

# Flashback Delay

Manual - 2014-05-26

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# Important safety instructions

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  - 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 a 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 is 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. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use

paratus. 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.

# Caution

You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

# Service

All service must be performed by qualified personnel.

# Warning

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

Do not install this device in a confined space.

# EMC/EMI

Electromagnetic compatibility/ Electromagnetic interference

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 residential installations. 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.



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For customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# **Explanation of graphic symbols**



The lightning bolt triangle is used to alert the user to the presence of uninsulated "dangerous voltages" within the unit's chassis that may be of sufficient magnitude to constitute a risk of electric shock to humans.



The exclamation point triangle is used to alert the user to presence of important operating and service instructions in the literature accompanying the product.

# Before you begin

# About this manual

This manual will help you learn understanding and operating your TC product.

To get the most from this manual, please read it from start to finish, or you may miss important information.

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

Of course, you can print this manual, but we encourage you to use the PDF version, which has both internal and external hyperlinks. For example, clicking the logo in the upper left corner of each page will take you back to the table of contents.

To download the most current version of this manual, visit

tcelectronic.com/support/manuals/

# **Getting support**

If you still have questions about the product after reading this manual, please get in touch with TC Support:

tcelectronic.com/support/

Enjoy your TC product!

# About this pedal

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.

### **Flashback Delay**

Flashback Delay is a modern twist on the knowhow and legacy of TC Electronic's legendary 2290 delay, featuring seven seconds of delay and a cherry-picked selection of the very best delay sounds out there.

#### Dazzling delays for days

From amazing reproductions of tape and analog echoes to a dedicated 2290 setting: Flashback Delay is the complete package. We truly love delay sounds (after all, they made TC what we are today), so Flashback Delay is our ode to all that makes delay sounds so great. And on top of all that we even managed to squeeze in a looper!

#### Simply strum to sync

Audio tapping allows you to set your delay times fast, accurately, on the fly and hassle-free, so you can immediately get back to the fun part: playing! Syncing up with your band, backing track or the tempo in your head is a natural and intuitive thing: Just strum the tempo with your guitar – and Flashback does the rest.

#### That's what she played

Flashback Delay encourages you to play with yourself and get your most creative looping performances out of your system. 40 full seconds of looping and an easy interface give you all you need to get your loop on.

# **True Bypass**

Here at TC, we have a simple philosophy: When you are using one of our products, you should hear something great – and if you don't, 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 highend.

You will also be delighted to hear *(literally)* that this TC Electronic effect pedal will let your dry, unprocessed sound pass without ever converting it to digital – keeping your original tone pure and without any latency. This feature is called **analog dry-through**.

Sometimes, it is advisable to switch an effect pedal from True Bypass to Buffered Bypass mode. For more information, see <u>"Switching</u> the pedal from true bypass to buffered bypass mode".

# TonePrint

This TC Electronic product supports TonePrints. To learn more about TonePrints, go to tcelectronic.com/toneprint/

# What are TonePrints?

When you look at your TC Electronic effect pedal, you'll only see a few knobs. Actually, 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 <u>Paul Gilbert</u>, <u>Guthrie</u> <u>Govan</u>, John Petrucci or <u>Steve Vai</u> – virtually rewire your reverb 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 <u>"Transferring Tone-Prints to your pedal using the TonePrint app"</u>) – and with the amazing TonePrint Editor, you can even create your own signature pedal, tweaked specifically to your liking.

You can change the TonePrint in your pedal as often as you like, and the best part:

It's totally free.

# Transferring TonePrints to your pedal using the TonePrint app

Being able to virtually rewire your TC Electronic effect pedal wouldn't be much use if you needed a lot of extra equipment to do it. This is why we created the TonePrint app. The TonePrint app is free software for popular smartphones that allows you to "beam" new TonePrints right into your effect pedal whenever and wherever you feel like it.

### Obtaining the TonePrint app

If you own an iPhone, you can download the TonePrint app from Apple's App Store.

If you own an Android phone, you will find the TonePrint app on Google Play.

Once you have the app, no additional downloads or in-app purchases are required. You can access all available TonePrints from within the app, and all TonePrints are free.

# Transferring TonePrints to

your pedal – step by step

- Launch the TonePrint app on your smartphone.
- Find the TonePrint you want to use. You can browse TonePrints by Artist or Product (i.e., pedal type). You will also find Featured Tone-Prints.
- Plug your guitar or bass into your TonePrint 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".

# Editing TonePrints with TonePrint Editor

The TonePrint app allows you to use TonePrints created by your favorite guitar and bass players. But this is only the start. Using TC's TonePrint Editor, you can create your very own signature pedal sounds.

## **TonePrint Editor features**

- Use TonePrint Editor to build your own custom sounds.
- 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 live
  make changes on the fly and listen to results immediately.
- Works with both PC and Mac.

Last but not least...

- TonePrint Editor is absolutely free!

### **Obtaining TonePrint Editor**

If you want to use TonePrint Editor for your Windows or OS X computer, download it from

#### tcelectronic.com/toneprint-editor/

If you want to use TonePrint Editor on your Apple iPad, download it from Apple's App Store.

Please note that version 2.0 or higher of the TonePrint Editor is required for working with TC Electronic Mini pedals. Version 2.0 has a Library function that allows you to access and use Tone-Prints even without an Internet connection.

Obtaining the TonePrint Editor manual Download the TonePrint Editor manual from

#### tcelectronic.com/toneprint-editor/support/

If you open the manual for TonePrint Editor in <u>Adobe Reader</u>, you can click on interface sections to jump directly to the sections of the manual you are interested in.



# Ready...

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

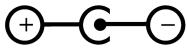
- Your TC Electronic effect pedal
- 2 rubber feet for "non-velcro" pedalboard mounting
- 1 TC Electronic sticker
- 1 leaflet about TC's guitar FX product range

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.

# Set...

 Connect a 9 V power supply with the following symbol to the DC input socket of your TC Electronic effect pedal.



This product does not come with a power supply.

- Plug the power supply into a power outlet.
- Connect your instrument to the in jack on the right side of the pedal using a ¼" jack cable.
- Connect the out jack on the left side of the pedal to your amplifier using a 1/4" jack cable.

# Inputs, outputs and controls



#### Flashback Delay

# Power / Switching the effect on and off

#### Power input

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 100 mA or more (not supplied).

To minimize hum, use a power supply with isolated outputs.

### Footswitch

- To turn the effect on, tap the footswitch.
- To turn the effect off, tap the footswitch again.

Using the footswitch for tempo tapping Hold down the footswitch for tempo tapping.

Of course, the delay time can be set using the DELAY knob. However, for timing the delay repeats to the tempo of the song you are playing, you can also tap in a the tempo via audio.

To set the tempo:

- Hold down the footswitch.
- With the footswitch held down, play steady short 1/4 notes on your instrument.
   Please note that the output is always muted during audio tapping.
- Release the switch again.

# Audio in and out

#### Audio inputs (stereo)

The audio inputs on the *right* side of this pedal are standard 1/4" jacks (mono/TS).

- If your signal source is mono, connect it to the MONO in jack of the pedal.
- If your signal source is stereo, connect the cable carrying the left signal component to the MONO IN jack and the cable carrying the right signal component to the STEREO IN jack.

### Audio outputs (stereo)

The audio outputs on the *left* side of this pedal are standard 1/4" jacks (mono/TS).

- If the next device in the signal chain has a mono input (e.g. your amp), connect the MONO OUT jack of TC Electronic effect pedal to the other device's input.
- If the next device in the signal chain has stereo inputs (e.g. another stereo effect pedal), connect the MONO OUT jack of your TC Electronic effect pedal to the left input and the STEREO OUT jack to the right input of the other device.

## USB port

Use the standard Mini-B USB port on your TC Electronic effect pedal to connect your pedal to a computer. This will allow you to load TonePrints into the pedal or create your own TonePrint using TC's TonePrint Editor. For more information, see "TonePrint".

If there should be firmware updates for this pedal, they can also be installed using the USB port – see "Updating the firmware".

# **Effect controls**

Please note that the knob assignments on your TC Electronic effect pedal are the *default* assignments. Using the <u>TonePrint Editor</u>, you can rewire all knobs so they control one or several parameters of your choice. For more information, see the TonePrint Editor manual.

DELAY knob – Delay time control Use the DELAY knob to control the delay time.

Almost all delay types have a delay range of 20 ms to 7000 ms (that's seven seconds). Slapback ("SLP") has a range from 20 ms to 300 ms.

FEEDBACK knob – Feedback control Use the FEEDBACK knob to set the desired numbers of delay repeats. Turning the FEED-BACK knob to the right will give you more delay repeats.

FX LEVEL knob – Effect level control Use the FX LEVEL knob to control the level of the delay repeats.

The direct, unprocessed signal is always passed at the original level (unity gain). Only the level of delay repeats is changed when turning the FX LEVEL knob.

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#### Delay type selector

Use the Delay type selector to choose the type of delay you want to work with.

The delay types are described in the section "Delay types".

### Subdivision selector

Use this switch to choose the note intervals that the delay repetitions are based on.

- Top position: quarter notes
- Middle position: dotted eighths
- Bottom position: quarter notes and dotted eighths.

# **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 and is still held in high regard among delay enthusiasts.

Use the "2290" delay for the crispest and clean delay you can imagine. This is the standard.

### ANA – Analog delay

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 – Tape delay

Who doesn't love the smooth sound of an old tape echo machine?

The "Tape" delay makes for an overall great starting point with its mellow and "warbling" sound.

## LOFI – Lo-Fi delay

Deliberately squashing the sound of the delay repeats, the Lo-Fi delay allows you to make a statement.

# DYN - Dynamic delay

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 relative large amount of delay without muddying fast riffs.

# MOD - 2290 delay with modulation

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 SELECTOR Switch.

# P.PONG - Ping-pong delay

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. Ping-pong is a lot of fun to play around with in stereo – but it sounds great in mono, too.

## SLAP - Slap delay

A delay type for all things country – but you can also use this for many other genres.

Use this setting to get your Rockabilly on. Pay homage to the rich staccato heritage of Brian Setzer, Chet Atkins and Scotty Moore, or use this delay as an alternative to reverb.

### RVS - Reverse delay

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.

Try this: Turn the Mix knob all the way down to hear only the reversed signal.

## LOOP - Looper setting

Set the Delay type selector to LP to use the builtin audio looper. Using the looper is explained in <u>"Using the loop-</u> er".

### TONEPRINT – TonePrint setting

Set the Delay type selector to TP to use the TonePrint setting.

Using and editing TonePrints is explained in the "TonePrint" section.

### Using the looper

With the looper built into your Flashback Delay, you can record and play back grooves and lines for playing along. 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.
- Make sure the pedal is in bypass mode (i.e., the LED should be off). Feel the groove and prepare for recording. Then tap the pedal's footswitch to start your recording and play. The pedal's LED flashes red.
- To stop recording, press the 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 switch once more. The LED now blinks.
- To delete all recordings, double-tap the footswitch.

# Maintenance

# 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.

# Changing the battery

If you need to change the battery of your TC Electronic effect pedal, proceed as follows:

- Unscrew the thumb-screw on the back of the pedal and detach the back-plate.
- Unmount the old battery and attach the new battery to the battery clip making sure the polarity is correct.
- Remount the back-plate.

## Notes regarding batteries

- Batteries must never be heated, taken apart or thrown into fire or water.
- Only rechargeable batteries can be recharged.
- Remove the battery when the pedal is not being used for a longer period of time to save battery life.
- Always dispose batteries according to local laws and regulations.

# Switching the pedal from true bypass to buffered bypass mode

# 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.

### lf...

- 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/ passive pick-ups, single coil/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! To set the bypass mode, proceed as follows:

- Disconnect the pedal and turn it on its back.
- Unscrew the back plate of the pedal and look for the two small dip-switches in the upper left corner.
- The upper DIP switch (the one closer to the power in jack), switches between True Bypass mode (default) and Buffered Bypass mode.
- Set the DIP switch to the desired position.
- Remount the back-plate.

# Kill-dry on/off

When you activate Kill-dry, the direct signal is removed from the pedal's output. Use this mode when you place your TC Electronic effect pedal in a parallel effects loop.

To set Kill-dry mode, proceed as follows:

- Disconnect the pedal and turn it on its back.
- Unscrew the back plate of the pedal and look for the two small dip-switches in the upper left corner.
- The lower DIP switch (the one further away from the power in jack), switches between Killdry on and Kill-dry off mode.

You can only remove the dry signal from the signal path if you have selected Buffered Bypass mode using the upper DIP switch – see <u>"Switching the pedal from true bypass to buffered bypass mode</u>". Kill-dry is not available in True Bypass mode.

True bypass	
Buffered bypass	
Kill-dry off	
Kill-dry on	

Maintenance

# **Frequently asked questions**

# Frequently asked questions about TonePrint pedals

"Are TonePrint pedals analog or digital?" The dry signal of your guitar passes straight through this effect pedal and is in no way digitized. The "wet" signal is just added.

"Do the TonePrint pedals have balanced or unbalanced inputs/outputs?" TonePrint pedals have unbalanced inputs and outputs. Use cables with TS jacks (i.e., standard instrument cables).

"Is it possible to run this TonePrint pedal in the effects loop of a tube amp?" Yes. All TonePrint pedals have a very wide gain range and are designed to run at both instrument and line level. There are a few amps which are capable of running much hotter than regular +4 dBu line-level signals because of the way their effect loops are designed. With these amps, it might be possible to get the input to clip. But for 99 % of all amps, the TonePrint pedals will work just fine.

For additional information about your TC Electronic TonePrint effect pedal, please go to TC Electronic Support:

#### tcelectronic.com/support/

Links

# Links

# **TonePrint resources**

- TonePrint: tcelectronic.com/toneprint/
- TonePrint products: tcelectronic.com/toneprint/toneprint-products/
- TonePrint app: tcelectronic.com/toneprint-app/
- TonePrint Editor: tcelectronic.com/toneprint-editor/
- TonePrint Editor manual: tcelectronic.com/toneprint-editor/support/

# Support resources

- TC Electronic Support: tcelectronic.com/support/
- TC Electronic product software: tcelectronic.com/support/software/
- TC Electronic all product manuals: tcelectronic.com/support/manuals/
- TC Electronic user forum: forum.tcelectronic.com/

# TC Electronic on...

- the web: tcelectronic.com/
- Facebook: facebook.com/tcelectronic
- Google Plus: plus.google.com/+tcelectronic/
- Twitter: twitter.com/tcelectronic
- YouTube: youtube.com/user/tcelectronic

# **Technical specifications**

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Please note that due to continuous development, the following specifications are subject to change without further notice.

Bypass mode	True Bypass (Buffered Bypass optional)
Signal circuitry	Analog dry-through
Dimensions (width x depth x height)	72 x 122 x 50 mm – 2.8 x 4.8 x 2.0"
Input connector	2 Standard 1/4" jacks – mono/TS with automatic mono/stereo sensing
Output connector	2 Standard 1/4" jacks – mono/TS with automatic mono/stereo sensing
Power input	Standard 9 V DC, centre negative >100 mA (power supply not included)
Battery option	Standard 9 V (battery not included)
Input impedance	1 MΩ
Output impedance	100 Ω
USB port	Mini USB connector for uploading and editing custom TonePrints and for software updates

