

Harley Benton

DB01, DB02

User Manual

Electric Upright Bass

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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.

1.1 Further information

On our website (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
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**

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!****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.

**NOTICE!****Possible staining**

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your surface and after some time cause permanent dark stains. In case of doubt, do not put the rubber feet directly on the surface and use a suitable underlay if necessary, i.e. felt-pad floor protectors or similar.

3 Scope of delivery

Keep the original packaging. To optimally protect the instrument against vibration, dust and moisture during transportation or storage use the suitable carrying bag.

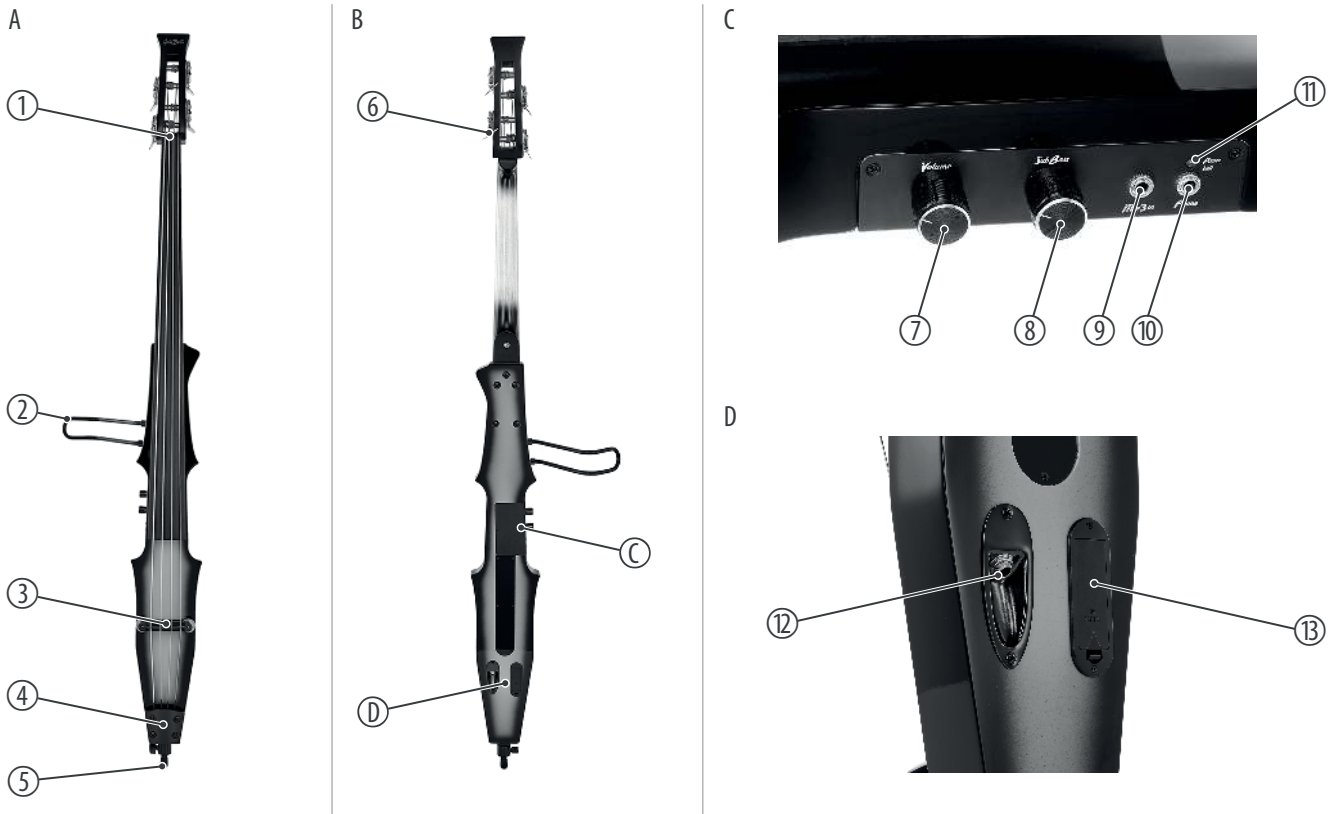
The package includes the following components:

- 1 × electric upright bass with active pickup system and 9 V battery supply
- 1 × endpin (pre-assembled)
- 1 × height-adjustable bridge
- 1 × strings set (pre-assembled)
- 1 × body support
- 1 × carbon 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



A (front side)	1	Nut
	2	Body support
	3	Bridge
	4	Tailpiece
	5	Endpin with wing screw
B (rear side)	6	Machine heads
	C	Operating elements
	D	Connections
C (operating elements)	7	<i>[Volume]</i> Volume control
	8	<i>[SubBass]</i> Bass control

	9	<i>[Mp3in]</i> Input socket for audio devices such as MP3 players (3.5 mm jack socket, stereo)
	10	<i>[Phone]</i> Output socket for headphones (3.5 mm jack socket, stereo)
	11	<i>[Power ball]</i> Status LED for the battery condition. The status LED only works when an instrument cable is connected.
D (connections)	12	Connector for instrument cable (1/4" jack socket, mono)
	13	Battery compartment for 9 V block battery (not included)

4.1 Setting the height



The endpin to adjust the height of the instrument is fully retracted in delivery condition and fixed with one wing nut.

Turn the wing nut counterclockwise to loosen the fixation and the endpin.



Drag out the endpin so far that the instrument can be played at the desired and for you ergonomically correct and comfortable height.

Then tighten the wing nut clockwise to fix the endpin in this position.

4.2 Body support mounting



Take the body support from the transport bag of the instrument and insert their ends into the openings provided on the side of the body.

Make sure that the curvature of the body support points to the rear and that it sits tension-free on the body. Tighten the bracket screws by turning them clockwise.

4.3 Mounting the bridge



On delivery, the strings of the instrument have minimum string tension between the machine heads and the tailpiece on the fretboard. Remove the cable tie that secures the strings for transportation.

Place the bridge in the holder provided on the top of the instrument body and set the desired height using the two screws.



NOTICE!

Possible deformation

When adjusting the height of the bridge, excessive pretension can overstretch the strings or damage the bridge or the top of the body.

On excessive tension, reduce the pretension of the strings or the height of the bridge to avoid damaging the strings, the bridge or the top of the body.

Make sure that all strings run correctly in the grooves of the bridge (the E string has to run in the biggest groove).

You can then tune all strings with the machine heads using a tuner device to the correct pitch (usually E, A, D and G).

4.4 Tuning the strings



Tune all strings with the pegs using a tuner device to the correct pitch (usually E-A-D-G).

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 connecting amplifiers or headphones, the volume controls of the cello and the equipment to be connected must be set to "minimum". This avoids loud crack noises when switching on.

5.1 Connecting and inserting the battery



The instrument is operated with a 9 V block battery. The battery is not included in the scope of delivery.

Open the battery compartment cover on the back of the instrument. Clamp the power cable with the correct polarity to the battery. Insert the battery into the battery compartment and close the battery compartment cover. It must audibly click into position.



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 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 audio devices



The [Mp3in] connection for audio devices (3.5 mm jack socket, stereo) is located at the side of the instrument body.

5.4 Connecting headphones



Connection [Phone] connection for headphones (3.5 mm jack socket, stereo) is located at the side of the instrument body.



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

5.5 Adjusting Volume and SubBass



The controls to adjust the *[Volume]* and *[SubBass]* are located at the side of the instrument body.

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 3/4 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



1. ➤ Replace the inserted battery if necessary (weak output signal) or at regular intervals.
2. ➤ Open the battery compartment cover on the back of the instrument. Remove the battery and unplug the connection cable from the battery terminals.
3. ➤ 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. It must audibly click into position.



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.

7 Technical specifications

Input connections	1 × 3.5 mm phone socket	
Output connections	1 × 3.5 mm phone socket 1 × 1/4" jack socket	
Scale	105 cm	
Body material	Paulownia	
Fretboard material	Birch (<i>Betula albosinensis</i>)	
Neck material	Maple	
Pick-up	active pickup system	
Machine heads	Machine heads	
Operating supply voltage	9 V block battery	
Dimensions (B × H × T), incl. body support	32.5 cm × 169.5 cm - 201.1 cm × 15.5 cm	
Weight	5.3 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

DB01

Harley Benton DB01-AM Electric Double Bass, amber	Item number 539184
Harley Benton DB01-BK Electric Double Bass, black	Item number 451963
Harley Benton DB01-CB Electric Double Bass, carbon	Item number 451975
Harley Benton DB01-RD Electric Double Bass, red	Item number 539183
Harley Benton DB01-SB Electric Double Bass, sunburst	Item number 451966
Harley Benton DB01-WH Electric Double Bass, white	Item number 539182

DB02

Harley Benton DB02-AM Electric Double Bass, amber	Item number 539178
Harley Benton DB02-BK Electric Double Bass, black	Item number 451976
Harley Benton DB02-CB Electric Double Bass, carbon	Item number 451978
Harley Benton DB02-RD Electric Double Bass, red	Item number 539179
Harley Benton DB02-SB Electric Double Bass, sunburst	Item number 451977
Harley Benton DB02-WH Electric Double Bass, white	Item number 539175
Harley Benton DB02-BEM Electric Double Bass, birds eye maple	Item number 511889

Technical specifications

Harley Benton DB02-LH/BK Elec. Double Bass, black	Item number 539468
Harley Benton DB02-LH/SB Elec. Double Bass, sunburst	Item number 539469

Further information

Number of strings	4
Bag included	yes
Case included	no
Bow included	yes
Stand included	no
Endpin included	yes
height-adjustable bridge	yes

8 Plug and pin assignments

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 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 of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of batteries



Batteries do contain some hazardous chemicals so they should not be thrown away with the normal household waste. They should be returned to the manufacturer for disposal or recycled elsewhere in accordance with your local regulations.

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 of 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.

