ROSEN
ENTERTAINMENT SYSTEMS

All-In-One System A10™

DVD/Video Game Entertainment System

Owner's Manual

DVD VIDEO ® · COMPACT disc DIGITAL AUDIO · COMPACT disc DIGITAL VIDEO · .mp3 · integrated namco® VIDEOGAMES · DUAL ZONE · SATELLITE input · RES SURROUND SOUND

Registration - When the Owner First Uses the System

When first turned on, this system will display a Registration screen. Registration requires the owner to record their name and a portion of the vehicle identification number for security and warranty purposes.

This screen will be displayed each time the system is turned on, for 15 seconds, until the required information is entered. Once the registration information is entered, the screen will no longer appear.

The VIN, or Vehicle Identification Number, can be found printed on your vehicle registration documents. It is also visible on the driver's side of your dashboard, in the front corner, on a metal plate. This plate is usually easiest to read from outside the vehicle, looking through the windshield.

The Registration Screen

```
REGISTRATION

   ENTER FIRST
   4 LETTERS OF
   LAST NAME:
   A_ _ _

   ENTER LAST 4
   DIGITS OF
   VEHICLE VIN:

   _ _ _ _

   PRESS ENTER TO
   SAVE AND EXIT
```

To enter the Owner Registration information:

- Use the Up or Down keys to *change* the letter or number.

- Use the Left or Right keys to *move to the next* letter or number.

- To save settings and exit the screen, you must advance the cursor to the last position and press ENTER.

> ***WARNING: DO NOT press Enter until all your settings are correct - the data CANNOT be edited after Enter is pressed!***

NOTICES

## About the Registered Marks

Table of Contents

GETTING STARTED

Use the system with the vehicle running, or with the ignition key switch in the "accessory" position.

When the system is first turned on, you will be prompted to register the system by entering owner information. See inside the front cover for more information on Registration.

To Lower the Screen and Switch On the System:

Press the OPEN button on the front panel or on the remote. The screen will deploy, and the system will turn on.
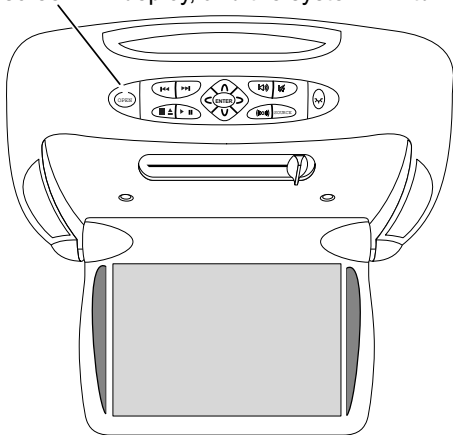
To Watch a DVD:

1 Press **SOURCE** until "INTERNAL DVD" is displayed. Press **EJECT** twice to remove any loaded disc.
2 Insert a DVD onto the slot, **label side up**.
3 Most DVD discs begin playback automatically. If a menu appears, press **PLAY** or **ENTER** as instructed on screen.
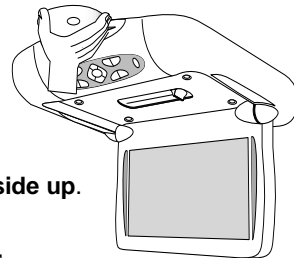
*Note: While a disc is playing, the **Stop/Eject** button on the front panel acts as a Stop button. To eject a disc while it is playing, press the Stop/Eject button **twice** in quick succession. The Eject button on the remote usually ejects the disc immediately.*

To Play the Integrated Video Game:

1 Connect the Game Controller to the system (see Page 18).
2 Press **SOURCE** until "INTERNAL GAME" appears on the screen.

START button

3 Press the **START** button on the game controller (included).
4 Use the arrow keys to select a game, and the **A** button to start.
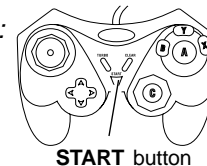
To Watch Broadcast Television *(with **optional** TV tuner):*

1 Press **SOURCE** until "TV Tuner " appears on the screen. If the screen remains dark, press the **POWER** button on the remote.
2 To change channels, press **UP CH** and **DOWN CH** on the remote.

Front View of the A10

OPEN button
Disc slot
Control Panel
Reset Button
Dome light
Dome light
Screen angle adjuster
LCD Screen
Infrared transmitter (for headphones)
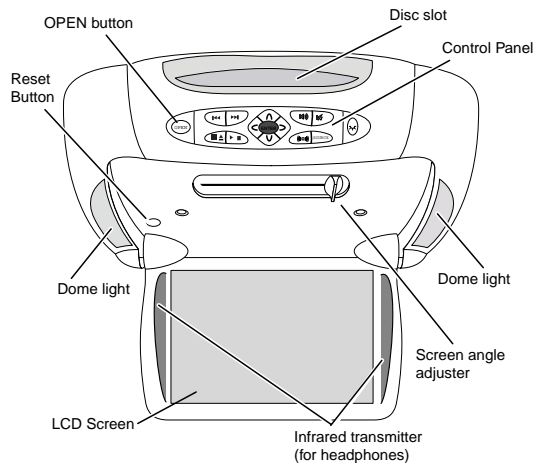
Console-mounted Input Jack Locations

Game Controller Jack
Auxiliary Input
RCA Jacks
Wired Headphone Jack
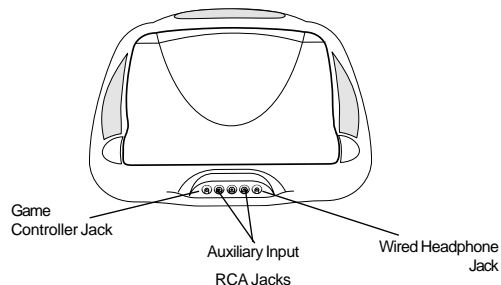
To Use An External Video Source

(optional video game console or camcorder):

1 Connect the RCA audio and video outputs of the device to the RCA inputs of the system.
2 Press **SOURCE** until "AUXILIARY INPUT" appears on the screen.

Listening Over the Vehicle Speakers

1 Make sure **MUTE** is off. Press **SPEAKER.** "SPEAKER SOUND ENABLED" will appear on the screen, along with an FM frequency (such as "FM 87.7").
2 Turn on the car radio. Tune to the FM frequency displayed on the screen. If radio interference is heard, try another frequency (see pages 13 and 16 for more information.)

Using the Dome Lights

1 Press the **DOME LIGHT** button to turn the dome lights on or off.
   Note: To prevent battery drain, the dome light automatically shuts off after 5 minutes of use.

The Front Panel Controls

Previous
Navigation Keys
Speaker
Next
Mute
Open
Stop/ Eject
Play/ Pause
Rosen Entertainment Sound
Source Select
Dome Light
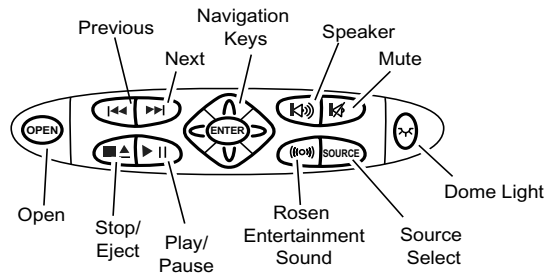
INTRODUCTION

Congratulations on owning a Rosen A10 Entertainment System! Here's a partial list of some things you can do with your A10:

· Play DVD movies, music CDs, or discs with MP3 audio files.

· Play classic Namco®video games like Pac-Man™ and Galaxian™.

·   Listen using the vehicle speakers or the wireless headphones.

· Use external audio/video units like video game consoles, camcorders, or optional units like a TV tuner or a DVD changer.

With optional dual-channel wireless headphones, you can also listen to CD-Audio or MP3 audio while another user plays the built-in video game.

Add an optional second display, and two users can simultaneously play video and listen to sound from two different source units. For instance, one user can watch and listen to a DVD while the other plays Pac-Man™ on the built-in video game.

Your system includes the following components:

·   An overhead, wide-screen, flat-panel display.

·   A built-in overhead DVD/CD/MP3 Player.

·   A built-in video game system with a game controller (AC3169).

·   Two pair of wireless infrared headphones (AC3003).

·   A remote control (AC3074).

·   A stereo FM modulator (this lets the system's audio play over your vehicle's speakers).

·   Other parts and cables installed out of sight in your vehicle.

Precautions

In order to operate the system, the vehicle ignition key switch must be in the ACC or engine ON position.

ACC or engine ON position

• Use this system only if properly installed by a qualified installer.

• If the A10 shows any sign of overheating or malfunction, close the display and consult your dealer immediately. Do not open the unit - there are no serviceable parts inside.

• Do not press on the display surface - you might damage it.

• Clean the LCD panel with a slightly damp, soft cloth using household glass cleaner. **Do not** use solvents such as benzene, thinner, or commercially available cleaners.

• When using portable radios and telephones near the system, picture or sound interference may occur.

• If your car was parked in a very cold or very hot place, you may see a temperature warning on the screen instead of a picture. The picture will return after the system temperature returns to normal.

Note:

The system's operating voltage range is 11-16VDC operating voltage. The system operating temperature is 32° to 140° F (0° to 60° C). Use of the system beyond the safe operating ranges listed can cause temporary or permanent damage to the unit, and such damage may not be covered by the manufacturer's warranty.

DISCS PLAYED

Compatible Discs

DVD, Video CD (VCD), and CD-Audio discs discs are compatible with the A10 system. Compatible discs have these logos on their labels:

Also, the A10 can play *most* CD-Recordable discs containing CD-Audio, MP3 files, and JPEG images - but not all such discs. *Since these discs are usually made on home computers, there is no certification process ensuring that all such discs play on all players.*

DVD Regions

When a DVD disc is created, it is encoded with a "Region number". The disc will only play on DVD players with the same Region number - for instance, a Region 3 disc won't play on a Region 1 player.

Region 1: U.S. and U.S. Territories, Canada

Region 2: Japan, Western Europe, Middle East, South Africa

Region 3: South Korea, Hong Kong, Taiwan, Southeast and East Asia

Region 4: New Zealand, Australia, Pacific Islands, Mexico, Central/
  South America.

Region 5: Russia and the former Soviet Union, Africa, Indian subcontinent, North Korea

Region 6: China

Region 8: Special International Venues (Cruise Ships, Airlines, etc.)

DVD Region Icons

Incompatible Discs

The following disc types are incompatible with the A10 system:

· DVD-ROM discs.

· DVD-R/DVD-RW/DVD-RAM discs.

· Photo CD discs, including Kodak Picture CDs.

· CD-ROM data discs.

· CD-Audio discs made with certain copy protection methods.

· Any DVD with a different Region number than the A10.

· Any disc that does not meet DVD Forum standards.

Why the A10 doesn't respond the same way to all discs

When a DVD disc is created, the creator has to define how the disc will operate when loaded into a DVD player. For instance, some discs begin playing immediately, while other discs only display a menu and require a menu selection to be made before playback will start.

The DVD standard also allows the maker of a DVD disc to disable functions at certain times, such as Fast-Forward and Stop (which is why you can't skip past the copyright warning screen). If some DVD feature temporarily isn't working for you, usually the disc is preventing the player from performing that function.

Discs that don't properly load and play

Some CD and DVD discs, especially homemade discs which do not have all the data needed to properly initialize all DVD players, may not load and play properly. They may even create a state where the DVD player will not eject the disc at all. In these cases, use a paper clip to press the Reset button (this button's location is shown on page 7).

CHANGING AND ADJUSTING THE DISPLAY

Selecting a display mode: The system's "widescreen" display has a 16:9 aspect ratio - wider than a standard television. While many DVD's provide widescreen video images that fit the screen, standard broadcast TV and many video games don't.

- To view widescreen DVD's, press the **DISPLAY MODE** button until "WIDE" is displayed on the screen.

- To watch "fullscreen" DVD's, the internal game system, or broadcast television, select "STANDARD".

Display adjustments: The display has adjustable video settings. To change these settings, press the **ENTER** button *on the overhead console* and hold it for two seconds. The following menu appears:

```
►  COLOR         8
   BRIGHT        8
   TINT          8
   SHARPNESS     4
   CONTRAST      8
   RESET
```

To select a setting to be changed: Press the **DOWN** button to move the cursor down the menu list. After you reach the final setting, pressing **DOWN** will cause you to exit the menu. Selecting RESET will restore the original factory values for all five settings.

To change the value of a setting: Use the **LEFT** and **RIGHT** arrow buttons. The range is from 0 to 15.

Press **DOWN** to return to the display adjustments menu.

To exit the menu: Press the **DOWN** button to save settings and exit.

  Note: See Page 12 for more on adjusting the Bright setting.

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Note: The internal DVD player can be configured for either a 16:9 "Wide" image output or a 4:3 standard image output. Since the A10 has a widescreen display, the DVD player should be configured for "Wide". See page 20 for more information.

USING THE BUILT-IN DOME LIGHTS

The A10 system has built-in dome lights. In many vehicles, these built-in dome lights replace an original factory dome light which was displaced when the system was installed. The dome lights are controlled by both the Dome Light button on the front panel and by the matching Dome Light button on the remote control.

When the lights are *off*, press either button to turn them **on**.

When the lights are *on*, press either button to turn them **off**.

When the lights have been turned on manually using the Dome Light button, they will automatically turn off after all the doors are closed.

Dome Light button
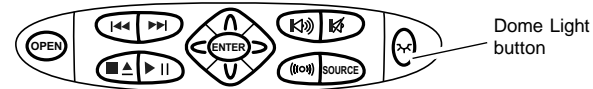
Note: Some vehicles have a dome light dimming feature that causes the light to fade out gradually after the doors are closed. The A10's dome light may not fade at the exact speed that the factory dome lights fade, but it will turn on and off normally when the doors are opened and closed.

USING THE REMOTE CONTROL

You can use the remote control to operate the system, including access to features not available on the front panel. The A10 has two infrared sensors to receive signals from the remote - one is built into the control panel, and the other faces forward in the vehicle, for use from the front seats. For definitions of each remote control button's specific function, see the following pages.

1	Open/ Optional Source Unit Power	15	Info
2	Pause	16	Eject
3	Stop	17	Navigate left
4	Play	18	Enter
5	Previous Chapter/Track	19	Navigate Right
6	Reverse	20	Subtitle
7	Fast forward	21	Source Unit Menu
8	Next Chapter/Track	22	Navigate Down
9	FMM Status and Frequency	23	Disc Menu
10	Rosen Entertainment Sound	24	Disc Zoom
11	Mute	25	Dome Light On/Off
12	Next Disc (w/DVD Changer only)	26	Day/Night Mode
13	Source select	27	Output B Control
14	Navigate Up	28	Display Mode

Note: If you try to perform a DVD action when it is not permitted (such as accessing the disc menu while the disc is loading), you'll see the the following symbol on the screen:
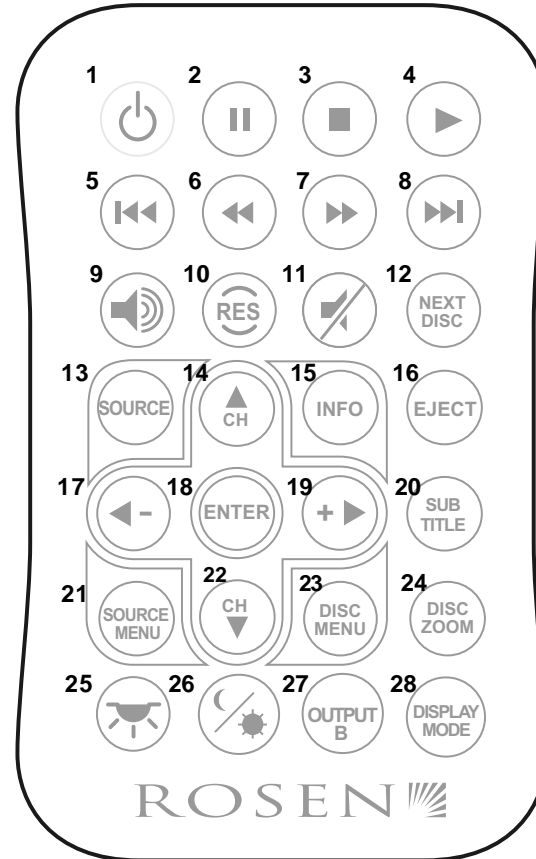
BASIC REMOTE CONTROL BUTTONS

1   Open/ Optional Source Unit Power ⏻

Pressing this button when the screen is closed will deploy the screen. This button also turns on some optional Rosen source units. (There is also an OPEN button on the front control panel.)

Note: The A10 turns on when the screen opens.

4   Play ▶

Press to begin or resume playback of a DVD.

Note: When the disc is first inserted, you may have to press PLAY or ENTER to begin playback.

3   Stop ■

Press once to temporarily stop playback of a DVD. To resume normal playback from the same point, press **PLAY**.

To play the disc from the beginning, press **STOP** *twice*, then **PLAY**.

Note: Once STOP is pressed twice, the player can only begin playing from the beginning of the disc.

16   Eject EJECT

Press to eject a DVD or CD. After a disc is ejected, "OPEN" is displayed on the screen.

2   Pause/Frame Step ⏸

Press once to pause playback. Press repeatedly to advance video frame by frame. To resume normal playback, press **PLAY**.

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5   Previous Chapter/Track ⏮

Press to jump to the previous title or chapter, if available on a DVD, or to the previous track on an audio CD. Not supported with some VCDs.

8   Next Chapter/Track ⏭

Press to jump to the next title or chapter, if available on a DVD, or to the next track on an audio CD. Not supported with some VCDs.

6   Reverse ⏪

Press to search in reverse. To resume normal playback, press **PLAY**.

7   Forward/Search ⏩

Press during playback to fast forward. Press the **RIGHT** and **LEFT** arrow buttons to adjust search direction and speed. Choose from 2x, 4x, 6x, and 8x. Press **PLAY** to resume regular play.

25   Day/Night ☾

This button decreases display brightness for optimum viewing in low light conditions. The A10 system also has an automatic dimming feature which dims display brightness automatically whenever the headlights are on (this feature is not compatible with all vehicles). Using the Day/Night button temporarily overrides the A10's auto-dimming feature - it re-activates the next time you start the vehicle.

Set the Brightness level in daytime conditions with plenty of ambient light, and with the headlights off. Then the auto-dimming feature will dim the screen automatically at night, or you can use this button to switch between Day and Night modes. (See Page 10.)

USING MENU AND NAVIGATION BUTTONS

13   Source   SOURCE

This button lets you select the internal DVD/CD player, the Internal Game, or the Auxiliary input. You can also select the optional TV Tuner, DVD Changer, or other optional auxiliary sources, if installed.

Note: The Source button on the control panel performs the same function.

14, 22   Up/Down Arrows   CH▲   CH▼

Press to move up or down in a menu or to change channel when watching TV.

17, 19   Left/Right Arrows   ◀-   +▶

Press to move left or right in a menu. Also used to change frequencies on the FMM, after the Speaker Sound button is pressed.

18   Enter   ENTER

Press to make a menu selection.

21   Source Menu   SOURCE MENU

If the source unit selected has a Setup Menu, you can access it by pressing Source Menu. With the optional TV Tuner, this button activates the Auto-Program feature, which stores all available TV stations in the memory for easier, faster channel-changing.

15   Info   INFO

Press to view the status, current title number, track number and the total playing time of the currently-playing disc.

USING AUDIO BUTTONS

9   Speaker Sound Control   🔊

When this button is pressed, *Speaker Sound On* appears on the screen, along with the FM frequency to which you should tune your radio, such as "*FM 87.7*" . To change the frequency, press the Left or Right arrow buttons on the remote control. Headphone audio is not affected by this button.

FM frequencies available: 87.7, 87.9, 88.1, 88.3, 88.5, 88.7, 88.9 106.7, 106.9, 107.1, 107.3, 107.5, 107.7, 107.9.

Note: If the frequency does not appear on screen when this button is pressed, the internal FM Modulator is not active, and an external FM Modulator is probably being used. See Page 16 for more information.

10   Rosen Entertainment Sound Processing
Rosen Entertainment Surround-sound   RES

This button turns on and off the Rosen Entertainment Surround-sound processing. The surround-sound processing can be used while listening over the vehicle speakers, or for headphone listening.

Note: The RES button on the control panel performs the same function.

11   Mute   🔇

Press once to mute all system audio. As long as the Mute function is active, "Mute" will appear on the screen. Press again to turn Mute off.

Note: The Mute button on the control panel performs the same function.

USING DVD DISC FEATURES

20   Subtitle (SUB TITLE)

This button lets you cycle through the various subtitle languages available on the DVD disc being played.

23   Disc Menu (DISC MENU)

Press to see the main menu for the DVD being played. To resume normal playback, press **PLAY**.

12   Next Disc (NEXT DISC)

When the optional R5001 DVD Changer is connected, this button commands the changer to play the next disc in the magazine.

CHANGING THE SHAPE AND SIZE OF THE IMAGE

24   Disc Zoom (DISC ZOOM)

View the same scene on a DVD at different magnifications.

1   Press the **DISC ZOOM** button during playback to select among the following options: x1.5, x2, and x4.
2   Press the arrow buttons to shift the magnified section of the screen.
3   To resume normal playback, press **DISC ZOOM** until "Zoom off" is displayed.

28   Display Mode (DISPLAY MODE)

This button lets you select from the various screen display modes.

- To view widescreen DVD's, press this button until "WIDE" is displayed on the screen. This uses the full width of the screen.

- To watch "fullscreen" DVD's or broadcast television, press until "STANDARD" is displayed. This mode uses most of the screen, but black bars will be visible on the sides, like this:

- To zoom the picture, select the "ZOOM" mode.

  Note: For best results when zooming in on DVD images, use the Disc Zoom feature instead of the "ZOOM" Display Mode.

For more information about image shapes, see "Managing Black Bars", on Page 20.

REPLACING THE REMOTE BATTERY

Battery

Press tab here
and pull battery tray out
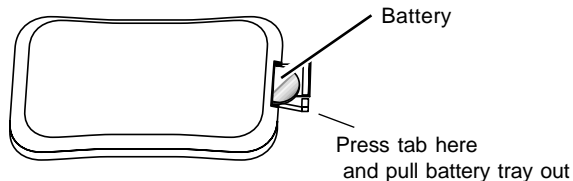
Use a single 3V battery, type CR2025. Insert as shown. Observe the correct orientation of the battery as marked on the battery tray.

Battery life is approximately six months, depending on how often the remote is used.

CD AUDIO AND MP3 PLAYBACK

The A10 plays CD-Audio discs and CD-R discs with MP3 music files.

CD Playback

When you insert an audio CD, "CD" will appear on the screen. The standard CD commands (PLAY, NEXT, etc.) will control the unit.To display track information, press **INFO**.

MP3 Playback

When a compact disc with MP3 files is inserted, the SMART NAVI screen will appear. To conceal the SMART NAVI screen, see the *"DVD Setup Menu"* section. Each folder and file will be shown (the order may be slightly different than that on your PC). Navigate the files and folders using the navigation arrow keys, and select a file or folder to be played by using the **ENTER** button. To move to the next file or the previous file, use the **NEXT** and **PREVIOUS** buttons.

MP3 Disc Recording

When recording a CD with MP3 files to be played on this system, always add a file extension " **.MP3**" or ".**mp3**" to MP3 files by using single-byte letters. If you add a different file extension, or forget to add the file extension " **.MP3**" or ".**mp3,**" the file cannot be played. In addition, if you use upper case and lower case letters (capital and small letters) mixed together for file extensions, the file may not play.

Notes:

· ***Some CDs recorded in CD-R or CD-RW mode may not play.***
· *Files saved without MP3 data will not play.*

When recording Audio CDs or MP3 files, make sure to check your CD recorder's level setting - too high a level results in distorted sound.

```
- -  SMART NAVI  - -

  ROOT                ROOT            0
                     MP3 (ARTIST NAME)  1
                     MP3 (ARTIST NAME)  2
                     MP3 (ARTIST NAME)  3



      ARTIST NAME - SONG TITLE
```
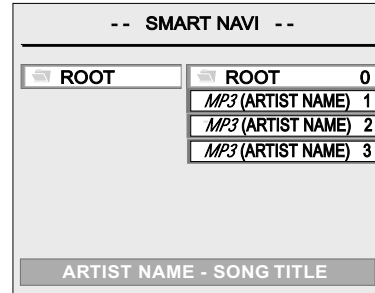
Two repeat modes are available for MP3 use:

· REP – ONE repeats the current file.
· FOLDER REP repeats the current folder.

Supported MP3 File Formats

· ISO9660, level 1 and level 2 (the most common type of MP3 format).
· Joliet (a version of ISO9660 that supports longer filenames).
· Romeo (a format used by some CD-creating software).

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LISTENING OVER THE CAR SPEAKERS

The system uses an FM Modulator (FMM) to send audio through the vehicle radio and speakers. To listen to the A10 over your speakers:

1   Make sure system **MUTE** is off. Press **SPEAKER.** "SPEAKER SOUND ON FM _ _ . _" appears. (If "SPEAKER SOUND DIS- ABLED" appears, select an FM frequency as described below.)

2   Turn on the car radio. Tune to the FM frequency displayed on the screen, such as "FM 87.7".

3   If no system audio is heard, try changing the FMM frequency and re-tuning the radio to the new frequency.

To change the FM Modulator frequency:

Press **SPEAKER**. "Speaker Sound on FM _ _ . _" will be displayed.

Now use the Left and Right buttons to change the frequency. The FMM frequencies are 87.7, 87.9, 88.1, 88.3, 88.5, 88.7, 88.9, 106.7, 106.9, 107.1, 107.3, 107.5, 107.7, and 107.9. After you select a frequency, re-tune your radio and check for clear sound.

The system saves the frequency you select, and returns to it each time the system is turned on. You may want to store the FM Modulator frequency as a preset of your radio for ease of use.

Note: If there seems to be a strong station on the FM Modulator frequency, and you are hearing a radio station mixed in with the system audio, change the FM Modulator frequency. Avoid frequencies used by local radio stations.

If the words "SPEAKER SOUND DISABLED appear, the Internal FMM is turned off. It can be turned on by pressing the left or right arrow keys and selecting an FM frequency. If the words "HEADPHONE SOUND ONLY" appear, an external FM Modulator is probably being used. In this case, the **SPEAKER** button turns the external FMM on and off. The Rosen external FMM is uses either FM 87.9 or FM 88.3. If you have any questions about your FMM, please ask your Rosen dealer.

USING THE INCLUDED WIRELESS HEADPHONES

The system comes with two pair of wireless infrared (IR) single-channel headphones (AC3003). These headphones receive a signal from an IR transmitter built into the A10. These headphones allow rear-seat passengers to listen without using the vehicle speakers.

To turn the headphones on and off, push the Power ON/OFF button on the right ear piece. The Power LED on the left ear piece indicates when headphone power is on. Power turns off automatically after three minutes of no audio, in order to preserve battery life.

To adjust the headphone volume, rotate the thumb wheel on the headphones.

To adjust the headphone size for differently-sized heads, slide the top as needed (see below).

Adjust headphones here

Power ON/Off switch

Volume Knob
Power LED
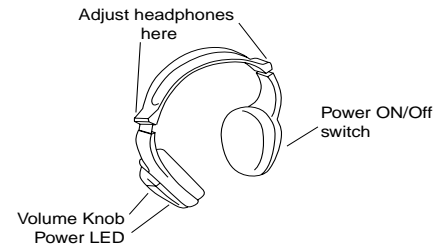
The A10 IR transmitter has *two* output channels, A and B. Using A and B, the A10 can transmit two different audio programs at the same time. When using optional Rosen AC3072 dual-channel headphones, listeners can switch between Channels A and B. For more,

REPLACING HEADPHONE BATTERIES

The wireless IR headphones require two AAA batteries. To replace the batteries, slide off the battery compartment door on the right earpiece and insert batteries, as shown. Make certain that the battery orientation matches the marks inside the battery compartment.
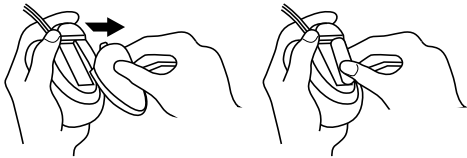
USING OPTIONAL WIRED HEADPHONES

There is a jack for wired headphones on the forward edge of the unit, under a removable cover. When using optional wired headphones, only use headphones with a volume control, since the system has no volume adjustment.

Mini-stereo Headphone Jack

WATCHING BROADCAST TELEVISION
(ON TV TUNER-EQUIPPED SYSTEMS)

You can watch television on the system if you have installed the optional CV4000 TV Tuner kit (includes TV Tuner, antenna, and an AC3024 harness).

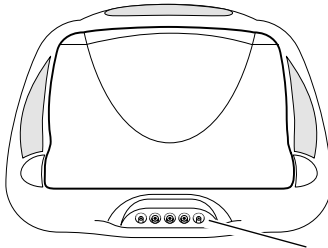*Note: Broadcast television reception varies with location, terrain, distance from the broadcast tower, and other factors. Signal quality is likely to vary in a moving vehicle.*

1 Press **SOURCE** to select the "TV TUNER" input. "TV TUNER" will appear on the screen. If the screen remains dark, press the remote's **POWER** button.

2 Press the **UP CH** and **DOWN CH** arrow buttons on the remote to change channels. You can also use the **UP** and **DOWN** arrows on the front control panel. Pressing the **LEFT** and **RIGHT** buttons allows you to access the auxiliary inputs of the TV Tuner.

3 To scan and store all available channels, press **SOURCE MENU**.

*Note: To watch broadcast television or videotapes in their original format, press the **DISPLAY MODE** button on the remote control until "STANDARD" is displayed on the screen. This will properly size the image, instead of stretching the image across the wide screen. In "STANDARD" mode, you will see black bars on the sides of the image, like this:*

USING THE INTEGRATED GAME SYSTEM

There is an integrated video game built into the system. The Rosen AC3169 game controller is included. Although the controller may resemble controllers for home game systems, only the Rosen AC3169 is certified to operate with the A10.

The controller plugs into the overhead console as seen below.

To play a game:

Plug in the controller as shown.

Press **SOURCE** on the remote or the front control panel until "INTERNAL GAME" appears, along with the game startup menu.

Press **START** on the controller.

Use the left joystick or the up and down arrows on the controller to select which game you want to play from the menu list. Game options include Pac-Man™, Galaxian™, Dig-Dug™, Rally-X™, and Bosconian™.

Press **A** to start the game.

While playing, use **A** as a fire, jump, or other action button.

Flat side of Game Controller Connector

Left Joystick

A (Fire) button

Arrow keypad

START button
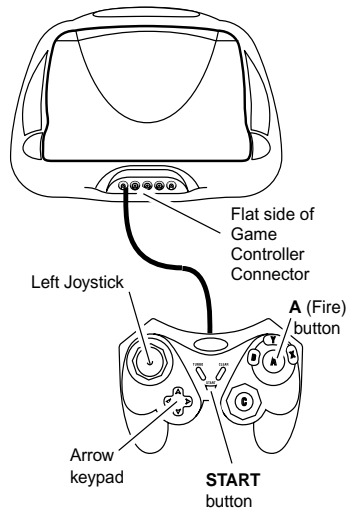
To return to the game main menu, press START on the game controller.

ADJUSTING THE SCREEN ANGLE

The Rosen A10 uses an advanced mechanical design to hold the screen at the perfect viewing angle for you, your passengers, and your vehicle. Here's how to adjust the screen angle:

First, press the OPEN button on the front panel, or on the remote. The screen will deploy.

Second, to allow the adjuster to move freely, gently pull the screen towards you an inch or so, and hold it there with one hand.

Third, while holding the screen, move the adjuster slider with your other hand - to the left to move the screen forward, and to the right to move the screen rearward.

Finally, let go of the screen and double-check the viewing angle. You may need to repeat this process a few times to get the angle just right for your height and the height of the vehicle seats.

## USING EXTERNAL SOURCES

You may use optional external video games, camcorders, and other portable video units by connecting the unit to the auxiliary RCA input jacks on the unit. You must remove the cover to access the jacks, and press **SOURCE** to select "AUXILIARY INPUT".

Color-Coded RCA Jacks

Red — Right channel audio input

White — Left channel audio input

Yellow — Video input
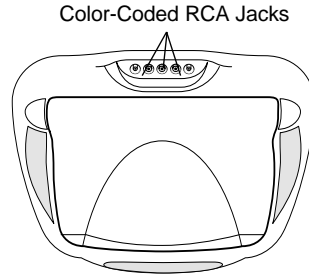
To use an external game system, a 12VDC to 110VAC power inverter, available at most electronic retail stores, is often required.

Note: If you want to watch non-widescreen, 4:3 images, press the **DISPLAY MODE** *button on the remote control until "STANDARD" is displayed on the screen. This will properly size the image, instead of stretching the image across the wide screen. In "STANDARD" mode, you will see black bars on the sides of the image, like this:*

OPTIONAL ROSEN ACCESSORIES

Check with your authorized Rosen dealer or visit *www.rosenentertainment.com.*, for information on accessories available for your A10 system. Some require installation parts and labor.

CV4000 TV Tuner kit

The CV4000 includes a TV Tuner that receives U.S. television broadcasts, a wire harness, and a TV antenna. When installed using theAC3024 harness, the TV Tuner is controlled by the A10 remote.

R5001 DVD Changer

This 10-disc changer plays CDs, DVDs, MP3 files, and Video CDs. It is fully compatible with your system (adapter kit required).

AC3074 Remote Control

This is the original replacement remote control for the A10. In multi-screen systems, it's a good idea to have a second remote control.

AC3003 Infrared Single-channel Wireless Headphones

These are the original-equipment headphones for the A10.

### AC3062 Noise-Cancelling Infrared Wireless Headphones

These offer improved audio performance through electronic cancellation of background and road noise. Single-channel only.

### AC3072 Dual-Channel Infrared Wireless Headphones

These are required to use the A10 dual-zone modes, or for compat-ibility with factory IR headphone systems.

19

MANAGING BLACK BARS

Motion picture film and cameras, and later television screens, were originally designed around a screen size that was almost square - it was one-third wider than it was high (another way to say this is that it had a width-to-height ratio, or aspect ratio, of 4:3. This ratio, 4:3, can also be expressed as 1.66:1.)

4:3

1.66:1
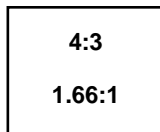
When widescreen movies using technologies like Cinemascope and Panavision became popular, new aspect ratios were used for them - 1.78:1, 2.35:1, and even 2.55:1. When high-definition television was developed, a screen shape of 16:9, or 1.85:1, was selected as the best compromise for viewing widescreen movie images.

16:9

1.85:1
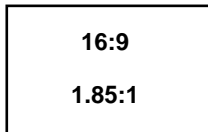
When you watch widescreen movies on a standard 4:3 television, there are "black bars" on the top and bottom of the screen. This is often called a "letterbox" image. The alternative is called "pan-and-scan", where the edges of the image are "cropped" off.

Letterbox

This system uses a widescreen 16:9, or 1.85:1 display - the same aspect ratio as high-definition televisions. This means that when viewing widescreen DVD's, these black bars are either non-existent, or greatly minimized.
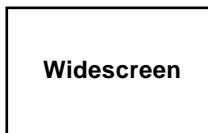
Widescreen

WHY ARE THE BLACK BARS STILL THERE SOMETIMES?

There are three possible reasons for black bars to appear on the top and bottom of an A10 display:

1) You are watching a widescreen movie with an aspect ratio *greater than* 1.85:1. (For more options on dealing with this, see below). Check the disc jewel box to determine the DVD's aspect ratio - if you see 2.3:1, 2.33:1, or 2.35:1, this applies.

2) The internal DVD player has been set for a 4:3 display instead of a 16:9, wide display. See DVD Setup on Page 23 to correct this.

3) The "widescreen" DVD movie you are viewing is not "anamorphic" or "enhanced for widescreen televisions". These films, often older DVD conversions, are not recommended for viewing on widescreen displays. You can usually determine if your DVD was produced for optimum compatibility with widescreen televisions by looking for the word "anamorphic" or the phrase "enhanced for widescreen televisions" on the box.

WHAT CAN I DO?

First, Rosen recommends that for best results you use DVD's that say "anamorphic" or "enhanced for widescreen televisions" on the box. However, this system can get rid of black bars with just about any DVD, by following the steps on the next page.

Note: To watch "fullscreen" DVD's or broadcast television (using an optional TV tuner), you can use the **DISPLAY MODE** *button to select "STANDARD". This will properly size the image, instead of stretching the image across the wide screen. In "STANDARD" mode, you* **will** *see black bars on the* **sides** *of the image.*

Eliminating Black Bars when viewing a DVD:

1) Make sure that the internal DVD player is set to "WIDE" (see DVD Setup, page 23).

2) Use the Display Mode button to select "Wide" or "Zoom".

- To view widescreen DVD's, use "Wide".

- To zoom the picture, use the "Zoom" mode.

  Note: This feature will slightly "crop" the edges of the image. For best results when zooming in on DVD images, use the Disc Zoom feature below - not the "Zoom" Display Mode.

  If this solution still isn't satisfactory, go to step 3.

3) Use the Disc Zoom feature to completely fill the screen. Again, the edges will be "cropped", but the screen will be filled.

Press the **DISC ZOOM** button during playback to select among the following options: x1.5, x2, and x4. You can then use the arrow buttons to shift the magnified image left and right.

Note: Best results are obtained by connecting only widescreen displays to the A10. The A10 DVD player can provide either widescreen video or standard, non-widescreen video - it cannot provide widescreen video for one screen and standard video for other screens. Your Rosen authorized dealer offers a selection of high-quality widescreen automotive displays.

INTEGRATING THE A10 WITH FACTORY IR WIRELESS HEADPHONE SYSTEMS

Some new vehicles have infrared wireless headphone systems built in which allow rear-seat passengers to listen to the vehicle's audio system without playing the audio over the speakers.

Many of these systems operate on the same IR wavelength as the wireless IR headphones used by video entertainment systems, and in these cases interference between the two systems can result. The A10 is compatible with these factory IR-headphone systems.

The A10 has a two-channel infrared headphone transmitter - that is, it uses two IR "channels" - Channel A and Channel B, and can transmit different audio programs on these two channels at the same time. Standard wireless headphones, as well as factory IR headphone systems, typically operate only on Channel A. Optional Rosen AC3007 Dual-Channel Headphones are required to receive Channel B - they switch between Channels A and B at the touch of a button. They are available from your Rosen authorized dealer.

Your Rosen Authorized dealer can configure the A10 to operate on Channel B *only*, thus preventing interference with most factory wireless headphone systems. This lets you use Channel A of your optional AC3007 headphones for listening to the factory audio system, and Channel B for listening to your A10 system.

Note: When the A10 is configured for factory-IR compatibility, the dual-zone functions described on Page 22 are not available.

USING THE A10 DUAL-ZONE MODES AND OUTPUT B

With the optional AC3072 headphones, the A10 supports the following multi-zone and multi-screen features and capabilities:

Dual-Zone Audio on Headphone Channel B

What this means: One user can play the Internal Game, listening on Channel A, while the other user listens on Channel B to Audio CDs or MP3s using the Internal DVD drive.

How to do it:

Load a CD into the DVD drive.

The main-screen user sets their headphones to Channel A.

Press **SOURCE** and select INTERNAL GAME. (SOURCE)

The audio-only user sets their headphones to Channel B.

Press **OUTPUT B**. "CONTROLLING OUTPUT B" appears. (OUTPUT B)

Press **SOURCE** and select INTERNAL DVD. (SOURCE)

Satellite Radio integration on Headphone Channel B

What this means: One user can play the Internal Game or watch DVD's, listening on Channel A, while the other user listens to their optional Satellite Radio receiver on Channel B.

How to do it:
Have your Rosen Authorized dealer connect your Satellite Radio receiver (not included) to the A10 Auxiliary Input 2, and have them program the on-screen display input label to read "SATELLITE".

The main screen user sets their headphones to Channel A.

Press **SOURCE**, select INTERNAL GAME or INTERNAL DVD. (SOURCE)

The Satellite Radio listener sets their headphones to Channel B.

Press **OUTPUT B**. "CONTROLLING OUTPUT B" appears. (OUTPUT B)

Press **SOURCE** and select SATELLITE. (SOURCE)

Note: The Satellite Radio feature is not available if an optional TV Tuner or DVD Changer is installed.

Viewing different video sources on different screens

What this means: When an optional additional screen is connected, the user can select and control the video source for "Screen B" independent of the main screen. For instance, the main screen can be used to play the Internal Game, while Screen B displays a DVD.

How to do it:

The main screen user sets their headphones to Channel A.

Press **SOURCE** and select the source you want to view on the main screen (INTERNAL DVD, INTERNAL GAME, etc.) (SOURCE)

The Screen B user sets their headphones to Channel B.

Press **OUTPUT B**. "CONTROLLING OUTPUT B" appears. (OUTPUT B)

Press **SOURCE** to select the source unit viewed on Screen B. (SOURCE)

Notes: Selecting "SAME AS MAIN SCREEN" for Screen B causes all screens to display the same image at all times. When this is selected, pressing SOURCE changes the audio and video for all screens simultaneously.

The Internal Game cannot be routed to Screen B unless it is already routed to the main screen. "SAME AS MAIN SCREEN" must then be selected.

To control the source unit assigned to Output B

First press **OUTPUT B,** then the desired button. For instance, to pause a DVD, press **OUTPUT B** and then press **PAUSE**.

DVD TYPICAL SETUP AND CONFIGURATION

The following section explains how to customize various features of the Internal DVD Player, including various language, display, and parental control features.

Note: Many DVD menu settings do not apply to this system, such as the Dynamic setting, since it is specifically engineered for automotiv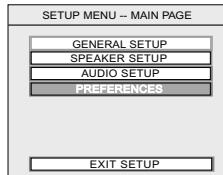e use. Changing the state of some settings can cause apparent system failure. If you have questions about the original state of any DVD setting, please see the list on page 25.

To change the settings for the internal DVD Player:

1 Press **SOURCE SETUP.**
2 Use the navigation arrow buttons to highlight a selection.
3 Press the **ENTER** button to confirm your selection.

```
┌─────────────────────────────────┐
│     SETUP MENU -- MAIN PAGE      │
│                                  │
│  ┌───────────────────────────┐   │
│  │      GENERAL SETUP        │   │
│  │      SPEAKER SETUP        │   │
│  │      AUDIO SETUP          │   │
│  │      PREFERENCES          │   │
│  │                           │   │
│  │                           │   │
│  │      EXIT SETUP           │   │
│  └───────────────────────────┘   │
└─────────────────────────────────┘
```
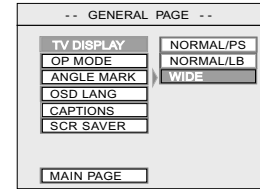
If you try to perform an action that is not permitted (such as accessing the Preferences menu while a disc is playing), this on-screen symbol will appear:

Note: To access the Preferences page, you must completely stop playback of any loaded disc, or eject the disc completely.
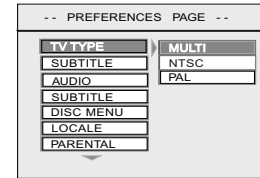
Changing the Aspect Ratio Mode

This is under the GENERAL tab. The correct setting is WIDE. Changing this setting to NORMAL/PS or NORMAL/LB will result in distorted video.

```
┌─────────────────────────────────┐
│      - - GENERAL PAGE - -        │
│                                  │
│  TV DISPLAY        NORMAL/PS     │
│  OP MODE           NORMAL/LB     │
│  ANGLE MARK    ▶   WIDE          │
│  OSD LANG                        │
│  CAPTIONS                        │
│  SCR SAVER                       │
│                                  │
│  MAIN PAGE                       │
└─────────────────────────────────┘
```

### Changing the Video Output Mode

To change the video output mode, select GENERAL, and then select TV TYPE. The default is NTSC. If you want to be able to play PAL discs on your NTSC monitors, select PAL. If you change this setting and the picture "rolls", see your Rosen dealer.

```
┌─────────────────────────────────┐
│    - - PREFERENCES  PAGE - -     │
│                                  │
│  TV TYPE       ▶   MULTI         │
│  SUBTITLE          NTSC          │
│  AUDIO             PAL           │
│  SUBTITLE                        │
│  DISC MENU                       │
│  LOCALE                          │
│  PARENTAL                        │
│          ▼                       │
└─────────────────────────────────┘
```

Note: The setting "MULTI" will automatically output NTSC video from NTSC discs, and PAL video from PAL discs. NTSC is the North American standard. Some discs do not play properly when MULTI is selected.

The Digital Output Setting

There is a setting in the menu for a Digital Audio output. This unit does not have a digital audio output. Leave this setting in the ANALOG mode.
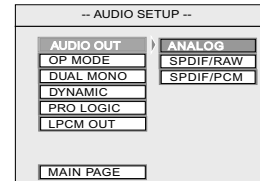
Note: Enabling the Digital Audio mode disables the analog audio output used by the FM Modulator and the IR headphones, and can resemble a system audio failure.

```
┌─────────────────────────────────┐
│       -- AUDIO SETUP --          │
│                                  │
│  AUDIO OUT         ANALOG        │
│  OP MODE           SPDIF/RAW     │
│  DUAL MONO         SPDIF/PCM     │
│  DYNAMIC                         │
│  PRO LOGIC                       │
│  LPCM OUT                        │
│                                  │
│  MAIN PAGE                       │
└─────────────────────────────────┘
```

Parental Control

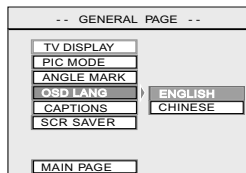The supplied remote control does not support the Parental Control feature.

Changing Language Settings

Several language settings can be customized on the DVD Player. These languages can vary depending on the language supported by the DVD disc.
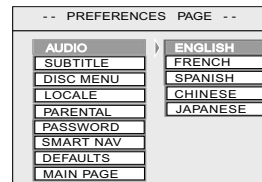
Notes:

· *Not all language settings are supported by all discs.*

· *The languages supported vary with the individual option setting - there is not a global language setting.*

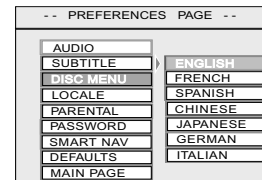**To change the on-screen display language**, select GENERAL and OSD LANG.

```
- - GENERAL PAGE - -

TV DISPLAY
PIC MODE
ANGLE MARK
OSD LANG        ▶  ENGLISH
CAPTIONS           CHINESE
SCR SAVER

MAIN PAGE
```

To change the soundtrack language, select PREFERENCES and AUDIO.

```
- - PREFERENCES  PAGE - -

AUDIO        ▶  ENGLISH
SUBTITLE        FRENCH
DISC MENU       SPANISH
LOCALE          CHINESE
PARENTAL        JAPANESE
PASSWORD
SMART NAV
DEFAULTS
MAIN PAGE
```

To change the subtitle or caption language, select PREFERENCES and SUBTITLE.

```
- - PREFERENCES  PAGE - -

AUDIO        ▶  ENGLISH
SUBTITLE        FRENCH
DISC MENU       SPANISH
LOCALE          CHINESE
PARENTAL        JAPANESE
PASSWORD        KOREAN
SMART NAV       ITALIAN
DEFAULTS
MAIN PAGE
```

To change the disc menu language, select PREFERENCES and DISC MENU.

```
- - PREFERENCES  PAGE - -

AUDIO
SUBTITLE        ▶  ENGLISH
DISC MENU          FRENCH
LOCALE             SPANISH
PARENTAL           CHINESE
PASSWORD           JAPANESE
SMART NAV          GERMAN
DEFAULTS           ITALIAN
MAIN PAGE
```
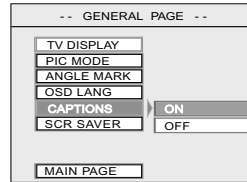
Concealing the "Angle Mark"

To display or conceal the "angle mark," which appears during scenes that support a multiple-viewing-angle feature, select GENERAL and ANGLE MARK. Since the remote included does not support this feature, the default state for this setting is "OFF".

```
- - GENERAL  PAGE - -

    TV DISPLAY
    PIC MODE
    ANGLE MARK        ON
    OSD LANG          OFF
    CAPTIONS
    SCR SAVER


    MAIN PAGE
```
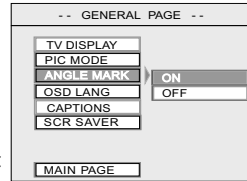
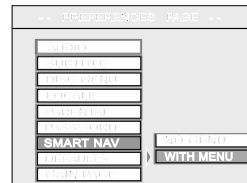## Activating Captions and Subtitles

To enable or disable captions or subtitles, select GENERAL and CAPTIONS.

*Note: If CAPTIONS is set to OFF, the **SUBTITLE** button will be defeated from working. If SUBTITLE OFF is selected under Preferences – Audio, then the **SUBTITLE** button can still enable subtitles during playback, as long as CAPTIONS is set to ON.*

```
- - GENERAL  PAGE - -

    TV DISPLAY
    PIC MODE
    ANGLE MARK
    OSD LANG
    CAPTIONS          ON
    SCR SAVER         OFF


    MAIN PAGE
```

Deactivating the "Smart Nav" MP3 On-Screen Menu Display

To play MP3 discs without the "Smart Nav" on-screen menu display, select PREFERENCES, then SMART NAV.

```
- - PREFERENCES  PAGE - -

    AUDIO
    SUBTITLE
    DISC MENU
    LOCALE
    PARENTAL
    PASSWORD
    SMART NAV         NO MENU
    DEFAULTS          WITH MENU
    EXIT SETUP
```

DVD Setup Options List

The factory default options are given in bold type.

GENERAL PAGE

TV DISPLAY:	**NORMAL/PS**, NORMAL/LB, WIDE
TV TYPE:	MULTI, **NTSC**, PAL
ANGLE MARK:	**ON**, OFF
OSD LANG:	**ENGLISH**, CHINESE
CAPTIONS:	**ON**, OFF
SCRN SAVER:	**OFF**, ON

SPEAKER SETUP

DOWNMIX:	LT/RT, **STEREO**

AUDIO SETUP

AUDIO OUTPUT:	**ANALOG**, SPDIF/RAW, SPDIF/PCM
DYNAMIC:	OFF to **FULL** (eight steps)
LPCM:	48K, 96K (Inoperative on A10)

PREFERENCES PAGE

AUDIO:	**ENGLISH**, FRENCH, SPANISH, CHINESE, JAPANESE
SUBTITLE:	**ENGLISH**, FRENCH, SPANISH, CHINESE, JAPANESE, OFF
DISC MENU:	**ENGLISH**, FRENCH, SPANISH, CHINESE, JAPANESE
LOCALE:	CHINA, FRANCE, HONG KONG, JAPAN, TAIWAN, GBR, **USA**
PARENTAL:	**OFF**
PASSWORD:	**3308**
SMART NAV:	No menu**, with menu**

FAQ'S

I HAVE NO PICTURE AND NO SOUND - WHAT'S WRONG?

The system has low- and high-voltage and temperature protection circuits. If the voltage or temperature goes beyond the limits, the system shuts off. The power wire or power harness may have been disconnected, or the fuse may have failed. Contact your Rosen authorized dealer to determine if this is the case.

Note: The system voltage range is 11-16VDC operating voltage. The system operating temperature is 0° to 60° Celsius. Use of the system beyond the safe operating ranges listed can cause temporary or permanent damage to the unit - such damage may not be covered by manufacturer's warranty.

I HAVE A PICTURE, BUT NO SOUND OR DISTORTED SOUND. WHY?

Check the **MUTE** button. Check the volume on the radio, and make sure the radio is tuned to the right frequency - try tuning the FMM and the radio to a new frequency. Check the headphones; ensure the headphones have a direct "line of sight" to the infrared transmitter below the monitor. Replace headphone batteries, if needed. Check the DVD Setup Menu - the Audio Output setting must be set to "ANALOG" and the Speaker Downmix setting must be set to "STEREO". If using a CD you have made yourself, make sure you did not set the recording level too high. Make sure you to check CH A and CH B if you are using AC3072 two-channel headphones.

WHY DON'T THE PREVIOUS OR NEXT BUTTONS WORK WITH A VCD?

Some VCDs don't support these - erratic operation can result.

WHY DO I GET NO RESPONSE WHEN I PRESS THE REMOTE BUTTONS?

Check the battery in the remote control.

THE DOME LIGHT WENT OUT - WHY?

The dome light has a 5-minute timer to prevent accidental battery drain.

I HAVE BLACK BARS ON THE TOP AND BOTTOM OF MY SCREEN WITH A WIDESCREEN DVD - HOW DO I GET RID OF THEM?

See page 20.

WITH THE AC3072 DUAL-CHANNEL HEADPHONES, CHANNEL A AND CHANNEL B HAVE THE SAME AUDIO. HOW DO I CHANGE WHAT I HEAR ON CHANNEL B?

Press **OUTPUT B** and then press **SOURCE** to change Output B's assigned source. See page 22 for more information on dual-zone use.

WHY DOESN'T THE STOP/EJECT BUTTON DOESN'T EJECT THE DISC RIGHT AWAY?

While a disc is playing, this button acts as a **STOP** button. To eject a disc while it is playing, press the **STOP/EJECT** button twice in quick succession. The Eject button on the remote control always ejects the disc immediately.

THE DISC WILL NOT EJECT AT ALL - WHAT DO I DO?

Using a paper clip, press the reset button (see page 7 for its location).

If this section does not address your question, please contact your Rosen authorized dealer. Also, your system has internal diagnostic capabilities that are accessible to authorized Rosen dealers. To locate a Rosen Entertainment Systems authorized dealer, please visit *www.rosenentertainment.com.*

RES PN 9100389 Rev B

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