



QUINTESSENCE HARMONIZER

Exceptional Dual-Voiced Intelligent Harmonizer with PolySense and Groundbreaking MASH Footswitch

Table of Contents

Important Safety Instructions	3
Legal Disclaimer	3
Limited warranty	3
1. About this Manual	4
2. Introduction.....	4
2.1 Unpacking	4
2.2 True Bypass	4
2.3 Setting up.....	4
3. Operation – Inputs, Outputs and Controls.....	4
3.1 Power/Computer connection.....	5
3.2 Switching.....	5
3.3 Audio in and out	5
3.4 Effect controls	5
4. Operation – MASH Function, Latching/Momentary Footswitching, Stereo Operation, Scales	5
4.1 Using the MASH function	5
4.2 Latching/Momentary footswitching	6
4.3 Stereo Operation	6
4.4 Scales and Intervals	6
5. Operation – TonePrint.....	7
5.1 What are TonePrints?	7
5.2 Transferring TonePrints to your pedal using the TonePrint app.....	7
5.3 Editing TonePrints with TonePrint Editor.....	7
5.4 Frequently Asked Questions about TonePrint pedals	8
5.5 TonePrint resources	8
6. Operation – Bypass Mode.....	8
6.1 True Bypass and Buffered Bypass explained	8
6.2 Switching between True Bypass and Buffered Bypass.....	8
7. Maintenance.....	8
7.1 Updating the firmware.....	8
7.2 Changing the battery	9
8. Links.....	9
9. Specifications.....	9

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.

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. 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 will help you learn understanding and operating your TC ELECTRONIC product. 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 rights 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/

2. Introduction

The QUINTESSENCE HARMONIZER is TC ELECTRONIC's revolutionary, TonePrint-enabled harmonizer pedal. With QUINTESSENCE in your pedalboard, your guitar can now harmonize (and customize) your lead lines in ways never before imaginable.

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

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 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 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

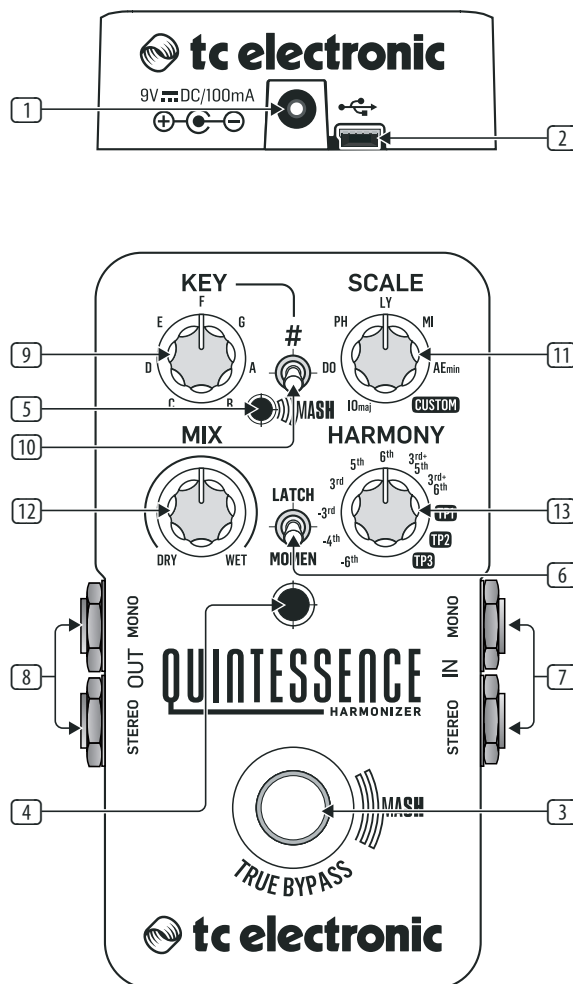
- Connect a 9 V power supply with the following symbol to the DC input socket of your TC ELECTRONIC effect pedal.



This product does not come with a power supply. We recommend using TC ELECTRONIC's PowerPlug 9 (sold separately).

- If no power supply is available, you can run this product using a battery. For more information on changing batteries, see "7.2 Changing the battery".
- Plug the power supply into a power outlet.
- Connect your instrument to the in jack on the right side of the pedal using a 1/4" jack cable.
- Connect the out jack on the left side of the pedal to your amplifier using a 1/4" jack cable.

3. Operation – Inputs, Outputs and Controls



3.1 Power/Computer connection

- 1 **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). TC ELECTRONIC recommends using the PowerPlug 9.

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

If no power supply is available, you can run this product using a battery. For more information on changing batteries, see “7.2 Changing the battery”.

- 2 **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 “5. Operation – TonePrint”.

If there should be firmware updates for this pedal, they can also be installed using the USB port – see “7.1 Updating the firmware”.

3.2 Switching

- 3 **FOOTSWITCH** Press the footswitch to switch the effect on or off, or to use the MASH function. The LATCH / MOMEN selector controls whether the footswitch works in latching or momentary modes. For more information about the footswitch modes, see “4.1 Using the MASH function” or “4.2 Latching/Momentary Footswitching”.
- 4 **INDICATOR LED** This LED lights up red when the effect is switched on.
- 5 **MASH LED** This LED lights up amber to indicate the MASH function is active when you gradually press down and hold the footswitch. The farther you press the footswitch down, the brighter the MASH LED will light to indicate that more MASH is being applied to the linked effect parameter. For more information, see “4.1 Using the MASH function”.
- 6 **LATCH / MOMEN selector** The LATCH / MOMEN switch allows you to select between two switching modes:
- **Latch** Set the LATCH / MOMEN selector to “LATCH” so that the effect stays switched on when the footswitch is pressed and released. To switch the effect back off, press and release the footswitch.
 - **Momentary** Set the LATCH / MOMEN selector to “MOMEN” so that the effect is only active when the footswitch is pressed and held down. When the footswitch is released, the effect will automatically switch off.

For more information, see “4.2 Latching/Momentary Footswitching”.

3.3 Audio in and out

- 7 **AUDIO INPUTS (mono/stereo)** The audio inputs on the right side of this pedal are standard ¼" jacks (mono/TS). Connect your guitar to the audio inputs on the right side of your pedal using a regular ¼" mono cable. If your guitar has a single mono output, use the upper input marked “MONO”. If your particular guitar has stereo outputs, use both the “MONO” and “STEREO” inputs.
- 8 **AUDIO OUTPUTS (mono/stereo)** The audio outputs on the left side of this pedal are a standard ¼" jacks (mono/TS). Connect the audio output of your pedal to the next device in the signal chain using a regular ¼" mono cable.

For more information, see “4.3 Stereo Operation”.

3.4 Effect controls

Please note that the knob assignments on your TC ELECTRONIC effect pedal are the default assignments. Using the TonePrint Editor, you can change the functionality of available controls. For more information, see “5.3 Editing TonePrints with TonePrint Editor”.

- 9 **KEY knob** The KEY knob controls which key the QUINTESSENCE pedal uses to generate harmonies.
- 10 **KEY switch** The KEY switch allows you to access additional flat/sharp keys. For example, to access Key of D#/Eb, set the KEY knob to Key of D and then move the KEY switch to the “#” setting.
- 11 **SCALE knob** The SCALE knob allows you to choose which scale the pedal will use to generate harmonies. The SCALE knob offers the following scale options: IOMaj (Ionian Major), DO (Dorian Minor), PH (Phrygian Minor), LY (Lydian Major), MI (Mixolydian Major), AEm (Aeolian/Natural Minor), and CUSTOM (Locrian Minor, default). For more information, see “4.4 Scales and Intervals”.
- 12 **MIX knob** The MIX knob controls the amount of the original dry guitar signal versus the pitch-shifted signal. At full counter-clockwise, only the dry guitar signal will be audible; at full clockwise, only the pitch-shifted signal will be audible.
- 13 **HARMONY knob** The HARMONY knob controls which intervals will be generated from the notes from your dry guitar signal, based on the scale selected by the SCALE knob. For more information, see “4.4 Scales and Intervals”.

4. Operation – MASH Function, Latching/Momentary Footswitching, Stereo Operation, Scales

QUINTESSENCE HARMONIZER has a lot more going on under the hood than you might think, and this section will show you details about these additional goodies.

4.1 Using the MASH function

The MASH function allows you to vary a linked effect parameter when you press down continuously on the footswitch with variable pressure. The more pressure you apply to the footswitch, the brighter the MASH LED will light up.

The MASH function deploys automatically any time you press and hold the footswitch. Simply take your foot off the footswitch to deactivate the MASH function.

The MASH function can be assigned to any parameter of your choice by using the TonePrint Editor. For more information, see “5.3 Editing TonePrints with TonePrint Editor”.

By default assignment, the MASH function is programmed to bend the pitch-shifted note (in the effected signal) upward to the next scale degree available in the chosen scale (except for the TP1, TP2 and TP3 default TonePrints, see below).

Here is a table of examples, all in Key of C Ionian Major (C-D-E-F-G-A-B), with the note C played on the guitar (for background info on music theory, see “4.4 Scales and Intervals”):

HARMONY Knob Setting	Interval (Notes Generated)	MASH Behavior
-6th	6th below (E below C)	E bends upward to F
-4th	4th below (G below C)	G bends upward to A
-3rd	3rd below (A below C)	A bends upward to B
3rd	3rd above (E above C)	E bends upward to F
5th	5th above (G above C)	G bends upward to A
6th	6th above (A above C)	A bends upward to B
3rd-5th	3rd and 5th above (E and G above C)	E and G bend upward to F and A
3rd-6th	3rd and 6th above (E and A above C)	E and A bend upward to F and B

When it comes to MASH behavior, the TP1, TP2 and TP3 TonePrint slots are special cases, because the default TonePrints contain specialized scales of their own, in addition to customized harmonies.

Here is a table showing how the default TonePrints are set up (based on the note C played on the guitar):

HARMONY Knob Setting	Scales and Intervals	MASH Behavior
TP1 (TonePrint 1)	Custom Scale: Pentatonic Major Scale Structure: 1-2-3-5-6 Custom harmony: 3rd and -4th (E above C and G below C)	E bends down one scale step to D. G stays the same. (Sounds great for pedal-steel style bends.)
TP2 (TonePrint 2)	Custom Scale: SuperLocrian Scale Structure: 1-b2-b3-3-#4-#5-b7 Custom harmony: 4th and 7th	The upper C bends down by an octave to C, while the lower C bends upward by an octave to C
TP3 (TonePrint 3)	Custom Scale: Harmonic Minor Scale Structure: 1-2-b3-4-5-b6-7 Custom harmony: 3rd and 5th (Eb and G above C) Delay: Voice 1 – 125 ms; Voice 2 – 250 ms	Eb and G both bend upward by an octave. (This one is crazy. Go from traditional “Yngwie-approved” harmonised lines to whammy-meets-arpeggiator madness.)

For more information about scale structure, see “4.4 Scales and Intervals”.

For more information about about customizing your own TonePrints, see “5.3. Editing TonePrints with TonePrint Editor”.

4.2 Latching/Momentary footswitching

You can set the pedal to latching or momentary switching by choosing the appropriate mode with the LATCH/MOMEN selector.

In Latch mode, the effect pedal remains on when the footswitch is pressed and released. To switch the pedal back off, simply press and release the footswitch again.

Momentary mode is useful when you want the pedal to operate only for a brief moment, such as on a single note in a lead line. In Momentary mode, the effect pedal only operates for as long as you press and hold down the footswitch. When you release pressure on the footswitch, the pedal will immediately switch off.

4.3 Stereo Operation

The QUINTESSENCE HARMONIZER can handle both mono and stereo signals.

Stereo input sources could include guitars with stereo outputs, pedals with stereo outputs (such as stereo chorus or flanger pedals), or side-by-side signals from parallel chains of effects in your pedal board.

Depending on the type of input signal, you can also bounce a stereo input down to a mono output by using only the MONO output jack.

You can also turn a single mono input into a stereo output, with dry signal panned to one side, and the effected, pitch-shifted signal panned to the other side. These two signals can then be sent to dual amplifiers, with one amplifier handling the dry sound, while the other amplifier plays only the pitch-shifted signal. (QUINTESSENCE senses which audio input and output jacks are in use, and when the pedal detects a “mono in>stereo out” connection, it automatically generates a stereo output with wet and dry signals panned hard left and right.)

4.4 Scales and Intervals

The QUINTESSENCE HARMONIZER comes conveniently pre-loaded with various major and minor scales commonly used in modern music. QUINTESSENCE then harmonizes your played notes according to the key and structure of your chosen scale.

For example, if you choose the “3rd” setting with the HARMONY knob, select “10maj” (Ionian Major) with the SCALE knob, and then play up the scale from the root note of the key, QUINTESSENCE will automatically generate the following major or minor 3rd harmonies as dictated by the Ionian Major scale:

M-m-m-M-M-m-m

*M = major 3rd; m = minor 3rd

Similarly, if you switch the SCALE knob to “AEmin” (Aeolian Minor) and play up the scale, QUINTESSENCE will generate the following 3rd harmonies:

m-m-M-m-m-M-M

Along these same lines, if you then switch the HARMONY knob to the “3rd-5th” setting, the harmonies generated in Aeolian Minor by QUINTESSENCE will be the major and minor chords native to the Aeolian Minor scale:

minor-minor-Major-minor-minor-Major-Major

Here is a table of the pre-loaded scales available in QUINTESSENCE:

Scale Knob Setting	Scale	Scale Structure
10maj	Ionian (Standard) Major	1-2-3-4-5-6-7
DO	Dorian Minor	1-2-b3-4-5-6-b7 (incl. 7)
PH	Phrygian Minor	1-b2-b3-4-5-b6-b7 (incl. 7)
LY	Lydian Major	1-2-3-#4-5-6-7
MI	Mixolydian Major	1-2-3-4-5-6-b7 (incl. 7)
AEmin	Aeolian (Natural) Minor	1-2-b3-4-5-b6-7 (incl. 7)
CUSTOM	Locrian (default), programmable	1-b2-b3-4-b5-b6-b7 (incl. 7)

NOTE: All of the scales with flattened 7th scale degrees (Dorian, Phrygian, Mixolydian, Aeolian and Locrian) have been programmed so that the natural 7th degree is also available when the music calls for a half-step resolution up from the 7th degree to the root note of the scale. This type of resolution is common in modern “mixed-mode” music, so the natural 7th is handy to have in case you need it.

By using the TonePrint Editor, you can also program the SCALE knob’s “CUSTOM” setting with scales of your own choosing. Possible substitute scales for unusual harmonies include Lydian Dominant (1-2-3-#4-5-6-b7), Whole Tone (1-2-3-#4-#5-b7), Whole-Half Diminished (1-b2-b3-3-4-b5-6-b7) and many more. For more information, see “5.3 Editing TonePrints with TonePrint Editor”.

The following interval harmonies are available with the HARMONY knob:

HARMONY Knob Setting	Interval	Comment
-6th	6th below the played note	—
-4th	4th below the played note	—
-3rd	3rd below the played note	—
3rd	3rd above the played note	—
5th	5th above the played note	—
6th	6th above the played note	—
3rd-5th	3rd and 5th above the played note	Major and minor chords
3rd-6th	3rd and 6th above the played note	Inverted major and minor chords and/or 6th chords (depending on context)
TP1 (TonePrint 1)	Octave above and below (default)	Available for custom TonePrint
TP2 (TonePrint 2)	Octave above and below (default)	Available for custom TonePrint
TP3 (TonePrint 3)	Octave above and below (default)	Available for custom TonePrint

Here is how you figure out the interval harmonies from a scale. . .

For example, let's say you play C, D and E in the key of A, and you are using a 3rd above HARMONY setting in Dorian Minor:

A-B-C-D-E-F#-G

Find C, and then count three notes up the scale – C, D, E—to find the next note, which in this case is E. So, the notes of the 3rd harmony built on C is C-E, which is a major 3rd.

Then, count three upward from D and E, to generate D-F and E-G, both of which are minor 3rds.

Similarly, to figure out a 5th above, you count 1-2-3-4-5 up the scale from the starting note to find the harmony note. With a 6th above, you would count 1-2-3-4-5-6 upward, and so on. (If you “run out” of notes before you get to the final note of the interval, you can “wrap around” back to the bottom of the scale and continue counting to get the next note, or you can write out the missing notes above to extend the scale for counting.)

Scales and intervals are an entire area of study unto themselves, and this little primer cannot possibly cover everything in just a few paragraphs. However, if you need more information, you can find multiple music theory sources and/or books on the Internet that will explain everything you might want to know in great detail. Enjoy! (If that's your thing, of course. . .)

5. Operation – TonePrint

This TC ELECTRONIC product supports TonePrints.

5.1 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 Paul Gilbert, Guthrie Govan, John Petrucci or Steve Vai – 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 “5.2 Transferring TonePrints to your pedal using the TonePrint app”) – 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!

5.2 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 smart-phone.
- Find the TonePrint you want to use. You can browse TonePrints by Artist or Product (i.e., pedal type). You will also find Featured TonePrints.
- 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”.
- The INDICATOR LED will light to show that the TonePrint has been transferred to the pedal.

5.3 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.
- Available for PC, Mac and iOS (iPad only).

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 TonePrints 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 Adobe Reader, you can click on interface sections to jump directly to the sections of the manual you are interested in.

5.4 Frequently Asked Questions about TonePrint pedals

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/

5.5 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/

6. Operation – 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!

6.2 Switching between True Bypass and Buffered Bypass

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.

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.

7.2 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 backplate.
- 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.

8. Links

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

9. Specifications

Bypass mode	True Bypass (default) / Buffered Bypass, switchable
Input connector	2 x ¼" TS, unbalanced, mono
Input impedance	1 MΩ
Output connector	2 x ¼" TS, unbalanced, mono
Output impedance	1 MΩ
Output connector	2 Standard ¼" jacks – mono/TS with automatic mono/stereo sensing
Output impedance	100 Ω
Power input	Standard 9 V DC, centre negative >300 mA (power supply not included)
Battery Option	9 V (battery not included)
USB port	Mini USB connector for firmware updates
Dimensions (H x W x D)	72 x 122 x 50 mm (2.8 x 4.8 x 2.0")

