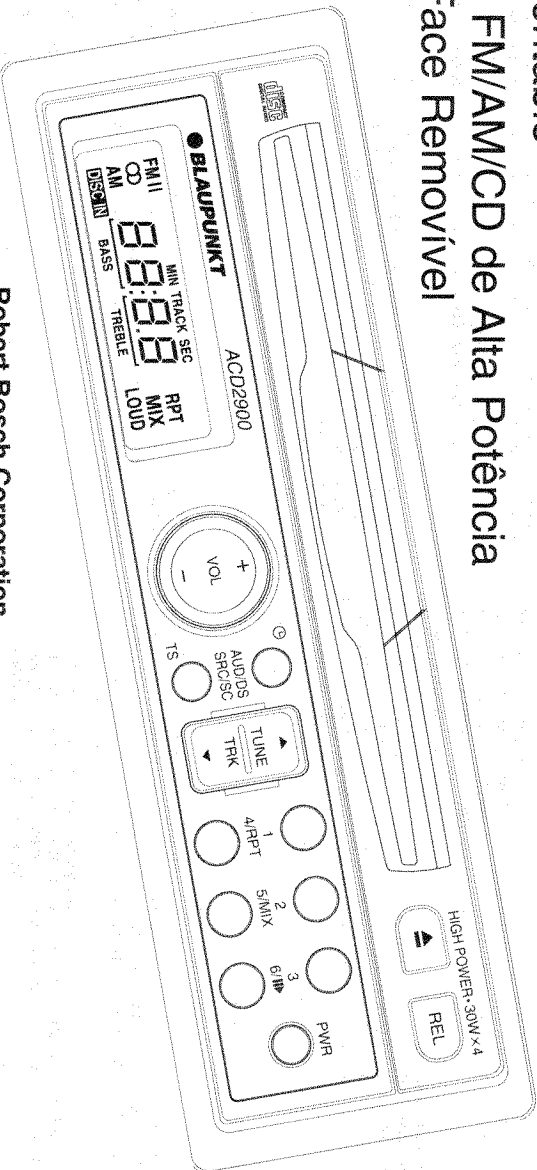


# ACD2900

High-Power FM/AM/CD Receiver with Detachable Face

Autoradio AM/FM à Lecteur CD de Forte Puissance et à Face Amovible  
Receptor FM/AM/Reproductor de CD de Alta Potencia y con Carátula  
Desmontable

Rádio FM/AM/CD de Alta Potência  
com Face Removível



Robert Bosch Corporation

Sales Group —

Blaupunkt Division

2800 South 25th Avenue,

Broadview, Illinois 60153

 **BLAUPUNKT**®

Bosch Group

## FCC WARNING

The 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 turning the equipment off and on, the user is encouraged to try to contact 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.

## CAUTION

- The use of optical instruments with this product will increase eye hazard.
- Because the invisible laser beam in this compact disc player is harmful to the eyes, do not attempt to disassemble this cabinet. Refer servicing to qualified personnel only.

## SAFETY CERTIFICATION

This Compact Disc Player is made and tested to meet exacting safety standards. It meets FCC requirements and complies with safety performance standards of the US Department of Health and Human Services.

## OWNER'S RECORD

The model and warranty numbers are located on the top of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Blaupunkt dealer regarding this product.

Warranty Number \_\_\_\_\_

## FEATURES

Congratulations on your purchase of the Blaupunkt CD Receiver. Its Optimum Reception Control (ORC III) quartz FM/AM tuner Anti-Vibration & Shock CD Mechanism provide the ultimate in sound reproduction. Its high-power amplifier and 2-channel RCA preamp output provide tremendous system configuration flexibility.

- Tuner Features:
  - ORC III Tuner
  - 12 FM/6 AM Station Presets
  - Including Travelstore for all Presets
  - Automatic and Manual Tuning
  - Station Scan
- CD Features:
  - Track Up/Down
  - Cue/Repeat
  - Track Repeat
  - Track Number Indication
  - Elapsed Track Time Indication
  - DISC IN Indicator
  - 1 Bit/8 Times Oversampling Digital Filter
  - Silicone-Oil Dampened Anti-Vibration and Shock CD Mechanism
- Audio Features:
  - 30 Watts (Peak) x 4 Channel Integrated Amplifier
  - 2-Channel RCA Preamp Output:
  - Dual-Level Fader
  - Volume/Balance/Fader Controls
  - Adjustable Turn-On Volume-Level
  - Loudness Control
  - Separate Bass and Treble Controls
- General Features:
  - Detachable Faceplate for Security
  - Switchable Clock/Function LCD Display
  - Ignition-Off Clock Recall
  - Amber Illumination
  - Detachable Wire Harness
  - 17 1/8 x 50 x 155.5 mm (7 x 2 x 6 in.) DIN Chassis
  - Snap-In DIN Sleeve & Mounting Hardware

## PRECAUTIONS

- The use of optical instruments with this product will increase eye hazard.
- Because the laser beam in this compact disc player is harmful to the eyes, do not attempt to disassemble this cabinet. Refer servicing to qualified personnel only.
- If your vehicle was parked in direct sunlight resulting in a considerable rise in temperature inside the vehicle, allow the unit to cool off before operating your unit.
- If no power connection is supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of a two-speaker system, set the fader control to the center position.
- You are cautioned that any changes or modifications not expressly approved in this manual could void your warranty.
- If you have any questions or problems concerning your unit that are not covered in this manual, please contact your Blaupunkt dealer.

## DETACHABLE FACE

### Detaching & Attaching the Face:

The face of this unit can be detached and taken with you to prevent it from being stolen.

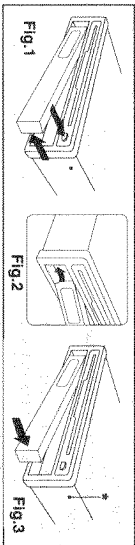
### Detaching the Face:

Press the FEL (Release) Button and detach the face by gently pulling it off as illustrated. (See Fig. 1 below.)

**Note:** Do not pull it straight out from the chassis. Be sure not to drop the face when detaching it from the chassis.

### Attaching the Face:

Apply the left hand side of the face to the chassis by sliding it into the left side of the chassis. (See Fig. 2.) Gently push the right side of the face against the front of the chassis until it snaps into place. (See Fig. 3.)



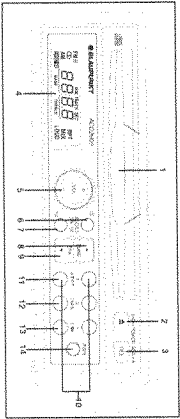
**Note:** Make sure that the face is inserted right side up. Do not press against the display window. Do not press hard against the face when attaching it to the chassis. It may be easily attached with gentle pressure. Do not expose the face to direct sunlight, heat sources such as hot air ducts or leave it in a humid place. Never leave it on the dash board of a vehicle parked in direct sunlight, where there may be a considerable rise in temperature inside the vehicle.

### Attaching Faceplate For Retail Display:

The faceplate can be affixed to the unit's chassis, which is desirable for a retail display, for example. **This should only be done in situations where the unit can be accessed from behind the mounting surface. Once the faceplate is affixed, the release keys cannot be used to remove the chassis.**

To affix the faceplate, obtain the small bolt (M2.6x1.0) from hardware pack and drive it into the upper hole at the front of the right side of the chassis using a No. 2 Phillips screwdriver. The bolt will self-thread the hole. (See in Fig.3.)

## LOCATION OF CONTROLS



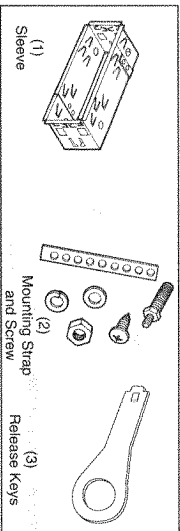
1. Disc Insertion Slot
2. Disc Eject Button
3. REL (Face Release) Button
4. LCD Display Window
5. VOL +/-
6. AUDIO/DS/Clock  
Temporary Display Change
7. SRC/SC/TS  
Source Change  
Station Scan and Track Scan  
Travelstore  
Minute :00
8. V Button  
Seek and Manual Tuning  
Track Up & Cue  
Hour Adjustment
9. V Button  
Seek and Manual Tuning  
Track Down & Review  
Minute Adjustment
10. Preset Station Buttons
11. Track Repeat
12. Track Mix
13. Track Pause
14. PWR  
Power On/Off  
Max. Turn-On  
Volume Set

## INSTALLATION

### Recommendations

- Carefully choose the mounting location so that the unit won't interfere with normal driving.
- Avoid mounting locations where the unit would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would subject to dust, dirt or excessive vibration.
- The illustration below shows a typical installation, however, you may need to adjust the installation, depending on the unit. If you have questions or need additional installation hardware, consult your Blaupunkt dealer.
- Make sure the unit is firmly anchored (preferably at both front and back) and does not vibrate.

### Mounting Hardware



### Mounting the Unit in a Japanese Car

You may have difficulty mounting this unit in some Japanese cars. In this case, consult your Blaupunkt dealer.

### Removing the Unit

Use the Release Keys as shown below. Keep them in a safe place in case you need them in the future.

### Fuse Replacement

When replacing the fuse, be sure to use one with the correct amperage, which will be stated on the fuse. Never use a fuse that has a stated amperage exceeding the one supplied for this unit, as this could cause malfunction and serious damage to the unit.

## SPECIFICATIONS

### Audio Power Specifications

**Power Output and Total Harmonic Distortion:** 10 watts per channel minimum continuous average output into 4 ohms, 4 channels driven, from 30-15,000 Hz with no more than 1% total harmonic distortion.

### Other Specifications

#### Turner

##### FM

**Tuning Range:** 87.5 - 107.9 MHz  
**Intermediate Frequency:** 10.7 MHz  
**FM Mono Sensitivity:** 15 dBf  
**Seek sensitivity:** 25 dBf

##### Seek sensitivity

**Selectivity:** 80 dB at 400kHz  
 70 dB (stereo), 75 dB (mono)

##### Signal-to-Noise Ratio:

0.7% (stereo), 0.5% (mono)

##### Separation:

30 dB  
 Frequency Response: 30-15,000 Hz  $\pm$  0.75 dB

*Design and specifications subject to change without notice.*

### AM

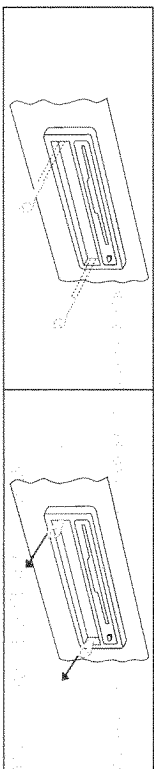
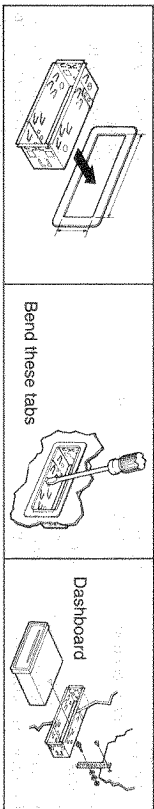
**Tuning Range:** 530 - 1,710 kHz  
**Seek sensitivity:** 25 dB $\mu$ V  
**Intermediate Frequency:** 450 kHz  
**Signal-to-Noise Ratio:** 50 dB

### Audio

**Speaker Impedance:** 4-8 ohms  
**Maximum Amp Power:** 4 X 30 Watts (at 4 ohms)  
**RMS Power:** 4 X 10 Watts (at 4 ohms)  
**Bass Control:**  $\pm$  10 dB @ 100 Hz  
**Treble Control:**  $\pm$  10 dB @ 10 kHz  
**Loudness:**  $\pm$  14 dB @ 100 Hz  
 $\pm$  + 5 dB @ 8 kHz  
**Preamp Outputs:** 2-CH RCA  
**Preamp Output Voltage:** 1.5 volts maximum @ 100%  
 Modulation with  $\leq$  1% Total Harmonic Distortion

### Mounting The Unit in Most Dashboards

1. Install the Sleeve (1) in the dashboard.
2. Select and bend the appropriate tabs to hold the sleeve firmly in place.
3. A. Attach the Mounting Strap (2) to the underside of the dashboard, using screw.  
 B. Attach the back of the unit to the mounting strap using the support stem bolt and hardware.



### CD Player

**Signal-to-Noise Ratio:** 90 dB  
**Dynamic Range:** 90 dB  
**Frequency Response:** 5-20,000 Hz  $\pm$  3 dB / 8-20,000 Hz  $\pm$  1 dB  
**Harmonic Distortion:** .01%

### General

**Dimensions (w/o projecting parts/controls):** 178 x 50 x 155.5 mm  
 7 x 2 x 6 in.  
**Approx. 1.4 kg (3.0 lb.)**

**Mass:**

**Power Requirement (neg. grd.):**

12 V DC car battery  
 15°F to 120°F, -10°C to 50°C

- Unit
- Facplate
- DIN Sleeve
- Mounting Hardware
- Owner's Manual in English, French, Spanish and Portuguese

## ELECTRICAL CONNECTIONS AND INSTALLATION

@!<?#&\*>@! To avoid the aggravation of costly mistakes and serious damage that could make you feel this way, please carefully read all of the instructions before you begin. Carefully follow all instructions. You'll be glad you did!

### GENERAL RECOMMENDATIONS

- If you're not confident that you can install the unit correctly, have it installed by a qualified Blaupunkt installation technician.
- Use this unit only with negative ground 12 Volt (11-16 Volt) direct current (DC).
- Be sure to detach the faceplate before you start to connect or install the unit.
- We recommend making and testing all electrical connections before installing the unit. Connect the leads (wires) according to instructions and diagram below.

### ELECTRICAL CONNECTION INSTRUCTIONS

1. Disconnect the vehicle battery's negative terminal before making connections.
  2. Connect the speakers and/or external amplifiers (if you have any) following the guidelines in the SPEAKER CONNECTION section below.
  3. Connect the blue (trigger output) lead to the amplifier's trigger input terminal and/or antenna motor trigger input terminal (if you have either or both of these items). The combined total amperage required for triggering the antenna motor and/or amplifier must not exceed 100 mA. DO NOT connect the blue lead to the antenna's and/or amplifier's power supply input.
  4. Connect the black (power ground) lead to a grounded metal part on the vehicle. We recommend grounding all audio system black ground leads (head unit, external amplifier, etc.) to a common grounding point, preferably a non-painted surface under the instrument panel.
  5. Connect the yellow (constant power) input lead to a source of constant battery power, preferably a terminal to an appropriate slot in the fuse box.
  6. Connect the red (turn-on power) input lead only after the other leads are connected. Be sure to connect the red lead to a positive (+) 12 Volt power terminal that is energized only when the ignition key is set to the on position or accessory position.
  7. Cover the ends of any unused leads with electrical tape. This will prevent them from touching the vehicle or each other and causing a short-circuit and damage to the radio or vehicle.
  8. Reconnect the vehicle's battery.
  9. Verify that no fuses have blown.
  10. Plug the harness into the unit.
  11. Attach the faceplate and test the unit.
- Once the connections have been successfully made, you can begin to mount the unit.

### SPEAKER CONNECTIONS

The unit's Dual-Level Fader allows you to fade between the front and the rear channels using either the front and/or rear speaker leads and/or the rear preamp outputs, providing you tremendous flexibility in configuring your speaker arrangement:

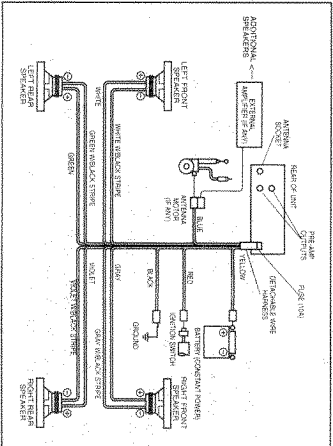
- You can connect a speaker (regular, co-axial or tri-axial speakers or component speaker system, all hereafter referred to simply as "speaker") to each of the unit's four pairs of speaker leads.

- You can connect the 2 RCA preamp outputs to multiple external amplifiers and power multiple speakers or speaker systems through the amplifiers. (Blaupunkt amplifiers and speakers available separately. Call 1-800-950-2528 for product brochure and/or dealer referral.)
- You can use a combination of these two methods.

### Connecting the Speaker Leads

#### To prevent short circuits or serious damage to the unit and/or speakers:

- Connect the speaker leads only as indicated in the wiring diagram.
- Only use speakers that have impedance ratings of 4 ohms or higher and have power-handling capabilities greater than the head unit's stated power level.
- The unit's internal amplifier is designed to handle a 4-ohm load on each pair of speaker leads.
- DON'T connect two speakers to a single pair of speaker leads ("in parallel") unless both speakers each have at least 8 ohms impedance.
- DON'T connect the left and right speaker leads to each other or to the same speakers.
- DON'T connect the front and rear speaker leads to each other or to the same speakers.
- DON'T connect the negative speaker leads to each other.
- DON'T connect the positive speaker leads to each other.
- DON'T connect any active speakers (with built-in amplifiers) to the speaker leads or unless the speaker's or amplifier's manual states that this is OK.



## INSTRUCTIONS — GENERAL OPERATION

"Press" means momentary press of less than 1/2 seconds.

### Ignition-Off Clock Recall

You can check the time when the vehicle ignition is off by simply pressing the AUD/DS Button. The time stays displayed for five seconds.

### Turning Unit On

Vehicle ignition must be on. To turn unit on, press PWR Button or insert a disc.

### Turning Unit Off

Press the PWR Button to turn the unit off.

### Volume

Press the + and - Buttons to quickly increase or decrease the volume to the desired level. The volume level is indicated in the Display Window. To make a fine adjustment to the volume level, press the other volume button before the volume level disappears from the display. You can then gradually adjust the volume in either direction, making precise adjustment easy.

### Source Change

Press the SRC (Source) Button as needed to reach radio bands FMI, FMII, AM and the CD player (if disc is already inserted).

### Adjustable Turn-On Volume

First adjust the volume to the (maximum) volume level desired when the unit is turned on. Press and hold the PWR Button for more than two seconds. The unit turns off and the turn-on volume level is memorized. When the unit is turned on, the volume will be at the memorized level, even if the unit was turned off while the volume was at a higher level. However, if the volume is turned off when the volume level is lower than the stored Turn-On volume level, the volume will be at the lower level when the unit is turned back on.

### Setting the Clock

Turn the unit on. Press the AUD/DS Button for four seconds until the clock starts blinking. (The display will change after two seconds. Ignore this and continue to hold for two more seconds.) Once the clock starts blinking, Press the A button to set the hour, and press the V Button to set the minutes. (To change the minute indicator to the nearest hour (:00), you can press the SRC Button. Press the AUD/DS Button again to activate the clock.

### Changing the Information Displayed

You can temporarily change the information shown in your unit's display. You can also select which information has "display priority" and is shown in the display except for moments when adjustments are made.

- To change the display priority, press the AUD/DS Button for two seconds. The display priority changes. In the radio mode, the display priority choices are clock and radio frequency. In the CD mode, the display priority choices are clock, track number, and elapsed track time.
- To change the display temporarily, press and release the AUD/DS Button one or two times to access the desired information.\* After *five* seconds, the display changes back to the priority information.

### Loudness

Press AUD/DS Button as needed to select Loudness adjustment mode – the word "LOUD" begins blinking. Press + to activate loudness, - to deactivate loudness.

### Bass and Treble

Press AUD/DS Button as needed to select the Bass once more to reach Treble mode. The level is indicated in the Display Window. Press the + Button or - Button to increase or decrease the level.\*

### Balance

Press AUD/DS Button as needed to select the Balance mode. The balance is indicated in the Display Window. Press the + button to shift sound to the left. Press - button to shift sound to right.

### Fader

Press AUD/DS Button as many times as needed to select the Fader mode. The level of output for front and back speakers is indicated in the Display Window. Press the + button to shift sound to the front. Press - button to shift sound to rear.

\* *Five seconds* after you complete your adjustments, the unit will automatically return to the volume mode and the display will revert back to the priority display, clock or function. You can also press and release AUD/DS as needed to return to VOLUME, which appears after FADER in the AUD/DS Button cycle.

### AUD/DS Button Summary

- Pressing and releasing the AUD/DS Button accesses these modes in this succession:
- Temporary Display Change(s), Loudness, Bass, Treble, Balance, Fader, Volume.
- Pressing the AUD/DS Button for two seconds changes the display priority.
- Pressing the AUD/DS Button for four seconds accesses the time adjustment mode.
- While in any AUD/DS mode, if no button is pressed for *five* seconds, the unit returns to the volume adjustment mode and priority display.

## RADIO OPERATION

### Automatic Stereo/Mono Reception Adjustment

When an FM stereo program with a signal strength of at least 50 dBf is tuned in, the stereo indicator ("CD") appears in the Display Window. If the FM stereo program is weak and noisy, the unit automatically blends the signals, eliminating the noise and gradually converts to the monaural or "mono" mode. The stereo symbol will disappear from the Display.

### Automatic Seek Tuning

Select the desired band. Press and release the  $\Lambda$  or V button to seek the next receivable station. To stop seeking and return to the previously tuned frequency, press the other of the  $\Lambda$  or V buttons.

### Manual Tuning

Select the desired band. To begin manual tuning, press and hold the  $\Lambda$  or V button for 0.5 seconds. Five seconds after you complete your adjustments, the Tuning Control reverts to Seek Tuning.

### Station Scan

Press the SRC/SC Button for greater than 1/2 a second to activate station scan. Scanned frequencies will blink. (Hold-down for greater than 4 seconds activates Travelstore.) To stop scan, press the same button.

### Travelstore

This feature allows you to automatically store 12 receivable FM and 6 receivable AM stations, which is especially handy when you travel to a different reception area.

Select the desired band. Then press SRC/SC button for 4 seconds. The band indicator begins to blink. Beginning with the last station received the unit automatically scans the band for the six stations with strong signals. Once completed, the unit switches to preset 1 on that band. If no stations are receivable, the unit returns to the previously-tuned frequency.

### Selecting Preset Stations

Select the desired band. Press the desired preset button. Then preset number will appear for 1 second. The frequency will appear.

### Manually Storing Individual Preset Stations

1. Select the desired band using the SRC button.
2. Tune in the desired frequency using seek or manual tuning.
3. Press and hold down the desired preset button for 2 seconds.
4. The frequency blinks and the audio mutes to one second to confirm storage.

## COMPACT DISC OPERATION

### Inserting A Disc

Check Display to make sure that "DISC IN" indicator is not lit. Insert a disc into the Disc Slot with the label surface facing up. Because this is a mechanical-insert/eject CD player, make sure that the disc is inserted completely, as confirmed by a definite "click" and the appearance of the "DISC IN" indicator. The track number and "DISC IN" indicator will appear in the Display. Play starts at the beginning of the first selection.

Do not insert a 3-inch CD.

When a CD is already in the unit, simply press the SRC Button to switch from radio to CD playback.

### Ejecting A Disc

To eject a disc, press the eject button. Once ejected, the disc should be put in the case.

### Track Up/Down

Press the  $\Lambda$  Button or V Button to locate the desired track. Track number appears in the display.

### Cue and Review

Press and hold the  $\Lambda$  Button or V Button to rapidly advance forward or backward to the desired position of the track during playback.

### Repeat Play

Press the RPT (Repeat Play) Button to repeat the same selection. The "RPT" indicator is displayed in the Display. To cancel, press this button again.

### Mix Play

Press the MiX Button to play the tracks in random order. The indicator "MiX" will appear in the Display. To cancel, press this button again.

### CD Scan

Press SRC/SC Button for more than 1/2 second to start CD Track Scan: start of scan mode is indicated by the blinking of the track number. The unit stops at each track for 10 seconds. Press again to end the Scan mode.

### Pause

Press the Pause Button during playback. Play will stop. Press again to resume play.

## 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

Trouble	Cause/Solution
No sound.	<ul style="list-style-type: none"> <li>Adjust the volume with the + button.</li> <li>Set the fader control to the center position with a 2-speaker system.</li> </ul>
Indications do not appear on the display window.	<ul style="list-style-type: none"> <li>Remove the front panel and clean the connectors with cotton swab dipped in isopropyl alcohol (90% or higher).</li> </ul>

### Radio reception

Trouble	Cause/Solution*
Preset stations are not receivable.	<ul style="list-style-type: none"> <li>The broadcast is too weak.</li> </ul>
Automatic tuning is not possible.	<ul style="list-style-type: none"> <li>The broadcast is too weak. —&gt; Use manual tuning.</li> </ul>
Travelstore feature does not complete storing of six stations.	<ul style="list-style-type: none"> <li>Not enough broadcast frequencies are receivable.</li> </ul>

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 operation\*

In the unlikely event that the CD doesn't play, first eject the disc, make sure it is clean, undamaged and that the print side is facing up; then load it again. If problem continues, try to eliminate the problem by turning the unit off and on, or by pressing the reset button located on the lower right of the unit, behind the faceplate, with a straight paper clip or something similar.

Trouble	Cause/Solution
CD play does not start.	<ul style="list-style-type: none"> <li>Dusty or defective disc.</li> <li>The ambient temperature is more than 50°C (120°F).</li> </ul>
The disc cannot be loaded or is automatically ejected.	<ul style="list-style-type: none"> <li>The disc is inserted with the labeled side downwards.</li> </ul>
The sound skips due to vibration.	<ul style="list-style-type: none"> <li>The unit is installed at an angle of more than 20°.</li> <li>The unit is not installed on the sturdy part of a car.</li> <li>Dusty or defective disc.</li> </ul>

### Error Displays

Display	Cause	Solution
E-01	Data error. Disc is dirty, scratched, up-side-down or CD-ROM.	Eject and insert clean, undamaged disc properly (print side up).
E-02	Focus error, possibly due to extreme temperature.	Try ejecting and reinserting under normal temperature conditions.
E-03	Data and focus errors.	Under normal temperature conditions, eject and insert clean, undamaged disc properly.
E-04	Mechanical error.	Eject and reinsert.