

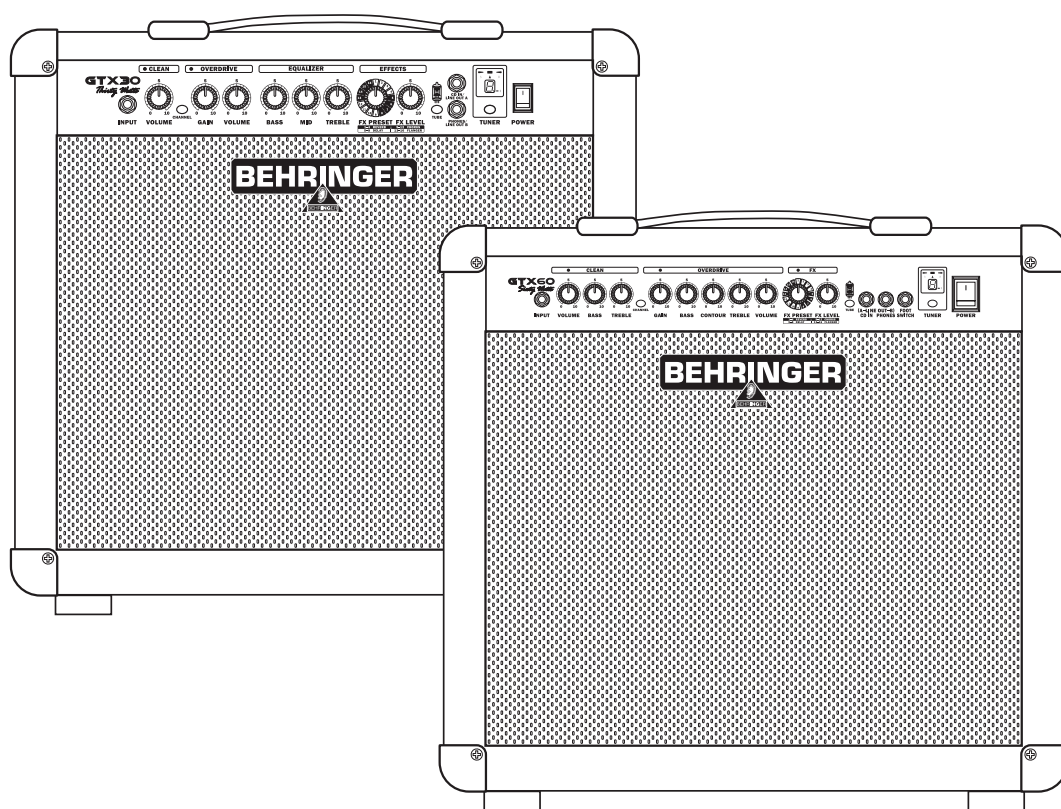
GUITAR COMBO

GTX60/GTX30

User Manual

en

A50-99230-08002



www.behringer.com





GUITAR COMBO GTX30/GTX60

Important Safety Instructions



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.

 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.



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.

WARNING

THIS EQUIPMENT IS CAPABLE OF DELIVERING SOUND PRESSURE LEVELS IN EXCESS OF 90 dB, WHICH MAY CAUSE PERMANENT HEARING DAMAGE.




- 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 and sharp edges. Be sure that the power cord is protected particularly at plugs, convenience receptacles and the point where it exits 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 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.

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.

Foreword



Dear Customer,
Welcome to the team of GUITAR COMBO users, and thank you very much for expressing your confidence in us by purchasing this device.

Writing this foreword for you gives me great pleasure, because it represents the culmination of many months of hard work delivered by our engineering team to achieve a very ambitious goal: to present you with an extraordinary guitar amp that gives you a maximum of flexibility and performance with its modern sound and wealth of functions. The task of

designing our new product certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician.

Meeting your expectations also meant a lot of work and night shifts. But it was fun, too. Developing a product usually brings a lot of people together. What a great feeling it is when all who participated in such a project can be proud of what they've achieved.

It is our philosophy to share our enjoyment with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've made a significant contribution to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely reasonable price. All of this will enable you to give free rein to your creativity without being hampered by budget constraints.

We are often asked how we manage to produce such high-quality devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers mean large sales volumes, enabling us to get better purchasing terms for components, etc. Isn't it only fair to pass this benefit on to you? Because we know that your success is our success too!

I would like to thank everyone who has made the GUITAR COMBO possible. From the developers to the many other employees at this company, each has made a personal contribution to you, the BEHRINGER user.

My friends, it's been worth the effort!

Thank you very much,

Uli Behringer

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GUITAR COMBO GTX30/GTX60

1. Introduction

Congratulations! By purchasing the GUITAR COMBO, you now own the newest generation of guitar amp. It offers an extremely broad range of options and possibilities, the only limit being your own creativity. The GUITAR COMBO is an allrounder with so many features that you'll hardly need any other equipment.

The demands placed on a guitar amp are nowadays very broad. A guitarist should offer a wide array of sounds. That's why it is very important to us to be able to offer you maximum sound diversity as well as a variety of connection possibilities with your GUITAR COMBO. Don't worry, you will quickly master the GUITAR COMBO and learn how to use all its capabilities easily and intuitively. With its up-to-date circuitry, the GUITAR COMBO features the functionality and reliability of a truly modern guitar amp.

VTC Virtual Tube Circuitry

The specially developed VTC Virtual Tube Circuitry gives your sound the unique vintage flavor of classic tube amps.

1.1 Before you get started

Your product was carefully packed at the factory to ensure safe transport. Nevertheless, if the box is damaged inspect the unit immediately for signs of damage.

- ☞ **If the unit is damaged, please do NOT return it to us, but notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be granted.**
- ☞ **Always use the original box to prevent damage during storage or transport.**
- ☞ **Make sure that children cannot play unsupervised with the unit or its packaging.**
- ☞ **Please ensure proper disposal of all packaging materials. Recycle whenever possible.**

Ensure adequate air supply. To avoid overheating, do not place the unit near radiators, etc.

- ☞ **Please make sure that all devices are properly grounded/earthed. For your own safety, never remove or disable the ground/earth conductors from the devices or on the power cords. The unit must always be connected to the mains outlet with a protective grounding connection.**

1.1.1 Online registration

Please register your new BEHRINGER equipment right after your purchase by visiting www.BEHRINGER.com and read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, it is our intention to have it repaired as quickly as possible. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information).

Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

* For customers of the EU, different designations can be applied. Customers from the EU get further informations from BEHRINGER Support Germany.

- ☞ **The sound quality may diminish within the range of powerful broadcasting stations and high-frequency sources. Increase the distance between the transmitter and the unit, and use shielded cables for all connections.**
- ☞ **We would like to draw your attention to the fact that extremely loud sound levels may damage your hearing as well as your headphones. Turn all VOLUME controls fully to the left before you switch on the unit. Make sure you select a suitable volume at all times.**

2. Control elements

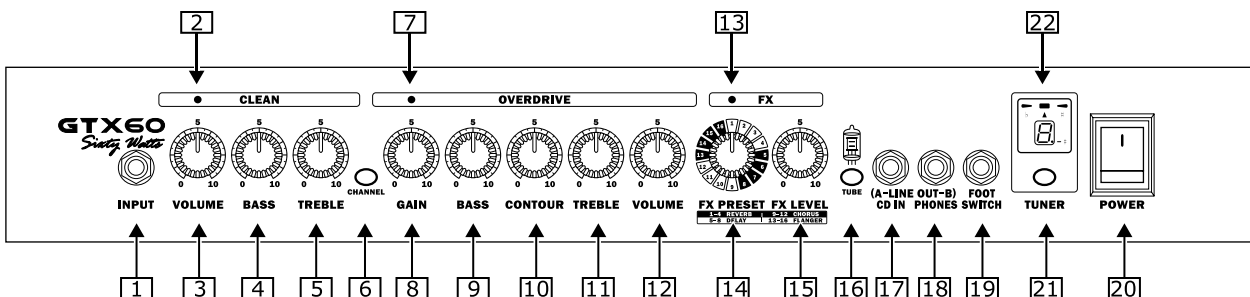


Fig. 2.1: GUITAR COMBO control elements (front panel)

2.1 Front panel

- 1** The *INPUT* socket is the 1/4" connector for your guitar. Please use a standard 1/4" guitar cable.

2.1.1 CLEAN channel

- 2** The *CLEAN CHANNEL* LED lights up when the channel is active.
- 3** The *VOLUME* control determines the volume of the CLEAN channel.
- 4** The *BASS* control in the EQ section boosts or cuts the bass frequencies on the CLEAN channel (GTX60 only).
- 5** The *TREBLE* control adjusts the treble frequencies on the CLEAN channel (GTX60 only).
- 6** Press the *CHANNEL* button to switch between the CLEAN and *OVERDRIVE* channels. The channel LED lights up when the channel is activated. You can also switch between channels using the footswitch sold with all models.

2.1.2 OVERDRIVE channel

- 7** The *OVERDRIVE CHANNEL* LED lights up when the channel is active.
- 8** The *GAIN* control determines the amount of gain applied and hence the degree of distortion in the *OVERDRIVE* channel.
- 9** The *BASS* control in the EQ section boosts or cuts the bass frequencies.
- 10** Use the *CONTOUR* control for additional, highly characteristic adjustment of the midrange, so as to easily create traditional as well as ultra-modern guitar sounds.
- 11** The *TREBLE* control adjusts the treble frequencies.
- 12** **On the GTX60, the controls **9**, **10** and **11** are only effective on the *OVERDRIVE* channel since this amplifier has a dedicated equalizer for the *CLEAN* channel (see also **4** and **5**).**
- 12** The *VOLUME* control adjusts the volume level of the *OVERDRIVE* channel.

2.1.3 FX section

- 13** The *FX* LED lights up when the effects processor is active.
- 14** Use the *FX PRESET* control to select one of 16 effects.

Preset	FX
1 - 4	Reverb
5 - 8	Delay
9 - 12	Chorus
13 - 16	Flanger

Tab. 2.1: Effects

- 15** The *FX LEVEL* control adjusts the mix ratio between the original and the effect signal.
- 16** The *TUBE* push button activates and deactivates the VTC Virtual Tube Circuitry.

2.1.4 Connectors and POWER switch

- 17** The *CD IN* connector allows you to connect the output signal of a CD player, tape deck, or CD/MD walkman. For example, you can play back music CDs or CDs accompanying a guitar tutor while practicing. This connector can also be used as a *LINE OUT* output. In this case, the guitar signal has no speaker simulation applied to it and can be routed to an external amp. This will not mute the built-in loudspeaker of the GUITAR COMBO.
- 18** The *LINE OUT/PHONES* jack is for headphones connection. Internal speaker simulation is applied to the headphones signal in order to produce an authentic signal. The built-in loudspeaker of the GUITAR COMBO is muted when this connector is used.

- 19** The headphones output signal can also be routed to a mixing console or other sound reinforcement system. To do so, connect the headphones output with the line input on the mixing console. Use a standard cable with 1/4" TS connectors. If hum problems occur, you may want to insert a DI box, such as the BEHRINGER ULTRA-DI G1100 or DI120.

- 20** At extremely high volume levels some headphones tend to produce distortion. Please turn the volume down until the distortion is no longer present.

- 19** Use the *FOOTSWITCH* jack to connect the 1/4" TRS plug of the footswitch supplied with the unit. The footswitch has three functions: to switch between the two channels, to turn the FX on and off, and to activate and deactivate the tuner (GTX60 only).

- 20** The *POWER* switch turns your GUITAR COMBO on and off. It should always be in the OFF position when connecting the unit to the mains.

- 21** Please note that switching the unit off does not mean that it is fully disconnected from the mains. To disconnect the unit from the mains entirely, pull out the mains connector. Before installation, please make sure that the mains connector has not been damaged. If you do not use the unit for an extended period of time, please disconnect it from the mains.

2.1.5 Chromatic tuner

- 21** The *TUNER* push button activates and deactivates the integrated tuner. You can also activate and deactivate the tuner by keeping the *EFFECT* push button on the footswitch pressed (GTX60 only).
- 22** The *DISPLAY* shows the note played. A dot indicates that the note played is a semitone higher (F. = F# (F sharp), G. = G# (G flat), etc.). The green LED lights up as soon as the displayed note is in tune. Pitch variations above and below the desired pitch are indicated by two LEDs on each side of the green LED. The brighter these LEDs glow, the greater the deviation. The reference tone A at 440 Hz serves as standard pitch.

2.2 Rear panel

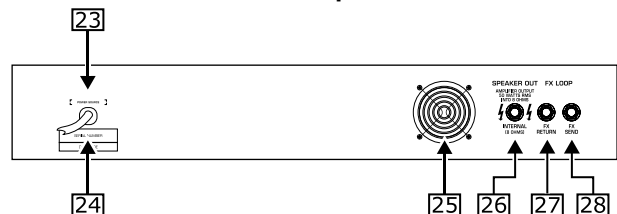


Fig. 2.2: GUITAR COMBO control elements (rear panel)

- 23** This is the power cord.
- 24** SERIAL NUMBER.
- 25** This is the cooling vent.
- 26** The *SPEAKER OUT* jack (1/4" TS connector) is used to connect to a loudspeaker. The minimum impedance is 8 Ohms (GTX60 only).
- 27** The *FX RETURN* input is used to connect to the output of an external effects unit with a shielded 1/4" TS connector (GTX60 only).
- 28** The *FX SEND* output is used to connect the input of an external effects unit with a shielded 1/4" TS connector (GTX60 only).

GUITAR COMBO GTX30/GTX60

3. Application example

The GUITAR COMBO features plenty of connectors for a wealth of applications. Here is an example of how flexible your GUITAR COMBO can be:

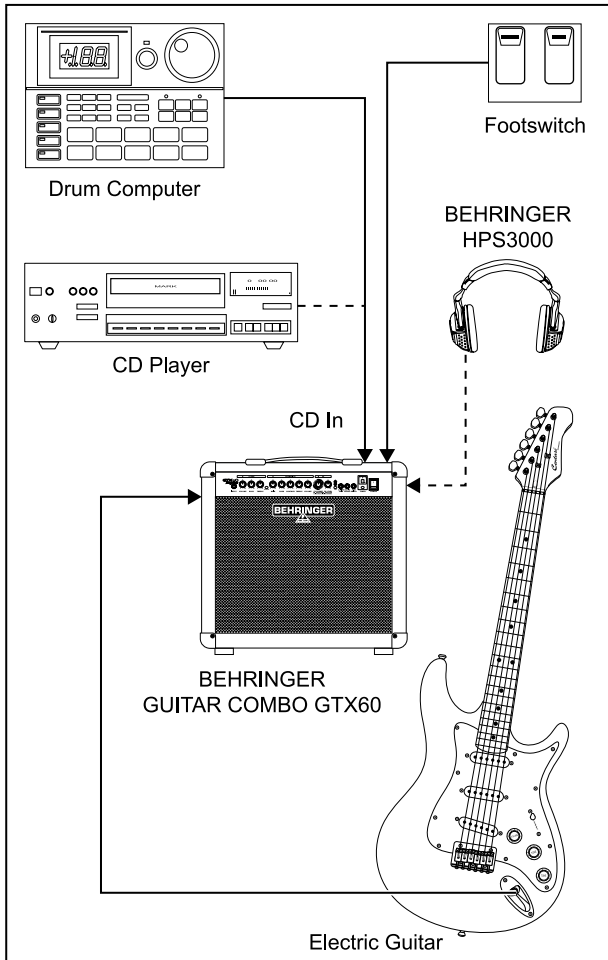


Fig. 3.1: GTX60 standard setup

For practicing in the rehearsal room or at home, please wire your GUITAR COMBO as shown in fig. 3.1. Connect a CD player or drum machine to the CD IN input. If you want to practice with headphones, connect your headphones to the LINE OUT/PHONES jack. The built-in loudspeaker will be muted automatically. Connect the dual footswitch supplied with the unit to the FOOTSWITCH jack on the GUITAR COMBO. The CHANNEL footswitch switches between the channels. The IN/OUT footswitch turns the effect on and off (GTX60 only).

4. Installation

Except for the headphones output and the CD IN input (1/4" TRS connectors), all audio inputs and outputs on the BEHRINGER GUITAR COMBO are 1/4" TS connectors. Please see Chapter 5, "Specifications" for more information.

Please ensure that the unit is installed and operated only by people qualified to do so. During installation and operation the user must have sufficient electrical contact to earth. Electrostatic discharge may affect the operation of the unit.

Unbalanced 1/4" TS connector

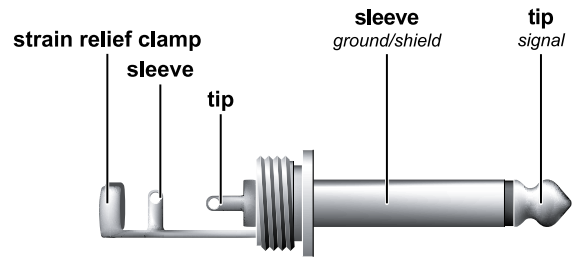
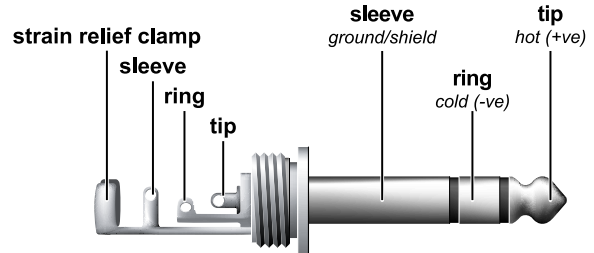


Fig. 4.1: 1/4" TS connector

Balanced 1/4" TRS connector



For connection of balanced and unbalanced plugs, ring and sleeve have to be bridged at the stereo plug.

Fig. 4.2: 1/4" TRS connector

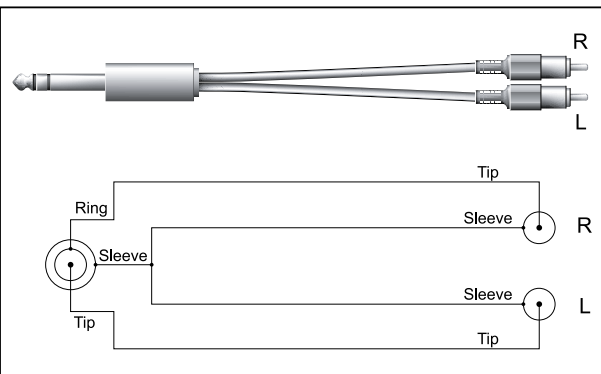


Fig. 4.3: Stereo adapter cable

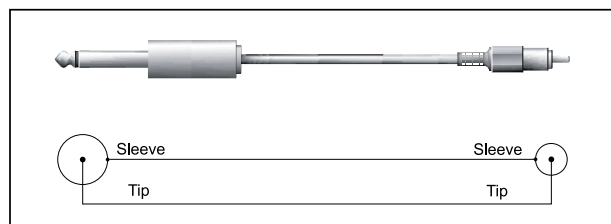


Fig. 4.4: Mono adapter cable

5. Specifications

	GTX60	GTX30
AUDIO INPUTS		
INPUT	1/4" TS, RF filtered	
FX RETURN	1/4" TS	
Input impedance	approx. 1 M Ω , unbalanced	
CD IN	1/4" TRS	
Input impedance	approx. 4 k Ω , unbalanced	
AUDIO OUTPUTS		
FX SEND	1/4" TS	
LINE OUT/PHONES	1/4" TRS, unbalanced	
Output level	max. +10 dBV	
Output impedance	100 Ω	
LOUDSPEAKER OUTPUTS		
Type	1/4"	
Min. load impedance	4 Ω	
AMPLIFIER		
Peak power	50 Watts / 8 Ω	30 Watts / 4 Ω
DIGITAL SIGNAL PROCESSING		
Converter	24-bit sigma-delta	
Sample rate	40 kHz	
LOUDSPEAKER		
Type	12"	12"
Model	BUGERA Vintage Guitar Series	
	12G50J8	12G30J4
Impedance	8 Ω	4 Ω
Continuous power (IEC268-5)	50 Watts	30 Watts
Peak power	200 Watts	120 Watts
POWER SUPPLY		
Power consumption	max. 90 Watts	max. 45 Watts
Fuse 100 V~, 50/60 Hz	T 1.6 A H 250 V	T 1.25 A H 250 V
Fuse 120 V~, 50/60 Hz	T 1.25 A H 250 V	T 1.25 A H 250 V
Fuse 220-230 V~, 50/60 Hz	T 630 mA H 250 V	T 630 mA H 250 V
DIMENSIONS/WEIGHT		
Dimensions (H x W x D)	530 x 525 x 280 mm	475 x 445 x 245 mm
	20.9 x 20.7 x 11"	18.7 x 17.5 x 9.7"
Weight	35 lbs (15.9 kg)	24.4 lbs (11.1 kg)

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

6. Warranty

§ 1 Other warranty rights and national law

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.
2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

§ 2 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting www.behringer.com (alternatively www.behringer.de) and kindly read the terms and conditions of our warranty carefully.

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

§ 3 Warranty

1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 5, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.
2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.
3. Warranty claims other than those indicated above are expressly excluded.

§ 4 Return authorization number

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER during normal business hours BEFORE returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.
2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.
3. Shipments without freight prepaid will not be accepted.

§ 5 Warranty regulations

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced.
2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.
3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, tubes, guitar strings, illuminants and similar parts.
4. Damage/defects caused by the following conditions are not covered by this warranty:

- ▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.
 - ▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.
 - ▲ damage/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.
5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.
 6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.
 7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

§ 6 Warranty transferability

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

§ 7 Claim for damages

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

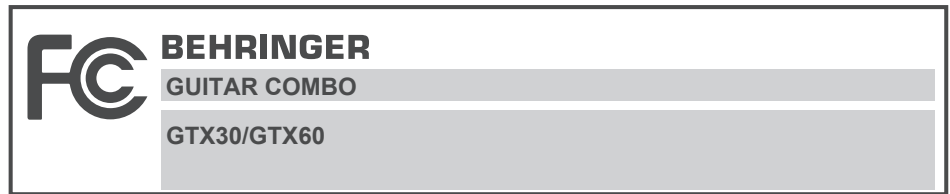
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FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Responsible party name: **BEHRINGER USA, Inc.**

Address: **18912 North Creek Parkway, Suite 200
Bothell, WA 98011, USA**

Phone/Fax No.: **Phone: +1 425 672 0816,
Fax: +1 425 673 7647**

hereby declares that the product(s)



GUITAR COMBO GTX30



GUITAR COMBO GTX60

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

This device 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.

Note: 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 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.

Important information:

Changes or modifications to the equipment not expressly approved by BEHRINGER USA can void the user's authority to use the equipment.

www.behringer.com

