BOSTON CD189
HOUSTON DM189
High-Power FM/AM/CD Receiver with Detachable Face

Robert Bosch Corporation
Sales Group — Blaupunkt Division
2800 South 25th Avenue,
Broadview, Illinois 60153

Bosch Group
FCC WARNING
This equipment has been tested and found to comply with the limits for a Class B device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with instructions, may cause harmful interference with radio communications. However, there is no guarantee that radio interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Precautions
- Avoid installing the unit where it would be subject to high temperatures, such as in direct sunlight or a hot air stream from the heater, or where it would be subject to dust, dirt, or excessive vibration.
- Do not turn on the unit if the temperature inside the car is very high. Always cool down the unit before usage. Parking your car in direct sunlight will result in a temperature rise.
- If the unit does not turn on, check the connections first. Then check whether the fuse at the back of the unit is blown.
- Carefully read this manual before using the unit. If you encounter any problems that are not covered in this manual, please consult the dealer where you purchased the unit or the dealer nearest to you.
- This unit has been designed specifically for playback of compact discs bearing the mark. Other discs cannot be played.

Features
- Detachable Flip down front panel
- Built-in power amplifier
  (max. output: 47W × 4ch)
- FM/AM PLL Synthesizer tuner
- 30 Station preset memory
- Travel Store / Scan tuning
- X-BASS System
- Station name, Disc name store / Station call
- CD changer control (HOUSTON DM189 only)
  (CDCA08 & CDCA071*)
  * CDCA071 requires adaptor # 7607 898 093 available separately.

Handling the Front Panel

Attaching the Front Panel
Place the right hand side of the front panel so that the parts A of the front panel are engaged with the parts B of the unit as shown below. Then push the left hand side of the front panel until it is securely locked.

Handling Compact Discs
- Be careful when removing a compact disk after the playback is completed because the disk may be extremely hot.
- Do not expose compact discs to direct sunlight or any heat source.
- Check all compact discs before playing, and discard cracked, scratched or warped discs.
- Wipe dirty or damp discs outward from the center with a soft cloth.
- Do not use any solvents such as commercially available cleaners, antistatic spray, or thinner to clean the compact discs.

Front Panel Open / Close

Panel open
Press the OPEN.

Panel close
Raise the front panel with your finger until it locks in place.
Notes
• Be sure to use this unit with the front panel closed. The unit is automatically switched off when the front panel is left open for about 10 minutes.
• Do not handle the unit roughly when opening/closing the front panel.
• Do not put any object or use it like a tray when the front panel is open in a lying position.
• Do not press the OPEN button when closing the front panel.
• Do not put much force to the operation buttons or the display window as it may cause damage or deform the unit.
• Connectors on the unit and front panel are vital parts transmitting the signal. Do not touch, push and scratch them.
• Be careful not to pinch your fingers or hands when opening and closing the front panel.
• Do not press hard on the front panel when affixing it to the unit. No more than light to moderate pressure should be needed.
• When taking the front panel with you, please use the supplied carrying case to protect the front panel from dirt and damage. Make sure there is no dust or dirt on the electrical terminals on the back of the front panel as this could cause intermittent operation or other malfunctions.

Identification of Controls
1. OPEN button
2. PWR button
   - Turns the power of the unit on or off.
3. TUN/TRK button
   - Used to tune in to the desired station.
4. LCD Display window
5. CD button
   - Switches the CD playback mode.
6. BND/TS button
   - Selects the AM/FM Band & Travel store.
7. DISP button
   - Mode selector. Clock adjustment. Display priority setting.
8. MUTE/SENS button
   - Muting the sound. Switches the seek sensitivity between local and distance.
9. XBASS button
   - Boosting the bass sound.
10. PRESET MEMORY button
   - During radio reception:
       - During CD mode:
       - For Mix play (Mix & Mix all during CDC; HOUSTON DM189 only)
       - For Repeat play
       - For Pause
11. DISC SELECT button (HOUSTON DM189 only)
   - Select the desired CD in CDC(CD changer) mode.
12. SC/PS button
   - Scan tuning. Preset scan tuning. Scan play in CD mode.
13. AUD button
   - Audio control selector; Bass, Treble, Loudness, Balance & Fader
14. Dial
   - Adjusts the volume level/bass/treble/balance/fader.
   - Storing the station names. Select Alpha-numeric characters.

Detaching the Front Panel
1. Press the OPEN firmly to open the flip down front panel.
2. Pull the front panel toward your direction to remove it.

Ejecting the CD
Press recessed button located to the left behind the Front Panel.

Security
Bolt the front panel with the screw (supplied) in the inner cover as shown below, to protect the front panel from robbery and from getting lost.
General Operations

Volume Level Control and Memory
Rotate the dial to set the memory for the volume level which will be recalled when the unit is turned on.

1. Adjust the volume level. Spinning or fast rotation of the dial knob will increase the number of turns needed to reach max. volume.

2. Hold the PWR pressed for more than 2 seconds.
The unit will turn off and the selected max. turn-on volume level is set in memory.

Note
If the unit is turned off with the volume lower than the memory setting, the unit will return to the lower setting when turned back on.

Muting the sound
Press MUTE / SENS. " MUTE " appears on the display window.
To restore the previous volume level, press MUTE / SENS again.

Setting the Clock
1. Turn the ignition key to the ON position.
2. Press the PWR to turn on the unit.
3. Press the DISP to display " CLK ADJ ".
   A. Press the MUTE / SENS within 3 seconds to flash the " 12 " (HOUR ADJ).
   B. Rotate the dial to set the hour digit.
   C. Press the MUTE / SENS to flash the " 00 " (MIN ADJ).
   D. Rotate the dial to set the minute digit.

4. Press the DISP to display " CLOCK 12 ".
5. Rotate the dial to select the 12 or 24-hour time mode. Each time you rotate the dial, the mode changes or toggles as follows;
   CLOCK 12 ↔ CLOCK 24

6. Press the DISP momentarily. The clock is activated.

Ignition-off Clock Recall
The display will illuminate showing the time and then automatically shut off after 5 seconds.
Press the DISP while the ignition switch is in the “ OFF ” position.

Mode Selector
Each time the DISP is pressed, the display window will change over as shown below;
Priority → STN CALL → LEVEL 1 → Temporary (NO NAME)

CLOCK 12 ↔ CLK ADJ ↔ METER 1

Display priority setting
Display Priority can be set for the following items;

Radio mode
• Frequency and Station Name, plus during CDC(CD changer) mode (HOUSTON DM189 only)
• Track No, Track time and Disc name.

Example
To set Station Name to the Display Priority.
1. Press the DISP three times, and the temporary display appears in the display window.
2. Hold the DISP pressed for more than 2 seconds.

Tip
Frequency Display is initially set as the Display Priority, and Station Name ("NO NAME") is set to "Temporary".

Adjusting the Sound Characteristics
1. Press the AUD to select the desired adjustment mode.
   BASS 0 → TREBLE 0 → LOUD OFF(LOUDNESS)
   R0 F0 (FADER) ↔ L0 R0 (BALANCE)

2. Rotate the dial to adjust the selected item.
   Adjust within 3 seconds after selecting the item. After 3 seconds, the dial functions as volume control.
   Use the following tables as a guide for adjusting the settings in each mode.

<table>
<thead>
<tr>
<th>BASS</th>
<th>BASS -5</th>
<th>BASS +5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TREBLE</td>
<td>TREBLE -5</td>
<td>TREBLE +5</td>
</tr>
<tr>
<td>LOUD</td>
<td>LOUD OFF</td>
<td>LOUD ON</td>
</tr>
<tr>
<td>BALANCE</td>
<td>L9 R0(Full left)</td>
<td>L0 R9(Full right)</td>
</tr>
<tr>
<td>FADER</td>
<td>R9 F0(Full rear)</td>
<td>R0 F9(Full front)</td>
</tr>
</tbody>
</table>
Radio Reception

Seek Tuning
1. Press the \textit{BND/TS} to select the desired band.
   - FM 1 $\rightarrow$ FM 2 $\rightarrow$ FT $\rightarrow$ AM $\rightarrow$ AT
   - FT & AT are Travel Store bands.
2. Press the \textit{TUN/ TRK} to tune in stations. Tuning automatically stops at a broadcasting frequency.
   - “SEEK” indicator will appear on the display window.
   - When tuned in to FM stereo broadcasting stations, the “\textbullet\textbullet\textbullet\textbullet” stereo signal indicator will appear on the display window.

Manual Tuning
1. Press the \textit{BND/TS} to select the desired AM or FM band.
2. Press the \textit{BND/TS} or \textit{TUN/ TRK} for more than 0.5 second to activate the manual tuning mode. Press again to tune in to stations.
   - “MANUAL” indicator will appear on the display window.
   - After 4 seconds of completing Manual Tuning, the tuning control will revert to the Seek Tuning mode.

Scan Tuning
1. Press the \textit{BND/TS} to select the desired band.
2. Hold the \textit{SC/PS} pressed for less than 2 seconds.
   - The unit will scan the selected band for stations.
   - “SCAN” indicator will appear on the display window.
   - Press the \textit{SC/PS} again to stop Scan Tuning and remain on the selected frequency.
   - \textit{Tip}
     While tuning, the pie-shaped signal-strength meter on the display is lit differently depending on the strength of the signal. While scanning bands, the pie-shaped signal-strength meter spins. While playing CD’s, this display spins also.

Preset Scan Tuning
1. Press the \textit{BND/TS} to select the desired band.
2. Hold the \textit{SC/PS} pressed for more than 2 seconds.
   - “SCAN” indicator will appear on the display window.
   - The unit will scan preset memory for the 12 stations from the AM/AT band or the 18 stations from the FM 1/FM 2/FT bands. The unit will stop at each preset station for 8 seconds, before continuing to the next preset station.
   - Press the \textit{SC/PS} again to stop Preset Scan Tuning and remain on the selected frequency.

Memorizing Stations Automatically (Travel Store)
1. Press the \textit{BND/TS} to select the desired band.
2. Hold the \textit{BND/TS} pressed for longer than 2 seconds.
   - Up to 6 stations with strong signals will be automatically stored in preset memory for the selected band.

Note
This function is available for FT and AT.

Memorizing Only the Desired Stations
You can store up to 6 stations on each band (18 for FM 1, FM 2 and FT, 12 for AM and AT) in the order of your choice.
1. Press the \textit{BND/TS} to select the desired band.
2. Press the \textit{TUN/ TRK} to tune in stations.
3. Press and hold the desired preset memory button for about 2 seconds until the frequency indicator flashes twice.
   - The number of the pressed preset memory button appears on the display window.

Note
If when you store another station on the same preset number button, the previously stored station is replaced with new one.

Receiving the Memorized Stations
1. Press the \textit{BND/TS} to select the desired band.
2. Press the \textit{1-6} momentarily.

Local/Distant (LO/DX) Selection
This feature is used to select the strength of the signals at which the radio will stop during Seek Tuning.

Press the \textit{MUTE/SENS} for more than 2 seconds to select the Local setting and only strong (local) stations will be received.
   - The “\textbullet\textbullet” indicator appears on the display window.
Pressing again will select the Distant setting and the radio will stop at a wider range of signals, including weaker more distant stations. The “\textbullet\textbullet” indicator will go out on the display window.
   - DX is the suggested default setting.
Storing the station names

You can assign a name to each radio station and store it in memory. As many as 30 station names can be stored, composed with 8 characters each.

Storing the station names

1. Tune in a station whose name you want to store.
2. Press the \(\text{DISP}\) for more than 2 seconds. The “NAME EDT” will light then the “_ _ _ _ _ _ _ _ ” on the display window. The first “_” flashes.
3. Enter the characters.
   A. Rotate the dial in a clockwise direction to select the desired characters. (A→B→C→...Z→<→→→→×→→→→/0→1→2→3→9→‘’Space’’) 
   B. Press the \(\text{TUN/ TRK}\) to move the flashing cursor to the next position. If you press \(\text{TUN/ TRK}\), the flashing cursor moves to the left.
   C. Repeat steps A and B to complete entering the entire name 8 characters max.

   Tip
   To erase/correct a name, press the \(\text{DISP}\) for more than 2 seconds to clear the character and re-enter.
4. Press the \(\text{MUTE / SENS}\) to store the station name. The station name flashes.
5. To return to the normal radio reception, Press \(\text{DISP}\).

Erasing the station names

1. Tune in any station and press the \(\text{DISP}\) for more than 2 seconds.
2. Press the \(\text{MUTE / SENS}\). The station name or “_ _ _ _ _ _ _ _” is now flashing.
3. Rotate the dial to select the name of the station that you want to erase. To erase all the name of the station, display “ SALL DEL “.
4. Press the \(\text{DISP}\) for more than 2 seconds. Repeat steps 3 and 4, if you want to erase other names.
5. To return to the normal radio reception, Press \(\text{DISP}\).

Direct Access to Memorized Stations via Station Call

You can search for the memorized AM & FM station names in the memory.

1. Press the \(\text{DISP}\) to display the “STN CALL” on the display window.
2. Rotate the large dial to select the desired station name.
3. Press the \(\text{MUTE / SENS}\) to tune in the desired station.

Level Meter selection

The meter displays can be selected from four types.

You can select:
- METER 1: Type that the level meter goes upward.
- METER 2: Type that only the very top segment lights.
- METER 3: Type that the remaining segments light. (opposite of METER 2)
- METER 4: Type that the level meter goes up and down dividing from the center segment.
- METER 0: No meter is indicated.

1. Press the \(\text{DISP}\) to display the “METER 1” on the display window.
2. Rotate the dial to select the desired meter indication.

Enhancing the bass sound

For extended bass centered @ 72Hz, the XBASS function can be set for either each band and CD mode.

You can select:
- XBASS 1: Enhanced BASS level (low)
- XBASS 2: Enhanced BASS level (Middle)
- XBASS 3: Enhanced BASS level (High)
- XBASS 4: Enhanced BASS level (Very high)
- XBASS 0: No BASS enhanced/off

Press the \(\text{XBASS}\) repeatedly to select the bass sound. “*” appears on the display window.
Each time you press \(\text{XBASS}\), the current mode appears on the display window and then the mode change as follows:
XBASS 0 → XBASS 1 → XBASS 2 → XBASS 3 → XBASS 4

Level Meter Sensitivity selection

The sensitivity of the level meter display can be switched. You can select:
- LEVEL 1: Normal sensitivity
- LEVEL 2: High sensitivity

1. Press the \(\text{DISP}\) to display the “LEVEL 1” on the display window.
2. Rotate the dial to select the desired meter sensitivity.

LEVEL 1 ↔ LEVEL 2
CD Operations

Playing the CD player

Loading Discs

1. Press the [OPEN] and insert the disc.
2. Close the front panel. Playback begins automatically.

"LOADING" indicator will flash in the display window.

Note

Make sure that the front panel is closed when playback begins.

Playback with the front panel open causes the unit to turn off automatically in about 10 minutes.

Labelled side up

! NEVER Insert a 3-inch CDs.
This unit is designed for playback of standard 5-inch CD’s only. Do not attempt to use 3-inch CD singles in this unit, either with or without an adaptor, as damage to the player and/or disc may occur.

Tips
• When a CD is loaded, the [ ] on the display remains lit.
• During playback of a CD, the pie-shaped signal-strength meter [ ] spins.

Listening to a disc that is already loaded
Press the [ ] to select the CD mode. Playback begins automatically.

Pausing Playback
Press the [ ].
To resume playback, press the [ ] again.

Stopping Playback
Press the [ ] to select the radio reception (FM 1, FM 2, FT or AM, AT).

Ejecting Discs
Press the [ ] to eject the disc located behind flip-down front panel.

Notes
• The unit will turn on automatically when a CD is inserted if the ignition switch is “ON”.
• When the disc is ejected from the CD slot, remove it within 10 seconds; otherwise, the disc will be reloaded automatically.

Track Search
Press the [ ] during CD mode. Track numbers appear in the display window.

Cue / Review
Press and hold the [ ]. Release when you have found the desired point.

: To search forward.

: To search backward.

Scan Play
Press the [ ] during CD mode.
The “SCAN ON” indicator appears in the display window. This will play the first 10 seconds of all the tracks on the disc.
Press the [ ] again to cancel this feature.

Repeat Play
Press the [ ] during CD mode.
The “RPT ON” indicator appears in the display window and the current track is played repeatedly.
Press the [ ] again to cancel this feature.

Mix Play
Press the [ ] during CD mode.
All the tracks on the current disc are played in random order.
Press the [ ] again to cancel this feature.
CD Changer Controls (HOUSTON DM189 only)

Playing the CD Changer
This product can control a CD changer. Please check with your nearest car stereo specialist for recommendations of the models that will work with this radio (See page 1).

Press the (CD) to switch the CD changer mode. Disc No, Track No, and Track time appear on the display window and playback begins automatically. Press again to change back to built-in CD operation.

Disc Select
Press the Disc select buttons to select the desired disc for play.
+ / 2: To advance to a higher number disc.
- / 1: To return to a lower number disc.

Track Search
Press the TUN/ TRK.
Track numbers appear in the display window.
A: Playback starts from the beginning of the next track.
V: Playback starts from the beginning of the current track.
Press again to play the previous track.

Cue / Review
Press and hold the TUN/ TRK. Release when you have found the desired point.
A: To search forward.
V: To search backward.

Track / Disc Scan Play
Track Scan
Press the (SCPS).
The " SCAN ON " indicator appears in the display window. This will play the first 10 seconds of all the tracks on the disc.
Press the (SCPS) again to cancel this feature.

Disc Scan
Press the (SCPS) for more than 2 seconds.
The " DSCAN ON " indicator appears in the display window. This will play the first 10 seconds of the first track on each disc.
Press the (SCPS) again to cancel this feature.

Track / Disc Repeat Play
Track Repeat
Press the (5/RPT).
The " RPT ON " indicator appears in the display window and the current track is played repeatedly.
Press the (5/RPT) again to cancel this feature.

Disc Repeat
Press the (5/RPT) for more than 2 seconds.
The " DRPT ON " indicator appears in the display window and the current disc will be continually repeated.
Press the (5/RPT) again to cancel this feature.

Track / Disc Mix Play
Track Mix
Press the (4/MIX).
The " MIX ON " indicator appears in the display window. All the tracks on the current disc are played in random order.
Press the (4/MIX) again to cancel this feature.

Disc Mix
Press the (4/MIX) for more than 2 seconds.
The " MIX ALL " indicator appears in the display window. Both discs and tracks will be played in random order.
Press the (4/MIX) again to cancel this feature.

Tip
During Disc scan, Disc Repeat or Disc Mix, the DISC will be lit on the display.

Storing the disc names
You can label each disc with a personalized name. As many as 99 disc names can be stored, composed with 7 characters each.

Storing the disc names

1. Play the CD and press the (DISP) for more than 2 seconds. The " NAME EDT " will light then the " _ _ _ _ _ _ _ " on the display window. The first " _ " flashes.

2. Enter the characters.
A. Rotate the dial in a clockwise direction to select the desired characters.
(B Ü C Ü ...Z Ü < Ü > Ü ∗ Ü + Ü ′ Ü − ′ Ü / 0 Ü 1 Ü 2 Ü 3...9 Ü “Space ”)
B. Press the TUN/ TRK to move the flashing cursor to the next position. If you press TUN/ TRK, the flashing cursor moves to the left.
C. Repeat steps A and B to complete entering the entire name 7 characters max.
Tip
To erase/correct a name, press the (DISP) for more than 2 seconds to clear the character and re-enter.

3. Press the MUTE / SENS to store the disc name. The disc name flashes.

4. To return to the normal CD playback mode, Press DISP.

Erasing the disc names

1. Press the (DISP) for more than 2 seconds during CD changer mode.

2. Press the (MUTE / SENS) for more than 2 seconds.
The disc name or " _ _ _ _ _ _ _ " is now flashing.

3. Rotate the dial to select the name that you want to erase. To erase all the name, display " * ALL DEL ".

4. Press the (DISP) for more than 2 seconds. Repeat steps 3 and 4 if you want to erase other names.

5. To return to the normal CD playback mode, Press DISP.
Installations

Supplied Mounting Hardware

![Supplied Mounting Hardware Image]

Precautions

- Be sure to detach the front panel before you start installing the unit.
- When mounting the unit in a car, keep the unit as level as possible. If the unit must be mounted at an angle, due to the design of the vehicle, make sure that the unit does not tilt by more than 30°.
- Choose the mounting location carefully so that the unit will not interfere with the normal driving operations of the driver.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting Example

Installation in the dashboard.

1. Install the sleeve in the dashboard.

2. Select and bend the appropriate tabs to hold the sleeve firmly in place.

3. Attaching the Mounting Strap to the underside of the dashboard, using screw. Attach the back of the unit to the Mounting Strap using the support stem bolt and hardware.

Mounting Strap Use

3. As shown in the figure below, securely fasten the screw, which has been inserted into the bushing, to the rear of the set.

Bushing Use

3. The distance to the fire wall is various due to the type of the car. Be sure to secure the unit by properly inserting the bushing.

Caution

Insufficient fastening of the screw may cause some CD’s to skip.

If your car has no accessory position on the ignition key switch (POWER SELECT switch)

The illumination on the front panel is factory-set to be turned on even when the unit is not being played. However, this setting may cause some car battery wear if your car has no accessory position on the ignition key switch. To avoid this battery wear, set the POWER SELECT switch located on the bottom of the unit to the B position, then press the reset button. The illumination is reset to stay off while the unit is not being played.

Reset button
Press the reset button with the point of a sharp object such as a ball-point pen.

POWER SELECT SWITCH
(Located on the bottom of the unit)

Change the position with a jeweler’s screwdriver, etc.

A: Your car has an accessory position on the ignition switch.
B: Your car has no accessory position on the ignition switch.

Be sure to press the reset button after changing the switch and connecting the lines.
Connections

Caution

• Connect each pair of speaker leads only to a single speaker (or speaker system) that has an impedance of least 4 ohms, as well as 47 watts power-handling capability.
• Do not connect speaker leads to any inputs on external amplifiers. This will cause damage to the internal amplifier of this unit.

Connection procedure

Warning

• To prevent short circuit, remove the key from the ignition and disconnect the battery’s (–) (minus) terminal.
• This unit is designed for negative ground 12 V DC operation only. You cannot use it for 24 V or other types of car batteries.

1. Make sure the car’s ignition key has been removed.
2. Disconnect the minus terminal of the car’s battery.
3. Connect the wiring harness wires in the following order: GND (Black), BTT (Yellow), ACC (Red) and ANTENNA REMOTE (Blue), and tape each so they do not come in contact with each other.
4. Connect the speaker wires of the wiring harness.
5. Connect the car’s antenna terminal to the antenna socket of the unit.
6. Connect the detachable wire harness to the unit.
7. Reconnect the minus terminal of the car’s battery.
8. Start the car’s engine.
9. Make sure the unit operates properly.

Connection Example
Maintenance

Replacing the Fuse
If the fuse is blown, check the power connection first and then replace the fuse. If the fuse blows again under normal conditions, the unit may be defective.

Warning
Use only a fuse with the specified amperage (10 A). Use of another type of fuse can result in a fire or unit damage.

Cleaning the Connectors
If the connectors of the unit and the front panel are contaminated, malfunctions may occur. Detach the front panel and clean the connectors with an alcohol dampened cotton swab as shown below.

Returning to the Initial Settings
When the reset button is pressed, the microcomputer of the unit returns to the initial settings. If the display window is not properly shown or the unit malfunctions, press the reset button with the point of a sharp object such as a ball-point pen.

Removing the Unit
Use the supplied release keys when you need to remove the unit from the car. Insert the “TOP R” and “TOP L” of the release keys on the right and left position until it clicks respectively, to remove the unit.

As shown in the figure below, push the plate spring firmly to remove the release keys.

Notes
• Handle the release keys carefully to avoid injuring your fingers.
• Keep the release keys in a safe place for future use.
Troubleshooting Guide

The following check will assist in the correction of most problems which you may encounter with your unit. Before going through the check list below, refer back to the connection and operating procedures.

General

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Cause/Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No sound</td>
<td>Adjust the volume with the dial. Set the fader control to the center position with a 2-speaker system.</td>
</tr>
</tbody>
</table>

Indications do not appear on the display window. Remove the front panel and clean the connectors with cotton swab dipped in isopropyl alcohol (90% or higher).

Radio reception

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Cause/Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preset stations are not receivable.</td>
<td>The broadcast is too weak. Use manual tuning.</td>
</tr>
<tr>
<td>Automatic tuning is not possible</td>
<td>The broadcast is too weak.</td>
</tr>
<tr>
<td>Travelstore feature does not complete storing of six stations.</td>
<td>Not enough broadcast frequencies are receivable.</td>
</tr>
</tbody>
</table>

Also make sure that antenna is connected, extended and dry inside.

If the above mentioned solutions do not help to improve the situation, consult your nearest Blaupunkt dealer or in the United States call 1-800-266-2528 for technical assistance, parts and service. Call 1-800-950-2528 for dealer referral or to request product brochure.

CD Player Troubleshooting

When problems occur with CD playback, an error message appears in the display window. Refer to the table below to identify the problem, then take the suggested corrective action. If the “ MECA ERR ” appears or “ SW ERROR ” persists, contact your nearest Blaupunkt dealer.

<table>
<thead>
<tr>
<th>Message</th>
<th>Possible cause</th>
<th>Recommended action</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW ERROR</td>
<td>Mechanical problem.</td>
<td>Eject and reinsert.</td>
</tr>
</tbody>
</table>

CD Changer Troubleshooting (HOUSTON DM189 only)

If a problem should develop while operating CD changer, an error message appears in the display window. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists or “09 ERROR” appears, contact your nearest Blaupunkt dealer.

<table>
<thead>
<tr>
<th>Message</th>
<th>Possible cause</th>
<th>Recommended action</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO DISC</td>
<td>No magazine No disc Up-side-down</td>
<td>Load the magazine in the CD changer Check the disc</td>
</tr>
<tr>
<td>01 ERROR</td>
<td>CD ROM is loaded</td>
<td>Replace with Music CD’s</td>
</tr>
<tr>
<td>COMM ERR</td>
<td>Communication error</td>
<td>Check the connection of the CD changer</td>
</tr>
<tr>
<td>TEMP ERR</td>
<td>Excessive temperature conditions at the CD changer</td>
<td>The error sign will go off and play will resume when the temperature at the changer returns to a normal range.</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>GENERAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>Approx. 178 mm x 50 mm x 155 mm (W x H x D)</td>
</tr>
<tr>
<td>Power requirements</td>
<td>12 volts DC car battery (negative ground)</td>
</tr>
<tr>
<td>Output Power</td>
<td>47 watts x 4 channels</td>
</tr>
<tr>
<td>Output Wiring</td>
<td>Floating-ground type designed for 4 speaker use. RCA low-level outputs (4 channels).</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>Compatible with 4-8 ohm speakers.</td>
</tr>
<tr>
<td>Low - Level Output</td>
<td>2 V. (4 channels)</td>
</tr>
</tbody>
</table>

TUNER

<table>
<thead>
<tr>
<th>Tuning Range</th>
<th>AM : 530 - 1,710 kHz (10 kHz step)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>AM : 20 µV FM : 1.5 µV</td>
</tr>
<tr>
<td>FM Stereo Separation</td>
<td>30 dB</td>
</tr>
</tbody>
</table>

CD PLAYER

<table>
<thead>
<tr>
<th>Frequency Response</th>
<th>20 - 20,000 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N Ratio</td>
<td>90 dB</td>
</tr>
<tr>
<td>Wow &amp; Flutter</td>
<td>Below the measurable limit</td>
</tr>
</tbody>
</table>