

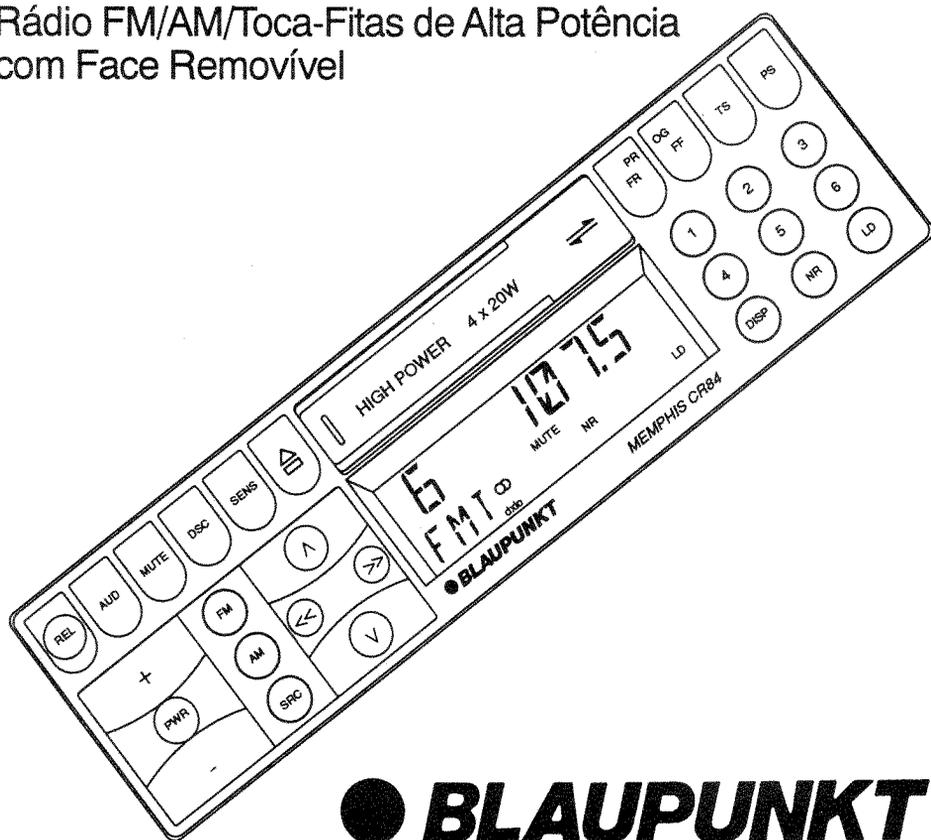
MEMPHIS CR84

High-Power FM/AM Cassette Receiver with Fully-Detachable Face

Récepteur-Cassette Stéréo AM/FM de Forte Puissance avec Face Avant Amovible

Receptor FM/AM Reprodutor de Alta Potencia con Panel Frontal Desmontable (Carátula)

Rádio FM/AM/Toca-Fitas de Alta Potência com Face Removível



● 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 correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet or circuit different from that which the receiver is connected.
- 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.

Model No. MEMPHIS CR84

Warranty Number _____

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Features

Congratulations on your purchase of the Blaupunkt MEMPHIS CR84 FM/AM/Cassette Receiver. Its HDT Phase Locked Loop (PLL) quartz High-Definition FM and AM Tuner and high-quality cassette tape player provide the ultimate in sound reproduction. The Travel Store feature allows you to automatically load six receivable FM stations into the tuner's presets as you travel through various reception areas.

- Tuner Features:
 - HDT High-Definition PLL Tuner
 - 24 FM/6 AM Station Presets Including 6 FM Travel Store Presets
 - Scan and Preset Scan
 - Automatic and Manual Tuning
 - Local/Distant Reception Control
- Cassette Features:
 - Auto-Reverse Semi-Logic Cassette Mechanism
 - Hard Permalloy Tape Head
 - Fast-Forward/Rewind
 - NR Cassette Noise Reduction
- Audio Features:
 - 4 x 20 Watt Integrated Amplifier
 - 2-Channel RCA Preamp Output
 - Dual-Level Fader
 - Volume/Balance/Fader Controls
 - Separate Bass and Treble Controls
 - Loudness Button
 - –20 dB Mute
 - Portable Input Jack
 - ASU Impulse Noise Quieting
- DSC (Direct Software Control) Features:
 - Loudness Boost Levels +9 or +18 dB @ 60 Hz
 - Scan Sample Time
 - Volume-Level Memory
 - Turn-On Message Enter
 - Demo Message, Demo On/Off
 - Confirmation Beep On/Off
 - lo/dx Tuning Threshold
- General Features:
 - Fully-Detachable Faceplate for Security w/Case
 - Switchable Clock/Function LCD Display
 - Cellular Phone Mute
 - Includes Mounting Hardware and Wire Harness
 - DIN/ISO Mounting Chassis

Your MEMPHIS CR84's fully-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:

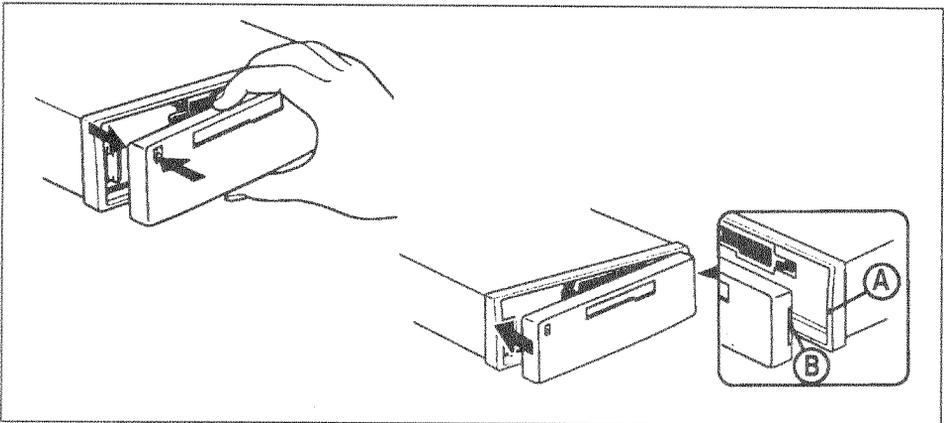
Before detaching the face, be sure to press the PWR Button first. Then press the REL (Release) Button and detach the face by gently pulling it towards you as illustrated.

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. When carrying the face with you, put it in the carrying case. 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.



Electrical Connections and Installation

@/<?#&*>@! To avoid the aggravation of costly mistakes and serious damage that could make you feel this way, please carefully follow all of the 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.
- Design and specifications subject to change without notice.
- We recommend making and testing all electrical connections before installing the unit.
- Be sure to detach the face before you start to connect or install the unit.

ELECTRICAL CONNECTIONS

Power Connections — To prevent short circuits and/or serious damage:

- Disconnect the vehicle battery's negative terminal before making connections.
- Use this unit only with negative ground 12 Volt (11-16 Volt) direct current (DC).
- Connect leads according to the wiring diagram.
- The total amperage required by the blue (remote) lead for triggering the antenna motor must not exceed 100 mA. We don't recommend connecting these leads to the main power input on an amplifier or anything else.
- The green cellular phone interrupt lead is for muting the audio sound while a cellular phone is in use. Connect this wire to the appropriate control terminal of the phone equipment.
- Connect the orange lead to the dashboard dimmer lead.
- Connect the red power input lead only after the other leads are connected. And be sure to connect it to a positive (+) 12 Volt power terminal that is energized only when the ignition key is set to the accessory position or on position.
- Connect the black lead to a grounded metal part of the vehicle. We recommend grounding all audio system black ground leads (head unit, external amplifier, etc.) to a common ground point.

Speaker Connections

The Memphis CR84's Dual-Level Fader allows you to fade between the front speaker leads and the rear of the vehicle using either the rear speaker leads and/or the preamp outputs, providing you flexibility in your speaker configuration:

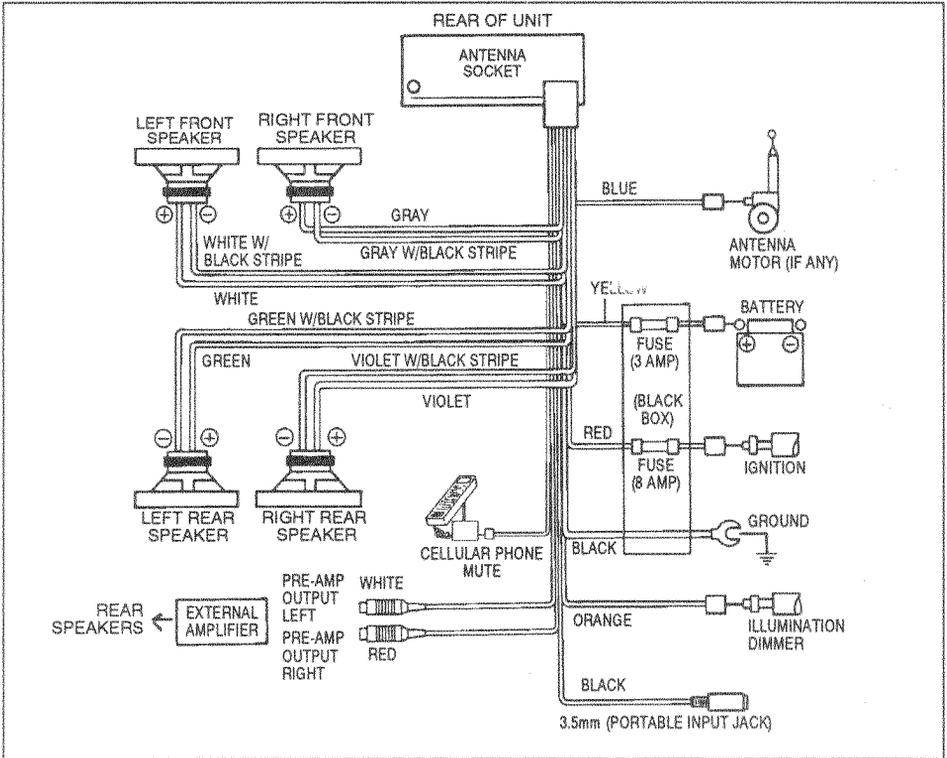
- You can connect speakers or speaker systems to each of the units' four speaker leads.
- You can connect the 2 RCA preamp outputs to external amplifiers and power up to two rear speakers or speaker systems with the amplifiers. (Blaupunkt amplifiers and speakers available separately).
- You can use a combination of these two methods, allowing your Memphis to provide sound to up to six speakers or speaker systems.

Speaker Lead Connections — To prevent short circuits, serious damage to the unit and/or speakers:

- Don't ground the speaker leads (or pre-amp outputs) to a metal part of the vehicle.
- Use speakers (or speaker systems) with 4 ohms minimum impedance that have adequate power-handling capabilities.
- Connect the speaker leads according to the wiring diagram.
- Don't connect more than one speaker (regular, co-axial or tri-axial) or (speaker systems) to each pair of speaker leads.
- Don't connect any active speakers (with built-in amplifiers) to the speaker leads.
- 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.

Pre-Amp Output Connections To External Amplifier(s) — To prevent short circuits, serious damage to the unit and/or speakers:

- Following the amplifier's instructions, connect Memphis' preamp outputs to the external amplifier and connect the speaker(s) or speaker system(s) directly to the amplifier.

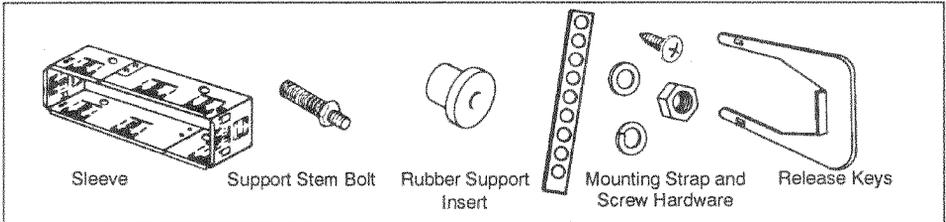


Installation

Recommendations

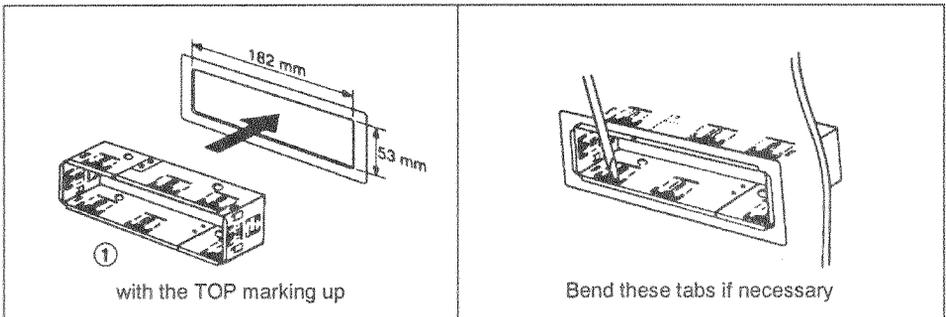
- Carefully choose the mounting location so that the unit won't interfere with normal driving.
- Avoid mounting locations where the unit would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would subject to dust, dirt or excessive vibration.
- The 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.
- Press the reset button after completing the electrical connections and installation. The reset button is located on the front of the chassis.

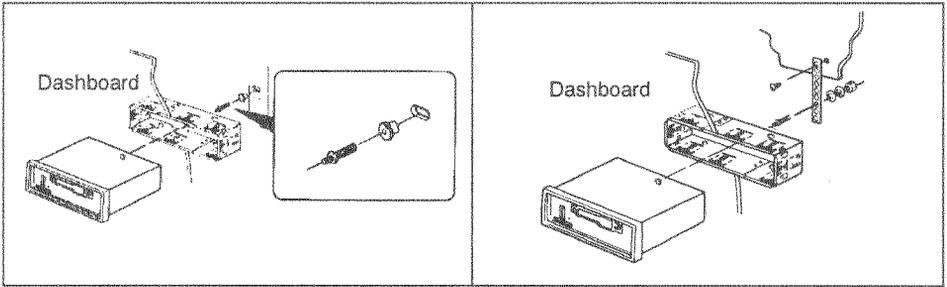
Mounting Hardware



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. **If your vehicle has a support hole behind its radio cavity:**
 - A. Attach the Support Stem (2) onto the back of the unit.
 - B. Insert the Rubber Support Insert (3) into the hole centered behind the radio cavity of the vehicle.
 - C. Slide the body of the unit into the sleeve until the support stem slides into the rubber support inserts and unit snaps into the sleeve.
- If your vehicle doesn't have a support hole behind its radio cavity:**
- A. Attach the Mounting Strap (4) to the underside of the dashboard.
 - B. Attach the back of the unit to the mounting strap.

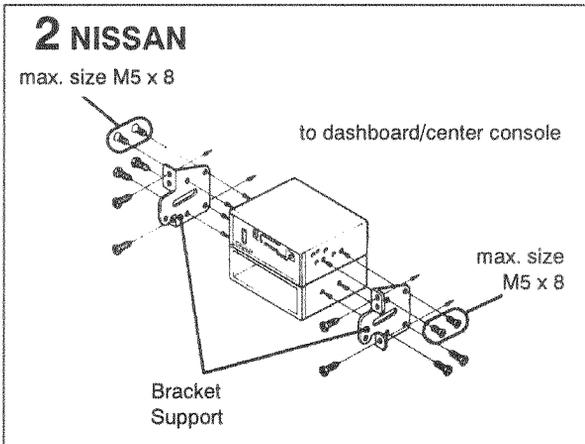
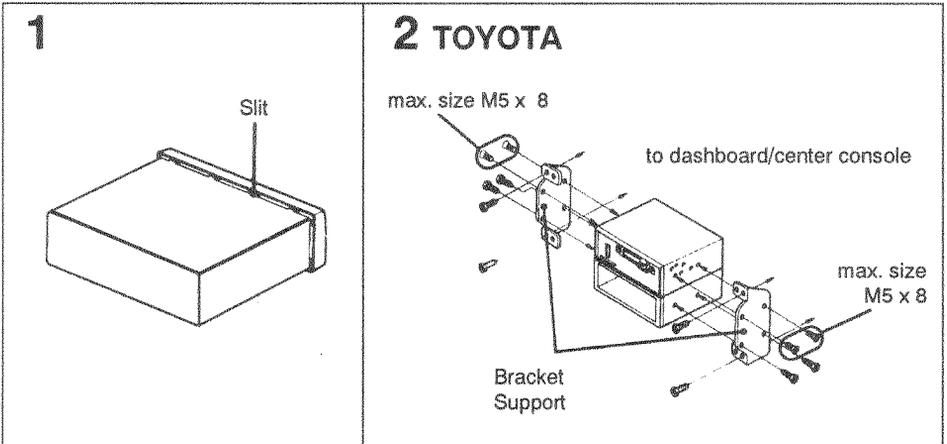




Mounting the Unit in a Japanese Car

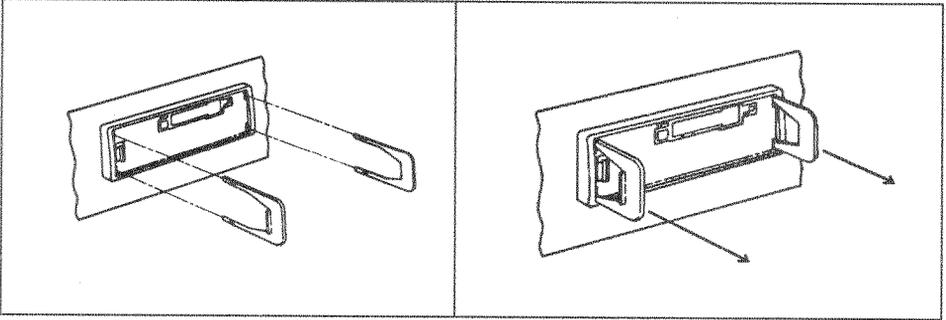
You may have difficulty mounting this unit in some Japanese cars that have ISO mounting features. In this case, consult your Blaupunkt dealer.

- 1 Run a blade along the slits on the back of the front trim ring and separate it from the unit. Discard the trim ring.
- 2 Use the vehicle's own mounting hardware to attach the unit.



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.

Cleaning the Connectors

The unit may not operate properly if the connectors between the unit and the face are contaminated with dirt. In order to prevent this from happening, remove the face from the unit by pressing the REL (Release Button), then detach it and clean the connectors from time to time. Clean the connectors with a cotton swab as illustrated. Be sure to clean them with a horizontal motion. Never clean them vertically, because this could damage the contact points.

Specifications

Audio Power Specifications

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 13 watts per channel minimum continuous average power into 4 ohms, 4 channels driven, from 30-15,000 Hz with no more than 1% total harmonic distortion.

Other Specifications

Power amplifier section

Outputs: Speaker output with bullet connectors
Speaker impedance: 4-8 ohms
Maximum power output: 20 W x 4 (at 4 ohms)
Measured at 14.4 V

Cassette section

Signal-to-noise ratio: 55 dB
Tape WOW and Flutter: < 0.15%
Tape frequency response: 30 - 18,000 Hz \pm 3 dB

Tuner section

FM

Tuning range: 87.7 - 107.9 MHz
Antenna terminal: External antenna connector
Intermediate frequency: 10.7 MHz
Sensitivity: 13 dBf
Selectivity: 75 dB at 400kHz
Signal-to-noise ratio: 65 dB(stereo), 70 dB (mono)
Harmonic distortion at 1 kHz:
0.7%(stereo), 0.3%(mono)
Separation: 35dB
Frequency response: 30 - 15,000 Hz \pm 3 dB

AM

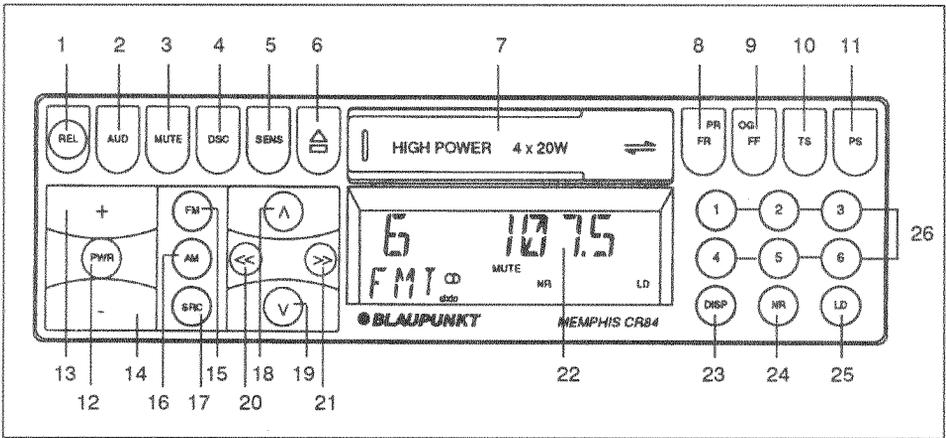
Tuning range: 530 - 1,710 kHz
Antenna terminal: External antenna connector
Intermediate frequency: 450 kHz
Sensitivity: 13 μ V
Signal-to-noise ratio: 55 dB
Harmonic distortion at 1 kHz:
1.0%

General

Tone controls: Bass \pm 10 dB at 100 Hz
Treble \pm 10 dB at 10 kHz
Power requirements: 12 V DC car battery
(negative ground)
Operating temperature: -10°C to 50°C
(15°F to 120°F)
Dimensions: Approx. 178 x 50 x 150mm
(w/h/d) (7 x 2 x 6 in.) not
incl. projecting parts and
controls
Mass: Approx. 1.7kg (3 lb. 12 oz.)
Supplied accessories: Mounting hardware (1 set)
Face plate case (1)

Design and specifications subject to change without notice.

Location of Controls



- | | |
|--|---|
| <ul style="list-style-type: none"> 1. REL (Release) Button 2. AUD (Audio Select) Button
Bass Mode
Treble Mode
Balance Mode Fader Mode
Turn-On Message Character Enter 3. MUTE Button 4. DSC (Direct Software Control) Button 5. SENS Button 6. Cassette Eject Button 7. Cassette Door 8. FR (Cassette Fast-Rewind) Button 9. FF (Cassette Fast-Forward) Button 10. TS (Travel Store) Button 11. PS (Scan/Preset Scan) 12. PWR (Power) Button 13. + Control:
Volume +
Bass +
Treble +
Turn-On Message Character Select 14. - Control:
Volume -
Bass -
Treble -
Turn-On Message Character Select 15. FM (FM Band-Select) Button | <ul style="list-style-type: none"> 16. AM (AM Band-Select) Button 17. SRC (Audio Source) Button 18. ^ Control
Fade to Front
Automatic Seek-Radio Tuning (Up)
Direct Software Control Feature Selection
Clock Hour Adjustment (Up) 19. v Control
Fade to Rear
Automatic Seek-Radio Tuning (Down)
Direct Software Control Feature Selection
Clock Hour Adjustment (Down) 20. << Control
Balance Left
Manual Radio Tuning (Down)
Direct Software Control Feature Adjustment
Clock Minute Adjustment (Down) 21. >> Control
Balance Right
Manual Radio Tuning (Up)
Direct Software Control Feature Adjustment
Clock Minute Adjustment (Up) 22. LCD Display Window 23. DISP/Clock Setting Button 24. NR (Cassette Noise Reduction) Button 25. LD (Loudness) Button 26. FM/AM Preset Button |
|--|---|

Instructions—General Operation

Turning Unit On

Vehicle ignition must be on. To turn unit on, press PWR Button (12) or insert a tape.

General Operation (Continued)

Turning Unit Off

Press the PWR Button (12) to turn the unit off.

Volume

Press the + and – Controls (13 & 14) to increase or decrease the volume to the desired level. The relative volume level is indicated in the Display Window (22).

Mute

To reduce the volume level by 20 decibels, press the MUTE Button (3). The "MUTE" indicator appears in the Display Window. To return to the previous volume level, press it again.

Loudness Control

Press the LD Button (25) to increase sound level of the low and high frequencies (60 Hz/ 8 kHz)*, especially when listening at low volume levels. The "LD" indicator appears in the display. To cancel, press this button again.

Setting the Clock

Turn the ignition key to the on position and turn the unit on by pressing the PWR Button (12). If the clock does not appear in the display, press and release the DISP Button (23) until the clock appears in the display. Press the DISP Button again for more than two seconds until the clock starts blinking. Press the \wedge and \vee Controls (18 and 19) to set the hour, and press the << and >> Controls (20 and 21) to set the minutes. Press the DISP Button again to activate the clock.

Changing the Information Displayed

To change the display priority, press the DISP Button (23) and the display changes as follows:

- During Radio Reception: Frequency \rightarrow Clock
- During Cassette Playback: Program Indication \rightarrow Clock
- During Portable Playback: "PORTABLE" \rightarrow Clock

Audio Source Selection

Press the SRC Button (17) to change the active audio source among radio, tape, or portable. The name of the new audio source is shown in the Display for at least one second, then reverts to the standard display, depending on the audio source. Inserting a tape at any time will turn the unit on or switch the unit into the tape mode.

Bass and Treble

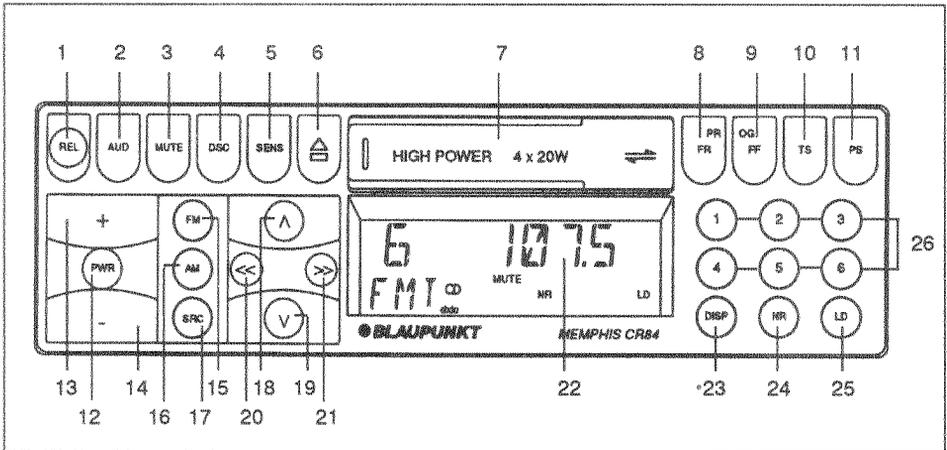
Press AUD (Audio Select) Button (2) once to select the Bass mode, twice for the Treble mode. The level is indicated in the Display Window (22). Press the + Control (13) or – Control (14) to increase or decrease the level. Four seconds after you complete your adjustments, the display will revert back to showing the sound source.

Balance

Press AUD (Audio Select) Button (2) three times to select the Balance mode. The balance is indicated in the Display Window (22). Press the << Control (20) to increase the left speaker output or press the >> Control (21) to increase the right speaker output to the desired level.

Fader

Press AUD (Audio Select) Button (2) four times to select the Fader mode. The level of output for front and back speakers is indicated in the Display Window (22). Press the \wedge Control (18) to decrease the rear speaker output. Press the \vee Control (19) to decrease the front speaker output.



DSC Direct Software Control Operation

Your Memphis unit allows you to customize many operational settings to your personal preference. Here's how to adjust the settings:

1. Press the DSC Button (4) to access the Direct Software Control menu.
2. Select the desired DSC function by pressing and releasing the \wedge and \vee Buttons (18 & 19).
3. Adjust the function as desired using the \ll and \gg Controls (20 & 21). As soon as you move to the next function or after eight seconds, your changes are stored. All other buttons become inactive until the DSC Button is pressed again or until approximately eight seconds pass.
4. Press the DSC Button (4) to complete the changes. While in the DSC mode, if 8 seconds pass and no buttons are pressed, the unit automatically exits the DSC mode. All changes made in the DSC mode are automatically saved.

Here are the MEMPHIS CR84's DSC functions:

Loudness (LD) Level (LOUD 1 & 2) — You can choose between two loudness levels for each sound source: FM, TAPE, CD CHANGER and PORTABLE. (The loudness level for AM is automatically set to LOUD 1.) LOUD 1 is +9 dB boost in bass. LOUD 2 is a +18 dB boost in bass.

FM Search Sensitivity Levels (LO 1 & 2, DX 1 & 2) — You can choose between low or high FM sensitivity thresholds for both local (lo) and distant (dx) stations.

Thresholds:

lo 1 > 65 dB μ V \pm 5	Only very strong stations
lo 2 > 50 dB μ V \pm 5	Also strong stations
dx 1 > 35 dB μ V \pm 5	Also distant stations
dx 2 > 25 dB μ V \pm 5	Also very distant stations

Fix Volume Level (FIX VOL) — Sets the volume level that is heard each time the unit is turned on. You can adjust the volume by using either the + & - Controls (13 & 14) or the \ll and \gg Controls (20 & 21).

Radio Scan Time (SCAN T 1-16) — Adjusts the time the unit stops at a station during scan and preset scan between 1 and 16 seconds.

Confirmation Tone (BEEP ON & OFF) — Allows you to activate or defeat an audible beep that sounds when a button is pushed or an operation step is completed.

Turn-On Message (MSG ON & OFF) — Turns message on or off and allows you to create your own turn on message each time the radio is turned on. Here's how to create your own turn-on message of up to 16 characters:

1. Select the "Message On" DSC function.
2. Press the AUD Button.
3. Press either the + or – Buttons (13 & 14) to select the desired characters, A-Z, 0-9 and other characters. If you wish to put a blank space in the name, select the " _ " (underbar).
4. Press the AUD Button after locating the desired character.
5. The next space to the right begins to flash. Repeat steps 3 and 4 for each desired character. After the sixteenth character (the farthest right character) is completed, the first (left-most) character begins to flash.
6. To store your turn-on message, press the \wedge or \vee Button or press the DSC Button.

Demonstration Mode — Your unit has a built-in demonstration message mode that scrolls a description of some of the unit's key features across the Display. (Should this unit be used by a retailer in a display, it would allow the retailer to provide customers with information about the unit.)

To activate the demonstration mode: Press the DSC Button (4). All of the units' features and buttons remain available. However, if one minute passes during which no buttons have been pressed, the demonstration message continuously scrolls across the screen.

To deactivate the demonstration mode: Press the DSC Button again for 4 seconds.

The demonstration mode is also active whenever the ignition voltage (red lead) is connected but no back-up voltage (yellow lead) is connected. The yellow lead must also be connected to make it possible to deactivate the demonstration mode.

Radio Operation

Band Selection

Press the FM Button (15) to select the bands FM1, FM2, FM3, and FMT, sequentially. [You can also press and release the TS Button (10) to switch to the FMT Band.] Press the AM Button (16) to select the AM band. The indicator for the active band (FM1, FM2, FM3, FMT or AM) appears in the Display along with the radio frequency being received.

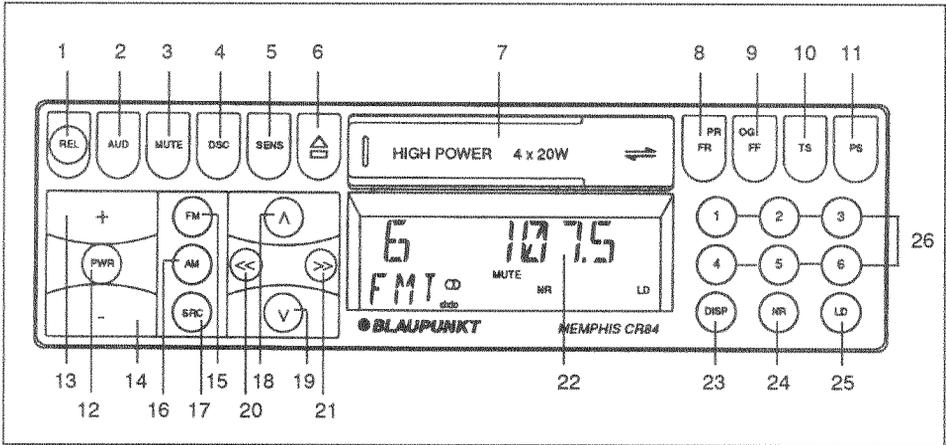
Travel Store

This feature allows you to automatically store the best-received FM stations, which is especially handy when you travel to a different reception area.

When the FM mode is active, pressing the TS Button (10) changes the active band to FMT. To store the most-receivable FM stations, press the TS Button (10) for more than 2 seconds. The lower left display changes to FMT. Beginning with the last-received FMT-Band dB μ V sensitivity, then with the lo and dx sensitivity levels you select under DSC. The unit then stores the six most-receivable stations and switches to preset 1 on the FMT Band.

Manual Tuning

Select the desired band: AM or FM. Press and hold the << or >> Controls (20 and 21) until the desired frequency appears in the Display.



Automatic Seek Tuning

Select the desired band AM or FM. Press and release the Λ and V Controls (18 and 19) to seek the next receivable station.

Scan Tuning

Press the PS Button (11) for more than 2 seconds to scan each receivable station. Scan tuning will stop at stations receivable using the reception sensitivity and scan time specified under DSC. (See page 14.) During scan tuning, the frequency blinks in the Display. To stop the scan and listen to a station by received, press the PS Button again.

Search Sensitivity

To have the automatic and scan tuning stop only at strong local stations, press and release the SENS Button (5). "lo" will be shown in the display. When "dx" is displayed, the distant reception mode is in effect and automatic tuning stops at ALL receivable stations, weak or strong.

When an FM stereo program with a signal strength of at least 20 dB μ V 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.

Preset Tuning

Up to 24 FM and 6 AM stations can be stored in preset memory.

1. Tune in a desired station, either manually or automatically, on the desired Band, AM, FM1, FM2, FM3, or FMT.
2. Press and hold any one of the six Preset Buttons (26). The Preset Button number will appear in the Display Window. After two seconds, the frequency will blink twice, indicating that the station has been stored in the Button's memory storage for that Band.
3. Repeat the above procedure with the rest of the presets for each Band, as desired.
4. To select a preset station, select the desired band, then press the desired Preset Button.

Preset Scan

To review the stations stored in the Preset Buttons, press and release the PS (Preset Scan) Button (11). All of the stations stored in memory will be scanned, in order, for the amount of time you've programmed under DSC. If any of the preset frequencies are not receivable with a signal strength of at least 15 dB μ V, they will be skipped over. To stop the scanning and listen to the station being received, press PS Button again or press a Preset Button or another tuning control.

Cassette Player Operation

Cassette Tape Play:

- Insert cassette into Cassette Door (7). 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 turn the unit on if it not already turned on.
- The insertion of the cassette will automatically override the radio (or portable input) and the cassette will begin to play. When the cassette deck is being used, "CASS 1" or "CASS 2" will appear, depending on which tape program is being played.
- The tape will continue to play until ejected, until the radio or portable input is selected using the SRC Button (17), or until the unit has been turned off.

Noise Reduction

Press the NR Button (24) to activate the high-cut circuit to reduce high frequency noise during tape play. To cancel, press this button again.

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 both tape program selector buttons [PR (8) and OG (9)] at the same time. (PROG is short for program.) The change in direction and in tape program will be confirmed in the Display.

Fast Winding of Tape

- To fast-forward tape, press FF Button (9).
- To stop fast winding, press the other fast-wind button, FR or FF.

Ejecting Tape

- Depress the Cassette Eject Button (6) completely towards the face of the unit. The tape will be ejected and the radio (or portable input) will play.

Portable Jack Input

An auxiliary input jack that allows you to connect portable audio equipment, such as a portable CD player, with a 1.2 volt/3.5 mm connector is located at the back of the unit. To play your portable equipment through your car audio system, simply plug your portable equipment's output into the jack and use the SRC (Source) Button (17) to select the portable jack as the active sound source. When the auxiliary jack is the audio source, "PORTABLE" will appear in the Display.