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HBV 990

User Manual

Electric Violin

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# 1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under [www.thomann.de](http://www.thomann.de).

## 1.1 Further information

On our website ([www.thomann.de](http://www.thomann.de)) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

## 1.2 Notational conventions

This manual uses the following notational conventions:

### Letterings

The letterings for connectors and controls are marked by square brackets and italics.

**Examples:** *[VOLUME]* control, *[Mono]* button.

### Instructions


The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

#### Example:

1. ➤ Switch on the device.
2. ➤ Press *[Auto]*.  
⇒ Automatic operation is started.
3. ➤ Switch off the device.

### 1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
<b>DANGER!</b>	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
<b>CAUTION!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
<b>NOTICE!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – danger zone.

## 2 Safety instructions

**DANGER!****Danger for children**

Ensure that plastic bags, packaging, etc. are properly disposed of and are not in the reach of babies and young children. Choking hazard! Ensure that children do not detach any small parts (e.g. knobs or the like) from the product. They could swallow the pieces and choke! Never let children play unattended with the product.

**CAUTION!****Possible hearing damage**

Using headphones for a prolonged period and at high volume can cause hearing damage. Avoid using the device at high volume, especially when using headphones.

**NOTICE!****Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations. Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures). Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

**NOTICE!****Possible damage by leaking batteries**

Leaking batteries can cause permanent damage to the device. Take batteries out of the device if it is not going to be used for a longer period.

**NOTICE!****Risk of fire due to incorrect polarity**

Incorrectly inserted batteries may destroy the device or the batteries. Ensure that proper polarity is observed when inserting batteries.

**NOTICE!****Possible property damage by magnetic fields**

Loudspeakers produce a static magnetic field. Therefore, maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.

### 3 Scope of delivery

Thank you very much for purchasing this electric violin. The package includes the following components:

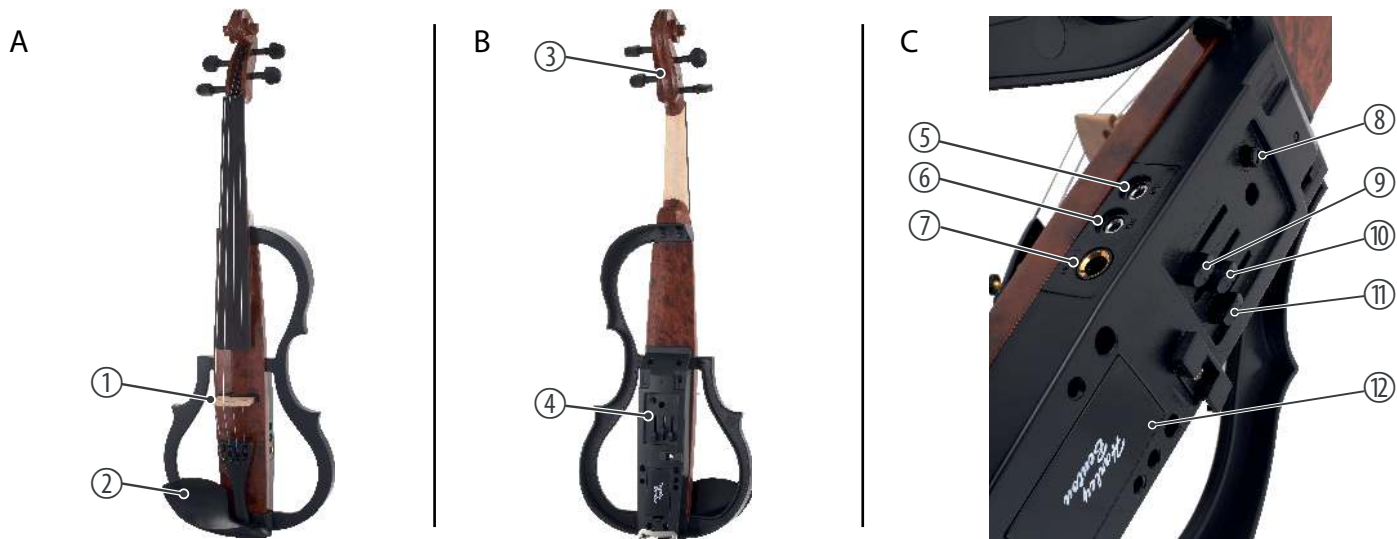
- 1 × electric violin
- 1 × bridge (pre-assembled)
- 1 × strings set (pre-assembled)
- 1 × composite bow
- 1 × bow rosin
- 1 × suitable transport bag

Assembling and tuning your instrument are described in detail in the following sections.



## 4 Assembly instructions

### Overview



<b>A</b> (front side)	1	Bridge
	2	Chin rest
<b>B</b> (rear side)	3	Machine heads
	C	Operating elements
<b>C</b> (operating elements)	5	<i>[MIC]</i> Connector for microphones (3.5 mm jack, stereo).
	6	<i>[PHONE]</i> Headphones socket (3.5 mm jack, stereo)
	7	<i>[LINEOUT]</i> 6.35 mm jack to connect the instrument cable
	8	<i>[Volume]</i> With this control you can adjust the volume
	9	<i>[Bass]</i> With this control you can adjust the low frequencies
	10	<i>[Midd]</i> With this control you can adjust the tone (mid frequencies)
	11	<i>[Treb]</i> With this control you can adjust the high frequencies
	12	Battery compartment

## 4.1 Tuning the strings



Tune all strings with the machine heads using a tuner device to the correct pitch (usually g-d'-a'-e").

## 5 Connections and controls

**CAUTION!****Possible hearing damage**

Using headphones for a prolonged period and at high volume can cause hearing damage.

Avoid using the device at high volume, especially when using headphones.

**NOTICE!****Risk of breakage, possible deformation**

When placing the instrument with the fretboard down, there is a risk of damaging the fingerboard and the tailpiece.

Avoid any compressive load on the rear of the instrument, if it is placed for the assembly or for service work with the fretboard down on a solid surface.



*Before you connect amplifiers or microphones, the volume controls of the violin and the devices to be connected must be set to "Minimum". This avoids loud crack noises when switching on.*



## 5.1 Connecting and inserting the battery

On delivery of the instrument, a suitable battery is enclosed.

Open the battery compartment cover on the back of the instrument and connect the lead wire with correct polarity to the battery. Insert the battery into the battery compartment and close the battery compartment cover.

**NOTICE!****Possible damage by leaking batteries**

Leaking batteries can cause permanent damage to the device.

Take batteries out of the device if it is not going to be used for a longer period.

## 5.2 Connecting the instrument cable

The connector for the instrument cable (1/4" jack, mono) is located at the side of the instrument.

## 5.3 Connecting headphones

The connector for the headphone (3.5 mm jack, stereo) is located at the side of the instrument.



*When using headphones with 1/4" jack, you need an appropriate adapter.*

## 5.4 Connecting audio devices

The connector for audio devices (3.5 mm, mono) is located at the side of the instrument.

## 5.5 Adjusting Volume and Tone

The controls to adjust the volume [*Volume*] and the tone (treble, bass) [*Treble*]/[*Bass*] are located on the back of the instrument.

## 6 Maintenance

### 6.1 Changing strings

**Proceed as follows to change the strings:**

Strings are subject to a natural aging process, which is also affected by the frequency of use of the instrument. Changing the strings is recommended if the sound quality of the instrument decreases audibly. Always replace the complete set of strings (strings of 4/4 length) and always go string by string. In this way you avoid a strong temporary bending of the neck due to reduced string tension. The bridge also remains in the correct position and does not have to be readjusted.

1. ➤ For example, loosen the run-down E string from the capstan of the machine head and from the tailpiece.
2. ➤ Thread the new E string into the tailpiece, pull it over the bridge into the capstan bore of the machine head.
3. ➤ Hook the string end to the capstan and tighten the string tension slowly. At the first windings, pay particular attention that the string is taut to the mechanics.
4. ➤ Make sure that the string is running correctly through the grooves of bridge and nut at the upper end of the neck.
5. ➤ Slowly increase the string tension until the correct pitch is reached. Use a tuner or a pitch pipe for reference.
6. ➤ Proceed in the same way with the A, D and G strings and then tune all strings again successively to the correct pitch. Note that the string tension will drop a little and the instrument needs to be retuned several times until the strings stay in tune.

### 6.2 Battery change



Replace the inserted battery if necessary (weak output signal) or at regular intervals.

Open the battery compartment cover on the back of the instrument. Remove the battery and unplug the connection cable from the battery terminals.

Clamp the power cable with the correct polarity to the new battery. Insert the battery into the battery compartment and close the battery compartment cover.

## 7 Technical specifications

	<b>HBV 990BEM</b>	<b>HBV 990BCF</b>	<b>HBV 990GW</b>	<b>HBV 990SKL</b>
Item no.	325869	325871	325875	325873
Colour	Birds Eye Maple	Black Carbon Fiber	Grey Wood	Skulls
Scale	approx. 32.6 cm			
Body material	Maple	Maple	Basswood	Maple
Fretboard material	Birch			
Neck material	Maple	Maple	Basswood	Maple
Pick-up	Active piezoceramic pick-up system with 9 V battery power supply			
Machine heads	Machine heads			
Dimensions	Total length: approx. 60 cm			
	Lower bout width: approx. 20.5 cm			
	Body length: approx. 35 cm			
	Mid bout width: approx. 11 cm			
	Saddle width: approx. 2.5 cm			
	Maximum height: approx. 9 cm			
Weight	580 g, without battery			

	<b>HBV 990BK</b>	<b>HBV 990AM</b>	<b>HBV 990WH</b>	<b>HBV 990RD</b>
Item no.	351782	351786	351784	351785
Colour	Black	Amber	White	White
Scale	approx. 32.6 cm			
Body material	Basswood			
Fretboard material	Birch			
Neck material	Basswood			
Pick-up	Active piezoceramic pick-up system with 9 V battery power supply			
Machine heads	Machine heads			
Dimensions	Total length: approx. 60 cm			
	Lower bout width: approx. 20.5 cm			
	Body length: approx. 35 cm			
	Mid bout width: approx. 11 cm			
	Saddle width: approx. 2.5 cm			

## Technical specifications

	<b>HBV 990BK</b>	<b>HBV 990AM</b>	<b>HBV 990WH</b>	<b>HBV 990RD</b>
	Maximum height: approx. 9 cm			
Weight	580 g, without battery			

	<b>HBV 990GBY</b>	<b>HBV 990RGR</b>	<b>HBV 990AMB</b>	<b>HBV 990BLU</b>
Item no.	417284	417283	417280	417282
Colour	Green + blue + yellow	Red + green	Amber	Blue + black
Scale	approx. 32.6 cm			
Body material	Birch			
Fretboard material	Maple			
Neck material	Maple			
Pick-up	Active piezoceramic pick-up system with 9 V battery power supply			
Machine heads	Machine heads			
Dimensions	Total length: approx. 60 cm			
	Lower bout width: approx. 20.5 cm			
	Body length: approx. 35 cm			
	Mid bout width: approx. 11 cm			
	Saddle width: approx. 2.5 cm			
	Maximum height: approx. 9 cm			
Weight	580 g, without battery			



## 8 Plug and connection assignment

### Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

### Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

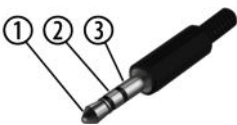
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

### 1/4" TS phone plug (mono, unbalanced)



1	Signal
2	Ground, shielding

### Three-pole 1/8" mini phone jack (stereo, unbalanced)



1	Signal (left)
2	Signal (right)
3	Ground, shielding

## 9 Cleaning

Clean the instrument and especially the strings after playing with a dry, soft, lint-free cloth. Stubborn dirt can be removed with a slightly dampened cloth.

Never use cleaners containing alcohol or thinner.

## 10 Protecting the environment

### Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

### Disposal of batteries



Batteries must not be disposed of as domestic waste or thrown into fire. Dispose of the batteries according to national or local regulations regarding hazardous waste. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites.

### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.









