

**User manual**  
**STUDIOART**

**B100 Bass Module**

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## Introduction

Congratulations on your purchase of the new STUDIOART B100 Bass Module and thank you for your trust in our high quality products.

To enjoy excellent sound quality in your home, carefully read the following instructions *before* first-time operation.

**General safety instructions, disposal of your old device and warranty conditions** can be found in the enclosed leaflet.

### Unpacking

We recommend that you keep the packaging material for later transport.

### Features

The Revox **STUDIOART** B100 Bass Module is a bass speaker designed for free placement on the floor. A built-in, high-quality amplifier drives a specially developed 20 cm long-stroke bass driver, which is located in a dual port bass reflex enclosure. The radiation is downwards. The sound is emitted via the defined, circumferential gap between the bottom of the housing and the floor. The amplifier electronics include a subsonic filter that prevents damaging membrane excursions, especially at very low (subsonic) frequencies. In addition, the B100 has a soft-clipping function, which gently adjusts the output power back to the power limit when overloaded, so that no audible distortion or interruptions can occur.

The **STUDIOART** series was developed for use with high-quality stereo and home cinema systems.

### Commissioning

Please inspect the active loudspeaker and accessories for completeness and transport damage after unpacking. Before putting the device into operation, please read the operating instructions carefully. Keep it as a reference book.

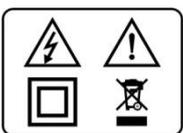
A device which shows mechanical damage or which liquid has entered must not be connected to the mains.

Use only the supplied power cord. Before connecting to the mains, the power supply and connection values of the device (mains voltage, frequency) must be checked. The fuse used in the active electronics must comply with the factory specifications in the "Technical Data".

### Scope of delivery

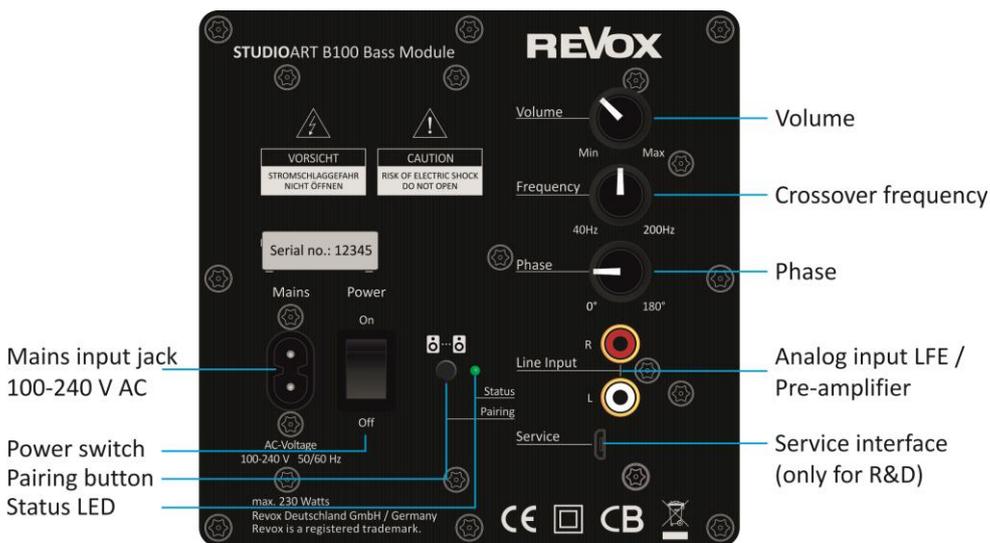
- **STUDIOART** B100 Bass Module
- Power cord
- Leaflet *Safety Instructions & Warranty*
- Welcome Letter
- Warranty Card
- Product Information **STUDIOART**
- Price list **STUDIOART** products

Note signs on the back of the device:



To avoid the risk of electric shock, do not remove any covers. Maintenance and repair may only be carried out by qualified specialist personnel!

## C connector panel



### Power switch: On / Off

The unit can be completely disconnected from the power supply via the power switch – there is no power consumption in the off position (off).

### Overvoltage / lightning strike

The off position does not protect against damage caused by overvoltage or lightning strikes. In thunderstorms, please unplug the power cord.

### Status indicator LED

- : B100 is in standby and needs about 0.9 watts.
- : B100 is on - no pairing with **STUDIOART** products
- *permanent*: B100 is wirelessly connected to a **STUDIOART** product
- *flashing*: B100 is ready to pair with a **STUDIOART** product

### Mains input jack (AC)

Use only the supplied power cord. The B100 is equipped with a multi-range power supply that covers AC voltages of 100-240 VAC (50/60 Hz).

### Volume control

Volume adjustment. In order to ensure a good signal-to-noise ratio and response of the automatic switch-on, it makes sense to select a high input level and accordingly to reduce the gain (volume control).

**Note:** When connected wirelessly to other **STUDIOART** products, the volume control has no function.

### Crossover frequency control (line input)

Infinitely variable low-pass filter with a crossover frequency between 40 - 200 Hz. The higher the frequency selected, the greater the maneuverability of the B100. In order to get a perfect, sonic match between the B100 subwoofer and the satellite speakers, the upper cut-off frequency (frequency at which the bass level drops) should be chosen so that there is no overshoot in the takeover range between B100 and the satellite speakers. Turned clockwise, the takeover frequency increases towards the satellites. Correspondingly, conversely, the frequency range in which the B100 operates decreases.

**Note:** When connected wirelessly to other **STUDIOART** products, the frequency control has no function. The transfer frequency is automatically set by the **STUDIOART** system.

### Phase control 0° - 180°

With the phase control, you can turn the subwoofer signal in the phase from 0° to 180°. This can be used to improve bass response in the listening position in relation to the other speakers, depending on the location.

**Note:** When connected wirelessly with other **STUDIOART** products, the phase control has no function.

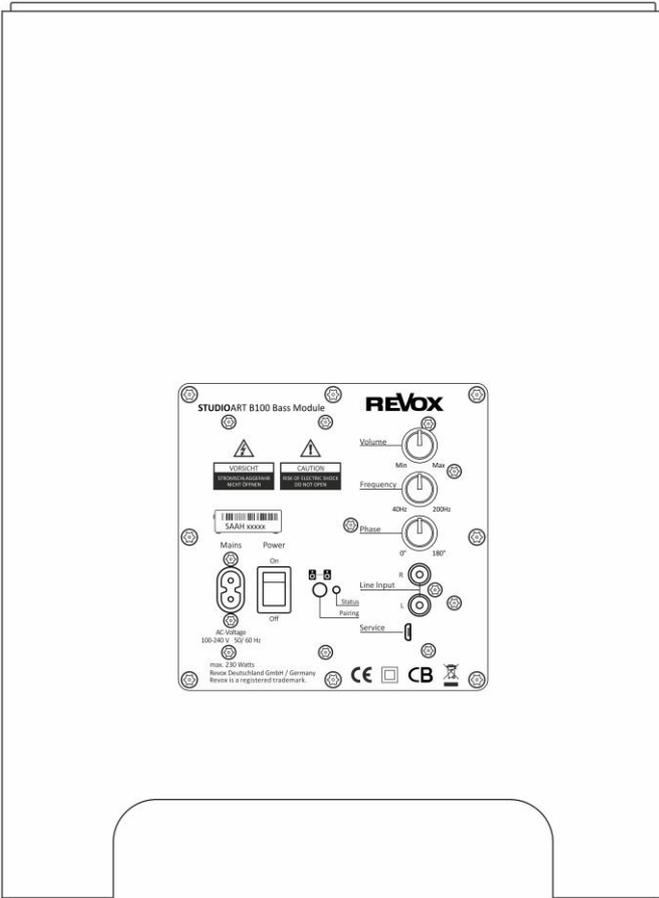
### Pairing Button

The B100 can connect to other **STUDIOART** products wirelessly. The B100 connects with a main loudspeaker e.g. a **STUDIOART** A100. Pairing two speakers is done through a one-time pairing process, where the main speaker is set as "Master", the B100 as "Client".

### Line input (L / R)

The B100 bass module can also be connected via cable to any stereo or home theater amplifier that has a preamp / subwoofer output outside the **STUDIOART** series; e.g. with a **Revox Joy Receiver S119** or **S120**.

## STUDIOART B100 Bass Module



Rear view B100

## How do I connect the B100 Bass Module?

The **STUDIOART B100 Bass Module** has been designed to be used as a subwoofer in high quality stereo and home theater systems and can be connected to your music system in two different ways:

**Wireless connection** to other **STUDIOART** products, e.g. the A100 Room Speaker

**Cable connection** (RCA stereo) with any stereo or home cinema amplifier with preamp / LEF output

### Wireless connection between B100 and other **STUDIOART** products

The B100 can be wirelessly connected to the **STUDIOART A100 Room Speaker** and supports it in the low-frequency bass range. To make this wireless connection clear, both speakers, the B100 as a client and the A100 as the chief, must be made known through a one-time pairing process. How to do this can be found on the next page of this quick guide or in the user manual of the **STUDIOART A100 Room Speaker**, which is available for download at [www.studioart-revox.com](http://www.studioart-revox.com).

### Important note

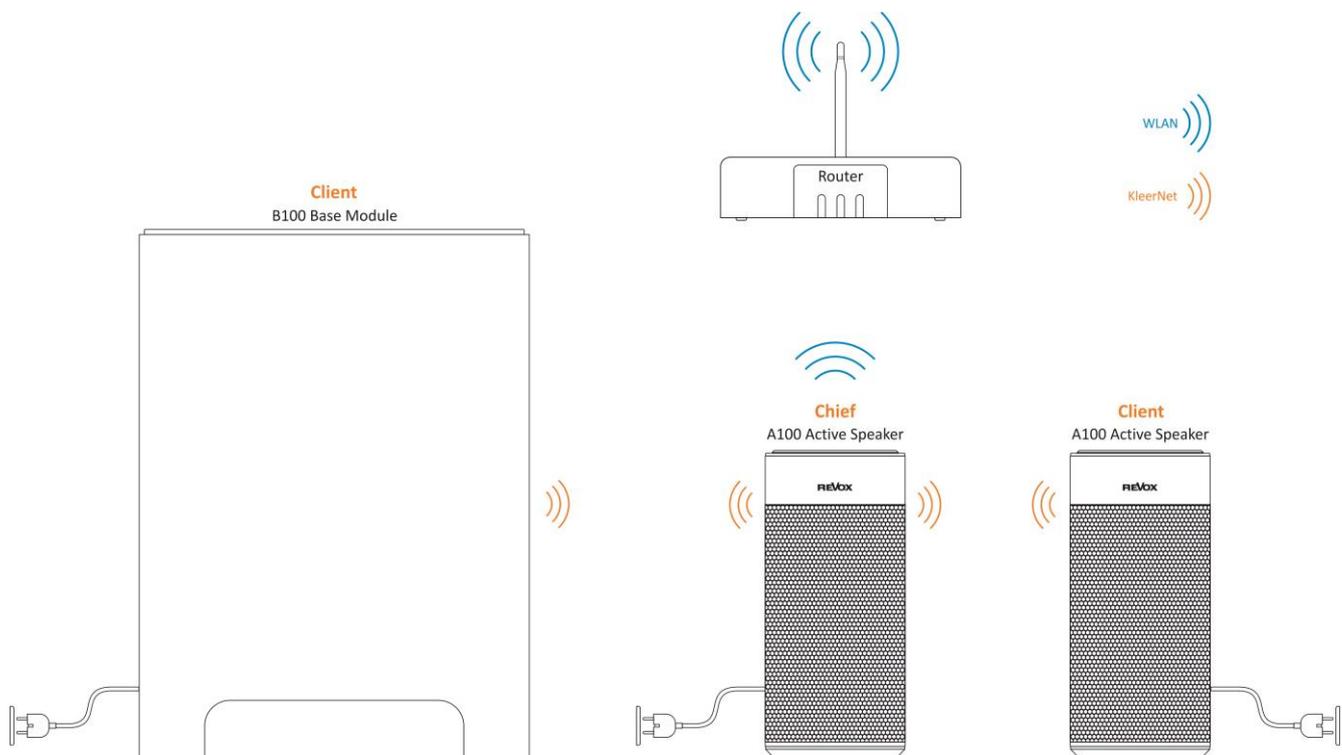
If there is a radio connection, the cut-off frequency is automatically set by the **STUDIOART** system. The settings for **volume** (amplification) and **phase** are only adjusted in the **STUDIOART App** for audio impression. The three knobs on the back of the B100 are without function in this case!

The volume, crossover and phase controls are only active if the B100 is supplied with a subwoofer signal via cinch cable and there is no radio connection to other **STUDIOART** products - see Wiring connection.

### Example wireless connection B100 with stereo set A100

The main A100 loudspeaker **Chief** requires a connection to the domestic network (WLAN / LAN). The individual **STUDIOART** loudspeakers communicate with each other via their own, uncompressed wireless network (KleerNet™). Due to the low radio power, this radio network is designed only for connections within a room.

Alternatively, a wired **P100 passive speaker** can be used for the A100 **Client**.



## Connect B100 Bass Modules **via radio** to A100

When pairing, an A100 is defined first, either directly on the device or via the **STUDIOART App**, as the **chief speaker**. Then you do the pairing process on the B100 Bass Module itself. After successful pairing, the B100 will be listed as a **paired Speaker** in the **STUDIOART app** and can be further configured there.

**Distance:** For the pairing process, the A100 and the B100 should be no further than 2 m apart. In later operation, the distance between A100 and B100 may be up to 10 m, provided there are no strong sources of interference such as repeaters, micro sources, baby monitors, etc. active in the area. From an acoustic point of view, however, the **distance between A100 and B100 should be kept as small as possible.**



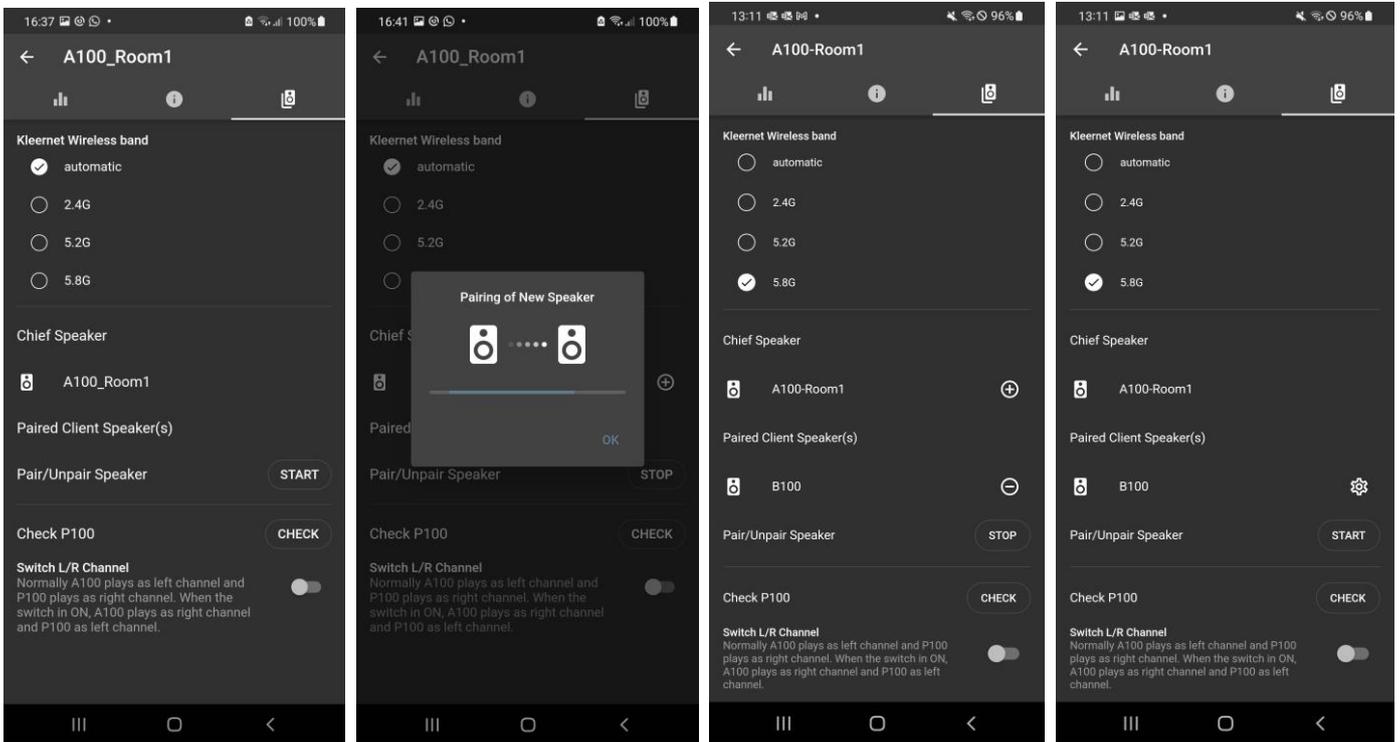
B100 Bass Module: rear view amplifier unit

### **Without** the STUDIOART app proceed as follows:

1. Switch on the A100 by pressing and holding
2. Switch on B100 on the rear panel using the mains switch - Status LED lights up
3. Define A100 as chief loudspeaker: + hold for more than 8 sec - status LED flashes fast first, then slowly and a periodic **double beep** can be heard
4. Defining B100 as connected loudspeaker: hold the pairing button on the back of the subwoofer for approx. 5 sec - status LED blinks
5. Wait until both devices have found each other. Then the A100 LED again shows the source with the corresponding LED color and the status LED on the B100 permanently shows the pink LED - done.

Proceed as follows **with** the STUDIOART app:

1. Switch on the A100 with a long press 
2. Switch on the B100 on the back with the help of the power switch - Status LED lights up 
3. Define A100 as the chief loudspeaker: # Call A100 Setup  # Select pairing menu ... # Activate with **START** pairing # Start connection process with "OK" # Perform step 4 within 60 seconds - Status LED flashes slowly  and a periodic **double beep** can be heard



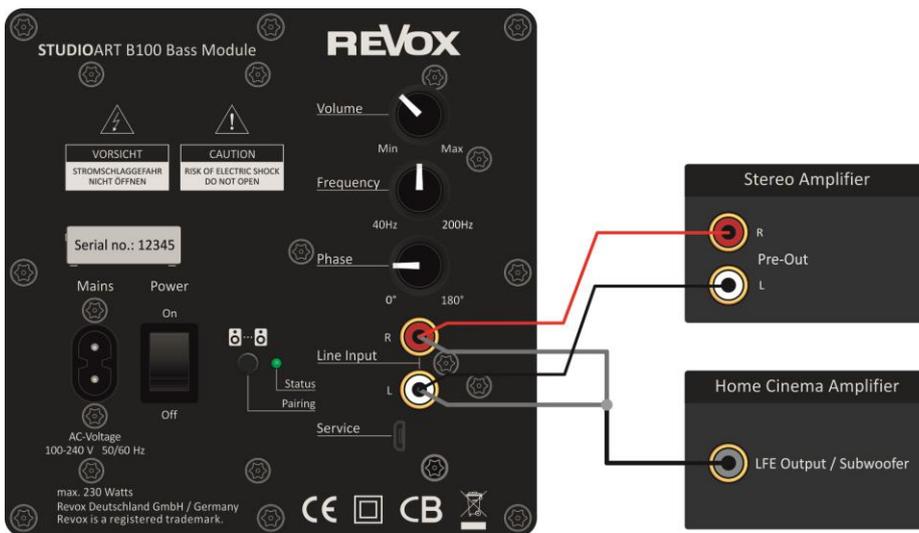
4. Defining B100 as connected loudspeakers: Hold the pairing button ... on the back of the subwoofer for approx. 5 sec - Status LED flashes 
5. Wait until both devices have found each other. Then the A100 LED again shows the source with the corresponding LED colour and the status LEDs on the B100 permanently show the pink LED - done.
6. End the pairing process with **STOP** - done

## Cable connection between B100 and stereo / home theater amplifiers Line input (L / R)

The B100 bass module can also be connected via cable to any stereo or home theater amplifier that has a preamp / subwoofer output outside the **STUDIOART** series; e.g. with a **Revox Joy Receiver S119** or **S120**.

**Classic stereo amplifiers** with a stereo preamp output, connect to a 1: 1 RCA cable. The cut-off frequency up to which the B100 should support the other loudspeakers in the bass range is set on the B100. Phase and volume can also be adjusted using the rotary controls.

For **home cinema amplifiers** with an explicit subwoofer output (LFE signal), a Y adapter is required, which splits the single-channel signal into the two B100 inputs [Line Input R + L]. Here, the home theater amplifier usually determines the crossover frequency. Therefore, in this case, the cut-off frequency should be set to the maximum of 200 Hz and the phase to 0°. The volume can be adjusted using the rotary control.



The line input is equipped with signal detection, which automatically turns on the B100 as soon as a music signal is present. If no input signal is detected for more than approx. 20 minutes, the B100 subwoofer automatically switches back to standby mode (standby consumption <0.5 W).

### Note:

*The automatic switch-on is level dependent, i.e. at very low signal levels, it may happen that the B100 subwoofer is not turned on or turned off too early. If necessary, increase the input signal while reducing the volume.*

## Placement

Very low frequencies, as emitted by the B100, are very difficult to locate. The aim is therefore to integrate the B100 so that it is not perceived superficially, but rather extends the sound image positively with respect to the lower frequencies.

To achieve this, Revox recommends considering the following points:

- Experience has shown that a more homogeneous sound is created when the subwoofer is placed in the area of the main speakers or between them.
- When installed in the corner of a room, it may result in undesirable elevation of individual low bass frequencies. The closer the B100 is moved towards the wall or room corner, the stronger, but also less precise, the bass reproduction becomes. The bass response shifts towards a "slimmer, drier" bass due to a greater distance.
- The **STUDIOART B100** does not need to have visual contact with the listener/ listening position.

The low-frequency behavior can be fine-tuned with the aid of the volume and the phase position after a good installation site has been found. In the case of a wired connection, the takeover frequency can also be adapted.

## Load capacity

The woofer is tuned to the output power of the built-in amplifier. Nevertheless, extreme situations can cause overloading with very long lasting, abnormal signals, i.e. no music signals (generator or other test signals) and at full volume. In general, it should be noted that the volume is increased only until the ear - mostly reliable - reports an overload. This sign is expressed in a timely manner by a very strong growth of distortions in the sound image. A short-term overload (30 sec.) will not damage your Revox speaker. If the loudspeaker driver has been damaged due to overloading, this can be clearly determined by the responsible service technician. In this case, a warranty service by Revox is not granted.

## Care

The real glass surface of the B100 can be cleaned with a mild window cleaning agent. In contrast, the painted housing surfaces should only be cleaned with a damp cloth and then rubbed dry with a soft cloth. Never use cleaning agents with grinding additives.

## FAQs

### **Status LED does not light up**

Possible causes:

Power line interruption

Mains switch in off position (Off)

### **Automatic switch-on does not work**

Possible causes:

The level of the line input is too low. This can occur with music material with soft passages. Increase the input signal while reducing the volume.

## Technical data B100

### Audio data

Loudspeaker principle	Active bass reflex system (downfire)
Frequency response	35 Hz –40... 200 Hz* (*dependent of lowpass control )
Max. sound pressure	106 dB / 1m [ > 40 Hz]

### Electrical data supply

Voltage range	100 -240V AC [50-60 Hz]
Power consumption	230 W max. 7 – 30 W typically
Standby consumption	< 0.9 Watt
Switch-off delay	25 minutes

### Amplifier

Max. NF input voltage.	2 V (Line input)
Crossover frequency	40-200 Hz (only LineIN)
Slope lowpass	24 dB per octave
Output power amplifier	160 W

### Dimension

Height	415 mm
Width	300 mm
Depth	300 mm (without knobs/ cable) 335 mm (without knobs/ cable)

### Operation conditions

Ambient temperature	+10° ... + 45°C / 50° ... 113° F
Relative humidity	Class F (DIN 40040)

Weight 11,8 kg (without packing)

E&EO

# REVOX

Studio Sound Quality

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