



## FLASHBACK 2 X4 DELAY

Flagship Delay Pedal Expanded with 3 MASH Switches, Tap Tempo, New Crystal, Analog and Tape Delays and 6 Delay Presets

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## EN Important Safety Instructions



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

Use only high-quality professional speaker cables with ¼" 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 qualified 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.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as 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 qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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.

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## LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at [musictribe.com/warranty](http://musictribe.com/warranty).

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## 1. About this Manual

Thank you for spending your hard-earned money on this TC Electronic product! We have done our best to ensure that it will serve you for many years to come, and we hope that you will enjoy using it.

This manual is available as a PDF download from the TC Electronic website.

### Please read this manual in full, or you may miss important information.

Please do not operate your TC device before you have made all connections to external equipment as described in the “2.3 Setting Up” section. In the subsequent sections of the manual, we assume that all connections are made correctly and that you are familiar with the previous sections.

### We reserve the right to change the contents of this manual at any time.

To download the most current version of this manual, view the product warranty, and access the growing FAQ database for this product, visit the web page [tcelectronic.com/support/](http://tcelectronic.com/support/)

## 2. Introduction

FLASHBACK 2 X4 DELAY packs our entire delay legacy into a 4-footswitch stompbox that’s designed for now – and the future. Our groundbreaking MASH technology adds extra expression capability to a world-class delay stompbox that responds to your touch and saves precious pedalboard space – and blends the ethereal world of delay with the ultimate in personal expression. A dedicated tap tempo switch gives you direct control over the delay time parameter, and a built-in looper lets you layer and jam creatively. Add the brand-new Crystal delay algorithm and two additional TonePrint slots, and the soon-to-be legendary FLASHBACK 2 X4 DELAY brings a wealth of new dimensionality to your quest for tonal perfection!

### 2.1 Unpacking

Your TC Electronic effect pedal box should contain the following items:

- Your TC Electronic effect pedal
- 1 USB cable (Type A to Mini-B)
- 1 TC Electronic sticker
- 9 V power supply
- 2 rubber feet
- Quick Start Guide

Inspect all items for signs of transit damage. In the unlikely event of transit damage, inform the carrier and supplier. If damage has occurred, keep all packaging, as it can be used as evidence of excessive handling force.

### 2.2 True Bypass

Here at TC, we have a simple philosophy: When you are using one of our products, you should hear something great – and when it’s off, you shouldn’t hear it at all. This is why this pedal sports True Bypass. When it is bypassed, it is really off and has zero influence on your tone, resulting in optimum clarity and zero loss of high end.

Sometimes, it is advisable to switch an effect pedal from True Bypass to Buffered Bypass mode. For more information, see “6.2 Switching the pedal from True Bypass to Buffered Bypass”.

### 2.3 Setting Up

Connect the included 9 V power supply, or a regulated 9 V power supply with at least 300 mA and the following symbol (center negative) to the DC input socket of your TC Electronic effect pedal.



- Plug the power supply into a power outlet.
- Connect your instrument to the input jack using a ¼" jack cable.
- Connect the output jack to your amplifier using a ¼" jack cable.
- The pedal also supports stereo operation (see Chapter 4.2).

## 3. TonePrint

This TC Electronic product supports TonePrints. To learn more about TonePrints, go to [tcelectronic.com/toneprint/](http://tcelectronic.com/toneprint/)

### 3.1 What are TonePrints?

When you look at your TC Electronic effect pedal, you’ll only see a few knobs. For some pedals, it’s just one knob. So – one knob, one function, right?

Actually, there’s a lot more to it than meets the eye.

#### Star-tweaked signature sounds

When TC Electronic builds an effect pedal, the relationship between its controls and many parameters “under the hood” are defined by developers, musicians and product specialists who live and breathe sound. This gives you an excellent starting point: a great-sounding pedal with well-balanced controls.

But wouldn’t it be cool to have world-famous guitar players – guys like Paul Gilbert, Guthrie Govan, John Petrucci or Steve Vai – virtually rewire your effect pedal, defining what should happen “behind the scenes”?

And how about doing this yourself?

This is exactly what TonePrint allows you to do.

TC Electronic is working with top guitar players who explore a pedal’s hidden tonal potential, redefining the controls and creating their personal TonePrints. And we are making these custom TonePrints available to you. Uploading them to your pedal is really easy (see chapter 3.2 for details) – and with the amazing TonePrint app, you can even create your own signature pedal, tweaked specifically to your liking.

You can change the TonePrints in your pedal as often as you like, and the best part: It’s totally free.

### 3.2 Transferring TonePrints to your pedal

TonePrints can be transferred via USB connection or via TCs “Beaming” technology.

#### Transferring via USB – step by step

- Connect the pedal to the power supply.
- Connect your pedal via USB cable to your computer or smartphone/tablet (use a “USB On-The-Go” adapter for Android devices and the Camera Connection Kit for iOS devices).
- Launch the TonePrint app and follow the instructions to turn the TonePrint selector knob to a TonePrint slot.
- Find the TonePrint you want to audition or use. You can browse TonePrints by Artist or Product (i.e. pedal type). Browsing by Artist or Product is selected in the Settings part of the app (press the “” icon).
- Listen to the new sound through your pedal. As long as you’re connected via USB, selecting a TonePrint will change the sound in your product immediately.
- Alternatively, you can create your own TonePrint using the editor part of the app – see section 3.3.
- Press “Store in Pedal” to store the TonePrint of your choice in the selected TonePrint slot.
- Turn the TonePrint selector knob to a different slot if you want to store more TonePrints.

#### Beaming TonePrints to your pedal – step by step

- When not connected via USB, simply launch the TonePrint app on your smartphone.
- Navigate to the TonePrint you want to use. You can browse by Artist or by Product (as described above).
- Plug your guitar or bass into the pedal.
- Turn your TonePrint pedal on.
- Turn up the volume on your instrument and set the pickup selector to one pickup.
- Hold the speaker of your smartphone next to the chosen pickup and touch “Beam to Pedal”. Follow instructions on your screen. A series of green flashes of the LED will confirm successful beaming.

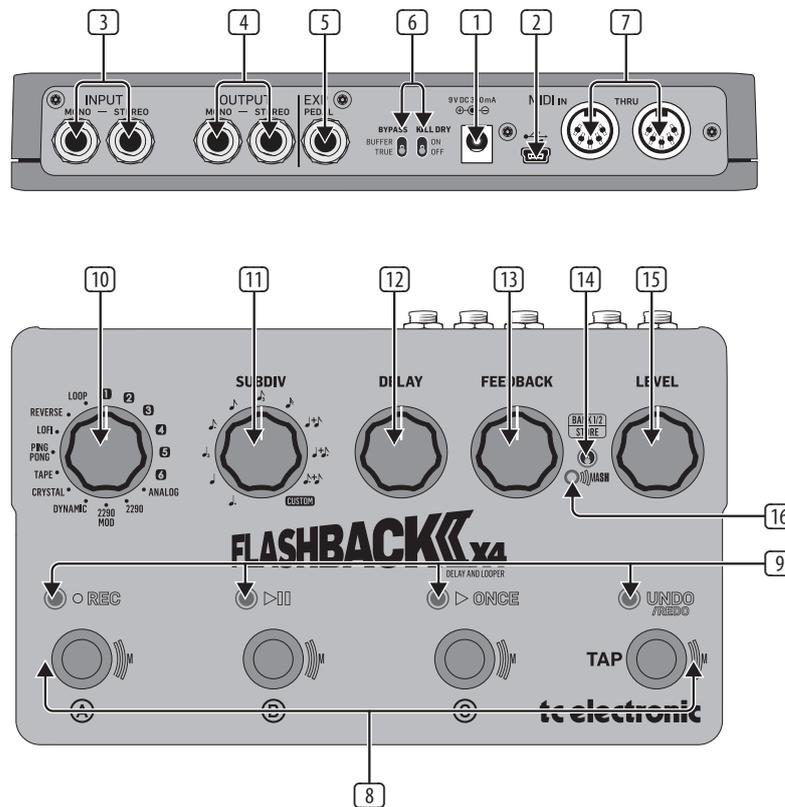
### 3.3 Editing TonePrints with the TonePrint App

The TonePrint app allows you to use TonePrints created by your favorite guitar and bass players. But this is only the start. Using the TonePrint editor within the app, you can create your very own signature pedal sounds. All of TCs own artist TonePrints in the Library tab (or alternatively all TonePrints in the Templates tab) can be edited, as can your own User TonePrints. In order to use the editor the TonePrint pedal must be connected to your computer or smartphone/tablet via USB, like described previously. Simply navigate to a TonePrint or Template and click on the “” icon to enter the editor part of the app.

#### Features of the editor part of the app

- Use the TonePrint app to build your own custom sounds and save them in your pedal or as User TonePrints which will show up in the User tab.
- Enjoy complete control over all effect parameters and effect behavior - it's your vision, your sound.
- Customize knob function and knob range to suit your needs and sounds.
- Audition your sonic creations in real time - make changes on the fly and listen to results immediately.
- Works with PC, Mac, and smartphones (iOS and Android).

## EN 4. Inputs, Output and Controls



### 4.1 Power / Computer connection

- To power up your pedal, connect a power supply to its power input socket. The power input socket of your TC Electronic effect pedal is a standard 5.5/2.1 mm DC plug (centre = negative).

Your TC Electronic effect pedal requires a 9 V power supply providing 300 mA or more. To minimize hum, use a power supply with isolated outputs.

- USB port** - Use the standard Mini-B USB port on your TC Electronic effect pedal to connect your pedal to a computer. If there are firmware updates for this pedal, they can be installed using the USB port – see “7.1 Updating the firmware”.

### 4.2 Audio in and out

- AUDIO INPUT** - The audio inputs are standard ¼" jacks (mono/TS). Connect your guitar to the mono audio input using a regular ¼" instrument cable. The pedal also accepts stereo signals using a pair of ¼" TS cables.
- AUDIO OUTPUT** - The audio outputs are standard ¼" jacks (mono/TS). Connect the audio output of your pedal to the next device in the signal chain, either with a single cable or with a pair of ¼" cables for stereo operation.

### 4.3 Other rear panel features

- EXPRESSION PEDAL** – Connect a ¼" TS cable to a 25 kΩ linear pot expression pedal to control delay time, feedback, and/or level. See Chapter 5.4 for details on configuring parameters. .
- BYPASS/KILL DRY** – The bypass modes can be conveniently switched from the rear panel, and are set to true bypass and kill dry off from the factory. See Chapter 6 for details about these alternate bypass modes.

- MIDI IN/THRU** – Connect a MIDI controller to the MIDI IN jack to control preset changes, delay tempo, and other parameters. Pass the MIDI information on to another device with the THRU connector. See Chapter 8 for details.

### 4.4 Switching

- FOOTSWITCHES** – The footswitches perform 5 functions – preset, tap tempo, bank select, looping, and MASH.
  - To turn one of the preset effects on, tap footswitch A, B or C. To turn the effect off, tap the same footswitch again. Note that 2 banks of presets are available.
  - The TAP footswitch can be tapped in rhythm to set the desired tempo. The LED will flash to indicate the current tempo. Note that taps are always “heard” by the pedal as quarter notes, even though the Subdivision knob will determine the actual delay rhythm.
  - Holding the TAP footswitch will toggle the 2 preset banks. Bank 1 is indicated by red LEDs, while bank 2 has green LEDs. Note that bank selection can also be achieved by pressing up on the Bank/Store switch.
  - When the Delay type selector knob is set to LOOP, the footswitches will control Record, Play/Pause, Play Once, and Undo/Redo. See section 5.3 for details.
  - The footswitches also control the MASH function assigned to each switch. See section 5.2 for details.
- INDICATOR LEDs** – The LEDs above footswitches A, B and C will light to indicate that the pedal is engaged. When preset bank 1 is selected, the LEDs light red, and light green when bank 2 is selected. The LED above the TAP footswitch will flash red in time with the current delay tempo. LEDs also indicate various looping functions as detailed in Chapter 5.3.

## 4.5 Effect controls

Please note that the knob assignments on your TC Electronic pedal are the default assignments. Using the TonePrint app, you can rewire knobs so they control one or several parameters of your choice.

- 10 **Delay type selector** – Select the type of delay, TonePrint slot, or enable the looper with this knob. The available delay types are described in the following section (4.6).
- 11 **SUBDIVISION knob** – This switch determines the note intervals that the delay repetitions are based on. The options are dotted quarter, quarter note, quarter note triplet, dotted eighth, eighth note, eighth note triplet, sixteenth note, quarter plus eighth note, quarter plus dotted eighth, dotted eighth plus eighth, and a custom subdivision.
- 12 **DELAY knob** – Use this knob to adjust the time of the delay. Most delay types have a range of 20 ms to 7000 ms (7 seconds!).
- 13 **FEEDBACK knob** – Use the Feedback knob to determine the number of delay repeats.
- 14 **BANK/STORE switch** – Press the switch up to toggle between presets 1-3 or 4-6. Bank 1 is indicated by red LEDs (presets 1-3), and Bank 2 is indicated by green LEDs (presets 4-6).  
  
Adjusting any of the knobs will override the current preset. To keep these changes, press the Bank/Store switch down briefly.
- 15 **LEVEL knob** – This knob adjusts the volume level of the delay repeats. The direct, unprocessed signal is always passed through at the original (unity) level. The Level knob only controls how prominently the delay repeats are mixed with the dry signal.
- 16 **MASH LED** – This will light up when the MASH function is engaged by pressing down firmly on one of the footswitches. The LED gets brighter as the footswitch receives more pressure, giving visual feedback to how the expression is controlling the assigned parameter(s). See section 5.2 for details.

## 4.6 Delay types

### 2290

Once upon a time... (i.e., back in 1985) TC Electronic released the 2290 Dynamic Digital Delay. It set the bar for professional delays for years to come, even paving the way for tap tempo control with its “learn” function, and is still held in high regard among delay enthusiasts. Use the “2290” delay for the crispest and cleanest delay you can imagine. This is the standard.

### ANALOG

This is as close as you can get to the charming nature of an old analog transistor bucket-brigade delay without buying the real thing! With every repeat, you get more of that old-school “fade to grey” vibe.

### TAPE

Who doesn't love the smooth sound of an old tape echo machine? This new-and-improved algorithm meticulously replicates every aspect of authentic tape delay, including the pitch shifting that occurs when the delay time is altered.

### DYNAMIC

This is a replica of the legendary Dynamic Delay initially introduced in the renowned TC 2290. The delay's output level is actively altered by the dynamics of the input level. While playing, the delay level is attenuated, and in between phrases the delay level is increased. This allows you to play with a relatively large amount of delay without muddying fast riffs.

### 2290 MOD

Take the 2290's pristine sound, send it through three (!) chorus pedals... et voilà. If you're into the sound of The Edge, you don't want to miss this setting. Oh, and while you're at it, try playing around with the SUBDIVISION knob.

### CRYSTALS

The Crystals effect pitch shifts the echoes up an octave through each delay loop, creating a haunting and other-worldly sound. This is a very unique effect that may open some interesting options, particularly when paired with the MASH function.

### REVERSE

If you've been around for some time, you know the drill: Record a guitar part on tape. Flip the tape over. Play it back. This is a classic effect made famous by guitar legends such as Jimi Hendrix – and although it's kind of “old school”, the reverse effect still seems to inspire people to try out new things.

### LOFI

Fed up with hi-fi? Try the “Lofi” setting to get that dirty feel.

### PING PONG

Like the ball in the eponymous game, the delay repeats jump from left to right (provided you're using both outputs for a stereo signal). The effect is really wide. While this effect is ideal for stereo, it works well in mono, too.

### LOOPER

Set the Delay type selector to LOOP to use the built-in audio looper. This functionality is explained in ‘Chapter 5.3 Using the looper’.

### TONEPRINT

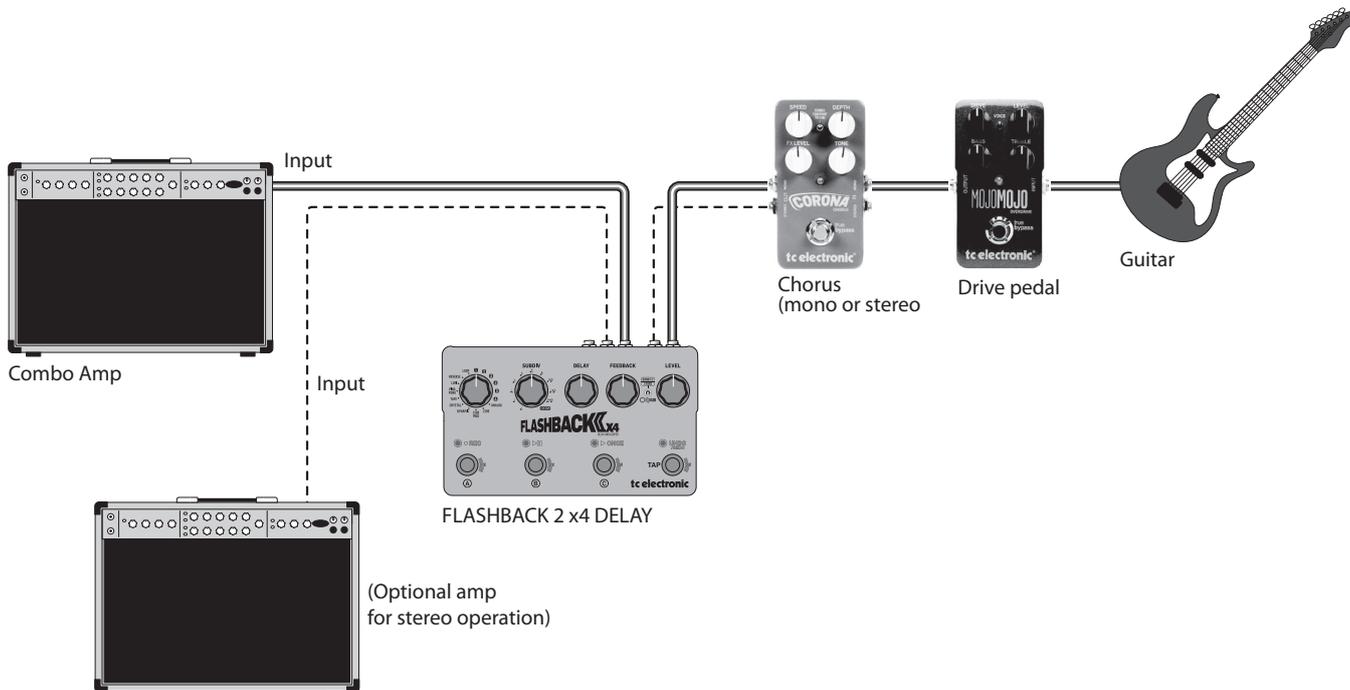
Select one of the 6 TonePrint settings to access a default setting, or create your own presets! See Chapter 3 for more details on creating and loading TonePrints.

## 5. Operation

### 5.1 Signal chain placement

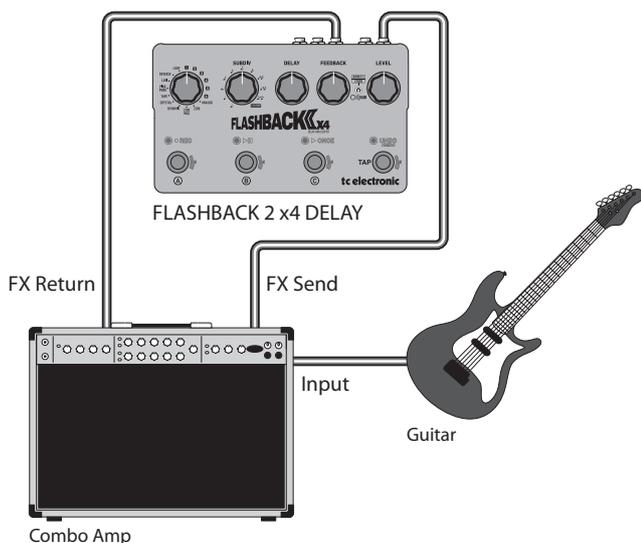
The FLASHBACK 2 X4 can be used several ways depending on your situation. While there isn't necessarily a right and wrong use, here are the most common scenarios.

#### Example 1: Before the amp's input



When using the FLASHBACK 2 X4 before the amp's input, it is generally best to place it after your other pedals. If any stereo effects are used before the delay pedal, you can preserve this stereo signal by connecting to both of the FLASHBACK 2 X4's inputs and sending the output jacks to different amps or to a stereo input on a mixer.

#### Example 2: In the amp's FX loop



The FLASHBACK 2 X4 input can handle a very wide range of signal levels thanks to high internal headroom, and can easily be used with guitar or line-level signals. Simply connect the amp's Send jack to the the pedal's input, and connect the output to the amp's Return jack.

### 5.2 MASH switch

The MASH function on the FLASHBACK 2 X4 is a very exciting and innovative feature that allows continuous control of a desired parameter through pressure on one of the footswitches. This opens up countless creative possibilities, particularly with the user-defined TonePrints.

The standard toggle function of the footswitches reacts to single, quick presses of the switch to engage a preset. If you press the switch slightly harder and hold it down, the MASH function will engage, causing the associated MASH LED to light up slightly. As you press down harder on the switch, the LED lights up brighter and the parameter that has been assigned to this function will change accordingly. Releasing the footswitch will exit the MASH function and the LED will turn off, but the pedal will still be engaged. This operation is the same for MASH parameters assigned to footswitches A, B and C.

Note that the pressure needed to reach the maximum MASH level is only 10 kg (around 20 pounds), which can be achieved just by squeezing with your fingers. You shouldn't need to lean too much weight on the pedal. With some practice, this feature will become familiar and expressive much like a wah or volume pedal.

Using the TonePrint app, you can assign your own parameters (up to 3!) to this unique feature and save a custom preset that allows you to create sounds that very few delay units have been capable of before. See Chapter 3 for more details on TonePrints.

## 5.3 Using the looper

With the looper built into your FLASHBACK 2 X4, you can record and play back grooves and lines to play along with. You can even overdub your recording an unlimited number of times.

The first round of recording always sets the length of the loop. The duration of a loop can be up to 40 seconds in mono and 20 seconds in stereo, regardless of how many overdubs you make.

If an overdub exceeds the length of the loop, a third round of recording begins. This gives a very natural logic and musical feel when recording loops.

The DELAY and FEEDBACK knobs are inactive in Loop mode.

Recording and playing loops:

- Set the Delay type selector to LOOP.
- Feel the groove and prepare for recording. Tap the 1st/REC footswitch to start your recording and begin playing. The LED flashes red.
- To stop recording, press the REC footswitch again. Flashback Delay immediately switches to playback mode and starts playing the loop. In playback mode, the LED is green.
- To overdub your recording, press the REC switch once more. The LED now blinks.
- Use the LEVEL knob to adjust the volume of the loop.
- Press the 2nd/Play/Pause footswitch to stop a loop that is playing back. Press it again to start playing the loop from the beginning.
- To stop a loop at the end of its cycle, press the 3rd/Play Once footswitch. The LED will flash until the end of the loop cycle, and the loop will stop.
- To undo the previous overdub, press the 4th/Undo footswitch. Press again to add the overdub back in.
- To delete all recordings, press and hold the 4th/Undo footswitch.

Note that loops are not stored across power cycles.

## 5.4 Expression Pedal Setup

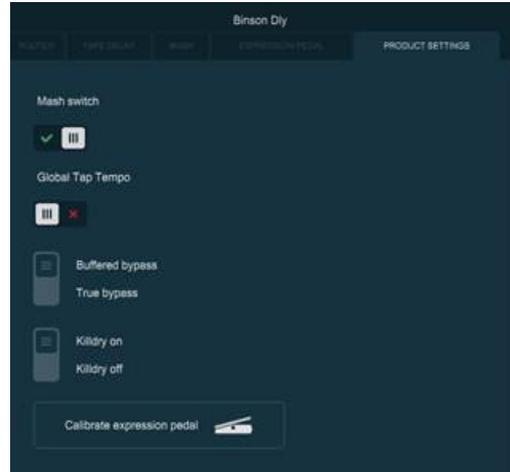
Connecting an expression pedal allows continuous control of feedback length, delay time or delay level. You will be able to define which parameters are controlled with the pedal, as well as the range of control. For example, if controlling the delay level with a pedal, you may not want the “heel down” position to turn the delay level all the way off, and you may not want the “toe down” position to actually reach maximum output level achievable with the Level knob.

It's important to note that the FLASHBACK 2 X4 does not work with standard 250 kΩ guitar volume pedals. You will need a 25 kΩ linear pot expression pedal for proper function.

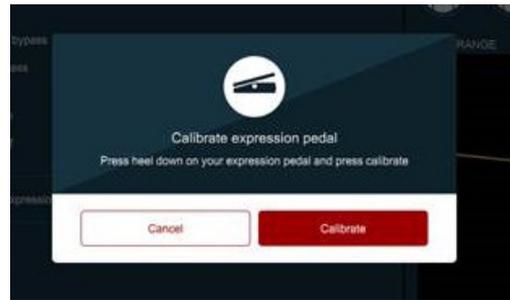
Follow these steps to assign one or more parameters to an expression pedal:

- Connect an expression pedal to the EXP PEDAL input.
- Connect your pedal to a computer or smartphone/tablet via USB cable.
- Open the TonePrint app.

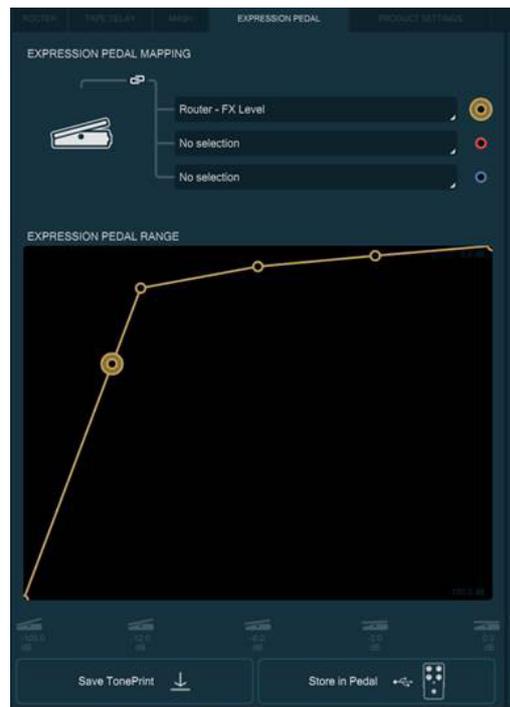
- Navigate to the Product Settings tab and click the 'Calibrate expression pedal' button.



- Follow the instructions for calibration.



- When the heel and toe positions have been established, click 'Done'.
- Navigate to the Expression Pedal tab to assign parameters that will be controlled with the expression pedal. The pedal response curve is indicated in a graphic display, and a peg will move along the curve as the pedal is rocked back and forth.



## 6. Bypass Mode

### 6.1 True Bypass and Buffered Bypass explained

True Bypass mode is a hard-wire bypass that gives absolutely no coloration of tone when the pedal is bypassed. This is the default mode for your effect pedal.

Using True Bypass on all pedals is a perfect choice in setups with a few pedals and relatively short cables before and after the pedals.

If...

- you use a long cable between your guitar and the first pedal or
- if you use many pedals on your board or
- if you use a long cable from your board to the amp,

... then the best solution will most likely be to set the first and the last pedal in the signal chain to Buffered Bypass mode.

#### Can you hear the difference between a pedal in True Bypass or Buffered Bypass mode?

Maybe, maybe not – many factors apply: active vs. passive pick-ups, single-coil vs. humbucker, cable quality, amp impedance and more. We cannot give a single ultimate answer. Use your ears and find the best solution for your setup!

#### Delay spillover

When the pedal is in True Bypass mode, switching a preset off will turn the entire pedal off, including the delay trails that would normally be heard fading away naturally. In Buffered Bypass mode, disengaging a preset will still allow those echoes to “spill over” and fade out naturally even though the pedal is no longer processing delays for the incoming audio. If this is an important feature for you, it may affect your decision to use Buffered over True Bypass.

### 6.2 Switching between True Bypass and Buffered Bypass

While some TC pedals require the back to be removed, the bypass mode on the FLASHBACK 2 X4 can be easily switched on the rear panel.

### 6.3 Kill-dry on/off

When you activate Kill-dry, the direct signal is removed from the pedal's output. This mode can be useful when you place the FLASHBACK 2 X4 in an amp's parallel effects loop. Parallel loops have their own mix control, so you can send a strong delay-only signal from the pedal back to the amp, and use the loop mix knob to set an appropriate mix of delay signal. This can theoretically preserve more of the amp's original tone by avoiding passing the entire signal through additional A/D conversion.

## 7. Maintenance

### 7.1 Updating the firmware

TC may provide updates for the built-in software of your pedal, the firmware.

Updating your TC pedal's firmware requires...

- a computer running Microsoft Windows or OS X with a standard USB interface
- the specified DC power supply for your pedal.

#### Preparing the firmware update

- Download the newest firmware from the “Support” page for your TC pedal. There are updaters for Microsoft Windows (these are ZIP archives containing the firmware installer) and for OS X (these are disk image files containing the firmware installer).
- Unplug all cables (including the power supply) from your TC pedal.
- Connect the pedal to your computer using a USB cable.
- Press and hold the footswitch on your TC pedal. If your TC pedal has more than one footswitch, press and hold the leftmost footswitch.
- Insert the DC power supply plug.
- The LED on your pedal should turn green. If your TC pedal has more than one LED, the leftmost LED should turn green. This indicates that the pedal is ready to receive the software update.
- Release the footswitch.
- Your TC pedal will now be recognized as an updatable device.

#### Applying the firmware update

- Quit all MIDI-related applications (e.g. your DAW) on your computer and launch the firmware updater you have downloaded in step 1.
- In the firmware updater app, select your TC pedal from the drop-down list under the “STEP 1” heading.
- When the “Update” button under the “STEP 2” heading turns green, click it.
- The updated firmware will now be transferred to your TC pedal. Wait for the progress bar to reach 100%. When the update procedure is complete, the pedal will automatically restart.

## 8. MIDI

The FLASHBACK 2 X4 is equipped with MIDI IN and THRU jacks, allowing an external MIDI controller to control preset and parameter changes. An incoming MIDI clock signal will also override the pedal's own Delay Time knob, but will not affect the Subdivision setting.

The following charts detail the control and program changes accepted by FLASHBACK 2 X4. Note that the MIDI receive channel is 6.

### Preset Changes

Initiating a program change will load the associated preset and un-bypass the pedal. To bypass the currently-selected preset, either use program change 1 (all FX off) or use the bypass command (cc 12) if you need to toggle the same preset on/off.

Preset number	Program change
Bypass All	1
Preset A / Bank 1	2
Preset B / Bank 1	3
Preset C / Bank 1	4
Preset A / Bank 2	5
Preset B / Bank 2	6
Preset C / Bank 2	7

\*Note that depending how the MIDI controller handles program change messages (0-127 or 1-128), the program number may need to be 1 digit higher than what is listed in the chart.

### Parameter Control

Preset number	Control change
Subdivision (modifier 2)	1
Delay time (modifier 3)	2
Feedback (modifier 4)	3
Delay level (modifier 1)	4
Tap tempo	13
MASH switch (active FX engine)	5
Exp Pedal (jack must be unplugged)	11
Bypass (active FX engine)	12
Looper Record	6
Looper Play/Pause	7
Looper Play Once	8
Looper Undo/Redo	9
Looper Stop+Clear	10

Note that the modifiers (knobs) can control up to 3 user-selectable parameters, so MIDI control may affect more than just the parameters listed. Custom controller setups can be arranged via the TonePrint app, and each TonePrint slot can store unique modifier configurations.

## 9. Links

### Support resources

- TC Electronic Support: [tcelectronic.com/support/](https://tcelectronic.com/support/)
- TC Electronic – product software: [tcelectronic.com/support/software/](https://tcelectronic.com/support/software/)
- TC Electronic – all product manuals: [tcelectronic.com/support/manuals/](https://tcelectronic.com/support/manuals/)
- TC Electronic user forum: [forum.tcelectronic.com/](https://forum.tcelectronic.com/)

### TC Electronic on...

- the Web: [tcelectronic.com/](https://tcelectronic.com/)
- Facebook: [facebook.com/tcelectronic](https://facebook.com/tcelectronic)
- Google Plus: [plus.google.com/+tcelectronic/](https://plus.google.com/+tcelectronic/)
- Twitter: [twitter.com/tcelectronic](https://twitter.com/tcelectronic)
- YouTube: [youtube.com/user/tcelectronic](https://youtube.com/user/tcelectronic)

## 10. Specifications

### Connectors

Inputs	2 x ¼" TS, unbalanced
Impedance	≥1 MΩ
Outputs	2 x ¼" TS, unbalanced
Impedance	100 Ω
Expression pedal input	¼" TRS connector
USB port	Mini-B USB connector for firmware updates and TonePrint App
MIDI In/Thru	5-pin DIN connector
Bypass mode	True bypass (buffered bypass selectable)

### Power

Connector	Standard 5.5/2.1 mm DC, center negative, 9 V, ≥300 mA (included)
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### Physical

Dimensions (HWD)	56 x 235 x 145 mm (2.2 x 9.3 x 5.7")
Weight	1.3 kg (2.9 lbs)

# FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Responsible Party Name: **Music Tribe Commercial NV Inc.**  
Address: **5270 Procyon Street  
Las Vegas, NV 89118  
USA**  
Phone Number: **+1 702 800 8290**

## FLASHBACK 2 X4 DELAY

complies with the FCC rules as mentioned in the following paragraph:

This equipment has been tested and found to comply with the limits for a ClassB 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.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

### Caution!

**Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

