

AURA[®]

OWNER'S

MANUAL



AMH-78DSP

CAR BLUETOOTH / USB RECEIVER

WARNING!

PLEASE READ CAREFULLY BEFORE USING

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In order to improve product quality, product specifications and features are subject to change without notice.



The Directive WEEE 2012/19/EU on waste electrical and electronic equipment.

Waste electrical equipment should not be disposed of with your other household waste. Please recycle it. Please contact your local authority for the required information.

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

Product service life - 3 years.



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Precautions

This user manual contains important safety advice and information on the correct use of the device. Please follow all instructions in this manual carefully.

1. While installing the device, avoid places with high temperature, humidity, or dusty places.
2. Make sure that the device and especially its installation accessories are out of the reach of children.
3. Do not drop the device and make sure do not hit it, as this may damage it.
4. The manufacturer will not be held liable for any loss of data caused by device damage, repairs or any other reason.
5. Do not disassemble the device yourself. This may void the warranty.
6. Do not use alcohol, solvents or gasoline for cleaning plastic parts and device. Use only dry soft cloth for cleaning.
7. Avoid contact with liquids.
8. The product is designed for use with 12-volt negative-grounded electrical systems only. Using the device on systems with a positive ground and / or voltage other than 12 volts may damage the vehicle and the device.

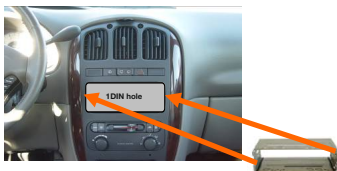


Package bundle and installation

Open the package and make sure that inside include:

1. USB-receiver - 1piece
2. Remote control - 1 piece
3. Keys for receiver remove - 2 pieces
4. ISO - jack- 1 piece
5. Instruction
6. Guarantee

If the car has a standard 1DIN hole for installing the head unit, use it as described below.



1. Install the mounting cover into the 1DIN hole provided by the manufacturer. If the standard place has a 2DIN size, use adapter frames and adapters **AURΔ** brand
2. Use a screwdriver to pry out the metal tabs on the mounting cover to lock it in place.
3. Check electrical connections, ISO connector or individual wires (depending on the equipment of the specific car model).
If necessary, use ISO adapters **AURΔ** brand
4. Connect the ISO connector to the device. And check the functionality of the system before fixing it in the mounting box.
5. Insert the device into the mounting cover and slide it inward until it clicks into place.

Connection

1. Make sure that the on-board voltage of your vehicle is +12 volts
2. Remove the fuse from the device before connecting the wires.
3. Connect the yellow (**A4**) wire to the +12 Volt DC power 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 car body.
6. Blue wire (**A5**) - connect to the amplifier's remote turn-on input or the antenna motor control input
7. Connect the rest of the wires according to the diagram.

Note: Each time the yellow wire is disconnected from the 12 volt power circuit or the battery terminal is removed, the device will revert to factory settings.
To avoid increased current consumption and unstable operation of the receiver, do not connect the red wire (**A5**) to a constant +12 volt!

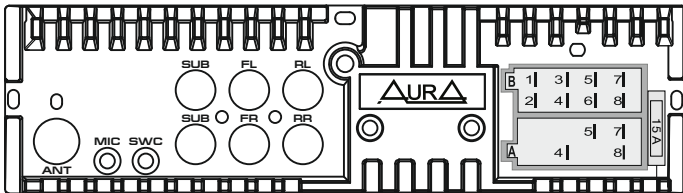
Connecting RCA wires

Mode 2 WAY (standard)

SUB - RCA subwoofer
FL - RCA front (left)
FR - RCA front (right)
RL - RCA rear (left)
RR - RCA rear (right)

Mode 3 WAY (network)

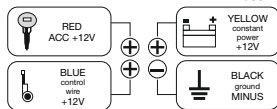
SUB - RCA subwoofer
FL - RCA mid-range speaker (left)
FR - RCA mid-range speaker (right)
RL - RCA tweeter (left)
RR - RCA tweeter (right)



ANT - radio antenna connection input
(not included)

MIC - external microphone input (not included)

SWC - steering wheel control wired adapter input
(not included)



Front speakers

- B3** Right channel + (gray)
- B4** Right channel - (gray-black)
- B5** Left channel + (white)
- B6** Left channel - (white-black)

Rear speakers

- B1** Right channel + (purple)
- B2** Right channel - (purple-black)
- B7** Left channel + (green)
- B8** Left channel - (green-black)



WARNING
DO NOT OPEN



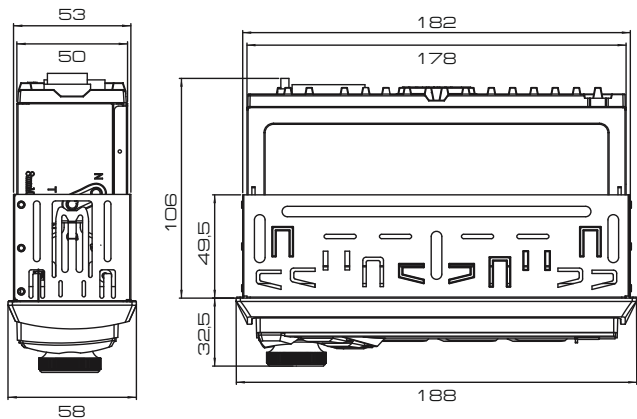


Control elements



1. Turn on / off the device / Select source
2. Adjust volume / Switch settings / Confirm selection
3. LCD display
4. IR receiver
5. Reset device to factory settings (RST)
6. USB connector
7. Microphone
8. Switching radio bands / Receiving / ending a call / Voice assistant
9. Muting the sound (Mute)
10. Return / Search
11. Preset button 1 / Next folder
12. Preset button 2 / Previous folder
13. Preset button 3 / Repeat mode
14. Previous track / Rewind / Radio tuning
15. Next track / Fast forward / Radio tuning
16. Preset button 4 / Shuffle mode
17. Preset button 5 / Pause
18. Preset button 6 / Track scan mode
19. Type of information on the display / Turn off the display
20. AUX input

Overall sizes



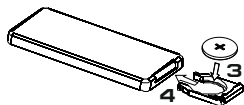
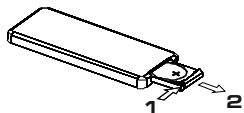
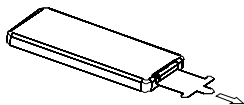
Remote control

Removing the battery protection (**CR-2025**).
Remote control supplied with battery protection.
The remote control will not work until the protection is removed.

Battery replacement:

1. When the lithium battery has lost capacity, replace it as shown in the figure.
2. Press and hold the release latch in the direction of arrow 1.

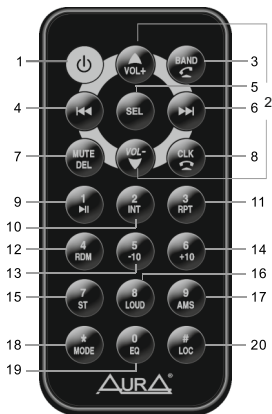
At the same time, pull the compartment out of the remote control in the direction of arrow 2.
3. Replace the old battery with a new one. Observe polarity! Make sure the (+) is on top!
4. Insert the battery holder into the remote control.





Remote control

1. Turn on/ off the device
2. Volume control
3. Switching radio bands
/ answer call
4. Previous track / Rewind
/ Radio setup
5. Source selection
6. Next track / Fast forward
/ Radio setup
7. Mute mode
8. End call / Clock
9. Preset 1 button / Pause
10. Preset 2 button
/ Track scanning mode
11. Preset 3 button / Repeat mode
12. Preset 4 button / Shuffle mode
13. Preset 5 button
/ Skip back 10 tracks
14. Preset 6 button
/ Skip forward 10 tracks
15. Radio reception mode (mono / stereo)
16. Loudness (LOUD)
17. Scanning stations in memory / Automatic search and storage of stations (AMS)
18. Source selection
19. Selecting a preset equalizer
20. Attenuation of the tuner sensitivity (LOC)



Using the remote control (RC):

- Place the emitting window of the remote control in the direction of the sensor window on the device.
- The working angle for receiving remote control signals is about 30 degrees.
- Distance between the emitting window of the remote control and the touch window of the device should be less than 5 meters.
- A depleted battery can damage the remote control.
- Keep batteries out of the reach of children!

Main functions

ON / OFF Power

Press any button to turn on the device.

Press and hold the button (1) **⏻ / SRC**, to turn on the device.

Volume control

Rotate the volume knob (3) to set the desired level.

Source selection

Press the (1) **⏻ / SRC** button to switch between sources

playback: Radio -> USB -> AUX in -> Bluetooth.

Mute mode

Press the button (9) **⏻**

Settings menu

Press the volume knob button (3) and rotate to select desired setting section: AUDIO (sound settings), DISPLAY (display settings), TUNER (radio settings), CLOCK (clock), BEEP (button sound), ANIMATION (display animation), DEMO MODE (demo mode).

Press the volume knob (3) to select the desired section.

AUDIO - sound settings

IMPORTANT! Before entering the AUDIO menu, when the screen displays the title of the AUDIO section, press and hold the volume knob button to select 2-way or 3-way crossover configuration: **2 WAY (normal)** or **3 WAY (network)**.

Manual EQ (Equalizer) - equalizer setting

Manual setting of 25 band equalizer (from -9 dB to +9 dB).

Tuning is possible at frequencies: 32 / 45 / 63 / 100 / 125 / 160 / 250 / 315 / 400 / 500 / 630 / 800 / 1 / 1.25 / 1.6 / 2.5 / 3.15 / 4/5 / 6.3 / 8/10 / 12.5 / 16 / 20.

Q-factor - Q-factor setting

Setting the value of the quality factor (quality factor).

Values: 1 / 1.5 / 2.5 / 3.5.

Preset EQ - pre-set equalizer.

Values: Custom / Natural / Rock / Pop / Easy / Top 40

Bass boost

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



AUDIO - sound settings

Loudness

Turn on and adjust loudness (2 levels).

Subwoofer set

Turns on / off the subwoofer.

Fader

Adjusts the relative volume between front and rear speakers.

Balance

Adjusts the relative volume between left and right channels.

SW level

Adjusts the volume level of the subwoofer (from -13 dB to +13 dB).

X-over

Setting low and high pass filters (LPF and HPF). The settings for this menu item will be different for **2-WAY / 3-WAY!**

2-WAY (Standard)

Tweeter - treble setting

FRQ (FREQUENCY) - Frequency selection: 1 / 1.6 / 2.5 / 4/5 / 6.3 / 8/10 / 12.5 kHz.

GAIN LEFT - volume level (left channel), from -8 to 0 dB.

GAIN RIGHT - volume level (right channel), from -8 to 0 dB.

Front HPF - setting the HPF of the front speakers

F-HPF FRQ - Cutoff frequency: TROUGH (off) / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 / 120 / 150 / 180 / 220 / 250 Hz.

F-HPF SLOPE - Slope: 6 / 12 / 18 / 24 dB per octave.

F-HPF GAIN - volume level, from -8 dB to 0 dB.

Rear HPF - setting the HPF of the rear speakers

R-HPF FRQ - Cutoff frequency: TROUGH (off) / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 / 120 / 150 / 180 / 220 / 250 Hz.

R-HPF SLOPE - Slope: 6 / 12 / 18 / 24 dB per octave.

R-HPF GAIN - volume level, from -8 dB to 0 dB.

Subwoofer LPF - setting the LPF and subwoofer phase.

SW LPF FRQ - Cutoff frequency: TROUGH (off) / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 / 120 / 150 / 180 / 220 / 250 Hz.

SW LPF PHASE - electrical phase changeover: 0 ° / 180 °

SW LPF GAIN - volume level, from -8 dB to 0 dB.

SW LPF SLOPE - Slope: 6 / 12 / 18 / 24 dB per octave.

AUDIO - sound settings

3-WAY (Network)

Tweeter - setting the HPF for the tweeters.

HP FRQ - Cutoff frequency: 1 / 1.6 / 2.5 / 4/5 / 6.3 / 8/10 / 12.5 kHz.

SLOPE - Slope: 6 / 12 / 18 / 24 dB per octave.

PHASE - electrical phase switching: 0 ° / 180 °

GAIN (HF LEVEL) - the volume level of the HF speakers, from -8 dB to 0 dB.

Mid range - setting the HPF and LPF of the midrange

HPF FRQ - HPF cutoff frequency (HPF): THROUGH (off) / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 / 120 / 150 / 180 / 220 / 250 Hz.

HPF SLOPE - Slope: 6 / 12 / 18 / 24 dB per octave.

LPF FRQ - Cutoff frequency: THROUGH (off) 1 / 1.6 / 2.5 / 4 / 5 / 6.3 / 8 / 10 / 12.5 kHz.

PHASE - electrical phase switching: 0 ° / 180 °

LPF SLOPE - LPF slope: 6/12 dB per octave.

GAIN (MF LEVEL) - volume level of midrange speakers, from -8 dB to 0 dB.

Woofers - setting low-pass filter (LPF) and subwoofer phase

LPF FRQ - Cutoff frequency: THROUGH (off) / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100 / 120 / 150 / 180 / 220 / 250 Hz.

SLOPE - Slope: 6 / 12 / 18 / 24 dB per octave.

PHASE (SAB PHASE) - switching the electrical phase: 0 ° / 180 °

GAIN - subwoofer volume level, from -8 dB to 0 dB.

DTA setting

Channel-by-channel setting of signal time delays.

The settings for this menu item will be different for **2-WAY / 3-WAY!**

2-WAY (Standard)

Position - choice of listening position.

All / Front Left / Front Right / Front All.

Delay - value for each channel.

FL (FRONT LEFT) - front left

FR (FRONT RIGHT) - front right

RL (REAR LEFT) - rear left

RR (REAR RIGHT) - rear right

SUB-L - subwoofer left

SUB-R (SUB. RIGHT) - subwoofer right



AUDIO - sound settings

Gain - volume value of each channel

FL - front left / FR - front right / RL - rear left

RR - rear right / SUB-L - subwoofer left / SUB-R - subwoofer right.

Data reset - reset settings.

Delay unit - selection of the unit of measurement.

Centimeters or milliseconds.

3-WAY (Network)

Position - choice of listening position.

All / Front Left / Front Right / Front All.

Delay - value for each channel.

FL - MF / LF left | FR - MF / LF right | RL - HF left | RR - HF Right

SUB-L - left subwoofer | SUB-R - right subwoofer.

Data reset - reset settings.

Delay unit - selection of the unit of measurement.

Centimeters or milliseconds.

Car type - choice of car type.

Sedan / Wagon / Minivan.

Display - display settings.

COLOR SELECT - Adjusts the RGB backlight color.

SPECTRUM - frequency spectrum display, incl. / off.

LANGUAGE - Select the language for the menu display.

VERSION - View the current software version.

Tuner - radio settings

LOCAL SEEK - local search incl. on / off.

MONO SET - Mono mode, on. / off.

REGIONAL - select the broadcasting region (Europe, USA, Asia, Russia).

RDS (RDS SETTINGS) - Activate the text messaging system.

TA (TA SETTINGS) - Traffic announcements. *

AF (AF SETTING) - Moves to steadier frequencies. *

EON - Auto switch to traffic announcement channels. *

RADIO TEXT - Displays text information.

PI REGIONAL - displays the station name.

PTY SEARCH - Searches by program type. *

* the function is not supported in Russia.

Clock - clock setting.

CLOCK FORMAT - select the display format (12/24 hours).

CLOCK ADJUST - Set hours / minutes.

DATA FORMAT - select the date display format.

DATA SET - Sets the date values.

CLOCK DISPLAY - display time on the display, incl. / off.

Beep - sound of buttons.

Mutes the sound when pressing buttons.

Animation - animation on the main screen

Enabling and adjusting the delay interval before the animation plays on the device display: No / 15 / 30 sec. / 1 / 2 / 4 min.

Demo mode

Enable / disable demo mode.

Radio

Range selection

Press the (8) **BAND** button to select the broadcasting range of radio stations: FM1, FM2, FM3 (VHF), AM1, AM2.

Saving and recalling radio stations

Press and hold one of the number buttons (1-6) to store the current radio station.

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 range.

Automatic station search

Press the button (9) **◀◀** or (2) **▶▶** to quickly search for stations.

Search and save stations automatically

Press and hold the BND button (3) for more than 2 seconds.

The unit will quickly search for and automatically save 18 FM radio stations with strong signals.

Manual station search

Press and hold the button (9) **◀◀** or (2) **▶▶** for more than 2 seconds to switch to manual setting mode.

Press button (9) **◀◀** or (2) **▶▶** to change the frequency step by step.

Hold down the button (9) **◀◀** or (2) **▶▶** to change the frequency step by step.



USB

Connect a USB storage device to the connector on the front of the device. Supported file formats will start playing automatically. The USB connector supports charging mobile devices. Charging current - 1A.

Switching tracks

Press the button (9)  or (2)  to skip to the previous or next track.

Rewind

Press and hold the button (9)  or (2)  to rewind or fast forward.

Play / Pause

Press the button (19)  to stop playback.

Press again to resume playback.

Track scanning

Press the **INT** button (20) to play 10 seconds of each track in sequence.

Click again to stop scanning.

Repeat play

Press the button (13) to select the repeat play mode:

RPT FLD - repeat playback of all files in the current folder.

RPT ALL - repeat playback of all files on the media.

RPT ONE - repeat playback of the current file.

Shuffle play

Press the button (16) to turn on the random play mode.

Press again to turn off.

Switching folders and tracks

Press the (15)  or (16)  button to switch to the previous or next source folder.

Press and hold the button (15)  or (16)  to move 10 tracks backward or forward.

BLUETOOTH

Pairing with your phone


Pair your phone with the AMH-78DSP receiver:

1. Turn on Bluetooth on your mobile device.
2. Find "AMH-78DSP" in the list of available BT devices and connect to it.
PIN-code for authorization: 1234.
3. In case of successful connection, the "BT" indicator on the display of the receiver will stop blinking and will light up constantly.
4. The audio signal from the mobile device (music and calls) will be transmitted to the car speakers.


Outcoming call

Dial the subscriber's number on your phone.
The call will be made through the speakerphone.



Incoming call

When an incoming call arrives, the caller's number will be displayed on the receiver's screen.
Press the button (8)  to receive the speakerphone call.


End call

To reject an incoming call or end a conversation, press and hold the button (8) .


Calling the last dialed number

Press and hold the button (8)  on the receiver to call the last number in the list of outgoing calls on your phone.
Press the button (8)  on the receiver to activate the Siri function.

Switch between phone and speakerphone

During a call, press the button (8)  to transfer the audio signal from the speakerphone to your phone or from the phone to the speakerphone.

Volume control

Rotate the volume knob during a call to adjust the volume level.
Press the button (9)  to mute the sound.



Bluetooth music (A2DP)

The AMH-78DSP receiver supports the Bluetooth A2DP audio transmission protocol. After successfully pairing your mobile device with the receiver, you can play music from your phone on the car audio system.

To switch tracks, press buttons (14) ◀◀ or (15) ▶▶.

To stop playback, press the button (17) ▶/||.

AUX

You can connect an external source to the 3.5mm jack on the front of the receiver using the AurA AUX cable (optional).

Reset settings (reset)

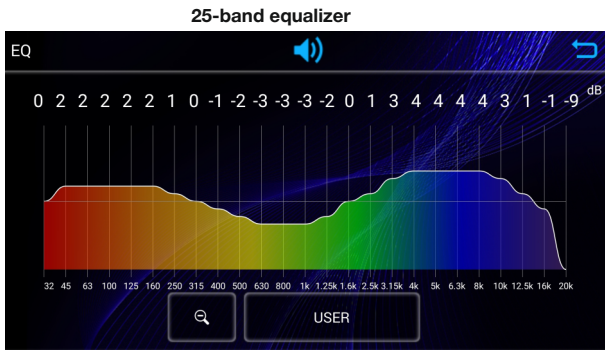
Press the button (7) **reset** to reset the device to factory settings.

Phone App

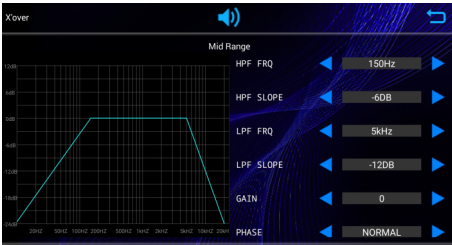
Most of the device settings are available in the AurA mobile application for Android or IOS.

You can control the AMH-77DSP receiver from your smartphone:

1. Install the AurA app from Google Play or App Store.
2. Connect your smartphone to the receiver via Bluetooth.
3. Launch the AurA app to control the receiver.

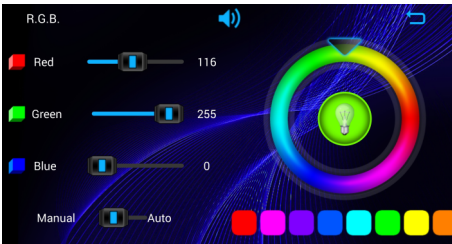
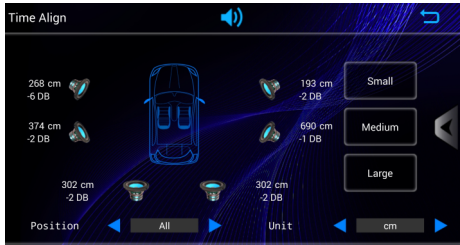


Phone App



3-band crossover

Time delays



RGB lights



TECHNICAL FEATURES

Main

Working supply voltage:	12 V (allowable range 9.6 - 15 V)
Fuse:	15 A
Maximum output power:	4 x 51 W (4 Ohm)
Rated output power:	4 x 16 W (4 ohms)
Speaker Impedance:	4 - 8 Ohm
Frequency Response Range:	20 Hz - 20 kHz
Display viewing angle:	vertical $\pm 30^\circ$, horizontal $\pm 15^\circ$
Audio signal input (AUX, stereo):	one (front, 3.5mm)
Line Out (RCA):	6-channel (3 pairs)
RCA Output Level:	3.5V
Maximum current consumption:	15 A
Dimensions (W x H x D):	178 x 108 x 50 mm
Temperature (working):	0 °C to + 60 °C
Humidity (working):	from 45% to 80%

USB

Supported media:	USB
Supported formats:	FLAC, WAV, APE, AAC, Mp3
File system:	FAT16, FAT32
USB stick:	USB 2.0, USB 3.0, up to 64Gb
ID3 Tag Support:	English language, Russian language

Bluetooth

Version:	4.2
Profiles:	A2DP, AVRCP, HFP
Frequency:	2.4 GHz

Radio receiver FM (VHF), AM

Tuning memory for radio stations:	18 FM, 12 AM
FM frequency range:	87.5 - 108.0 Mhz
VHF frequency range:	65 - 74 Mhz
Received frequency range AM:	522 - 1620 kHz
Antenna impedance:	75 Ohm

Audio signal input AUX IN

Audio input level:	500 mV (max 2 V)
--------------------	------------------

DSP:

Crossover	30-12500 Hz, 6-24 dB / oct.
Equalizer	25 bands, 32-20000 Hz gain from -9 dB to +9 dB, step 0.1 dB
Phase reversal	0/180 °
Time delays	0-25 ms, 0-850 cm



 App Store

 Google Play



www.aurael.ru



Due to continuous product development and improvement, all specifications

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