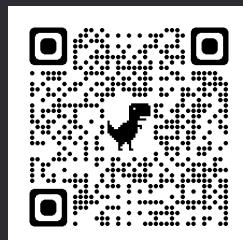




KATAHASHI
INSTRUMENTS

KAREN
Ultralight
electric violin



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1 General information

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit please make sure that the buyer also receives this manual.

Our products are subject to a process of continuous development. Thus, they are subject to change.

1.1 Further information

On our website [www.katahashi.com](#) 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
DANGER!	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.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	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

Making music for a prolonged period and at high volume can cause hearing damage.

Avoid playing the unit at full 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.



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!

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

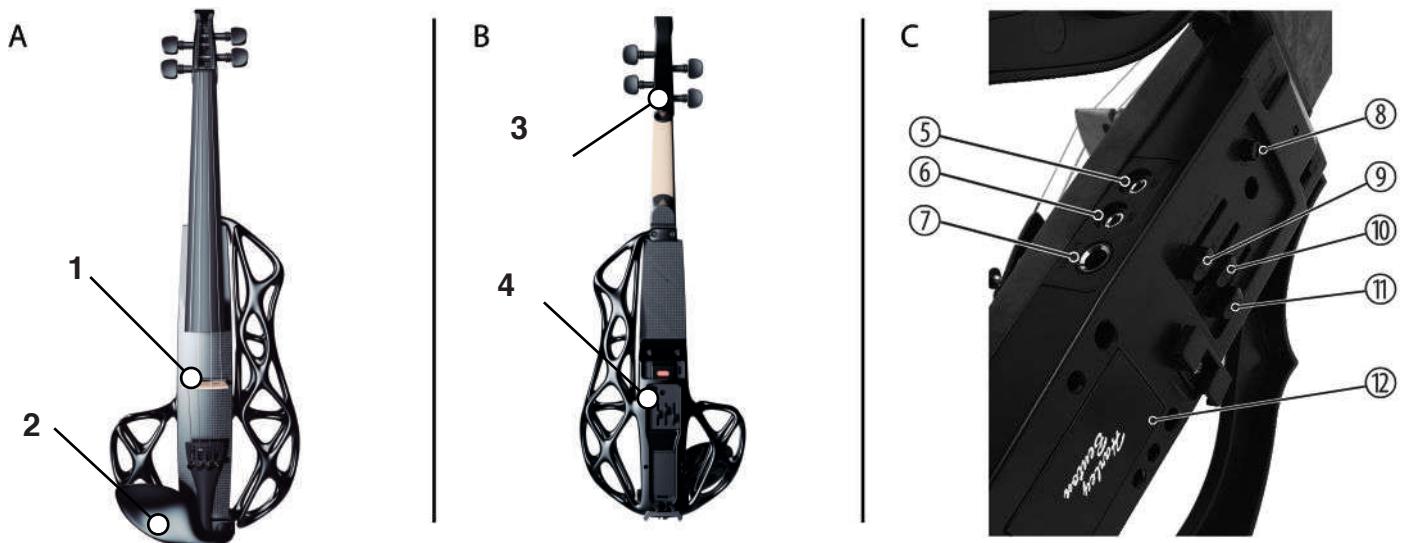
Thank you very much for purchasing this electric violin. The package includes the following components:

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

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

4 Assembly instructions

Overview



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

Making music for a prolonged period and at high volume can cause hearing damage.

Avoid playing the unit at full 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.

Connections and controls



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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 on the back of the instrument.

5.3 Connecting headphones

The connector for the headphone (1/4" jack, mono) is located on the back of the instrument.



When using a headphone with 3.5 mm jack, you need an appropriate adapter.

5.4 Connecting audio devices

The connector for audio devices (3.5 mm, mono) is located on the back 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

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.

Proceed as follows to change the strings:

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

	HBV 990BEM	HBV 990BCF	HBV 990GW	HBV 990SKL
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			

	HBV 990BK	HBV 990AM	HBV 990WH	HBV 990RD
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			

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

	HBV 990GBY	HBV 990RGR	HBV 990AMB	HBV 990BLU
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°.

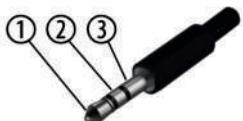
Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

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.



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