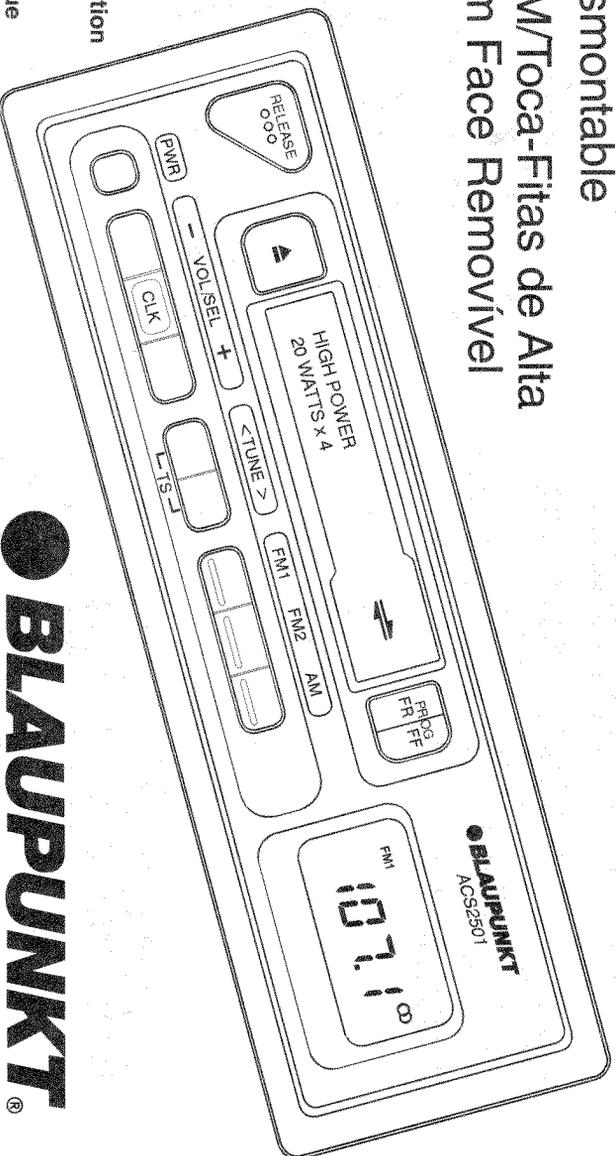


# ACS2501

ATTACH SALES RECEIPT HERE

High-Power FM/AM/Cassette Receiver with Detachable Face  
Autoradio/Cassette AM/FM de Forte Puissance à Face Amovible  
Receptor FM/AM/Reproductor de Cassette de Alta Potencia y con  
Carátula Desmontable  
Rádio FM/AM/Toca-Fitas 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 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.

## 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 this Blaupunkt FM/AM/Cassette Receiver. Its Optimum Reception Control (ORC III) quartz FM and AM Tuner and high-quality, cassette tape player provide the ultimate in sound reproduction.

- Tuner Features:
  - ORC III Tuner
  - 12 FM/6 AM Rapid-Access Station Presets, stored on 3 Band buttons, including Travelstore for all Presets
  - Automatic and Manual Tuning
- Cassette Features:
  - Auto Reverse Cassette Mechanism
  - True Fast-Forward/Rewind
  - Hard Ejector/Tape Head
- Audio Features:
  - 4 x 20 Watt Integrated Amplifier
  - Volume/Balance/Fader Controls
  - Adjustable Turn-On Volume Level
  - Separate Bass and Treble Controls

- General Features:
  - Detachable Faceplate for Security
  - Switchable Clock/Function LCD Display
  - Ignition-Off Clock Recall
  - Green Illumination
  - Detachable Wire Harness
  - 179 x 50 x 153.5 mm (7 x 2 x 6 in.) DIN Chassis
  - Snap-In DIN Sleeve & Mounting Hardware

Your unit's detachable front faceplate makes the unit useless to would-be thieves.

## PRECAUTIONS

- 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.

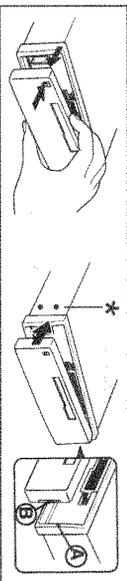
**Detaching the Face:** Before detaching the face, be sure to press the PWR Button first. Then press the FEL (Release) Button and detach the face by gently pulling it off as illustrated.

**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 right hand side of the face to the chassis by sliding (part B) of the face to (part A) at the front of the chassis. Gently push the left side of the face against the front of the chassis until it snaps into place.

**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 faceplate, obtain the small bolt (M2.6 x 10) from hardware pack and drive it into the upper hole at the front of the left side of the chassis using a No. 2 Phillips screwdriver. The bolt will self-thread the hole. (See above.)



## 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 unless the speaker's or amplifier's manual states that this is O.K.

### ELECTRICAL CONNECTION INSTRUCTIONS

1. Disconnect the vehicle battery's negative terminal before making connections.
  2. Connect speakers following the guidelines in the **SPEAKER CONNECTION** section below.
  3. Connect the blue (trigger output) lead to the antenna motor trigger input terminal (if you have one). The total amperage required for triggering the antenna motor must not exceed 100 ma. DO NOT connect the blue lead to the antenna 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, CD changer, 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.

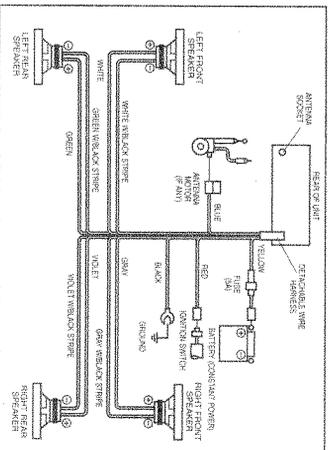
### SPEAKER CONNECTIONS

- 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.

#### 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.

**Adding CD Changer:** You can easily play compact discs through this unit by adding the Blaupunkt CDC-RF6 6-Disc Compact Disc Changer. The space-saving CDC-RF6 easily plugs into the unit's antenna jack and comes complete with its own commander control. See your Blaupunkt dealer for details!

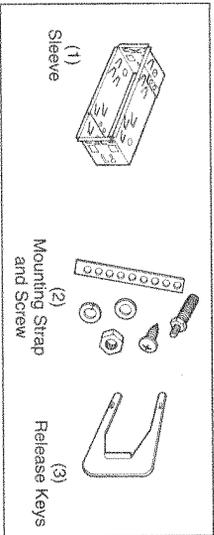


## INSTALLATION

### 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 be 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.

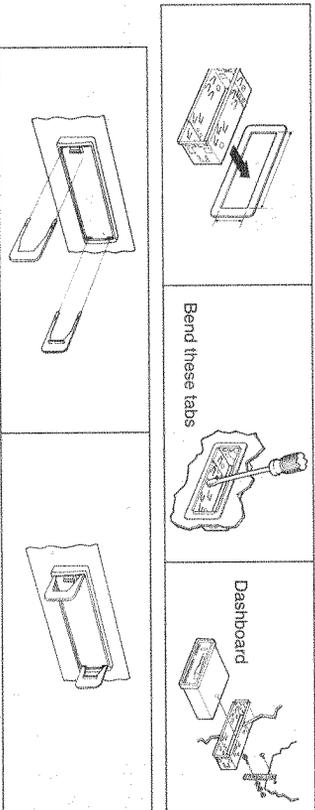
## MAINTENANCE

### Fuse Replacement

When replacing the fuse, be sure to use one with the correct amperage, which will be stated on the fuse case. 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.

### Mounting The Unit in Most Dashboards

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



## SPECIFICATIONS

### Audio Power Specifications

Power Output and Total Harmonic Distortion: 5.5 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

#### Tuner

**FM**  
 Tuning Range: 87.5 - 107.9 MHz  
 Intermediate Frequency: 10.7 MHz  
 FM Mono Sensitivity: 18 dBf  
 Seek to Sensitivity: 51 dBf  
 Seek sensitivity: 31 dBf  
 Selectivity: 80 dB at 400kHz  
 Signal-to-Noise Ratio: 65 dB (stereo), 70 dB (mono)  
 Harmonic distortion at 1 kHz: 0.7% (stereo), 0.5% (mono)  
 Separation: 30 dB  
 Frequency Response: 30-15,000 Hz  $\pm$  3 dB

#### AM

Tuning Range: 530 - 1,710 kHz  
 Seek to sensitivity: 50 dB $\mu$ V  
 Seek sensitivity: 30 dB $\mu$ V  
 Intermediate Frequency: 450 kHz  
 Signal-to-Noise Ratio: 45 dB  
 Design and specifications subject to change without notice.

#### Audio

Speaker Impedance: 4-8 ohms  
 Maximum Amp Power: 20 Watts x 4 (at 4 ohms)  
 RMS Power: 5.5 Watts x 4  
 Bass Control:  $\pm$  10 dB @ 100 Hz  
 Treble Control:  $\pm$  10 dB @ 10 kHz

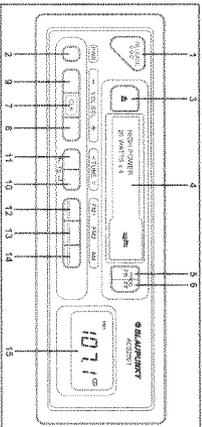
#### Cassette

Signal-to-Noise Ratio: 55 dB  
 Signal Wow and Flutter: 0.10%  
 Tape Frequency Response: 30-18,000 Hz  $\pm$  3 dB

#### General

Dimensions (w/o projecting parts/controls): 178 x 50 x 153 mm  
 7 x 2 x 6 in.  
 Mass: Approx. 1.4 kg (3.0 lb)  
 Power Requirement (neg. grnd.): 12 V DC car battery  
 Operating Temperature: 15°F to 120°F, -10°C to 50°C  
 Supplied Accessories:  
 • Unit  
 • Mounting Hardware  
 • Owner's Manual in English, French, Spanish and Portuguese

## LOCATION OF CONTROLS



- |                                 |   |  |   |
|---------------------------------|---|--|---|
| 1. REL (Release) Button         | 8. + Button:<br>Volume +<br>Bass +<br>Treble +<br>Balance Left<br>Fade To Front | 9. -- Button:<br>Volume -<br>Bass -<br>Treble -<br>Balance Right<br>Fade To Rear | 10. > Button:<br>Seek and Manual Radio Tuning |
| 2. PWR (Power) Button           |   |  | 11. < Button:<br>Minute Adjustment            |
| 3. Cassette Eject Button        |   |  | 12. FM1 Band Button                           |
| 4. Cassette Door                |   |  | 13. FM2 Band Button                           |
| 5. FR (Fast-Rewind) Button      |   |  | 14. AM Band Button                            |
| 6. FF (Fast-Forward) Button     |   |  | 15. Liquid Crystal Display                    |
| 7. Clock Button                 |   |  |   |
| Audio and Display Select Button |   |  |   |

## INSTRUCTIONS — GENERAL OPERATION

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

### Turning Unit On

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

### 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 adjustments 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.

### 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 CLK 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 < Button to set the hour, and press the > Button to set the minutes. (To change the minute indicator to the nearest hour (:00), you can press the FM1 Button.) Press the CLK Button again to activate the clock.

### Changing the Information Displayed

- **To change the display priority** from clock to function or function to clock, press the CLK Button for two seconds. The display priority changes.
- **To change the display temporarily** from clock to function or function to clock, press and release the CLK Button.\* After *five* seconds, the display changes back to the priority information.

### Ignition-Off Clock Recall

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

### Bass and Treble

Press and release as many times as needed CLK Button to select the Bass mode, once more to reach the Treble mode. The level is indicated in the Display Window. Press the + Button or – Button to increase or decrease the level.\*

### Balance

Press CLK Button as needed to select the Balance mode. The balance is indicated in the Display Window. Press the + Button to increase the right speaker output or press the – Button to increase the left speaker output to the desired level.\*

### Fader

Press CLK Button 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 decrease the front speaker output. Press the – Button to decrease the rear speaker output.\*

\* *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 CLK as needed to return to VOLUME, which appears after FADER in the CLK Button cycle.

### CLK Button Summary

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

## RADIO OPERATION

### Band Selection

Press the desired band. To access FM, press either FM1 or FM2. The indicator for the active band (FM1, FM2 or AM) appears in the Display, along with the radio frequency being received.

### 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 ("Ⓢ") 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 < or > button to seek the next receivable station. To stop seeking and return to the previously tuned frequency, press the other of the < or > buttons.

### Manual Tuning

Select the desired band. To begin manual tuning, press and hold the < or > button for 0.5 seconds. Five seconds after you complete your adjustments, the Tuning Controls (< >) Buttons reverts to Seek Tuning.

### 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 the < and > buttons for two 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. Momentarily press and release the band as needed until the desired preset frequency appears. The preset number will appear for 1 second, then the unit returns to the priority display.

### Manually Storing Individual Preset Stations

1. Select the desired band.
2. Select the preset frequency that you wish to replace by pressing the band button as many times as needed.
3. Press and hold the band button until the preset number begins to blink.
4. Use the < and > buttons to seek or to manually tune the desired frequency.
5. Once the desired frequency is tuned, press the band button for 2 seconds at which time the preset number appears in the display to confirm the storage, then release the button. (If you wish to replace the next preset frequency, you can continue holding the band button until the next preset number begins to blink, and repeat steps 4-5.)

## CASSETTE PLAYER OPERATION

### Cassette Tape Play:

- Insert cassette into Cassette Door. Note: Make sure that the side of the cassette with the tape exposed is facing to the right side and that all slack has been removed from the tape prior to insertion.
- The insertion of the cassette will automatically override the radio, and the cassette will begin to play. When the cassette deck is being used, the display will indicate which direction the tape is going.
- The tape will continue to play until ejected after which the radio will play.

### Auto-Reverse Tape Function

- Automatic: When the end of the tape (side A or B, program 1 or 2) is reached, the tape will automatically reverse direction and play the other side of the tape.
- Manual: To reverse tape direction during playback, press the PROG (Program) Buttons. The change in direction and in tape program will be confirmed in the Display.

### Fast Winding of Tape

- To fast-rewind the tape, press the FR Button.
- To fast-forward the tape, press the FF Button.
- When the unit is fast-winding, the display blinks.
- To stop fast winding, press the other fast-wind button, FR or FF.

### Ejecting The Tape

Press the Cassette Eject Button to eject the tape. The radio will 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>• With the 2-speaker system, set the fader control to the center position.</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. See "Cleaning the Connectors" of "Maintenance" for details.</li></ul>            |

### Radio reception - (Make sure the antenna is connected, extended, and dry inside)

| 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> |
| Travel Store feature does not complete storing of six stations. | <ul style="list-style-type: none"><li>• Not enough broadcast frequencies are receivable.</li></ul>    |

If the above mentioned solutions do not help to improve the situation, consult your nearest **Blaupunkt** dealer or in the USA call 1-800-266-2528. For dealer referral or product brochure call 1-800-950-2528.