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SOUND STORM[®]
LABORATORIES

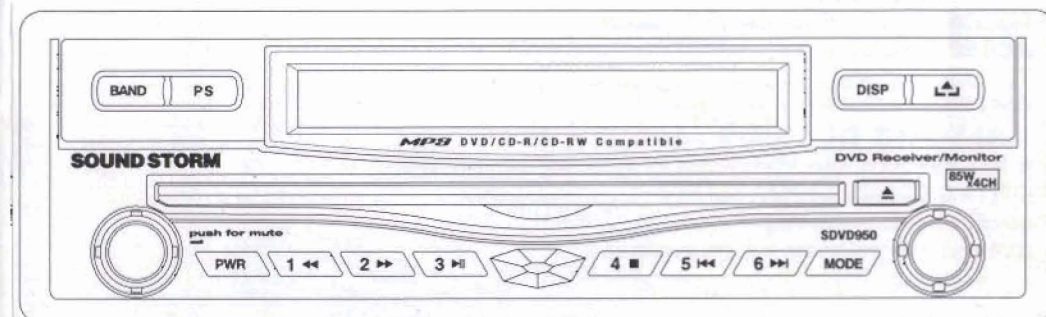


SOUND STORM[®]
LABORATORIES

User's Manual

SDVD950

SDVD-950



Thank You!

Thank you for choosing SOUND STORM for your mobile entertainment system. Please become familiar with the contents of this manual before you begin installation and operation of your new SDVD-950 multimedia AM/FM/DVD/CD receiver/monitor. This unit will be the control center of your audio/video system and will provide years of enjoyment for you, your family and friends.

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SDVD-950

Introduction

Congratulations on your purchase of a Sound Storm SDVD-950 multimedia AM/FM/DVD/CD receiver / monitor.

Features

- Motorized 7-inch widescreen TFT monitor
- AM/FM stereo tuner
- TV Tuner w/diversity antenna input(sold separately)
- DVD-R/RW, CD-R/RW compatible
- Video Select (V.Sel) rear zone output
- ESP – Electronic shock protection for DVD, MP3 and CDDA
- OSD – On Screen Display
- Joystick menu navigation
- AV1 and AV2 inputs for system expansion

Preparation

It's a good idea to read all of the instructions before beginning the installation. We recommend having your SDVD-950 installed by a professional installation shop.

Tools and Supplies

You will need these tools and supplies to install your SDVD-950 :

- Torx type, flat-head and Philips screwdrivers
- Wire cutters and strippers
- Tools to remove existing radio (screwdriver, socket wrench set or other tools)
- Electrical tape
- Crimping tool
- Volt meter
- Crimp connections
- 16 gauge wire for power connections
- 14 -16 gauge speaker wire

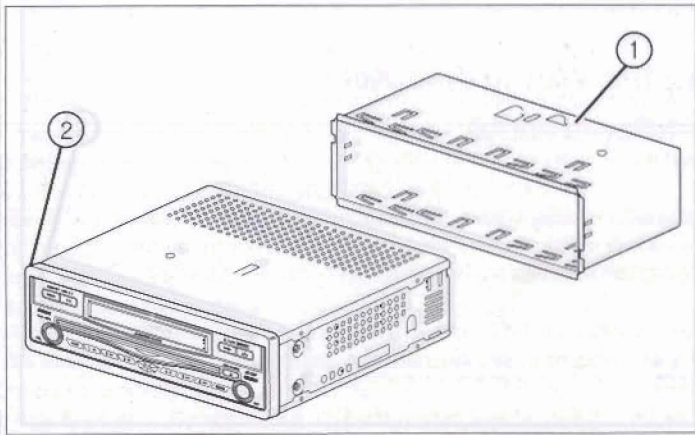
Disconnecting the Battery

To prevent a short circuit, be sure to turn off the ignition and remove the negative (-) battery cable prior to installation.

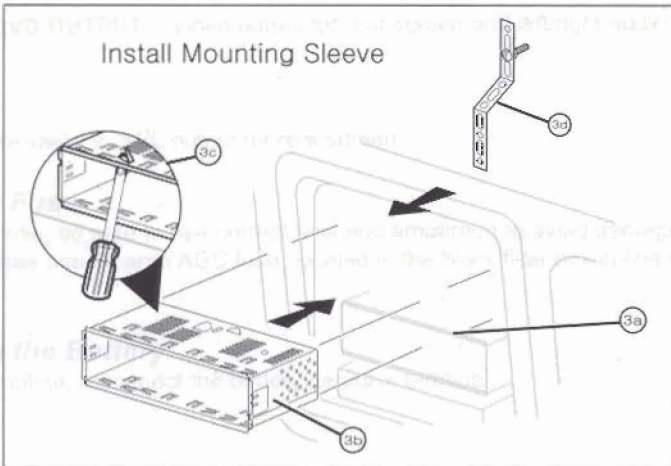
NOTE: If the SDVD-950 is to be installed in a car equipped with an on-board drive or navigation computer, do not disconnect the battery cable. If the cable is disconnected, the computer memory may be lost. Under these conditions, use extra caution during installation to avoid causing a short circuit.

Pre-installation

1. Press the metal levers on both sides to remove the mounting sleeve from the radio.
2. Remove the trim ring.



3. Install the mounting sleeve.
 - a. Install adapter if necessary(Optional).
 - b. Install mounting sleeve into adapter or dashboard (only use the supplied screws). Do not force the sleeve into the opening or cause it to bend or bow.
 - c. Locate the series of bend tabs along the top, bottom and sides of the mounting sleeve. With the sleeve fully inserted into the dashboard opening, bend as many of the tabs outward as necessary so that the sleeve is firmly secured to the dashboard.
 - d. Install support strap to make the unit more stable.



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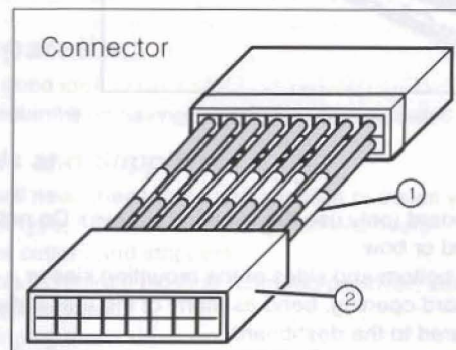
Caution! Be careful not to damage the car wiring.

4. Place the radio in front of the dashboard opening so the wiring can be brought through the mounting sleeve.

Connecting the Wiring Adapter (Purchased Separately)

You can make these connections without being in the car.

1. Splice or crimp wires.
2. Attach wiring adapter to car wiring harness.



Wiring

Wiring Connections

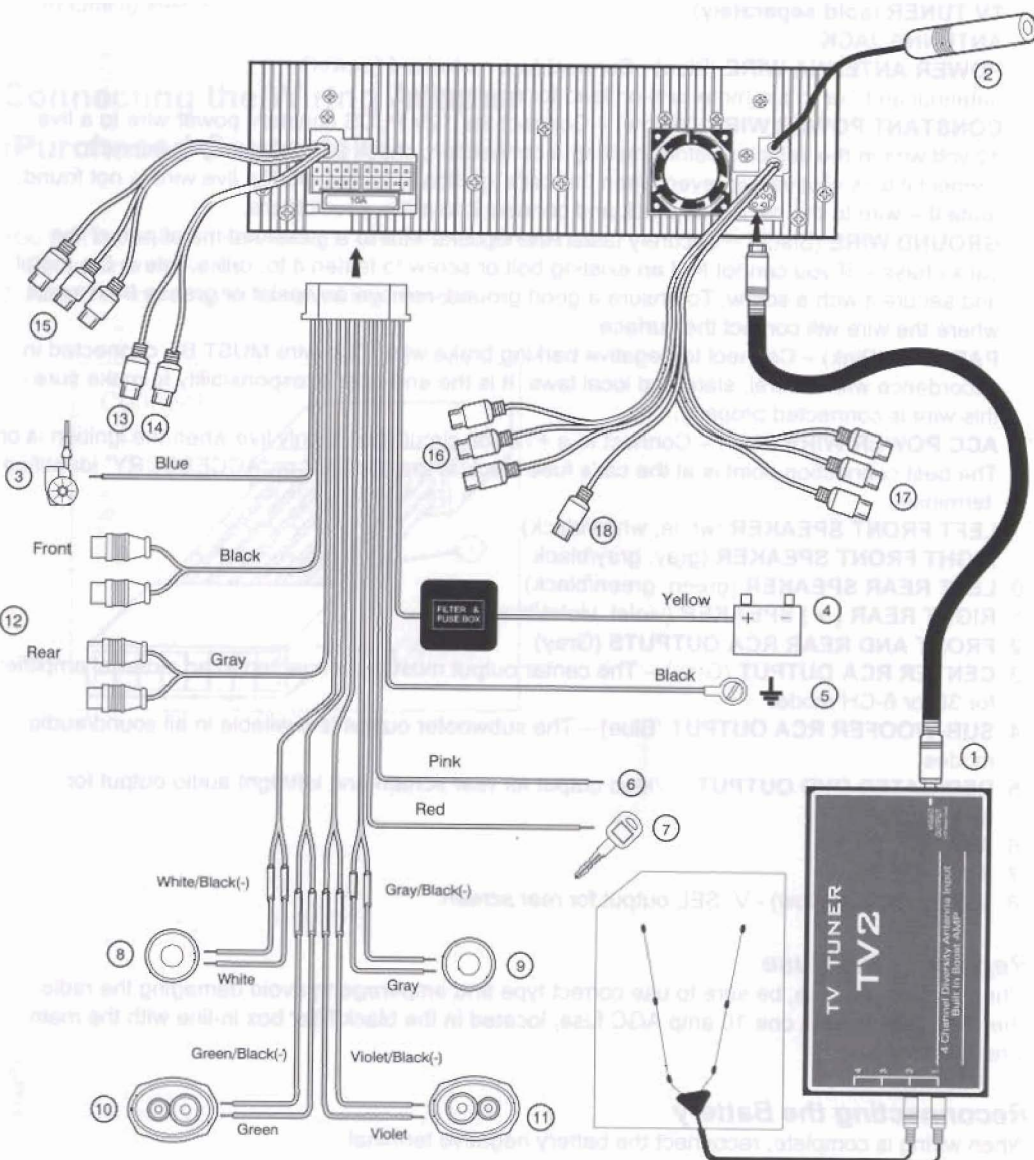
1. **TV TUNER** (sold separately)
2. **ANTENNA JACK**
3. **POWER ANTENNA WIRE** (Blue)– Connect to a motorized (power) antennal and / or to a remote turn-on lead for an amplifier.
4. **CONSTANT POWER WIRE** (Yellow) – Connect the 12V PLUS constant power wire to a live 12 volt wire in the vehicle. Before making a connection, check that the wire you intend to connect it to is always live, even when the car's ignition is turned off. If a live wire is not found, route the wire to the car's fuse block and connect it to a live circuit there.
5. **GROUND WIRE** (Black) – Securely fasten the Ground wire to a grounded metal part of the car's chassis. If you cannot find an existing bolt or screw to fasten it to, drill a hole in the metal and secure it with a screw. To ensure a good ground, remove any paint or grease from areas where the wire will contact the surface.
6. **PARKING** (Pink) – Connect to negative parking brake wire. This wire **MUST BE** connected in accordance with federal, state and local laws. It is the end-user's responsibility to make sure this wire is connected properly.
7. **ACC POWER WIRE** (Red) – Connect to a +12 volt circuit that is only live when the ignition is on. The best connection point is at the car's fuse block at the "RADIO" or "ACCESSORY" identified terminals.
8. **LEFT FRONT SPEAKER** (white, white/black)
9. **RIGHT FRONT SPEAKER** (gray, gray/black)
10. **LEFT REAR SPEAKER** (green, green/black)
11. **RIGHT REAR (+) SPEAKER** (violet, violet/black)
12. **FRONT AND REAR RCA OUTPUTS** (Gray)
13. **CENTER RCA OUTPUT** (Gray) – The center output must be connected to an external amplifier for 3D or 6-CH mode.
14. **SUB-WOOFER RCA OUTPUT** (Blue) – The subwoofer output is available in all sound/audio modes.
15. **DEDICATED DVD OUTPUT** – Video output for rear screen and left/right audio output for headphones.
16. **AV1 INPUT**
17. **AV2 INPUT**
18. **VIDEO OUT** (Yellow) - V. SEL output for rear screen.

Replacing the Fuse

When replacing a fuse, be sure to use correct type and amperage to avoid damaging the radio. The DVD-9800B uses one 10 amp AGC fuse, located in the black filter box in-line with the main wire harness.

Reconnecting the Battery

When wiring is complete, reconnect the battery negative terminal.



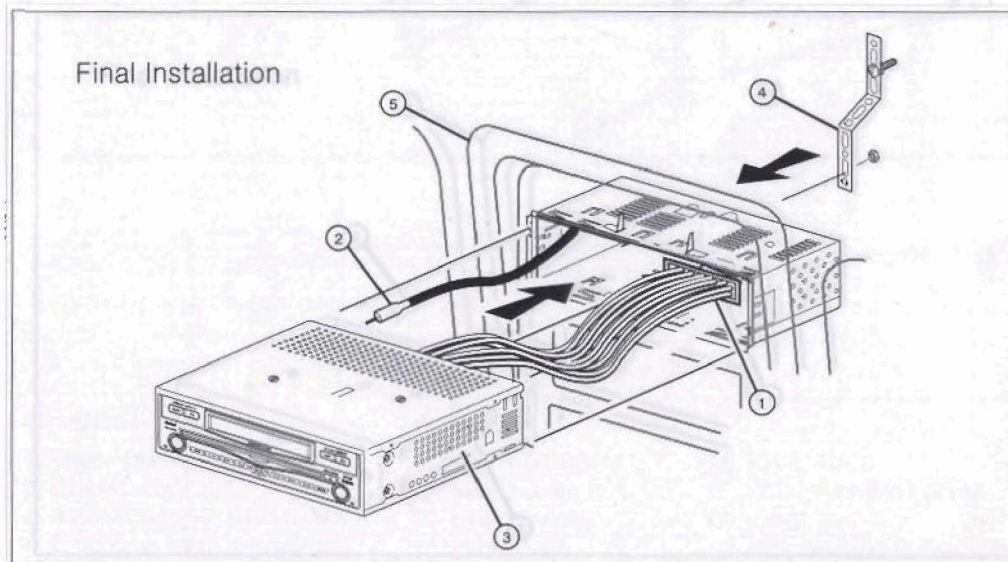
Installation

After completing the wiring connections, turn the unit on to confirm operation (ignition switch must be on). If unit does not operate, recheck all wiring until problem is corrected. Once proper operation is achieved, turn off the ignition switch and proceed with final mounting of the chassis.

NOTE: For proper operation of the CD/DVD player, the chassis must be mounted within 20" of horizontal. Make sure the unit is mounted within this limitation.

Final Installation

1. Connect wiring adapter to existing wiring harness.
2. Connect antenna lead.
3. Carefully slide the radio into the half-sleeve making sure it is right-side-up until it is fully seated and the spring clips lock it into place.
4. Attach one end of the perforated support strap (supplied) to the screw stud on the rear of the chassis using the hex nut provided. Fasten the other end of the perforated strap to a secure part of the dashboard either above or below the radio using the screw and hex nut provided. Bend the strap to position it as necessary. **CAUTION:** The rear of the radio must be supported with the strap to prevent damage to the dashboard from the weight of the radio or improper operation due to vibration.
5. Replace any items you removed from the dashboard.

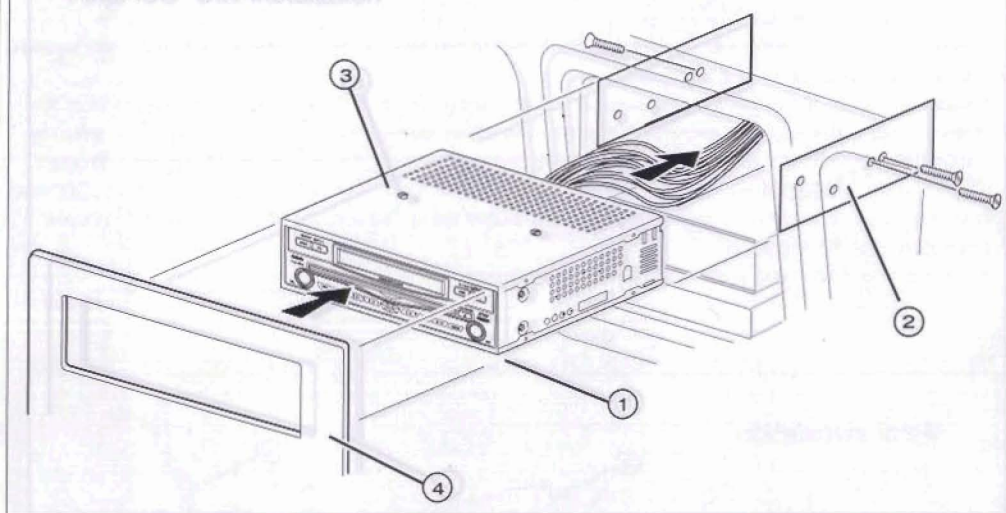


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Final ISO-DIN Installation

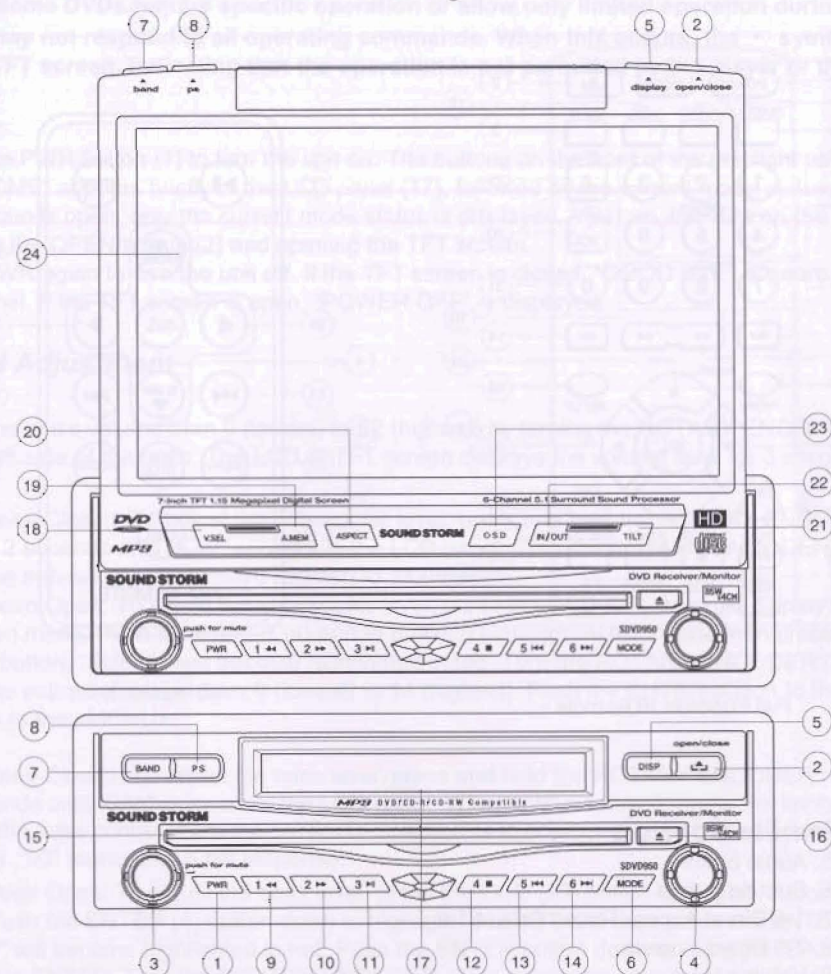
1. Remove trim ring.
2. Mount factory brackets on new radio using existing screws from old radio.
3. Slide radio chassis into dash opening and secure.
4. Reinstall dash panel.

Final ISO-DIN Installation



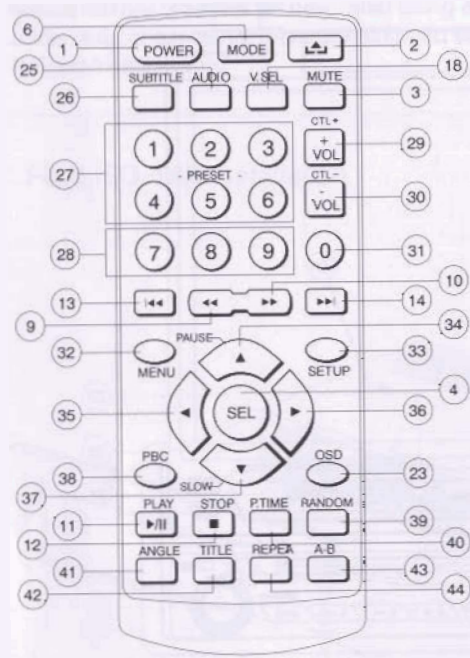
Operation

The buttons located on the radio and the remote controls that perform the same function are assigned the same number for reference on the diagrams and in the text.



Controls

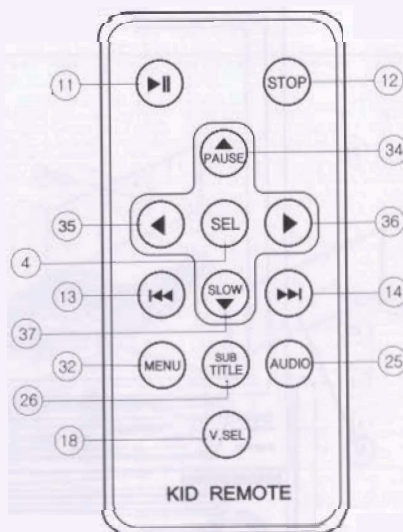
- | | | |
|---|---------------------|------------------------------|
| 1. Power On/Off | 8. PS (Preset Scan) | 16. Eject button |
| 2. Open/Close | 9. Fast Reverse | 17. LCD information panel |
| 3. Rotary Encoder, push to Mute | 10. Fast Forward | 18. V.SEL button |
| 4. Directional key - Joystick(up, down, left, right), push to Enter | 11. Play/Pause | 19. Auto Memory button |
| 5. Display button | 12. Stop | 20. Aspect Ratio button |
| 6. Mode button | 13. Chapter Down | 21. Tilt button |
| 7. Band button | 14. Chapter Up | 22. In/Out button |
| | 15. Disc slot | 23. On Screen Display button |
| | | 24. TFT display screen |



Full Function IR Remote

Remote Controls

- 25. Audio button
- 26. Subtitle button
- 27. 1-6 Direct Access Recall Preset 1-6
- 28. 7-9 Direct Access
- 29. Volume Up
- 30. Volume Down
- 31. 0 Direct Access
- 32. Menu button
- 33. Setup button
- 34. Up direction key/DVD pause
- 35. Left direction key
- 36. Right direction key
- 37. Down direction key/DVD slow



KID REMOTE

- 38. Playback Control button
- 39. Random button
- 40. P. Time button
- 41. Angle button
- 42. Title button
- 43. A-B Section Repeat button
- 44. Repeat button

Operation (continued)

NOTE: Some DVDs require specific operation or allow only limited operation during playback which may not respond to all operating commands. When this occurs, the • symbol appears on the TFT screen, indicating that the operation is not permitted by the player or the disc.

Power

Press the PWR button (1) to turn the unit on. The buttons on the front of the unit light up and "WELCOME" appears briefly in the LCD panel (17), followed by the current mode status. If the TFT screen is open, only the current mode status is displayed. You can also turn on the unit by pressing the OPEN button (2) and opening the TFT screen. Press PWR again to turn the unit off. If the TFT screen is closed, "GOOD BYE" appears in the LCD panel. If the TFT screen is open, "POWER OFF" is displayed.

Sound Adjustment

Volume

Adjust the unit's volume from 0 (lowest) to 52 (highest) by turning the ROTARY ENCODER (3) on the left side of the radio. The LCD or TFT screen displays the volume level for 3 seconds.

Sub-W

TFT Screen Closed: To adjust the sub-woofer level, press and hold the ROTARY ENCODER (3) for > 2 seconds until "S/W" appears in the LCD panel. Turn the ROTARY ENCODER to adjust the sub-woofer level from 0 (lowest) to 14 (highest).

TFT Screen Open: To adjust the sub-woofer level, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "AUDIO", and then press the ENTER button. "SUB-W" will become highlighted in red. Turn the ROTARY ENCODER (3) to adjust the sub-woofer level from 0 (lowest) to 14 (highest). Push the ENTER button to the right to return to the <MENU>.

Bass

TFT Screen Closed: To adjust the bass level, press and hold the ROTARY ENCODER (8) for > 2 seconds until "S/W" appears in the LCD panel. With "S/W" displayed, press the knob again to access the bass control. Turn the ROTARY ENCODER to adjust the bass from -07 (lowest) to +07 (highest). "00" represents a flat response.

TFT Screen Open: To adjust the bass level, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "AUDIO", and then press the ENTER button. "SUB-W" will become highlighted in red. Push the ENTER button down to highlight "BASS", and then press ENTER. Turn the ROTARY ENCODER (3) to adjust the bass from -07 (lowest) to +07 (highest). "00" represents a flat response. Push the ENTER button to the right to return to the <MENU>.

Treble

TFT Screen Closed: To adjust the treble level, press and hold the ROTARY ENCODER (3) for > 2 seconds until "S/W" appears in the LCD. With "S/W" displayed, press the knob again 2 times to access the treble control. Turn the ROTARY ENCODER to adjust the treble from -07 (lowest) to +07 (highest). "00" represents a flat response.

TFT Screen Open: To adjust the treble level, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "AUDIO", and then press the ENTER button.

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"SUB-W" will become highlighted in red. Push the ENTER button down to highlight "TREBLE", and then press ENTER. Turn the ROTARY ENCODER (3) to adjust the treble from -07 (lowest) to +07 (highest). "00" represents a flat response. Push the Right direction button to the right to return to the <MENU>.

Balance
TFT Screen Closed: To adjust the balance, press and hold the ROTARY ENCODER (3) for > 2 seconds until "S/W" appears in the LCD panel. With "S/W" displayed, press the knob again 3 times to access the balance control. Turn the ROTARY ENCODER to adjust the balance between the right and left speakers from R14 (full right) to L14 (full left). "00" represents an equal balance between the right and left speakers.
TFT Screen Open: To adjust the balance, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "AUDIO", and then press the ENTER button. "SUB-W" will become highlighted in red. Push the ENTER button down to highlight "BALANCE", and then press ENTER. Turn the ROTARY ENCODER (3) to adjust the balance between the right and left speakers from R14 (full right) to L14 (full left). "00" represents an equal balance between the right and left speakers. Push the ENTER button to the right to return to the <MENU>.

「SUB-W	」	-I	.....	II	.....	I+	07	<div>< MENU > ▶ SOURCE ▶ AUDIO ▶ VIDEO ▶ SC REEN ▶ SYSTEM ▶ TV C FG</div>	
「BASS	」	-I	.....	II	.....	I+	00		
「TREBLE	」	-I	.....	II	.....	I+	00		
「BALANCE	」	L	I	.....	II	.....	I		R 00
「FADER	」	R	I	.....	II	.....	I		R 00

Fader
TFT Screen Closed: To adjust the fader, press and hold the ROTARY ENCODER (3) for > 2 seconds until "S/W" appears in the LCD panel. With "S/W" displayed, press the knob again 4 times to access the fader control. Turn the ROTARY ENCODER to adjust the fader between the front and rear speakers from F14 (full front) to R14 (full rear). "00" represents an equal balance between the front and rear speakers.
TFT Screen Open: To adjust the fader, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "AUDIO", and then press the ENTER button. "SUB-W" will become highlighted in red. Push the ENTER button down to highlight "FADER", and then press ENTER. Turn the ROTARY ENCODER (3) to adjust the fader between the front and rear speakers from F14 (full front) to R14 (full rear). "00" represents an equal balance between the front and rear speakers. Push the ENTER button to the right to return to the <MENU>.
Mute
Press the ROTARY ENCODER (3) and relate it to silence the receiver. Press any button to resume normal operation.

Operation (continued)

Loudness
To adjust the Loudness, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "SYSTEM", and then press the ENTER button. "TILT" will become highlighted in red. Push the ENTER button down to highlight "LOUD". Press ENTER to toggle between "On" and "Off". Push the ENTER button to the right to return to the <MENU>.

Audible Beep
An audible beep tone confirms each function selection. The beep tone cannot be disabled.

Clock
You can only view the clock or modify its settings with the TFT screen closed.

CLOCK DISPLAY
Press the DISP (5) button to show the clock in the LCD panel.
CLOCK ADJUSTMENT (TIME)
Press and hold the DISP (5) button until the clock flashes in the LCD panel. Push the ENTER button (4) to the left or right to adjust the hour. Push the ENTER button up or down to adjust the minutes. Continue changing the hour to move between AM and PM. If you do not adjust the time within 10 seconds, the LCD panel reverts to the previous display.

Auxiliary Input
You can connect an audio and/or video device (MP3, cassette, navigation unit, VCR, gaming console, etc.) to the unit using one of the auxiliary input jacks (AV1 or AV2) to listen to an auxiliary audio source. Use the "Wiring" diagram on page 4 to locate the auxiliary input jacks.
TFT Screen Closed: To utilize an auxiliary input device, press MODE (6) until "AV1" or "AV2" appears on the LCD panel.
TFT Screen Open: To utilize an auxiliary input device, press the OSD (23) button to display the on-screen menu. "SOURCE" appears highlighted in red. Press the ENTER button to highlight "TUNER". Push the ENTER button down to highlight "AV1" or "AV2". Push the ENTER button to the right to return to the <MENU>.

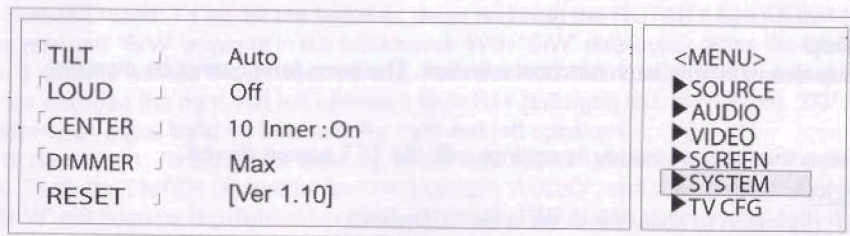
「TUNER	」	<div>< MENU > ▶ SOURCE ▶ AUDIO ▶ VIDEO ▶ SCREEN ▶ SYSTEM ▶ TV C FG</div>
「D V D	」	
「A V 1	」	
「A V 2	」	
「T V	」	

NOTE: If no TV tuner is connected the TV menu will not appear.

System Menu Options

To access the system menu, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "SYSTEM", and then press the ENTER button.

"TILT" will become highlighted in red. Push the ENTER button down to highlight the property you want to modify, and then press ENTER.



- **TILT**: Press ENTER to toggle the Auto-Close function between "Auto" and "ManI". When "Auto" is selected, the screen will automatically retract when the ignition is turned off. When "ManI" is selected, the screen will remain in the last position before the ignition was turned off.
- **LOUD**: Press ENTER to toggle the Loudness between "On" and "Off".
- **CENTER**: Use the ROTARY ENCODER (3) to control the center speaker volume level by adjusting it from "MIN" to "MAX", with levels 1-13 in between.
- **Inner**: Internal speaker on/off control. Press ENTER to toggle the usage.
- **DIMMER**: Press ENTER to adjust the brightness between "1" and "9", controlling the TFT screen.
- **RESET**: Press ENTER to reset the unit, returning all system values to the default factory settings.

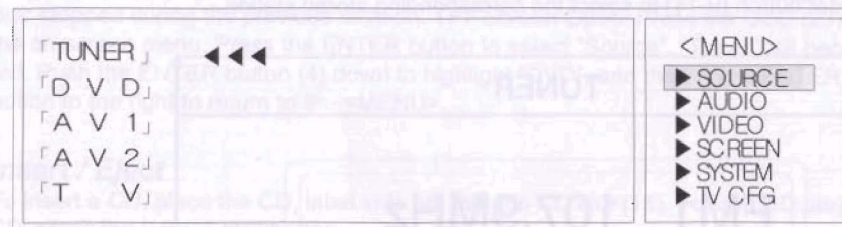
Push the ENTER button to the right to return to the <MENU>.

Tuner Operation

Switching to Radio Mode

TFT Screen Closed: Press the MODE button (6) to move through the available modes in the following sequence: FM1, CD, AV1, AV2, and TV1. Stop on "FM1" to access radio mode. The LCD panel displays the current radio station, preset memory number (if applicable), and frequency.

TFT Screen Open: To select "TUNER", press the OSD (23) button to display the on-screen menu. "SOURCE" appears highlighted in red. Press the ENTER button to highlight "TUNER". Press ENTER again to select "TUNER" as the current mode. Push the ENTER button to the right to return to the <MENU>.



Selecting a Band

Press BAND (7) to change between three FM bands and two AM bands. Each band stores up to six preset stations.

Manual Tuning

Push the ENTER button (4) up or down to move the radio frequency number up or down one step.

Seeking

Push the ENTER button (4) to the right to seek forward station on the current band or push it to working vice versa.

Preset Scanning

Push the ENTER button (4) to scan forward through strong stations in the current band. Push the ENTER button to the left to scan backwards. The radio pauses for five seconds at each strong station. Press the ENTER button to stop scanning and listen to the current station.

Scanning

Push the chapter up button (14) to scan forward in the current band or push the chapter down button to scan vice versa. The radio pause for five seconds if it band station.

Using Preset Stations

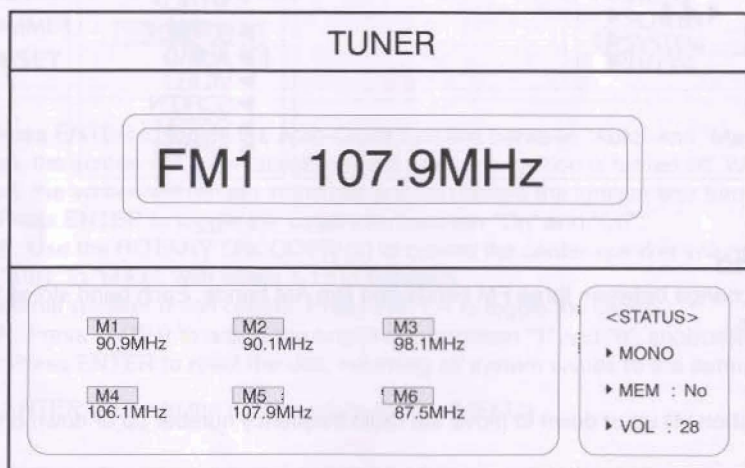
Six numbered preset buttons store and recall stations for each band. All six stored stations (M1-M6) for the current band appear on the TFT screen.

Storing a Station

1. Select a band (if needed), then select a station.
2. Hold a preset button (9-14) for three seconds. The preset number appears in the LCD panel.

Recalling a Station

1. Select a band (if needed).
2. Press a preset button (9-14) to select the corresponding stored station.

**Auto Store (AS) / Preset Scan (PS)****Automatic Storing**

Use the Auto Store function to select six strong stations and store them in the current band.

1. Select a band (if needed).
2. Press A.MEM (19) for > 2 seconds to activate the Auto Store function. The new stations replace stations already stored in that band.

Using Preset Scan

Scan stored stations in the current band.

1. Select a band (if needed).
2. Press PS (8). The unit pauses for 10 seconds at each preset station. Press PS(8) again to stop scanning when the desired station is reached.

CD Player Operation

You must be familiar with the remote control (see the "Remote Controls" diagram on page 9) to perform some of the steps listed in this section.

Switching to CD Mode

TFT Screen Closed: Press the MODE button (6) to move through the available modes in the following sequence: FM1, CD, AV1, AV2, and TV1. Stop on "CD" to access CD mode. If no disc is inserted, the LCD panel displays "NO DISC". If a disc has already been inserted, the LCD panel (if visible) displays "CD STOP" and then automatically plays the inserted CD, beginning where the disc stopped during the previous session. **TFT Screen Open:** Press the OSD (23) button to display the on-screen menu. Press the ENTER button to select "Source". "Tuner" will become highlighted in red. Push the ENTER button (4) down to highlight "DVD", and then press ENTER. Push the ENTER button to the right to return to the <MENU>.

Insert / Eject

To insert a CD, place the CD, label side up, into the CD slot (15). To stop CD play and eject the CD, press the EJECT (16) button.

NOTE: If Child Lock is set to ON and the disc inserted is not authorized, the 4-digit code must be entered and/or the disc must be authorized (see "Access Control (DVD/VCD)" on page 36). After inserting the disc, playback starts automatically.

Play / Pause

Press the 3 ► button (11) to suspend or resume disc play.

Stopping Play

Press the 4 ■ button (12) to stop CD play.

Track Selection

Press the 6 ►► button (14) for < 1 second to advance to the next track on the CD. Press the 5 ◀◀ button (13) for < 1 second to advance to the previous track. The selected track number appears in the LCD panel.

Fast Forward/Fast Reverse

Press the 2 ►►► button (10) to fast forward. Keep pressing and releasing the button to increase the rate from 2X to 4X, 8X, and 32X.

Press the 1 ◀◀◀ button (9) to fast reverse. Keep pressing and releasing the button to increase the rate from 2X to 4X, 8X, and 32X.

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Scan

Press PS (8) to play the first ten seconds of each song/file on the current disc. "INT" appears in the LCD panel. Press AS/PS again to stop the scan function.

Random Play (Requires Remote Control)

Press the RANDOM button (39) on the remote control to play all tracks on the disc in random order

Repeat Play (Requires Remote Control)

- Press the REPEAT (44) button on the remote control once to repeat the current track. "Repeat Track" appears near the top of the TFT screen.
- Press the REPEAT (44) button on the remote control twice to repeat the full disc. "Repeat Disc" appears near the top of the TFT screen.
- Press the REPEAT (44) button on the remote control a third time to cancel the repeat function.

MP3 Player Operation

Instructions for Insert/Eject, Play/Pause, Stopping Play, Track Selection, Fast Forward / Fast Reverse, Scan, and Random Play are the same for CD and MP3 operation. Please see the CD Player Operation section for information about these topics. You must be familiar with the remote control (see the "Remote Controls" diagram on page 9) to perform some of the steps listed in this section. After inserting an MP3 disc, the track number appears on the LCD panel. If the TFT screen is open, any available ID3 information appears on the screen, as shown below.

MP3-audio mode			
Play	Album	Track	Time
▶	1 / 3	1 / 11 / 36	0.04:43
Album	Id3: Lemon Parade Directory: /Lemon Parade		
Artist	Id3: Tonic		
Title	Id3: If You Could Only See File: 03 - Tonic - If You Could Only See		

- The current album followed by the total number of albums on the disc (1/3) is displayed under the word "Album" at the top of the screen.
- The current track number, the number of tracks in the current album, and the total number of tracks on the disc (1/11/36) is displayed under "Track".
- The total running time for the current track (0.04.43) appears under "Time".

Repeat Play (Requires Remote Control)

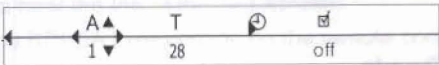
- Press the REPEAT (44) button on the remote control once to repeat the current track. "Repeat Track" appears near the top of the TFT screen.
- Press the REPEAT (44) button on the remote control twice to repeat the current album/folder. "Repeat Album" appears near the top of the TFT screen.
- Press the REPEAT (44) button on the remote control three times to repeat the full disc. "Repeat Disc" appears near the top of the TFT screen.
- Press the REPEAT (44) button on the remote control a fourth time to cancel the repeat function.

Direct Access (Requires Remote Control)

Press the number buttons (1, 2, 3, 4, 5, 6, 7, 8, 9, 0) on the remote control to directly access a track in the current folder.

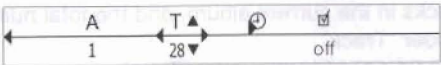
Select Directory

- 1. Press the • button (12) to stop MP3 play.
- 2. Press the P.TIME button (40) on the remote control to display the main menu.
- 3. Use the left/right arrows (• •& •) on the remote control or the ENTER button (4) on the radio to select the Album (A) option.
- 4. Use the up/down arrows (• •& •) on the remote control or the ENTER button (4) on the radio to change the album (directory/folder) number.
- 5. Press ENTER to play the first track in the selected directory.



Select Track

- 1. Press the • button (12) to stop MP3 play.
- 2. Press the P.TIME button (40) on the remote control to display the main menu.
- 3. Use the left/right arrows (• •& •) on the remote control or the ENTER button (4) on the radio to select the Track (T) option.
- 4. Use the up/down arrows (• •& •) on the remote control or the ENTER button (4) on the radio to change the track number.
- 5. Press ENTER to play the selected track.



NOTE: CD-R/RWs must conform to the ISO9660 level 1 or level 2 format Romeo or Joliet. When naming files be sure the file name extension is ".MP3". The DIN-070RD does not support WMA playback.

SDVD-950

DVD Player Operation

You must be familiar with the remote control (see the "Remote Controls" diagram on page 9) to perform some of the steps listed in this section.

NOTE: When properly installed, DVD video cannot be displayed on the main TFT screen unless the parking break is applied. If you attempt to play a DVD while the vehicle is moving, the TFT screen displays "PARKING" with a blue background. Rear video screens, if applicable, will operate normally.

Opening/Closing the TFT Video Screen

Opening the TFT Screen

To open the TFT video screen, press the OPEN (2) button. The unit beeps three times and then opens to a 90 degree position.

NOTE: If you press the OPEN button when the unit is off, the unit turns on automatically.

Closing the TFT Screen

Press the OPEN (2) button again to close the TFT screen. If the screen is in the "IN" position, it moves out before closing. Once the TFT screen is closed, the LCD panel displays the current status.

Adjusting the Position of the TFT Screen

Moving the Screen In/Out

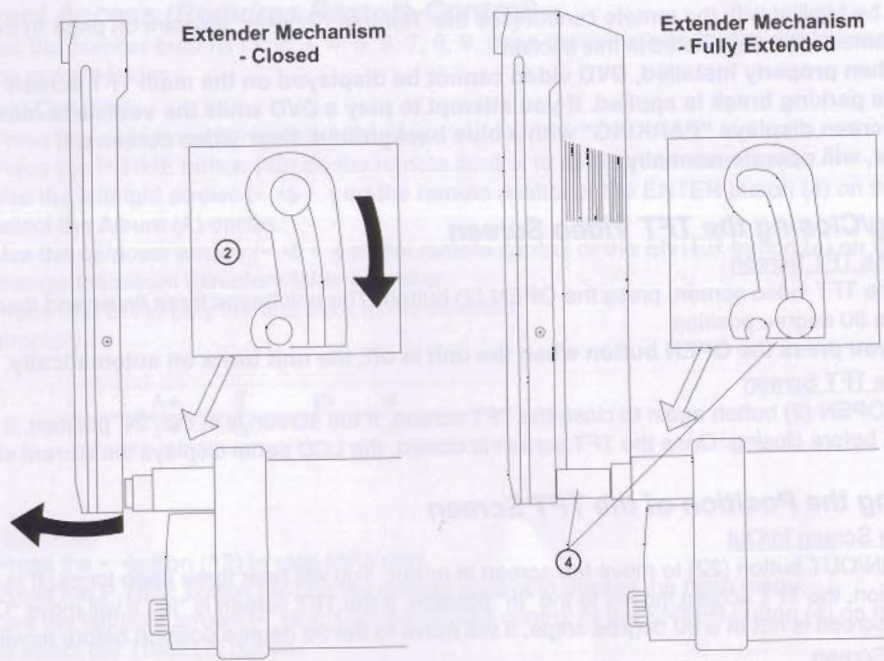
Press the IN/OUT button (22) to move the screen in or out. You will hear three beep tones. If in the "Out" position, the TFT screen moves to the "In" position. If the TFT screen is "In", it will move "Out". If the TFT screen is not at a 90 degree angle, it will move to the 90 degree position before moving in.

Tilting the Screen

The TFT screen can be tilted forward or backward in 6 tilted positions and then back to 90 degrees. Press the TILT button (21) briefly to tilt the screen backwards. The unit beeps once and then moves backward one position. From the 90 degree position, you can perform this step three times. Press and hold the TILT button (21) two seconds to tilt the screen forward. The unit beeps twice and moves forward one position. From the 90 degree position, you can perform this step three times.

Manually Adjusting the Angle From Left to Right

- To manually adjust the left/right angle of the TFT screen, follow these steps:
- 1. Make sure the TFT screen in "Out". Press the IN/OUT button (22) if necessary.
- 2. Locate the extender mechanism behind the screen.
- 3. Firmly grasp both sides of the screen near the bottom.
- 4. Gently pull on either the left or right side until the extender mechanism becomes fully extended.



Switching to DVD Mode

Press the MODE button (6) to move through the available modes in the following sequence: FM1, CD, AV1, AV2, and TV1. Stop on "DVD" to access DVD mode. To access DVD mode through the menu, press the OSD (23) button to display the on-screen menu. Press the ENTER button to select "Source". "Tuner" will become highlighted in red. Push the ENTER button (4) down to highlight "DVD", and then press ENTER. Push the ENTER button to the right to return to the <MENU>.

Accessing the DVD Menu

Press the MENU button (37) on the remote control to recall the main DVD menu. Use the directional (arrow) buttons (◀, ▶, ▲, ▼) to select a title from the menu. Press the TITLE button (48) on the remote control to return to the beginning of the disc.

Moving Through Chapters

Press the 6 ►► button (14) for < 1 second to advance to the next chapter on the DVD. Press the 5 ◀◀ button (13) for < 1 second to advance to the previous chapter.

DVD Operation (continued))

Fast Forward/Fast Reverse

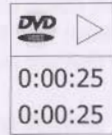
Press the 2 ►► button (10) to fast forward. Keep pressing and releasing the button to increase the rate from 2X to 4X, 8X, and 32X. Press the 1 ◀◀ button (9) to fast reverse. Keep pressing and releasing the button to increase the rate from 2X to 4X, 8X, and 32X.

Scanning

Press the AS/PS button (8) to play the first ten seconds of each chapter. Press AS/PS again to stop the scan function and play the current chapter.

Viewing Play Time (Requires Remote Control)

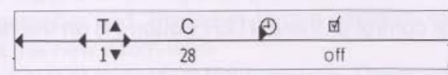
Press the P.TIME (Play Time) button (40) on the remote control to display the total running time and elapsed time of the current disc.



Direct Search (Requires Remote Control)

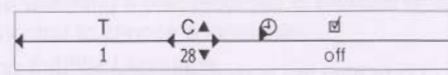
Title Search

- 1. Press the P.TIME button (40) on the remote control to display the main menu.
- 2. Use the left/right arrows (◀ & ▶) on the remote control or the ENTER button (4) on the radio to select the Title (T) option.
- 3. Use the up/down arrows (▲ & ▼) on the remote control or the ENTER button (4) on the radio to change the title number.
- 4. Press ENTER to move to the selected title.



Chapter Search

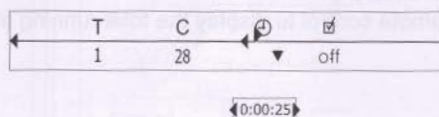
- 1. Press the P.TIME button (40) on the remote control to display the main menu.
- 2. Use the left/right arrows (◀ & ▶) on the remote control or the ENTER button (4) on the radio to select the Chapter (C) option.
- 3. Use the up/down arrows (▲ & ▼) on the remote control or the ENTER button (4) on the radio to change the chapter number.
- 4. Press ENTER to move to the selected chapter.



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Time Search

1. Press the P.TIME button (40) on the remote control to display the main menu.
2. Use the left/right arrows (◀ & ▶) on the remote control or the ENTER button (4) on the radio to select the Time Search (⌚) option.
3. Use the down arrow (▼) on the remote control or the ENTER button (4) on the radio to display the play time in a box below the menu. Playback will pause.
4. Use the left/right arrows (▲ & ▼) on the remote control, the ENTER button (4) on the radio, or the number keys on the remote control to select hours, minutes, or seconds from left to right. Use the up/down arrows (▲ & ▼) on the remote control or the ENTER button (4) on the radio to adjust the hours/minutes/seconds to an exact time on the DVD.
5. Press ENTER to confirm the start time. The time box will disappear and play will begin from the specified time.



Controlling Playback

Stopping Playback

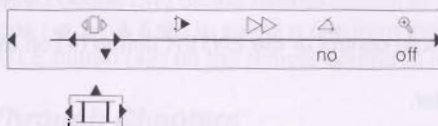
Press the ■ button (12) to stop DVD play.

Still Playback

Press the button (11) to suspend or resume disc play.

Frame-by-Frame Playback

1. Press the P.TIME button (40) on the remote control to display the main menu.
2. Use the left/right arrows (◀ & ▶) on the remote control or the ENTER (4) button (4) on the radio to select the Frame by Frame (⏮) option.
3. Use the down arrow (▼) on the remote control or the ENTER button (4) on the radio to access the Frame by Frame box.
4. Use the left/right arrows (◀ & ▶) on the remote control or the ENTER button (4) on the radio to move backward or forward frame by frame.
5. Use the up arrow (▲) on the remote control or the ENTER button (4) on the radio to close the Frame by Frame box.
6. Press ENTER to close the menu.



Slow Motion Playback

Press the down arrow (▲) on the remote control (37) to play the current title in slow motion at 1/2, 1/4, or 1/8 the normal speed. Press PLAY (11) to resume normal play.

NOTE: You can also access the slow motion function by selecting the ► icon on the

DVD Operation (continued))

Repeat Play (Requires Remote Control)

Repeat Chapter, Title, or Disc

- Press the REPEAT (44) button on the remote control once to repeat the current chapter. "chapt. ⏮" appears near the top of the TFT screen.
- Press the REPEAT button on the remote control twice to repeat the current title. "title ⏮" appears near the top of the TFT screen.
- Press the REPEAT button on the remote control three times to repeat the full disc. "repeat ⏮" appears near the top of the TFT screen.
- Press the REPEAT button on the remote control a fourth time to cancel the repeat function.

Sectional Repeat Function (A-B)

Use the A-B function to define a specific area of a disc to repeat.

- Press the A-B button (43) on the remote control to set the start point (A) of the repeated section.
- Press the A-B button again once you reach the desired end point (B) of the repeated section. The selected portion of the DVD will now repeat continuously.
- Press the A-B button again to cancel the A-B section setting and stop repeat play.

Viewing an Alternate Picture Angle (Requires Remote Control)

For discs recorded with multiple angles, press the ANGLE button (41) on the remote control to toggle available angles of the on-screen image.

Zooming

Use the Zoom function to enlarge and pan through the video image.

1. Press the P.TIME button (40) on the remote control to display the main menu.
2. Use the left/right arrows (◀ & ▶) on the remote control or the ENTER (4) button (4) on the radio to select the Zoom (🔍) option.
3. Press the up/down arrows (▲ & ▼) to activate the Zoom function and select the required zoom factor: 1.33, 2 or 4. Playback pauses. The selected zoom factor appears below the Zoom icon in the menu bar and "Press OK to pan" appears below the menu bar. The picture changes to reflect the new zoom level.
4. Press ENTER to confirm the selection. The panning icons appear on the screen.
5. Use the directional (arrow) buttons (◀, ▶, ▲ & ▼) to pan across the screen. When ENTER is pressed, only the zoomed picture is shown on the screen.
6. To exit Zoom mode, press PLAY.

Multi-Language Discs (Requires Remote Control)

Changing Audio Language

If you are watching a disc recorded in multiple languages, press the AUDIO button (25) on the remote control to choose a language.

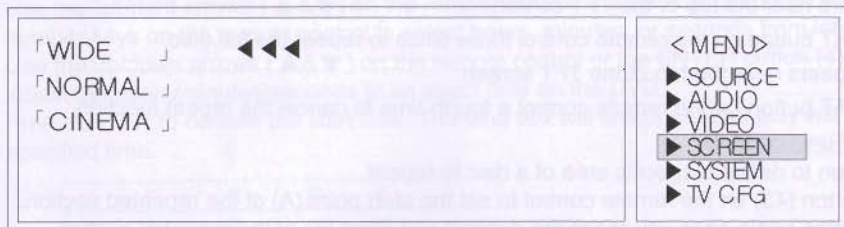
Changing Subtitle Language

In case of disc recorded multi languages with subtitles, press the SUBTITLE button (26) on the remote control to choose the language in which you would like the subtitles to appear.

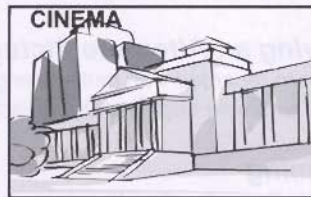
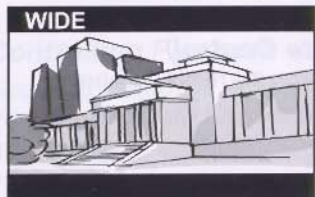
Setting the Aspect Ratio

Press the ASPECT button (20) to toggle between Wide, Normal, and Cinema aspects.

- Wide = 16:9 ratio
- Normal = 4:3 ratio
- Cinema = Full screen

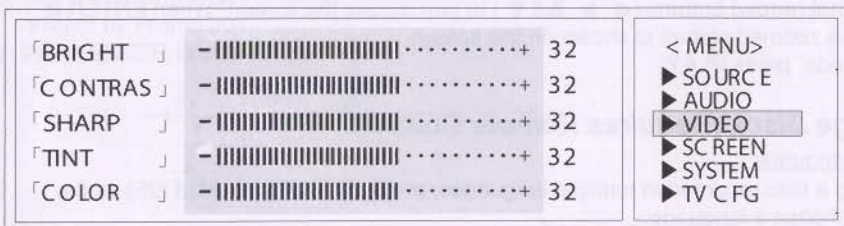


NOTE: The ASPECT button does not work in "Tuner" mode.



Adjusting the Video Screen Settings

To adjust the video output, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "VIDEO", and then press the ENTER button. "Bright" will become highlighted in red. Push the ENTER button down to highlight the property you want to modify, and then press ENTER. Turn the ROTARY ENCODER (3) to adjust the selected property. Push the ENTER button to the right to return to the <MENU>.










DVD Operation (continued)

Main Menu Functions

A number of operations can be carried out using the main menu at the top screen. To access the main menu, press the P.TIME button (40) on the remote control. When the menu bar is visible and an item is selected, it will become highlighted and the appropriate cursor keys to operate will be displayed below the icon. Left/Right arrows indicate more items are available at the left/right of the menu bar. Press the corresponding arrow keys to select these items.

	Favorite Track Selection		The FTS-Video function allows you to store your favorite titles and chapters (DVD) and favorite tracks and indexes (VCD) for a particular disc in the player memory. FTS program can contain 20 items (titles, chapters etc.). A programmed FTS will be placed on top of the list when playback is activated. When the list is full, a new program will replace the last program on the list. The program can be selected and played at any time.
	Time Search	0:00:25	The Time Search function allows you to start playing at any chosen time on the disc. See "Time Search" on page 28.)
	Chapter		The Chapter option allows you to go directly to a specified chapter on a DVD. (See "Chapter Search" on page 27.)
	Track/Title		The Track/Title option allows you to directly access a track or title. (See "Select Track" on page 22 or "Title Search" on page 27.)
	Album		The Album option allows you to directly access an album/directory/folder. (See "Select Directory" on page 22.)
	Enlarge Picture		The Enlarge Picture (Zoom) function allows you to enlarge the video image and to pan through the enlarged image.
	Camera Angle		If the disc contains sequences recorded from different camera angles, the angle icon appears, showing the number of available angles and the angle currently shown. To change the angle, use the (&) keys. Playback changes to the selected angle automatically. The angle icon remains displayed until multiple angles are no longer available.
	Scan Speeds		The Scan Speed function allows you to scan at the following speeds: -32 -8 -4 | 4 8 32
	Slow Motion		The Slow Motion function offers the following playback options: -1 -1/2 -1/4 -1/8 0 1/8 1/4 1/2 1
	Frame by Frame		The Frame-by-Frame function allows you to move through video one frame at a time. (See "Frame-by-Frame Playback" on page 29.)
	Sound Mode		Four sound fields are available depending on the audio encoding on the particular disc you are playing. <ul style="list-style-type: none"> • Stereo: Normal 2-channel down mix decoding • 6CH: 5-channel decoding with subwoofer LFE • 3D: 3-channel pseudo surround effect. (Left, Center and Right) • Surround: 4-channel pseudo surround effect (Front Left, Front Right, Rear Left and Rear Right)
	Smart Color		The Smart Color function allows you to adjust the "warmth" of the video screen using five (1-5) preset color levels.


	Audio Language		You can choose from different languages, if available on the disc. If the selected language is not available, speech reverts to the first language on the disc.
	Current Subtitle Language		You can choose from different subtitle languages. If available on the disc, subtitles will be in the language chosen. If the selected language is not available, subtitles will revert to the first subtitle language on the disc.
	User Preference Settings		TV Shape: Select between wide screen (16:9), normal (4:3) or cinema (full screen) display. If a disc supports the format, the picture will be shown accordingly. (See "Setting the Aspect Ratio" on page 32.)
			Black level shift (NTSC only): Select "On" to adjust the color dynamics to obtain richer contrasts.
			Video shift: Personalize the position of the picture by scrolling it to the left or right.
			Color Settings: Choose one of five predefined sets of color settings and one Personal set, which you can define yourself.
			Personal Color: Fine-tune the selected color settings saturation, brightness and contrast.
			TV System: Select between PAL, NTSC and AUTO mode.
			This feature is not available on this unit.
			Analog Output: Select Stereo, 3D Sound (TruSurround) or multichannel output.
			AC3 Dyn. Compression: Enables enhanced movie viewing. <ul style="list-style-type: none">• Off• On / line / MED: Compresses the dynamics for medium to low volume listening. Increases dialog at low volumes• On / line / MAX: Compresses the dynamics for low volume listening. Increases dialog at low volumes• On / RF Mode: Disabled
			Karaoke Vocal: Control vocals on Karaoke discs. <ul style="list-style-type: none">• On: Enables vocals on Karaoke discs.• Off: Disables vocals on Karaoke discs.
			Speakers: Allow s you to adjust the various speaker levels for optimum surround effect.
			Select the appropriate Menu, Audio and Subtitle language.
			Access Control: Access Control contains the Child Lock and Parental Control Features. See "Access Control (DVD/VCD)" on page 36 for more information.
			Status Window: The Status Window displays the current status of the player along with the menu bar. Select "Off" to suppress the Status Window.
			PBC: Set the Playback Control to "On" or "Off".
			Help Text: When set to "On", help text appears beside the selected icon. Select "Off" if you do not require help text.

DVD Operation (continued)

Access Control (DVD/VCD)

Child Lock

Activating Child Lock

1. Press the **P.TIME** button (40) on the remote control to display the main menu.
2. Use the left arrow (◀) on the remote control or the **ENTER** button (4) on the radio to move to select the User Preference Settings (T) option.
3. Use the down arrow (▼) to choose the  icon.
4. Use the right arrow (▶) to select "Access Control".
5. Enter a 4-digit code of your choice.
6. Enter the code a second time to confirm.
7. From the "Child Lock" menu, use the right arrow (▶) to move to the Lock/Unlock field.
8. Use the up arrow to select the Lock (L) icon.
9. Press **ENTER** (4) to confirm, then press the left arrow (◀) to exit the menu.

Once Child Lock is enabled, the 4-digit code must be entered to play unauthorized discs.

Deactivating Child Lock

To deactivate Child Lock, perform the steps above, using the down arrow (▼) to select the Unlock (U) icon in step 8.

Authorizing Discs

The DVD player maintains a list of 120 authorized (child safe) disc titles. Each time an approved disc is played, the title is placed at the top of the list. Once the list becomes full, new titles are added in place of the last title in the list.


To authorize a disc, perform the following steps.

1. Insert the disc. The "child protect" dialog appears.
2. Use the arrow keys to select "Play Once" or "Play Always". If you select "Play Once", the disc can be played as long as it is in the player and the player is not turned off. If you select "Play Always", the disc will become child safe (authorized) and can be played any time. You must enter the secret 4-digit code for either option.

NOTE: Double-sided DVDs may have a different ID for each side. To make the disc "child safe", each side must be authorized. In addition, multi-volume VCDs may have a different ID for each volume, in which case each volume must be authorized.

locked

Access Control






▶ ▶ Play Once

Play Always

Choose 'Play Always' to insert the disk in the child-safe list

De-authorizing Discs

Insert the disc and let playback begin. Press the  button while the  icon is visible. The  icon appears and the disc is now de-authorized.

Parental Control (DVD Video only)

Some DVD movies contain scenes not suitable for children. Many of these discs contain "Parental Control" information which rates these scenes from 1 to 8, providing more suitable scenes for a younger audience. Ratings vary in different countries. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.

Activating Parental Control

1. Display the "Access Control" menu. (See "Activating Child Lock" on page 36.)
2. Enter your 4-digit code.
3. Use the down arrow (▼) to select Parental Level.
4. From the "Parental Level" menu, use the right arrow (►) to move to the Value Adjustment field.
5. Use the up/down arrows (▲&▼) to select a rating of 1-8.
 - A rating of zero (displayed as "--"), means the Parental Control is not activated, and the disc will be played in full.
 - Ratings of 1-8 indicate that the movie contains scenes not suitable for children. Once a rating is set, all scenes with that rating and lower will be played. Higher rated scenes will not be played. An alternate scene will be played, if available. If there is no alternate scene with an approved rating, play will stop and the 4-digit code must be entered to resume play.
6. Press ENTER (4) to confirm, then press the down arrow (▼) to exit the menu.

Dvd Operation (continued)

Access Control (DVD/VCD)

Changing the 4-digit Code

1. Display the "Access Control" menu. (See "Activating Child Lock" on page 36.)
2. Enter your 4-digit code.
3. Use the down arrow (▼) to select Change Code.
4. Use the right arrow (▶) to move to the Change Code field.
5. Enter the new 4-digit code.
6. Enter the code a second time to confirm.
7. Press the down arrow (▼) to exit the menu.

NOTE: If you forget your code, display the Access Control menu as described above. Press **■** four times to cancel the code.

Changing the Country

1. Display the "Access Control" menu. (See "Activating Child Lock" on page 36.)
2. Enter your 4-digit code.
3. Use the down arrow (▼) to select Change Country.
4. Use the right arrow (►) to move to the Country Select field.
5. Use the up/down arrows (▲&▼) to select a country.
6. Press ENTER (4) to confirm, then press the down arrow (▼) to exit the menu.

Play Back Control for VCD or SVCD Discs (Requires Remote Control)

The Play Back Control (PBC) can be used with a VCD or SVCD that has PBC built into the disc. To use Play Back Control, insert your VCD or SVCD, then press the PBC button (38) on the remote control. If the PBC menu has a list of titles, you can select a title directly by using the number keys (0-9) on the remote control. You can turn PBC off through the Personal Preferences menu (see "Main Menu Functions" on page 33).

SDVD-950

TV Operation

Switching to TV Mode

Press the MODE button (6) to move through the available modes in the following sequence: FM1, CD, AV1, AV2, and TV1. Stop on "TV" to access TV mode. The TFT screen displays the current station and all six preset memory channels.

Changing the Channel

Searching for Channels

Push the ENTER button (4) to the left or fast backward(9) to search down.
Push the ENTER button to the right direction of fast forward(10) to search up.

Manually Changing the Channel

Push the ENTER button (4) up or chapter up(14) for Manual Tuning up.
Push the ENTER button (4) down or chapter down(13) for Manual Tuning down.

Auto Memory (A.MEM)

Use the Auto Memory function to automatically select six strong stations and store them in preset memory.

Preset Channels

Six numbered preset buttons store and recall TV stations. All six stored stations (M1-M6) appear on the TFT screen.

T			V
TV1 CH 13			
M1 CH 13	M2 CH 21	M3 CD 22	<STATUS> ▶ NTSC ▶ MEM : 01 ▶ VOL : 28
M4 CH 25	M5 CH 26	M6 CH 27	

TV Operation (continued)

Preset Channels (continued)

Storing a Station

1. Select a station.
2. Hold a preset button (9-14) for three seconds. The preset number appears in the LCD panel.

Recalling a Station

Press a preset button (9-14) to select the corresponding stored station.

TV CFG Menu

To access the TV CFG menu, press the OSD (23) button to display the on-screen menu. Push the ENTER (4) button down to highlight "TV VFG", and then press the ENTER button. "CH STEP" will become highlighted in red. Push the ENTER button down to highlight the property you want to modify, and then press ENTER.

- CH STEP (Channel Step): Press ENTER to toggle the CH STEP function between "Auto" and "ManI". When "Auto" is selected, the arrow keys will search for strong stations. When "ManI" is selected, pressing the arrow keys will manually change the channel.
- AutoMem: Press ENTER to begin the Auto Memory function. Push the ENTER button to the right to return to the <MENU>.
- TV AGC: Auto Gain Control
Push the ENTER button to the right to return to the <MENU>

「CH STEP」	Auto	< MENU>
「AutoMem」		▶ SOURCE
「TV AGC」	On	▶ AUDIO
		▶ VIDEO
		▶ SCREEN
		▶ SYSTEM
		▶ TV CFG

SDVD-950

Troubleshooting

Mechanical Errors

If a mechanical error occurs while opening the TFT screen, the screen stops moving and beeps three times.

If a mechanical error occurs while closing the TFT screen, the screen beeps three times and returns to the previous position.

Problem	Cause	Corrective Action
No power to unit	Fuse(s) blown	Check/replace fuse(s) in vehicle fuse box
No sound can be heard or the volume is low	Speakers are not wired correctly	Connect speaker harness; check speaker wires
	Speaker wires shorting to chassis ground or to each other	Check splices, insulate all bare wires
	Fader or Balance incorrectly adjusted	Check audio settings
	AV1 or AV2 not wired correctly	Check wiring
Will not read disc	Disc is upside down	Insert disc right side up
	Disc is dirty	Clean/inspect disc
	Format not supported by player	Insert correct disc format
The sound "skips" during disc play	Disc is dirty	Clean/inspect disc
	Receiver mount is not solid or backstrap is not secure	Check mounting and backstrap, tighten if needed
DVD will not play on main screen	Parking brake not applied	Apply parking brake
Remote control does not work	Batteries are weak	Check/replace batteries
	Sunlight is interfering with infrared sensor	If sunroof is allowing too much light, close it partially or fully.
		Close windows
The display is dark	Direct sunlight reflecting off screen	Close windows and/or sunroof
	Color/Brightness settings incorrect	Adjust Color/Brightness settings
Poor TV reception	Poor antenna reception	Park vehicle (It is difficult to receive a clear signal in a moving vehicle.)
		Install Diversity antenna
Front panel will not motorize back into unit	Front panel not centered	Re-center left/right manual swivel adjustment

Specifications

Power Output: 85 watts X 4 channels (max.)

Signal to Noise Ratio: 70dBA below reference. (Reference: 1 watt, 4-ohms)

Frequency Response: 20Hz to 20kHz (-3dB), Audio/Video input used as source reference

Reference Supply Voltage: 14.4VDC

DVD/CD Player

Compatible formats: DVD-R, DVD-RW, CD-R, CD-RW, CDDA, MP3, SVCD and VCD

Signal to Noise Ratio: >90dBA

Frequency Response: 20Hz to 20kHz, -3dB

Channel Separation: > 60dB @ 1kHz

D/A Converter: 1 bit

Video

Format: NTSC/PAL

Output: 1Vp-p (75-ohm)

Input: 1Vp-p (75-ohm)

FM Tuner

Tuning Range: 87.5MHz - 107.9MHz

Mono Sensitivity (-30dB): 9dBf

Quieting Sensitivity (-50dB): 15dBf

Alternate Channel Selectivity: 70dB

Signal to Noise Ratio @ 1kHz: 58dB

Image Rejection: 60dB

Stereo Separation @ 1kHz: >30dB

Frequency Response: 50Hz - 12kHz, -3dB

AM Tuner

Tuning Range: 530kHz - 1720kHz

Sensitivity (-20dB): 30uV

Signal to Noise Ratio @ 1kHz: 50dB

Image Rejection: 60dB

Frequency Response: 50Hz - 2kHz, -3dB

Monitor

Screen Size: 7.0" (Measured diagonally), 16:9 Wide screen

"6.3" (160mm) H X 4.0" (102mm) W

Screen Type: TFT Liquid Crystal Display (LCD) active matrix

Resolution:

- DVD player: 1.15 Mega pixel (Internal RGB Digital Interface), 800 (H) X 480 (W) X 3

- Composite video input: 384,000 pixels, 800 (H) X 480 (W)

Pixel pitch 0.1905 mm X 0.1905 mm

- Brightness: 600 NITS

Viewing angle:

- 65 degrees left or right

- 45 degrees up

- 60 degrees down

General

Audio input impedance: 10k

Power Supply: 11 to 16VDC, negative ground

Fuse: 10 amp, ATO type

DIN chassis dimensions: 7" x 7" x 2" (178mm x 178mm x 50mm)

TV Tuner dimensions: 4 11/16" x 2 3/4" x 13/16" (119mm x 70mm x 21mm)

** Specifications subject to change without notice.