indication

This is a way for you to check the original value of a parameter; i.e., the value that was saved in the preset program or user program.

When you're using a knob to edit the value of a parameter, the decimal point in the lower left of the bank/value display LED is lit-up momentarily when the edited value matches the original value.

HINT: You can take advantage of this original value indication to find out the actual settings of a program that you like.

NOTE: The settings of the rear panel LEVEL knob, SPEAKER LEVEL, Total Equalizer, and AMP/LINE switch settings are not saved, and will not be shown by the original value indication. Nor will the original value of the SPEED parameter or TIME parameter be shown when you use the TAP switch to set the SPEED parameter or TIME parameter.

Noise reduction settings

Noise reduction reduces the unwanted noise that might be heard between notes. This setting is made independently for each program.

HINT: High-gain amp models are particularly prone to noise, so we recommend using noise reduction in this case.

1. Hold down the CABINET on/off switch for about one second to enter OPTION parameter setting mode.

The CABINET on/off switch LED will blink.

2. Turn the MIDDLE control to adjust the noise reduction sensitivity.

Turning the knob toward the right will increase the amount of noise reduction.

Turning the knob all the way to the left will turn noise reduction off; it will have no effect.

NOTE: Depending on the guitar you're using, excessively high settings of noise reduction may cause notes to be cut off unnaturally.

3. When you've finished adjusting the settings, press the EXIT/TUNE switch.

Using Total Equalizer

Setting the AMP/LINE switch to LINE enables you to use Total Equalizer, which can adjust the tone of the final sound output from the ToneLab EX. You can set the following parameters in OPTION parameter setting mode (p. 3):

- **BASS control:** Total Equalizer High (EQ HI)
-10→+10 High range boost amount
- **REVERB control:** Total Equalizer Low (EQ LO)
-10→+10 Low range boost amount
- **VOLUME control:** Trim (TRIM)
-10→+10 Input level

NOTE: If using Total Equalizer to boost a certain range distorts sound, adjust the trim setting to lower the input level.

Saving a program

When you've come up with a sound you like, here's how to save (write) it.

NOTE: If you switch to a different program or turn off the power before saving, the changes you've made will be discarded, and the settings will revert to their original state.

1. Press the WRITE switch.

The Bank/Value display and the program pedal LEDs will blink.

2. Press the BANK UP or BANK DOWN pedal to select a bank (01–25) of the user program in which you want to save your settings.

The selected bank number will blink on the Bank/Value display.

3. Press the Program 1–4 pedals to select the desired user program.

NOTE: Your settings will overwrite the program you select here. Be careful not to overwrite an important program that you want to keep. You can't save to a preset program (26–50).

HINT: If you decide to cancel the Write operation, press the EXIT/TUNE switch. You will return to the previous mode, and the LED will stop blinking.

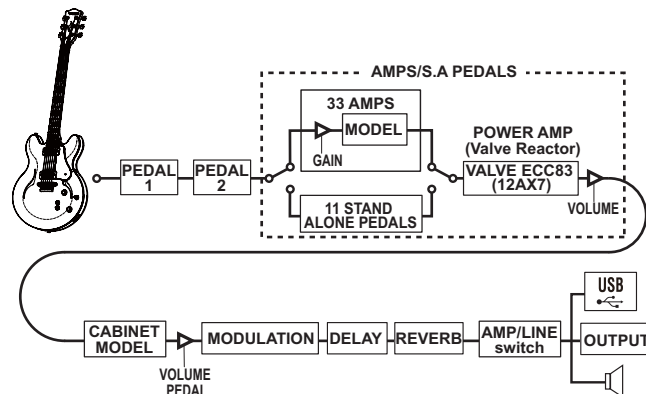
4. Press the WRITE switch once again.

Your settings will be written to the user program you selected in step 2, and the Bank/Value display and the program pedal LED will return to a steadily lit state.

About the amp models, cabinet models, and effect types

This section provides details about the amp models and stand alone pedals and cabinet models, and on the pedal 1, 2 effects, modulation effects, delay effects, and reverb effect.

The following illustration shows the signal flow within the ToneLab EX.



Amp models

Here we'll explain the 33 different amp models.

HINT: Each amp model's GAIN (adjusted by the top panel GAIN control) can be assigned to the expression pedal for control. For details on how to assign a parameter to the expression pedal, refer to "Assigning a function to the expression pedal (Quick Assign)" (p. 31).

1. CLEAN

STANDARD

This models the clean channel of a high-quality amp that was produced only on special order, and was known as the overdrive special. With a beautifully rounded low range, a sharp mid-range attack, and a sweet treble register, this is ideal for single coil pickups.

SPECIAL

This models the clean channel of a Japanese-made amp with 2 x 12" speakers that went on sale in 1975. It is known for its clean full-range sound and its built-in stereo chorus, and is used on stages and in studios around the world.

CUSTOM

This is the best model for obtaining a pristine clean tone using the 4 band e.q.

To get a flat tonal response set the GAIN, TREBLE, MIDDLE, BASS and PRESENCE to minimum. In order to get a completely clean sound (similar to using the line input) please set the cabinet model to off.

2. CALI CLEAN

STANDARD

The 6G5-A "Pro" amp was produced during the years 1960–1963, and was distinctive for its yellowish brown vinyl cover and round brown knobs. This 40W combo amp is known for its warm and clean tone.

SPECIAL

This American-made tweed-covered 2x12" combo amp made in 1957 is known for its rich and clean tone that's ideal for classic rock, blues, and country. By raising the volume you can also produce a powerful and punchy overdrive sound.

CUSTOM

This modifies an American-made black-paneled amp that has been modified. With this modification, an already-superb amp gains even greater smoothness and additional warmth.

3. US BLUES

STANDARD

This models a 4x10" combo amp from 1959 that was originally designed for bass guitar. Its smooth and crisp overdrive sound will respond sensitively to your picking dynamics and to the volume of your guitar.

SPECIAL

This models the 22W Bruno Cowtipper Pro II 22 which owes its existence to a special friend of VOX, the custom amp designer Tony Bruno. It responds with extreme sensitivity to your playing touch, and its silky-sweet clean tone will become a crunch sound rich in overtones when you turn up the volume.

CUSTOM

This models a wood-finished 30W boutique amp head that cost more than \$25,000. It delivers sparkling glassy clean tones, and raising the gain will produce overdrive sounds that are startlingly sweet in a musical way.

4. US 2x12

STANDARD

This models a black-faced 2x12" combo amp that has become an indispensable item for country and blues players. Its tight and clean sound provides deep piano-like bass tones, and will deliver the classic Chicago blues tone particularly when used with single coil pickups.

SPECIAL

This models a beautiful 30W boutique amp head renowned for its peerless quality and true point-to-point wiring. Based on a concept similar to that of the VOX AC30, this amp is known for its rich overtones, sparkling clean tone, and great-sounding overdrive.

CUSTOM

Based on a crunch-distortion amp, this original amp model changes the tone control to an active circuit that is more powerful than the conventional one, allowing a wide range of tones to be created.

Raise the TREBLE for sparkling chords or lower it for a tasteful blues setting, or turn up the MIDDLE for a rock backing sound.

5. VOX AC15

STANDARD

This models the AC15TB, which combines the beautifully sweet tonal character of the AC15's low output power amp with the sound-creating flexibility of the AC30's top boost channel.



SPECIAL

This models channel 2 of the VOX AC15 (1x12", 15W), which was manufactured in 1962 and was a big hit for its compact cabinet, power, and great tone—along with then-popular British bands.



CUSTOM

Designed to emulate the tones of the thick channel on the VOX Night Train Amplifier this tone is a modern take on the classic VOX pairing of 12AX7 pre-amp tubes and EL84 power tubes. Think Classic British Crunch.



6. VOX AC30

STANDARD

This models an AC30 amp with the "top boost" circuit that was included as standard starting with units produced in 1964. It delivers a smooth and refined top end, majestically deep overdrive, and a rich and brilliant clean sound.



SPECIAL

Designed after our VOX Hand-wired Heritage AC30H2 this model provides the sparkle that is synonymous with the pairing of a classic VOX amplifier and the famed Celestion Alnico Blue.

CUSTOM

This models the AC30BM Brian May signature model which faithfully reproduces every nuance of the legendary original AC30 from the 1950's. This setting provides the screaming sound of the amp being overdriven with the treble booster turned on.



7. UK ROCK

STANDARD

This 45W amp head was originally manufactured from 1962 to 1966, and was based on a tweed-covered bass amp. Its high-gain design was the beginning of the British amp tone revolution that continues to this day.

SPECIAL

This models a UK-manufactured 100W single-channel head with master volume made in 1983. Turn the GAIN control all the way up to get that thick, snarling hard rock and heavy metal sound that dominated the 80's.

CUSTOM

This models the high treble channel of a hand-wired amp head made in England during the early 60's. Raising the volume of this 50W output amp all the way produces the crunch that will forever be the sound of rock 'n' roll.

8. UK METAL

STANDARD

This models the high-gain channel of a modern 100W amp. While individual notes are clearly defined, it delivers a monster sound that's quite aggressive and arrogant.

SPECIAL

This models an English-made 100W amp head released in 2007, boasting a four-channel design with powerful tone. We've used the "Overdrive 1" channel that produces a tight low-end and transparent high-gain metal sound.

CUSTOM

Based on a UK-made 100W head, this amp was created for a famous guitarist known for his amazing tone, slash rhythms, and liking for silk hats. If you have a desire for ultimate metal tones, this amp will be the perfect choice.

9. US HIGAIN

STANDARD

This models a 100W boutique amp head manufactured in North Hollywood. This amp can be switched between power tube class AB or class A modes; the class AB mode used on the ToneLab EX produces rich overtones and highly musical response.

SPECIAL

This models the overdrive channel of a snakeskin-covered 100W amp head made in 1991. With an open low-end and a compressed mid/high range, its powerful and heavy sound delivers a forceful tone that will not break down even with the most extreme gain settings.

CUSTOM

Designed to model the sound behind “POWER METAL” this amp will crank!

10.US METAL

STANDARD

This models the modern high-gain channel from a wild beast of a high-gain amp. Its deep and loose low-end, sparkling highs, and monstrous gain are ideal for guitars tuned as low as possible, or for metal acts wielding seven-string guitars.

SPECIAL

This models a California-made amp head with a three-channel design and versatile gain switches that produce a wide variety of sounds. We’ve modeled the lead channel that produces the ultimate high-gain tone.

CUSTOM

This two-channel 120W head manufactured in Mississippi was designed for a legendary guitar hero known for his “brown sound.” This amp models features a high-gain sound that’s ideal for the two hand tapping performance technique.

11.BTQ METAL

STANDARD

This models the overdrive channel of a 100W high-quality amp that was produced only on special order, and known as the overdrive special. The wonderful sustain obtained by raising the GAIN control is smooth and soulful.

SPECIAL

This models the crushing high-gain sound emanated from a German-made 100W four-channel amp head. We chose the “Heavy” channel that delivers a startling tightness when played with a dropped-D metal tuning.

CUSTOM

This is an original amp model based on a recent high-gain amp, marked by a rich and hot mid-range tone and extremely powerful sustain. Since active-circuit tone controls are used on this model as well, a wide range of tonal variety can be obtained. Crank it up for the best tone.

Cabinet models

These simulate the acoustical character of a guitar amp's cabinet.

1. **TWEED 1x8**

This is an open back cabinet containing an 8-inch 3.2 ohm Alnico speaker, found in simple amplifiers with a 6V6 output tube.

2. **TWEED 1x12**

This cabinet has an important influence on the sound of the Tweed 1x12 amp. The speaker uses an Alnico magnet.

3. **TWEED 4x10**

This is an open back cabinet containing four 10-inch 8 ohm speakers connected in parallel for a 2 ohm impedance.

4. **BLACK 2x10**

This is the cabinet of a 35W open back combo amp containing two 10-inch ceramic magnet speakers.

5. **BLACK 2x12**

This contains two 12-inch ceramic magnet speakers, connected in parallel as a 4 ohm load.

6. **VOX AC15**

This is the cabinet of an open back combo amp containing one of the famous 12-inch "VOX blue Alnico speakers" made by the British company Celestion.

7. **VOX AC30**

The famous VOX sound is completed by this speaker cabinet which contains two 12-inch VOX blue Alnico speakers connected in series as a 16 ohm load.

8. **VOX AD120VTX**

This is the closed back cabinet VTX containing two custom-designed Celestion speakers with neodymium magnets.

9. **UK H30 4x12**

This is a heavy-duty cabinet containing 30W speakers from the late 60's made by the same manufacturer as the UK T75 4x12 described below.

10. **UK T75 4x12**

This is a more modern 4x12 cabinet containing 75-watt British-made speakers.

11. **US V30 4x12**

Known as the "black beast," this cabinet uses British-made "Vintage" speakers, and is known for its deep low-range and well-defined highs.

Examples of amp and cabinet combinations

You can freely combine amp models with cabinet models to create a wide range of sounds, so be sure to try out various combinations.

Here are some typical combinations.

Amp model	Cabinet model	
CLEAN	2	TWEED 1x12
	4	BLACK 2x10
	5	BLACK 2x12
	9	UK H30 4x12
	For the CUSTOM amp model, we recommend that you turn the cabinet model off.	
CALI CLEAN	1	TWEED 1x8
	2	TWEED 1x12
	4	BLACK 2x10
	5	BLACK 2x12
US BLUES	2	TWEED 1x12
	3	TWEED 4x10
	5	BLACK 2x12
	9	UK H30 4x12
US 2x12	4	BLACK 2x10
	5	BLACK 2x12
VOX AC15	6	VOX AC15
	7	VOX AC30
	8	VOX AD120VTX

Amp model	Cabinet model	
VOX AC30	6	VOX AC15
	7	VOX AC30
	8	VOX AD120VTX
UK ROCK	9	UK H30 4x12
	10	UK T75 4x12
UK METAL	9	UK H30 4x12
	10	UK T75 4x12
US HIGAIN	10	UK T75 4x12
	11	US V30 4x12
US METAL	10	UK T75 4x12
	11	US V30 4x12
BTQ METAL	9	UK H30 4x12
	10	UK T75 4x12
	11	US V30 4x12

stand alone pedals

The ToneLab EX provides eleven models of the most popular effect pedals. You can use the GAIN, TREBLE, MIDDLE and BASS controllers to adjust the major parameters.

HINT: Each pedal type's GAIN (adjusted by the top panel GAIN control) can be assigned to the expression pedal for control. For details on how to assign a parameter to the expression pedal, refer to "Assigning a function to the expression pedal (Quick Assign)" (p. 31).

1. TONE DRIVE

This effect models a California boutique pedal that offers a clean boost and overdrive in one effect. Dial in the right amount of singing distortion and give your amp the boost it needs to get extra sustain.

2. BRIT LEAD

This models a pedal that was nicknamed "The Leader". It is a British Overdrive designed to give more power and punch to any amp.

3. FAT DIST

Based on a pedal named after one of the most disliked rodents to ever walk the planet! The result is a smooth distortion rich in harmonics... nasty but nice.

4. METAL DIST

This is a distortion unit that's ideal for metal.

5. ROCK PLANET

Need metal? Well this is it. This model is based off a popular metal distortion that uses a mid-frequency sweep that scoops you right down into the inner depths of the planet.

6. TUBE DX

This effect models a relatively new ultra high gain distortion designed by a British amp company using an ECC83 tube and high tension 300 volt circuit.

7. BIG FUZZ

This model is based on a pedal often referred to by its nickname—the "Rams head". These were produced in New York between 1972 and 1977 and are highly collectible and known for having a complex harmonic fuzzed out distortion with long sustain.

8. VOX TONE BENDER

This model is based on our original 60's Tone Bender fuzz pedal. The VOX TONE BENDER was an aggressive fuzz that utilized two transistors. The Tone Bender was innovative because it allowed more control over the distortion with controls for attack and level.



9. OCTA FUZZ

This models a legendary UFO-shaped fuzz unit that generates standard fuzz effects, and adds a pitch one octave above the original. To get the best results, be sure to use your front pickup.

10. TECHNO FUZZ

This new-generation fuzz combines aggressive distorted guitar sounds with vicious techno synth sounds. MIDDLE control on this model adjusts “sound color”.

11. CRUSHER

The distortion of this new-generation fuzz will absolutely destroy everything.

Pedal 1

HINT: Parameters that can be assigned to the expression pedal are indicated by a “*”. For details on how to assign a parameter to the expression pedal, refer to “Assigning a function to the expression pedal (Quick Assign)” (p. 31)

1. COMP

This models a compressor pedal that is popular for its percussive clean sound. It’s perfect for the pop or funk music of the 80’s and 90’s. It can also produce a singing, mellow sustain.

Knob	Parameter	
PEDAL 1	SENS*	Adjusts the sensitivity. Turn the knob toward the right to increase the compression and sustain.

2. VOX V847

This effect is modeled on the legendary VOX wah pedal, the V847. Thanks to its unique “throaty” tone, many professionals love stepping on this wah pedal. If you select VOX V847, the expression pedal will automatically function as a wah pedal.



Knob	Parameter	
PEDAL 1	MANUAL*	Adjusts the tone.

3. TONE

This models a tone control circuit similar to those built into electric guitars.



Knob	Parameter	
PEDAL 1	TONE*	Adjusts tone.

4. ENERGIZER

This boosts (energizes) but also tightens the low range.

Knob	Parameter	
PEDAL 1	ENERGIZE*	Adjusts the depth of the effect.

NOTE: Depending on the selected effects, boosting the low range with this model may generate an unwanted distortion. In that case, lower the VOLUME setting in the amp section.

Pedal 2

Like stand alone pedals, the pedal 2 effect offers eleven of the most popular pedal effect types. For example, you can assign different distortion pedals to the stand alone pedal and pedal 2 to create more complex and elaborate sounds.

1. VOX V845

This models the VOX V845 wah pedal, which features milder and more vintage sounds relative to the V847 wah pedal. If you select VOX V845, the expression pedal will automatically function as a wah pedal.



Knob	Parameter	
EDIT	MANUAL*	Adjusts the tone.

2. BRN OCTAVE

This models a pedal that adds weight to the sound by generating a sound one octave below, and mixing this with the original sound.

Knob	Parameter	
EDIT	LEVEL*	Adjusts the mix amount of the octave-lower sound.

3. ACOUSTIC

This is ideal when you want to play acoustic sounds. It's a simulator that transforms the sound of an electric guitar into the sound of an acoustic guitar.

We recommend that you use this with a single-coil (i.e., low output) neck (front) pickup

Knob	Parameter	
EDIT	TONE*	Adjusts the tone.

4. RING MOD

A ring modulator is an effect that uses an oscillator to generate a sine wave which is then multiplied with the signal from your guitar to produce harmonics above and below the frequencies originally produced by your guitar. This creates complex and unpredictable pitches.

Knob	Parameter	
EDIT	MANUAL*	Adjusts the tone.

5. U-VIBE

This models the famous phase/vibrato pedal unit. This effect simulates a rotary speaker, producing a seductive and emotional tone.

Knob	Parameter	
EDIT	SPEED*	Adjusts the vibrato speed.

6. CLASSIC +

This models the “script logo” distortion which was famous for fueling the tones on “Crazy Train”. These “bud box” distortions are sought after for their large signal gain which uses LM741CN op amps to drive germanium clipping diodes. You will find the soft-clipped distortion sounds classic. Mix in a splash of reverb and push the distortion higher to produce drive and fuzz.

Knob	Parameter	
EDIT	GAIN*	Adjusts the gain.

7. TUBE OD

This model is based on an overdrive pedal that’s housed in a garish, “seasick green” box and is considered an all-time classic due to the wonderfully warm tones it produces.

Knob	Parameter	
EDIT	GAIN*	Adjusts the gain.

8. BLUE DRIVER

This models a bluesy compact drive pedal that was based on the classic overdrive sound of a cranked vintage tube amp.

Knob	Parameter	
EDIT	GAIN*	Adjusts the gain.

9. GOLD DRIVE

This models an overdrive unit named after a half-human half-horse being from Greek myth. When the gain is lowered, this acts

as a booster that preserves the original sound of the guitar. Raising the gain makes this act as an overdrive with a rich mid-range.

Knob	Parameter	
EDIT	GAIN*	Adjusts the gain.

10.ORG DIST

This is a classic Japanese-made distortion unit in an orange box.

Knob	Parameter	
EDIT	GAIN*	Adjusts the gain.

11.GERMANIUM FUZZ

Retro, brazen, and rough-edged.

Knob	Parameter	
EDIT	GAIN*	Adjusts the gain.

Modulation

The ToneLab EX provides eleven types of modulation effects, including most standard ones.

The SPEED parameter of modulation-type effects can be adjusted easily by pressing the TAP switch twice.

HINT: To set a precise speed that matches the tempo of a song, press the TAP switch several times in rhythm with the song.

You can use the EDIT knob to adjust the most important parameter (EDIT 1). In addition, you can hold down the TAP switch and turn the EDIT knob to make more detailed settings (EDIT 2).

HINT: Parameters that can be assigned to the expression pedal are indicated by a “*”. For details on how to assign a parameter to the expression pedal, refer to “Assigning a function to the expression pedal (Quick Assign)” (p. 31).

1. CE CHORUS

This models a Japanese made vintage analog chorus unit housed in a grey box.

Knob/Switch	Parameter	
EDIT	DEPTH*	Adjusts the modulation depth.
TAP	SPEED*	Adjusts the modulation speed in a range of 0.1–15 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

2. MULTI CHORUS

This is a deep and spacious chorus with independent chorus taps at left, center, and right.

Knob/Switch	Parameter	
EDIT	DEPTH*	Adjusts the modulation depth.
TAP	SPEED*	Adjusts the modulation speed in a range of 0.1–15 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

3. FLANGER

This models a truly classic analog flanger associated with a great guitarist of today who is honored by many as “the god-father of two-handed tapping.”

Knob/Switch	Parameter	
EDIT	RESONANCE*	Adjusts the amount of resonance.
TAP	SPEED*	Adjusts the modulation speed in a range of 0.1–15 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

4. ORG PHASE

This models a popular analog phaser in a banana-colored box.

Knob/Switch	Parameter	
EDIT	RESONANCE*	Adjusts the amount of resonance.
TAP	SPEED*	Adjusts the modulation speed in a range of 0.1–15 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

5. TWIN TREM

This models the acclaimed tremolo circuit built into a US-made combo amp.

Knob/Switch	Parameter	
EDIT	DEPTH*	Adjusts the tremolo depth.
TAP	SPEED*	Adjusts the modulation speed in a range of 1.0–15 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

6. VIBRATO

This vibrato effect adds cyclical pitch changes, creating a wide range of vibrato from a mild warbling to cricket chirps to something fast and furious like an electric shock. With this effect you can, for example, assign the “DEPTH” parameter to the expression pedal and apply the effect at key points during your performance.

Knob/Switch	Parameter	
EDIT	DEPTH*	Adjusts the modulation depth.
TAP	SPEED*	Adjusts the modulation speed in a range of 1.0–30 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

7. G4 ROTARY

This models a rotary speaker.

Knob/Switch	Parameter	
EDIT	DEPTH*	Adjusts the modulation depth.
TAP	SPEED*	Adjusts the modulation speed in a range of 0.8–15 Hz.
TAP+EDIT	SPEED*	Adjusts the speed.

8. SLOW ATTACK

This creates a violin-like slow and gentle attack.

Knob/Switch	Parameter	
EDIT	ATTACK*	Adjusts the speed.

9. PITCH

This is a pitch shifter that allows you to play chords, and has a variable range of one octave upward or downward.

Knob/Switch	Parameter	
EDIT	BALANCE*	Adjusts the balance between direct sound and effect sound.
TAP	PITCH*	Specifies the amount by which the pitch of the effect sound will be shifted; an octave, a 4th, or a 5th. Each time you press the switch, the setting will cycle between -12, -7, -5, DT (Detune), +5, +7, +12, -12.
TAP+EDIT	PITCH*	Specifies the amount by which the pitch of the effect sound will be shifted in semitone units (100 cents). The setting will change as follows: -12, -11– -1, 0, DT (Detune), +1– +12

10. FILTRON

This is an envelope-controlled filter (wah) that opens or closes a filter according to the input from the guitar.

Knob/Switch	Parameter	
EDIT	SENS*	Adjusts the sensitivity to the guitar's volume. If this parameter is assigned to the expression pedal, the cutoff frequency will be controlled by the expression pedal, meaning that the opening/closing of the filter will not be affected by the input from the guitar.
TAP	TYPE	Specifies the direction of movement (up or down). If Up is selected, the TAP switch LED will light-up.
TAP+EDIT	RESONANCE*	Adjusts the amount of resonance.

11. TALK MOD

This is an envelope controlled talking modulator. The vocal character will change according to the input from your guitar. If you assign “SENS” to the expression pedal, you can use your foot to control the vowel.

Knob/Switch	Parameter	
EDIT	SENS*	Adjusts the sensitivity to the guitar's volume. If this parameter is assigned to the expression pedal, the vowel will be controlled by the expression pedal, meaning that the vocal character will not be affected by the input from the guitar.
TAP	TYPE	Specifies the vocal character type 1 or 2. If type 2 is selected, the TAP switch LED will light-up.
TAP+EDIT	RESONANCE*	Adjusts the amount of resonance.

Delay types

The ToneLab EX provides four types of delay effects. Depending on the knob position, you can switch the reverb type among ANALOG DELAY, TAPE ECHO, SDD DELAY, and MULTI DELAY, and set the delay mix amount. The TIME parameter of delay-type effects can easily be adjusted in the range from 40 to 1480ms by pressing the TAP switch twice.

HINT: To set a precise time that matches the tempo of a song, press the TAP switch several times in rhythm with the song.

Knob/Switch	Parameter	
DELAY	LEVEL*	Adjusts the mix amount of the delay sound. If this parameter is assigned to the expression pedal, the input level to the delay will be controlled by the expression pedal.
TAP	TIME	Specifies the delay time in a range of 40–1480 ms.
TAP+DELAY	FEEDBACK*	Adjusts the amount of feedback.

1. ANALOG DELAY

This models an analog delay that uses a Bucket Brigade Device (BBD). Its audio quality is lo-fi, but is popular for its warm sound

2. TAPE ECHO

This models an acclaimed analog tape echo. Originally, echo was created by a playback head, and the delay time was specified by changing the speed of the motor.

3. SDD DELAY

This models the KORG SDD-3000 Digital Delay.

The SDD-3000 is known for its crisp clean echoes and ability to modulate the pitch of the delayed signal. The SDD-3000 used high and low filters, waveforms, and phase cancellation to produce some of the most sought after delay sounds in rock history.



4. MULTI DELAY

This is a model of a tape echo unit boasting three playback heads. You can create "multi-tip" echo effects.

Reverb types

Three types of reverb are provided.

Depending on the position of the knob, this selects the reverb type (SPRING, ROOM, or HALL) and adjusts the mix amount of the reverb sound.

HINT: If reverb is assigned to the expression pedal, the expression pedal will control the input level to the reverb. For details on how to assign a parameter to the expression pedal, refer to "Assigning a function to the expression pedal (Quick Assign)" (p. 31).

1. SPRING

This simulates the spring reverb built into many guitar amps.

2. ROOM

This reverb type simulates a typical room that contains numerous early reflections.

3. HALL

This models the reverberation of a concert hall containing numerous echo components.

Tuner

The ToneLab EX has a built-in auto chromatic tuner.

Tuning procedure

1. **To tune your guitar with all effects bypassed, press one of the program pedals 1–4 (that corresponds to the program selected in Program Select Mode) for one second.** The Bank/Value display will indicate " - - ".

If you press and hold down the pedal for two seconds, you can tune with the sound muted. The LEDs will indicate the tuning status.

The Bank/Value display will indicate " _ _ ".

If you're tuning on stage, we recommend that you use this method.

HINT: If the Quick Assign LED or the Bank/Value display is not blinking, you can also press the EXIT/TUNE switch to tune with the effects bypassed.

2. **Play a single note on your guitar, and tune the string approximately so that the desired note name appears in the Bank/Value display.**

The note name is shown as follows.

C	C [♯]	D	D [♯]	E	F	F [♯]	G	G [♯]	A	A [♯]	B
[[[♯]	d	d [♯]	E	F	F [♯]	G	G [♯]	A	A [♯]	b

3. **While watching the LEDs in the tuner section, tune the guitar string precisely.**

Follow the tuning method for the desired tuning mode (p. 30, "Switching tuning mode").

4. When you've finished tuning, press one of the program pedals 1–4.

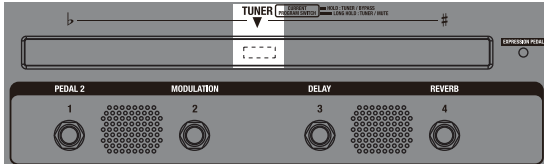
HINT: You can also press the EXIT/TUNE switch to return to the previous operation.

Switching tuning mode

The built-in Auto Chromatic Tuner features switchable Normal and Strobe modes. To switch tuning mode, press the EXPRESSION switch during tuner operation. When the mode is switched, the Bank/Value display indicates " n " (normal) or " 5 " (strobe) for one second.

NOTE: This mode setting will be saved when you turn the power off.

Normal mode



Tune the string so that only the middle indicator (out of seven tuner LEDs) lights up green.
If the tuning is sharp, an LED on the right side will be lit.
If the tuning is flat, an LED on the left side will lit.

Strobe mode

Tune the string so that movement of the tuner LED illumination stops.

If the tuning is sharp, illumination of the LEDs will start with the LED on the left end and move towards right.

If the tuning is sharp, illumination of the LEDs will start with the LED on the right end and move towards left.

When the string is in tune, the movement of illumination will stop.

Calibrating the tuner

Calibration specifies the reference pitch for tuning (expressed as the frequency of the middle 'A' note on a piano). You can adjust this in a range of 438 Hz–445 Hz.

NOTE: The calibration setting you specify here will be discarded when you turn off the power. When you turn the power on again, it will automatically be set to 440 Hz.

1. Activate the tuner as described in step 1 of "Tuning procedure" (p. 29).
2. While holding down the EXIT/TUNE switch, use the BANK UP/DOWN pedals to adjust the reference pitch. The bank/value display will indicate "38"–"45" (438 Hz–445 Hz). Specify the desired reference pitch.
3. Release the EXIT/TUNE switch to complete the calibration setting.

Using the expression pedal for control

Expression pedal settings

The ToneLab EX's programs assign various functions to the expression pedal, allowing you to control not only wah or volume but many other kinds of effect parameters with the expression pedal.

HINT: If you select "VOX V847" or "VOX V845," the expression pedal will automatically function as a wah pedal.

For each program, you can specify which parameter will be controlled by the expression pedal and how it will be controlled.

When you save a program, the position (angle) of the expression pedal at that moment will be saved in the program as the parameter value. When you select that program, the value saved in the program will be recalled as the setting of the assigned parameter.

In the following cases, however, the value is not saved.

- Volume
- Input level to the delay effect
- Input level to the reverb effect
- PITCH parameter of PITCH
- Cutoff frequency of FILTRON
- Vowel of TALK MOD

Assigning a function to the expression pedal (Quick Assign)

On the ToneLab EX, it's easy to assign an effect parameter or the effect input level to the expression pedal.

HINT: For details on the effect parameters that you can assign, refer to "About the amp models, cabinet models, and effect types" (p. 15).

To assign a function to the expression pedal

As an example, here's how to assign the SPEED parameter of the U-VIBE pedal 2 effect to the expression pedal.

1. Turn on the effect.

In this example, press the PEDAL 2 on/off switch to turn the pedal effect on.

2. Use the selector to select a effect, and then use the EDIT knob.

Use the PEDAL 2 selector to select U-VIBE, and then turn the EDIT knob. The Quick Assign LED will light.

3. Hold down the EXPRESSION switch for about two seconds.

The SPEED parameter will be assigned to the expression pedal; the bank/value display will indicate " [P " for one second.

4. If desired, save this setting in the program.

For details on how to save, refer to "Saving a program" (p. 15).

NOTE: The settings you made will return to their original values if you switch programs or turn off the power before saving.

To assign volume, gain, or the input level to the reverb or delay effect, proceed as follows.

- **Volume:** Use the VOLUME knob, and then hold down the EXPRESSION switch for about two seconds.
- **Gain:** Press the AMPS bank select switch or STAND ALONE PEDALS switch, use the GAIN knob, and then hold down the EXPRESSION switch for about two seconds.
- **Pedal 1:** Use the PEDAL 1 knob, and then hold down the EXPRESSION switch for about two seconds.
- **Input level to the reverb effect:** Use the REVERB knob, and then hold down the EXPRESSION switch for about two seconds.
- **Input level to the delay effect:** Use the DELAY knob, and then hold down the EXPRESSION switch for about two seconds.

To clear the expression pedal to an unassigned state

Hold down the EXPRESSION switch and press the EXIT/TUNE switch. The expression pedal assignment will be cleared, and the EXPRESSION PEDAL LED will go dark.

The expression pedal will also revert to an unassigned state if you switch to a different effect.

However in the following cases, the setting will be maintained and the assignment will not change.

- After the GAIN parameter of the amp model or standalone pedal type was assigned to the expression pedal, you changed the amp model or standalone pedal type.

Expression pedal minimum and maximum values

The minimum value is when the expression pedal is fully returned toward yourself; the maximum value is when the expression pedal is fully advanced away from yourself.

When you assign a parameter or volume to the expression pedal, the minimum and maximum values of the expression pedal will be set automatically.

Adjusting the minimum and maximum parameter values

When you assign an effect parameter to the expression pedal, the minimum and maximum values appropriate for that parameter will be assigned as the minimum and maximum values of the expression pedal. If you assign the PITCH parameter of the PITCH, the minimum value will be “0” (no pitch shift) and the maximum value will be the current value.

You can adjust the minimum and maximum values as follows.

NOTE: If the reverb, delay effect input level is assigned to the expression pedal, the minimum and maximum values will be set automatically, and cannot be changed.

1. Press the EXPRESSION switch.

The Quick Assign LED will blink.

If an effect is assigned to the expression pedal

The on/off switch LED of the assigned effect will blink, and the bank/value display will indicate “ P _ ”.

If no function is assigned to the expression pedal

The bank/value display will blink “ - - ”. In this case, use Quick Assign to assign a function (p. 31, “Assigning a function to the expression pedal (Quick Assign)”).

- 2. Use the EDIT knob of the assigned effect (whose on/off switch LED is blinking), or the GAIN control to specify the minimum value.**

HINT: You can skip this step, if you do not change the minimum value.

- 3. Press the EXPRESSION switch.**

The bank/value display will indicate “ P - ”.

- 4. Use the EDIT knob you used in step 2, or the GAIN control to specify the maximum value.**

HINT: You can skip this step, if you do not change the maximum value.

NOTE: If you decide to cancel the setting, press the EXIT/TUNE switch.

- 5. Press the EXPRESSION switch.**

The bank/value display will indicate “ [P ” for about one second.

The Quick Assign LED will go dark.

NOTE: The assignment of a function to the expression pedal, the minimum value, and the maximum value are specified independently for each program.

- 6. If desired, save these settings to the program.**

For details on the procedure, refer to “Saving a program” (p. 15).

NOTE: The settings you made will return to their original values if you switch programs or turn off the power before saving.

Adjusting the minimum and maximum volume

If volume is assigned to the expression pedal, you can adjust the minimum and maximum values as follows.

- 1. Press the EXPRESSION switch.**

The EXPRESSION PEDAL LED and Quick Assign LED will blink, and the bank/value display will indicate “ P - ”.

- 2. Use the VOLUME control of the AMP section to specify the minimum value, and then press the EXPRESSION switch.**

The minimum value will be specified, and the bank/value display will indicate “ P - ”.

- 3. Use the VOLUME control to specify the maximum value, and then press the EXPRESSION switch.**

The bank/value display will indicate “ [P ” for about one second.

Adjusting the sensitivity of the expression pedal

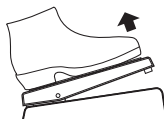
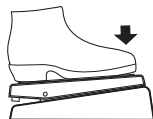
If the minimum and maximum values of the parameter are assigned as the minimum and maximum values of the expression pedal, but the effect or volume fails to reach the maximum (or minimum) setting when the expression pedal is fully advanced (or returned), you can adjust the sensitivity of the expression pedal as follows so that it will function optimally.

NOTE: When adjusting the sensitivity, you must operate the expression pedal with your foot; in some cases, it may not be possible to adjust the pedal sensitivity if you operate it with your hand.

1. Turn the power off (STANDBY).
2. While holding down the EXPRESSION switch and WRITE switch, turn the power on.
3. When the program display indicates "Pd," release the switches.
4. Advance the expression pedal so that the effect switches on/off.

This will be assigned as the weight that will switch on/off the effect assigned to the expression pedal.

5. Use your foot to slowly return the expression pedal toward yourself, and take your foot off when the pedal stops.



6. Softly advance the expression pedal, and take your foot off when the pedal stops.

NOTE: If you decide to cancel this sensitivity adjustment, press the EXIT/TUNE switch.

7. Press the WRITE switch.

The program display will indicate "EP" for about one second, and then the program number will appear.

If the sensitivity adjustment could not be performed correctly, the program display will blink "Er", and will then indicate "Pd". In this case, perform the procedure from step 4.

NOTE: If you are repeatedly unsuccessful in adjusting the sensitivity, it is possible that the ToneLab EX has malfunctioned. Please contact your nearby VOX dealer.

Connecting to your computer (USB connection)

If you use a commercially available USB cable to connect the ToneLab EX to your computer, you'll be able to use the librarian software on your computer to manage user programs, and use the ToneLab EX as a USB audio interface.

Using librarian software

If you install the USB-MIDI driver on your computer, you'll be able to use the dedicated librarian software to back up programs and manage your data library.

Download the USB-MIDI driver and the librarian software from the manufacturer's website (www.voxamps.com).

For details on using the librarian software, refer to the owner's manual of the librarian software.

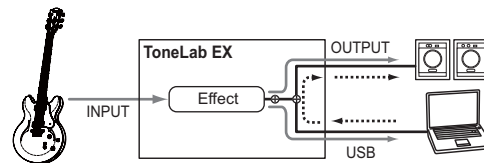
Transferring audio data

If the ToneLab EX is connected to your computer via a USB cable, the ToneLab EX's effect output can be recorded directly into an audio track of your DAW software. You'll also be able to monitor the audio playback of your software via the ToneLab EX.

NOTE: If you're using Windows, you'll need to install the USB-ASIO driver in your computer in order to transfer audio data via the USB connector.

Download the USB-ASIO driver from the manufacturer's website (www.voxamps.com).

The following illustration shows the signal flow when connected to your computer.



The ToneLab EX's effects will not be applied to the audio input from the USB connector.

Restoring the factory settings

Here's how to restore the ToneLab EX to its factory-set state.

NOTE: This operation will initialize the programs you've saved, returning all of them to the factory-set programs.

NOTE: Never turn the power off while initialization is being performed.

1. Turn the power off (STANDBY).
2. While holding down the EXIT/TUNE switch and EXPRESSION switch, turn the power on (ON).
3. When the program pedal 1–4 LEDs blink, release the switches.

HINT: If you decide to cancel this procedure, press the EXIT/TUNE switch.

4. Press the WRITE switch.

Initialization will be completed, the program display will indicate " *LP* " and then automatically returns to program select mode.

Troubleshooting

Power doesn't turn on when you turn the ON/STANDBY switch on

- Is the AC adapter connected to the rear panel DC12V jack?
- Is the AC adapter plugged into an AC outlet?
- Is the AC outlet working properly?
- Could the AC adapter be damaged?

No sound

- Could the volume of your guitar be turned down?
- Is your guitar cable connected correctly?
- Could your guitar cable be broken?
- Could the rear panel LEVEL knob and SPEAKER LEVEL knob be set to the minimum value?
- Could the top panel VOLUME and GAIN controls be set to the minimum value?
- Could the settings of the TREBLE, MIDDLE, and BASS controls be set to the minimum value?
For some amp models, there may be no sound from the amp if the TREBLE, MIDDLE, and BASS control values are low.
- Make sure that your headphones or connection cable is not defective or broken.
- Could the expression pedal be assigned as gain and volume, and returned all the way toward yourself?
- Could you have activated the tuner in a muted state?

Effects don't apply

- Could the effect setting be off?
Use the selector to select the effect that you want to use, or use the effect on/off switch to turn the effect on.
- Could the tuner be active?
The effects are bypassed if the tuner is active. Press the EXIT/TUNE switch to defeat bypass.
- Could an EDIT knob be set to the minimum value?
Adjust the EDIT knob.

Something is wrong with the sound

- Are the OPTION parameters set appropriately?
Hold down the CABINET on/off switch about one second to enter OPTION parameter setting mode, and adjust the parameters to appropriate values.
- Is the AMP/LINE switch set appropriately for the output destination that's connected?
Set the AMP/LINE switch correctly as described in step 1 of "Making connections" (p. 9).
- You are monitoring the sound through the built-in speakers.
Some programs (especially those with an emphasized low range) may cause the sound from the speakers to be distorted or noisy. In such a case, adjust the volume level using the SPEAKER LEVEL control.

The sound does not change when you use the switches, selectors, or knobs on the top panel

- Could the effect setting be off?
Use the selector to choose the effect that you want to use, or use the effect on/off switch to turn the effect on.
- Could the tuner be active?
The effects are bypassed if the tuner is active. Press the EXIT/TUNE switch to defeat bypass.
- Could you be specifying the expression pedal's minimum and maximum values?
While you're specifying the expression pedal's minimum and maximum values, parameters other than the one assigned to the expression pedal will not change. Press the EXIT/TUNE switch to return to normal operation.
- Could you have activated the Key Lock function?
If the Key Lock function is active, you won't be able to operate the switches, selectors, or knobs on the top panel. Hold down the EXIT/TUNE switch for about two seconds to defeat the Key Lock function.

Song Preset Program List

Bank No.	Program No.	Song title
26	1	Aenima
	2	Alive
	3	Always on the Run
	4	Back In Black
27	1	Badge
	2	Basket Case
	3	Beat It
	4	Best Of You
28	1	Black Dog
	2	Born To Run
	3	Breathe
	4	Bullet with Butterfly Wings
29	1	Cocaine
	2	Creep
	3	E Pro
	4	Enter Sandman
30	1	Five Minutes Alone
	2	For the Love of God
	3	Free Bird
	4	Gravity
31	1	Heartbreak Hotel
	2	Hot For Teacher
	3	I Ain't Superstitious
	4	I Feel Fine
32	1	I Wanna
	2	Jessica

Bank No.	Program No.	Song title
32	3	Know Your Enemy
	4	Message In A Bottle
33	1	Outshined
	2	Owner of the Lonely Heart
	3	Paranoid
	4	Pride and Joy
34	1	Pride (In the Name of Love)
	2	Raining Blood
	3	Rebel Rebel
	4	Satch Boogie
35	1	Satisfaction
	2	Show Me the Way
	3	Smells Like Teen Spirit
	4	Smoke On The Water
36	1	Song 2
	2	Sultans of Swing
	3	Sweet Child O' Mine
	4	Tie Your Mother Down
37	1	Under The Bridge
	2	Voodoo Child (slight return)
	3	Walk This Way
	4	Waters of Nazareth
38	1	Wonderwall
	2	You Enjoy Myself

* The equipment used in the song by the actual guitarist may differ.

* Programs which are not listed on this page are "Basic Preset Programs". These presets range from standard, recognizable tones to more unique and crazy sounds.

Specifications

Amp models: 33

Cabinet models: 11

Pedal types: 26

Modulation types: 11

Delay types: 4

Reverb types: 3

Noise reduction: 1

Programs: 200 (25 x 4 preset, 25 x 4 user)

Audio input

INPUT jack, AUX IN jack

Audio output

OUTPUT/PHONES jack (stereo/mono dual use)

LEVEL knob, AMP/LINE switch

USB

USB connector (Type B)

Speaker

1 inch x 2

Power amp output

approx. 0.3 W x 2

Tuner

Detection range: A0–E6 (27.5Hz–1,318.5Hz)

Calibration: A=438–445 Hz

Other


DC12V connector, ON/STANDBY switch

Signal processing

A/D conversion: 24-bit

D/A conversion: 24-bit

Sampling frequency: 44.1kHz

Power supply: AC adapter (DC12V, )

Current consumption: 700mA

Dimensions (W x D x H):

394 x 238 x 82 (mm)/15.51 x 9.37 x 3.23 (inches)

Weight: 3kg/6.61lbs.

Included items: AC adapter

* Specifications and appearance are subject to change without notice for improvement.



VOX AMPLIFICATION LTD. 9 Newmarket Court, Kingston, Milton Keynes, MK10 OAU, UK

www.voxamps.com