

PERFORM-VG

Ultra-Simple Mic-Stand-Mount Vocal and Acoustic Guitar Processor for Solo and Duo Performers

User Manual





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CAUTION OF ELECTRIC SHOCK! NOT OPEN! ENTION UTION ! ELECTROCU' AS OUVRIR !



Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock.

Use only high-guality professional speaker cables with 1/4" TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the

enclosure - voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the

accompanying literature. Please read the manual.



Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.



Caution

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



Caution

These service instructions are for use by gualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

- Read these instructions. 1.
- Keep these instructions. 2.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- Clean only with dry cloth. 6.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as 8. radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

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

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

11. Use only attachments/accessories specified by the manufacturer.



12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid

injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to gualified 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.

15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.

16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.



17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken

to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.

18. Do not install in a confined space, such as a book case or similar unit.

19. Do not place naked flame sources, such as lighted candles, on the apparatus.

20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed-of at a battery collection point.

21. Use this apparatus in tropical and/or moderate climates.

LEGAL DISCLAIMER

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LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding MUSIC Group's Limited Warranty, please see complete details online at music-group.com/warranty.



1. Introduction

ΕN

Thank you for purchasing Perform-VG!

Your new mic stand-mounted vocal and guitar processor opens up a world of new performance opportunities.

Starting with Adaptive Tone (automatic EQ, De-Essing, Gating and Compression), your voice will punch through the mix and sound great in any environment.

Add studio-quality Reverb, Harmony and Echo to the party and you'll easily craft eardrum pleasing vocal effects that are perfectly suited to your song.

With the addition of acoustic guitar BodyRez and independent Echo and Chorus effects it's easier than ever to get a complete guitar sound for your performance.

Anti-Feedback tames the annoying high pitched squeals we've all experienced at live shows and keeps your performance sounding its very best.

Our global Pitch Correction gently guides your voice to the nearest note, ensuring that your pitches are spot on.

2. Let's Get Going!

On the box, you may have seen a connection guide and simple instructions to set your mic gain. If you haven't got things connected and making sound, we should do that now.

3. Set Mic Gain

- Connect your mic, guitar, and mixer or headphones according to the guide below
- Press and hold the SET button for about 2 seconds, while singing normally
- When the process is complete, the SET LED will turn RED
- Release the SET button to complete the process
- Your mic gain is now set optimally

After the gain is set, you'll see the LED ring illuminate red, showing you the current mic gain. If you would like to make a manual adjustment to the automatic setting, simply turn the control knob. When you're done making adjustments, the control will time out and your manually selected level will be saved. Manually setting mic gain also disables the "nudge" feature which protects you from overloading the input by reducing gain when repeated overloads are detected in a short period of time. Pressing the SET button after manually setting mic gain will re-enable "nudge".



4. Connection Diagram

*Note that using guitar THRU will mute all guitar sounds in Perform-VG. Chords will still be detected for NaturalPlay harmony, but the intent is to connect to other pedals/amps instead of hearing guitar from VG.

If you change the guitar level via the MIX button while the THRU is connected, the guitar signal will become available again via both THRU and MIC OUT, should you want a dry signal for guitar in addition to the mixed vocal/guitar output.

To re-mute the guitar in the MIC OUT, plug and re-plug the THRU or GUITAR IN.

5. Control

All editing and control on Perform-VG is achieved in three ways. Here are some examples:

- Button press
 - Effects on/off
 - Tone , Anti-Feedback, BodyRez on/off
 - Enter headphone level control
 - Enter mix control
 - Enter dimming control
 - Tap tempo
- Button hold
 - Enter effects edit mode
 - Start automatic gain calibration
 - Talk/Tuner mode
 - Lockout mode
 - 48V on/off
 - Aux to main out toggle
- Control knob rotation
 - Main output level (default top-level control)
 - Effects level/style
 - Headphone level
 - Guitar level
 - Dimming level
 - Manual mic gain level

6. Effects

Harmony

Additional voices, created from your own voice, provide harmony as personal backup singers. Chord information is captured via the guitar input to pick the right key and scale for your song automatically.



We can also use music coming into the AUX input to automatically pick the right key/scale for the harmony voices if you don't have a guitar connected. If you have no guitar or Aux input, we'll use the built in RoomSense mic to listen for key/ scale. You'll need to have a chorded instrument near the RoomSense mic for this to work.

Reverb

Reverb creates a simulated physical space for your voice and guitar. It can be a small space, like a shower (where everyone's best singing takes place), or something as big as a concert hall. It's common to use a smaller (shorter) Reverb for faster songs and a larger (longer) Reverb for slower ones.

Vocal and guitar share the reverb style, but control over the levels is independent.



Echo

Otherwise known as "Delay", echo effects repeat your voice or guitar back to you in various ways and amounts, simulating the effect of shouting into a mountain range or very large space.

Vocal and guitar can each have independent echo styles and levels.



Chorus

Chorus adds pitch/time modulation effects to your guitar, giving you options to further expand your sound.



7. Turning Effects On and Off

To activate or deactivate an effect, simply tap the Reverb, Harmony, Echo or Chorus button. The button will glow WHITE when active and turn off when inactive.





8. Editing Effects

ΕN

Don't like the Reverb, Harmony, Echo or Chorus that you hear? You can adjust both the Level (volume) and Style (sound of the effect) to dial in just the right combination for your music.

To edit an effect, simply PRESS & HOLD the effect button. You'll know you're in EDIT mode because the effect button will pulse.

The LED ring serves as both a Level and Style control. As you turn the knob clockwise, the LED segments will fill up, indicating that you're turning up the Level of the current style.

When you completely fill the LED ring, the color will change, letting you know that you've now changed the Style of the effect.

Continuing to turn the Control Knob clockwise will increase the Level of that Style. Turning the knob counter-clockwise will reduce the level until you change style.

We've tried to relate the color of the LED ring to the type of style from "least" to "most".



Blue = smallest/least, like slap echo (very short) or room reverb (also short) or guitar chorus (least extreme of the guitar effects)



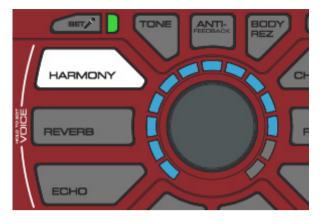
Purple = medium, like ¹/sth note echo, club reverb or guitar flanger



Red = most, like 1/4 note echo, hall reverb or guitar detune

Harmony works slightly differently than the other effects, since there are more styles to choose from.

When you first hold the harmony button to enter edit mode, you'll be greeted with a level control. Unlike the other effects, this is simply a minimum to maximum control and applies regardless of which harmony style you've chosen.



Once in edit mode, tap the harmony button again to toggle between level control and style control.

Each effect has three different styles to choose from, with the exception of Harmony, which offers 13.

Harmony

- High
- High & Higher
- Higher
- Octave Up
- Bass & High
- Bass
- Octave Up & Down
- Octave Down
- Lower & Higher
- Lower
- Lower & Low
- Low
- High & Low

Reverb

- Room (blue)
- Club (purple)
- Hall (red)

Echo

- Slap (blue)
- ¹/₈ note (purple)
- ¹⁄₄ note (red)

Chorus

- Chorus (blue)
- Flanger (purple)
- Detune (red)

Harmony styles are represented relative to the topmost (12 O'Clock) LED, which serves as an indicator of your lead voice.

• High





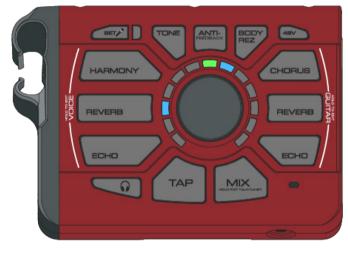
Bass & High

•

Octave Up

• High & Higher



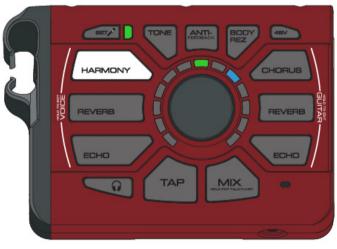


Bass



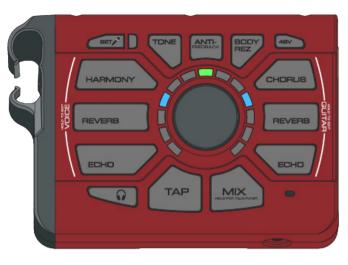
Higher

•

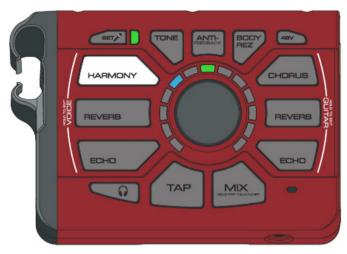




Octave Up & Down



Lower

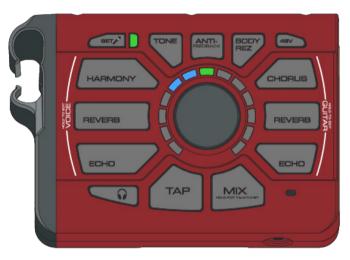






Low & Lower

Low

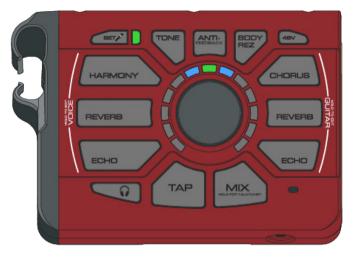


Higher & Lower





High & Low



9. Tone

Tone automatically adds EQ (equalization), Compression, De-Ess and Gate to your overall vocal sound.

To activate Tone, press the button.



EQ helps to shape the tone of your voice to fit into a musical mix. We remove some of the low "mud" frequencies and boost the highs for "sparkle" or "air". Every recording you hear has some manner of EQ on the lead vocal (and pretty much everything else too).

Compression reduces the difference in volume between the loudest and quietest notes. This gives you a more even sound that can blend into the music better. It's almost unheard of for vocals to go uncompressed in modern music, both recorded and live.

De-Ess gets rid of harsh "S" sounds and makes them sound more pleasing to the human ear. De-Ess goes hand in hand with Compression, since Compression can make "S" sounds a bit more pronounced in the mix.

Gate "shuts off" an audio input when it falls below a certain volume. This works great on things like drums where you want the drum hit to come through, but then have the mic silent in between hits. For vocals, we don't want to go as far as shutting your mic off but we do want to reduce the volume (gain) of the mic when you're not singing so that feedback becomes less likely.

Although you can turn Tone off, we recommend you leave it on.

Since Perform-VG replaces EQ and effects that are often added by a live sound technician, you'll want to make sure that the mixer channel you plug Perform-VG into has a flat EQ (not altering any frequencies) and that any effects are turned off.

Tone Style

To change Tone styles, press and HOLD the tone button for 3 seconds. Turn the Control Knob to select a style. There are 8 to choose from:

Normal



• Less Bright



• Normal + Warmth



• More Compression



• Normal, No Gate



• Less Bright, No Gate



Normal + Warmth, No Gate



More Compression, No Gate

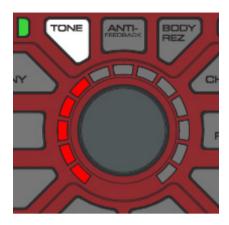




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10. Pitch Correction

Auto chromatic pitch correction gently guides you to the nearest semi-tone without making you sound like a robot. To access pitch correction, press and hold the Tone button for about one second. Use the control knob to adjust the amount of correction, from 0-100%.



Here's a Craig's Corner explaining why you might hear a "phased" type sound when using pitch correction: https://youtu.be/KWrEluiDXsA

11. Anti-Feedback

Everyone loves that amazing squealing sound coming out of the speakers, right? Yeah, not so much.

Anti-Feedback automatically adapts to your environment and removes frequencies that can cause feedback. It's not a silver bullet, you still have to set up your gear with reasonable volume levels and avoid pointing the mic at the speakers, but Anti-Feedback can help when you're "on the edge" and getting some squealing here and there.

To activate Anti-Feedback, simply press the button. White is ON.



You'll see the LED light blue when it's working to get rid of offending frequencies. If the LED is flashing constantly, it's done all it can do and you'll have to look at the rest of your audio setup to reduce feedback further.

To reset the filters, simply turn Anti-Feedback off and on again.

Note that Anti-Feedback works for the microphone input only.

However, you can press and hold Anti-Feedback to invert the phase of your guitar, which can help reduce acoustic instrument feedback significantly. Use the control knob to toggle between green "normal phase" and red "inverted phase". There's no right or wrong choice here. Use whichever setting reduces guitar feedback the best for you.

Here's a Craig's Corner video about feedback: www.youtube.com/watch?v=VIN1RJ4gcAo

12. BodyRez

There's nothing like a great sounding acoustic guitar. However, most guitar pickups create what we refer to as a "quacky" sound that's just not the same as listening to the natural guitar either in a room or via a nice microphone based recording. BodyRez works with your acoustic guitar's unique tone to reduce muddiness and "quack" giving you a vastly improved sound. We recommend leaving BodyRez on.

To turn BodyRez on and off, simply tap the button.



To adjust the amount of BodyRez:

- Press and hold the BodyRez button for about one second
- Use the Control Knob to adjust the BodyRez amount to taste

13. 48V (Phantom Power)

If you have a condenser mic, it'll need power to function. You'll need to press and hold the 48V button for two seconds to turn phantom power on.



If you're not sure what kind of mic you have, but you don't hear any sound, it's ok to try 48V. It won't damage a dynamic microphone.

14. Mic Control

To enable Mic Control, activate +48V.

Then, you'll need to select your Mic Control Mode. This is done by holding the +48V button and then pressing the guitar Chorus, Reverb or Echo buttons respectively.

Chorus sets Mic Control OFF. Use this when you have a condenser mic. If you have another Mic Control mode set, you may inadvertently activate buttons on the box as you sing.

Guitar Reverb sets MP-75 mode. The Mic Control button activates harmony by default. You can change Mic Control behavior by holding the Mic Control button and then pressing the button on Perform-VG that you'd like to control. For example, if you hold the Mic Control then press the Reverb button, the MP-75 will now control on/off for Reverb. If you have an MP-76 connected but choose MP-75 mode, the "top" button on the MP-76 will function just like the MP-75 button. The other buttons will not do anything.

Guitar Echo sets MP-76 Mode. In this mode, the "Top" button controls Harmony. The "Left" button controls Echo. The "Right" button controls Reverb. The "Bottom" button controls Talk Mode.

MP-75 and MP-76 modes can control the following:

- Harmony
 - follow the Harmony Style Footswitch Assignment instructions, pressing a mic button instead of footswitch
- Reverb
- Echo
- Tap Tempo
- Talk
 - If you activate Talk via Mic Control, we don't mute the guitar or activate the tuner. We assume you're using Mic Control because you're not playing guitar and wouldn't want to mess with that signal if it doesn't belong to you. Entering Talk/Tuner directly on the unit will always mute the guitar and enable the tuner.

15. Talk/Tuner

During a performance, especially between songs, you might want to speak with the audience and/or tune your guitar. It's unlikely that you'll want all the effects on your voice while doing so. That's where the talk/tuner mode comes in. When active, it bypasses all of the effects in the box (except Tone) so that you can speak with the crowd and be heard clearly. It also mutes your guitar signal and gives you an easy-to-use guitar tuner on the main LED ring.

AUX signals are still passed to the XLR out in talk/tuner mode.

Hold the MIX button for 2 seconds to engage talk/tuner.

*Guitar tuner and guitar level are disabled if no guitar is present

16. Lock/Mute

Press and HOLD the MIX button for 5 seconds to enter Lock/Mute mode. Only the Aux input remains active and is sent to the XLR output. This stops people from messing with your gear if you've stepped away for a break. The Aux is left active in case you want to play canned music between sets.

The MIX button will flash when in Lock/Mute mode.

To re-activate Perform-VG, press and HOLD the MIX button again.



17. Tap (Tempo)

When pressed, this light flashes in time with your echo effects. You can re-tap the tempo at any time to sync up with your current song. Keep in mind that you can tap at half-time or double-time to make your echo sounds more flexible.

If the guitar and vocal Echo styles are engaged but the Tap button is dark, both Echo styles are "slap" style and don't use tap tempo.



Tap will flash red in time with the tempo you've just tapped in, then will turn off so it doesn't annoy you, annoy you, annoy you. . .

18. RoomSense

Did you notice that little hole on the front of the unit? It's a microphone!



If you activate Harmony and you're not using the guitar input or an Aux music source to guide key/scale, the mic will listen for chords in the room (like a nearby piano or speaker) and try to figure out key and scale from that. Pretty cool.

RoomSense is the most unpredictable of the key/scale trackers, since the room dynamics and chord information is most easily obscured using this mode. That said, it can be quite effective in specific situations, like placing the unit on top of an acoustic piano.

19. AUX Input

When you have a music player connected to the AUX input, any incoming chord information will be used to determine key/scale for Harmony. (guitar connections have priority over Aux when detecting key/scale)

You will hear the AUX input mixed with your Mic input (vocals). If the AUX is too loud or too quiet, use the volume control on the music player to create the appropriate mix with your vocals.

20. Aux to Main Out

Sometimes, you'd like to have a signal from the Aux input guide key/scale or use it for an incoming monitor mix, but you don't want that Aux signal mixed into your main outputs. If you'd like to remove audio from Aux to the main out, simply press/hold the Headphone button while connecting your Aux (1/8") cable.

This parameter resets each time you unplug and re-plug the Aux cable or if you power cycle the unit. We don't save this parameter because it's not immediately obvious how you'd "toggle" things and we don't want to trap unsuspecting users in a mode they can't find a way out of.

21. Dimming the Buttons

The buttons on your Perform-VG are designed to be pretty darned bright so you can see them clearly in an outdoor environment. If you're playing inside, you may not want to tan yourself with their brilliance.

To dim/brighten the buttons, tap the SET button and then turn the Control Knob. Turning the knob to the right increases brightness and turning to the left decreases brightness.

22. Switch3/Switch6 (Pedal) In

When a Switch3 or Switch6 is connected (using the TRS cable that came in the S3/S6 box) you can control various aspects of Perform-VG remotely.

The default behavior for Switch3 is:

Switch1 = Harmony - High

Switch2 = Harmony - Low

Switch3 = Harmony - High & Low

You can reassign any of the Perform-VG buttons to be activated by a footswitch, with the exception of SET, +48V, Headphone Level, and Lock/Mute (TALK is assignable).

Guitar Boost is also available by mapping the MIX button to a footswitch. This acts as a +6dB level increase for solos and the like. The MIX button is lit white when boost is ON and unlit when boost is OFF.

Guitar Phase Invert may be assigned to a footswitch by mapping the Anti-Feedback button.

To map a function, press and hold the desired footswitch, then press the button on Perform-VG that you'd like the switch to control. Release both buttons.

Switch6 acts in the same manner as Switch3 but adds buttons 4, 5, and 6. The default controls for the buttons are:

Switch1 = Harmony – High

Switch2 = Harmony – Low

Switch3 = Harmony – High & Low

- Switch4 = Guitar Chorus
- Switch5 = Guitar Echo
- Switch6 = Guitar Boost

23. Harmony Style Footswitch Assignment

Perform-VG is the first product from TC-Helicon to offer harmony style assignments directly to a footswitch. This means that you can, for example, assign "High" harmony to one switch and "High & Low" harmony to another, changing them on the fly.

To assign a style to a footswitch:

- Enter harmony edit mode by pressing and holding the Harmony button for 2 seconds
- Select your desired harmony style
 - if you see the level control after holding the harmony button, remember to tap the Harmony button to toggle between level and style control
- Let the menu "time out" and exit back to normal operation
- Press and hold the desired foot switch
- Press the Harmony button to confirm the current style
- Your harmony style is now assigned to the switch

Here's how the on/off works. Let's imagine you have two harmony styles assigned to switches 1 and 2 on the footswitch. Switch 1 has "High" harmony and switch 2 has "High & Higher".

- If harmony is OFF and you press either switch 1 or switch 2, harmony will turn on with the assigned style
 - For this example, we'll say you turned on "High" via switch 1
- If you press switch 1 again, harmony will turn OFF
- If you press switch 2, harmony will remain ON and change to the "High & Higher" style
- If you then press switch 2 again, harmony will turn OFF
 - If you press switch 1 instead, harmony will remain on and change back to the "High" style

This new functionality allows you to "stack" harmony by changing the style. You could, for example, sing and hold a note, turn on "High" harmony, then turn on "High & Higher" to emulate multi-part additive harmony. Nice!

A vocal/guitar mix of switch assignments could be something like:

- 1. High Harmony
- 2. Low Harmony
- 3. High & Low Harmony
- 4. Vocal Echo
- 5. Guitar Echo
- 6. Guitar Chorus





24. Default Top-Level Control

Out of the box, the Control Knob allows you to control the main output level. This is particularly handy if you're connected to a powered speaker directly and would like to have control over your level at all times. However, there may be times when you'd like the Control Knob to do something else, so we've covered you there as well.

You may change the default behavior of the Control Knob during power-up. Simply HOLD the indicated button during the power-up sequence. There three options:

- Harmony Level harmony button
- Headphone Level headphone button
- Guitar Level MIX button
 - This control will only work if you have a guitar plugged in. If your guitar is not plugged in, it will default back to Main Output Level until you plug the instrument back in.

Please note:

These control options are "volatile" and will only be remembered during the current power cycle. When you re-power, you must perform the operation again to reset the control. This, like the Aux To Main Out control's behavior, is to ensure someone who gets stuck/lost with an unwanted top level control can easily reset it back to Main Out Level (the default) by simply restarting the unit.

Additionally, if you have reassigned the top level control from Main Out Level your last known main out level will be maintained in the background. If you need to change your main out level, you'd need to re-power without holding any buttons, set your level and then re-power again to reassign your top level control to one of the other options. Generally, if you're going to be using one of the options regularly, just set your main out level to max (OdB) once and leave it there permanently. This is because you'd be connected to a system with level control somewhere else, like a mixer, which would take care of any changes you might need.

25. Factory Reset

To reset the unit back to factory settings, press and hold the Vocal Echo and Harmony buttons while powering up.

26. Support

If you've read through this manual and still need a little help, you can contact us via our support portal and forums

http://support.tc-helicon.com



