AKAI

Operator's manual

CAR AUDIO - MP3 / CD RECEIVER

ACAC112B

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2
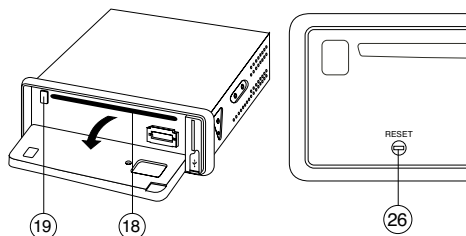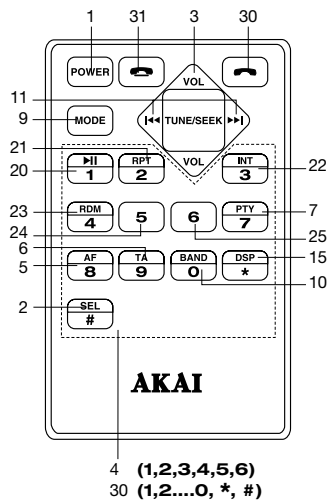
INSTALLATION

PRECAUTIONS

• Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
• Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
• Use only the supplied mounting hardware for a safe and secure installation.
• Be sure to remove the front panel before installing the unit.

Mounting angle adjustment
Adjust the mounting angle to less than 20°.

MOUNTING EXAMPLE
Please remove the decoration-panel from the frontpanel to insert the release keys.

1

release the outer edge

2
A. Release screw
C. Release bracket
B. Insert the release keys
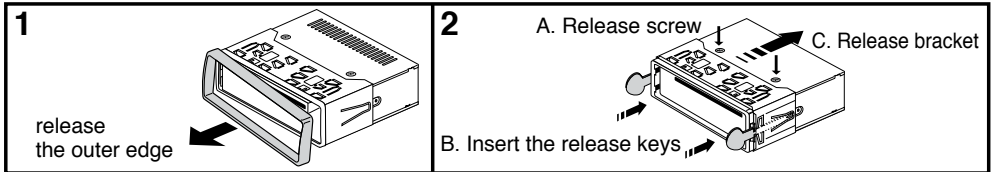
Note: Keep the release key in a safe place as you may need it in the future to remove the unit from the car.

Installation in the dashboard

3
182mm
53mm

4
TAP
Bend these claws, if necessary

5
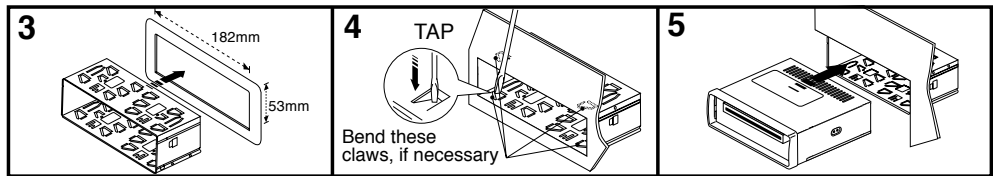
TO SUPPORT THE UNIT
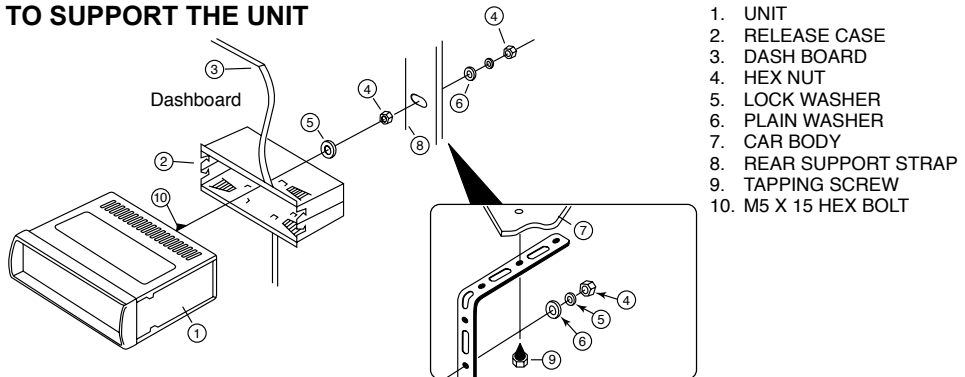
Dashboard

1. UNIT
2. RELEASE CASE
3. DASH BOARD
4. HEX NUT
5. LOCK WASHER
6. PLAIN WASHER
7. CAR BODY
8. REAR SUPPORT STRAP
9. TAPPING SCREW
10. M5 X 15 HEX BOLT

Detaching and attaching the front panel
The front panel of this unit can be detached in order to prevent the unit from being stolen.

FOLDING DOWN AND DETACHING/ATTACHING THE FRONT PANEL
Before detaching the front panel, be sure to press the ⏻ button (1) OFF first.
Then press the ▲ button, let the Front Panel arrive in horizontal position and detach the panel by pulling it towards you as illustrated.

<10°
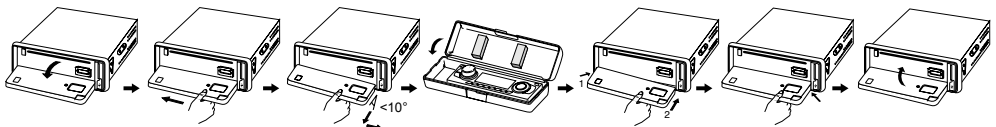
Notes:
- Do not press the front panel hard against the unit when attaching it. It can be easily attached by pressing it lightly against the unit.
- When you carry the front panel with you, put it in the supplied front panel case.
- Do not press hard or give excessive pressure to the display window of the front panel when attaching it to the unit.

CLEANING THE CONNECTOR
The unit may not function properly if the connectors between the unit and the front panel are contaminated with dirt. In order to prevent this from happening, detach the front panel by pressing the ⏏ button and clean the connector from time to time.
Clean the connector with a cotton swab together with contact cleaner as illustrated. Be sure to clean them carefully pin by pin and make sure not to damage the connecting points.

Rear of front panel   Main unit

Cotton Swab
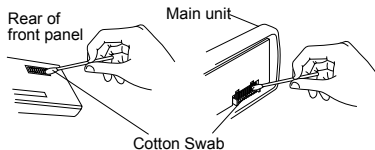
WIRE CONNECTION

RCA Jack Line Out:
White (left)   Red (right)
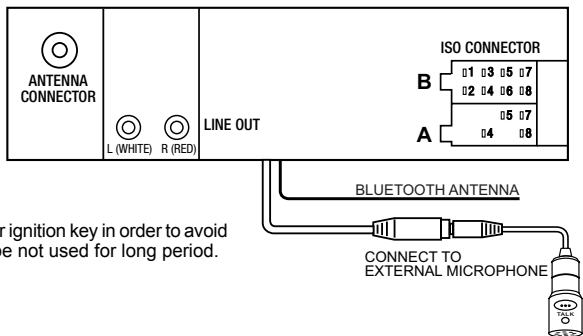
External Microphone: Black

CONNECTOR A
4.   MEMORY +12V
5.   AUTO ANTENNA OUTPUT
7.   +12V (TO IGNITION KEY)
8.   GROUND
Note: (connector A no. 7) must be connected by car ignition key in order to avoid that car battery being drained when the car will be not used for long period.

CONNECTOR B
1.   REAR RIGHT SPEAKER (+)
2.   REAR RIGHT SPEAKER (-)
3.   FRONT RIGHT SPEAKER (+)
4.   FRONT RIGHT SPEAKER (-)
5.   FRONT LEFT SPEAKER (+)
6.   FRONT LEFT SPEAKER (-)
7.   REAR LEFT SPEAKER (+)
8.   REAR LEFT SPEAKER (-)

ANTENNA CONNECTOR

LINE OUT
L (WHITE)   R (RED)

ISO CONNECTOR
B   □1 □3 □5 □7   □2 □4 □6 □8
A   □5 □7   □4   □8

BLUETOOTH ANTENNA

CONNECT TO EXTERNAL MICROPHONE

Maintenance
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 nearest repairing center.
Warning
Use the specified amperage fuse for each lead. Use of a higher amperage fuse may cause serious damage.

OPERATING INSTRUCTIONS

1.   POWER ON/OFF
By pressing this key, the unit is switched on or off. This unit is turned on by pressing any key.

2.   SELECT

3.   VOLUME UP/DOWN
Turning the VOL knob Right or Left (3), you can adjust VOL/BASS/TREB/BAL/FAD. To select other functions, press the SEL (2) button shortly until the desired functions is shown on the display. Figure 1 shows how control functions are selected using the SEL button.

1 → 2 → 3 → 2 → 4 → 2 → 5 → 2 → 6 → 2
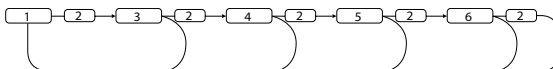
Fig. 1 Selection of sound control functions

1. VOL   2. SEL   3. BAS   4. TRE   5. BAL   6. FAD

Turning the VOL knob Right or Left. Increase or decrease the volume by turning (VOL) or (VOL) . These buttons can be used to adjust the BASS, TREBLE, BALANCE and FADER.

Note: *When you press and hold "SEL" key longer than 2 sec, unit enters FUNCTION select mode. In order to exit such mode, simply press "DISP" key or just wait around for 8 sec. and unit automatically exits.*

2 sec.
SEL → IN VOL → SEL → ADJ → SEL → TA VOL → SEL → EON → SEL → DSP
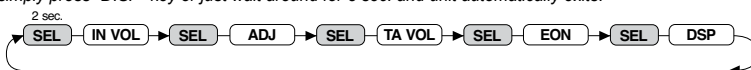
Press and hold **VOL** knob to adjust INIT VOL /ADJ/TA VOL/EON ON/DSP
IN VOL: Can adjust Initial Volume level using this mode.
ADJ: Can adjust clock time. Turn **VOL** knob clockwise to set hours and counter clockwise to set minutes.
TA VOL: Can adjust TA Volume (The volume level when Traffic announcement is transmitted).
EON: Can selected EON condition, ON or OFF.
DSP: Can select DSP mode (Classic, Rock, POP, Flat)

4. **PRESET STATIONS (1,2,3,4,5,6)**
   When pressed short, these keys select a preset station directly. When pressed longer than 1 sec., current station is stored in preset memory bank.

USING THE RDS FUNCTION
What is RDS?
The RDS (Radio Data System) is a digital information system developed by the EBU (European Broadcast Union). Piggy-backed on normal FM broadcasts, RDS offers a variety of information services and automatic retuning functions for RDS-compatible car stereos.

5. **'AF/REG' function (ALTERNATIVE FREQUENCIES)**
   When pressed short, AF/REG switching mode is selected.
   When AF/REG switching mode is selected, the radio checks the signal strength of the AF all the time. When pressed long, it is activated as regional mode ON/OFF.
   – Regional mode ON:
   AF switching or PI SEEK is implemented to the station which have all PI codes same as current station. REG segment is turned on, in LCD display.
   – Regional mode OFF
   The regional code in the format of PI code is ignored when AF switching or PI SEEK is implemented.
   Note:
   AF noise: When AF mode is ON and broadcast signal is weak,the unit will try to get more strong signal. In this period you can listen AF muting noise. But this is normal operation. If you don't want this noise, just turn off AF mode.

6. **'TA' function (TRAFFIC ANNOUNCEMENT)**
   When pressed short, it is activated as TA mode on or off
   When TA mode is on and traffic announcement is transmitted
   – When the unit is it CD/MP3 mode, it will switch to radiomode temporarily.
   – If the volume level was under the threshold point, it will be raised to the threshold point.
   – When TP station is received, TP segment is turned on in LCD display.

7. **'PTY' function (PROGRAM TYPE)**
   • To activate the PTY search press the PTY button. In the display the notice PTY appears.
   With the station search only stations of the currently selected PTY identification (see the PTY identification table) will be considered.
   • To deactivate the PTY search press the PTY button again.
   Setting the PTY identification
   • Hold down the PTY button and then turn the multi controller to set the individual PTY identifications.
   Station search by PTY identification
   • During the display of a PTY identification if you press briefly the PTY button or the buttons (VOL) or (VOL) a search immediately starts for stations, which correspond to this PTY identification.

   PTY identification
   NEWS--AFFAIRS--INFO--SPORT--EDUCATE--DRAMA--CULTURE--SCIENCE--VARIED--POP--ROCK--EASY M--LIGHT M--CLASSIC--OTHER M--WEATHER--FINANCE--CHILDREN--SOCIAL--RELIGION--PHONE IN--TRAVEL--LEISURE--JAZZ-- COUNTRY--NATION. M--OLDIES--FOLK M--DOCUMENT--TEST--ALARM.

8. **DISPLAY (DISP)**
   Press **DISP** button to switch between display informations such as radio frequencies, clock, track and other informations depending on the playing MODE.

9. **MODE/LOUDNESS BUTTON (LD/MOD)**
   By pressing this key, user can select. AUX/TUNER/CD-MP3/USB/SD/MMC/AD2P mode.
   Note: Selection of USB or MMC/SD mode only works if a USB or Card is placed in the slot.
   LOUDNESS: By pressing this key longer than 2 sec., you can select LOUDNESS mode.

10. **BAND BUTTON (BD)**
    Each band is toggled cyclically by pressing this key FM1---FM2---FM3.

11. **AUTOMATIC OR MANUAL TUNING (FREQ UP ▶▶I OR FREQ DOWN I◀◀)**
    (A) RADIO MODE
    When pressed short, these keys are operated as SEEK tuning mode.
    When pressed longer than 1 sec., they are operated as MANUAL tuning mode.
    (B) CD/MP3 PLAYER MODE
    When pressed short, they are operated as TRACK UP or TRACK DOWN mode.
    When pressed longer than 1 sec., they are operated as CUE or REVIEW mode.

12. **AUTO SEEK SEARCH TUNING (A/PS)**
    By pressing shortly, the radio searches for each preset station.
    When field strength level is bigger than the threshold level of stop level, the radio is holding at that preset number for 5 sec. with releasing mute, and then searches again.
    By pressing longer than 1 sec, and then 6 strongest stations are preset to the corresponding preset number.
    When AS operation is finished, the radio executes the preset scan.

13. **'SCAN' AUTOMATIC TUNING CONTROL (SCN)**
    This key is operated as RADIO SCAN. The operation is similar as normal search but different thing is holding 5 seconds on every station detected in RADIO SCAN mode.

14. **MUTE BUTTON (MUTE)**
    Press this button, audio will disappear. Press this button again in order to hear audio newly.

15. **EQUALIZER (DSP)**
    Press **DSP** to select between (Classic, Rock, POP, Flat) equalizer modes.

16. **LCD DISPLAY**
    The Liquid Crystal Display will display the current state of the unit.

17. **OPEN FRONT PANEL BUTTON**
    Press ⏏ button and the front panel will be open.

CD/MP3/WMA CONTROL LOCATION OF PARTS
TRACK/SEARCH BUTTON (11)
FORWARD AND REVERSE TRACK SEARCH (or changing songs)
Press the SKIP button (◄◄ or ►►) during play to go to the desired track(song).
◄◄ ....REVERSE   ►► ....FORWARD
Press and hold the SKIP button (◄◄ or ►►) during play to scan the disc at high speed. When the desired music section of the disc is found, release the button. Normal play will resume.

18. **CD SLOT**

19. **CD EJECT BUTTON**
    Press the ⏏ button to remove the CD.

20. **PAUSE BUTTON**
    During "PLAY", press (20) 'PAU' button to "PAUSE". Press it again to resume play.

21. **REPEAT BUTTON**
    When this button is pressed, 'RPT ON' indication is displayed and play of the selected track will be continually repeated until the Track repeat mode is cancelled by pressing 'RPT' button again.

22. **INTRO BUTTON (Preview all Tracks)**
    When this button is pressed, 'INT ON' indication is displayed and the first several seconds of each track of the disc are played. Press again to stop intro and listen to track.

23. **RANDOM BUTTON**
    When this button is pressed, 'RDM ON' indication is displayed and each track of the disc are played in random instead of normal progression. To cancel RANDOM mode, press 'RDM' button (23) again.

24, 25. **FOLDER DOWN/UP (In case of MP3/WMA files)**
    M5: Folder down / M6: Folder up

HOW TO SELECT MP3/WMA FILES
1. **Searching by Track:**
    • Press "A/PS", then search track is activated.
    • Turn "VOL" knob to left or right, select first digit desired.
    • Press "VOL" knob, then the first digit is fixed and second digit will flash.
    • Turn "VOL" knob to left or right, select 2'nd 3'rd respectively.
    • Press "BD/ENT", the song selected will start.
2. **Searching by Character:**
    • Press "A/PS" twice, then character search mode is activated.
    • Turn "VOL" knob to left or right, you can select the desired letter.
    • Press "VOL" knob, repeat steps above for 2'nd 3'rd character.
    • The songs with the same character that you selected is displayed.
    • Turn "VOL" knob to left or right, you can select the desired song.
    • Press "BD/ENT", then the song selected will start.
3. **Searching by File Name:**
    • Press "A/PS" 3 times, then folder search is activated.
    • Turn "VOL" knob to left or right, you can select the desired folder.
    • Press "BD/ENT", then the folder is fixed and the first file will be played.

26. **RESET**
    Reset button (26) is placed on the housing.
    The reset button is to be activated for the following reason:
• Initial installation of the unit when all wiring is completed.
• All the function button do not operate.
• Error symbol on the display.

Connecting it to Portable MP3 Player
27. **USB Port**
    Using USB cable to connect Your Portable MP3 Player.

28. **MULTI-MEDIA CARD (MMC) / SD CARD SLOT**
    Support MP3/WMA ID3 format music only.

IMPORTANT INFORMATION:

BECAUSE OF THE GREAT VARIETY OF PRODUCTS WITH USB, SD AND MMC CARD PORTS AND THEIR SOMETIMES QUITE MANUFACTURER-SPECIFIC FUNCTIONS WE CAN NEITHER GUARANTEE THAT ALL DEVICES WILL BE RECOGNIZED NOR THAT ALL OPERATING OPTIONS THAT ARE POSSIBLE IN THEORY WILL ACTUALLY WORK

29. **FRONT AUX IN**
    Convenient easy to use front "AUX IN" input jack, allows easy connection of Portable Media and digital MP3 Players.

HOW TO USE BLUETOOTH IN YOUR CAR AUDIO

How to Perform Pairing
Before you can dial out from the car stereo, you must first perform PAIRING. Pairing is a procedure used to connect 2 Bluetooth devices together.
1. This unit's Bluetooth function is always on, perform the pairing starting from your cellular phone. Refer to your cellular manual on proper pairing.
2. Perform the search for available Bluetooth devices, **"CAR--BT"** will show. Enter **'0000'** when asking for code.
3. After successful pairing, connect to the head unit if it is not automatically connected.

How to call / receive calls using wired remote controller
- When there is incoming call, press **TALK** button once to answer.
- During conversation, press **TALK** button once to end call.
- To make calls using call history
    1. Press and hold **TALK** button to display "REDIAL" history.
    2. Using VOL knob on main unit, turn repeatedly to select the phone number you want to make call to and press " 📞 " to dial out.
    Note: Up to 20 phone numbers will be displayed including previous outgoing and incoming calls.
    Outgoing calls dialled from remote control will be automatically saved in call history. Calls made directly on mobile will not be saved.

TALK BUTTON

MICROPHONE

How to call / receive calls using wireless remote controller
- To make calls, press " 📞 " button on the remote controller followed by pressing TEL NO using number keys.
- After entering TEL NO, press " 📞 " again to dial out.
- During conversation, press " 📞 " button to end call.
- When there is incoming call, press " 📞 " button to receive call.
- Press " 📞 " button to reject incoming calls.
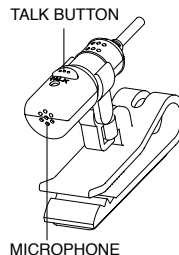
Audio Streaming
1. If your phone is "A2DP" format is compatible, you can play music in your mobile and the music will be transferred to car audio unit.
2. Make sure your mobile and the car radio unit is paired and connected.
3. Play the music in your mobile according to your mobile operating method.
4. Unit will display "A2DP" when receiving A2DP music automatically, but for some mobile your have to press **LD/MOD** button to change A2DP mode.
5. You can press ⏮ or ⏭ on head unit for previous or next tracks.

TECHNICAL INFORMATION

CD/MP3/WMA PLAYER SECTION

Signal to noise ratio	> 60 dB
Channel separation	> 50 dB (1kHz)
Frequency response	20Hz - 20 kHz

TUNER (FM)

Frequency range	87.5 -108 MHz
Sensitivity	2.8 μV
Stereo separation	37 dB
Signal to noise ratio	>50 dB
Channel step	50 kHz

LINE-OUT

Output	1.5V (max.)
Impedance	10k Ohm

GENERAL

Power supply	12V DC (10.8-15.6V allowable)
Power consumption	10A
Standby power consumption	under 10 mA
Speaker impedance	4 or 8 Ohm
Output power	40W x 4CH

Note: Specifications and the design are subject to possible modification without notice due to improvement.

**For more information and warranty conditions,
please visit : www.akai.eu**