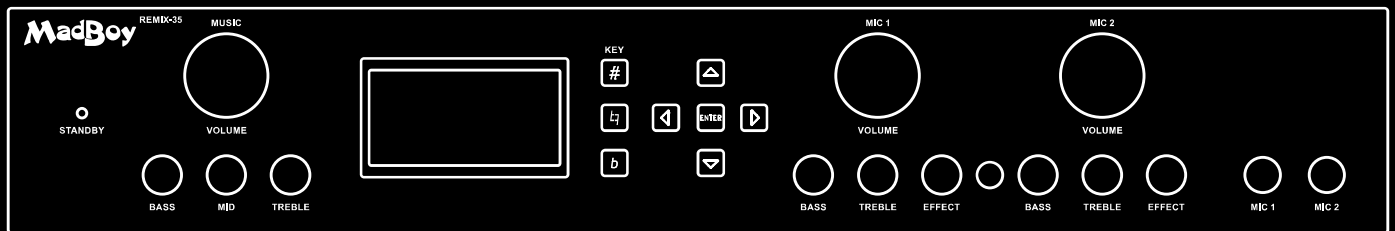


MadBoy®

REMIX-35

DIGITAL KARAOKE MIXER WITH BLUETOOTH



OWNER'S MANUAL

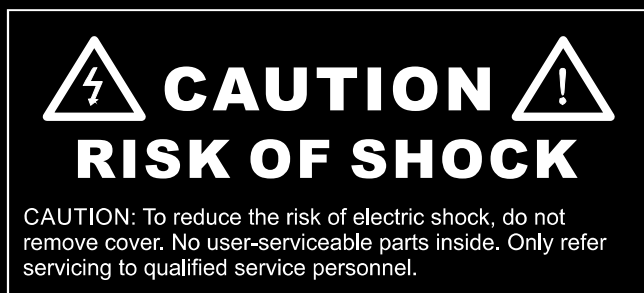
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ENGLISH

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Safety Instructions



Explanation of graphical symbols



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of danger.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and servicing instructions.

Warning!

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

1. **Read instructions:** All safety and operating instructions should be read before installation.
2. **Keep instructions:** Safety and operating instruction should be retained for future reference.
3. **Heed warnings:** Warnings on the apparatus and in the operating instruction should be adhered to.
4. **Follow instructions:** All operating instructions should be followed.
5. **Accessories:** Only use accessories specified by the manufacturer.
6. **Water and moisture:** Do not use this apparatus near water.
7. **Ventilation:** Do not block any ventilation openings.
8. **Heat:** Do not install near heat sources such as radiators or other apparatus that produces heat.
9. **Protect power cord:** Power cord should be placed so that it is not likely to be walked on or pinched by items placed upon it. Do not use the apparatus if power cord is damaged.
10. **Cleaning:** Unplug power cord before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
11. **Nonuse periods:** Unplug the power cord if apparatus is left unused for a long period of time.
12. **Objects and liquids:** Care should be taken so that object do not fall and liquids are not spilled into the enclosure through the openings.
13. **Damage requiring service:** The apparatus should be serviced by qualified service personnel when:
 - A. Objects has fallen inside enclosure.
 - B. The apparatus has exposed to rain or moisture.
 - C. The apparatus has been dropped or enclosure is damaged.
 - D. The apparatus do not operate normally.
14. **Servicing:** Refer all servicing to the qualified service personnel.
15. **Warranty:** Warranty service should be done by qualified service personnel authorized by Madboy Audio International Oy. Warranty is invalidated if a warranty seal has been altered, removed or defaced.

Getting Started

Features

- High Performance 24-bit Reverb Engine with seven adjustable effect types.
- 2.6" display with easy to use graphical user interface.
- Remote control for adjusting the settings remotely.
- Bluetooth 5.0 for streaming music from tablet or mobile phone.
- Digital optical (S/PDIF) input and output for connecting to the SMART-TV or amplifier.
- USB Audio Class compliant audio interface for connecting to the computer.
- Four analog RCA inputs for connecting to the DVD or CD player.
- Two RCA outputs for connecting to amplifier or active speakers.
- Digital Toner Key Control, +/- 5 semitones.
- Two microphone inputs with individual volume, 2-band equalizer and effect level controls.
- Feedback Cancel for both microphones.
- Volume control and 3-band equalizer for music.
- 10-band graphic equalizer for audio output.



Connectors

Inputs:

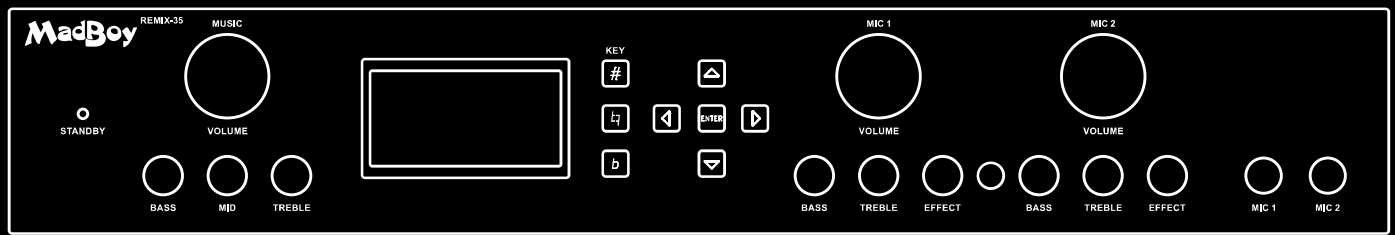
- Two microphone channels
 - Balanced 1/4" TRS jacks in the front panel
 - Balanced XLR connectors in the back panel
- Seven audio inputs
 - Bluetooth audio interface (A2DP, AVRCP)
 - Optical input (Toslink)
 - USB audio interface (USB Type B)
 - 4 x RCA
- Four video inputs
 - 4 x RCA

Outputs:

- Four audio outputs
 - Optical output (Toslink)
 - USB audio interface (USB Type B)
 - 2 x RCA
- Subwoofer output for active subwoofer
 - 1 x RCA
- Two video outputs
 - 2 x RCA

Getting Started

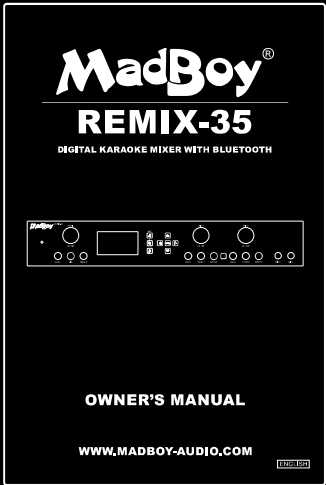
What's in the Box:



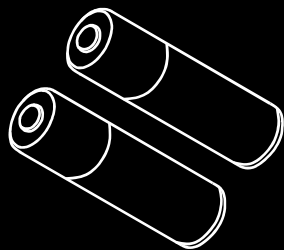
REMIX-35 (1)



REMOTE CONTROL (1)



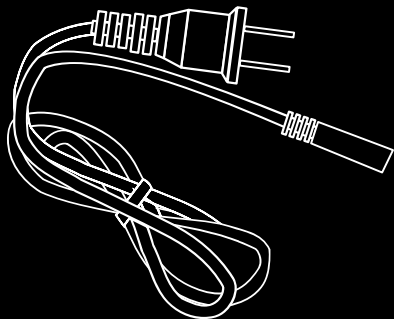
USER MANUAL (1)



AAA BATTERY (2)

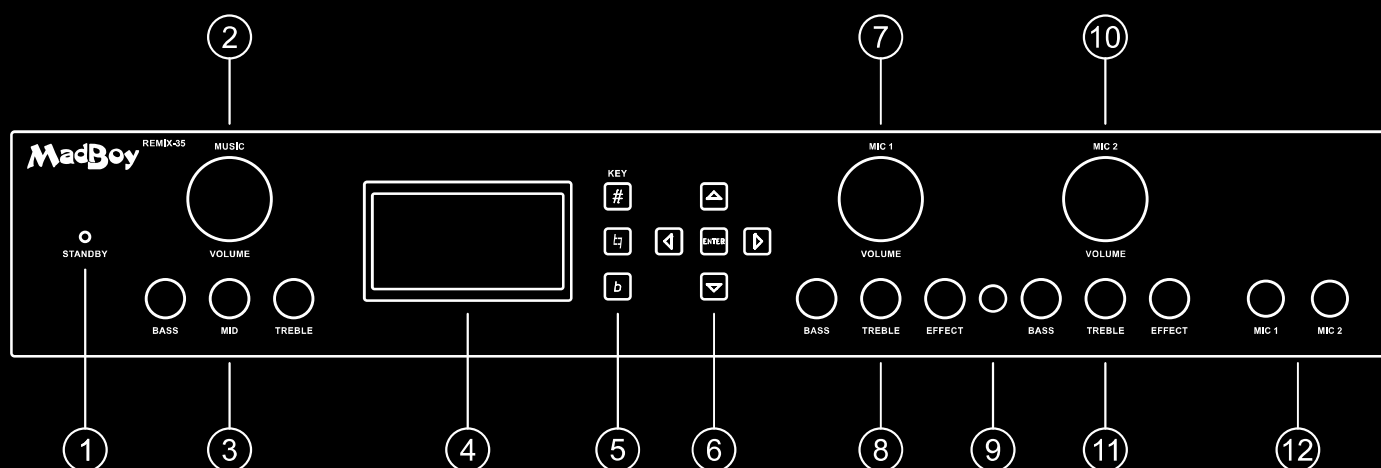


ANTENNA (1)



POWER CABLE (1)

Front panel



1. STANDBY LIGHT: Light is turned on when device is set to standby mode.

2. MUSIC VOLUME: For adjusting the volume of the music.

3. MUSIC EQUALIZER: For boosting or cutting the frequency of the music.

4. DISPLAY: Display with easy to use graphical user interface.

5. KEY CONTROL: For setting the key of the music:

Press **#** button to raise the key by one semitone.

Press **↶** button to reset the key back to normal.

Press **b** button to lower the key by one semitone.

6. NAVIGATION CONTROLS: For navigating on the menu.

7. MIC 1 VOLUME: For adjusting the volume of the microphone 1.

8. MIC 1 BASS, TREBLE, EFFECT: For boosting or cutting the frequency or adjusting effect volume of microphone 1.

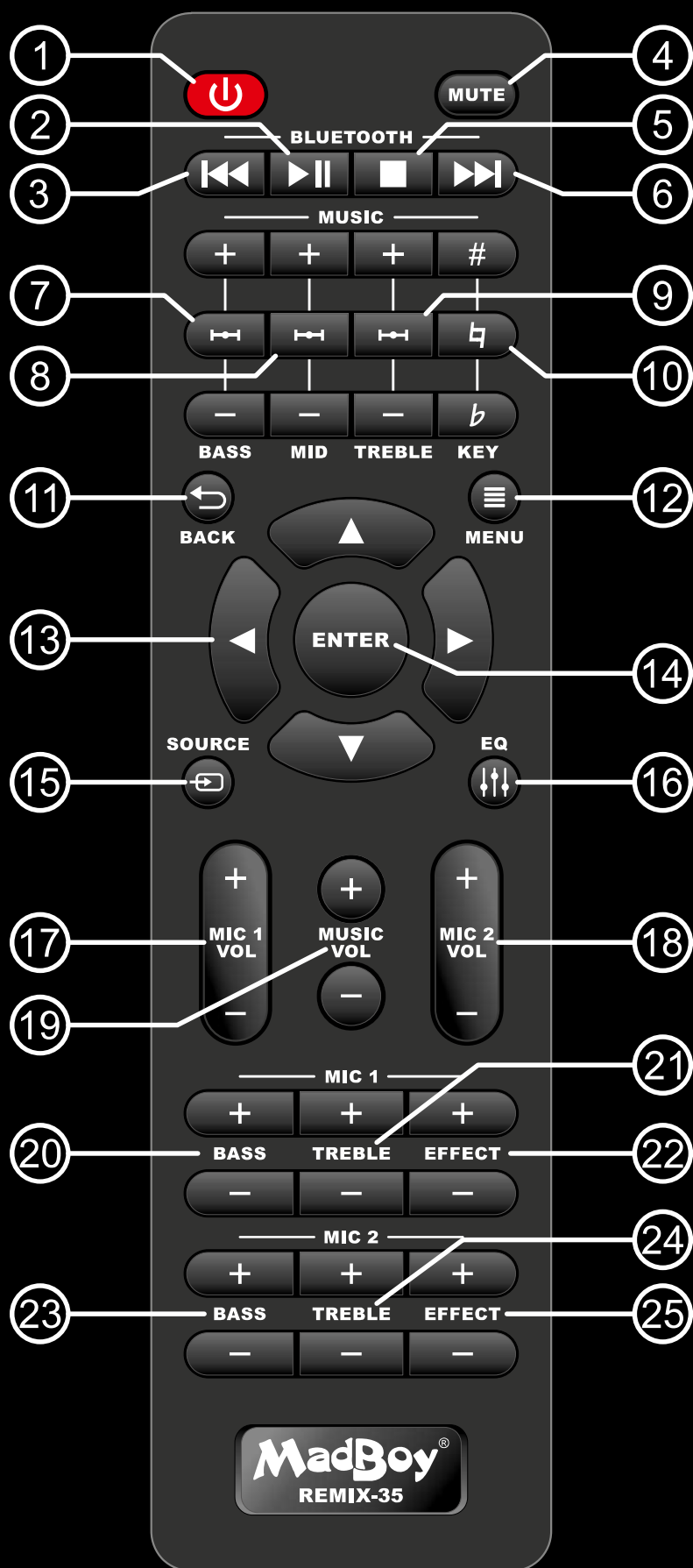
9. IR: IR receiver for the remote control.

10. MIC 2 VOLUME: For adjusting the volume of the microphone 2.

11. MIC 2 BASS, TREBLE, EFFECT: For boosting or cutting the frequency or adjusting effect volume of microphone 2.

12. MICROPHONE INPUT: Balanced 1/4" TRS microphone input jacks for connecting microphones. Balanced or unbalanced microphone cables can be used.

Remote Control



Remote Control

1. POWER Turn power on or off.
2. MUTE Mute the audio output. Press again to disable the mute.
3. PLAY / PAUSE Play or pause the music on the connected bluetooth device.^{Note 1}
4. PREVIOUS Select previous music track on the connected bluetooth device.^{Note 1}
5. STOP Stop the music on the connected bluetooth device.^{Note 1}
6. NEXT Select next music track on the connected bluetooth device.^{Note 1}
7. MUSIC BASS Press + to increase low frequencies of the music.
Press  to reset the equalizer back to normal.
Press - to decrease low frequencies of the music.
8. MUSIC MID Press + to increase middle frequencies of the music.
Press  to reset the equalizer back to normal.
Press - to decrease middle frequencies of the music.
9. MUSIC TREBLE Press + to increase high frequencies of the music.
Press  to reset the equalizer back to normal.
Press - to decrease high frequencies of the music.
10. MUSIC KEY Press  to raise the key of the music by one semitone.
Press  to reset the key back to normal.
Press  to lower the key of the music by one semitone.
11. BACK Go back to the previous menu.
12. MENU Go to the main menu.
13. NAVIGATION KEYS For moving the cursor on the menu.
14. ENTER Confirm selection.
15. SOURCE Input source selection (AV1 - AV4, USB, BLUETOOTH, OPTICAL).
16. EQ Go to the master equalizer menu.
17. MIC 1 VOL Press + to increase or - to decrease the microphone 1 volume.
18. MIC 2 VOL Press + to increase or - to decrease the microphone 2 volume.
19. MUSIC VOL Press + to increase or - to decrease the music volume.
20. MIC 1 BASS Press + to increase or - to decrease low frequencies of the MIC 1.
21. MIC 1 TREBLE Press + to increase or - to decrease high frequencies of the MIC 1.
22. MIC 1 EFFECT Press + to increase or - to decrease effect level of the MIC 1.
23. MIC 2 BASS Press + to increase or - to decrease low frequencies of the MIC 2.
24. MIC 2 TREBLE Press + to increase or - to decrease high frequencies of the MIC 2.
25. MIC 2 EFFECT Press + to increase or - to decrease effect level of the MIC 2.

Note 1: Bluetooth device and application (YouTube, Spotify etc.) with AVRCP support needed.

Views

Introduction

Remix-35 have four different views to offer best user experience and to fulfill the requirements of different users.

VU Meter View

4 BLUETOOTH ▶		44.1 kHz		KEY: 4		
VU METER ▶	dB	-40	-30	-20	-10	0
	MUSIC L					
	R					
	MIC 1					
	2					
▶ VU METER	OUTPUT L					
	R					

Karaoke View

4 BLUETOOTH ▶		44.1 kHz		KEY: 4	
▶ KARAOKE	MUSIC		MIC		1 2
	VOL	100	VOL	100	100
	BASS	0	BASS	0	0
	MID	0	TREBLE	0	0
	TREBLE	0	EFFECT	0	0
	L		E.TYPE	SMALL ROOM	
	R		EQ.	FLAT	

Music View

BLUETOOTH 44.1 kHz KEY: 4

BASS MID TREBLE

0dB 0dB 0dB

VOLUME

50%

Media View

◀	BLUETOOTH ▶	44.1 kHz	KEY: 4
▶ MEDIA ▼	TRACK NAME		
	ARTIST NAME		
	01:29 ▶	03:24	
	OUTPUT L		
	R		

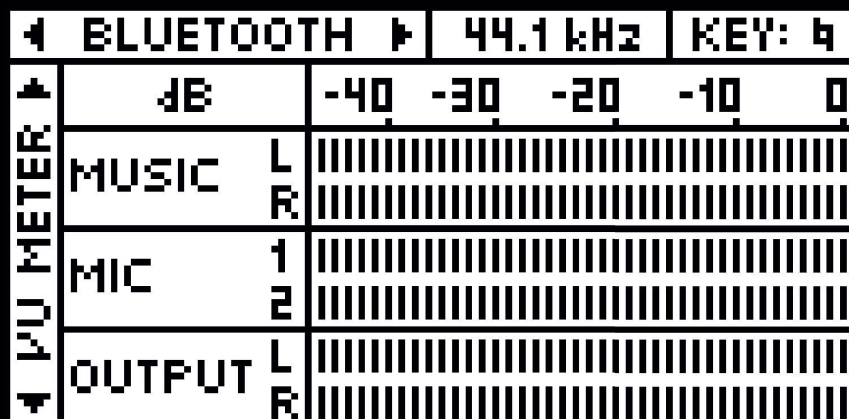
Using the Views:

View can be changed using "UP / DOWN" navigation buttons on the remote control or on the front panel. Source can be changed using "LEFT / RIGHT" navigation buttons or "SOURCE" button on the remote control. Previously used view is saved when setting device to standby mode and recovered when turning it on again.

Views

VU Meter View

VU meter view can be used to adjust the music and microphone levels. It has separate VU meters for music input, microphone inputs and output to make it easy to adjust the levels. The view is available for all inputs.



INPUT: Currently selected input. Input can be changed by pressing "SOURCE" on the remote control or left/right navigation button on the remote control or on the front panel. Currently used input is saved and selected when device is turned on. Available inputs are: AV1 - AV4, USB, bluetooth and optical.

SAMPLE RATE: Input signal sampling rate for digital inputs (USB, bluetooth, optical).

KEY: Indicates the key of the music.

VIEW: Currently used view. The view can be changed using "UP/DOWN" navigation buttons.

MUSIC: Indicates input signal level of the music. Text is blinking if input signal is clipping. Decrease volume from the audio source in case the signal is clipping.

MIC: Indicates input signal level of the microphones. Text is blinking if microphone input signal is clipping. Decrease microphone volume from the front panel or remote control in case the signal is clipping. You may need to increase volume from your amplifier to compensate the decreased microphone volume level.

OUTPUT: Indicates output signal level of the music and microphones. Output text is blinking if output signal (music+microphones) is clipping. Decrease volume from the audio source or from the Remix-35 in case the signal is clipping. You may need to increase volume from your amplifier to compensate the decreased volume. VU meter is hidden and mute notification symbol appears on the display if output is muted.

Views

Karaoke View

Karaoke View is most suitable for singing karaoke. It displays main settings in compact view for user to quickly see the currently used options. The view is available for all inputs.

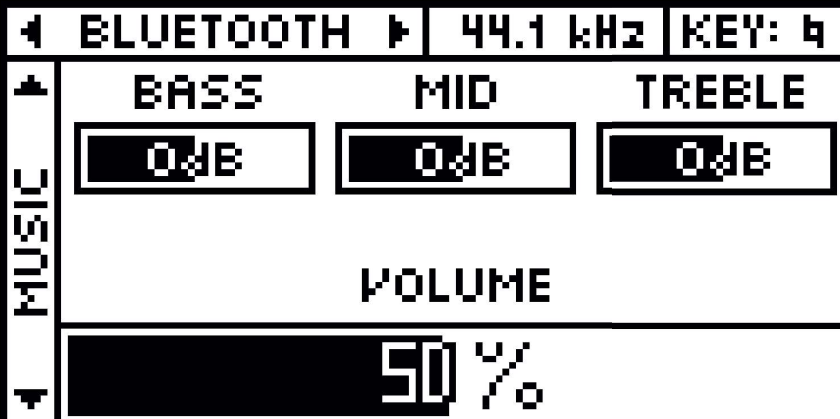
◀ BLUETOOTH ▶			44.1 kHz		KEY: 4
▲ KARAOKE ▼	MUSIC		MIC	1	2
	VOL	100	VOL	100	100
	BASS	0	BASS	0	0
	MID	0	TREBLE	0	0
	TREBLE	0	EFFECT	0	0
	L		E.TYPE	SMALL ROOM	
	R		EQ	FLAT	

- INPUT:** Currently selected input. Input can be changed by pressing "SOURCE" on the remote control or left/right navigation button on the remote control or on the front panel. Currently used input is saved and selected when device is turned on. Available inputs are: AV1 - AV4, USB, bluetooth and optical.
- SAMPLE RATE:** Input signal sampling rate for digital inputs (USB, bluetooth, optical).
- KEY:** Indicates the key of the music.
- VIEW:** Currently used view. The view can be changed using "UP/DOWN" navigation buttons.
- MUSIC:** Currently used settings for music. Music text is blinking if input signal is clipping. Decrease volume from the audio source in case the signal is clipping.
- MIC 1 / MIC 2:** Currently used settings for microphone 1/2. MIC 1/2 text is blinking if microphone input signal is clipping. Decrease microphone volume from the front panel or remote control in case the signal is clipping. You may need to increase volume from your amplifier to compensate the decreased microphone volume level.
- VU METER:** Indicates output signal level of the music and microphones. Text (L/R) is blinking if output is clipping.
- E.TYPE:** Currently used effect type for microphones. Effect type can be changed on the microphone settings menu.
- EQ:** Currently used master equalizer preset. Settings can be changed on the master equalizer menu.

Views

Music View

Music View is well suited for playing music. It displays music settings in compact view for user to quickly see the currently used options. The view is available for all inputs.



- INPUT:** Currently selected input. Input can be changed by pressing "SOURCE" on the remote control or left/right navigation button on the remote control or on the front panel. Currently used input is saved and selected when device is turned on. Available inputs are: AV1 - AV4, USB, bluetooth and optical.
- SAMPLE RATE:** Input signal sampling rate for digital inputs (USB, bluetooth, optical).
- VIEW:** Currently used view. The view can be changed using "UP/DOWN" navigation buttons.
- EQUALIZER:** Currently used music equalizer settings for bass, mid and treble.
- KEY:** Indicates the key of the music. Unvisible if key is set to natural.
- VOLUME:** Volume of the music. Mute symbol appears on the left side of the volume bar if output is muted.

Views

Media View

Media View is best suited for playing music from bluetooth mobile device. It displays progress bar and media info from currently played song. The view is only available for bluetooth.

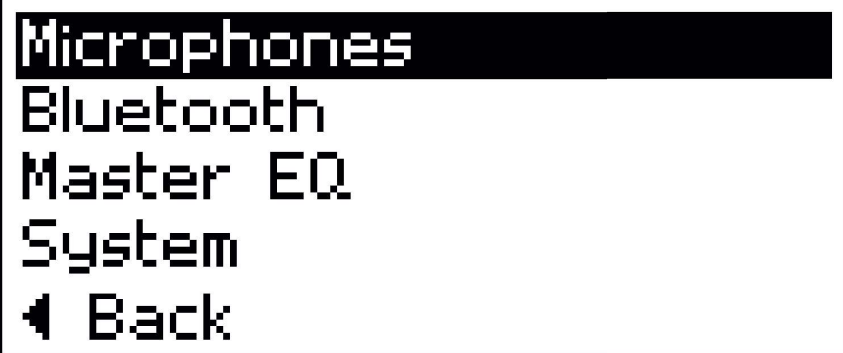


- INPUT:** Media view is only available for bluetooth audio input. If another input is selected while on the media view, the previously used view is chosen.
- SAMPLE RATE:** Input signal sampling rate for bluetooth audio input (8, 44.1 or 48 kHz)
- KEY:** Indicates the key of the music.
- MEDIA INFO:** Currently played music track title*, artist* and progress bar. Displayed only if mobile device and application supports AVRCP protocol. Information may be limited in some applications.
- OUTPUT:** Indicates output signal level of the music and microphones. VU meter is hidden and mute symbol appears on the display if mute is enabled. Text is blinking if output signal (music+microphones) is clipping. Decrease volume from the audio source or from the Remix-35 in case the signal is clipping.

*Latin and cyrillic alphabets supported.

Main Menu

Menu



Microphones
Bluetooth
Master EQ
System
◀ Back

Using the Main Menu

1. On the main view, press "MENU" on the remote control or "ENTER" on the front panel to open the main menu.
2. Navigate on the menu using "UP / DOWN" navigation buttons on the remote control or on the front panel and confirm selection by pressing "ENTER".
3. Use "LEFT / RIGHT" navigation buttons to change the option you want to change.
4. You can move back on the menu by pressing "BACK" on the remote control or navigate to the "BACK" button on the menu and press "ENTER".
5. Menu can be closed by pressing "MENU" on the remote control or navigate to the "BACK" button on the bottom of the main menu and press "ENTER".

Main Menu

Menu Structure

• Microphones

- Effect
 - Effect: small room, large room, small hall, large hall, plate reverb, echo, echo reverb
- Reverb:
 - Time: 0 - 100 %
 - Tone: -12 – +6 dB
- Echo:
 - Delay: 0 - 100 %
 - Repeat: 0 - 100 %
- Gain
 - Mic 1: 0, +3 dB, +6 dB, +9 dB
 - Mic 2: 0, +3 dB, +6 dB, +9 dB
- Feedback cancel
 - Mic 1: on, off
 - Mic 2: on, off
 - Harmonic sensitivity: off, 1-7
 - Response: fast, normal, slow
- Equalizer
 - Treble cutoff: 5.0-8.0 kHz (0.5 kHz interval)
 - Bass cutoff: 100-350 Hz (25 Hz interval)
 - Low cut: on, off

• Bluetooth

- Unpair
- Disconnect
- PIN

• Master EQ

- Preset: flat, rock, jazz, classic, pop, user 1, user 2, user 3
- Frequency bands: 31 Hz, 62 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
- Reset


• System

- Contrast: -5 – +5
- Sleep Timer: off, 15 min, 30 min, 1 h, 2 h
- Theme: light, dark
- Notifications: fast, normal, slow
- Volume reset:
 - Music: off, 0%, 10%, 20%, 30%
 - Mic 1: off, 0%, 10%, 20%, 30%
 - Mic 2: off, 0%, 10%, 20%, 30%
- Rename inputs
- Power off
- Restore
- System info

Microphone Settings

Effect

Remix-35 has seven different types of vocal effects for microphones. You can adjust the effect by extending the duration, adjusting the tone or delay and number of repeats in case of delay echo.

EFFECT	SMALL ROOM	
REVERB	TIME	+ 100% +
	tone	+0dB
ECHO	DELAY	---
	REPEAT	---
<div>BACK</div>		

Effect settings

- Effect: Change the effect type. Available effect types are: Small Room, Large Room, Small Hall, Large Hall, Plate Reverb, Echo, Echo Reverb
- Reverb:
 - Time: Change length of the reverb effect. Value can be between 0 - 100 %.
 - Tone: Change tone of the reverb effect. High shelf filter with cutoff frequency of 1.5 kHz. Value can be between -12 – +6 dB.
- Echo:
 - Delay: Change length of the echo effect. Value can be between 0 - 100 %.
 - Repeat: Change the number of repeating echos.
Value can be between 0 - 100 %.

Note! Echo settings are only available for Echo and Echo Reverb effect types.

Microphone Settings

Gain

Remix-35 has gain settings for microphones. Microphone gain is set to 0 dB by default. Increase the gain if your microphone doesn't have enough sensitivity. Too large value may cause distortion to the microphone sound. Check the microphone level from the VU meter.

Gain



Gain settings

- Mic 1: 0 dB, +3 dB, +6 dB, +9 dB
- Mic 2: 0 dB, +3 dB, +6 dB, +9 dB

Microphone Settings

Feedback Cancel

Remix-35 has Feedback Cancel function for microphones. Feedback is produced when the signal from the microphone is amplified and picked up again from the speaker. The signal continues to amplify and produces unpleasant noise, which can damage your speakers. Remix-35 use automatic 12-channel notch filters to reduce microphone feedback. Feedback cancel settings can be adjusted on the Feedback Cancel menu. Feedback Cancel is enabled by default.

Feedback cancel

Mic 1	On
Mic 2	On
Harm. Sens.	3
Response	Fast
Back	

Feedback Cancel settings

- Microphone 1: Set the Feedback Cancel ON or OFF to reduce the feedback.
- Microphone 2: Set the Feedback Cancel ON or OFF to reduce the feedback.
- Harmonic sensitivity: Set sensitivity on the harmonic frequencies. Off, 1-7
- Response time: Set response time. Available options are slow, normal and fast.

Microphone Settings

Equalizer

Microphone equalizer settings can be changed to fine-tune the microphone sound. You can change cutoff frequencies and enable high pass filter for microphones.

Equalizer

A screenshot of a digital menu titled "Equalizer". The menu has a black background with white text. It lists four options: "Treble cutoff" with a value of "5.0 kHz" and left/right arrow icons; "Bass cutoff" with a value of "200 Hz"; "Low cut" with a value of "On"; and "Back" with a left arrow icon.

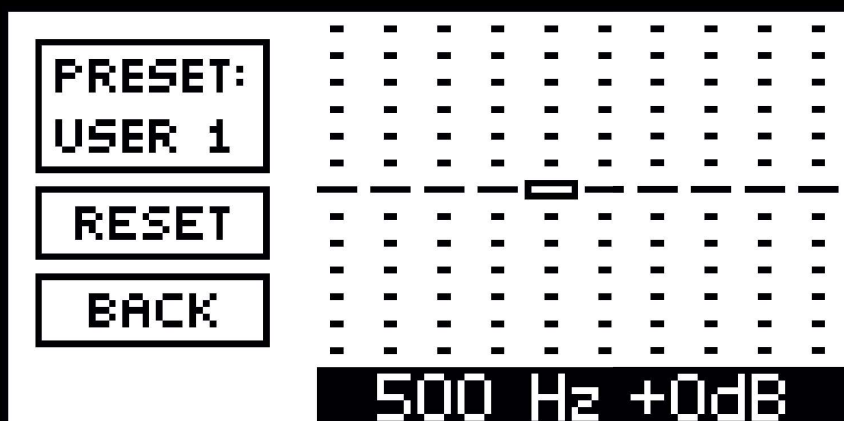
Treble cutoff 5.0 kHz
Bass cutoff 200 Hz
Low cut On
Back

Equalizer settings

- Treble cutoff: Set the cutoff frequency (F0, -6 dB) for high shelf filter. 5.0-8.0 kHz (0.5 kHz interval).
- Bass cutoff: Set the cutoff frequency (F0, -6 dB) for low shelf filter. 100-350 Hz (25 Hz interval).
- Low cut: Set Low cut ON or OFF. Low cut cuts off frequencies below 80 Hz to reduce microphone handling noise or unwanted electrical hum.

Master Equalizer

Remix-35 has digital 10-band graphic equalizer for precise tone shaping and room tuning.



Changing the preset

1. Navigate to the "PRESET" and select it by pressing "ENTER".
2. Use "UP / DOWN" button to change the option.
3. Confirm by pressing "ENTER".

Customizing the equalizer

1. Select User 1-3 preset into use according to the guide above.
2. Navigate to the equalizer by pressing "RIGHT" button and change the option by pressing "UP / DOWN" button.
3. Confirm by pressing "ENTER".

Master EQ settings

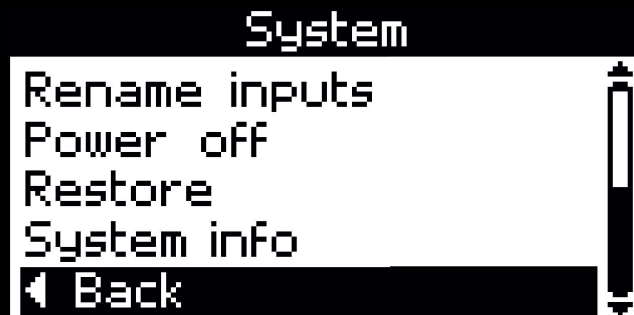
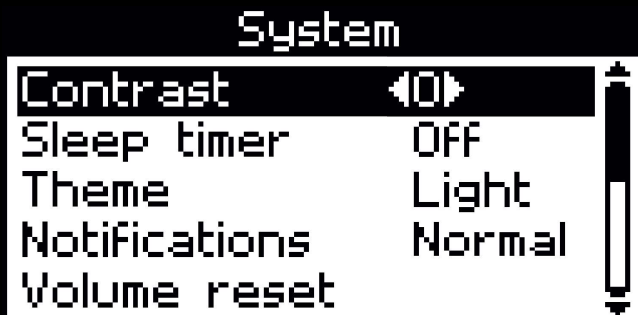
- Frequency bands: Cut or boost the specific frequency of the audio output. Available frequency bands are: 31 Hz, 62 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz. ± 12 dB cut or boost.
- Preset: Available presets: flat, rock, jazz, classic, pop, user 1, user 2, user 3. User 1-3 options are customizable.
- Reset: Reset values back to 0 dB. Only applied to currently used User 1-3 options.

Note! You can quickly access to the Master EQ menu by pressing "EQ" button on the remote control.

System Settings

General

System settings includes settings to modify your device operations.



System Settings

- Contrast:
- Sleep Timer:

Adjust contrast of the display.

Device automatically enters to standby mode after a set period of time if audio signal is not detected on the currently used audio input or actions are not performed.

- Theme:
- Notifications:
- Volume reset:

Change theme between light and dark.

Change the duration of the notification display (Volume, equalizer, key control etc.).

Set the volume level after starting the device. Can be adjusted separately for music and both microphones.

- Rename inputs
- Power off
- Restore
- System info

Rename analog inputs (AV1-AV4).

Set the system to standby mode.

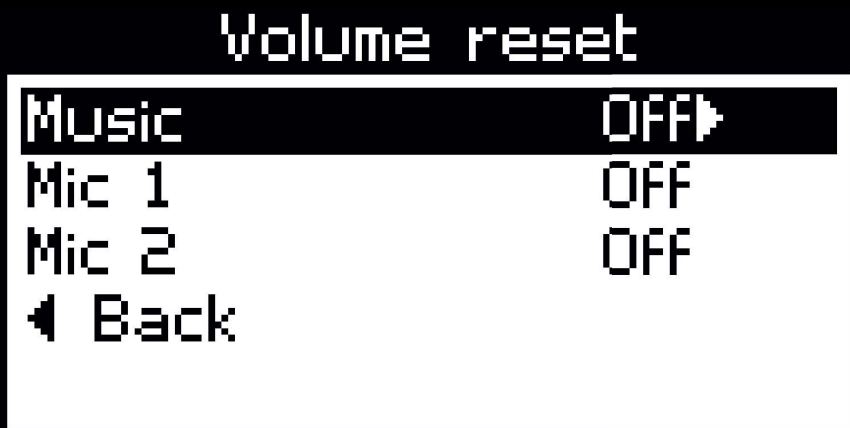
Restore factory defaults.

Information about the system.

System Settings

Volume Reset:

You can set default startup volume for music and both microphones. If function is turned off, the last time used volume setting is restored when device is turned on.



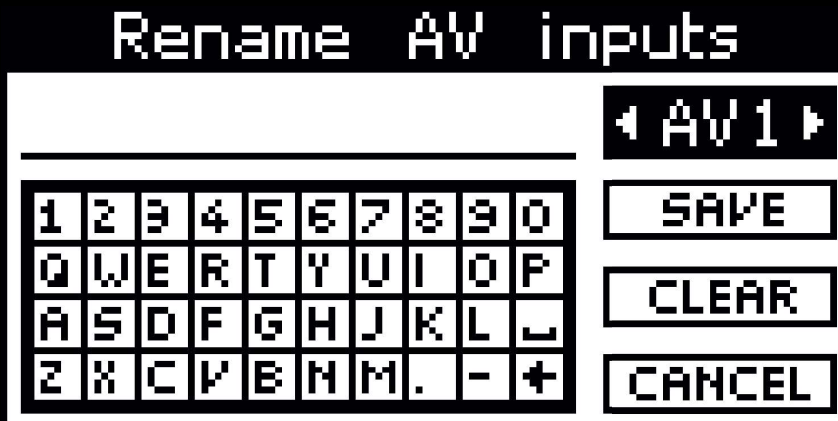
Settings

- Music Off, 0 %, 10 %, 20 %, 30 %
- Mic 1 Off, 0 %, 10 %, 20 %, 30 %
- Mic 2 Off, 0 %, 10 %, 20 %, 30 %

System Settings

Renaming AV Inputs:

You are able to rename analog inputs (AV1-AV4) to make it easier to choose the right input.



How to rename AV inputs:

1. Select the input you want to rename using "LEFT / RIGHT" navigation buttons and press "ENTER" to activate the keyboard.
2. Navigate on the keyboard using navigation buttons and select character by pressing "ENTER".
3. If you want to rename another input, navigate to the input on the upper right corner and repeat section 1 and 2.
4. Once ready, press "SAVE".

Functions

- | | |
|----------|--|
| ▪ Source | Select the input you want to rename. |
| ▪ Save | Save changes and quit. |
| ▪ Clear | Clear renamed input. |
| ▪ Cancel | Go back to the system menu without saving changes. |

Bluetooth

Connecting the Bluetooth

1. Turn on Bluetooth on your mobile device and search for bluetooth devices.
2. Select "REMIX-35" on the bluetooth device list.
3. Enter the PIN code. PIN code can be checked on the Bluetooth menu. Default PIN code is "0000".
4. Once connected, your mobile device name appears on the bluetooth menu of Remix-35.



Note! Install external antenna to the back panel before using bluetooth.

Using the Bluetooth Menu



Bluetooth device name appears on the top of the menu when the device is connected.

- UNPAIR:** Unpair the bluetooth device. PIN code must be entered again when connecting the same device next time.
- DISCONNECT:** Disconnect the bluetooth device. PIN code is not asked when connecting the same device next time.
- PIN:** Currently used PIN code. Pin code can be changed by the user.
- BACK:** Go back to the main menu.

Bluetooth

Using AVRCP Controls

Remix-35 has support for AVRCP protocol to control the audio stream of the bluetooth device using the remote control and gives you information about the currently played song in the Media View. Available remote controls are play/pause, stop, previous track and next track. The connected bluetooth device and application must support AVRCP protocol to be able to use the controls. Controls may be limited on some application.

How to Change the PIN Code

1. Go to the Bluetooth menu.
2. Press "RIGHT" button to access PIN code selection.
3. Change PIN code by pressing "UP / DOWN" arrow and move to another number by pressing "LEFT / RIGHT" button.
4. Once ready, you can press "BACK" button on the remote control to go back to the main menu or select the back button on the bottom of the screen and press "ENTER".



Note! You must unpair currently used mobile device to make the pin change to take effect.

Getting Connected

You can connect the audio source using analog or digital connection.

Remix-35 offers four RCA inputs for analog audio sources. The analog connection is made using RCA cable which is color-coded (red, white, yellow) to make the installation easier.

The digital connection can be made using optical Toslink cable. Optical connection is less susceptible to noise and less likely cause ground loop problems on your audio system. The audio source must be set to output audio in PCM format.

The computer can be connected digitally using USB audio interface. USB Type A - USB Type B cable is needed to make the installation. The computer can be set up as the audio source and the recorder simultaneously. See for a detailed set up guide on page 33-35.

You can stream music wirelessly from your mobile device using the bluetooth connection. AVRCP control protocol gives you the possibility to control the audio stream of the bluetooth device using the remote control and gives you some information about currently played song in Media View. Install external antenna before using the bluetooth to increase the range of the bluetooth connection.

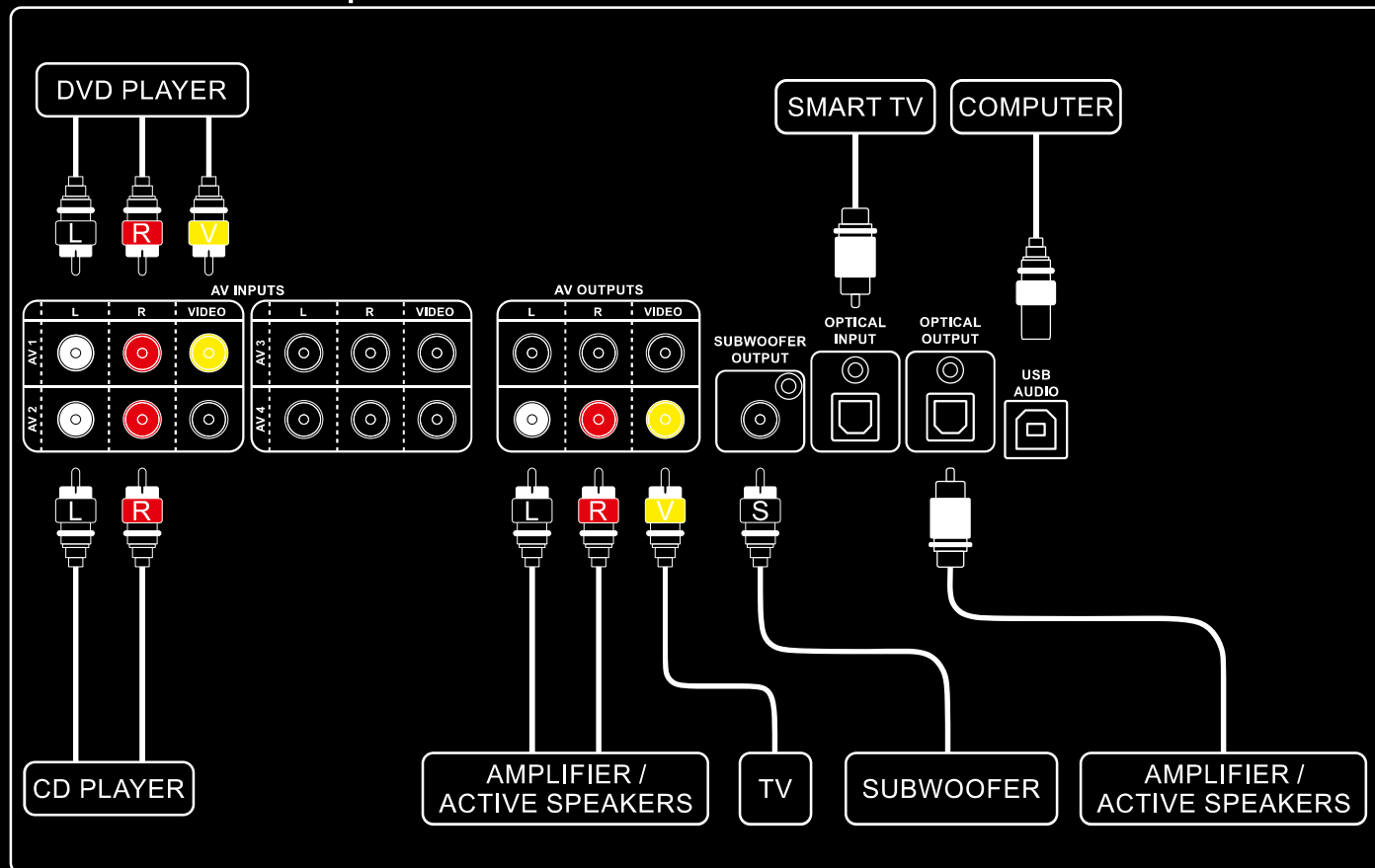
Active speakers or amplifier can be connected using analog RCA cable or digital Toslink cable. Subwoofer output can be used to connect active subwoofer, but it can also be used as mono audio output. The frequencies are not filtered out on the subwoofer output.

The microphone can be connected to the front panel using balanced or unbalanced 1/4" microphone plug cable or to the back panel using balanced XLR cable. Two microphone inputs can be used simultaneously. You can improve signal-to-noise ratio by using balanced microphone cables. Balanced microphone cables are less susceptible to the external noise caused by electromagnetic interference.

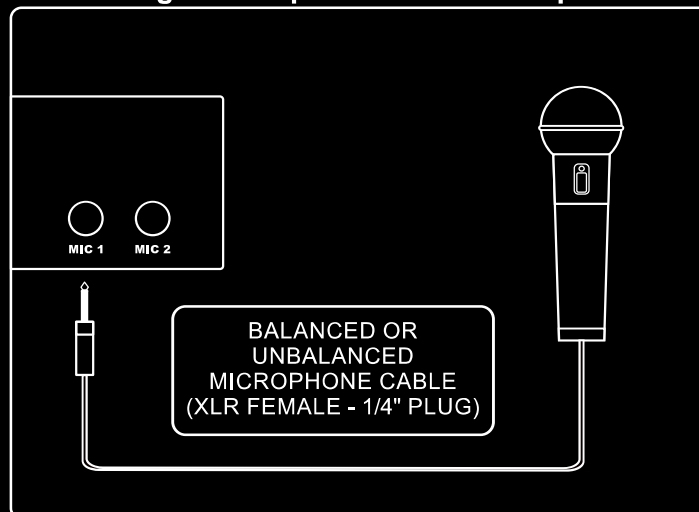
See for a detailed connection examples on the page 29-32.

Getting Connected

Basic Connection Example

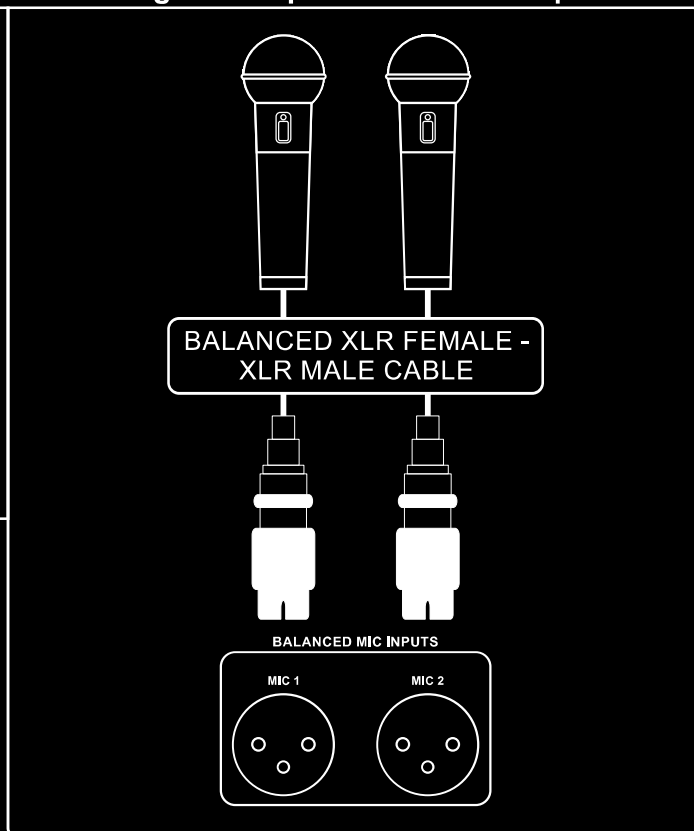


Connecting a microphone to the front panel



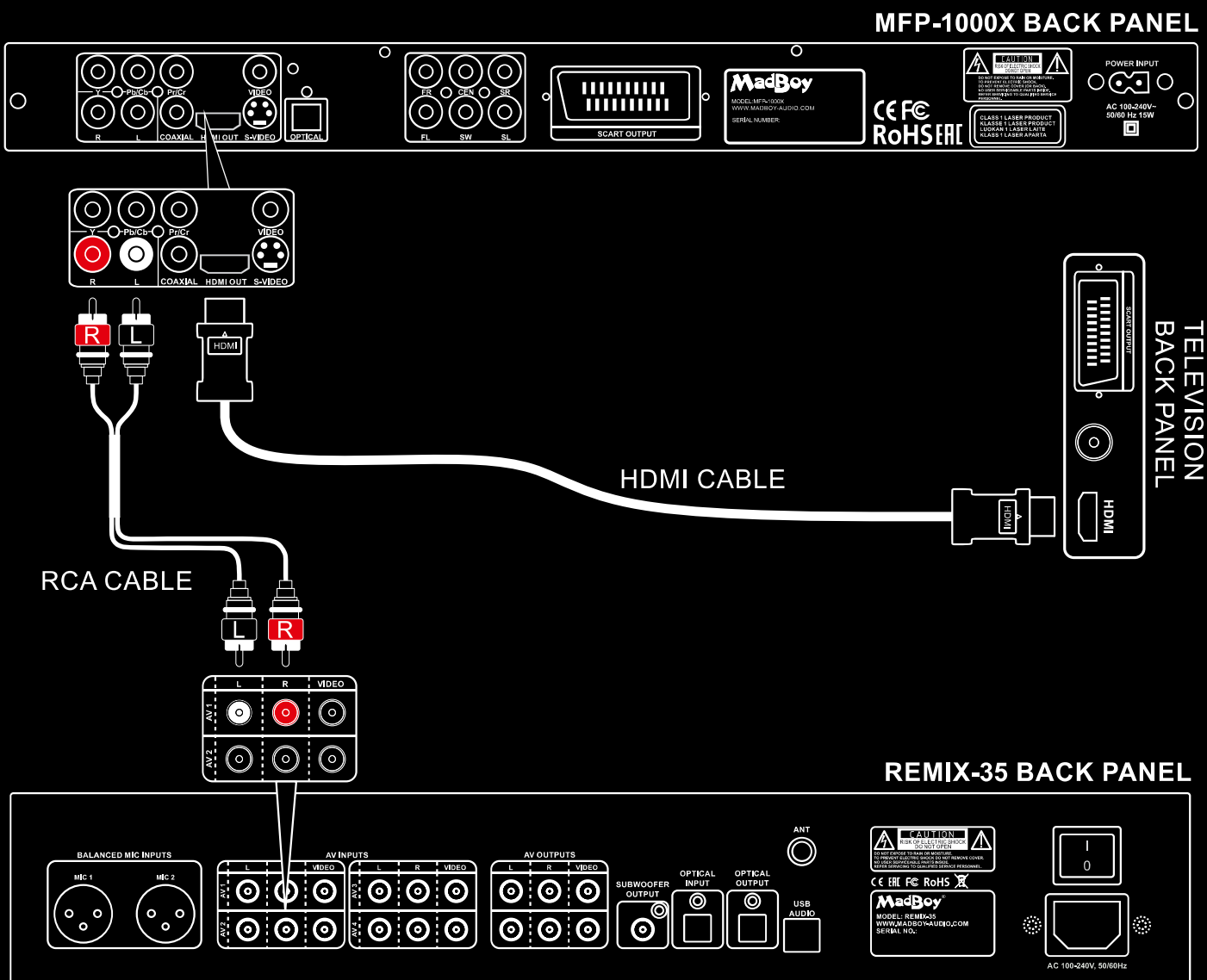
Two microphone inputs can be used simultaneously!

Connecting a microphone to the back panel



Connection Example

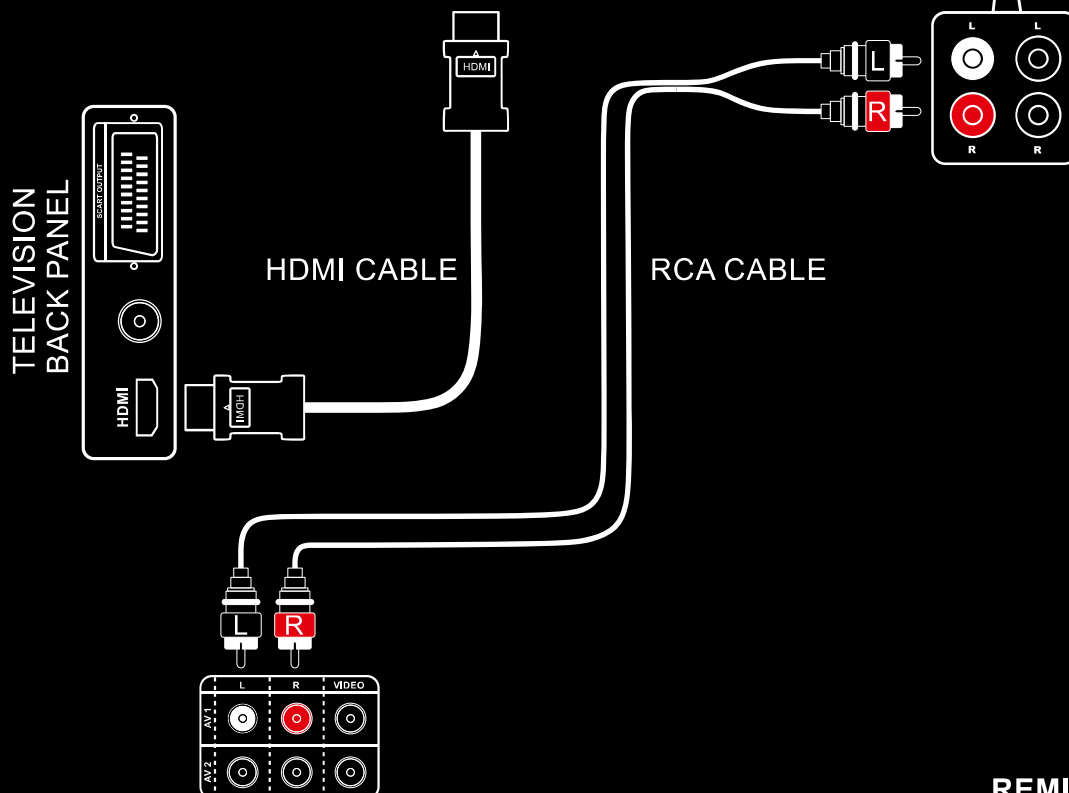
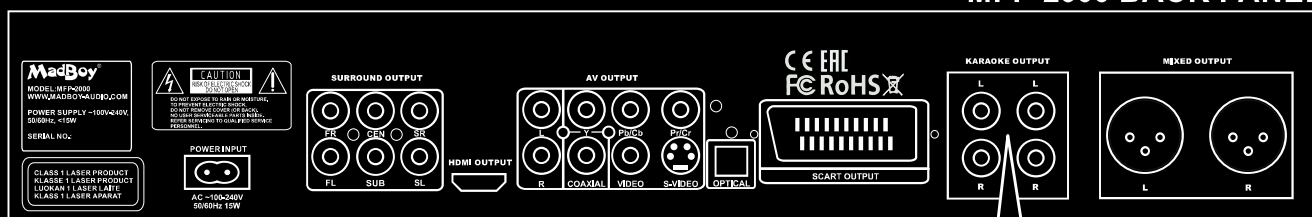
1. Connecting MFP-1000X karaoke player as the audio source



Connection Example

2. Connecting MFP-2000 karaoke player as the audio source

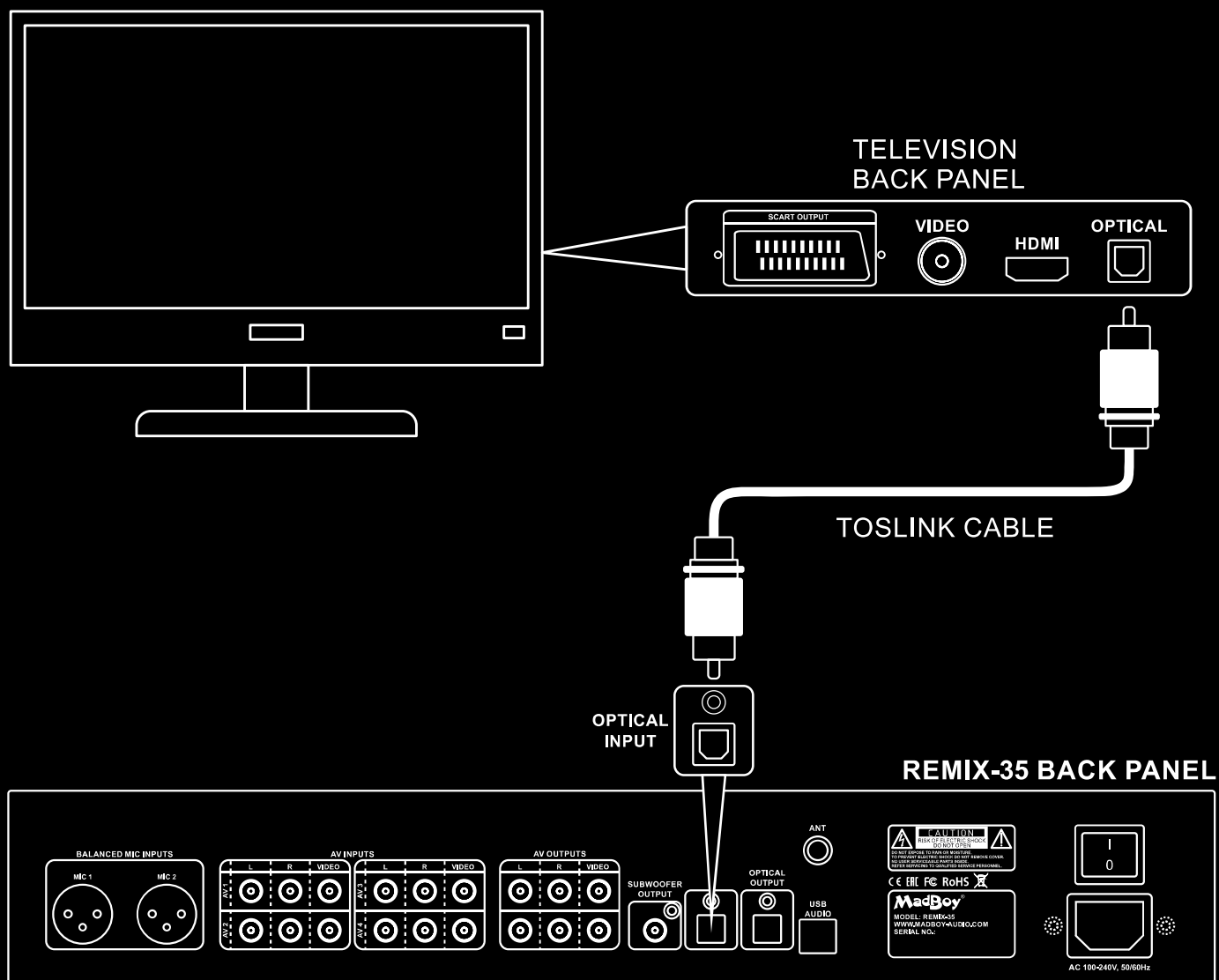
MFP-2000 BACK PANEL



REMIX-35 BACK PANEL

Connection Example

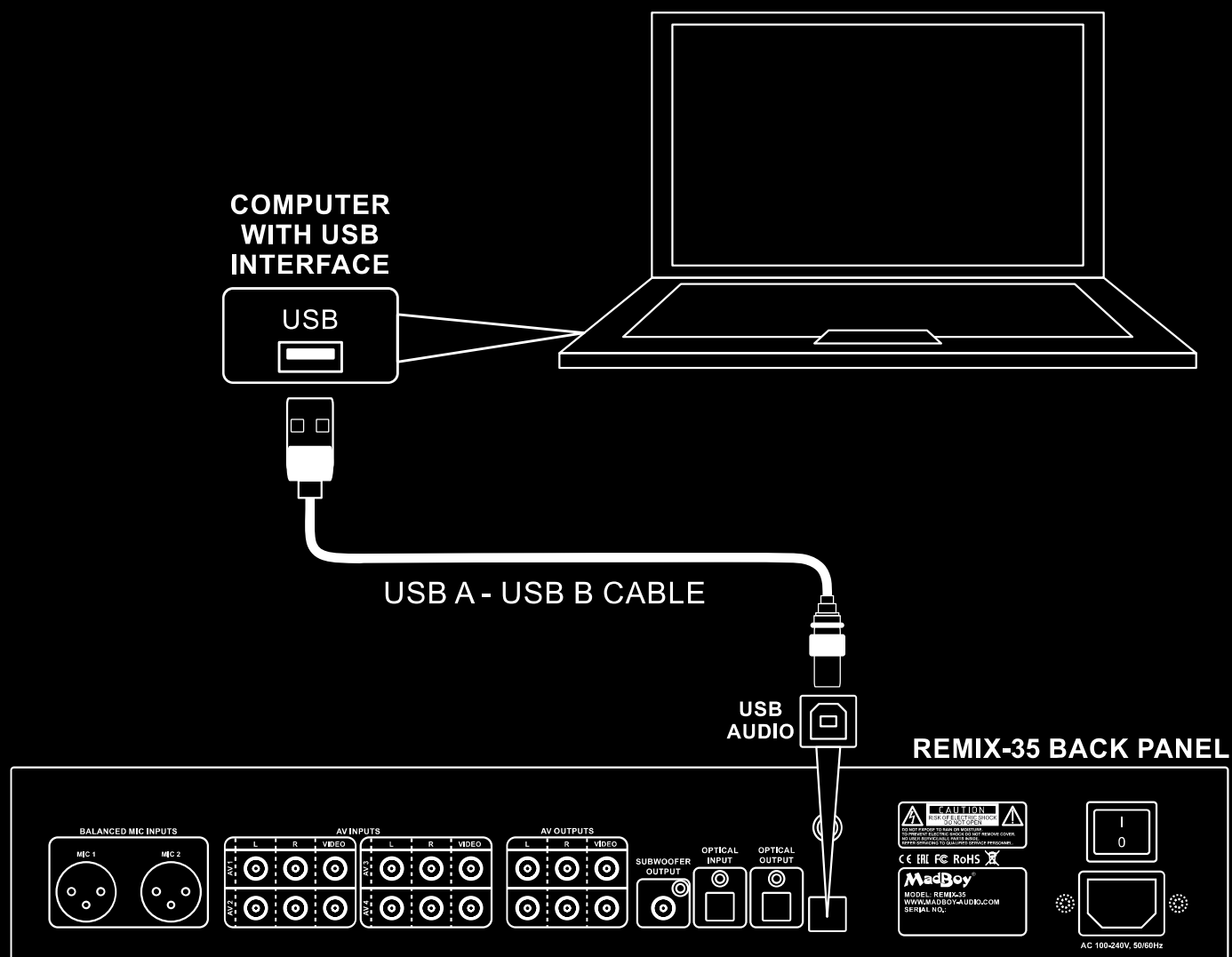
3. Connecting the SMART-TV as the audio source using optical Toslink cable.



Note! Television must be set to output audio in PCM format.

Connection Example

4. Connecting the computer as the audio source and/or the recorder.

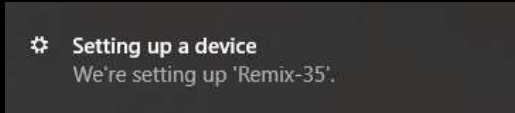


Connecting the Computer as the Audio Source

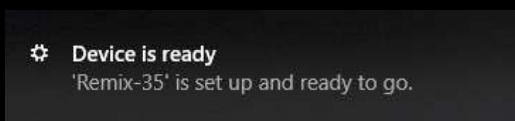
Remix-35 can be connected digitally to the computer using USB audio interface. USB Type B - USB Type A cable is needed to make the connection.


Setting up the computer as the audio source in Windows 10 operating system

1. Connect USB Type B - USB Type A cable from Remix-35 to the computer.
2. "Setting up a device" notification appears on the bottom right corner of the screen.



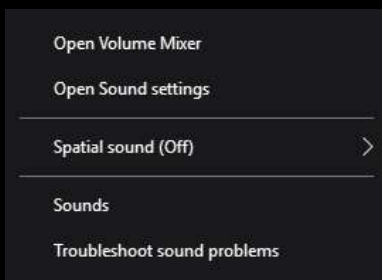
3. "Device is ready" notification appears after the set up is completed.



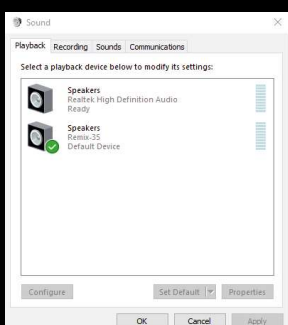
4. Usually Windows 10 sets the installed device as a default playback device automatically. You can check the audio device state in Windows Sound Settings.
5. Open Windows Sound Settings by right clicking  speaker icon on the bottom right corner.



6. Click "Sounds" on the popup menu.



7. Click "Playback" tab on the Sound settings. Remix-35 should be set as a "Default Device". If Remix-35 is not set as a default device, select Remix-35 and press "Set Default".



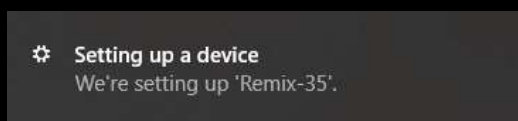
Connecting the Computer as the Recorder

Remix-35 can be connected digitally to the computer using USB audio interface. USB Type B - USB Type A cable is needed to make the connection.

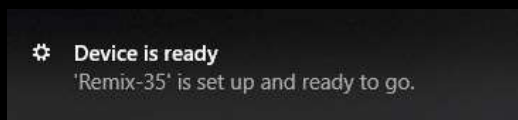
If you have already set up the computer as the audio source for Remix-35, you can start from section 4.


Setting up the computer as a recorder in Windows 10 operating system

1. Connect USB Type B - USB Type A cable from Remix-35 to the computer.
2. "Setting up a device" notification appears to the bottom right corner of the screen.



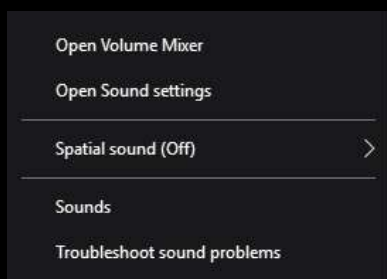
3. "Device is ready" notification appears after the set up is completed.



4. Usually Windows 10 sets the installed device as a default recording device automatically. You can check the audio device state in Windows Sound Settings.
5. Open Windows Sound Settings by right clicking  speaker icon on the bottom right corner.



6. Click "Sounds" on the pop-up menu.



Connecting the Computer as the Recorder

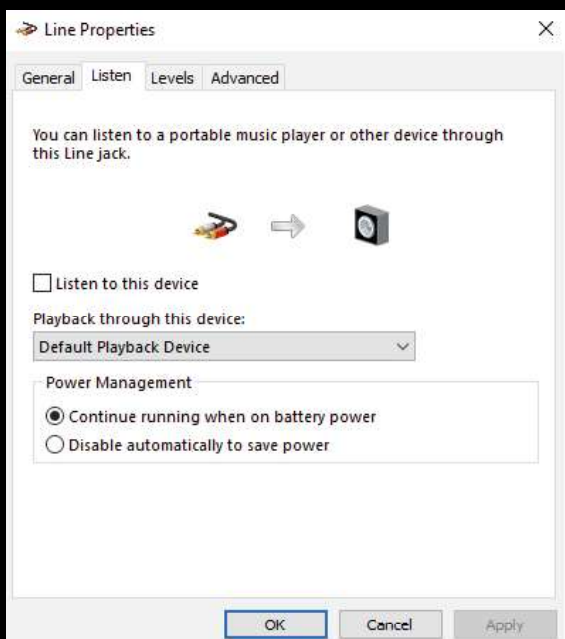
7. Click "Recording" tab on the Sound settings. Remix-35 should be set as a "Default Device". If Remix-35 is not set as a default device, select Remix-35 and press "Set Default".



Note! You must disable "Listen to this device" option if you are using the computer as the audio source and the recorder simultaneously.

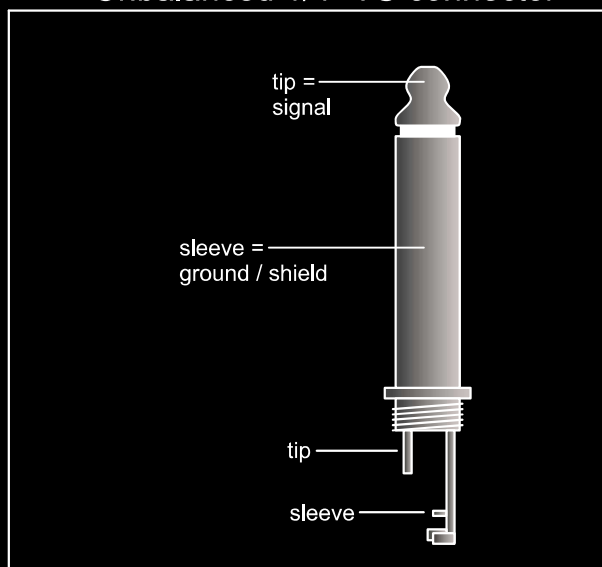
How to disable "Listen to this device" option

1. Select Remix-35 on the "Recording" tab and press "Properties".
2. Go to the "Listen" tab on the Line Properties menu.
3. Uncheck "Listen to this device" and click "OK" to apply the settings.

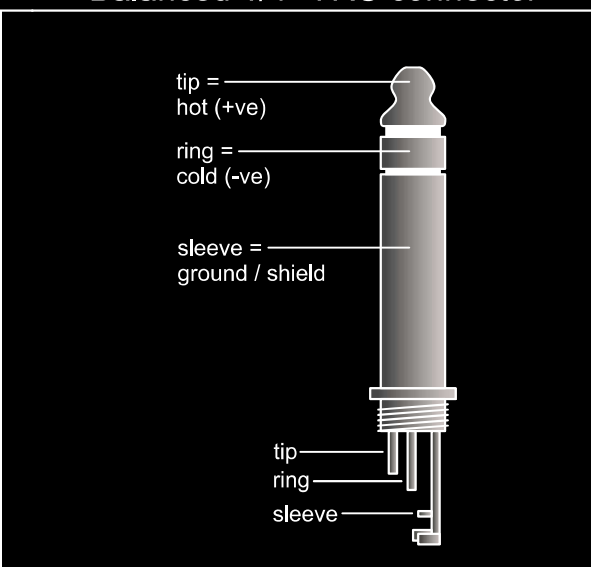


Connector Pinouts

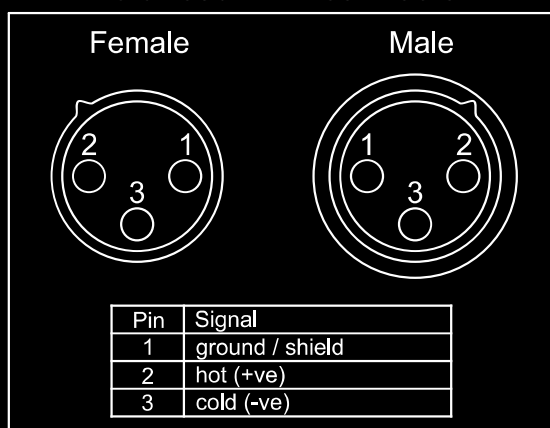
Unbalanced 1/4" TS connector



Balanced 1/4" TRS connector



Balanced XLR connector



Technical Specifications

Bluetooth

Base frequency:	2.404 - 2.480 GHz
Version:	Bluetooth 5.0
Profiles:	A2DP V1.2, AVRCP V1.5
Codec:	SBC, AAC
Sampling frequency:	8 kHz, 44.1 kHz, 48 kHz
Range:	>20m (free space, no interference, external antenna installed)

Microphone input

Input impedance:	1.2 k Ω (unbalanced), 2.4 k Ω (balanced)
Maximum input level:	-13 dBV (unbalanced / balanced)
ADC:	48 kHz, 24-bit, SNR 111 dB

Line input

Input impedance:	10 k Ω
Maximum input level:	-1 dBV
ADC:	48 kHz, 24-bit, SNR 111 dB

Line output

Maximum output level:	+3 dBV
DAC:	48 kHz, 24-bit, SNR 113 dB

Optical input

Data format:	2-channel PCM, 24-bit
Sampling frequency:	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz

Optical output

Data format:	2-channel PCM, 24-bit
Sampling frequency:	48 kHz

USB audio interface (input / output)

Data format:	2-channel PCM, 24-bit
Sampling frequency:	48 kHz

Technical Specifications

Music controls:

Vol:	$-\infty$ – +12 dB
Bass:	± 12 dB / 100 Hz (2nd order shelving, Q 0.7, F0 -6 dB 200 Hz)
Mid:	± 12 dB / 2.5 kHz (peaking, Q 0.5)
Treble:	± 12 dB / 10 kHz (2nd order shelving, Q 0.7, F0 -6 dB 6 kHz)
Key control:	MadBoy Toner Key Control, ± 5 semitones

Microphone controls:

Vol:	$-\infty$ – +18 dB (additional gain setting 0 dB)
Bass:	± 12 dB / 100 Hz (2nd order shelving, Q 0.7, F0 adjustable)
Treble:	± 12 dB / 10 kHz (2nd order shelving, Q 0.7, F0 adjustable)
Low cut	80 Hz (-3 dB, Q 0.7)

Microphone effects:

1. Small Room
2. Large Room
3. Small Hall
4. Large Hall
5. Plate Reverb
6. Echo
7. Echo Reverb

Feedback cancel:	2x12-channel automatic notch filter
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Master equalizer

Type:	10-band graphic equalizer
Frequency bands:	31 Hz, 62 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Q factor:	1.4
Gain:	± 12 dB

Frequency response

Line in - line out	20 Hz - 20 kHz (-2 dB)
Mic in - line out	30 Hz - 20 kHz (-2 dB)

Power

Power input:	AC 100-240 V, 50/60 Hz (switching mode power supply)
Power consumption:	<10 W (normal operation), <0.5 W (standby)

Dimensions	(W) 430 mm x (D) 255 mm x (H) 79 mm
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