REISS AUDIO

World Class Audio

1 Din High Resolution Player
ACC/FLAC/WAV, with app control USB & BT

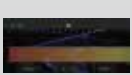
RS-MX81DSP USER MANUAL



Maximum output power: 4x51W
Rated output power:4x16W
8-channel DSP sound processor
Convenient app for iOS / Android
48-band equalizer
8-way crossover
Channel-by-channel time delays
RCA line outputs (4 pairs)
AUX input (3.5mm jack)

Bluetooth 5.1
USB connector
Playback FLAC / APE / WAV / MP3
Steering wheel button control (D-SWC)
Digital radio tuner
Memory for 18 FM radio stations
RGB backlight (3 zones)

SIRI
Voice Control



2.0 V RCA Output
No distortion

60Wx4
HIGH POWER

4x51W
MAX POWER

CORE DSP

DSP · Bluetooth · flac · APE · 48 BAND EQ · 4 RCA SUB CONTROL

PLEASE READ CAREFULLY BEFORE USING

Copyrights

Copyrights

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Disposal instructions

WEEE Directive 2012/19/EU on waste electrical and electronic equipment. Electrical equipment that has reached the end of its life should not be disposed of with other household waste.

Please dispose of it for recycling. Please contact your local authorities for the necessary information.



Important!

All illustrations in this manual are schematic representations of objects and may differ slightly from their actual appearance.

In connection with the continuous development and improvement of the product, all technical-

Specifications and appearance are subject to change without notice.

Service life

According to the law, this device is subject to a service life of 3 yuda from the date the store sells the device.

The value of service life has nothing to do with actual service life device and is solely an obligation in relation to the legal requirements of the Consumer Protection Act.

Considering the high quality control, reliability and degree of safety of the device, the actual duration of use may significantly exceed the officially established service life, provided that the consumer complies with the rules established by the manufacturer.

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Preventive Measure

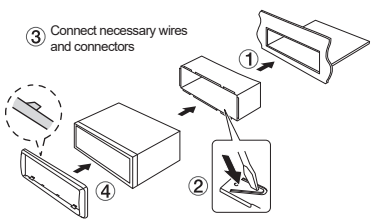
The user manual contains important safety recommendations and information on the proper use of the device. Please follow all instructions in this manual carefully.

1. When installing the unit, avoid places with high temperature, or places where there's a lot of dust.
2. Keep the device and especially its accessories out of the reach of children.
3. Do not drop the device and make sure that it is not subjected to shocks, as this may damage it.
4. The manufacturer assumes no responsibility for any loss of data resulting from damage to this unit, repair or any other cause.
5. Do not disassemble the device yourself. Doing so may void the warranty.
6. Do not use alcohol, solvents or benzene to clean the plastic parts and the display of the device. Use only a soft, dry cloth for cleaning.
7. Avoid contact of the device with liquids.
8. The product is designed for use only with 12 volt electrical systems with a negative ground. Use of the product in systems with a positive ground and/or voltage other than 12 volts may result in damage to the vehicle and the product.

Open the package and make sure there are some inside:

1. USB receiver - 1pc.
2. Remote control - 1pc.
3. Keys for receiver removal - 2 pcs.
4. LO-connector - 1 pc.
5. Instructions
6. Sticker

Installing the device



1. Install the mounting cover into the 1DIN standard hole provided by the manufacturer. In the case of a 2DIN standard hole, use 2DIN adapter frames and adapters of the brand name.

2. Use a screwdriver to bend outward the metal tabs on the mounting cover to lock it in place.

3. Check the electrical connections, connector or individual wires (depends on the equipment of the specific vehicle model). Connect the main connector to the unit. Check the system for proper operation before securing in the mounting cover.

4. Insert the unit into the mounting cover and slide it inside until it clicks into place.

In some car brands (e.g. TOYOTA, HONDA, ...) the device is mounted by screws to the standard brackets.
In this case, the mounting cover is not used.

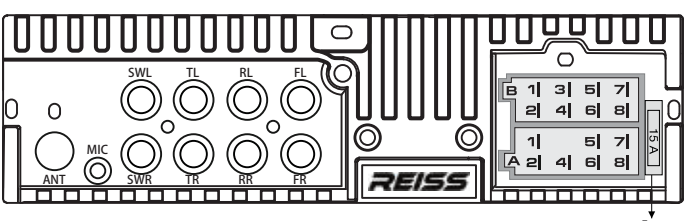
Power Connection

1. Make sure the on-board voltage of your vehicle is +12 volts.
2. Remove the fuse from the unit before connecting the wires.
3. Connect the yellow (A4) lead to the +12 volt DC power supply circuit.
4. Connect the red wire (A7) to the ACC terminal of the ignition switch.
5. Connect the black wire (A8) to the metal part of the vehicle body.
6. Blue wire (A5) - connect to the amplifier's remote power input (Remote) or active antenna power input.
7. Connect the orange wire (A6) to the circuit in which +12 volts appears when the to turn on the parking lights.
8. Connect the remaining wires according to the diagram.

To avoid high current consumption and unstable operation of the receiver, when connecting the red wire (A7) to the constant +12 volts together with the yellow (A4), set the "CAR ACC" function in the "SYSTEM" menu to "NO"!

Connection of acoustic cables and RCA cables

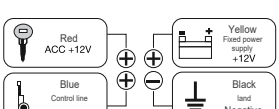
1L-2R: RCA output, channels 1 (left) and 2 (right)
3L-4R: RCA output, channels 3 (left) and 4 (right)
5L-6R: RCA output, channels 5 (left) and 6 (right)
7L-8R: RCA output, channels 7 (left) and 8 (right)



ANT - Radio antenna connection input (not included)

MIC - External microphone input (not included)

Connecting the steering wheel buttons
A1 - SWC key: Brown/Black
A2 - SWC key: Brown
A8 - GND (Earth): Black



B5 Channel 1 left + (White)
B6 Channel 1 left - (White - Black)
B3 Channel 2 right + (Gray)
B4 Channel 2 right - (Gray - Black)

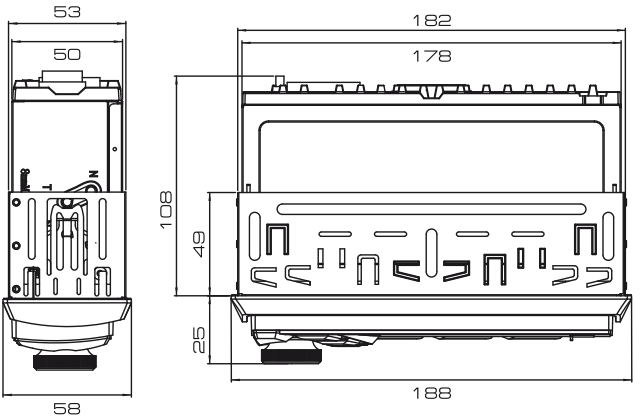
B7 Channel 3 left + (Green)
B8 Channel 3 left - (Green - Black)
B1 Channel 4 right + (Purple)
B2 Channel 4 right - (Purple Black)





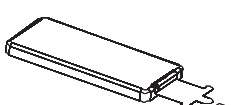
1. Turning the device on / Turning it off / Selecting a source
2. IR receiver
3. LCD display
4. USB-removal
5. Next track / Fast forward / Radio tuning
6. Adjusting the volume / Switching settings / Confirming selection
7. Previous track / Rewind / Radio tuning
8. Refund
9. Search
10. Microphone
11. Mutes the sound (MUTE)
12. Preset button 1 / Next folder
13. Preset button 2 / Previous Folder
14. Preset button 3 / Repeat mode
15. Preset button 4 / Random playback mode
16. Preset button 5 / Pause
17. Preset button 6 / Track scan mode
18. Display information type / Display off (press for 2 seconds)
19. Receiving / Ending a call / Voice assistant
20. Radio band switching (FM1/2/3/AM1/2)
21. Resetting the device to factory settings (reset)
22. AUX input

External Dimensions



Remote Control

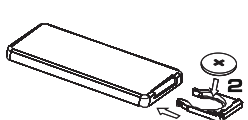
Remove the battery protection (CR-2O25). The remote control unit is supplied with battery protection.
The remote control will not operate until the protection is removed.

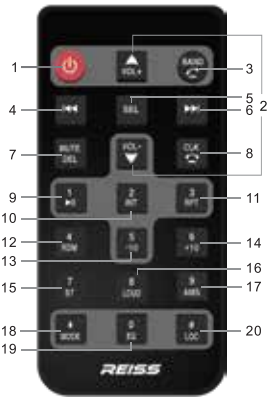


Replacing the battery:
When the lithium battery has lost capacity, replace it as shown.



1. Pull the cell holder from the remote control in the direction of arrow 1.
2. Replace the old battery with a new one. Observe the polarity! Make sure the (+) is on top!
3. Insert the battery holder into the remote control.





1. ⏻ Turning the device on / off
2. Adjusting the volume
3. Switching the radio bands / ☎ Receiving a call
4. ⏮ Previous track / Rewind / Radio tuning
5. Selecting a source
6. ⏭ Next track / Fast forward / Radio tuning
7. Mute
8. ☎ End call / Clock
9. Preset Button 1 / ⏯ Pause
10. Preset Button 2 / Track scan mode
11. Preset Button 3 / Repeat mode
12. Preset Button 4 / Random playback mode
13. Preset Button 5 / Skip back 10 tracks
14. Preset Button 6 / Skip 10 tracks forward
15. Radio station reception mode (mono / stereo)
16. Tone Compensation (LOUD)
17. Scanning stations in memory / Automatic station search and memorization (AMS)
18. Source selection
19. Selecting an equalizer preset
20. Lowering the tuner sensitivity (LOC)

Using the remote control(R/C):

- Position the remote control's emitting window in the direction of the sensor window on the device.
- The operating angle for receiving R/C signals is about 30 degrees.
- The distance between the emitting window of the R/C and the touch window of the device should be less than 5 meters.
- A dead battery can damage the remote control.
- Keep the batteries out of the reach of children!

Basic Operation

On/Off
Press any button to turn on the device.
Press and hold the (1) ⏻ / SRC button to turn off.

Modulation
Turn the volume knob to set the desired level.

Select source
Press (1) ⏻ / SRC to switch between playback sources: Radio --> USB --> AUX in --> Bluetooth.

Settings menu
Press the volume knob button (6) and rotate to select the desired setting section: AUDIO (audio settings), DISPLAY (display settings), TUNER (radio settings), SYSTEM (system), BLUETOOTH (Bluetooth settings).

Audio - Sound Setting

EQ Setting (Equalizer)

Custom - manually adjust the 48-band equalizer (-9 dB to +9 dB).
EQ reset - resets the equalizer settings.

Prerequisites:
Flat, Classic, Rock, Pop, Eavu, Tod 4O, Top 40, JAZZ, Vocal, Country, Super Bass, Natmral, Electric, Powerfmll, Dynamic.

Q - factor
Level
Sets the value of the quality factor of the Quality Ratio). Values: 1 - 12.

Link all band
Yes - A single quality value for all equalizer bands.
No - Individual goodness value for each equalizer band.

Bass boost
Turns on and adjusts the bass boost (5 levels).

Loudness
Enables and adjusts tone compensation (2 levels).

Subwoofer
Sub-W output - Turns the subwoofer on/off.
Sub-W level - adjusts the volume level of the subwoofer.
Sub-W stereo - the subwoofer's 7/8 RCA outputs (Mono/Stereo).

Fader
Adjusts the relative volume between 1/2 and 3/4 channels.

Balance
Adjusts the relative volume between the left and right channels.

Volume Step
Selects the volume step value (1/2/3).

Volume Limit
Selects the maximum possible volume level (3 - 62).

Power on vol
Selects the volume level when the receiver is turned on (1 - 62).

X'Over (Crossover) - Crossover Setting

1/2 Channel (1/2 channel) - Tune HPF, LPF, filter type, descent slope, 1/2 channel level, and phase.

1/2-HPF FRQ - cutting frequency: THROUGH (off) / 20Hz - 12.5kHz.
1/2-HPF TYPE - filter type.
1/2-HPF SLOPE - decay slope: 6 - 48 dB per.

1/2-LPF FRQ - cutting frequency: THROUGH (off) / 20Hz - 12.5kHzL
1/2-LPF TYPE - filter type.
1/2-LPF SLOPE - decay slope: 6 - 48 dB per.

1/2 GAIN - the 1/2 level of the channel, ranging from -8 dB to 0 dB.
1/2 PHASE - electrical phase changeover: 0° / 180°

3/4 Channel (3/4 channel) - Tune HPF, LPF, filter type, descent slope, 3/4 channel level, and phase.

3/4-HPF FRQ - cutting frequency: THROUGH (off) / 20Hz - 12.5kHz.
3/4-HPF TYPE - filter type.
3/4-HPF SLOPE - decay slope: 6 - 48 dB per.

3/4-LPF FRQ - cutting frequency: THROUGH (off) / 20Hz - 12.5kHzL
3/4-LPF TYPE - filter type.
3/4-LPF SLOPE - decay slope: 6 - 48 dB per.

3/4 GAIN - the 3/4 level of the channel, ranging from -8 dB to 0 dB.
3/4 PHASE - electrical phase changeover: 0° / 180°

5/6 Channel (5/6 channel) - Tune HPF, LPF, filter type, descent slope, 5/6 channel level, and phase.

5/6-HPF FRQ - cutting frequency: THROUGH (off) / 20Hz - 12.5kHz.
5/6-HPF TYPE - filter type.
5/6-HPF SLOPE - decay slope: 6 - 48 dB per.

5/6-LPF FRQ - cutting frequency: THROUGH (off) / 20Hz - 12.5kHzL
5/6-LPF TYPE - filter type.
5/6-LPF SLOPE - decay slope: 6 - 48 dB per.

5/6 GAIN - the 5/6 level of the channel, ranging from -8 dB to 0 dB.
5/6 PHASE - electrical phase changeover: 0° / 180°

7/8 Channel - adjusts the HPF, LPF, slope, level and phase of the 7/8 channels.

7/8-HPF FRQ - cutting frequency: 10Hz - 100Hz / THROUGH (off).
7/8-HPF TYPE - filter type.
7/8-HPF SLOPE - decay slope: 6 - 48 dB per.

7/8-LPF FRQ - cutting frequency: 30Hz - 800Hz / THROUGH (off).
7/8-LPF TYPE - filter type.
7/8-LPF SLOPE - decay slope: 6 - 48 dB per.

7/8 GAIN - the 7/8 level of the channel, ranging from -8 dB to 0 dB.
7/8 PHASE - electrical phase changeover: 0° / 180°

X'Over Reset
Reset the crossover settings.

IMPORTANT!
The delay setting starts with the farthest speaker from the listening position (usually the subwoofer).
The farthest speaker does not need any additional delay. The other speakers should be corrected according to the difference between the distance from the farthest speaker and the distance from the calculated speaker to the listening position.

For example: the distance from the listener to the subwoofer is 220cm,
the distance from the listener to the front left tweeter is 80cm.
The delay for the left tweeter channel will be: 220cm - 80cm = 140cm. Add the figure 140 to the left tweeter channel delay.

Make the necessary calculations for all speakers, then make the settings in the REISS Audio app or in the receiver menu.

Delay - the value for each channel.
Select the desired channel and set the desired signal delay value.
In MOHO mode, the delay values for 7/8 channels will be adjusted synchronously.

Gain - the signal level value for each channel.
Select the desired channel and set the desired signal level.
In MOHO mode, the level values for 7/8 channels will be adjusted synchronously.

DTA Reset
Reset delay settings.

Delay units
Selects the unit of measurement:centimeters or milliseconds.

Save DSP Settings (preset)

You can store 6 independent settings (presets) and switch between them quickly.

IMPORTANT! Settings are saved when the battery power is disconnected.

1. adjust the equalizer, delay, and crossover settings.
2 to save the current settings to memory location "1", press and hold the "1" button.
3. change the equalizer, delay, and crossover settings.
4. Press and hold the "2" button to save the current settings to memory location "2".
5. 2 Press the "1" button quickly to clear the settings stored in "Preset 1" from the memory.
6. 2 button to clear the settings stored in "Preset 2" from memory.

Display Settings

Color Select
Set the RGB backlight color.
All zone - Select a color for all 3 zones at the same time.
Zone 1, Zone 2, Zone 3 - select a color for each zone.
of 3 zones.

Dimmer
Backlight dimming settings, on/off, or a choice of two dimming levels.

Spectrum
Frequency spectrum display, on/off.

Radio - Tune radio function

Local Seek
Local search, on/off.

Stereo set
Stereo mode, including/close.

Regional
Select the broadcasting region (Europe, USA, Asia, Russia).

RDS set
Enables the text messaging system.

TA set
Traffic message.

AF set
Switch to more stable frequencies.*

EON set
Auto switching to channels with traffic messages.*

Radio text
Display text information.

PI regional
Displays the station name.

PTY search
Search by program type.

Bluetooth

Enable
Turns BT on/off.

PIN code edit
Change the PIN code for BT pairing.

MIC gain (micro level)
BT microphone level adjustment.

System

Language
Selects the language in which the menu is displayed.

Clock - set the clock
Clock format - selects the clock format (12/24 hours).
Clock adjust - sets the hours / minutes.
Data format - selects the date display format.
Data set - set the date values.
Time sync - synchronizes the exact time via RDS.

System

Beep
Enable / disable button sound.

AUX IN
Enable / disable the AUX source.

SWC
Programming the standard steering wheel buttons.
See page 18 for a detailed description of the programming procedure.

Car ACC (ACC position) - ignition switch type
Yes - set for a car with ACC position, the red power lead of the unit is connected to the ACC position of the ignition switch.

No - set for a car without ACC position, the red power lead is connected to the permanent +12 volts (together with the yellow one).
BT module and USB connector will be disconnected when the unit is turned off.

Animation - animation on the main screen
Enable and set the delay interval before the animation is played on the device display: none / 15 / 30 sec. / 1 / 2 / 4 min.

Demo mode
Enable/disable demo mode.

Factory reset
Reset / return to factory settings.

Version .
View the current software (firmware) version.

Radio

Storing and recalling radio stations from the memory
Press and hold one of the number buttons (1-6) to store the current radio station in memory.
Press one of the number buttons (1-6) to recall the current radio station.
It is possible to store 6 radio stations in each broadcasting band.

Band selection
Press the (18) BAND button to select the broadcast band of the radio stations: FM1, FM2, FM3, AM1, AM2.

Automatic station search
Press the (7) ⏮ or (5) ⏭ button to quickly search for stations.

Automatically search and store stations

Press and hold the SEARCH button (8) for more than 2 seconds.
The unit will quickly search and automatically store 18 FM radio stations with a strong signal.

Manual station search

Press the (7) ⏮ or (5) ⏭ to change the frequency step by step.
Hold down the (7) ⏮ or (5) ⏭ button to enter auto tuning mode.

USB

Connect a USB memory device to the connector on the front panel of the unit. Playback of supported file formats starts automatically. The USB connector supports charging mobile devices. The charging current is up to 1A.

IMPORTANT! There are a wide variety of freeware and other software on the market for encoding FLAC, Mp3 and WAV files, and depending on the encoding status and file format, poor playback quality or noise may appear during playback. In some cases, playback is not possible.

Switching tracks

Press the (7) ⏮ or (5) ⏭ button to skip to the previous or next track.

Rewind

Press and hold (7) ⏮ or (5) ⏭ button to rewind or fast forward.

Play/Pause

Press (15) ⏯ to stop playback.
Press again to resume playback.

Scanning tracks

Press the (16) INT button to play 10 sec. of each track sequentially.
Press again to stop scanning.

Repeat playback

Press the button (13) to select the repeat playback mode: Repeat folder - Repeat playback of all files in the current folder.
Repeat one - Repeat playback of the current file.
Repeat all - Repeat playback of all files on the media.

Repeat one (Repeat track) - Repeat playback of the current file

Press the (14) button to select the random playback mode: Random folder / Random All / Random Off.

USB

Switching folders and tracks
Press the (12) or (11) button to switch to the previous or next source folder.
Press and hold (12) or (11) to move 10 tracks backward or forward.

Bluetooth

Pairing with a phone

1. Turn on Bluetooth on your mobile device.
2. Find "RS-MX81DSP" in the list of available BT devices and connect to it.
   PIN code for authorization: 1234.
   WARNING! It is not necessary to perform pairing with BLE channel, it may lead to unstable operation of the device!
3. In case of successful connection the "BT" indicator on the receiver display will stop blinking and will light up permanently.
4. The audio signal from the mobile device (music and calls) will be transmitted to the car speakers.

Outgoing call
Dial the number of the person on your phone.The call will be placed on speakerphone.

Incoming call
When you receive an incoming call, the caller's number will be displayed on the receiver's screen. Press the button (18) to accept the call hands-free.

Ending a call
Press and hold the button (18) to drop an incoming call or end a call.

Calling the last number dialed
Press and hold the button (18) on the receiver to call the last number in your phone's outgoing call list.
Press the button (18) on the receiver to activate the Siri function.

Switching between phone and speakerphone
During a call,press the button (18) to switch the audio signal from the speakerphone to your phone or from the phone to the speakerphone.

Adjusting the volume
Turn the volume knob during a call to adjust the voule level.Press the (10) MUTE button to mute the sound.

Bluetooth Music(A2DP)

Your device supports Bluetooth audio transmission protocol. After successfully pairing your smartphone with the receiver, you can play music from your smartphone on your vehicle's audio system. Press the (7) ⏮ or (5) ⏭ buttons to switch tracks.
To stop playback, press (15) ⏯ .

AUX

You can connect an external source via the 3.5mm jack on the front panel of the receiver using the AurA AUX cable (available separately).

Reset Settings

Press and hold the button (19) RST for 10 seconds to reset the device to factory defaults.

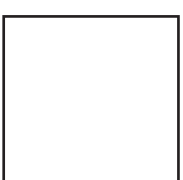
Softward update (firmward)

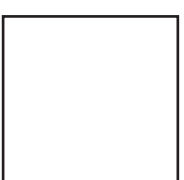
We are pleased to offer software (firmware) upgrades to ensure maximum performance and the latest features for your device.
Please check for the new software version at

Smartphone applications

Most of the device settings are available in the REISS Audio mobile app for Android or iOS.

1. Install the "REISS Audio" application from Google Play or App Store.
2. Connect your smartphone to the receiver via Bluetooth.
3. Launch the "REISS Audio" application to control the receiver.





Steering wheel button programming (Direct SWC)

This function can only be realized in vehicles with resistive control buttons, the common wire of the buttons is connected to the vehicle ground.
For correct operation of the steering wheel buttons, you must first connect the wires of the OEM remote control to the ISO connector (section A).

Steering wheel button programming

The WHEEL GND wire of the OEM control panel should be connected to the black GND wire (A8), and the WHEEL KEY A and WHEEL KEY B signal wires should be connected to wires A1 (brown/black) and A2 (brown), respectively.

Operating voltage range with connected remote control buttons from 0.3 to 3.3 V.
The minimum difference of operating voltages, which are set at the remote control output after pressing the buttons, should be at least 0.3 V. Otherwise, in some cases, the buttons may be perceived as one.

WARNING!
The manufacturer does not guarantee correct operation of the device with all car models and is not responsible for possible problems with the car or the device that may occur if the device is not properly connected to the vehicle's standard wiring.

To correctly connect the standard resistor remote control,please consult your official vehicle dealer or contact a certified installation center.

Button programming procedure:

1. Select the SYSTEM menu.
2. Enter the SWC section and select one of the two memory banks (SWC or SWC 2).
3. Enter the ENABLE menu item and select YES.
4. Press the Back button and select PROGRAM. PRESS K1 will flash on the display.

Follow the steps below:
1. Press the button located on the steering wheel to assign a function to it. The message CHOOSE KEY 1 flashes on the display.
2. Select one of the buttons on the head unit whose function you want to activate. The message PRESS KEY 2 flashes in the display when successfully assigned.
3. Repeat these steps (1-2) as many times as you want to assign functions to the steering wheel buttons.
4. Press the controller button on the front panel to save the data. The display will show SAVED x KEYS (СОХРАНЕНО), then the unit will return to the SWC menu.

Note.
There are 9 functions available for programming. To disable the settings of the programmed buttons, enter the SWC menu, and by selecting the ENABLE option, set the value to NO.

General	
Working power supply voltage:	12 V (9.6 TO 15 V allowed)
Fuse:	15 A
Maximum power output:	4 x 51 W (4 Ω)
Rated output power:	4 x 16 W (4 Ω)
Acoustic impedance:	4 - 8 Ω
Frequency range:	20 Hz - 20kHz
Display angle:	vertically ± 30°, horizontally ± 15°
Audio input (AUX,stereo):	one (front panel, 3.5mm)
Linear output (RCA):	8-channel (4 pairs)
RCA output level:	up to 4 V
Maximum current consumption:	15 A
Mounting dimensions W x D x H):	182 x 108 x 53 mm
Temperature (working):	0 ℃ to + 60 ℃
Humidity (working):	45% + 80%

USB	
Supported Media:	USB
Supported Formats:	FLAC (16 bit), WAY, APE, AAC, MP3
File System:	FAT 16., FAT32
USB media:	USB 2.0, USB 3.0, up to 256Gb
ID3 Tag support:	English

Bluetooth	
Version:	5.1
Introduction:	A2DP, AVRCP, HFP
Codec:	SBC
Frequency:	2.4 GHz

Radio AM/FM	
Radio station tuning memory:	12 AM / 18 FM
FM reception frequency range:	87.5 - 108.0 MHz
AM reception frequency range:	522 - 1620 KHz
Antenna impedance:	75 Ω

Audio input AUX IN	
Audio input level:	500 mV (2 V max)

Processor:	
Crossover	8 bands, 10-12500 Hz, 6-48 dB/oct.
Equalizer	48 bands, 20-20000 Hz
Phase rotation	0 / 180°
Time delays	0-25 ms, 0-850 CM



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