tc electronic



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Important safety instructions





The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

- Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this device near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 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.
- 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 the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the device. When a cart is used, use caution when moving the cart/device combination to avoid injury from tip-over.
- 13. Unplug this device during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the device 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 device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning

- To reduce the risk of fire or electrical shock, do not expose this device to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the device.
- This device must be earthed.
- ► Use a three wire grounding type line cord like the one supplied with the product.
- ▶ Be advised that different operating voltages require the use of different types of line cord and attachment plugs.
- Check the voltage in your area and use the correct type. Please refer to the following table:

Voltage	Line plug according to standard
110-125 V	UL817 and CSA C22.2 no 42.
220-230 V	CEE 7 page VII, SR section 107-2-D1/IEC 83 page C4.
240 V	BS 1363 of 1984. Specification for 13A fused plugs and switched and unswitched socket outlets.

This device should be installed near the socket outlet and disconnection of the device should be easily accessible.

- ▶ To completely disconnect from AC mains, disconnect the power supply cord from the AC receptacle.
- ► The mains plug of the power supply shall remain readily operable.



- ▶ Do not install this device in a confined space.
- ▶ Do not open the device risk of electric shock inside.
- Mains ground must be connected.
- Norwegian: Apparatet må tilkoples jordet stikkontakt.
- Swedish: Apparaten skall anslutas till jordat uttag.
- ► Finnish: Laite on liitettävä suojakoskettimilla varus-tettuun pistorasiaan.

Service

There are no user-serviceable parts in this device.

All service must be performed by qualified personnel.

Caution

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

EMC/EMI

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.

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.



About this manual / Getting support



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

Please do not operate your TC Electronic product before you have made all connections to external equipment as described in this manual.

In the subsequent sections of the manual, we assume that all connections are made correctly and that you are familiar with the previous sections.

To download the most current version of this manual, view the product warranty, and access the growing FAQ database for this product, please visit the web page

tcelectronic.com/support/

Getting support

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

tcelectronic.com/support/

Register your product

Please register this product so we can inform you about updates and other product-related news. To register your product, please go to:

tcelectronic.com/support/account-registration/registration/

Introduction



Now all that's great about bass... is at your fingertips.

Thank you for purchasing this TC Electronic bass head! Now let's see what we got here...

- ► Powerful? Check!
- ▶ Rich on features? Check!
- ► Lightweight? Check!

So... What else do you need?

Flexibility. *Lots* of flexibility.

Yes, we think you might like that.

Cabinet configurations

There are countless cab configurations to use with your TC Electronic bass amp. Mix and match what suits your personal style. You can find configuration examples on the product page for your amp:

► BH550: tcelectronic.com/bh550/

► BH800: tcelectronic.com/bh800/

If you accidentally connect a non-valid combination of cabinets to a TC Electronic bass amplifier, the amplifier's protection mode may be invoked – see "Protection mode" on page 17. However, the amplifier will not be damaged.

More than meets the eye

There is a lot of clever technology under the hood of this product – but that doesn't mean it's hard to use!

Use the EQ controls as you would with every other amp – but know that great attention and effort was put into the way these controls affect your sound. Different frequency areas are affected when boosting and cutting to make it feel "just right".

There's a tuner for 4, 5 and 6-string basses, a balanced output with a Pre/Post EQ button, a headphones out and a rehearsal ("aux") input for a stereo source to play along with...

This may already be more than you would expect from a bass amp... but why not expect even more?

Let's talk TonePrints.



TonePrint

This TC Electronic product supports TonePrints. To learn more about TonePrints for bass, go to

tcelectronic.com/toneprint/toneprint-bass

What are TonePrints?

TonePrint technology gives you complete creative control. No longer is your creativity held back by a fixed set of built-in effects! With Tone-Print, *you* become the amp designer. So if you need a swirling vintage flanger and a TubeDrive for your next rock gig, or a compressor and a chorus when you play with your funk band, you simply just load them into the amp.

TonePrint means signature effects made by the most awesome bass players around, like Victor Wooten, Duff McKagan, Nathan East and many more. These TonePrints are available for free, straight from your smartphone – and with two switchable TonePrint slots available, you can mix and match to your heart's desire!

You can change the TonePrints in your amp as often as you like, and the best part:

It's totally free.

Transferring TonePrints to your amp using the TonePrint app

Being able to virtually rewire your TC Electronic bass amp 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 amp whenever and wherever you feel like it.

Obtaining and using the TonePrint app

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

itunes.apple.com/us/app/toneprint/id432767616

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

play.google.com/store/apps/details?id=com.tcelectronic.toneprint

Once you have downloaded 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.

Setup Guide



Unpacking

Unpack your bass head. The box should contain the following items:

- ► Your TC Electronic bass head
- Power cable
- ► USB cable
- ▶ 1/8" cable
- Setup guide
- ► Switch-3 sticker

Inspect all items for signs of transit damage. In the unlikely event of this having occurred, inform the carrier and supplier.

Keep all the packaging if damage has occurred, as this will show evidence of excessive handling force.

It is also a good idea to keep the packaging for future transportation.

Setting up

- ➤ Connect the power cable to the amp and to an outlet with correct voltage. This device accepts voltages from 100 to 240 VAC.
- Connect the amp to one or multiple cabinets. For setup examples, see the "Cabinet Configuration" sections on the BH550 and BH800 product pages.
- Connect your bass to the INPUT jack on the front panel.
- ► Adjust the input gain using the GAIN knob.
- Adjust the output volume using the MASTER knob.

PLAY!

Operation – Front Panel



This section describes the front panel ports and controls of your bass amp from left to right.

The descriptions apply to both BH550 and BH800 – the only difference between these amps is their power.



1. INPUT jack

You can connect an active or passive bass to this ¼" input jack. The input stage of your bass amp is designed to adapt to any type of pickup.

2. GAIN knob and CLIP LED

The input gain should be set to the highest possible level without overloading the input stage.

To find the correct setting,

- plug in your bass and play,
- ► turn up the GAIN knob until the PEAK LED occasionally lights up, then
- reduce the gain slightly.

When set, simply turn up the MASTER volume knob to start playing.

3. TUNER

Your bass amp's integrated tuner allows you to easily tune a 4, 5 or 6-string bass.

The B, E, A, D and G LEDs indicate which strings you are currently tuning. When the D and G LEDs are lit, you are tuning the C string.

The string is in perfect tune when both green LEDs to the right of the string LEDs are lit.

The tuner is always active.



4. Intelligent EQ section

The Intelligent EQ section of this TC bass amp is not your standard bass amp EQ!

Ordinary bass, middle and treble controls boost or cut the same frequency area when you turn the controls clockwise or counterclockwise. The tone controls of this amp intelligently address several different frequencies when you turn them, integrating not only tone control, but also contouring your sound.

By adapting one or more target frequencies and bandwidths at the turn of a single knob, the Intelligent EQ section combines excellent tone shaping abilities with ease of use.

5. TONEPRINT knobs 1 and 2

If you are not familiar with the TonePrint concept, please read <u>"TonePrint" on page 8</u> first. You can also find <u>additional information</u> and videos about TonePrint technology for bass players on TC Electronic's website.

Your bass amp can store two independent Tone-Prints. By default, TonePrint slot 1 contains the TubeDrive TonePrint, and slot 2 contains the famous TC Classic Chorus TonePrint.

6. TonePrint slot switch

To select a TonePrint slot (1 or 2), set the Tone-Print slot switch to the respective slot. The LED of the currently selected TonePrint slot will light up. You will hear the TonePrint effect currently stored in this slot, and if you transfer a new TonePrint to your TC bass amp, it will be stored in this slot.

Use the TonePrint knob for the currently selected TonePrint slot to control the TonePrint in this slot as follows:

- ► For most modulation effects (Chorus, Flanger, Vibrato and Octaver), the TonePrint knob work as a dry/wet mix control, but for some TonePrints, it could also be the speed of the Vibrato or the depth of the Chorus.
- For Compression and Drive TonePrints, the TonePrint knob usually acts as amount (intensity) control.

Featured TonePrint artists may have assigned the TonePrint knob to other parameters.

Finally, there are some TonePrints that encompass two effects. In this case, the TonePrint knob will control one or multiple parameters of one effect, while the parameters of the other effect are static.

Please note that while your TC bass amp can *store* two separate TonePrints, only one Tone-Print can be *active* at any time.

Deactivating TonePrint

If you do *not* want to hear/use the TonePrint effect at all.

- set the TonePrint slot switch to center position or
- turn the knob of the currently active TonePrint slot fully counterclockwise or
- ▶ use a Switch-3 footswitch connected to the PEDAL jack on the rear of the amp see "PEDAL input jack" on page 15.

7. MUTE switch

To tune you instrument silently, set the MUTE switch to the upper position. This will mute all signal paths:

- ▶ the SPEAKER OUT jack
- ► the PHONES jack and
- ▶ the BALANCED OUTPUT jack.

When you have connected a Switch-3 to the PEDAL jack, you can use it to mute or unmute the amp – see <u>"PEDAL input jack" on page 15.</u> Switch-3 overrides the Mute switch on the bass amp.

8. MASTER level knob

Use the MASTER knob to set the overall output level of the amp. The master level also controls the level of the PHONES output on the rear panel of the amp.

Operation – Rear Panel



This section describes the rear panel ports and controls of your bass amp from left to right.

The descriptions apply to both BH550 and BH800 – the only difference between these amps is their power.



9. MAINS IN - Power switch & Power input

The switched-mode power supply of this device accepts voltages from 100 V to 240 V. The ground pin of the power supply unit must always be connected in order to avoid voltage differences between e.g. the PA and your bass amp.

10. SPEAKER OUT jack

Use the SPEAKER OUT connector for connecting your amp to speaker cabinets.

Please note that this is a speakON connector, and you must use speaker cables for connecting the amp to your cabinets. Do not use instrument cables!

Use a cabinet configuration with your BH550/BH800 with a minimum load of 4 Ohms.

11. PEDAL input jack

You can connect a TC Electronic Switch-3 to the PEDAL input of your bass amp to control the following features:

- 1: Activate TonePrint A
- 2: Activate TonePrint B
- 3: Mute on/off.

For more information about Switch-3, see tcelectronic.com/switch-3/



12. USB port

The USB port can be used to...

- ► transfer TonePrints downloaded from the TC Electronic website to your BH550/BH800
- update the internal software (firmware) of your TC bass amp.

13. UTIL button

TC may provide updates for the built-in software of your amplifier, the firmware. Updating your TC amp's firmware requires...

- a computer running Microsoft Windows or OS X with a standard USB interface
- a USB cable.

Preparing the firmware update

Download the newest firmware from the "Support" page for your TC amp. If a firmware update is available, you will find 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).
- Connect your TC amp to your computer using a USB cable.
- ▶ Power up the amplifier while pressing and holding the UTIL button on the rear panel.
- After a few seconds, you should see the LED next to the UTIL button turn red.

► Launch the firmware updater you have downloaded and follow the on-screen instructions to apply the firmware update.

14. AUX IN Rehearsal input

The AUX IN is a stereo 1/8" auxiliary input. Any signal present on the AUX IN jack is played back through the output of your bass amp. This allows you to play along with a rehearsal track, or you can practice to the beat of a metronome click. The included "mini jack to mini jack cable" allows you to use a smartphone or any other consumer playback device as a source for rehearsing.

15. PHONES (Speaker Mute) jack

The PHONES jack is a 1/8" connector for headphones. With a mild speaker filter applied to the bass sound, our studio quality headphone amp caters for a great headphone sound.

The headphone output also plays back any signal connected to the AUX IN input jack.

AUX IN and PHONES jacks are the perfect combination for rehearsing or checking out new tracks without disturbing the neighbors.

16. PRE/POST EQ switch

Use the PRE/POST switch located to the left side of the BALANCED OUT jack to determine where in the signal chain the signal for the balanced output should be tapped.

- ▶ POST setting (top): The signal is tapped *after* the EQ section and the currently active Tone-Print effect, allowing you to use the signal with the specific flavor of the amp.
- ▶ PRE setting (bottom): The signal is tapped before the EQ section and the currently active TonePrint effect. Use this setting if you want to record your bass sound without any effects or equalization applied.

17. BALANCED OUTPUT

Use the BALANCED OUT XLR jack to connect your bass amp to the PA when you play on stage, or to connect your amp to a recording device when you are in the studio.



Protection mode



This product is equipped with an advanced protection system for both the amplifier's and your own safety. These protection features will only kick in if you operate this product under extreme conditions.

Be sure not to cover the cooling grid of your bass amp! Insufficient ventilation may cause the amplifier's temperature to increase to critical values.

Your bass amp is equipped with an intelligent protection system, ensuring that the amp does not suffer or malfunction if operated wrongly or in extreme environments. When the amplifier switches to Protection mode, the speaker output is muted, and the TUNER LEDs start flashing in pairs of two.

Protection mode is invoked...

- ▶ if a short circuit occurs (on speaker outputs)
- ▶ if the amplifier is used in an environment that is too hot, or
- ▶ if proper ventilation is not ensured.

In Protection mode, the speaker outputs are shut off to prevent speaker damage. However, the balanced output still passes audio.

How to proceed in Protection mode

- ► If the amplifier does not automatically recover from Protection mode and feels hot, try turning off the amplifier for a minute to let it cool. Ensure sufficient ventilation.
- ► Ensure that your speaker(s) and speaker cable(s) are not defect, as such a defect could cause a short circuit.
- Turn on the amplifier again.

If these steps do not solve the problem and the Tuner LEDs continue flashing, you will have to send the amplifier to a qualified service center for inspection.



Links and additional information



Support resources

- ► TC Electronic service and warranty: tcelectronic.com/support/service-warranty/
- ► 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

TC Bass resources

- ► TC Electronic | Bass: tcelectronic.com/bass/
- ► TonePrint for Bass: tcelectronic.com/toneprint/toneprint-bass/

Product-related information

- ► BH550 product page: tcelectronic.com/bh550/
- ► BH800 product page: tcelectronic.com/bh800/



Technical specifications



Input	
Input connector	1/4" jack
Input impedance	500 kOhm / 100 pF
Gain range	-96 to 41 dB
Tone control	
Bass	50 Hz @ Gain -24 to 0 dB; 80 Hz @ Gain 0 to +24 dB
Low Mids	200 Hz @ Gain -24 to 0 dB; 160 Hz @ Gain 0 to +24 dB
High Mids	630 Hz @ Gain -24 to 0 dB; 800 Hz @ Gain 0 to +24 dB
Treble	1800 Hz @ Gain -24 to 0 dB; 4000 Hz @ Gain 0 to +24 dB
TonePrint (two slots)	0 to 10 embedded parameters for TonePrints
Tuner	Bass Tuner, always on
Tuning range	B0 (30.87 Hz) to C4 (523.25 Hz)
Mute	Mutes speaker output, phones output and balanced output
Master level / Headphones output	Studio quality headphone amp
Recommended HP impedance	32 to 600 Ohm
Mains supply	100 to 240 V~ 50/60 Hz (200 W @ 1/8 of maximum output)
Power module rating	BH550: 550 W
	BH800: 800 W
Speaker output	Neutrik speakOn™
Balanced output	Balanced XLR, pre/post preamp
Balanced output maximum	+2 dBu
Bal. output optimal load impedance	600 Ohm
Rehearsal input	1/8" jack input, fits to iPod®
Humidity	Maximum 90 % non-condensing
Dimensions	241 x 55 x 279 mm / 11" x 9.5" x 2.2"
Weight	BH550: 2.8 kg / 6.1 pounds
	BH800: 3.0 kg / 6.6 pounds
Finish	Brushed and anodized aluminum front plate, metal chassis

Specifications are subject to change without notice.





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