

KARAOKE
EVO BOX

Quick Start Guide

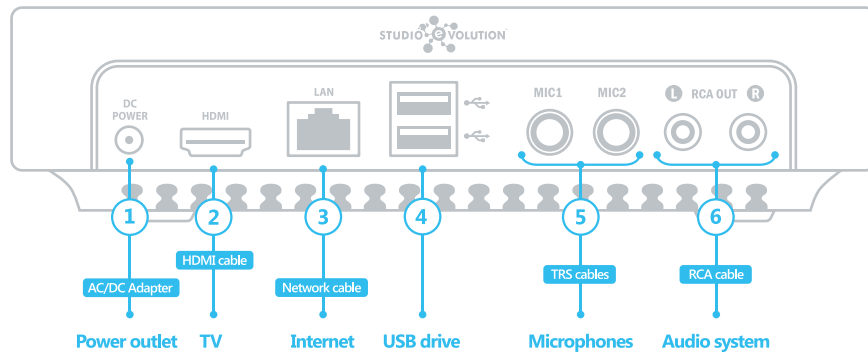
Congratulations!

You have become the proud owner of the **EVOBOX** karaoke system.

Thank you for choosing Studio Evolution solutions.
Follow the steps below to wire up your EVOBOX.

Let's start!

Quick connection



1. Connect one end of the HDMI cable to the HDMI port on your TV. Connect the other end of the HDMI cable to the EVOBOX HDMI port **2**.
2. Use the RCA cable to connect EVOBOX to the audio system **6**.
3. Use TRS cables to connect wired microphones or a wireless microphone receiver to the appropriate Mic1 and Mic2 inputs **5**.
4. Connect EVOBOX to a power outlet **1**.
5. Turn on the TV and select the HDMI input to which your karaoke system is connected.
6. Follow the on-screen instructions to connect the remote control, select a language, time zone, and configure Internet connection.

WARNING! Failure to follow these instructions can result in a fire, electric shock, personal injury, or equipment damage.

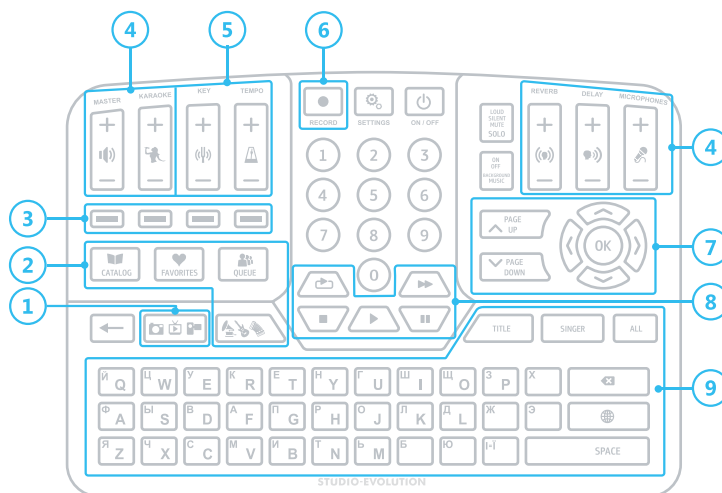
Karaoke system activation

Please activate your EVOBOX system so it could operate at its full potential. Without activation, EVOBOX will run in demo mode only. In the demo mode, the song duration is limited to 45 seconds.

To activate your karaoke system, use the instructions on the screen of your TV.



Remote control



- 1 Select a background image (photo/video).
- 2 Catalog, Favorites, Queue, and Genre selection.
- 3 Function keys.
Catalog, Favorites, Queue and Genre selection:
yellow — open/close the background music player;
blue — information about the song;
red — open/close the performance recording player;
green — enable/disable LiveFX.
- 4 Adjust the volume and effects.
- 5 **Tone** adjustment — from -6 to +6 units.
Tempo adjustment — from -12 to + 12%.
- 6 Turn on/cancel performance recording.
- 7 Navigation.
- 8 The block of playback control keys.
- 9 Keyboard and search filters.

KARAOKE
EVOBOX

[LIVE FX]

Feel it comin'
in the air

[LIVE FX]

The live concert effect

LiveFX is created individually for each song, so you can feel the special atmosphere of a live concert.

LiveFX is available for tracks marked with the special icon .

Use the green function key to enable/disable the effect.

Smart control

You can control the EVOBOX karaoke system using its Bluetooth remote control with a full-size keyboard, as well as rely on our official applications.



EVO NET

To control from a
smartphone.



EVO CONTROL

To control from a
tablet.



Scan the QR code



[● RECORD] Record your concerts

Record your performances with EVOBOX in studio quality. To enable it, press the Record key on the remote control or tap a similar button in the application interface.

You can easily copy the recordings to a USB drive or instantly share them with your friends and family members via instant messengers or social networks, with the application.



Microphone Settings

For a more voluminous and spectacular sound of your voice, we recommend adjusting the microphones. Go to EVOBOX's Settings, select the **Audio** section  and go to the **Microphones** subsection . Adjust the EQ for your voice, select the gain level for microphones and choose the following effect types: **Delay**, **Reverb**. Use the remote control or app to adjust the effects.



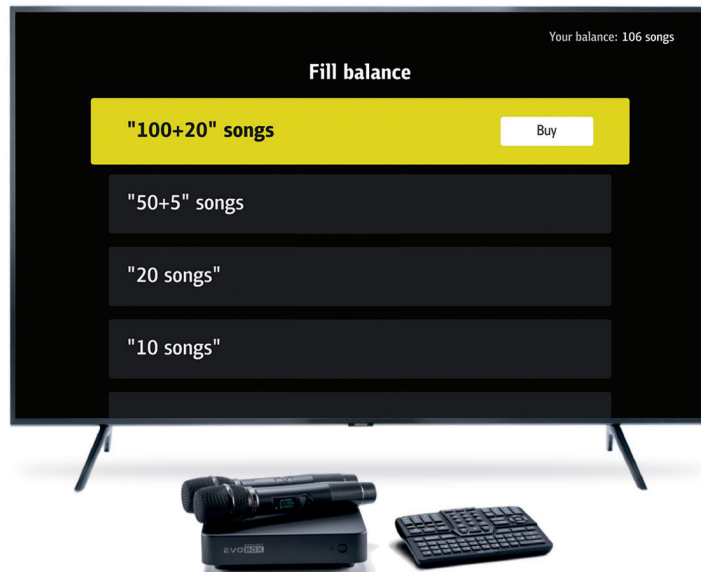
How to buy songs

At any moment, you can purchase individual tracks from the Studio Evolution full karaoke catalogue. Studio Evolution Catalogue is updated several times a week with just-outs and trendy songs.

In the Catalogue, the songs available for purchase are marked grey. You have an opportunity to play a song in a demo mode before buying it. To buy a song, please, charge up your Balance.



You can charge up your Balance and buy songs only when your karaoke system is connected to the Internet.



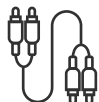
What's inside



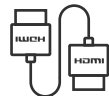
EVOBOX
Karaoke system



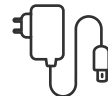
Bluetooth
remote control



Audio cable
2RCA-2RCA



HDMI Cable



AC/DC Adapter



2×AA Batteries



Quick
Start Guide



The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI logo are registered trademarks of HDMI Licensing Administrator, Inc.



The Bluetooth logo and the term itself are registered trademarks owned by Bluetooth SIG Inc. Any use of the trademark/term is licensed.

Specifications

Casing colors available

Black, Graphite, Silver, Ocean, Gold, Ruby

Dimensions and weight

Height 49 mm, width 198 mm, length 198 mm, weight 1140 g

Control

Bluetooth remote control, mobile applications for smartphones (EVONET) and tablets (EVOCONTROL)

Audio inputs

Microphone inputs: Balanced TRS 6.3 (Jack) (2 pc.)
Maximum microphone input gain: 32.5 dB
Maximum input amplitude: +0.14 dBu (0.788 Vrms)
Input signal/noise ratio: -95.9 dB (A-weighted)
Dynamic range: 95.7 dB
Harmonic distortion + noise: 0.0011%
Bandwidth (+/- 0.5 dB): 50 Hz - 20 kHz
Cross-channel penetration: -95.3 dB
Input resistance: 25 kOhm
Audio ADC: Asahi Kasei Microdevices AK5703

Audio outputs

Stereo outputs: RCA, (2pc.)
Input signal/noise ratio: 99.3 dB (A-weighted)
Dynamic range: 99.4 dB
Harmonic distortion + noise: 0.005%
Bandwidth (+/- 0.5 dB): 20 Hz - 20 kHz
Cross-channel penetration: -98.3 dB
Maximum output amplitude: +4.7 dBu (1.34 Vrms)
Output resistance: 470 Ohm
Audio DAC: Asahi Kasei AK4430

Video

The maximum screen resolution: 4K UHD (3840 × 2160)

Supported file formats

Video: MOV, AVI, MP4, MKV
Audio: WAV, OGG, MP3
Graphic: PNG, JPG, JPEG
Karaoke: EK2

Connectors and Interfaces

Wi-Fi 802.11ac.; Two ranges:
2.4 GHz and 5 GHz
Bluetooth 4.1 Low Energy
HDMI 2.0
USB Type-A (2 pc.)
Gigabit LAN (RJ45)
Power connector

Drives

EVOBOX: 120 GB (SSD)
EVOBOX Plus: 960 GB (SSD)

System

Processor: Quad-Core Cortex-A53
RAM: 2 GB DDR4
Graphics and multimedia processors:
Mali-T820 MP3 GPU

Other

Power: 12 V / 2 A
Power consumption: 24 W
Temperature range: 0-50 °C
Transport box size
(W × H × L), mm: 333 × 134 × 324

Visit support.studio-evolution.com to learn more about the way you can use the EVOBOX karaoke system.
Please note that the appearance and interface of the equipment may differ from those described in this manual.



WWW.STUDIO-EVOLUTION.COM

EVOLINK SE·201D



WIRELESS DIGITAL MICROPHONES



Use only external USB power adapter*
(5V=1A or 5V=2A) to charge the microphones.

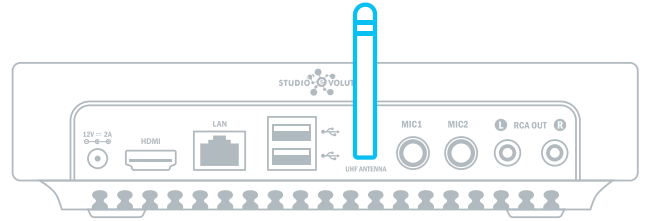
* USB power adapter not included.

Starting operation



Before starting, make sure the karaoke system is unplugged.

1. Connect the supplied antenna to the UHF ANTENNA socket at the back panel of the karaoke system*.
2. Connect the karaoke system to the mains.
3. Unscrew the protective cap ③ on the microphone and place the battery with the pole "+" downward. Screw the cap back and switch the microphone on by pressing the "Button Switch" ① briefly. Repeat the same for the Microphone 2.



The microphones are now ready for use.

* For efficient and correct microphones operation, the antenna should be installed vertically, and the karaoke system should be placed at least 0.5 meters away from walls, floor, and metal surfaces.

Microphone control with the "Button Switch" ①:

- A brief press switches the microphone on.
- A brief press with the microphone on switches the microphone to the "MUTE" mode.
- 3 brief presses with the microphone on switch it to the channel-changing mode.
- A long press (~2 sec) switches the microphone off.
- A prolonged press (~ 6 sec) with the microphone off switches it to the mode of the microphone interfacing with the karaoke system.
- A very long press (~10 sec) with the microphone off changes the microphone number.

Recommendations

We recommend that you follow the rules below:

1. Hold a microphone in its middle. If you hold it at its lower part, you interfere with its built-in antennas.
2. Keep the microphone in the almost horizontal, slightly downward position.
3. Direct the sound to the center of the microphone membrane.
4. Do not move the microphone toward the loudspeakers.
5. The best distance between the microphone and your lips is 2-5 cm.
6. Bring the microphone closer to your lips several seconds before you start singing to ensure the first phrase is complete.
7. Mute your microphone when it is not in use.

Microphone connection

Connection


To connect the microphone to the karaoke system, follow the steps below:

1. Make sure the microphone accumulator is properly placed and charged.
2. Open the karaoke system settings and go to the "Audio" section.
3. Select "Microphones", subsection "Connection".
4. Follow the tips on the display.

Changing the microphone number ⑥

When the microphone is on, press the "Button Switch" ① for 10 seconds. Once the microphone number is changed, connect the microphone to the karaoke system.

Changing microphone channel ⑦

Each microphone has 16 connection channels. To switch to the channel changing mode, Switch the microphone on and press the "Button Switch" ① three times. The microphone will display the sign . A brief press of the "Button Switch" changes the current channel number. Once the channel is selected, the microphone will exit this mode automatically after 5 seconds.



IMPORTANT NOTICE! To ensure the connection to the karaoke system, change the channels when EVOBOX is on, and the microphone is connected to the karaoke system.

Table of useful frequencies, MHz

CH	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
MIC 1	661.500	662.300	663.100	663.900	664.700	665.500	666.300	667.100	667.900	668.700	669.500	670.300	671.100	671.900	671.700	673.500
MIC 2	676.500	677.300	678.100	678.900	679.700	860.500	681.300	682.100	682.900	683.700	684.500	685.300	686.100	686.900	687.700	688.500

SE•201D Advantages

- The microphone signal receiver is integrated into the karaoke system
- Transmission of digitized sound
- Maximum noise immunity
- Dynamic microphone type
- Digital audio processing sampling frequency 48 kHz
- Ultra-short audio latency
- Frequency response: 30 – 20000 Hz
- Setting up with one button, placed on the microphone
- High-capacity lithium batteries are charged without removing them from the microphone
- Battery level monitoring on both microphone display and TV screen
- Working time after a full charge — over 10 hours
- Operational distance — up to 30 m

Learn more about EVOBOX microphones at support.studio-evolution.com.
The exterior of the device can differ from what it is in this manual.

Malfunction repair

Failure to switch on a microphone

- Make sure the accumulator is placed according to the polarity: "+" is supposed to be at the bottom.
 - Use included USB cable to charge microphone. Connect cable to charging port ⑤ from one side and to a 5V==1A or 5V==2A USB power adapter from other.
- * Use only external USB power adapter (not included) to charge the microphones. Microphone does not work while charging.

The microphone is switched on but produces no sound

- Make sure EVOBOX is properly connected to the acoustic system.
 - Set up the general sound volume of the karaoke system and the microphone sound volume at the level of 75%.
 - If the recommendations above are observed, but the microphone produces no sound, please, connect* it to the karaoke system (see "Microphone connection").
- * Do not initiate the connection process if the microphone operates appropriately. It can lead to the disconnection of the microphone from the karaoke system.

Poor signal or noise when playing

- The antenna is not connected properly, or the karaoke system is misplaced. For the microphones to work efficiently and correctly, the antenna should be placed vertically, and the karaoke system should be placed at least 0.5 m away from the walls, floor, and metal surfaces.
- External electromagnetic interference. To remove interference, switch the microphone to another channel (see "Microphone connection").

Technical characteristics

Microphone

Effective frequency range: 660-690 MHz

Working bandwidth: 30 MHz

Modulation: DQPSK

Power output (HF): 9 MW

Side emissions: < -50 dB (of the carrier level)

Antenna: internal

Number of channels: 16

Switching the channels: by the button on the microphone

Battery: lithium-ion battery, the typical size of 18500, 3.7 V, 1600 mAh.

Duration of the operation with the charged battery: > 10 hrs

Charging: through the USB-C port, 5 V, 0.5 A (for one microphone)

Receiver

Effective frequency range: 660-690 MHz

Working bandwidth: 30 MHz

Channel width: 300 kHz

Number of channels: 2 groups, 16 channels each

Dynamic range: 96 dB

Total distortion: < 0.1 %

Antenna: external, length — 11 cm

Frequency range (audio): 30 – 20 000 Hz with frequency response unevenness ± 2 dB

Signal-to-noise ratio: 96 dB

Receiver sensitivity: - 95 dBm

Audio transmission latency: < 3 ms