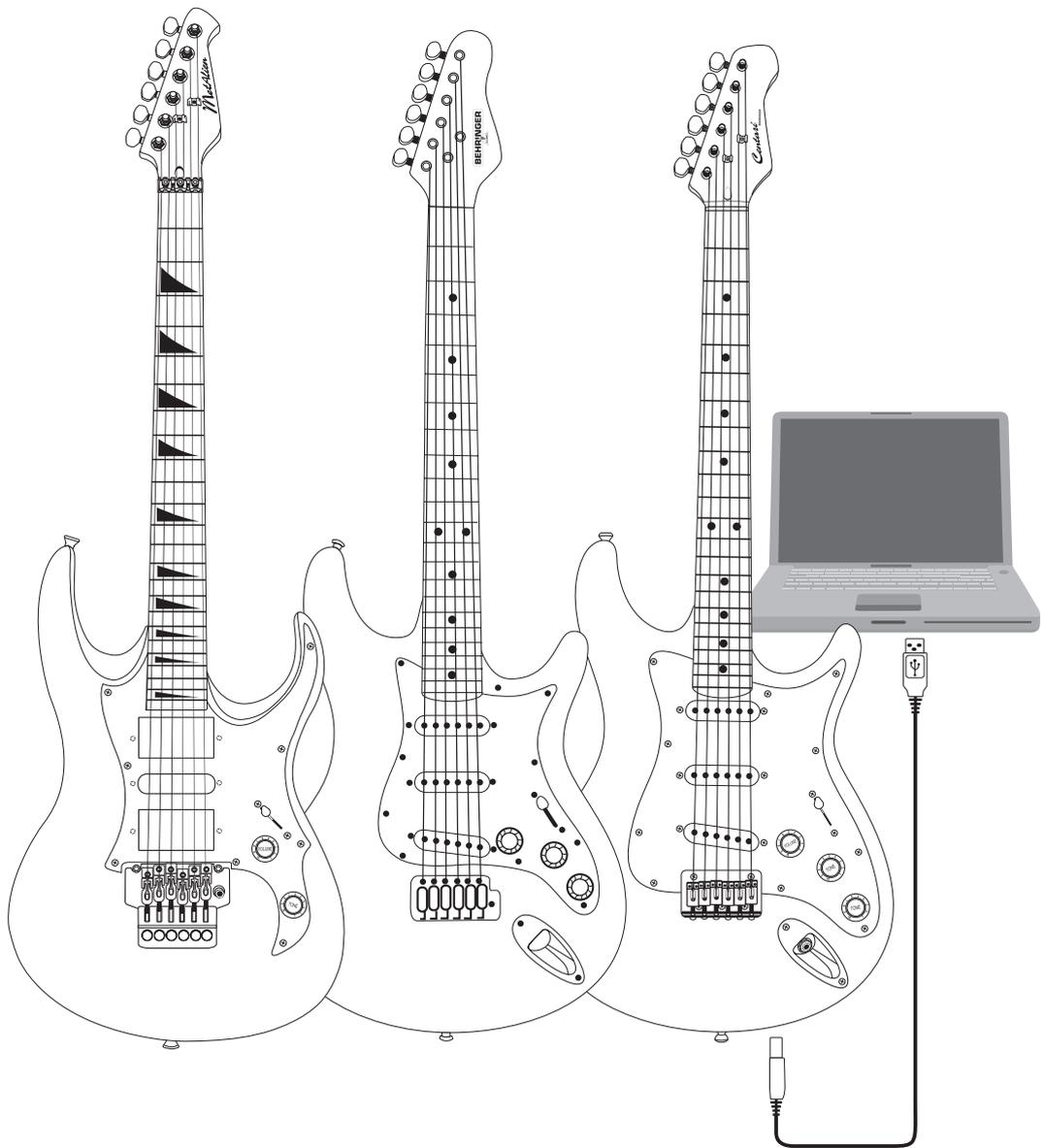


iAXE USB-GUITAR

User Manual

en

A50-61213-00003



www.behringer.com



Important Safety Instructions



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.
-  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.
-  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.
-  The sound quality may diminish within the range of powerful broadcasting stations and high-frequency sources. Increase the distance between the transmitter and the device and use shielded cables for all connections.

- 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 install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 8) Only use attachments/accessories specified by the manufacturer.
- 9) 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.

1. Introduction

Thank you for expressing your confidence in us by purchasing the BEHRINGER iAXE USB-GUITAR.

Your computer will become the ultimate working platform on which you can use the classic effects, in the studio as well as on stage. BEHRINGER presents the groundbreaking iAXE USB-Guitar which gives you the possibility to record the brilliant song, which just came to your mind, immediately and directly to your computer.

With a notebook and the BEHRINGER iAXE USB-Guitar it is now possible to work on the go, be it train or hotel.

The iAXE guitar's scope of delivery includes a first-class modeling software with virtual amps and effects pedals. Accompany songs in MP3, WAV, AIFF format which you can play from your computer or Mac.

1.1 Before you get started

1.1.1 Shipment

Your iAXE USB-Guitar was carefully packed at the assembly plant to assure secure transport. Should the condition of the cardboard box suggest that damage may have taken place, please inspect the unit immediately and look for physical indications of damage.

Damaged equipment should NEVER be sent directly to us. Please inform the dealer from whom you acquired the unit immediately as well as the transportation company from which you took delivery. Otherwise, all claims for replacement/repair may be rendered invalid.

Please always use the original packaging to avoid damage due to storage or shipping.

Never let unsupervised children play with the iAXE USB-Guitar or with its packaging.

Please dispose of all packaging materials in an environmentally friendly fashion.

1.1.2 Care

Do not lean your guitar against walls; it could get knocked over or bumped into.

Never leave your guitar lying on the floor or on the edge of your bed where it may get stepped on or knocked off or even sat on.

Never leave your instrument in the trunk of a car when the weather is very warm or extremely cold. Extreme temperatures can be harmful to your gear.

1.1.3 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.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. 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 (www.behringer.com/support).

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

Thank you for your cooperation!

2. Controls and connections

The iAXE624 can either be connected directly via jack to an amplifier or by connecting the provided USB cable to your PC/Mac computer. At the same time, the USB connection acts as power supply for the iAXE624 guitar.

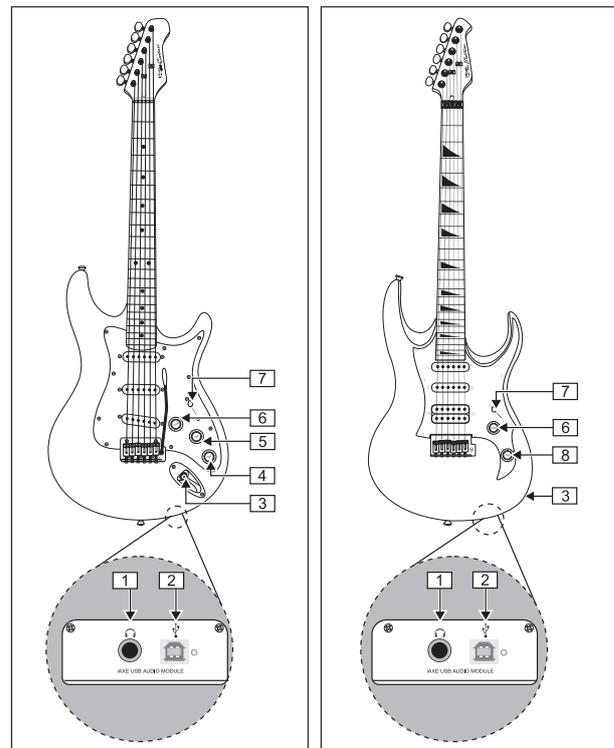
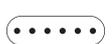
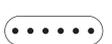
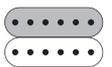


Fig. 2.1: Control elements and connections of iAXE393 & CENTARI iAXE624 (left), and METALIEN iAXE629 (right)

- 1 You can use a commercially available ¼" TRS for the ↻-connection.
 - 2 You can connect the guitar with the USB connection to your computer via USB. The blue control LED indicates that a connection to the computer has been established.
 - 3 The ¼" TS connection can be used to connect the iAXE guitar to any standard guitar amplifier. (See Fig. 4.2)
 - 4 You can use the TONE control T2 to reduce the high frequencies from the guitar's mid pickup.
 - 5 You can use the TONE control T1 to reduce the high frequencies from the guitar's neck pickup.
 - 6 The VOLUME control lets you change the volume of the guitar output. The headphone volume needs to be changed by using the software on the computer.
 - 7 Use the pickup selector switch to select different pickup combinations. Each position has its own sound.
 - 8 You can use the TONE control to reduce the guitar's high frequencies.
- These controls affect both conventional and USB outputs.**
 - We would like to draw your attention to the fact that extremely loud sound levels may damage your hearing as well as your headphones/loudspeakers. Turn the VOLUME control fully to the left before you switch on the unit. Be careful to select a suitable volume at all times.**
 - When using your guitar with the supplied GUITAR COMBOS software, please note that the volume setting of the virtual amplifier is saved for each individual preset. This may result in a noticeable difference in volume when changing from one preset to another.**

	pickup switching combinations				
pickup selector	 1. Neck	 2. Neck/Mid	 3. Mid	 4. Mid/Bridge	 5. Bridge
neck pickup					
mid pickup					
bridge pickup					
tone control	T1	T1 + T2	T2	T2	none

Tab. 2.1: Switching combinations of iAXE393 & CENTARI iAXE624 (Grey = activated, white = deactivated)

	pickup switching combinations				
pickup selector	 1. Neck	 2. Neck/Mid	 3. Mid	 4. Mid/Bridge	 5. Bridge
neck pickup					
mid pickup					
bridge pickup					

Tab. 2.2: Switching combinations of METALIEN iAXE629 (Grey = activated, white = deactivated)

3. Important notes

- ▲ To avoid damage to the USB plug or socket, disconnect the USB cable from the guitar when the instrument is not being played. Take extra care not to stand the guitar on the USB plug.
- ▲ For more information on tuning and maintenance of your guitar, please read the tutorial which is included with your guitar.
- ▲ Visit our homepage for more information about setting up the tremolo, the intonation and the action of the strings on your guitar. We recommend that such adjustments are performed only by an experienced guitar technician.
- ▲ When replacing strings on a guitar with a tremolo system we recommend changing strings one-by-one. This ensures that the tremolo system remains in balance during the whole procedure and reduces the risk of string breakage due to over-tensioning. Furthermore, it takes much longer to restore the correct positioning of the tremolo and to tune the guitar after restringing if all strings were removed at once.

4. Application examples

The iAXE USB-Guitar is an extraordinary guitar. You can connect it directly to a computer and record music or play along to your favorite songs. Additionally, you can enjoy the exciting sounds of virtual guitar amps and stomp boxes. The iAXE USB-Guitar is the perfect solution if you want to start playing immediately. It is so easy—plug and rock!

4.1 Operation of the USB connector

Use the USB cable, which is included, to connect the iAXE USB-Guitar to your computer. The USB unit of the iAXE USBGuitar is bus powered—no separate power supply is needed. The blue LED below the USB connector (2) lights up and the system will indicate the connection of a USB audio unit.

Connect your headphones to the PHONES-connector on the guitar, which is located directly above the USB-connector. If you don't

want to use your headphones, you can also connect a pair of active monitors to the PHONES-connector—the BEHRINGER MONITOR SPEAKERS MS16 are a perfect choice for this application.

If you own a mixing console, you can do the following: connect a stereo input of the mixing console to the PHONES-connector and the active monitors to the control room outputs of the mixing console.

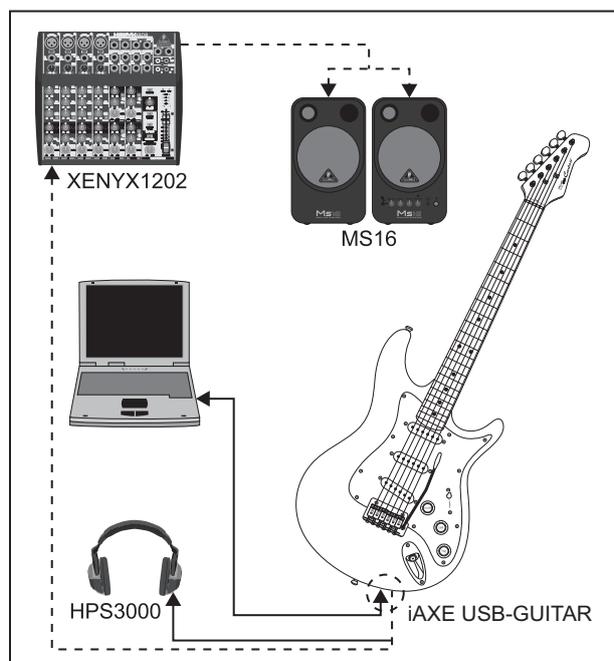


Fig. 4.1: Wiring of the USB guitar

4.2 Connection to a guitar amp

Instead of using the USB function of the guitar, you can also use the guitar the same way as a conventional electric guitar. To do so, simply connect the 1/4" TS connector (3) to a guitar amp instrument input. This gives you the opportunity to play without a computer, for example, when jamming with your band.

The conventional guitar output works independently from the USB connector, meaning you can simultaneously play via the USB port and a guitar amp. This way, you can set up a means of direct monitoring to avoid latency problems.

The advantage of this setup is that while listening to the sound coming from your guitar amp, you can record a clean guitar sound.

Using plug-ins, you can experiment with different effects and amplifiers afterwards.

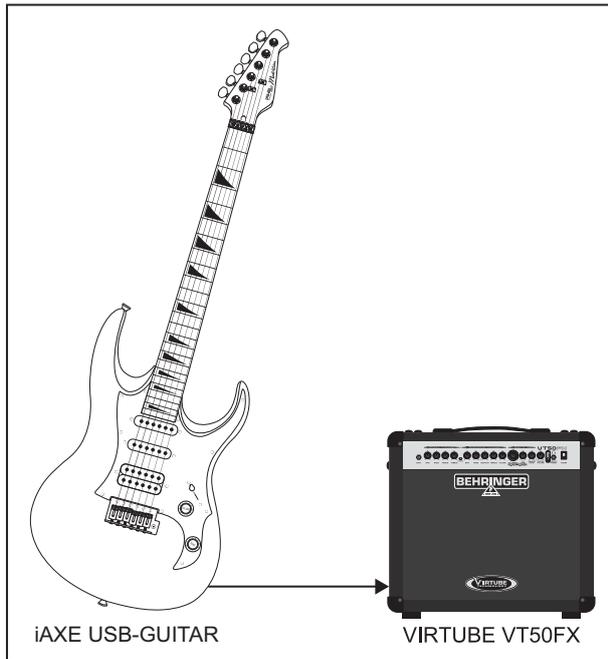


Fig. 4.2: Connection to a guitar amp

4.3 Using the iAXE with a BEHRINGER V-AMP

If you're in need of latency-free monitoring during multitrack recording, then the BEHRINGER V-AMP is the ideal partner for your iAXE. Make the connections as follows:

- ▲ Connect your iAXE to the V-AMP's instrument input using a standard instrument cable.
- ▲ Connect the iAXE's headphone output to the V-AMP's aux input using a balanced cable with stereo phone jacks.

This allows you to use the V-AMP's aux level control to adjust the playback volume.

To record the guitar, connect your iAXE to the computer using the USB cable. You can set up your preferred monitoring sound on the V-AMP and record the dry, unprocessed guitar sound on your computer. For this purpose you should use a sequencing software, for example the program energyXT2 Compact which can be found on the CD-ROM included with the iAXE package.

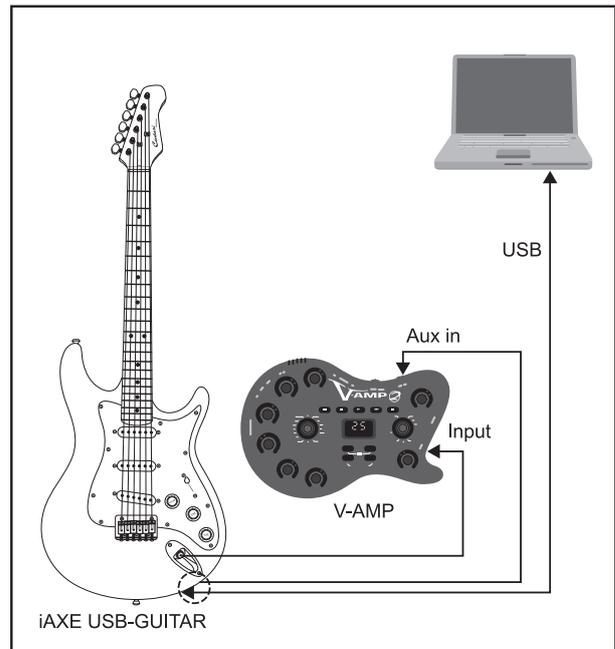


Fig. 4.3: USB-Guitar with BEHRINGER V-AMP

5. Audio connections

With both connection options—the common guitar output and the additional USB output—a variety of applications are at your disposal. The well-known 1/4" output jack can be connected to the input of your guitar amplifier as usual. With the help of the integrated USB interface you turn your computer into an ultimate recording studio.

Whether for studio application or practicing at home, the audio connections used always remain the same:

5.1 Wiring

For connecting your iAXE USB-Guitar to your guitar amplifier, you need a standard instrument cable.

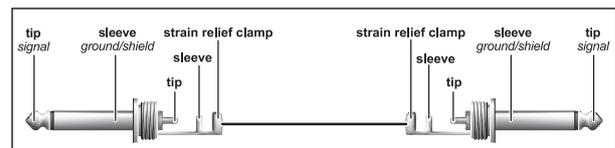


Fig. 5.1: Unbalanced instrument cable with 1/4" TS connector

5.2 Headphone connection

The iAXE USB-Guitar provides a connection for headphones. You can connect any standard commercial headphone with a 1/4" TRS jack plug. For mini TRS jack plugs, you will need a suitable adapter. You can see the required pin allocation from the following diagram.

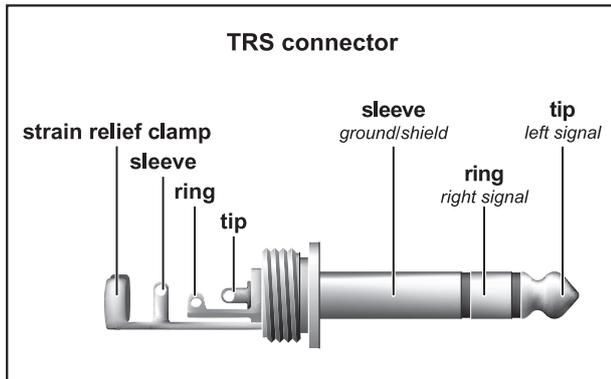


Fig. 5.2: 1/4" TRS stereo connector

5.3 USB cable

The iAXE USB-Guitar comes with a USB output for connecting USB compatible devices. Here you can connect any standard USB cable.

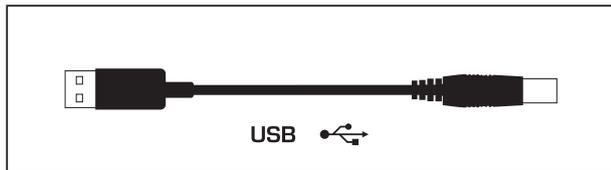


Fig. 5.3: USB connector cable

6. Specifications

Guitar out

Connector 1/4" TS, unbalanced

Phones out

Connector 1/4" TRS stereo jack
Output impedance approx. 50 Ω
Max. output level 4.5 dBu, 2 x 8.5 mW @ 32 Ω

USB 1.1

Connector type A

Digital processing

Converter 16-bit converter
Sample rate 32.0 / 44.1 / 48 kHz

Power supply

USB connection 5 V[±], 100 mA max.

Dimensions/Weight

iAXE393

Dimensions (H x W x D) approx. 39" x 13" x 2 1/3"
(990 mm x 330 mm x 60 mm)
Weight approx. 6 3/5 lbs (3.0 kg)

CENTARI iAXE624

Dimensions (H x W x D) approx. 38 3/4" x 13 1/5" x 2 2/5"
(985 mm x 335 mm x 62 mm)
Weight approx. 6 3/5 lbs (3.0 kg)

METALIEN iAXE629

Dimensions (H x W x D) approx. 39 2/5" x 12 1/5" x 2 3/5"
(1000 mm x 310 mm x 65 mm)
Weight approx. 7 1/4 lbs (3.3 kg)

System requirements (PC / Mac)

Operating system	Win XP	Mac OS X
Processor min.	Pentium 700 MHz	G4 733 MHz
	Athlon XP 1.33 GHz	Intel Core Duo 1.66
RAM	256 MB	512MB

Software

Applications please see "Software Installation Guide"
Driver (Windows) high-performance driver
BEHRINGER USB AUDIO
for Win 98 (SE) / ME / 2000 / XP / Vista
Driver (Mac OS X) Core Audio

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.

7. 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) year¹ 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 damage

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.

¹ Customers in the European Union please contact BEHRINGER Germany Support for further details.

Technical specifications and appearance are subject to change without notice. The information contained herein is correct at the time of printing. All trademarks (except BEHRINGER, the BEHRINGER logo, JUST LISTEN, iAXE, CENTARI and METALIEN) mentioned belong to their respective owners and are not affiliated with BEHRINGER. BEHRINGER accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colors and specifications may vary slightly from product. Products are sold through our authorized dealers only. Distributors and dealers are not agents of BEHRINGER and have absolutely no authority to bind BEHRINGER by any express or implied undertaking or representation. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of BEHRINGER International GmbH. Mac and Mac OS are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Windows is a registered trademark of Microsoft Corporation in the United States and other countries. ASIO is a trademark and software of Steinberg Media Technologies GmbH. energyXT2 and energyXT2 Compact are trademarks of XT Software AS incorporated in Norway. Guitar Combos and Guitar Rig are registered trademarks of Native Instruments GmbH.



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)



iAXE USB-GUITAR, iAXE393



iAXE USB-GUITAR, iAXE624



iAXE USB-GUITAR, iAXE629

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.

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