JCD2010

MOBILE CD PLAYER / RECEIVER

Installation and Operation Manual
SAFETY INFORMATION

When Driving
Keep the volume level low enough to be aware of your surroundings.

When Washing your Vehicle
Do not expose the product directly to water, as this can cause electrical shorts, fire or other damage.

When Parked
Exposure to direct sunlight for an extended period of time can produce very high temperatures inside the mobile unit. Give the interior a chance to cool down before starting playback.

Do not mount radio in close proximity of the engine compartment.

Use the Proper Power Supply
This product is designed to operate with a 12 volt DC negative ground battery system.

Protect the Disc Mechanism
Avoid inserting any foreign objects into the disc slot. Misuse may cause malfunction or permanent damage due to the precise mechanism of this unit.

CAUTION:
THIS MOBILE CD PLAYER IS A CLASS I LASER PRODUCT. THIS UNIT USES A VISIBLE/INVISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION IF EXPOSED DIRECTLY. BE SURE TO OPERATE THE MOBILE CD PLAYER AS INSTRUCTED.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR BY YOURSELF. PLEASE REFER SERVICING TO A QUALIFIED TECHNICIAN.

WARNING:
• TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.
• TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES.

DISC NOTES

Compatible Disc Types

<table>
<thead>
<tr>
<th>Disc Type</th>
<th>Logo</th>
<th>Diameter/Playable Sides</th>
<th>Playback Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio CD</td>
<td>![Logo]</td>
<td>12 cm single side</td>
<td>74 minutes</td>
</tr>
</tbody>
</table>

NOTE: CD-R and CD-RW discs will not play unless the recording session is closed and the CD is finalized.

Disc Maintenance

• A dirty or defective disc may cause sound dropouts while playing. Before playing, wipe the disc using a clean cloth, working from the center hole towards the outside edge. Never use benzene, thinners, cleaning fluids, anti-static liquids or any other solvent.

![Insert label side up.](image)

![Do not bend.](image)

![Never touch the under side of the disc.](image)

![Wipe clean from the center to the edge.](image)

• Be sure to use only round CDs for this unit and do not use any special shape CDs. Use of special shape CDs may cause the unit to malfunction.

• Do not stick paper or tape on the disc. Do not use CDs with labels or stickers attached or that have sticky residue from removed stickers.

• Do not expose discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a vehicle parked in direct sunlight where there can be a considerable rise in temperature inside the vehicle.

NOTE: A disc may become scratched (although not enough to make it unusable) depending on how you handle it and other conditions in the usage environment. These scratches are not an indication of a problem with the player.
**INSTALLATION**

**Before You Begin**

1. **Disconnect Battery**
   
   Before you begin, always disconnect the battery negative terminal.

2. **Remove Transport Screws**

**Important Notes**

- Before final installation, test the wiring connections to make sure the unit is connected properly and the system works.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications to your vehicle.
- Install the unit where it does not interfere with driving and cannot injure passengers if there is a sudden or emergency stop.
- If the installation angle exceeds 30° from horizontal, the unit might not give optimum performance.
- This unit is not waterproof and is intended for interior mounting applications only. Exterior mounting of the unit requires use of an ASA approved marine housing.
- Avoid installing the unit where it will be subject to high temperatures from direct sunlight, hot air, or from a heater, or where it would be subject to excessive dust, dirt or vibration.

**DIN Front/Rear Mount**

This unit can be properly installed with either a “Front” (conventional DIN front mount) or “Rear” (DIN rear mount installation, utilizing threaded screw holes at the sides of the unit chassis) mount. For details, refer to installation methods A and B.

**DIN Front Mount (Method A)**

1. Slide the mounting sleeve off of the chassis if it has not already been removed. If it is locked into position, use the removal keys (supplied) to disengage it. The removal keys are depicted in “Removing the Unit” on page 3.

2. Check the dashboard opening size by sliding the mounting sleeve into it. If the opening is not large enough, carefully cut or file as necessary until the sleeve easily slides into the opening. Do not force the sleeve into the opening or cause it to bend or bow. Check that there will be sufficient space behind the dashboard for the radio chassis.

3. Locate the series of bend tabs along the top, bottom and sides of the mounting sleeve. With the sleeve fully inserted into the dashboard opening, bend as many of the tabs outward as necessary to firmly secure the sleeve to the dashboard.

4. Place the radio in front of the dashboard opening so the wiring can be brought through the mounting sleeve.

5. Follow the wiring diagram carefully and make certain all connections are secure and insulated with crimp connectors or electrical tape to ensure proper operation.

6. After completing the wiring connections, turn the unit on to confirm operation (vehicle ignition switch must be on). If the unit does not operate, recheck all wiring until the problem is corrected. Once proper operation is achieved, turn the ignition switch off and proceed with final mounting of the chassis.

7. Carefully slide the radio into the mounting sleeve making sure it is right-side-up until it is fully seated and the spring clips lock it into place.

8. Attach one end of the perforated support strap (supplied) to the screw stud on the rear of the chassis using the hex nut and spring washer provided. Fasten the other end of the perforated strap to a secure part of the dashboard either above or below the radio using the screw and plain washer provided. Bend the strap, as necessary, to position it.

   **CAUTION:** The rear of the radio must be supported with the strap to prevent damage to the dashboard from the weight of the radio or improper operation due to vibration.

9. Test radio operation by referring to the operating instructions for the unit.

**Removing the Unit**

To remove the radio after installation:

1. Insert fingers into the groove in the front of the frame and pull out to remove the frame. (When re-attaching the frame, point the side with a groove downwards and re-attach.)

2. Insert the removal keys straight back until they click, and then pull the radio out. If removal keys are inserted at an angle, they will not lock properly to release the unit.

**Trim Plate Installation**

Push the trim plate against the chassis until it is fitted.
DIN Rear Mount (Method B)
This unit has threaded holes in the chassis side panels which may be used with the original factory mounting brackets of some vehicles to mount the radio to the dashboard. Please consult with your local mobile stereo shop for assistance on this type of installation.

1. Remove the existing factory radio from the dashboard or center console mounting. Save all hardware and brackets as they will be used to mount the new radio.
2. Carefully unsnap the plastic trim ring from the front of the new radio chassis. Remove and discard the trim ring.
3. Remove the factory mounting brackets and hardware from the existing radio and attach them to the new radio. Select a position where the screw holes of the bracket and the screw holes of the main unit are aligned (are fitted). Tighten the screws at 2 places on each side. Do not exceed M5 x 9 MM maximum screw size. Longer screws may damage components inside the chassis.
4. Wire the new radio to the vehicle as outlined in the Universal Installation instructions.
5. Mount the new radio assembly to the dashboard or center console using the reverse procedure of step 1.

**NOTE:** The mounting box, outer trim ring, and half-sleeve are not used for method B installation.

Reconnect Battery
When wiring is complete, reconnect the battery negative terminal.
**WIRING**

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>WIRE COLOR</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YELLOW</td>
<td>+12VDC BATTERY (MEMORY)</td>
</tr>
<tr>
<td>2</td>
<td>BLACK</td>
<td>GROUND</td>
</tr>
<tr>
<td>3</td>
<td>GREEN</td>
<td>REAR LEFT SPEAKER (+)</td>
</tr>
<tr>
<td>4</td>
<td>GREEN/BLACK</td>
<td>REAR LEFT SPEAKER (-)</td>
</tr>
<tr>
<td>5</td>
<td>PURPLE</td>
<td>REAR RIGHT SPEAKER (+)</td>
</tr>
<tr>
<td>6</td>
<td>PURPLE/BLACK</td>
<td>REAR RIGHT SPEAKER (-)</td>
</tr>
<tr>
<td>7</td>
<td>BLUE</td>
<td>POWER ANTENNA</td>
</tr>
<tr>
<td>8</td>
<td>EMPTY</td>
<td>NO CONNECTION</td>
</tr>
<tr>
<td>9</td>
<td>ORANGE</td>
<td>ILLUMINATION/DIMMER</td>
</tr>
<tr>
<td>10</td>
<td>WHITE/BLACK</td>
<td>FRONT LEFT SPEAKER (-)</td>
</tr>
<tr>
<td>11</td>
<td>WHITE</td>
<td>FRONT LEFT SPEAKER (+)</td>
</tr>
<tr>
<td>12</td>
<td>GRAY/BLACK</td>
<td>FRONT RIGHT SPEAKER (-)</td>
</tr>
<tr>
<td>13</td>
<td>GRAY</td>
<td>FRONT RIGHT SPEAKER (+)</td>
</tr>
<tr>
<td>14</td>
<td>RED</td>
<td>+12VDC SWITCHED (ACC)</td>
</tr>
</tbody>
</table>
BASIC OPERATION

Power On/Off (ϕ)
Press the button (1) to turn the unit ON or OFF.

Volume Control
To change the volume level, rotate the VOL+/− control (4). When the volume is adjusted, the volume level is shown on the display panel as a number ranging from 00 (lowest) to 63 (highest).

Mute
Press the MUTE button (8) on the control panel to mute the audio output. Press MUTE again to restore the audio output to the previous level.

Mode
Press the MODE button (5) on the control panel to select a different mode of operation, as indicated on the display panel. Available modes include Radio, CD, and AUX (optional Auxiliary Input).

Auxiliary Input
To connect a portable audio device, insert a standard 3.5mm (audio line output or headphone output from your portable CD/MP3/iPod or other media player) into the front “AUX IN” jack. Press the MODE button (5) to change to AUX mode. Press MODE again to cancel AUX mode and return to previous mode.

Audio Menu
Press the VOL+/− control (4) on the control panel to access the Audio Menu. You can navigate through the Audio Menu items by pressing the volume control button repeatedly. Once the desired menu item appears on the display, adjust that option by turning the volume control knob within 5 seconds. The unit will automatically exit the Audio Menu after five seconds of inactivity. The following menu items can be adjusted.

Volume Level
Use the button to adjust the Volume level from “00” (lowest) to “63” (highest).

Bass Level
Use the button to adjust the Bass (BA) level range from “-7” to “7”.

Treble Level
Use the button to adjust the Treble (TR) level range from “-7” to “7”.

Balance
Use the button to adjust the Balance (BL) between the right and left speakers from “9L” (full left) to “9R” (full right). “BL:0” represents an equal balance between the right and left speakers.

Fader
Use the button to adjust the Fader (Fd) between the rear and front speakers from “9R” (full rear) to “9F” (full front). “Fd:0” represents an equal balance between the front and rear speakers.

Clock Set
• In clock display mode, press VOL+/− (PUSH SEL) control (4) for 2 seconds to enter clock adjustment mode.
• While the hour is flashing, rotate the VOL+/− control (4) to adjust the value as follows:
  • USA Tuning Mode: 1-12
  • EURO Tuning Mode: 00 - 23
• Press the VOL+/− control to confirm the hours.
• While the minutes are flashing, rotate the volume control to change the value (from 00 to 59).
• Press the VOL+/− control for 2 seconds to confirm the time and exit clock adjustment mode.

Reset
Use a pencil or any non-metallic object to press and hold the RESET button (17) for five seconds to reset the main unit. The unit will return to the factory default settings. The reset button should be activated for the following reasons:
• initial installation of the unit when all wiring is completed
• function buttons do not operate
• error symbol on the display

Preset Equalizer (EQ/LD)
Press the EQ/LD button (15) to select from the following preset equalizer functions: CLAS (classic) > ROC (rock) > POP > DSP (OFF). When “DSP” is selected, the EQ function is controlled by the user bass/treble settings.

Loudness (EQ/LD)
Press and hold the EQ/LD button (15) to toggle loudness on/off. When listening to music at low volumes, this feature will boost the bass and treble ranges to compensate for the characteristics of human hearing.
TUNER OPERATION

Select a Band
Press the BAND button (21) on the control panel to change between three FM bands and two AM bands. Each band stores up to six preset stations (see "Preset Stations").

Tuning (|<</>>|)
Auto Seek Tuning
Press the >>| (19) or |<< button (18) for less than 2 seconds to move to the next station automatically.
Manual Tuning
Press and hold the >>| (19) or |<< button (18) for more than 2 seconds to enter manual tuning mode. Press the >>| or |<< button to change the radio frequency number up or down one step.

Preset Stations
Six numbered preset buttons store and recall stations for each band.

Store a Station
Select a band (if needed), then select a station. Hold a preset button (9-14) for 2 seconds. The preset number will appear in the display.
Recall a Station
Select a band (if needed). Press a preset button (9-14) to select the corresponding stored station.

Automatically Store / Preset Scan (AS/PS)

Automatically Store
Select a band (if needed). Press and hold the AS/PS button (16) for more than 2 seconds to automatically select six strong stations and store them in the current band. The new stations replace any stations already stored in that band.

Preset Scan
Select a band (if needed). Press AS/PS (16) to scan stations stored in the current band. The unit will pause for seven seconds at each preset station. Press AS/PS again to stop scanning when the desired station is reached.

Stereo
The unit will automatically pick up an FM stereo signal, when available. When in stereo mode, the “” icon appears in the display. When no stereo signal is available, the unit will automatically revert to mono operation, and no icon will be displayed.

Local/Distant Reception
To receive local radio stations with high transmitting power, activate the LOCAL feature. Press the LOC button (6) to toggle between local and distant station receiving. In Local mode, the “LOC” icon displays on LCD.

USA/EURO Tuning
Use the BAND button (21) switch between USA and European broadcast tuning.
1. Turn the vehicle ACC on and the radio off.
2. Press and hold the BAND button for 5 seconds.
The LCD will display either “USA” or “EUR” as the new tuning region.
CD OPERATION

Insert and Eject Disc
Insert a disc, label-side up, with the unit turned on. “Cd” will display on the LCD and then unit will play the first track on the disc. Press the eject button (2) to stop disc play and eject the disc. The unit does not have to be turned on to eject the disc.

NOTE: If powered off, the unit will automatically power on when a CD is inserted.

Controlling Disc Playback

Track Select
- Press the >> button (19) or << button (18) for less than one second to advance to the next track on the CD. CD play begins when the button is released.
- Press the -10 button (13) to skip ten tracks backward.
- Press the +10 button (14) to skip ten tracks forward.
- Press and hold the >> button (19) to begin playback from the first track on the disc.
- Press and hold the >> button (19) or << button (18) for >2 seconds to fast forward or fast reverse through the disc.

Play/Pause Disc Playback (>> 1)
Press the >> button (9) to suspend disc play. Press the >> button again to resume disc play.

Intro Scan (INT 2)
Press the INT 2 button (10) on the control panel to play the first 10 seconds of each track sequentially. Press INT 2 again to stop Intro Scan and resume normal play at the current track.

Repeat Play (RPT 3)
Press the RPT 3 button (11) during disc play to repeat play the current track. Press RPT 3 again to stop repeat play.

Random Play (RDM 4)
Press the RDM 4 button (12) on the control panel during disc play to play all tracks on a CD in random, shuffled order. Press RDM 4 again to stop random play.
SPECIFICATIONS

CD
Signal to Noise Ratio: ≥ 70dB
Sampling Frequency: 44.1Khz
Quantization Bits: 1 bit
Frequency: 5-20,000Hz
Channels: 2 Channel (Stereo)

FM Radio
USA Frequency Range: 87.5-107.9MHz
EURO Frequency Range: 87.50-108.00MHz
Usable Sensitivity: ≥ 15dB at S/N 30dB
Stereo Separation: 25dB at 1KHz
S/N Ratio: 50dB

AM/MW
USA Frequency Range: 530-1710KHz
EURO Frequency Range: 522-1620KHz
Usable Sensitivity: > 45dB
S/N Ratio: 40dB

General
Operating Voltage: DC 11 -14.4
Grounding System: Negative Ground
Speaker Impedance: 4 ohms
Power Output: 40W x 4

TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No power</td>
<td>The vehicle’s ignition is not on</td>
<td>If the power supply is properly connected to the vehicle accessory terminal, switch the ignition key to “ACC”.</td>
</tr>
<tr>
<td></td>
<td>The fuse is blown</td>
<td>Replace the fuse.</td>
</tr>
<tr>
<td>Disc cannot be loaded or ejected</td>
<td>Presence of CD disc inside the player</td>
<td>Remove the disc in the player and insert the new one.</td>
</tr>
<tr>
<td></td>
<td>Inserting the disc in reverse direction</td>
<td>Insert the compact disc with the label facing upward.</td>
</tr>
<tr>
<td></td>
<td>Compact disc is extremely dirty or disc is defective</td>
<td>Clean the disc or try to play a new one.</td>
</tr>
<tr>
<td></td>
<td>Temperature inside the vehicle is too high</td>
<td>Wait until the ambient temperature returns to normal.</td>
</tr>
<tr>
<td></td>
<td>Condensation</td>
<td>Leave the player off for an hour or so, then try again.</td>
</tr>
<tr>
<td>No sound</td>
<td>Volume is too low</td>
<td>Adjust volume to audible level.</td>
</tr>
<tr>
<td></td>
<td>Wiring is not properly connected.</td>
<td>Check wiring connections.</td>
</tr>
<tr>
<td></td>
<td>The operation keys do not work</td>
<td>The built-in microcomputer is not operating properly due to noise</td>
</tr>
<tr>
<td>Sound skips</td>
<td>The installation angle is more than 30 degrees.</td>
<td>Adjust the installation angle to less than 30 degrees.</td>
</tr>
<tr>
<td></td>
<td>The disc is dirty or defective.</td>
<td>Clean the disc and try to play again or use new disc.</td>
</tr>
<tr>
<td>Cannot tune to radio station, auto-seek does not work</td>
<td>The antenna cable is not connected.</td>
<td>Insert the antenna cable firmly.</td>
</tr>
<tr>
<td></td>
<td>The signals are too weak.</td>
<td>Select a station manually.</td>
</tr>
<tr>
<td>ERROR 1</td>
<td>Mechanism Error</td>
<td>Press the eject button to correct the problem.</td>
</tr>
<tr>
<td></td>
<td>If the error code does not disappear, consult your nearest service dealer.</td>
<td></td>
</tr>
<tr>
<td>ERROR 2</td>
<td>Servo Error</td>
<td>Press the eject button to correct the problem.</td>
</tr>
<tr>
<td></td>
<td>If the error code does not disappear, consult your nearest service dealer.</td>
<td></td>
</tr>
</tbody>
</table>