

# AKAI

Carradio CD-player with USB-port,  
Cardreader and Front line-in

ACAC105UC



User manual

Gebruiksaanwijzing

Manuel de l'utilisateur

Manual de instrucciones

Gebrauchsanleitung

Οδηγίες χρήσεως

GB 2

NL 23

FR 45

ES 68

DE 91

EL 137

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## Copyright notice

Design and specifications are subject to change without notice.

# 1. Safety

## 1.1 Intended use

The Car Radio Music System plays music from CD, USB device, memory card and radio. Read the manual carefully before the first use.



Due to the great variety of products with external memory connection (USB, SD/MMC, etc.) and their sometimes quite manufacturer-specific functions we can neither guarantee that all devices will be recognised, nor that all operating options that are possible in theory will actually work.

## 1.2 Labels in this manual



### **WARNING**

A warning means that injury or death is possible if the instructions are not obeyed.



### **CAUTION**

A caution means that damage to the equipment is possible.



A note gives additional information, e.g. for a procedure.

## 1.3 General safety instructions



### WARNING

Do not put force on the appliance. The appliance can fall and can cause serious injury.



### CAUTION

Do not spill any liquid on the appliance.



### WARNING

Do not insert any objects in the ventilation holes.



### CAUTION

Do not block the ventilation holes.



This appliance employs a laser system. To prevent direct exposure to the laser beam, do not open the appliance. Visible laser radiation when open and interlock defeated.

## 2. Preparations for use

### 2.1 Unpacking

- Unpack the appliance carefully.
- Check the package contents as described below. If any item is missing, please contact your reseller.
- Remove the labels from the front panel carefully if present.



We recommend that you retain the original carton and packing materials in case it ever becomes necessary to return your product for service. This is the only way to safely protect the product against damage in transit. If you do dispose of the carton and the packing materials, please remember to recycle with due care to the environment.

## 2.2 Package contents

The following items are included in the received package:

- 1x Car Radio Music System
- 1x Detachable front panel
- 1x Protective carrying case for detachable front panel
- 1x Mounting bracket
- 2x Release keys
- 1x Support strap
- 1x Tapping screw
- 1x Bolt M5
- 2x Nut M5
- 1x Flat washer
- 2x Spring washer
- 2x ISO Wire Cable
- 1 Operator manual



If any item is missing, please contact your reseller.

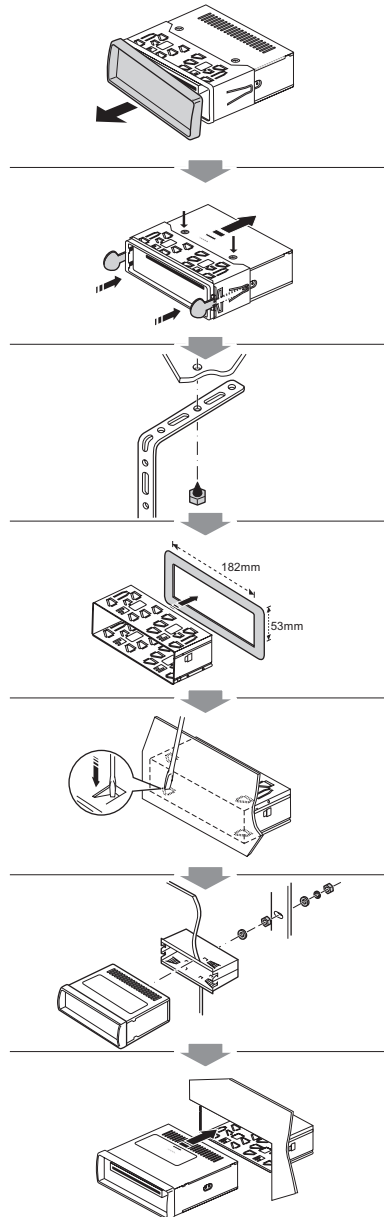
## 3. Installation

This unit can be installed in any dashboard having an opening as shown in the picture. The dashboard should be 4.75 - 5.56 mm thick in order to be able to support the unit. The unit should be installed horizontally in an angle less than 20°.

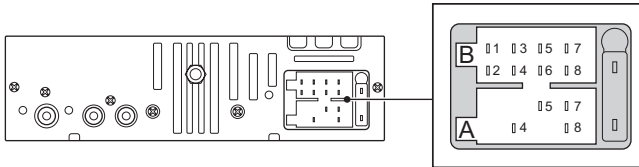


First complete the electrical connections, and then check them for correctness.

- Remove the outer edge from the unit.
- Remove the detachable control panel.
- Remove the release screws.
- Insert the release keys to separate the unit from the mounting bracket.
- If necessary, attach the support strap to the car body using the tapping screw.
- Insert the mounting bracket into the dashboard, and bend the mounting tabs out with a screwdriver.
- Secure the rear of the unit to the support strap, using the bolts, nuts, and washers provided.
- Connect the appliance to the electrical circuit. Read the paragraph "ISO Cable Connection".
- Connect the random equipment to the appliance. Read the paragraph "Connecting random equipment".
- Push the main unit into the mounting bracket until you hear a click.
- Press the RESET button.
- Attach the control panel. Read the paragraph "Detachable control panel" in the chapter "Operation".



## 3.1 ISO Cable Connection



### ISO A CONNECTOR



Depending on the manufacturer, the contacts on your vehicle connection may be assigned differently. This is not a defect of the device but caused by a deviating connector pin assignment by the manufacturer of your vehicle. To provide a connection that conforms to this device, please purchase an appropriate adapter cable from a specialized dealer if required. Please consult a specialist in your area if you have any questions about the connections.

- A4 YELLOW (B+): Connection for +12V operational voltage (diameter at least 2.5 mm<sup>2</sup>) to permanent plus of the vehicle.
- A5 BLUE: To system control terminal of an external amplifier or Automatic Antenna (max. 100mA / 12V<sub>DC</sub>).
- A7 RED ACC (+): Connection for +12V trigger voltage. Connect to ignition key of the vehicle. If contacts A4 and A7 are switched, the device will "forget" the stored stations after the ignition is turned off.
- A8 GND (- /Ground): Attach the connection for the ground (diameter at least 2.5 mm) to the ground of the vehicle.

### ISO B CONNECTOR

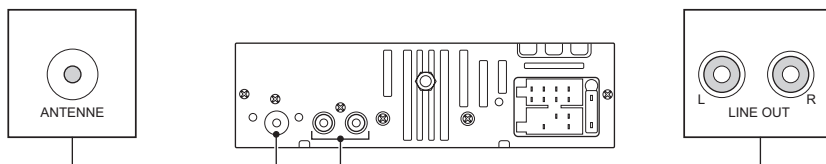
Front speaker

- B3 Right + (Gray)
- B4 Right - (Gray/Black)
- B5 Left + (White)
- B6 Left - (White/Black)

Rear speaker

- B1 Right + (Violet)
- B2 Right - (Violet/Black)
- B7 Left + (Green)
- B8 Left - (Green/Black)

## 3.2 Connecting random equipment



### Audio connections (output)

- Connect a suitable cable to the L/R channels of the LINE OUT connection.

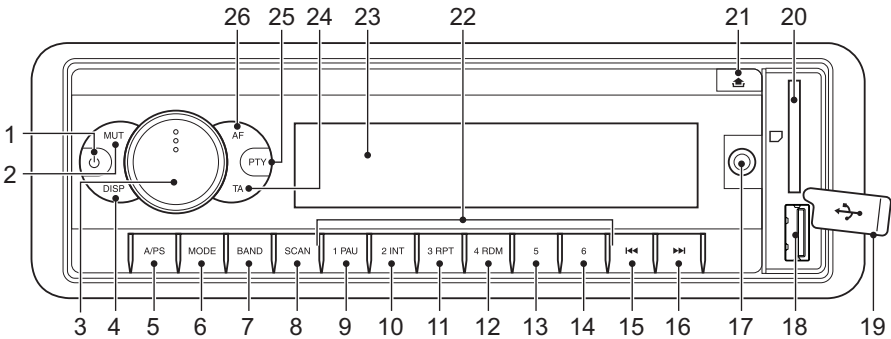
### Cable connection

- Insert the vehicle's antenna cable into the RADIO ANTENNA connection.



## 4. Functions

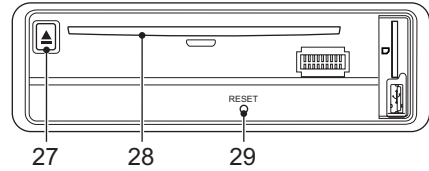
### 4.1 Control panel



- |                             |                                 |
|-----------------------------|---------------------------------|
| 1 POWER button              | 14 TRACK SEARCH UP button       |
| 2 MUTE button               | 15 PREV button                  |
| 3 SELECT button/VOLUME dial | 16 NEXT button                  |
| 4 DISPLAY button            | 17 Line in jack                 |
| 5 AUTO SEEK button          | 18 USB slot                     |
| 6 MODE button               | 19 USB slot cover               |
| 7 BAND button               | 20 Memory card slot             |
| 8 SCAN button               | 21 OPEN PANEL button            |
| 9 PAUSE button              | 22 PRESET STATION [1-6] buttons |
| 10 INTRO button             | 23 Display                      |
| 11 REPEAT button            | 24 TA button                    |
| 12 RANDOM button            | 25 PROG/PTY button              |
| 13 TRACK SEARCH DOWN button | 26 AF/REG button                |

## Behind control panel

- 27 EJECT button
- 28 Disc slot
- 29 RESET button



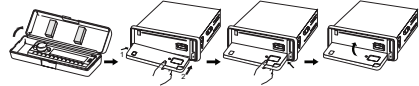
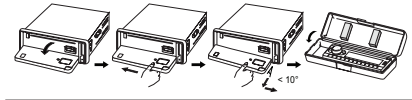
# 5. Operation

## 5.1 Detachable control panel

The control panel can be detached in order to discourage burglary.

### Attaching the control panel

- Insert the left side of the control panel into the main unit.
- Press the control panel right side until the "click" sound is heard.
- Flip the control panel upwards.



### Detaching the control panel

- Switch the power off.
- Press the OPEN PANEL button (21) to release the panel.
- Wait until the control panel is in horizontal position.
- Pull the control panel out.
- Place the control panel into the case and take it with you when you leave the car.



#### WARNING

Do not install or remove the control panel while driving your car.



## CAUTION

- Do not insert the control panel from the right side. It can damage the control panel.
- This control panel is not waterproof. Do not expose it to water or excessive moisture.
- Do not place the control panel on the dashboard or nearby areas where the temperature rises high. Instead, keep the control panel in the protective carrying case.
- To avoid damaging the control panel, do not push it down or place objects on it while it is open.
- The rear connector that connects the main unit and the control panel is an extremely important part. Be careful not to damage it by pressing on it with fingernails, pens, screwdrivers, etc. Do not touch the contacts on the control panel and the main unit, since this may result in poor electrical contact. If dirt or other foreign substances get on the contacts, wipe them off with a clean and dry cloth.

## 5.2 General functions

- To switch on the appliance, press the POWER button (1). To switch off the appliance, press the POWER button (1) again.
- To select the source mode (AUX, TUNER, CD-MP3, USB, MMC/SD), press the MODE button (6). Press the SELECT button (3) to confirm the selection.
- To adjust the volume level, turn the VOLUME dial (3) until the desired level is set.
- To mute or restore sound, press the MUT button (2).
- To access the BASS control, press the SELECT button (3) once. To adjust the level, turn the VOLUME dial (3) until the desired level is set.
- To access the TREBLE control, press the SELECT button (3) once again. To adjust the level, turn the VOLUME dial (3) until the desired level is set.
- To access the BALANCE control, press the SELECT button (3) once again. To adjust the level, turn the VOLUME dial (3) until the desired level is set.
- To access the FADER control, press the SELECT button (3) once again. To adjust the level, turn the VOLUME dial (3) until the desired level is set.
- To connect an external audio device, insert the cable plug in the LINE IN receptacle (17).



- Upon switching on, the appliance is default in the radio mode, unless there is a disc in the slot.
- Selection of the USB mode or the memory card mode only works if a USB device or a memory card is placed in the slot.

## 5.3 Radio functions

- To select the radio band, press the BAND button (7) to toggle between FM1, FM2, FM3.
- To select a preset radio station, press the appropriate PRESET STATION button (22) shortly.
- To search for a specific frequency, press the PREV button (15) or the NEXT button (16) repeatedly until the desired frequency is set.
- To search automatically, press and hold the PREV button (15) or the NEXT button (16). The appliance searches for the next available station.
- To perform an automatic search for preset radio stations, use the AUTO SEEK function (5). Short press to search for all preset stations in the memory of the current band and stay on each memory station for about 5 seconds. Long press to save the stations with good reception automatically and scan each station for about 5 seconds.
- To perform an automatic scan of preset radio stations, use the SCAN function (8). Press to scan all preset stations in the memory of the current band and stay on each memory station for about 5 seconds.
- To show extra information about a radio station (program type/radio name/radio test), press the DISP button (4).

### Programming radio stations

Per radio band (FM1, FM2, FM3), 6 radio stations can be preset.

- Search for a radio station.
- Press the PRESET STATION button (22) for more than 1 second to store the station under the desired preset number.

### Using the PTY function

- To search a radio band for a specific program type, press the PROG/PTY button (25) prior to start the search:
  - PTY MUSIC: the search is limited to radio stations with program type MUSIC

- PTY SPEECH: the search is limited to radio stations with program type SPEECH
- PTY OFF: the search is not limited to a specific program type

Radio stations with the program type MUSIC will be stored under the PRESET STATION buttons as follows:

- 1 POP M, ROCK M
- 2 EASY M, LIGHT M
- 3 CLASSICS, OTHER M
- 4 JAZZ, COUNTRY
- 5 NATION M, OLDIES
- 6 FOLK M

Radio stations with the program type SPEECH will be stored under the PRESET STATION buttons as follows:

- 1 NEWS, AFFAIRS, INFO
- 2 SPORT, EDUCATE, DRAMA
- 3 CULTURE, SCIENCE, VARIED
- 4 WEATHER, FINANCE, CHILDREN
- 5 SOCIAL, RELIGION, PHONE IN
- 6 TRAVEL, LEISURE, DOCUMENT

## Using the AF/REG function

This function can be activated to check the signal strength of the alternative frequencies.

- Short press the button (26) to switch the alternative frequencies function ON or OFF.
- Long press the button to switch regional mode ON or OFF:
  - ON: the search for alternative frequencies and the AUTO SEEK function are limited to the stations with the same regional code as the current radio station
  - OFF: the regional code is ignored in the search for alternative frequencies and the AUTO SEEK function

## Using the TA function

This function can be activated to receive traffic announcements.

- Press the button (24) switch this function ON or OFF.

When the unit is in TA mode (and if traffic announcement is transmitted):

- The TP symbol appears on the display when a TP station is received
- The unit will switch to radio mode temporarily if it was in another source mode

- The volume level will be increased to the threshold value if it was under the threshold value

## 5.4 CD functions

- To insert a disc:
  - Press the OPEN PANEL button (21) and wait for the control panel to move out of the way.
  - Insert the disc into the slot (28) with the label upwards.
  - Flip the control panel upwards.

Playback will start automatically. During playback, the following functions are available:

- To select a track, press the PREV button (15) or the NEXT button (16) until the desired track is set.
- To search for a specific point on the disc, hold the PREV button (15) or the NEXT button (16) until the point is reached and release the button.
- To pause playback, press the PAU button (9) once; to resume playback, press the button again.
- To play the first 10 seconds of each track on the disc, press the INT button (10). The display shows the message "INT ON". Press the button again to cancel the function.
- Press the RPT button (11) once to repeat the current track. The display shows the message "RPT ON". Press the button again to cancel the function.
- Press the RDM button (12) to play all tracks in random order. The display shows the message "RDM ON". Press the button again to cancel the function.
- To show extra information about a disc (track time, specific track), press the DISP button (4).

### MP3/WMA playback

- To scroll through the track list, by 10 tracks down or 10 tracks up, press the TRACK SEARCH - button (13) or the TRACK SEARCH + button (14).

## 5.5 USB functions

- To insert a USB device:
  - Open the cover (19).
  - Insert the device in the slot (18).
- Press the MODE button (6) until USB appears on the display.

Playback will start automatically.

- Refer to the instructions under "CD functions" for explanation of the functions available during playback.
- To remove the device, gently pull it out of the slot. Re-install the cover.



Because of the great variety of products with USB ports and their sometimes quite manufacturer-specific functions we can neither guarantee that all devices will be recognised, nor that all operating options that are possible in theory will actually work.

## 5.6 SD/MMC functions

- Insert the device in the slot (20).
  - Press the MODE button (6) until SD/MMC appears on the display.
- Playback will start automatically.
- Refer to the instructions under "CD functions" for explanation of the functions available during playback.
  - To remove the device, gently pull it out of the slot.

## 5.7 File management

To perform a quick search for a specific MP3/WMA file the following possibilities are available:

- Search by track number
- Search by file name
- Search by song title

### Search by track number

- Press the A/PS button (5) once.
- Press the SELECT button (3). On the display, the first digit starts blinking.
- Turn the VOLUME dial (3) to select the first digit of the track number that you are looking for.

- Press the SELECT button (3). The first digit is fixed and the second digit starts blinking.
- Turn the VOLUME dial (3) to select the second digit of the track number that you are looking for.
- Proceed in the same way for the third digit. After selection of the third digit, the selected track number will be played.

### **Search by file name**

- Press the A/PS button (5) twice.
- Press the SELECT button (3). On the display, the first folder appears.
- Turn the VOLUME dial (3) to select the folder that you are looking for.
- Press the SELECT button (3). The folder is fixed now. On the display, the first file name appears.
- Turn the VOLUME dial (3) to select the file name that you are looking for.
- After selection of the file name, press the SELECT button (3).  
The selected track will be played.

### **Search by song title**

- Press the A/PS button (5) three times.
- Press the SELECT button (3). On the display, the character 'A' appears.
- Turn the VOLUME dial (3) to select the initial character of the song title that you are looking for.
- Press the SELECT button (3) for more than 2 seconds. All song titles with the initial character that you selected, appear on the display.
- Turn the VOLUME dial (3) to select the song title that you are looking for.
- After selection of the song title, press the SELECT button (3). The selected track will be played.

## **5.8 Advanced functions**

The following advanced functions are available: TA SEEK, MASK DPI, RETUNE, AUDIO DSP, LOUDNESS, CD MULTI, BEEP, SEEK, STEREO, LOCAL, VOLUME LAST.

- To enter and navigate through the menu:
  - Press and hold the SELECT button (3) for more than 2 seconds.
  - To select the required function mode, press the SELECT button a number of times until this mode appears on the display.
  - To adjust/set the function, turn the VOLUME dial (3) until the setting is selected.



- To exit the menu at any time, press the DISP button (4), or wait for approx. 8 seconds. After 8 seconds the unit automatically exits the menu.

## **TA SEEK**

- TA SEEK: when the currently tuned radio station does not receive any TP signal (for traffic announcement), or when the TP signal is too weak, the unit automatically retunes to an alternative frequency with a stronger TP signal.
- TA ALARM: the unit does not automatically retune to an alternative frequency but gives a beep signal.

## **MASK DPI**

- MASK DPI: masks only the alternative frequency which has a different program identification
- MASK ALL: masks the alternative frequency which has a different program identification and does not have an RDS signal with high field strength

## **RETUNE**

- RETUNE L: the initial time of an automatic TA search is set to 90 seconds max.
- RETUNE S: the initial time of an automatic TA search is set to 30 seconds max.

## **AUDIO DSP**

- Select EQ mode: POP M / ROCK M / CLASS M / FLAT M / DSP OFF

## **LOUDNESS**

- ON: the bass and treble response is boosted
- OFF: the bass and treble response is not boosted

## **CD MULTI**

- CD MULTI ON: read a multi session disc
- CD MULTI OFF: only read the first session of a disc

## **BEEP**

- BEEP ON: when pressing the buttons of the unit a beep signal is heard
- BEEP OFF: when pressing the buttons of the unit no beep signal is heard

## **SEEK**

- SEEK 1: the automatic search for a preset radio station is stopped when a radio station is detected, even if you keep pressing the AUTO SEEK button (12)
- SEEK 2: the automatic search for a preset radio station is not stopped when a radio station is detected, as long as you keep pressing the AUTO SEEK button. Upon releasing the AUTO SEEK button, the automatic search stops when a radio station is detected.

## **STEREO**

- STEREO: stereo audio reception
- MONO: mono audio reception. In the case of a weak FM signal, the audio quality can be improved by selecting this mode.

## **LOCAL**

- LOCAL: during manual tuning, only radio stations with strong signals are found. This is the preferred setting in areas with strong signals.
- DX: during manual tuning, all radio stations are found, independent of the signal strength. This is the preferred setting in areas with weak signals.

## **VOL LAST**

- VOL LAST: after switching on the unit, the volume level is the previously set volume level
- VOL ADJ: after switching on the unit, the volume level is the initial volume level

## **5.9 Resetting the appliance**

If any of the buttons on the appliance does not operate or if the error symbol appears on the display, the appliance needs to be reset.

- Press the OPEN PANEL button (21) to release the panel.
- Press the RESET button (29).

## 6. Cleaning and maintenance

### 6.1 Cleaning the cabinet

Wipe with a soft cloth. If the cabinet is very dirty, dampen (not dropping wet) the cloth with a weak solution of soapy water, and then wipe clean.

### 6.2 Cleaning the connector

Use a cotton swab soaked in isopropyl alcohol to clean the socket on the back of the control panel. Be sure to clean them carefully pin by pin and make sure not to damage the connecting points.

### 6.3 Fuse replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after the replacement, there may be an internal malfunction. In this case, consult your reseller.



#### CAUTION

Use the specified amperage fuse for each lead. Use of a higher amperage fuse may cause serious damage.

### 6.4 Handle and care of a disc

- Hold the disc with fingers. Hold the disc outer edge and/or the centre spindle hole. Do not touch the disc surface.
- Do not bend or press the disc. Do not expose the disc to direct sunlight or heating sources.
- Clean the disc surface with a soft, dry cleaning cloth. Wipe the disc surface gently, radially, from centre towards the outer edge.
- Do not apply thinner, alcohol, chemical solvent, or sprays when cleaning. Such cleaning fluids will permanently damage the disc surface.

## 7. Troubleshooting

<b>Trouble</b>	<b>Action</b>
No power.	The car ignition is not on. If the power supply is properly connected to the car accessory, switch the ignition key to "ACC". The fuse is blown. Replace the fuse.
Disc cannot be loaded.	Presence of disc inside the player. Remove the disc in the player, then insert the new disc.
Disc cannot be read.	Disc inserted upside down. Insert the disc with the label facing upward. Disc is extremely dirty or defective. Clean the disc or try to play a new one. Temperature inside the car is too high. Cool down until the ambient temperature has returned to normal.
No sound.	Volume is at minimum level. Adjust volume to the desired level. Wiring is not properly connected. Check wiring connections.
The operation keys do not work.	Internal error. Reset the appliance. Front panel is not properly fixed into its place. Install the front panel properly.
Sound skips.	The installation angle is more than 20°. Adjust the installation angle to less than 20°. The disc is extremely dirty or defective. Clean the disc or try to play a new one.
The radio does not work.	The antenna cable is not connected. Insert the antenna cable firmly.
The radio station automatic selection does not work.	The signals are too weak. Select a station manually.

### MP3 playback

<b>Trouble</b>	<b>Action</b>
No sound or incomplete audio	If MP3 data is mixed with other files on CD, the appliance may play the non-MP3 files as noise or without sound or it rejects the disc. Check if the played file is in MP3 format or select another file to play.

## USB playback

Trouble	Action
No playback	USB device is not installed or installed incorrectly. Insert USB device into slot. Incompatible USB device used. Playback using any USB device cannot be guaranteed. Please try another USB device.

## 8. Technical data

Parameter	Value
Voltage	12 V <sub>DC</sub>
Voltage tolerance	10.8 - 15.6 V <sub>DC</sub>
Power consumption	10 A
Standby power consumption	< 10 mA
Max power output	40 W x 4
Speaker impedance	4/8 Ω
USB connection	USB 2.0 compatible
Flash memory connection	SD/MMC
Dimensions (W x H x D)	177 x 50 x 200 mm
Weight	1.356 kg

### Tuner

Parameter	Value
Frequency range	87.5 - 108 mHz
Sensitivity	2.8 miniV
Stereo Separation	30 dB
Signal/Noise Ratio	50 dB
Channel step	50 kHz
Intermediate frequency	10.7 mHz

### Disc output

Parameter	Value
Frequency response	20 Hz - 20 kHz
Channel separation	> 50 dB (1 kHz)

## LINE OUT

Parameter	Value
Max. output level	1.5 V
Impedance	10 k $\Omega$

## Supported media formats

Parameter	Value
Disc types	CD/CD-R/CD-RW
Audio formats	MP3/WMA

# 9. Disposal of used electrical and electronic equipment



The meaning of the symbol on the material, its accessory or packaging indicates that this product shall not be treated as household waste. Please, dispose of this equipment at your applicable collection point for the recycling of electrical and electronic equipments waste. In the European Union and Other European countries which there are separate collection systems for used electrical and electronic product. By ensuring the correct disposal of this product, you will help prevent potentially hazardous to the environment and to human health, which could otherwise be caused by unsuitable waste handling of this product. The recycling of materials will help conserve natural resources. Please do not therefore dispose of your old electrical and electronic equipment with your household waste.

For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

For more information and warranty conditions, please visit: [www.akai.eu](http://www.akai.eu)