

## TC Electronic BRAINWAVES PITCH SHIFTER

# TC Electronic BRAINWAVES PITCH SHIFTER User Manual

Model: BRAINWAVES PITCH SHIFTER

## INTRODUCTION

The TC Electronic BRAINWAVES PITCH SHIFTER is a state-of-the-art pitch shifter pedal designed to provide a wide array of pitch-shifting effects for guitarists. It incorporates innovative features such as a pressure-sensitive MASH footswitch and compatibility with the TonePrint app for extensive customization. This pedal allows for completely independent dual voice pitch shifting, ranging from unison to two octaves up or down, and includes studio-grade algorithms for polyphonic pitch shifting, whammy-style octave up, and detune effects.

Key features include:

- Advanced pitch shifting algorithms for versatile sound manipulation.
- Independent dual voice control for complex harmonies and octaves.
- Revolutionary MASH expression control footswitch for dynamic real-time effects.
- TonePrint compatibility for custom effect creation and artist presets.
- True bypass for optimal signal clarity when the effect is off, with an optional buffered bypass mode.



Figure 1: Top view of the TC Electronic BRAINWAVES PITCH SHIFTER pedal, showcasing its controls and footswitch.

## SETUP

Before using your BRAINWAVES PITCH SHIFTER pedal, ensure proper connection and power supply.

## Connections

- **Input:** Connect your instrument (guitar, bass, etc.) to the 'STEREO IN MONO' jack on the right side of the pedal. For mono input, use a standard mono instrument cable. For stereo input, use a TRS cable or two mono cables with a stereo splitter.
- **Output:** Connect the 'STEREO OUT MONO' jack on the left side of the pedal to your amplifier or next pedal in the signal chain. This output supports both mono and stereo configurations.

- **USB:** The USB port on the rear of the pedal is used for connecting to a computer (PC or Mac) for TonePrint editing and firmware updates.

## Power Supply

The BRAINWAVES PITCH SHIFTER requires a 9V DC power supply with a minimum current of 100mA. The power connector is standard center-negative. Ensure you use a compatible power supply to avoid damage to the unit.



Figure 2: Rear view of the pedal, highlighting the 9V DC power input and USB port for connectivity.

## OPERATING

Understanding the controls and features of your BRAINWAVES PITCH SHIFTER will allow you to unlock its full potential.

### Controls Overview

- **FX TYPE Knob:** Selects the overall effect type. Options include WHAM (whammy-style pitch bends), DETUNE (subtle pitch detuning), TP1 (TonePrint 1), TP2 (TonePrint 2), and PITCH (standard pitch shifting).
- **MIX Knob:** Blends the dry (unaffected) signal with the wet (effected) signal. Turn clockwise for more effect, counter-clockwise for more dry signal.
- **VOICE 1 & VOICE 2 Knobs:** These independent controls adjust the pitch interval for each voice. Settings range from OFF, UNI (unison), to various octave and custom intervals (2, 3, 5, 7, 9, 12(OCT), 24(OCT)). The small toggle switches below each knob determine if the voice shifts UP or DOWN.
- **MASH Footswitch:** This pressure-sensitive footswitch acts as an expression controller.

Pressing harder on the footswitch dynamically alters a pre-assigned parameter, such as pitch bend range or modulation depth. The MASH functionality can be customized via the TonePrint app.



Figure 3: Detailed view of the control knobs and switches on the pedal's top panel.

## TonePrint App Integration

The BRAINWAVES PITCH SHIFTER is compatible with TC Electronic's free TonePrint app (available for PC, Mac, iPhone, Android, and iPad). This app allows you to:

- Beam artist-made TonePrints directly to your pedal.
- Create and customize your own unique pitch effects.
- Assign and fine-tune the MASH footswitch functionality to any parameter.

To use TonePrint, connect your pedal to your device via USB or use the audio beaming feature with your smartphone.

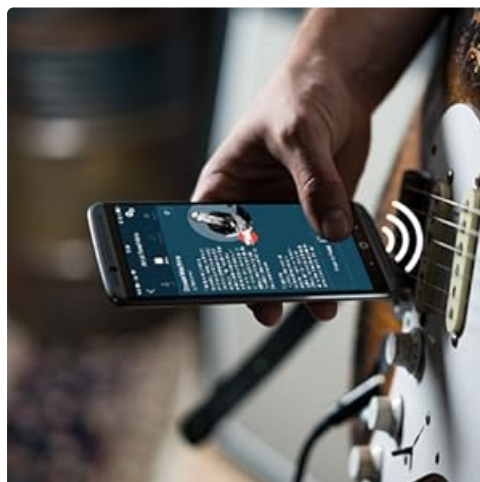


Figure 4: Demonstrating the TonePrint app's audio beaming feature for wireless preset transfer.

## Bypass Modes

The pedal features switchable true/buffered bypass. True bypass ensures optimum clarity and zero high-end loss when the pedal is off, preserving your original tone. Buffered bypass mode can be beneficial for long cable runs to prevent signal degradation.

## MAINTENANCE

To ensure the longevity and optimal performance of your BRAINWAVES PITCH SHIFTER, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the pedal's exterior. Avoid using abrasive cleaners, solvents, or waxes, as these can damage the finish and internal components.
- **Storage:** When not in use for extended periods, store the pedal in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Handle the pedal with care. Avoid dropping it or subjecting it to strong impacts, which can damage the internal circuitry or external casing.

## TROUBLESHOOTING

If you encounter issues with your BRAINWAVES PITCH SHIFTER, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No sound or weak signal	Incorrect power supply; faulty cables; incorrect input/output connections.	Verify power supply (9V DC, 100mA, center-negative). Check all cable connections. Ensure instrument and amplifier are working correctly.
Pitch tracking issues (unstable or inaccurate pitch)	Input signal too low or too high; complex chords (polyphonic tracking limitations); TonePrint settings.	Adjust guitar volume. For optimal tracking, play single notes clearly. Experiment with different TonePrint settings or reset to factory presets. Ensure proper intonation on your instrument.
Noise or hum	Ground loop; faulty power supply; interference from other electronics.	Use an isolated power supply. Try a different power outlet. Move the pedal away from other electronic devices. Check cable shielding.
MASH footswitch not responding	MASH functionality not assigned or incorrectly configured in TonePrint.	Connect to TonePrint app and verify MASH assignments for the selected effect type. Ensure the footswitch is clean and free of debris.
Cannot connect to TonePrint app	Incorrect USB cable; driver issues; app version incompatibility.	Ensure you are using a data-capable USB cable. Reinstall TonePrint drivers if necessary. Update the TonePrint app to the latest version. Try a different USB port or computer.

If these steps do not resolve your issue, please contact TC Electronic support.

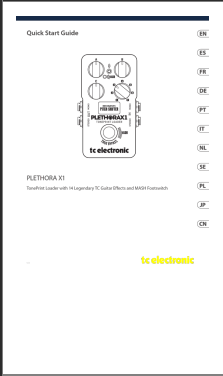

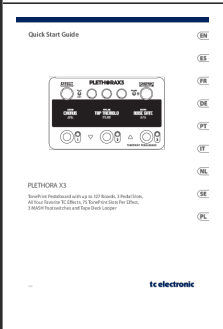
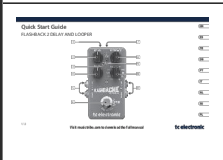

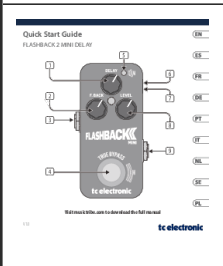
## SPECIFICATIONS

Feature	Specification
Model Number	BRAINWAVES PITCH SHIFTER
Item Weight	13.8 ounces (390 Grams)
Product Dimensions	4.8 x 2.9 x 2 inches
Power Source	Corded Electric
Voltage	9 Volts DC
Current Draw	100 mA (minimum)
Hardware Interface	USB 3.0 Type C (for TonePrint)
Signal Format	Analog
Bypass Type	True Bypass (switchable to Buffered Bypass)
Color	Pink

## WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official TC Electronic website or contact their customer service directly. You can also visit the [TC Electronic Store on Amazon](#) for additional product information and resources.

No official seller videos were found for this product in the provided data.

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