USB-GUITAR CENTARI IAXE624

User's manual

Version 1.0 March 2007





1. INTRODUCTION

Thank you for expressing your confidence in us by purchasing the BEHRINGER CENTARI iAXE624 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 CENTARI iAXE624 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 CENTARI iAXE624 USB-Guitar it is now possible to work on the go, be it train or hotel.

The iAXE624 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

1.1.1Shipment

Your iAXE624 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 iAXE624 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 er even sat on.

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

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.

1.1.3 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. 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 (www.behringer.com).

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.

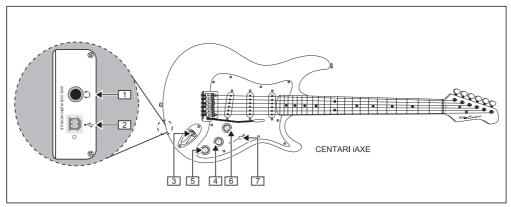


Fig. 2.1: Control elements and connections

CENTARI iAXE624 USB-GUITAR

- 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 iAXE624 guitar to any standard guitar amplifier. (See Fig. 4.2)
- 4 You can use the *TONE*-control *T1* to reduce the high frequencies from the guitar's neck pickup.
- 5 You can use the *TONE*-control *T2* to reduce the high frequencies from the guitar's mid pickup.
- The VOLUME controller lets you change the volume of the guitar output. The headphone volume needs to be changed by using the software on the computer.
- These controllers affect both conventional and USB output.

- 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.
- Use the pickup selector switch to select different pickup combinations (see table 2.) Each position has it's own sound.

	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

Table 2. Switching combinations of your iAXE624 (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 overtensioning. 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.

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4. APPLICATION EXAMPLES

The iAXE624 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 iAXE624 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

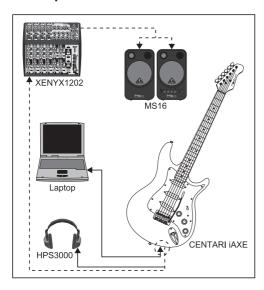


Fig. 4.1: Wiring of the USB guitar

Use the USB cable, which is included, to connect the iAXE624 USB-Guitar to your computer. The USB unit of the iAXE624 USB-Guitar 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 as well as the DIGITAL MONITOR SPEAKERS MS20 and MS40 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.

4.2 Connection to a guitar amp

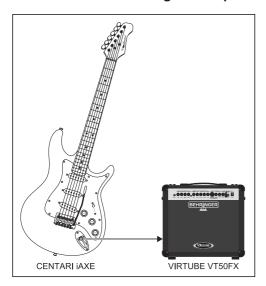


Fig. 4.2: Connection to a guitar amp

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 ¼" 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.

4.3 Using the iAXE624 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 iAXE624. Make the connections as follows:

- Connect your iAXE624 to the V-AMP's instrument input using a standard instrument cable.
- Connect the iAXE624'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 iAXE624 to the computer using the USB cable. You can set up your prefered 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 Kristal which can be found on the CD-ROM included with the iAXE624 package.



CENTARI iAXE624 USB-GUITAR

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 ¼" 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

When connecting your CENTARI iAXE624 to a conventional guitar amplifier, we recommend using a well-shielded, low-noise instrument cable.

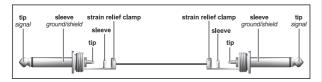


Fig. 5.1: Unbalanced instrument cable with 1/4" TS connector

5.2 Headphone connection

The iAXE624 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.

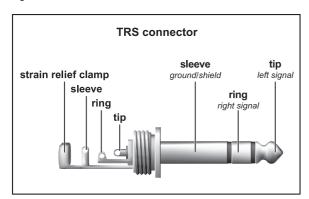


Fig. 5.2: 1/4" TRS stereo connector

5.3 USB cable

The iAXE624 USB-Guitar comes with a USB output for connecting USB compatible devices like notebooks or MP3 players. 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

1/4" TRS stereo jack Connector 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

Dimensions

 $(H \times W \times D)$ approx. 985 x 335 x 62 mm

(38 3/4" x 13 1/5" x 2 2/5")

Weight approx. 3.0 kg (6 3/5 lbs) SYSTEM REQUIREMENTS SOFTWARE (PC/MAC)

Operating system Win XP Mac OS X v10.3.x Pentium 700 MHz Processor min. G4 733 MHz

Athlon XP 1.33 GHz

256 MB **RAM** 512MB

SOFTWARE

Applications please see "Software Installation Guide" Driver (Windows)

high-performance driver

BEHRINGER USB AUDIO

for Win 98 (SE)/ME/2000/XP

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.

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CENTARI iAXE624 USB-GUITAR

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!

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§ 3 WARRANTY

- 1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries listed on the enclosed page, 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 (see enclosed list) 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. Damages/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.
- damages/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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