TC Helicon 653341325532

TC Helicon Critical Mass Vocal Effects Pedal User Manual

Model: 653341325532

INTRODUCTION

The TC Helicon Critical Mass pedal is designed to enhance vocal performances by providing gang vocal effects, melodic harmonies, and studio-grade reverb. This manual provides instructions for setting up, operating, and maintaining your Critical Mass pedal to achieve optimal sound quality and performance.

PRODUCT OVERVIEW

The Critical Mass pedal features intuitive controls for shaping your vocal sound. Below is an illustration of the pedal's layout and its primary controls.
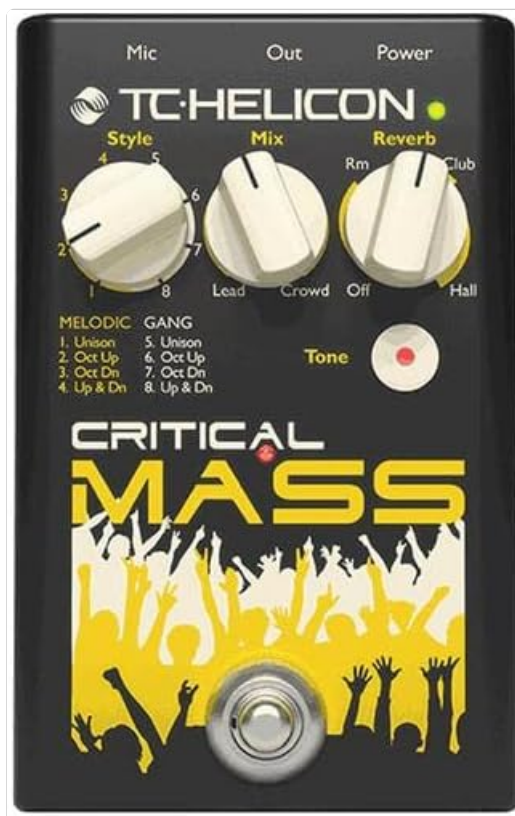
Figure 1: Front panel of the TC Helicon Critical Mass Pedal, showing input/output labels, control knobs, and footswitch.

Key Controls:

- **Style Knob:** Selects between various melodic and gang vocal effects.
- **Mix Knob:** Adjusts the blend of the processed vocal effect with your dry vocal signal.
- **Reverb Knob:** Controls the amount and type of reverb applied to the vocal.
- **Tone Button:** Engages or disengages adaptive tone processing for vocal clarity.
- **Footswitch:** Activates or bypasses the pedal's effects.

SETUP

1. **Power Connection:** Connect a compatible 9V DC power supply (not included) to the Power input on the pedal.
2. **Microphone Connection:** Connect your microphone to the XLR Mic input on the pedal using a standard XLR cable.
3. **Output Connection:** Connect the XLR Out of the pedal to your mixer, audio interface, or amplifier using a standard XLR cable.
4. **Guitar Input (Optional):** If using a guitar, connect it to the 1/4" Guitar In jack. This input is for signal pass-through and does not affect vocal harmony generation on this specific pedal.

OPERATING INSTRUCTIONS

1. Powering On

Once all connections are made, apply power. The Power LED will illuminate, indicating the pedal is ready for use.

2. Selecting Vocal Styles

The **Style** knob offers eight distinct vocal effects, divided into Melodic and Gang categories:

Melodic Styles (Positions 1-4):

- **1. Unison:** Adds a vocal layer at the same pitch as your lead vocal.
- **2. Oct Up:** Adds a vocal layer one octave above your lead vocal.
- **3. Oct Dn:** Adds a vocal layer one octave below your lead vocal.
- **4. Up & Dn:** Adds vocal layers both one octave up and one octave down.

Gang Styles (Positions 5-8):

- **5. Unison:** Creates a crowd-like unison effect.
- **6. Oct Up:** Creates a crowd-like effect with voices one octave up.
- **7. Oct Dn:** Creates a crowd-like effect with voices one octave down.
- **8. Up & Dn:** Creates a crowd-like effect with voices both one octave up and one octave down.

3. Adjusting Mix Level

Use the **Mix** knob to control the volume balance between your dry (unaffected) vocal and the processed vocal effect. Turn clockwise to increase the effect level, counter-clockwise to decrease it.

4. Applying Reverb

The **Reverb** knob controls the amount and type of reverb. Turn the knob from "Off" to "Rm" (Room), "Club", or "Hall" to add spatial depth to your vocals. Further clockwise rotation increases the reverb decay time and intensity.

5. Using the Tone Button

Press the **Tone** button to activate TC Helicon's adaptive tone processing, which automatically applies EQ, compression, de-essing, and gating to optimize your vocal sound for clarity and presence.

6. Engaging/Bypassing Effects

Press the footswitch to toggle the pedal's effects on or off. When the effects are active, the LED indicator next to the footswitch will illuminate.

CONNECTIVITY

The TC Helicon Critical Mass pedal offers robust connectivity options:

- **XLR Input:** For connecting your microphone.
- **XLR Output:** For sending the processed vocal signal to a mixer or amplifier.
- **1/4" Guitar Input:** A high-impedance input for connecting a guitar.
- **Power Input:** For a 9V DC power supply.

MAINTENANCE

- **Cleaning:** Wipe the pedal with a soft, dry cloth. Do not use liquid cleaners or solvents.
- **Storage:** Store the pedal in a dry environment, away from extreme temperatures and direct sunlight.
- **Power Supply:** Always use a compatible 9V DC power supply to prevent damage.
- **Firmware Updates:** Check the official TC Helicon website for any available firmware updates and instructions.

TROUBLESHOOTING

No Sound Output:

- Ensure all cables (microphone, output, power) are securely connected.
- Verify the power supply is functioning and correctly connected.
- Check that the pedal is engaged (footswitch LED illuminated).
- Confirm the Mix knob is not set to minimum (fully counter-clockwise).
- Test with different cables and microphones to rule out faulty equipment.

Distorted Sound:

- Reduce the input gain from your microphone or the Mix knob setting.
- Ensure your microphone is not overdriving the pedal's input.

Effects Not Changing:

- Verify the Style and Reverb knobs are being adjusted correctly.
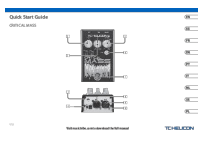- Ensure the Tone button is not causing an unexpected sound profile.

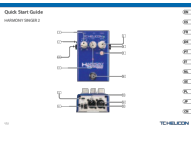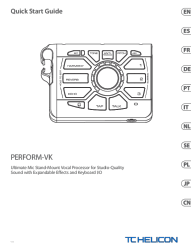## SPECIFICATIONS

Feature	Detail
Brand	TC Helicon
Model Number	653341325532
Audio Output Effects	Gang Vocals, Melodic Vocals, Reverb
Signal-to-Noise Ratio	>114 dB
Connectivity	XLR Input/Output, 1/4" Guitar Input
Input Impedance (Guitar)	1M Ohms
Body Material	2-part Die-cast Metal
Color	Black
Power Source	9V DC (external power supply, not included)
Item Weight	1 pound (16 ounces)
Dimensions (Package)	16.11 x 15 x 2.62 inches

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official TC Helicon website or contact their customer service directly. Keep your proof of purchase for warranty claims.
Official TC Helicon Website: www.tchelicon.com

Related Documents - 653341325532

	TC Helicon Critical Mass Quick Start Guide A concise guide to the TC Helicon Critical Mass vocal effects pedal, covering its controls, functions, and connectivity for quick setup and operation.
	TC Helicon VoiceLive Play Quick Start Guide: 3-Button Vocal Effects Stompbox with Looping Get started quickly with the TC Helicon VoiceLive Play, a 3-button vocal effects stompbox with looping. This guide covers essential setup, operation, safety instructions, and frequently asked questions for singers and musicians.

	[TC-Helicon VoiceLive Play Vocal Effects Processor Preset List](#) Explore the complete list of 235 factory presets for the TC-Helicon VoiceLive Play vocal effects processor, designed for singers, including vocal harmonies, effects, and tone enhancements.
	[TC HELICON VOICETONE C1: Simple 1-Button Vocal Pitch Correction Stompbox](#) Explore the TC HELICON VOICETONE C1, a versatile 1-button stompbox offering flexible pitch correction, HardTune effects, and vocal processing for musicians. Learn about its features, connectivity, and warranty.
	[TC Helicon HARMONY SINGER 2 Quick Start Guide](#) A concise guide to setting up and using the TC Helicon HARMONY SINGER 2 vocal effects pedal, covering essential safety instructions, control descriptions, connections, and compliance information.
	[TC Helicon PERFORM-VK Quick Start Guide: Vocal Processor](#) Get started quickly with the TC Helicon PERFORM-VK, a stand-mount vocal processor. This guide covers setup, features like Harmony, Reverb, Echo, Pitch Correction, and important safety information.