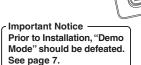
MP3000

High-Power FM/AM/CD/MP3 Receiver with Detachable Face Autoradio FM/AM à Lecteur CD/MP3 de Forte Puissance et à Face Amovible Receptor FM/AM/Reproductor de CD/MP3 de Alta Potencia y con Panel Extraíble

Rádio FM/AM/CD/MP3 de Alta Potência com Face Removível



Robert Bosch Corporation Sales Group — Blaupunkt Division 2800 South 25th Avenue, Broadview, Illinois 60155



or an exper enced rad o/TV techn c an for he p. s on recept on, wh ch can be determ ned by turn ng the equ pequ pment does cause harmfu nterference to rad o or te evance with instructions, may cause harmful interference with Ru es. These m ts are des gned to prov de reasonab e proment off and on, the user s encouraged to consut the dea er rad o nterference w not occur n part cu ar nsta at on. If th s rad o commun cat ons. However, there s no guarantee that frequency energy, and, f not nsta ed and used n accordt on. Th s equ pment generates, uses, and can rad ate rad o tect on against harmfu interference in a resident a insta a Th s equ pment has been tested and found to comp y w th the m ts for a Cass B dev ce, pursuant to Part 15 of the FCC

press y approved n th s manua coud vod your author ty to operate this equipment. You are caut oned that any changes or mod f cat ons not ex-

Features

- MP3/WMA file playback support
- CD-TEXT support (SONG, ALBUM)
- Detachable flip down front panel
- Built-in power amplifier (max. output : 47Wimes4ch)
- FM/AM PLL Synthesizer tuner
- 30 Station preset memory
- Travel Store / Scan tuning
- X-BASS System
- Station / Disc name store, Station / Disc call
- Auxiliary input

- Avo d nsta ng the unt where t wou d be subject to hgh excess ve v brat on from the heater, or where t wou d be subject to dust, d rt, or temperatures, such as n d rect sun ght or a hot a r stream
- If the un t does not turn on, check the connect ons f rst. Then Do not turn on the un t f the temperature ns de the car s your car n d rect sun ght w resut n a temperature r se very h gh. A ways coo down the un t before usage. Park ng
- Carefu y read th s manua before us ng the un t. If you encheck whether the fuse at the back of the unt s b own. p ease consut the dea er where you purchased the untor counter any probems that are not covered in this manual
- Th s unt has been des gned spec f cay for payback of compact d scs bear ng the fo ow ng mark. Other d scs cannot the dea er nearest to you.



Handling Compact Discs

- back s comp eted because the d sc may be extreme y hot. Be carefu when removing a compact disc after the play-
- Do not use non-convent ona d scs such as heart-shaped, octagona d scs, etc. The p ayer cou d be damaged.
- Do not expose compact d scs to d rect sun ght or any heat
- Check a compact d scs before p ay ng, and d scard cracked, scratched or warped d scs.
- W pe d rty or damp d scs outward from the center wth a
- Do not use any so vents such as commerca y ava ab e c eaners, ant stat c spray, or th nner to c ean the compact
- If a abe s aff xed to a d sc, the abe may prevent remova of the d sc from the un t or may damage the un t.



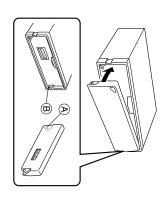




Handling the Front Panel

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.



Front Panel Open / Close

Panel open

Press the OPEN

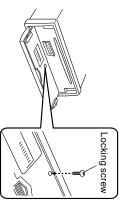
Panel close

finger until it locks in place. Raise the front panel with your



Security/Retailer Display

Bolt the front panel with the locking screw (See page 16) in from theft and from getting lost. the inner cover as shown below, to protect the front panel



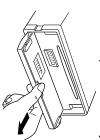
E-2

Detaching the Front Pane

1. Press the OPEN firmly to open the flip down front panel

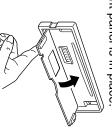


2. Pull the front panel toward your direction to remove it.



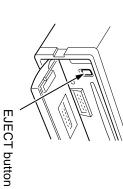
3. Close the inner cover.

Do not leave inner cover in the down position unless the front panel is in place

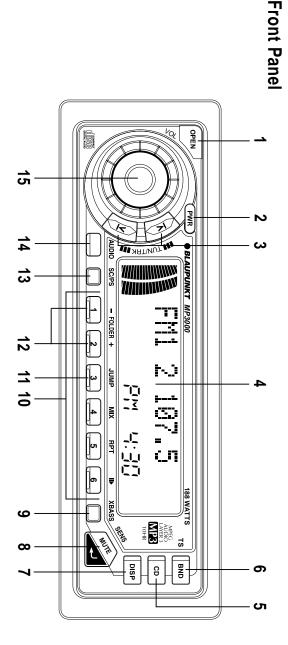


Ejecting the CD

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



- Be sure to use this unit with the front panel closed. is left open for about 10 minutes. The unit is automatically switched off when the front panel
- Do not handle the unit roughly when opening/closing the
- Do not put any object or use it like a tray when the front panel is open in a lying position.
- Do not press OPEN button when closing the front panel.
- Do not put too 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 or 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
- 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 maltunctions.



Music Album Artist DISO MIX RPT SCAN 10 20

E L O MUTE-<u>•</u>

OPEN button

Open the flip down front panel

TUN/TRK button Turns the power of the unit on or off.

Used to tune in to the desired station.

LCD Display window

CD button

Selects the AM/FM Band & Travel store

Select the operating source (CD, CD changer or AUX).

BND/TS button

DISP button

Mode selector. Clock adjustment. Display priority setting.

MUTE/SENS button

Muting the sound. Switches the seek sensitivity between local and distance.

XBASS button

Boosts the bass sound.

10 PRESET MEMORY button

During radio reception :
1 - 6 ; For Preset memory

During CD mode:

For Mix play (Mix & Mix all during CDC)

6/₽ (4/MIX For Pause

For Repeat play

11 JUMP button

switches the unit to ID3 Tag display. (Not supported with WMA.) If an ID3 Tag has been recorded on MP3 file, one touch

12 FOLDER SELECT button Select the desired CD in CDC (CD changer) mode.

Select the desired FOLDER in MP3/WMA play mode

13 SC/PS button

Scan tuning. Preset scan tuning. Scan play in CD/CDC mode

14 AUDIO button

& Fader. Audio control selector; Bass, Treble, Loudness, Balance

meric characters. Adjusts the volume level/bass/treble/balance/fader. Used to store the station names, and selects alpha-nu-

L-ch Level Meter

6

5

14 13 12

10

R-ch Level Meter

XBASS indicator

Main display section

STEREO signal indicator

Signal-strength indicator

lo(Local) indicator

LOUD indicator **MUTE** indicator

10 MIX/RPT/SCAN Mode indicator

11 Clock indicator

13 ID-3 Tag indicator 12 CD Changer indicator

14 DISC IN indicator

15 FOLDER indicator

Flashes when the folder name is displayed

16 FILE indicator

Flashes when the file name is displayed.

ENGLISH

LCD Display

General Operations

Turning the power On/Off

Press the PWR to turn on or off the unit

MP3!" will be displayed before actual power on. When you turn on the unit, "BLAUPUNKT MP3 - I WANT MY

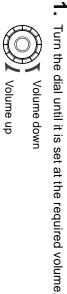
before actual power off. When you turn off the unit, "BYE - BYE" will be displayed

You can edit these message. (See "Turn on/off message

Volume Level Control and Memory

Rotate the dial to adjust the volume.

is switched on by following the procedure explained below. It is also possible to set the maximum volume when the power



Press the (PWR) for two or more seconds. The power will be switched off and the Turn-On volume level is saved.

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

The clock uses a 12-hour display system. (factory set)

- Turn the ignition key to the ON position
- 2. Press the (PWR) to turn on the unit.
- 3. Repeatedly press the (DISP) to display "CLOCK 12"
- Rotate the dial within 5 seconds to select the 12 or 24changes or toggles as follows: hour time mode. Each time you rotate the dial, the mode



CLOCK 24

- <u>5</u> Repeatedly press the (DISP) to display "CLOCK ADJUST"
- A. Press the (MUTE/SENS) within 5 seconds to flash the hour digit
- B. Rotate the dial to set the hour digit.
- C. Press the (MUTE / SENS) to flash the minute digit.
- D. Rotate the dial to set the minute digit
- Press the (DISP) momentarily to complete the Clock setting mode.

If you make no button input or dial operation in 20 seconds, the Clock setting mode will turn off automatically.

Ignition-off Clock Recal

Press the (DISP) while the ignition switch is in the "OFF" posimatically shut off after 5 seconds The display will illuminate showing the time and then auto-

Adjusting the Sound Characteristics

1. Press the (AUDIO) to select the desired adjustment mode as follows;

BASS 0 → TREBLE 0 → LOUD OFF → BAL LORO → FAD ROFO → (LOUDNESS) (BALANCE) (FADER)

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



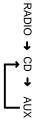
Adjustment Range

BASS	BASS –5	BASS +5
TREBLE	TREBLE -5	TREBLE +5
LOUDNESS	LOUD OFF	LOUD ON
BALANCE	L9 R0 (Full left)	L0 R9 (Full right)
FADER	R9 F0 (Full rear)	R0 F9 (Full front)

be made to each of the following modes independently: Settings for BASS, TREBLE, LOUDNESS and XBASS can FM, AM, CD, MP3, CD Changer and AUX.

Switching the Source (Selecting auxiliary input)

You can connect the auxiliary equipment (Portable cassette player, etc) to this radio via optional AUX-IN cable. (See page 17) Each time the (CD) is pressed, the operation source will change over as shown below;



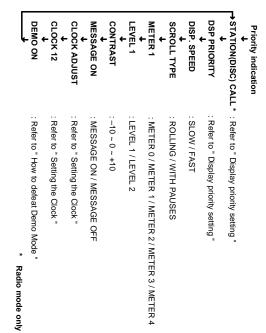
Press the (BND/TS) to return to radio mode.

Note

If the $\stackrel{\bigcirc}{}$ button is pressed when no CD has been loaded into the unit, The CD mode will skip to the AUX mode.

Mode Selector

Each time the (DSP) is pressed, the display window will change over as shown below;



Notes

- "STATION CALL" and "DSP priority" are not displayed in AUX mode.
- If you make no button input or dial operation in few seconds, the display returns priority indication.

Display priority setting Example

To set Station Name to the Display Priority.

- 1. Repeatedly press the (DISP) to display "DSP PRIORITY" appears in the display window.
- 2. Rotate the dial to select "STATION NAME" or "FRE-QUENCY".
- firm/enter your selection.

"NO NAMÉ" or a previously assigned station name (See page 10) flashs once to indicate that Station Name is selected for the Display Priority.

After 5 seconds, the display mode will automatically return to the Display Priority showing either "NO NAME" or the station name.

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

Display Priority can be set for the following items;

- Radio mode
 Frequency ←→ Station name
- CD or other media

FOLDER NAME : Folder name scrolls.

FILE NAME : File name scrolls.

FILE NAME : File name scrolls.

TRACK/TIME : Track No, and elapsed time scrolls.

SONG NAME : Song name scrolls.

ARTIST NAME

: Artist name scrolls

as shown in the table below. The items supported for display priority for each media are

is displayed, following which TRACK/TIME is displayed. When an item that is not supported is selected, "NO NAME"

	×			ID3-Tag ARTIST
	×	×		ID3-Tag ALBUM
	×	×		ID3-Tag MUSIC
×	×	×	×	TRACK/TIME
×	×			FILE NAME
×	×			FOLDER NAME
	* ×	*X		ID3-Tag Scroll
WMA	MP3	CD TEXT	CD	Media DISP Priority

Notes

- MUSIC → ALBUM
- <u>*</u> MUSIC → ALBUM → ARTIST

Display Speed selection

The scroll speed of the display indication can be switched.

- You can select:
 SLOW: Slow.
 FAST: Fast.
- **1.** Repeatedly press the (DISP) to display the "DISP. SPEED" on the display window.
- 2. Rotate the dial to select the desired display speed.



NOT STOM

Display Scroll type selection

The scroll type of the display indication can be switched.

You can select:

- ROLLING : Scrolls across the display
- WITH PAUSES : Scrolls across the display with pause
- **1.** Repeatedly press the (DISP) to display the "SCROLL TYPE" on the display window.
- 2. Rotate the dial to select the desired scroll type.



Level Meter selection

The meter displays can be selected from four types.

You can select :

- METER 1 : The level meter goes upward.
- METER 2 : Only the very top segment lights
- METER 3: The remaining segments light. (opposite of METER 2)
- METER 4 : The level meter goes up and down dividing from the center segment.
- METER 0 : No meter is indicated.
- **1.** Repeatedly press the (DISP) to display the "METER 1" on the display window.
- 2. Rotate the dial in a clockwise direction to select the desired meter indication.

METER 1 → METER 2 → METER 3 → METER 4 → ME-

R-ch Level meter



L-ch Level meter

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.** Repeatedly press the (DISP) to display the "LEVEL 1" on the display window.
- 2. Rotate the dial to select the desired meter sensitivity.



Display Contrast selection

The contrast of the display can be adjusted

You can adjust :

- -10 ~ 0 ~ +10
- 1. Repeatedly press the (DISP) to display the "CONTRAST" on the display window
- Rotate the dial to select the desired display contrast.



Message ON/OFF selection

Message display following POWER ON/OFF can be switched.

MESSAGE ON : A message is displayed following power

You can adjust :

MESSAGE OFF: No message is displayed

- Repeatedly press the (DISP) to display the "MESSAGE ON" on the display window.
- 2. Rotate the dial to select whether or not to display a message following power on/off



How to defeat Demo Mode

When power is turned off, the unit switches to demonstration After installation we recommend defeating the Demo Mode.

the display screen. The demonstration starts about 10 seconds after power off The demonstration of each function is repeatedly shown on

You can adjust

 DEMO ON The demonstation is displayed after power off.

 DEMO OFF A demonstration is not displayed after power off.

- **1.** Repeatedly press the DSP to display the "DEMO ON".
- Rotate the dial to select whether or not the demonstration should be displayed when power is off.



Enhancing the bass sound

tion can be set for either each band and CD/MP3/CDC/AUX mode. For extended bass centered @ 72Hz, Blaupunkt's XBASS func-

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.

the display window and the mode change as follows: Each time you press (XBASS), the current mode appears on " ■ E " appears on the display window. (Except for XBASS 0) Press the (XBASS) repeatedly to select the bass sound

XBASS 0 → XBASS 1 → XBASS 2 → XBASS 3 → XBASS 4

Note

on amplifiers sound distorted at the preferred sound level. Reduce XBASS level if your combination of speakers and add-

Turn on/off message edit

then "MESSAGE 2" will momentarily displayed before actual When you turn on the unit, "MESSAGE 1" will be displayed Following four messages can be edit with 12 characters each. You can edit the turn on/off message and store it in memory. power on.

When you turn off the unit, "MESSAGE 3" will be displayed then "MESSAGE 4" will momentarily displayed before actual power off.

Turn-on message
• MESSAGE 1 / MESSAGE 2

Turn-off message

- MESSAGE 3 / MESSAGE 4
- 1. Repeatedly press the (DISP) to display the "MESSAGE ON" on the display window.
- Press the (MUTE/SENS) to flash the "MESSAGE 1".
- 3. Rotate the dial to select the desired message you want to edit

MESSAGE 1 → MESSAGE 2 → MESSAGE 3 → MES-

- Press the (MUTE/SENS), then enter the character
- A. Rotate the dial in a clockwise direction to select the (A~Z, a~z, 0~9, ()*+, -./!"#\$%&':;<=>?desired characters.
- . Press the (TUNTRK >) to move the flashing cursor to cursor moves to the left. the next position. If you press (> TUNTEK), the flashing (<u>, {|}</u>, _ , [\] @
- C. Repeat steps A. and B. to complete entering the entire message 12 characters max.

- than 2 seconds to clear the character and re-enter. To erase/correct a message, press the (DISP) for more
- When entering a name, pressing the following buttons affects the display of characters as follows:
- : Changes to inputting letters. (Starts with "A".) switches between upper and lower case letters. If pressed while letters are already selected
- : Changes to inputting numbers. (Starts with "0".
- Changes to inputting synEnters a space (blank). : Changes to inputting symbols. (Starts with "(".
- Press the (MUTE / SENS) to store the message The new message flashes
- To return to the normal radio reception, Press (DISP)

Notes

- If you make no button input or dial operation in 20 seconds, the message edit mode will turn off automatically.
- Make sure the "MESSAGE" will be "ON"

Erasing the turn on/off message

You can erase the turn on/off message if so desired

- Repeatedly press the (DISP) to display the "MESSAGE ON" on the display window.
- 2. Press the (MUTE/SENS) to flash the message you edit
- Rotate the dial to select the desired message you want
- Press the (DISP) for more than 2 seconds

Repeat steps 1. and 3. if you want to erase other mes-

<u>ن</u> To return to the normal radio reception, Press (DISP)

Radio Reception

Seek Tuning

- 1. Press the (BND/TS) to select the desired AM or FM band.
 FM1 → FM2 → FMT → AM → AMT
 (FMT & AMT are Travel Store bands.)
- 2. Press the (YTUNTRK) to tune in stations. Tuning automatically stops at a broadcasting frequency.

 When tuned in to FM stereo broadcasting stations, the "O" stereo signal indicator will appear on the display

Manual Tuning

- 1. Press the (BND/TS) to select the desired AM or FM band.
- 2. Press the VILVIER or TUNTER of for more than 0.5 second to activate the manual tuning mode. Press again to tune in to stations.
- "MAN" 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 (BND/TS) to select the desired AM or FM band.
- 2. Hold the (SCPS) pressed for less than 2 seconds. The unit will scan the selected band for stations. "SCAN" indicator will appear on the display window. The unit will stop at each station for 8 seconds, before continuing to the next station.

Press the (SUPS) again to stop Scan Tuning and remain this on the selected frequency.

Τip

While tuning, the pie-shaped signal-strength meter to 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 also spins.

Preset Scan Tuning

- 1. Press the (BND/TS) to select the desired AM or FM band.
- 2. Hold the (SCPS) 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/AMT band or the 18 stations from the FM1/FM2/FMT bands. The unit will stop at each preset station for 8 seconds, before continuing to the next preset station.

 Press the (SCPS) again to stop Preset Scan Tuning and remain this on the selected frequency.

Memorizing Stations Automatically (Travel Store)

- 1. Press the (BND/TS) to select the desired AM or FM band
- 2. Hold the (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. If the radio is in FM1 or FM2, it switches to FMT. If the radio is in AM, it switches to AMT.

Note

This function is available for FMT and AMT.

Memorizing Only the Desired Stations

You can store up to 6 stations on each band (18 for FM1, FM2 and FMT, 12 for AM and AMT) in the order of your choice.

- 1. Press the (BND/TS) to select the desired band.
- 2. Press the TUNTRK > to tune in stations.
- Press and hold the desired preset memory button (1) 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 (END/TS) to select the desired AM or FM band.
- 2. Press the 1 6 momentarily.

Local/Distant (LO/DX) Selection

This feature is used to select the signal strength at which the radio will stop during Seek Tuning.

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

Storing the station names

memory. As much as 30 station names can be stored composed with 12 characters each. You can assign a name to each radio station and store it in

Storing the station names

- 1. Tune in a station whose name you want to store
- **2.** Press the DSP for more than 2 seconds.

- ယ Enter the characters.
- A. Rotate the dial in a clockwise direction to select the desired characters.

(A~Z, a~z, 0~9, () *+, -./!" #\$%&':;<=>? @[\]^_`{|}")

- . Press the (TUNTRK >) to move the flashing cursor to cursor moves to the left. the next position. If you press (> TUNTRK), the flashing
- C. Repeat steps A. and B. to complete entering the entire name 12 characters max

- To erase/correct a name, press the (DISP) for more than 2 seconds to clear the character and re-enter.
- When entering a name, pressing the following buttons affects the display of characters as follows:
- : Changes to inputting letters. (Starts with "A".) switches between upper and lower case letters. If pressed while letters are already selected
- Changes to inputting numbers. (Starts with "0".)
 Changes to inputting symbols. (Starts with "(".)
 Enters a space (blank).
- 4 Press the (MUTE / SENS) to store the station name The station name flashes.
- ٠ To return to the normal radio reception, Press (DISP)

Note

will be displayed. If you try to store more than 30 station names, "**FULL**"

E-10

- seconds.
- Ņ Press the (MUTE / SENS)

Rotate the dial to select the name of the station that you play "*ALL DELETE*". want to erase. To erase all the names of the stations, dis-

Press the (DISP) for more than 2 seconds.

Station call Direct Access to Memorized Stations via

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

- 1. Press the (DISP) to display the "STATION CALL" on the display window.
- Rotate the large dial to select the desired station name
- Press the (MUTE/SENS) to tune in the desired station.

Erasing the station names

- 1. Tune in any station and press the (DSP) for more than 2
- The station name or "
- flashing.
- Repeat steps 3. and 4. if you want to erase other names
- To return to the normal radio reception, Press (DISP).

CD Operations

Playing the CD player

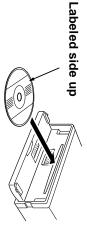
Loading Discs

- 1. Press the (OPEN) and insert the disc
- **2.** Close the front panel. "LOADING" and "FILE CHECK" will appear in the display window. Playback begins automatically.

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.



! NEVER Insert a 3-inch CD!

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 so 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 ©D to select the CD mode. Playback begins automatically.

Pausing Playback

Press the (6/1).
To resume playback, press the (6/1) again.

Stopping Playback

Press the (BND/TS) to select the radio reception (FM1,FM2 FMT or AM, AMT).

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 (TUNTRK >) during CD mode. Track numbers appear in the display window.

Playback starts from the beginning of the next track.

Playback starts from the beginning of the current track.
 Press again to play the previous track.

Cue / Review

Press and hold the (> TUNTRK >). Release when you have found the desired point.

: To search forward.

: To search backward.

Scan Play

Press the (SCPS) during CD mode.
The "SCAN 1" 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.

Repeat Play

Press the (srpr) during CD mode.

The "RPT 1" indicator appears in the display window and the current track is played repeatedly.

Press the (S/RPT) again to cancel this feature

Mix Play

Press the (4MIX) during CD mode.

The "MIX 1" indicator appears in the display window.

All the tracks on the current disc are played in random order.

Press the (4MIX) again to cancel this feature.

Note

If the Mix, Repeat or Scan buttons are pressed for 2 seconds or longer while playing a music CD, the unit will enter the respective mode2. These modes can be used for playing MP3 discs which contain a number of folders. (See page 12.) Since a music CD is treated as a folder, there is almost no difference in the operation.

MP3 / WMA operation

and "folder" in PC terminology, respectively. In this section, "track" and "album" mean "MP3 or WMA file' Rs, or CD-RWs by following the procedures below. You can play MP3 and WMA files written on CD-ROMs, CD-

MP3 / WMA play

Loading Discs

- 1. Press the OPEN and insert a CD-ROM, CD-R, or CD-RW with the labeled side upward
- 2. Close the front panel.

CD-R/RW with very complex folder trees could take in the appear in the display window. During scanning of the disc, "LOADING" and "FILE CHECK" Playback begins automatically.

Listening to a disc that is already loaded

range of 20-seconds to load.

Playback begins automatically. Press the (CD) to select the CD mode.

Pausing Playback

Press the 6/1.

To resume playback, press the (ể) again.

Stopping Playback

FT or AM, AT). Press the (BND/TS) to select the radio reception (FM 1, FM 2,

Ejecting Discs

tront panel Press the (to eject the disc located behind the flip-down

- 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.
- ID3 Tags are not supported for WMA files.

Track Search

in the display window. Press the (> TUNTER >) during CD mode. Track numbers appear

: Playback starts from the beginning of the next track.

 ${f \smile}$: Playback starts from the beginning of the current track Press again to play the previous track.

Album(Folder) Search

Press the (FOLDER+) or (FOLDER-) during CD mode. Folder indicator " igsqcup " flashes in the display window.

FOLDER+): Playback starts from the beginning of the next folder

FOLDER -): Playback starts from the beginning of the previous

Cue / Review

the desired point. Press and hold the (> TUNNTRK >). Release when you have found

: To search forward.

: To search backward

Scan / Folder Scan Play

Scan Play (Mode1)

Press the (sc/Ps) again to cancel this feature play the first 10 seconds of all the tracks on the disc. Press the (SCPS) during CD mode. The "SCAN 1 ON" appears in the display window. This will

Folder Scan Play (Mode2)

play the first 10 seconds of first tracks in each folder Press the (SC/PS) again to cancel this feature Press the (SC/PS) for more than 2 seconds during CD mode. The "SCAN 2 ON" appears in the display window. This will

Repeat / Folder Repeat Play

Repeat Play (Mode1)

Press the $\frac{s_{RPT}}{s_{RPT}}$ during CD mode. The "RPT 1 ON" appears in the display window and the current track is played repeatedly.

Press the (5/RPT) again to cancel this feature

Folder Repeat Play (Mode2)

Press the (5/RPT) for more than 2 seconds during CD mode. Press the (5/RPT) again to cancel this feature The "RPT 2 ON" appears in the display window and the current folder is played repeatedly.

Mix Play / Folder Mix

Mix Play (Mode1)

Press the (4MIX) during CD mode

The "MIX 1 ON" appears in the display window.

der. Press the (4/MIX) again to cancel this feature All the tracks on the current folder are played in random or-

Folder Mix Play (Mode2)

The "MIX 2 ON" appears in the display window Press the (4MIX) for more than 2 seconds during CD mode

Press the (4/MIX) again to cancel this feature All the tracks on the current disc are played in random order.

ID3 Tag Jump

immediately switches the unit to ID3 Tag scroll display. When a file containing an ID3 Tag is played, pressing (3JUMP)

nal display is restored after displaying "TRACK/TIME" for five When pressed (هاساسه) while scroll display has priority, the origi When the scroll display finishes, the original display is restored

playing a WMA file, pressing (SUUMP) causes "NO NAME" to be When playing a file that does not contain an ID3 Tag or when displayed

MP3 / WMA Overview

This unit can play back files recorded in MP3 or WMA format on CD-ROM, CD-R (recordable) or CD-RW (rewritable) discs. There are some limitations on the files and media that can be used, so before recording files on a disc please carefully read the following information.

ISO9660 Format

The unit can play back data recorded in ISO9660 format. ISO9660 is an international standard for representative CD-ROM file formats determined by ISO (International Standard Organization).

The media formats that can be used by the unit include Level 1, Level 2 and the extension format known as Joliet.

What are MP3 and WMA?

- An MP3 file stores audio data compressed using the "MPEG 1 / 2 audio layer-3" file format. We call files that have the ".mp3" extension "MP3 files". Likewise for WMA files. WMA is an abbreviation for Windows Media Audio. WMA files have the extension ".wma" and are compatible with MP3 files.
- The unit cannot read files that have a file extension different from ".mp3" or ".wma".
- The unit cannot read files without an extension even if the files are MP3 or WMA files.

Furthermore even if a file has an ".mp3" or ".wma" extension, the unit cannot read the file if is not recorded with the MP3 or WMA data format.

Playback Limitations

 The number of tracks and number of albums (folder) that can be played back from a disc are as follows.
 Tracks : About 250 depending on file contents.
 Albums(folder) : A maximum of 250 depending on the num-

ber of tracks.

The unit also recognizes up to eight album(folder) levels.

 The unit can playback MP3 files with compression bit rates from 32kbps~320kbps. However for the best balance of file space and sound quality we recommend 128kbps. When files compressed at less than 128kbps are played back, the sound may have breaks in it.

Sampling rates are supported as follows.

MPEG 2.5	MPEG 2	MPEG 1
12k	24k	48k
11.03k	22.05k	44.1k
8k	16k	32k

In the case of WMA files, play back is possible only for files encoded with a compression bit rate of at least 64kbps and a sampling rate of 44.1 kHz.

- Please note that the unit cannot play files encoded using the WMA copyright protection function.
- When playing WMA files, song, album and artist tags cannot be displayed.
- The unit allows the playback of CD-R and CD-RW discs containing a mixture of music CD data (CD-DA), MP3 and WMA files. However playback of both types of data is possible only for Mixed Mode CDs/CD Extra created using Disc at Once Method. (See below.)
- The unit also supports files compressed using VBR (variable bit rate).
- The unit does not always play back MP3 and WMA files in the order in which they were recorded.
- When many folders are recorded on a disc, the time required to retrieve information from the disc becomes longer.
- We recommend that multi-session discs be limited to 10 sessions.

The packet write method is not supported.

The following three methods are used to record data (files) on a disc. As the unit does not support the "Packet Write" method please be aware of this.

The unit supports discs recorded with the "Disc at Once" and "Track at Once" methods.

Disc at Once Method

With this method, all the data to be written is prepared in advance and then recorded on the disc in one go. Additional writing of data is not possible.

Track at Once Method

With this method, data is written in file (track) units. Additional writing of data is possible.

Packet Write Method

With this method, tracks are sub-divided into packets depending on availability of space on the disc. Additional writing of data is possible.

Display Information Limitations

- The unit can display folder and file names, ID3 Tags of length up to 64 characters including the extension. However, certain special symbols may not display correctly.
- During playback of MP3 and WMA files, there may be occasions when the elapsed playback time is not correctly displayed.

Important Points

- Please take care not to append the extensions for MP3 and WMA files onto files of any other type. When a disc containing such files is played, the files will be incorrectly recognized and played back. This will result in extremely loud noise that may damage the speakers.
- Depending on the state of the disc or recorder or writing software used to write on the disc, there may be cases when the disc cannot be correctly played back. In such cases please refer to the user manual for the tools you are using.
- When using a Macintosh personal computer, the file extension will not be added, so please add the extension ".mp3' to the end of the file name.
- This unit does not support WAVE files.
- This unit does not support m3u playlists.
- The unit does not support "Emphasis". (See "Glossary" on page 15.)

Note Concerning Bit Rate and Record Time

Please refer to the following general guide concerning the bit rate used when encoding and the overall time of a file recorded on disc.

Before recording on a disc, please carefully read the software instructions and ensure you use it correctly.

Note

When the sampling frequency used for encoding is 44.1kHz

CD quality (Standard)	CD quality (Medium sound quality)	CD quality (High sound quality)	For highest sound quality
128 kbps	160 kbps	192 kbps	320kbps
About 10hr	About 8hr	About 7hr	About 4hr

When Creating Discs

Files will not always be played back in the order in which they were recorded. When you want to ensure that files will be played back in the order they were recorded, please write onto the disc paying attention to the points below.

- Use writing software that can write MP3/WMA files on the disc in the order of the file (track) names. Please check with the software developers concerning the behavior and operation of the writing software.
- Prefix numbers to the names of folders (albums) and files (tracks) to arrange them in order. Shown below is a gooc example (2 or three digits correctly entered.) and a bad example (if the number of digits is not the same for all names, the names will not be ordered correctly.)

Example <good>

04XX	03XX	02XX	01XX	9000
04XXXX.mp3	XX.mp3	XX.mp3	XX.mp3	

cbad>
1XXXX.mp3
10XXXX.mp3
11XXXX.mp3
2XXXX.mp3

About Recommended CD-R and CD-RW Media

With some CD-R and CD-RW media, data may not be properly written depending on their manufacturing quality. In this case, data may not also be reproduced correctly. We recommend the media manufactured by the following companies:

CD-R Media

TDK USA Corp., Taiyo Yuden (U.S.A.), Inc., Ricoh Corporation, Eastman Kodak Company, Maxell Corporation of America, Mitsubishi Chemical Corporation, Fuji Photo Film U.S.A., Inc., Mitsui Chemicals, Inc., Sony Corporation of America, Philips Electronics North America Corporation, Imation Corp.

CD-RW Media

TDK USA Corp., Ricoh Corporation, Mitsubishi Chemical Corporation

Several types of CD-R and CD-RW media are available, such as 2X and 1X-4X. Please read the instruction manuals of the drive and the recording software you are using to select the right media.

Glossary

Bit rate

per second as a number of bits. The greater the quantity of information, the higher the bit rate. The bit rate expresses the amount of information transferred

The unit is "bits/second". "kbps" indicates "kilo (1,000) bits/

Emphasis

smooth characteristic. However, at the current time almost all player not supporting emphasis. play back an audio track recorded with emphasis on with a CD players lack support for this function. It is no problem to the audio track. When the emphasis bit is set the sound has a ity, which when turned on writes emphasis attributes on to The software used for recording has an "emphasis" capabil-

Extension

type of file. In Windows and DOS personal computers, several characters are placed at the end of each file name to indicate the

meric characters. The extension differs depending on file type The extension for MP3 files is ".mp3". The extension consists of a period followed by three alphanu-

name etc. to be added to MP3 files. This is a data format that allows a file name, title and artist

1.0/1.1/2.2 and 2.3. This unit supports SONG ALBUM and ARTIST for Versions

ID3 Tags are not supported for WMA files

Multi-Session

as a bundle called a session. The Track at Once Method althe time writing starts until the time writing finishes is regarded with each recording of a track being a single session. lows data to be added to a single disc one track at a time. When data is written on a CD-R disc, the data written from

> data for two or more sessions on a single disc. We recommend that this unit be used for up to 10 sessions. The term multisession refers to the method of recording the

Structure of Folder Hierarchy

be put into a folder, but in addition to files, a folder may also A, and folder C may be put into folder B so as to create a ing system. ISO9660 specifies up to 8 levels. can be recognized differs depending on the computer operat-"hierarchical structure". The number of hierarchical levels that have other folders put into it. Folder B may be put into folder To keep data within a computer organized, related files may

VBR (Variable Bit Rate)

during periods of violent variation of sound the bit rate is in-MP3 files are normally encoded with a fixed bit rate (eg 128kbps etc.), however VBR encoding during which the bit do not support VBR, so caution is required when using VBR. while maintaining high sound quality. However, some players creased. Encoding in this way allows file size to be curbed creased and during soundless periods the bit rate is derate is varied while encoding is also possible. That is to say

Types of CD

Audio CD(CD-DA)

ordinary audio CD players. It is also called CD-DA (Compact Disc Digital Audio). This is the format used for audio CDs that can be played on

ISO9660 Format CD-ROM

Macintosh operating systems and also by UNIX operating ROMs with this format can be played by Windows and ISO (International Organization for Standardization). CD-ISO9660 is a CD-ROM standard file system determined by

HFS Format CD-ROM

System) used by Macintosh Mac OS This is a CD-ROM conforming to the HFS (Hierarchical File

Hybrid CD-ROM

files and HFS format files. This is a CD-ROM containing a mixture of ISO9660 format

Mixed Mode CD on the one disc. This is a CD-ROM containing both data files and audio files

puter use so the audio files on the CD cannot be played Mixed Mode CD is a standard developed for personal comwith CD players that do not support Mixed Mode CD.

CD Extra (Enhanced CD)

with an audio CD player and the data files to be read by a ized by Sony and Philips to allow the audio files to be played personal computer. followed on the disc by data files. CD Extra was standard-This differs from Mixed Mode CD in that the audio files are

Installations

Supplied Mounting Hardware



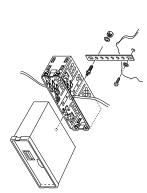


Keys

Precautions

Mounting Strap Use

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



Bushing Use

Use only the supplied mounting hardware for a safe and

secure installation.

Choose the mounting location carefully so that the unit will

Be sure to detach the front panel before you start in-

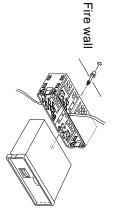
stalling the unit.

not interfere with the normal driving operations of the driver.

When mounting the unit in a car, keep the unit as level as

design of the vehicle, make sure that the unit does not tilt possible. If the unit must be mounted at an angle, due to the

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





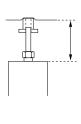
1. Install the sleeve in the dashboard.

Installation in the dashboard.

Mounting Example

Turn-off Demo mode before use.

upward by more than 30°



2. Select and bend the appropriate tabs to hold the sleeve

firmly in place.

sure to secure the unit by properly inserting the bushing. ies due to the type of the car. Be The distance to the fire wall var-

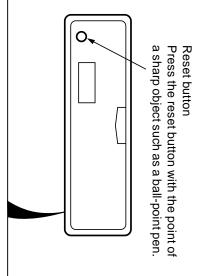


Caution

screw may cause some CD's to Insufficient fastening of the

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

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



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
- Your car has no accessory position on the ignition switch.

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

Note

nated. If set to the 🖪 position, demonstration mode will be elimi-

Connections

Warning

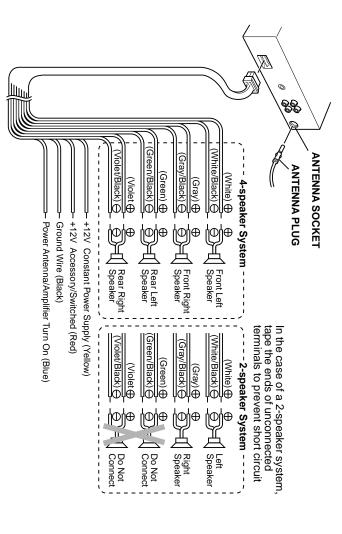
- To prevent short circuit, remove the key from the ignition and disconnect the battery's (-) terminal
- This unit is designed for negative ground 12 V DC operation only. You can not use it for 24 V or other types of car batteries.

Connection procedure

Caution

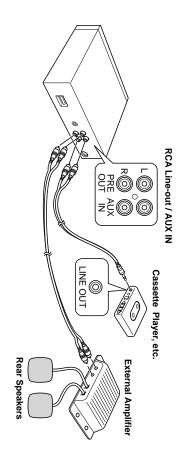
- DO NOT connect any speaker wires to the metal body or chassis of the vehicle.
- DO NOT connect the speaker common (–) wires to each other.
- Connect each speaker wire directly to each speaker terminal
- ie. No common connections or connection to vehicle grd. All speaker common (-) wires must remain floating.
- Connect each pair of speaker leads only to a single speaker as well as 47-watt power-handling capability. (or speaker system) that has an impedance of least 4 ohms,
- Do not connect speaker leads to any inputs on external amplifiers. This will cause damage to the internal amplifier
- Make sure the car's ignition key has been removed.
- Disconnect the negative (-) terminal of the car's bat-
- ယ Connect the wiring harness wires in the following Connect the speaker wires of the wiring harness. order: Ground wire (Black), +12V Constant Power each so they do not come in contact with each other. Power Antenna/Amplifier Turn On (Blue), and tape Supply (Yellow), +12V Accessory/Switched (Red) and
- Connect the car's antenna terminal to the antenna
- socket of the unit. Connect the detachable wire harness to the unit.
- Reconnect the negative (-) terminal of the car's bat-
- Start the car's engine.
- Make sure the unit operates properly.
- 10 Defeat Demo mode. (See page 7.)

Connection procedure



Preamp Out/AUX IN Connections

Since this unit has Line Level Outputs, you can use an amplifier to upgrade your vehicle stereo system.



RCA Line-out Jacks

· Connect a patch cable (not supplied) from the White and Red RCA line output jacks of the unit to the line input terminals of the external amplifier.

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.



Back of the unit

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.

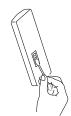
Cleaning the Connectors

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.



Main unit



Back of the front panel

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.

Note

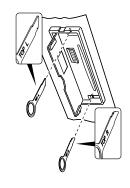
• Remember to defeat Demo mode. (See page 7.)



Removing the Unit

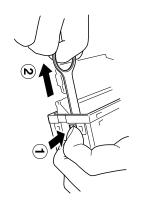
Use the supplied release keys when you need to remove the unit from the car.

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

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

General

 No power is being supplied to the unit. 	OFF positions.	 Radio works when the ignition key is the ON, ACC and 	The fuse has blown.	Memorized stations and	Trouble
upplied		he igni- connector. CC and Check wiring for short		ns and Leads are not matched	Cause/Solution

Radio reception

Trouble	Cause/Solution
Preset stations are not receivable.	The broadcast signal is too weak.
Seek tuning is not possible.	The broadcast signal is too weak. → Use manual tuning.
Travel Store feature does not complete storing of six stations.	Not enough broadcast frequencies are receivable.

Also make sure that antenna is connected, extended and dry

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

MP3 File Play Troubleshooting

Trouble	Cause/Solution
MP3 Files cannot	 Write MP3 files with the extension
ayed.	6 0+ 6 7
	files do not have the extension ".mp3".
	 Use discs conforming to ISO9660 level 1/2.
	• Confirm that the disc is not
	scratched or dirty, and that it is not upside down.
Folder Name/File Name is not cor-	 Use a disc conforming to ISO9660 level 1/2.
rectly displayed.	 The name contains characters that could not be handled by the software
	instruction manual for the software
	and use only characters that can be handled by the software.
ID3-Tag is not displayed.	 Record conforming with ID3-Tag v1.0/1.1/2.2 or 2.3.
Time elapses be- fore an MP3 file is	 As this unit initially checks all files on the disc, some time may be re-
played.	quired before it can start playing a file if the disc contains many files or folders or many folder levels.
MP3 files are not played in order.	 The files were not written by the write software in the desired playback or-
	der. Prefix digits such as "00""99" to the file names. For details refer to the in-
	struction manual for the write software.
	struction ware.

CD Player Troubleshooting

appears in the display window. When problems occur with CD playback, an error message

suggested corrective action. If the "SLED ERROR" appears, return unit to your nearest Blaupunkt dealer. Refer to the table below to identify the problem, then take the

Message	Possible cause	Recommended action
LD/EJ ERROR	Loading/eject error. Press the EJECT button and then reinsert the disc.	Press the EJECT button and then reinsert the disc.
SERVO ERROR	SERVO ERROR Mechanical error.	Eject and then reinsert the disc.
TOC ERROR	The disc is dirty, reversed or not recorded etc.	Check the disc and replace with a proper disc.
FILE ERROR	File read failure.	Reinsert the disc. The disc does not contain music files or the file extensions are missing. Add the extension ".mp3" or ".wma".
COMM ERROR	Communication error.	Reinsert the disc.

- When the disc can not be inserted, press the EJECT button press the Reset button (See page 18.) and try inserting the disc again. (See page 2.) and try inserting the disc again. Alternatively,
- If the disc does not eject after the EJECT button is pressed, press the Reset button and then press the EJECT button
- CD-R/RW: Quality of the blanks can & do effect the general operation of the CD player.
- After market CD-R/RW labels: The quality of these labels ing such labels. vary greatly, and can result in difficulties ejecting a disc us-

Specifications

GENERAL

Power requirem
Output Power Dimensions : Approx. 178 mm \times 50 mm \times 155 mm $(W \times H \times D)$

Power requirements: 12 volts DC car battery

: RMS and Peak Power ratings (negative ground)

23 watts RMS/47 peak \times 4ch (188 watts)

: Floating-ground type designed for 4 speaker use.

Output Wiring

RCA low-level outputs (2 channels).

Output Impedance : Compatible with 4-8 ohm speakers. Low - Level Output : 4 V.

: Frequency response : 11Hz - 100 KHz Input Sensitivity

AUX Input

TUNER

Tuning Range : AM : 530 - 1,710 kHz (10 kHz step)

FM: 87.5 - 107.9 MHz (200 kHz step)

Sensitivity

: AM : 20 μV FM : 9.1 dBf mono sensitivity

CD PLAYER

Stereo Separation : 40 dB

Frequency Response : 20 - 20,000 Hz

S/N Ratio Wow & Flutter : Below the measurable limit

MP3 PLAYER

MP3 decoding FORMAT : MPEG 1 Audio Layer 3 : ISO9660

Capability (Disk) : 700MB