

Ensemble HD™
Home Cinema System

EPSON®
EXCEED YOUR VISION

User's Guide

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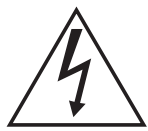
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Important Safety Instructions



CAUTION: To reduce the risk of electric shock, do not remove the cover (or back). No user serviceable parts inside. Refer servicing to qualified personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating maintenance (servicing) instructions in the literature accompanying the appliance.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Additional Safety Instructions

- Do not place the components of this system near sources of heat or in direct sunlight.
- Make sure nothing blocks the ventilation openings on any of the components. Allow for sufficient heat dispersion when components are installed on a rack. Do not block or cover the heatsink on the back of the subwoofer.
- Where the mains plug is used as the disconnect device, the disconnect device shall remain readily operable.
- When unplugging the power cord of any system component, handle it carefully. Hold the plug when unplugging the cord.
- This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied in your home, consult your product dealer or local power company.
- Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- Keep the system components free from moisture, water, and dust.
- Do not let insecticides, benzene, or thinner come in contact with any components of the system.
- Never push objects of any kind through openings in the system components as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- Except as specifically explained in these instructions, do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
- Never disassemble or modify the product in any way. Dangerous electrical voltages inside the components can severely injure you.
- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- When closing the screen, be careful not to pinch your fingers where the screen closes against the case.
- Do not touch the white part of the screen with your hands. Oil from your skin could damage it.
- Never look into the projector lens when the lamp is turned on. The bright light can damage your eyes. Never let children look into the lens when it is on.
- Don't use the projector outside of the required temperature range of 41 to 95 °F (5 to 35 °C). Doing so may cause an unstable display and could lead to projector damage.
- (Hg) The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.
- Allow the projector lamp to cool for one hour before replacing it.

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Introduction

The Ensemble HD™ home cinema system by Epson® is designed to transform your living room into a state-of-the-art home cinema. Its wide-format (16:9) projection screen, 5.1-channel surround sound system, and high-definition video projector deliver unrivaled, high-performance picture and sound.

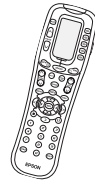
Your home cinema system's ease-of-use and versatility let you:

- Watch movies using the built-in DVD player (see page 19)
- Listen to music in various formats—by playing CDs, connecting an MP3 player, or using the built-in AM/FM radio (see page 23)
- Connect external components such as a cable box, satellite receiver, gaming console, or high-definition DVD player like Blu-ray™ or HD DVD® (see page 31)
- Use the included universal remote control to operate not just the Ensemble HD system, but any components you connect to it

See “Getting Started” in the next section for basic instructions on using your system.

Getting Started

The universal remote control included with your Ensemble HD system puts complete control over your home theater in the palm of your hand. With one touch, you can lower the screen, turn on the projector, and get ready to watch a movie. If you've connected additional components to your home theater, such as a cable box or satellite receiver, you can use the remote control to operate them too.

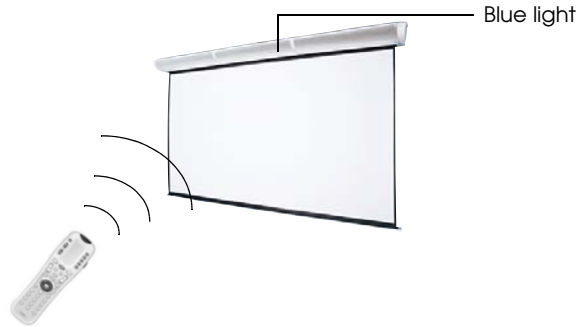


See these sections:

- “Using the Remote Control” on page 12
- “Turning On the System” on page 13
- “Controlling the Screen” on page 15
- “Controlling the DVD Player and Other Equipment” on page 15
- “Adjusting the Volume” on page 17

Using the Remote Control

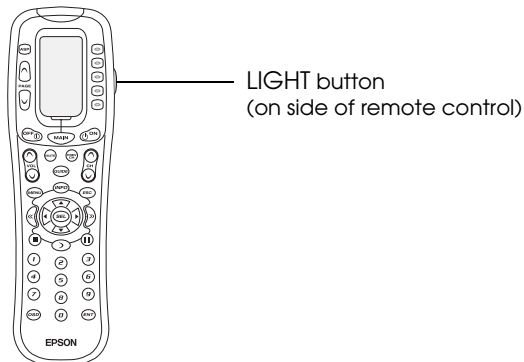
Aim the remote control at the screen and press any button. An  icon appears on the remote control's LCD screen to indicate that a command is being transmitted. At the same time, the blue light at the top of the projection screen flashes, indicating that the system is receiving a command.



Note

The blue light remains on when the screen is raised and turns off when the screen is lowered.

If you're using the remote control in a darkened room, press the **LIGHT** button on the side of the remote control. The keys and display screen on the remote control light up so you can make a selection. The light shuts off by itself after 10 seconds, or you can turn it off by pressing the **LIGHT** button a second time.



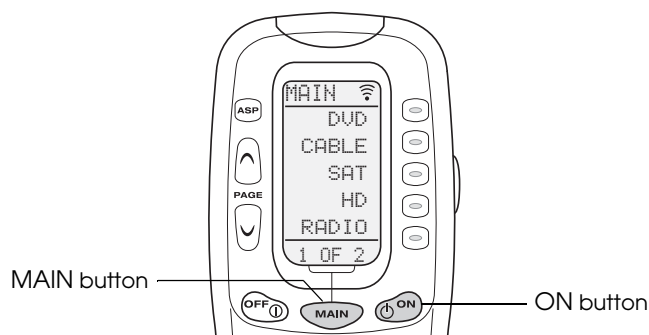
Note

If you need to increase the amount of time the remote control lights up or change the contrast of its screen, see page 71.

Turning On the System

When you're ready to watch a movie, you can lower the screen, turn on the projector, and turn on the AV controller (with its built-in DVD player) with the touch of a button.

- 1 Make sure the MAIN menu is displayed on the remote control. If necessary, press the **MAIN** button.



- 2 Point the remote control at the screen and press the **ON** button to turn on the system. The screen comes down and the projector and AV controller turn on.

Note

Make sure the remote control remains pointed at the screen until the system has turned on. (You see the  icon flash on the remote control screen while it's turning on the system.) If the system does not turn on, see "Basic Operation Problems" on page 61.

The projector lamp takes up to 30 seconds to achieve full brightness.

- 3 When you're done using the system, make sure the MAIN menu is displayed on the remote control and press the **OFF** button. The projector and AV controller turn off, and the screen raises up automatically.

Note

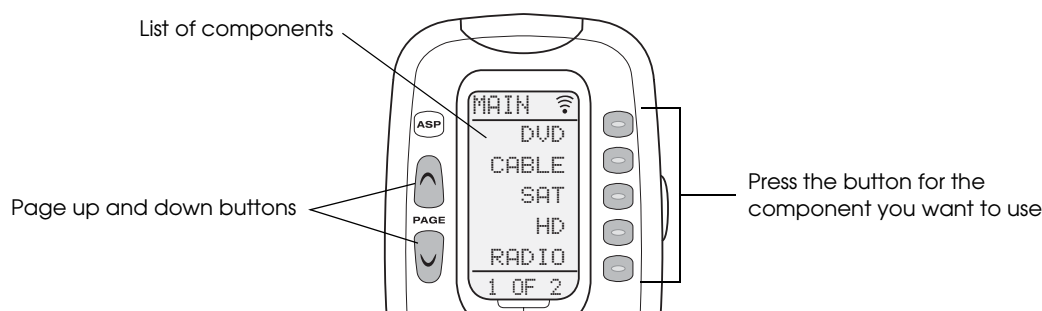
If you install additional components, such as a cable box or satellite receiver, you can set up the remote control to turn them on with one button, too. See "Setting Up Macros" on page 77.

Turning On Selected Components

You can turn on and operate any component in the system without using any of the others. For example, if you want to listen to your home theater's built-in radio, you can turn on the radio by itself without lowering the screen.

- 1 Make sure the MAIN menu is displayed on the remote control. If necessary, press the **MAIN** button.

You see a list of components displayed on the remote control:



- 2 If you don't see the component you want to use, it may be listed on the next page. Press the **PAGE**  or  (page up or down) button to access additional components.
- 3 Press the button to the right of the component you want to use, such as DVD or RADIO. The top of the screen changes from MAIN to the name of the component you select, and the menu options change to the ones for that component.

Note

Some of the options in the MAIN menu, such as CABLE or SAT, are for components that don't come with the Ensemble HD system, such as a cable box or satellite receiver. If you install components like these, you can use the remote control to operate them just like the rest of your system. See "Connecting and Using Other Components" on page 31 for more information.

- 4 Once you've opened the menu for the selected component, press the **ON** button to turn it on or the **OFF** button to turn it off. (If you select DVD or RADIO, the AV controller turns on automatically.)
- 5 Follow the instructions elsewhere in this guide to operate the selected component:
 - If you selected RADIO, you can listen to AM/FM radio through your home theater (see page 23).
 - If you selected DVD, you can play a DVD (see page 19), listen to a CD (see page 23), or listen to a disc with MP3 audio files (page 26).
 - To use other components you may have added to your system, see page 39.

Controlling the Screen

The screen is lowered automatically when you turn on the system as described on page 13. If necessary, you can also operate the screen manually as described below.

Note

To change how far the screen comes down when you lower it, see “Adjusting the Screen Length” on page 54.

- 1 Make sure the MAIN menu is displayed on the remote control. If necessary, press the **MAIN** button.
- 2 Press the **PAGE**  button to display additional components.
- 3 Press the button to the right of **PROJ** to select the projector menu.
- 4 Press **S-DWN** to lower the screen. It comes down and automatically stops at the pre-set position.
- 5 Press **S-UP** to raise the screen when you’re done using it.

Controlling the DVD Player and Other Equipment

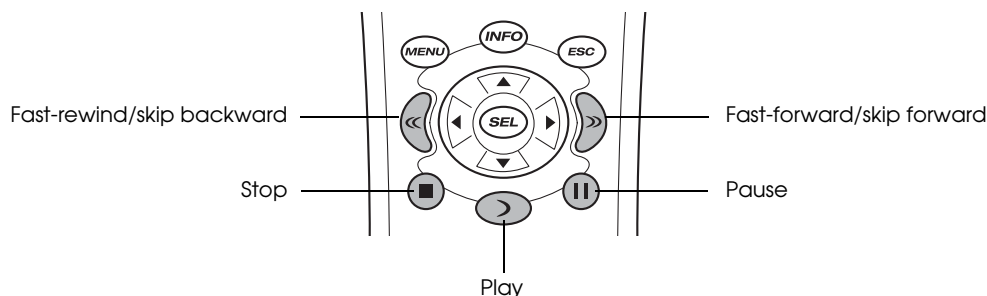
The universal remote control has all the buttons you need to control the Ensemble HD home theater, along with any additional components you may add to it. Here’s an overview of the main buttons you’ll use to control the built-in DVD player and radio, as well as any optional components like a cable box or satellite receiver.

Note

You can also use the buttons on the AV controller for many of the same functions that you would normally access using the remote control. See “Using the Buttons on the AV Controller” on page 16.

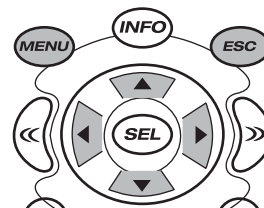
Controlling Playback

Use the buttons shown below to control playback when watching a movie or listening to music:



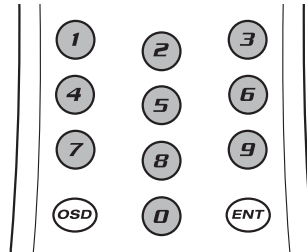
Note

The buttons highlighted at right are for accessing the on-screen menu system and selecting menu options, not for controlling playback. See “Using the On-screen Menu System” on page 41.



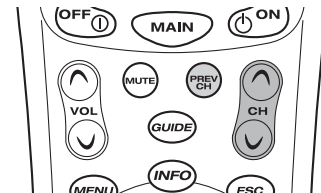
Selecting Channels on an HD Tuner, Cable Box, or Satellite Receiver

You can use the numeric keypad to select pretuned radio stations or the tracks on a CD. If you've connected an HD tuner or other equipment to receive programmed content, use the numeric keypad to enter channels. The method of entering the digits varies, depending on the type of equipment you're using—for example, you might have to press **0** to enter a single-digit number, such as 01. In some case, you may need to press the **ENT** (Enter) or **SEL** (Select) button to enter the digits.



You can also use **CH**  and  (channel up and down) to change channels.

To return to the previously selected channel, press the **PREV CH** button.



Using the Buttons on the AV Controller

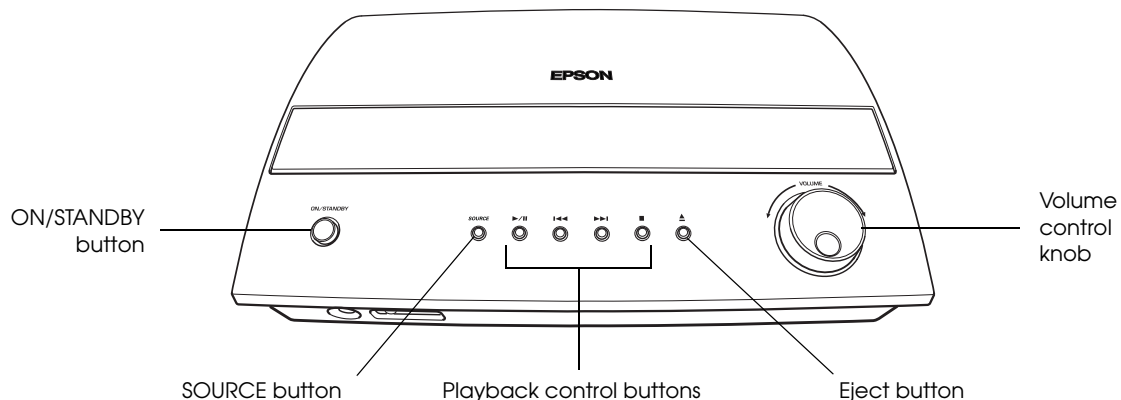
You can use the buttons on the AV controller to control most basic functions.

Note

All these functions are accessible via the remote control.

- **ON/STANDBY** lets you turn on the AV controller. The controller is on when the light surrounding the button is blue, and is off (standby) when the light is orange.
- **SOURCE** lets you switch between the Ensemble HD system's DVD player and radio, or select other equipment you've connected to the system. Each time you press the button, the AV controller cycles through these functions or sources:

DVD player → FM radio → AM radio → Audio 1 port → Audio 2 port → Composite video (CVBS) → S-video → Component video → HDMI 1 → HDMI 2

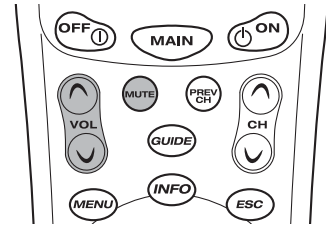


- The playback control buttons let you control playback when watching a DVD or listening to a CD. In addition, the ◀◀ and ▶▶ buttons let you select preset radio stations while listening to AM or FM radio.
- The ▲ eject button opens and closes the DVD/CD tray.
- The volume control knob lets you adjust the sound volume.

Adjusting the Volume

The Ensemble HD system gives you various ways to control the volume:

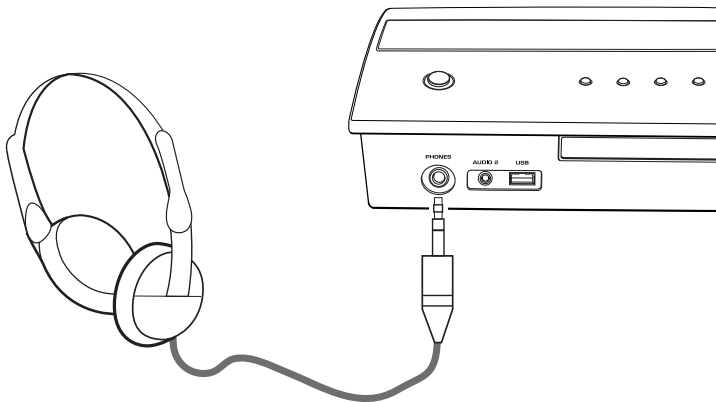
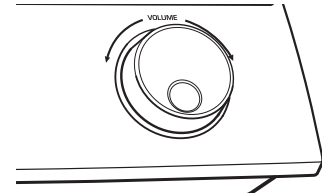
- VOL ▲ and ▼ (volume up and down) lets you change the volume from -74 to +10 dB.
- MUTE temporarily turns off the sound. Press the button again to restore audio.
- **Midnight Mode** adjusts the sound for late-night viewing when you want to avoid disturbing others. Volume is reduced at the bass end with volume highs and lows being compressed to a narrower range. See page 48 for details.



Note

You can also adjust the volume using the volume control knob on the AV controller.

To use headphones with your home theater, plug them into the **PHONES** jack on the front of the AV controller. The jack accepts 1/4-inch stereo headphones. When you plug in the headphones, the sound is automatically muted from the Ensemble HD speakers.



Watching Movies

Follow the steps in this chapter when you're ready to watch a movie on DVD. See these sections:

- “Inserting a Disc” below
- “Playing a DVD” on page 20

Note

If you watch movies under different lighting conditions (for example, in the daytime and at night), you may want to change the Color Mode when you begin watching a movie (see “Adjusting the Color Mode” on page 42).

Depending on the aspect ratio your movie was filmed in, you may also want to select a different Aspect setting (see “Adjusting the Aspect Ratio” on page 43).

Inserting a Disc

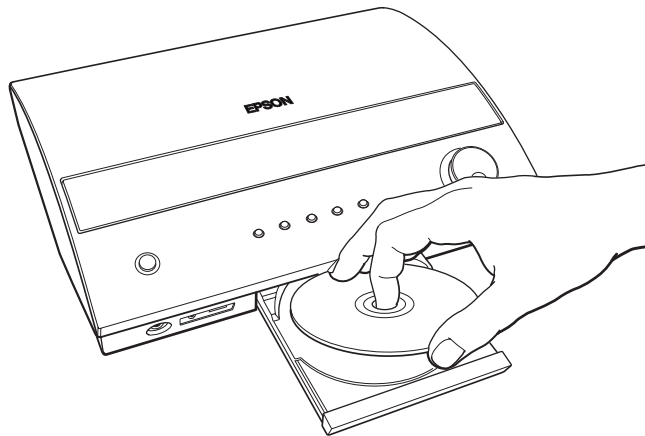
The DVD player, built into the Ensemble HD system, accepts both DVD and DVD-R discs. For more information on compatible formats, see “Playable Disc Types” on page 119.

- 1 Make sure the Ensemble HD system is turned on (see “Turning On the System” on page 13).
- 2 Open the DVD/CD tray by pressing the  eject button on the AV controller. (Or select EJECT from the DVD menu on the remote control.)

Note

Make sure you don't have a USB flash drive inserted, or you won't be able to operate the DVD player, or insert or eject a DVD. Remove the flash drive prior to inserting the disc.

- 3 Place the disc in the tray, playable side down.



- 4 Close the DVD/CD tray by pressing the  eject button on the AV controller. (Or select EJECT from the DVD menu on the remote control.)

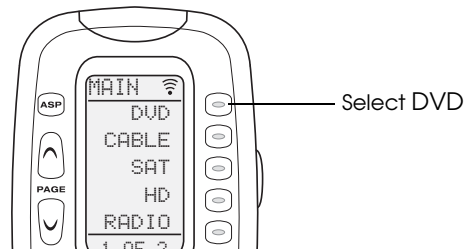
When you're done playing the disc, open the DVD/CD tray as described above and remove the disc.

Playing a DVD

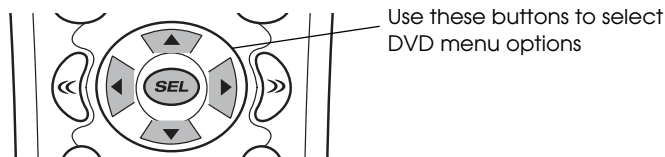
Once the disc is inserted, follow these steps to begin playing the movie:

- 1 If the DVD player was the last function you used, the DVD begins playing automatically.

If you previously used a different function (such as CABLE or SAT), select the **DVD** option on the remote control:



- 2 When the DVD begins playing, you may see a menu screen that lets you select its contents and other options. (This menu varies from disc to disc.) Use the arrow buttons (◀▶▲▼) to highlight the option you want, then press the **SEL** (Select) button. For example, to play a movie, highlight the “Play movie” option, then press **SEL**.



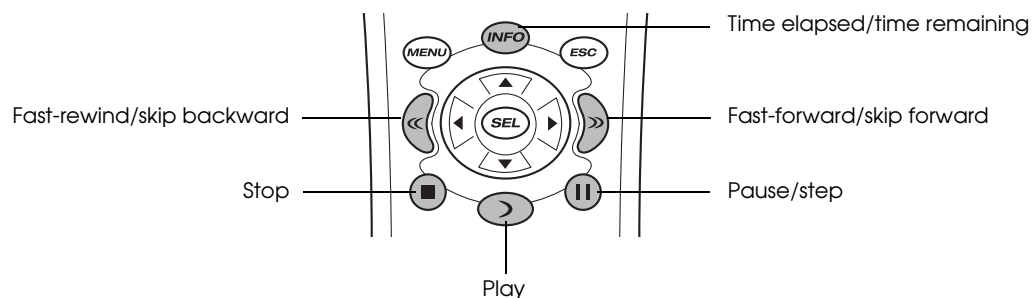
- 3 If you need to return to the DVD’s main menu screen while watching the movie, press the **MENU** or **GUIDE** button. You can also select **MENU** from the DVD menu on the remote control.

Note

To avoid losing your place while watching a movie, don’t switch sources. If you select a different source (such as CABLE or SAT), the DVD will stop playing. It will start over from the beginning when you return to the DVD function.

Using Basic Playback Functions

While you’re watching a movie, you can use the following buttons to control playback:

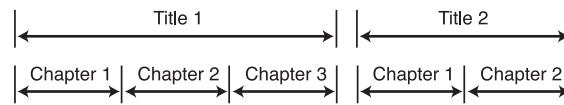


- Press the **||** pause button to stop the movie temporarily. The image freezes on the screen. While the movie is paused, pressing the **||** pause button again puts the player in step mode. Each time you press the **||** pause button, the movie advances one frame at a time. To return to normal playback, press the **>** play button.
- Press the **■** stop button to stop projection of the movie temporarily. The DVD player remembers the point in the movie where you stopped. Press the **>** play button to resume playback from that point.

Note

If you press the **■** stop button twice, playback will start over from the beginning of the movie.

- Press the **>** play button to resume playback if you've paused or stopped the movie.
- Press the **<<** fast-rewind or **>>** fast-forward button to skip backward or forward to a different chapter in the movie. DVDs are usually structured with each movie or special feature having its own title, and with each title broken into chapters:



As you skip through chapters, the title and chapter information display at the top of the screen.

- Press and hold the **<<** fast-rewind or **>>** fast-forward button to move quickly through a scene. Each time you press and hold the button, the speed doubles and then finally returns to normal speed:

2x → 4x → 8x → 16x → normal speed

- Press the **INFO** button to display title and chapter information on the screen. The on-screen display tells you the time elapsed and time remaining at your current location on the disc. Each time you press the **INFO** button, you see the following information displayed:

Title time elapsed → Title time remaining → Chapter time elapsed → Chapter time remaining → Display off

Note

If you press a button for a function that cannot be performed at a given time (for example, if you press the **>** play button while the movie is already playing), you see the **⊘** symbol on the screen.

Using Other Playback Features

You can use the DVD menu on the remote control to access several other features while watching movies.

Note

Some functions in the remote control's DVD menu are used only for playing CDs. These include the Shuffle, Memory, and Clear functions.

- If your DVD has separate audio tracks in different languages, you can change the language by selecting **AUDIO** from the DVD menu. Each time you press **AUDIO**, the language changes and you see an on-screen display like the following:

Audio 5/5:Dolby D 2CH ENGLISH

Note

If you usually watch DVDs with a language other than English selected, you can set that language to be used automatically whenever you play a DVD. See "Choosing the Language" on page 49.

- Some DVDs include scenes that have been shot from different camera angles. They have a symbol like this to indicate the number of available angles: . When you encounter a scene with multiple angles, a camera icon is displayed on the screen. Select **ANGLE** in the DVD menu to change angles. To stop displaying the camera icon, press the **INFO** button repeatedly until it clears the icon from the screen.
- To repeat the current chapter of a movie that you're watching, select **RPEAT** from the DVD menu. To repeat the entire title (such as the movie itself or a special feature), press **RPEAT** again. Press **RPEAT** a third time to cancel the repeat function.

To repeat just part of a scene that you're watching, press **A<>B** at the beginning of the part you want to repeat, then press **A<>B** a second time to mark the end of the section. Press **A<>B** a third time to cancel the repeat function.

- To move slowly through a scene, select **SLOW** from the DVD menu. Each time you press **SLOW**, the speed is reduced by one-half. You can select from 1/2, 1/4, and 1/8 speed. To return to normal playback, press the **>** play button.
- If your DVD has subtitles, you can change the subtitle language by selecting **SUB-T** from the DVD menu. Each time you press **SUB-T**, the language changes and you see an on-screen display like the following:

Subtitle 03/03:FRENCH

Note

If you usually watch DVDs with subtitles, you can have the subtitle language you prefer turned on automatically whenever you play a DVD. See "Choosing the Language" on page 49.

Listening to Music

Follow these steps when you want to listen to music with your Epson Ensemble HD system. See these sections:

- “Playing a CD” below
- “Playing Audio Files” on page 26
- “Listening to an MP3 Player” on page 28
- “Listening to a Tape Deck” on page 29
- “Listening to AM/FM Radio” on page 29

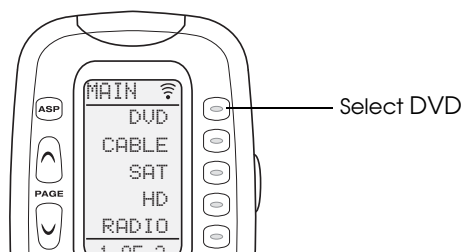
Note

When listening to music, you may wish to change the surround sound format to STEREO. See “Changing the Surround Sound Format” on page 47.

Playing a CD

The DVD player built into the Ensemble HD system can play music CDs as well as movies. The player accepts both commercial CDs and home-recorded CD-R and CD-RW discs. For more information on compatible formats, see “Playable Disc Types” on page 119.

- 1 Select the DVD option on the remote control to activate the DVD player:

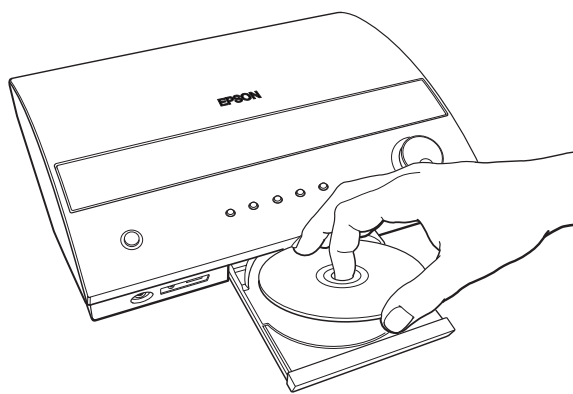


Note

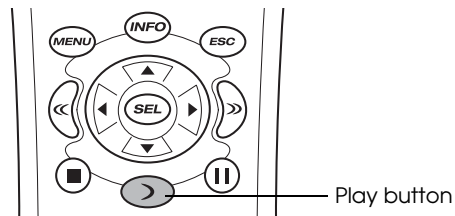
For most CD playing functions, it is not necessary to lower the screen or turn on the projector.

- 2 Insert the CD just as you'd insert a DVD. See “Inserting a Disc” on page 19.

After a moment, you see the number of tracks and total playing time on the AV controller.



- 3 To begin playing the CD, press the ► play button.

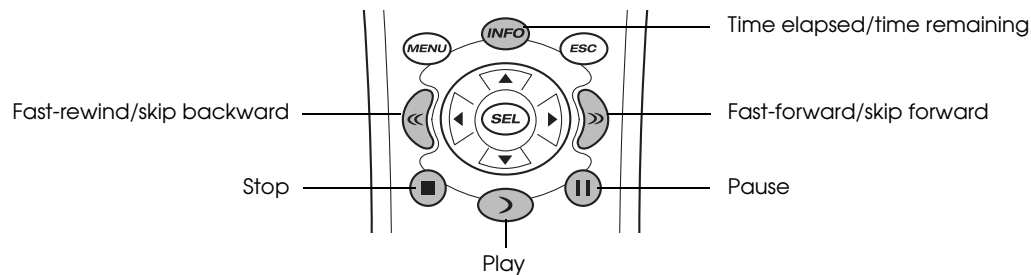


Note

To avoid interrupting CD playback, don't switch sources. If you select a different source (such as CABLE or SAT), the CD will stop playing. It will start over from the beginning when you resume playback.

Using Basic Playback Functions

While you're listening to a CD, you can use the following buttons and the numeric keypad to control playback:



- To play a specific track on the CD, use the numeric keypad on the remote control. For example, to select track 3, just press the 3 button. To select track 21, press 2 followed by 1. After pressing the buttons, wait a moment for the selection to be transmitted, or press SEL (Select) to transmit your selection right away.

You can also skip between tracks by using the ◀◀ fast-rewind or ▶▶ fast-forward button. To advance to the next track, momentarily press and release the ▶▶ button without holding it. To go to the previous track, press the ◀◀ button twice (the first time returns you to the beginning of the current track).

- The current track and elapsed time are indicated on the AV controller screen.

If the projector is on, you can also display the track and time information on the projection screen by pressing the INFO button. Each additional time you press the INFO button, the displayed information changes (both on the AV controller and on the projection screen) as follows:

Track time elapsed → Track time remaining → Total time elapsed → Total time remaining → Display off

- Press and hold the ◀◀ fast-rewind or ▶▶ fast-forward button to move quickly through a track. Each time you press and hold the button, the speed changes as follows:

2x → 4x → 6x → 8x → 2x

To return to normal playback, press the ► play button.

- Press the || pause button to stop the music temporarily. To resume playback, press ► play or || pause.
- Press the ■ stop button when you're done listening to the CD.

Using Other Playback Features

You can use the DVD menu on the remote control to access several other features while listening to a CD.

Note

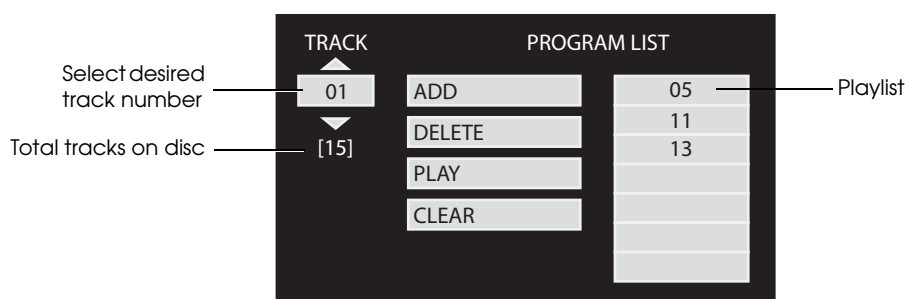
Most functions in the remote control's DVD menu are used only for playing DVDs. Only the ones listed below can be used when playing CDs.

- To repeat the current track of a CD that you're listening to, select **RPEAT** from the DVD menu. To repeat the entire CD (or a programmed playlist), press **RPEAT** again. Press **RPEAT** a third time to cancel the repeat function. Each time you select this option, the display changes as follows:

Repeat one → Repeat all → Repeat off

To repeat just part of a track, press **A<>B** at the beginning of the part you want to repeat, then press **A<>B** a second time to mark the end of the section. Press **A<>B** a third time to cancel the repeat function.

- To play all the tracks on your CD in a random order, press the ■ stop button if the CD is currently playing. Select **SHUFF** (Shuffle) from the DVD menu, then press the ► play button. After all the tracks finish playing, the DVD player stops and the shuffle function is cancelled. To cancel shuffle mode while random playback is in progress, press the ■ stop button, then press **SHUFF**.
- You can play up to 21 tracks in any desired order by creating a playlist. To create a playlist, you need to lower the screen and turn on the projector. Also, press the ■ stop button if the CD is currently playing. Once the projector is turned on, select **MEMO** (Memory) from the DVD menu on the remote control. You see this screen:



Select the desired track number on the left, using the ▲ or ▼ button on the remote control. Then highlight **ADD**, using the ► button, and press **SEL** (Select). The track number is added to the list on the right. Repeat for any additional tracks you want to add.

To insert a track at an earlier point in the list, highlight the track in the playlist prior to the point where you want to insert the new track. Then select the desired track number on the left and select **INSERT**. Use **DELETE** to erase a track, or **CLEAR** to erase the whole list.

Once you've finished creating your playlist, highlight **PLAY** and press **SEL** (Select) to start playback. The playlist is retained until you remove the CD or turn off the player. To resume normal playback without the playlist, press the ■ stop button, then press ► play.

Playing Audio Files

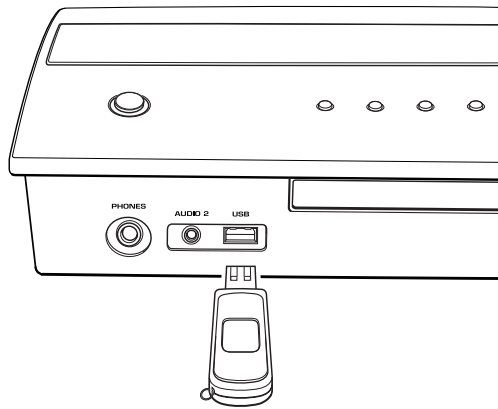
You can use the AV controller to play MP3 and WMA audio files stored on a USB flash drive, or on a data CD or DVD.

Note

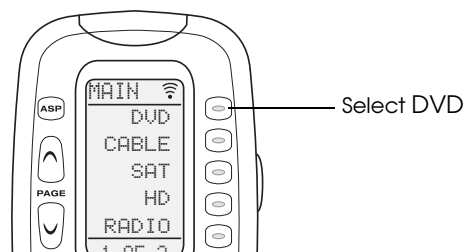
If you burn your MP3 and WMA files to an audio CD instead of a data CD, play the disc as described in “Playing a CD” on page 23.

You can also display JPG images (stored on a flash drive, data CD, or DVD) by following the instructions below. When you press the ➤ play button, your photos display as a slideshow.

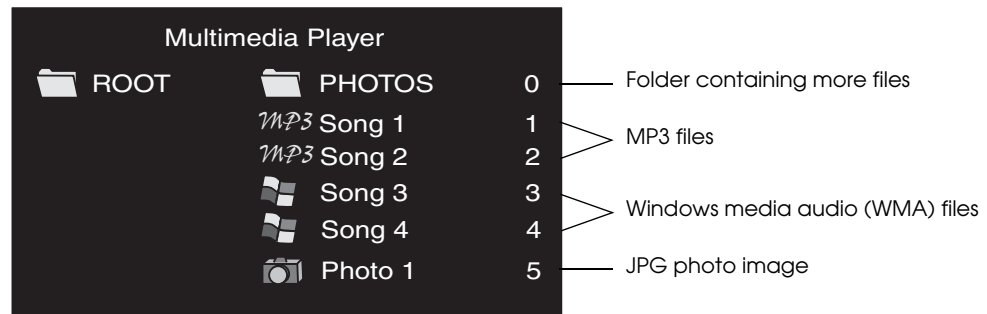
- 1 Make sure the Ensemble HD system is turned on (see “Turning On the System” on page 13). You’ll need the projector turned on in order to select files on the screen.
- 2 Insert your USB flash drive into the USB slot on the front of the AV controller. (If the files are stored on a CD or DVD, insert the disc as described in “Inserting a Disc” on page 19.)



- 3 Select the DVD option on the remote control. (This tells the AV controller to check for an inserted disc or flash drive.)



After a moment, you see the contents of the flash drive or CD/DVD displayed on the screen:



Caution

Do not remove the flash drive while its data access light is flashing, or you could lose data on the drive. Always stop playback by pressing the ■ stop button before removing the drive.

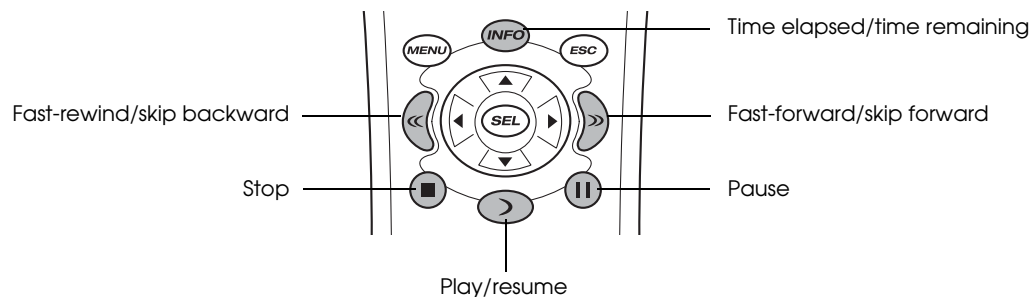
4 Do one of the following:

- Press the > play button to play all files from the beginning.
- Use the ▲ or ▼ button to highlight the file you'd like to start with. (If a file is already playing, press the ■ stop button first.) Then press the > play button. All files are played from the selected file to the last one on the drive.
- If your flash drive contains folders, use the ▲ or ▼ button to highlight the desired folder, then press SEL (Select) to view its contents. Highlight the file you'd like to start with, then press the > play button. Only files in the folder are played.

When you're done listening to music on the flash drive, make sure its data access light is not flashing. (If necessary, press the ■ stop button.) Then pull the drive straight out of the slot.

Using Basic Playback Functions

While you're listening to audio files, you can use the following buttons and the numeric keypad to control playback:



- To play a specific file, use the numeric keypad on the remote control. For example, to select file 3, just press the 3 button. To select file 21, press 2 followed by 1. After pressing the buttons, wait a moment for the selection to be transmitted, or press SEL (Select) to transmit your selection right away.

You can also skip between tracks by using the << fast-rewind or >> fast-forward button. To advance to the next track (or go to the previous one), momentarily press and release the button without holding it.

- The current file and elapsed time are indicated on the AV controller screen. You can also display the file and time information on the projection screen by pressing the **INFO** button. Each time you press the **INFO** button, the displayed information changes (both on the AV controller and on the projection screen) as follows:

Time elapsed → Time remaining → Display off

- Press and hold the **<<** fast-rewind or **>>** fast-forward button to move quickly through a file. Each time you press and hold the button, the speed increases:

2× → 4× → 6× → 8× → normal speed

To return to normal playback, press the **>** play button.

- Press the **||** pause button to stop the music temporarily. To resume playback, press the **>** play button.
- Press the **■** stop button when you're done listening.

Note

You can also use the repeat function to repeat one or more files. Select **RPEAT** from the DVD menu on the remote control. Each time you press **RPEAT**, you switch between various repeat options.

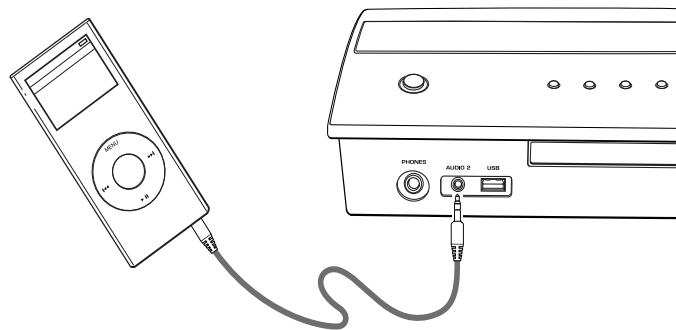
Listening to an MP3 Player

You can connect a personal MP3 player, such as an iPod, to the **AUDIO 2** port on the front of the AV controller. You'll need a 1/8-inch stereo mini audio cable, which you can purchase from an electronics retailer.

- 1 Connect one end of a stereo mini audio cable to the **AUDIO 2** port, shown below. Connect the other end to the headphone jack on your MP3 player.

Note

Do not connect your MP3 player to the AV controller with a USB cable.



- 2 Select the **AUDIO** option on the remote control, then select **AUD2**. This switches the audio input to your MP3 player.
- 3 Use the controls on your MP3 player to begin playing music.

Listening to a Tape Deck

Make sure your tape deck (or other audio source) is connected to the **AUDIO 1** port on the back of the AV controller, as described in “Connecting Audio Equipment” on page 36.

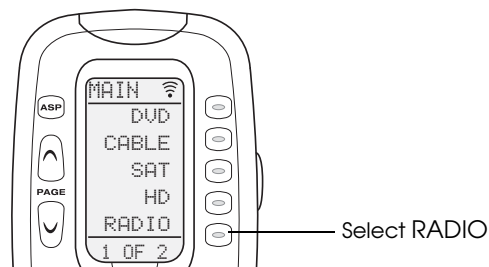
- 1 Select the **AUDIO** option on the remote control, then select **AUD1**. This switches the audio input to your tape deck.
- 2 Use the controls on your tape deck to begin playing music.

Listening to AM/FM Radio

You can use the AV controller to receive AM or FM radio broadcasts. First make sure an antenna is connected, as described in the *Installation Guide*.

Tuning to the Desired Station

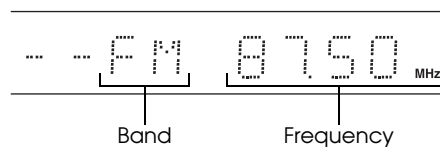
- 1 Select the **RADIO** option on the remote control to activate the radio:



Note

To use the radio, it is not necessary to lower the screen or turn on the projector.

- 2 Select the **BAND** option on the remote control to switch between AM and FM. The display on the AV controller shows the current station:

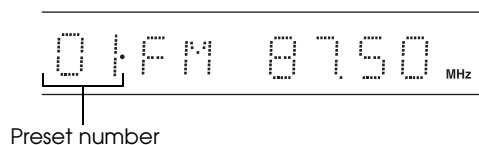


- 3 Select **TUNE+** or **TUNE-** to change the frequency:
 - Press the button momentarily and then release it to change the frequency manually.
 - Or press and hold the button to find the next available station automatically. The tuner searches until a station of sufficient strength has been found, and the word “TUNED” appears on the display. Weak stations are skipped during the auto-tuning process.

Using Radio Station Presets

You can save up to 40 preset stations. Follow these steps to save a station:

- 1 Tune in the desired station, as described in the previous section.
- 2 Select the **SAVE** option in the RADIO menu on the remote control. The preset number flashes on the display:



- 3 Select the desired preset number (1 through 40):
 - Use the numeric keypad to enter the number—for example, to select preset 3, press **0** followed by **3**. To select preset 21, press **2** followed by **1**.
 - Or use the **<<** or **>>** button to select the desired number, then press **SAVE** again.

Note

A preset station is erased from the memory when you store another station in its place.

Once your stations are preset, use either the numeric keypad on the remote control, or the **<<** and **>>** buttons, to quickly access your favorite stations. You can also use the **◀◀** and **▶▶** buttons on the AV controller.

Connecting and Using Other Components

To extend the capabilities of your Ensemble HD system, you can add on a variety of audio and video components. You can connect up to a total of five external video devices to the Ensemble HD system, such as a cable box or satellite receiver. You can also connect an external audio device, such as a CD player or tape deck. If you want to connect your own amplifier or sound system, a two-channel (stereo) analog audio output port is provided.

See these sections:

- “Connecting Video Equipment” on page 32
- “Connecting Audio Equipment” on page 36
- “Setting Up the Remote Control” on page 36
- “Using the Remote Control to Operate Your Equipment” on page 39

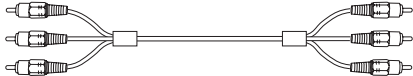
Note

To temporarily connect a personal MP3 player, such as an iPod, use the Audio 2 port located on the front of the AV controller. See page 28.

If desired, you can connect an IR blaster to the IR OUT port to relay signals to your components (such as a cable box or satellite receiver), or use an RF base station. See “Using an RF Base Station” on page 81.

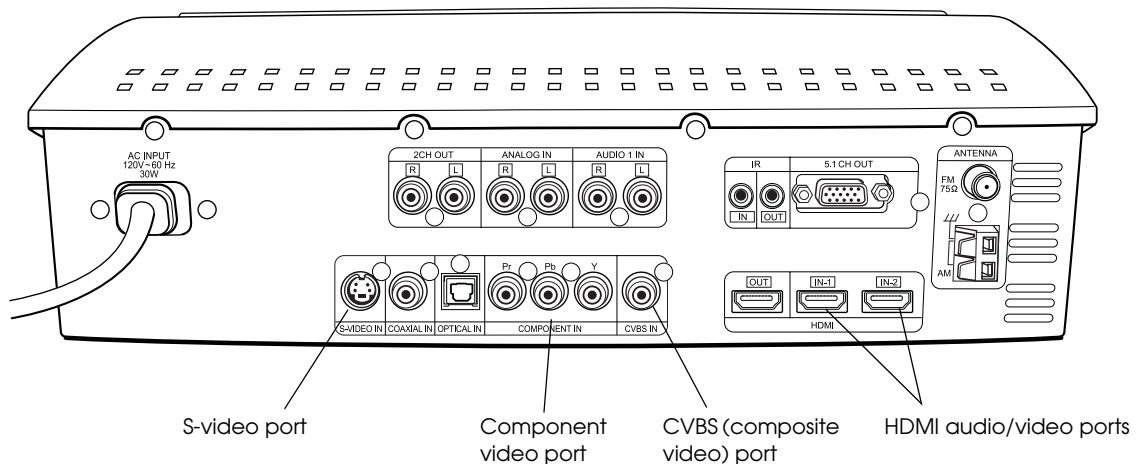
Connecting Video Equipment

You can connect up to five pieces of video equipment at the same time, using any of the commercially available cables shown below:

Port	Cable
HDMI 1 or 2 	HDMI cable 
Component Pr Pb Y 	Component video cable  Note When connecting the cable, match the colors of its connectors to the colors of the ports where you're plugging them in.
S-Video 	S-video cable 
CVBS (composite video) 	Composite video cable (RCA cable) 

Check your video device for the type of output port(s) it has available. For best picture quality, use the HDMI (High-Definition Multimedia Interface) port. If your equipment doesn't support HDMI, use one of the following ports (highest quality listed first): component video, S-video, or composite video (yellow RCA-style connector).

Connect the cable from your video component to any available port on the back of the AV controller, as shown below:



Caution

Avoid connecting or disconnecting any components with your equipment turned on.

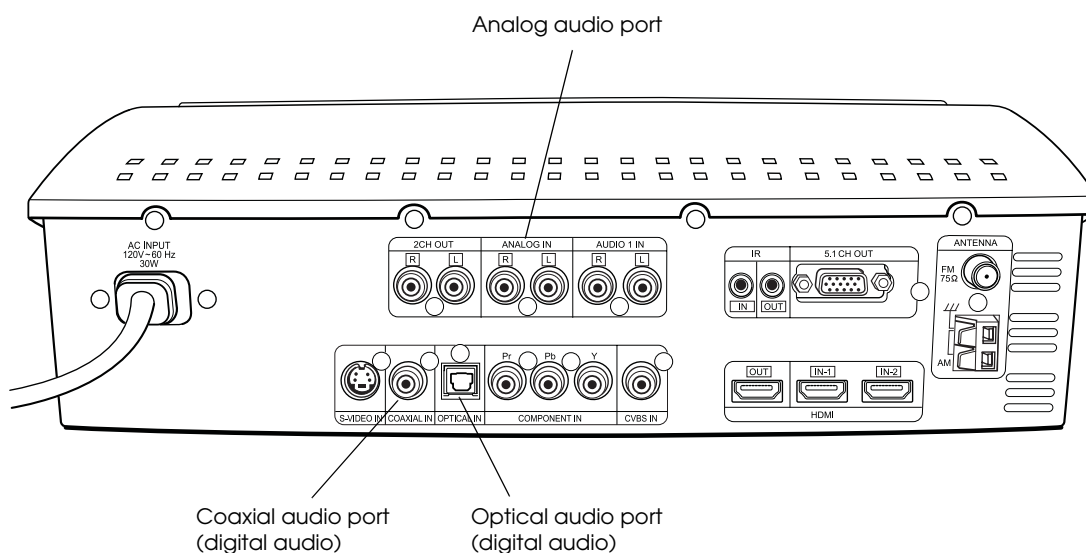
Connecting the Audio Cable for the Video Source

Once you've connected the video cable, you may need to connect an audio cable in order to combine the picture with sound. If you've connected your device using an HDMI cable, the audio signal is already carried by the cable, so you don't have to connect an additional cable. (Make sure HDMI audio is enabled in your component's setup menu.) Otherwise, you'll need to connect an audio cable to one of the ports listed below:

If you've connected to this video port...	...connect an audio cable to one of these ports
HDMI 1 or 2	Coaxial* Optical*
Component	Coaxial Optical Analog
S-Video	Coaxial Optical Analog
CVBS (Composite video)	Coaxial Optical Analog

* Connection not required if your video device supports HDMI audio.

Check your video device for the type of audio output port(s) it has available. For best sound quality, use either the coaxial or optical digital audio port. If your equipment doesn't have digital audio, use an analog stereo output port instead. Connect the audio cable to one of the ports shown below:



Linking Audio and Video Sources

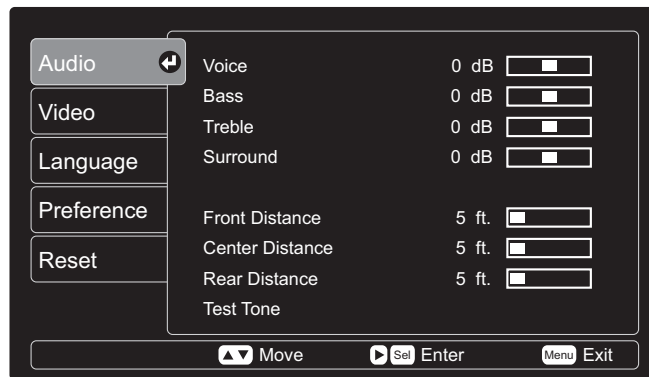
Once you've connected the audio and video cables, you need to tell the Ensemble HD system which audio and video ports to use together. That way, when you select a device with the remote control (VCR, cable, satellite, etc.), the matching audio and video sources will be automatically used. You link the audio and video sources together using the Source Assign screen.

Note

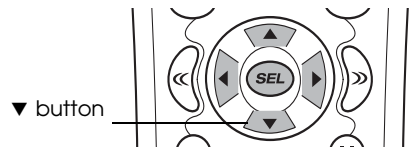
The label you assign to a device (e.g. "CABLE") is what you see on the projection screen when you're selecting sources. It doesn't affect the device names shown on the remote control's LCD screen.

- 1 Make sure the MAIN menu is displayed on the remote control. If necessary, press the **MAIN** button.
- 2 Point the remote control at the screen and press the **MENU** button.

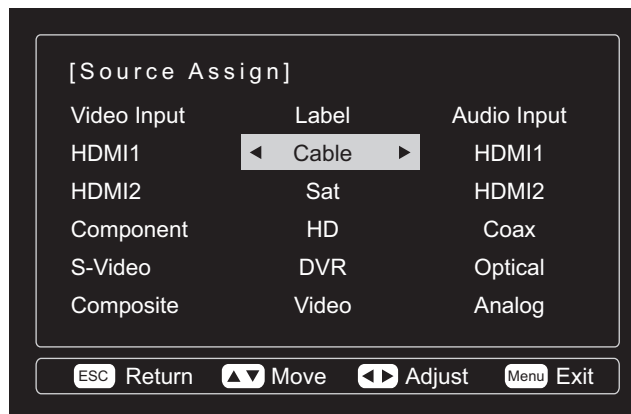
You see the Ensemble HD menu screen:



- 3 Use the ▼ button to highlight **Video**, then press the **SEL** (Select) button.
- 4 Use the ▼ button to highlight **Source Assign**, then press the **SEL** (Select) button.



You see the screen shown below. The video port to which you've connected your video equipment is listed in the left-hand column:



- 5 In the left-hand column (under **Video Input**), locate the name of the port to which you've connected the video cable for your equipment.
- 6 In the middle column of the same row (under **Label**), select the type of device you've connected. If you've connected a device not listed below, select an unused name such as **AUX**. You can select from these labels:

Label (device name)	Description
CABLE	Cable box
SAT	Satellite receiver
HD	High-definition DVD player, such as Blu-ray or HD DVD
DVR	Digital video recorder (for example, TiVo)
AUX	Video game console
VIDEO	Video cassette recorder

Note

You can't select the same label for different inputs. If the label you want is currently selected on another unused input, change the label on the unused input to free up that label.

- 7 In the right-hand column of the same row (under **Audio Input**), select the name of the port to which you've connected the audio cable.

For example: If you connected a cable box to the **HDMI1** port and the cable box supports HDMI audio, select **HDMI1** in the **Audio Input** column. Or if you connected to the S-Video port, select **Coax**, **Optical**, or **Analog** in the **Audio Input** column, depending on the port to which you connected the audio cable.

Note

Make sure you don't select the same audio input for different video inputs.

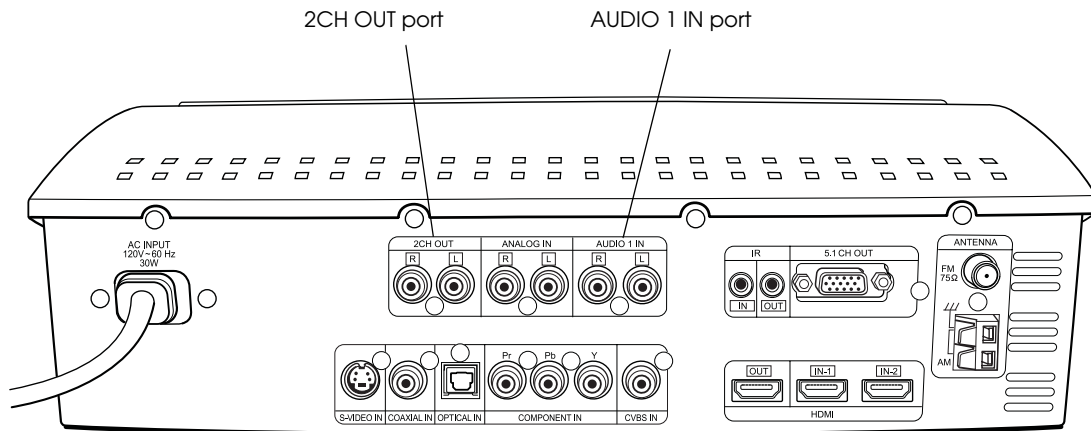
- 8 When you're done changing the settings, press the **MENU** button to exit the menu system.

Note

When you're viewing a particular source, you can press the **OSD** (On-Screen Display) button to display information about the source.

Connecting Audio Equipment

You can connect an external audio device, such as a CD player or tape deck, to the Ensemble HD system. Use an RCA-style stereo cable and connect your equipment's audio output port to the **AUDIO 1** port on the back of the AV controller, as shown below:



To record from the AV controller to your tape deck, connect the audio input port on your tape deck to the **2CH OUT** port, shown above. If you're not using a tape deck, you can use this port to connect the Ensemble HD system to an external amplifier or other home audio system.

Note

The **2CH OUT** port is intended for use as a pass-through port. You cannot use the Ensemble HD system to control the volume of the audio signal transmitted through this port.

Setting Up the Remote Control

After connecting a new component, you can continue to use its original remote control. However, it may be more convenient to set up the Ensemble HD remote control to work with it. That way, you only need to use one remote control.

You enable the Ensemble HD remote control to recognize the new component by entering a setup code as described on page 37. This creates the appropriate commands for your device in one of the remote control menus listed below:

Component	Remote control menu name
Cable box	CABLE
Satellite receiver	SAT
High-definition DVD player	HD
Digital video recorder (for example, TiVo)	DVR
Video game console	AUX
Video cassette recorder	VIDEO

Note

The menus for the listed components remain blank until you enter the setup code for the component. The remote control also has several other menus (DVD, RADIO, AUDIO, and PROJ). These are used to operate the built-in components of the Ensemble HD system.

If you have a type of component not listed above, first enter its setup code as described in the next section. Then see "Customizing the Remote Control Menu" on page 39 for additional instructions.

Entering the Setup Code for Your Component

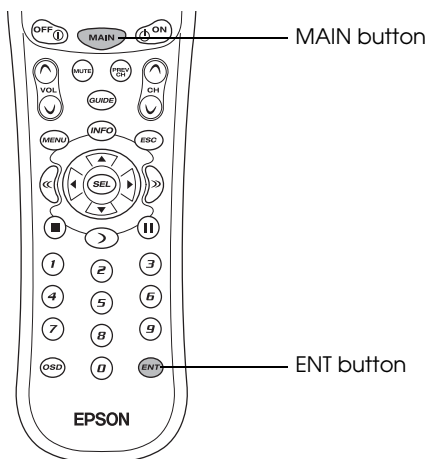
You enable the remote control to recognize the new component by entering a setup code from the tables starting on page 85. You may have to try out several codes before finding the right one for your component. Once the correct code is entered, the remote control will automatically create the appropriate commands in the menu for the new device.

If you can't find the correct code, you can "teach" the remote control how to operate your new component one function at a time, but this may take much longer (see page 72).

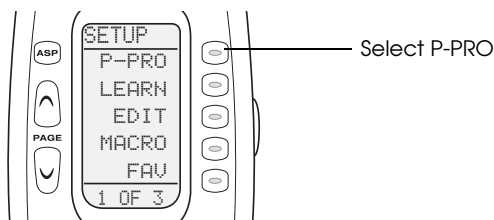
- 1 Turn on the component you want to set up. Each time you enter a code, the remote control will try to turn off your component by sending a power-off command. You will know that you have entered the correct code when the component turns off.
- 2 Press and hold both the **MAIN** and **ENT** (Enter) buttons for approximately three seconds to enter the **SETUP** menu.

Note

You have 30 seconds to perform a step while you are in the **SETUP** menu. If you don't press a button, the remote control returns to the **MAIN** menu.



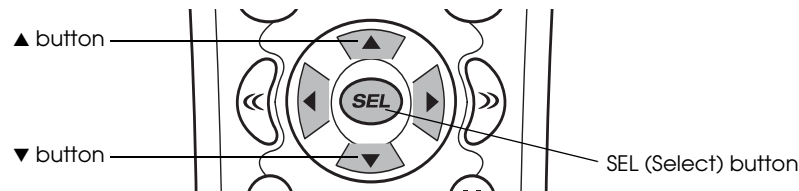
- 3 Select the **P-PRO** (Pre-Programmed) option on the LCD screen.



- 4 Choose the name of the remote control menu that will operate the device. It's important to choose the one whose name matches the device label you selected in the Source Assign screen on page 35. If you don't see your device on the screen, press the **PAGE** ▲ or ▼ (page up or down) button to view more options. Use the ▲ or ▼ button to highlight the desired option so it flashes, then press the **SEL** (Select) button.

Note

Some of the device names (DVD, RADIO, AUDIO, and PROJ) are already used by the Ensemble HD system, and you cannot select them.

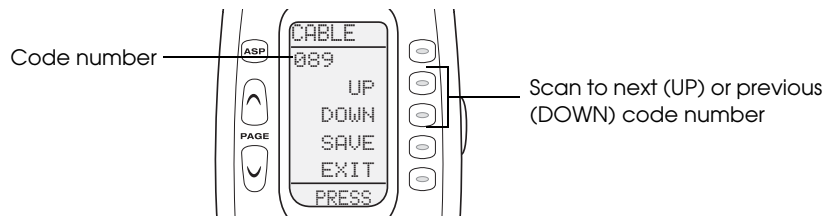


- 5 Use the ▲ or ▼ button to select the type of device you've connected, then press the **SEL** (Select) button. (The names in this step correspond to the categories of devices found in the code tables on page 36).
- 6 Point the remote control at the component, then enter the first three-digit code number from the code tables starting on page 87. The code numbers are listed by categories of devices, then by brand. After you enter a three-digit code, look at the component to see if it has turned off. (You do not have to press **SEL** or **ENT** to enter the code.)

Continue to enter code numbers until the component turns off.

Note

If the component fails to turn off after you have entered all the code numbers listed for your brand, you can scan through the other brands in the table using the UP and DOWN options on the LCD screen (there is a chance that your component was actually manufactured by another brand). However, most of the code tables are large, so it is usually faster to use the learning method described on page 72.



- 7 When the component turns off, save the code number you entered by selecting the **SAVE** option on the LCD screen.
- 8 Press the **MAIN** button twice to exit the **SETUP** menu.
- 9 Test the Ensemble HD remote control to make sure it has all the functions you need for your component. When you select your component's menu, you should see all the functions needed to operate it. If any commands are missing, you can copy them from the component's original remote control (see page 72).

Note

Refer to the manual that came with your component for instructions on using the commands to operate it.

Customizing the Remote Control Menu

For most components that can be connected to the Ensemble HD system, a full set of functions is already programmed into the remote control. These functions work with all the components listed in the tables starting on page 85. If you've connected a different type of component or want to customize the menu for your device, follow the steps below.

Note

There are 10 devices listed in the remote control's MAIN menu. You cannot add new ones, but you can modify an existing one to customize it for your new component.

- 1 First enter the code for your component, as described on page 37. If you successfully enter the correct code, the remote control will automatically create the appropriate commands in the menu for the new device.
- 2 If desired, change the menu name for the new device on the remote control. For example, you might want to change AUX to HDTV. To change the device name, see "Editing Device Names and Commands" on page 75.

Note

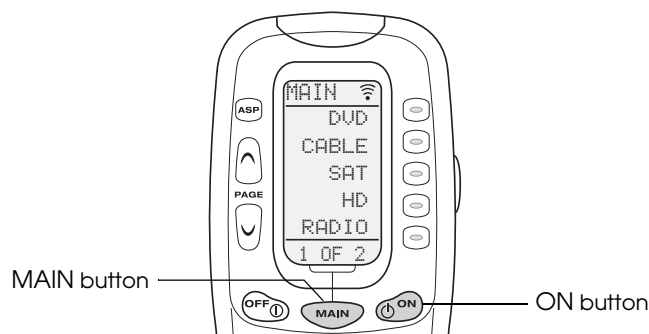
If you change the device name on the remote control, it will not match the name shown on the projection screen when you select your component for viewing.

- 3 If necessary, delete any functions currently displayed in the menu that you don't need. See "Editing Device Names and Commands" on page 75.
- 4 If any functions are missing, copy them from component's original remote control. See "Learning Commands from Another Remote Control" on page 72.

Using the Remote Control to Operate Your Equipment

When you're ready to use your new component, follow these steps to turn it on:

- 1 Make sure the Ensemble HD system is ready for use. If necessary, press the **MAIN** button on the remote control, then press the **ON** button to turn on the system. The screen comes down, and the projector and AV controller turn on.



- 2 Select the component you want to operate on the remote control's LCD screen (for example, **CABLE** or **SAT**).

Your component turns on and the AV controller switches to that component as its source.

Note

When the menu is displayed for a component (not the MAIN menu), the ON and OFF buttons operate that component. When the MAIN menu is displayed, the ON and OFF buttons control the Ensemble HD system.

Refer to the manual that came with your component for instructions on using the commands to operate it.

- 3** When you're done using your component, make sure its menu screen is displayed on the remote control and press the **OFF** button.
- 4** To turn off the Ensemble HD system, press the **MAIN** button to return to the MAIN menu. Then press the **OFF** button to turn off the projector and AV controller, and to raise the screen.

Adjusting the Sound, Picture, and Other Settings

You can use the menu system described in this chapter to adjust the sound, picture, and other settings. See these sections:

- “Using the On-screen Menu System” below
- “Adjusting the Picture” on page 42
- “Adjusting the Sound” on page 46
- “Using Other Features” on page 49
- “Restoring Factory Defaults” on page 51

Using the On-screen Menu System

Follow these guidelines when using the on-screen menu system.

- 1 Make sure the MAIN menu is displayed on the remote control.

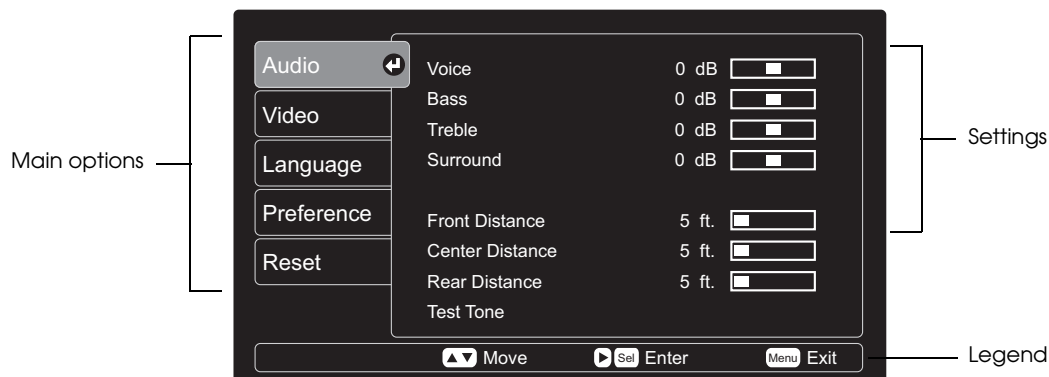
Note

The MAIN menu must be displayed, or you won't be able to open the Ensemble HD menu by pressing the MENU button. If another component's page is displayed instead, its menu screen will open when you press the MENU button.

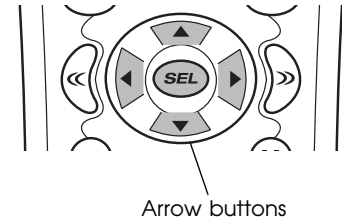
- 2 Point the remote control at the screen and press the MENU button. You see the Ensemble HD menu, as shown below.

Note

When you open the menu, it displays the last screen you used.



- 3 Use the ▲ or ▼ button to highlight the menu you want to use (such as Audio or Video). Then press the SEL (Select) button to open it.
- 4 Use the ▲ or ▼ button to highlight the setting you want to adjust.
- 5 After highlighting the setting you want to adjust, check the legend at the bottom of the screen. It tells you which buttons let you adjust the setting.



For example, if you see a slider bar like this, use the ◀ and ▶ buttons to change the setting.



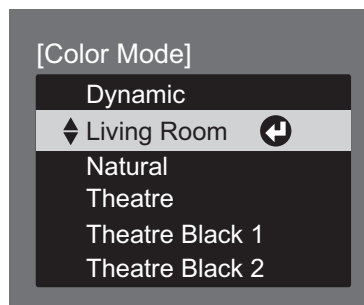
- 6 Press the ESC (Escape) button to return to the previous menu level, or press the MENU button to exit the menu system.

Adjusting the Picture

Adjusting the Color Mode

You can change the projector's Color Mode to automatically adjust brightness, contrast, and color, letting you quickly optimize the image for different lighting conditions. For example, you might select **Living Room** for watching movies in the daytime with the curtains closed, and **Theatre** for watching movies at night.

- 1 Make sure the MAIN menu is displayed on the remote control. If necessary, press the MAIN button.
- 2 Press the PAGE ▼ button to display the second page of components.
- 3 Select the PROJ option on the LCD screen to open the Projector menu.
- 4 Select COL-M (Color Mode). You see a screen like this:



Screen shown for the
PowerLite Home Cinema 1080

- 5 Press the COL-M button repeatedly to change modes. (With the PowerLite Home Cinema 720, use the ▲ or ▼ button to highlight the setting you want to use.)

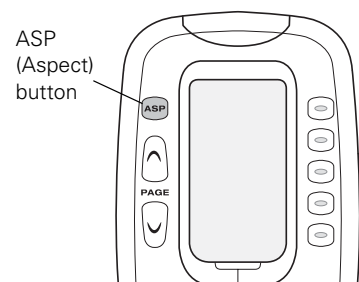
Color Mode	Description
Dynamic	For projecting the brightest picture available
Living Room	For watching movies during the day
Natural	For projecting the most natural, accurate colors
Theatre	For viewing movies in a dark room

Color Mode	Description
Theatre Black 1	For images close to those produced by professionally used broadcast monitors
Theatre Black 2	For black-and-white movies or those with dark scenes
sRGB	For projecting computer images that conform to the sRGB color standard (PowerLife Home Cinema 720 only)

- 6 Press the **SEL** (Select) button to apply the setting.

Adjusting the Aspect Ratio

Some picture sources, such as standard-definition TV broadcasts, are not formatted for high-definition video. To fit such images optimally onto the screen, you can change their shape (or aspect ratio) by pressing the **ASP** (Aspect) button on the remote control. Press the **ASP** button repeatedly to move through the settings. The setting you choose depends on how the original picture source is formatted.



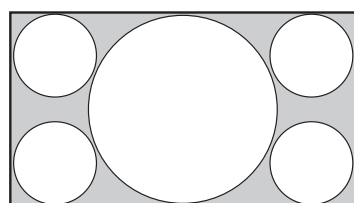
Note

No matter which aspect ratio setting you choose, the original image is automatically “upscaled” (resized) to fit on your Ensemble HD screen.

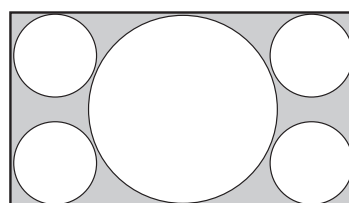
- **Normal 1** (default setting) for widescreen content, such as HD television broadcasts, presented in the 16:9 HDTV aspect ratio.

Note

Movies released in a theatrical widescreen format (such as 1.85:1 or 2.35:1) will display with black bars at the top and bottom. That’s because high-definition TVs and home entertainment systems use the slightly narrower 16:9 (1.78:1) aspect ratio.

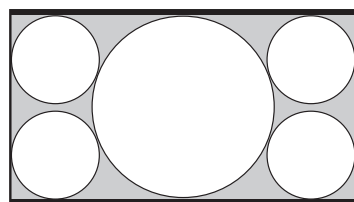


Original 16:9 image

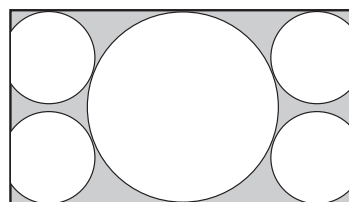


Normal 1 maintains the original aspect ratio

- **Normal 2** for use with DVDs that present movies in their original 1.85:1 aspect ratio. Eliminates narrow black bars at the top and bottom so the image fills the whole screen. Can also be used to improve the appearance of widescreen TV broadcasts that contain “noise” in the overscanned area.

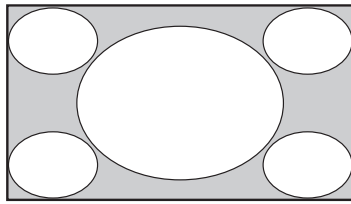


1.85:1 theatrical aspect ratio shown using Normal 1 setting

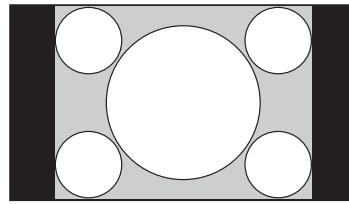


Normal 2 enlarges the image to eliminate the black bars, but cuts off some side content

- 4:3 for standard-definition TV broadcasts, video games, and other 4:3 content.

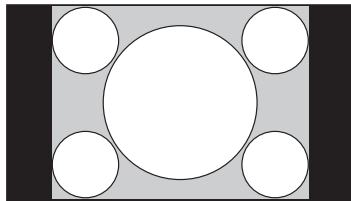


4:3 image shown using Normal 1 setting

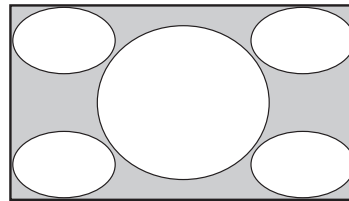


4:3 adds side bars to display the image in its original aspect ratio

- Wide for standard-definition TV broadcasts, video games, and other 4:3 content.

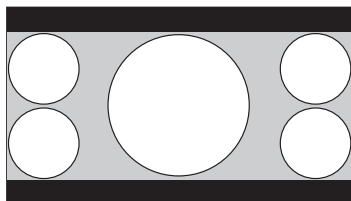


4:3 image shown using 4:3 setting

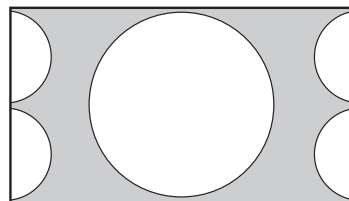


Wide keeps the center of the image close to its original proportions, while stretching the image more at the sides to fill the screen

- Zoom 1 for use with DVDs that present movies in their original 2.35:1 aspect ratio.

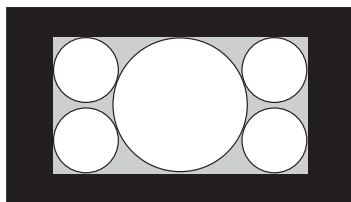


2.35:1 theatrical aspect ratio shown using Normal 1 setting

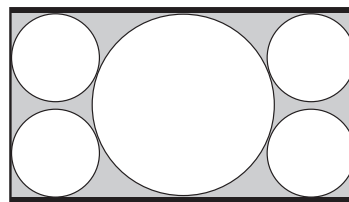


Zoom 1 enlarges the image to eliminate the black bars, but cuts off some side content

- Zoom 2 for standard-definition (4:3) content that has been “letterboxed” to present movies in their original aspect ratio.



Letterboxed 1.85:1 movie image shown using 4:3 setting



Zoom 2 enlarges the image to eliminate the black bars on the sides, but narrow bars remain at the top and bottom

Note

When you're viewing a particular source, you can press the OSD (On-Screen Display) button to display the selected aspect ratio.

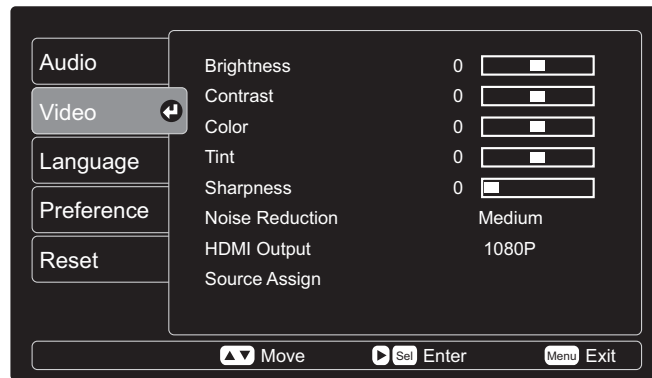
Adjusting the Picture Quality

The settings described below control how the image is processed by the Ensemble HD system's AV controller. Before changing any of these settings, first be sure to select the best Color Mode as described on page 42.

Note

These settings adjust the picture quality for all sources, not for each source independently.

To access the Video menu, make sure the MAIN menu is displayed on the remote control, press the **MENU** button, then select **Video**. You see this screen:

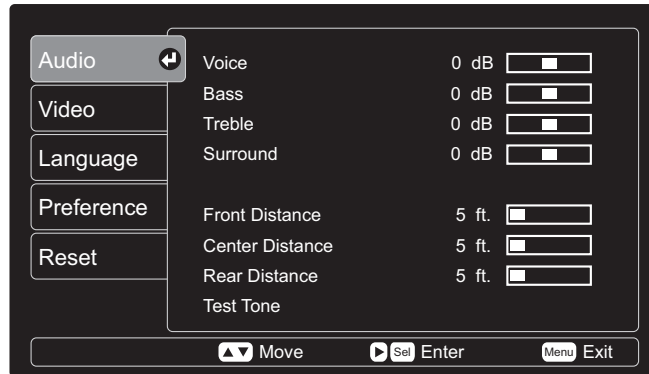


You can adjust the following settings:

- **Brightness**
Adjusts the brightness so it's suitable for your viewing conditions.
- **Contrast**
Adjusts the contrast between the light and dark parts of the image.
- **Color**
Adjusts the color intensity of the image.
- **Tint**
Shifts the color balance between magenta and green.
- **Sharpness**
Use this function to make lines and edges appear more distinct.
- **Noise Reduction**
This function softens the image and reduces noise. Use only if you are receiving a weak signal.
- **HDMI Output**
Sets the output signal to either 720P (for the PowerLite Home Cinema 720) or 1080P (for the PowerLite Home Cinema 1080). Automatically defaults to the projector's resolution.
- **Source Assign**
Lets you combine audio and video sources connected to the AV controller through different ports. See "Linking Audio and Video Sources" on page 34 for details.

Adjusting the Sound

To access the Audio menu, make sure the MAIN menu is displayed on the remote control, press the **Menu** button, then select **Audio**. You see this screen:



You can adjust the following settings:

- **Voice**
Lets you adjust the volume of the center channel, which is mainly used for actors' voices in movies.
- **Bass**
Lets you adjust the volume at the lower end of the sound spectrum. This setting adjusts the bass sound from the left and right front channels and the subwoofer.
- **Treble**
Lets you adjust the volume at the higher end of the sound spectrum.
- **Surround**
Lets you adjust the volume from the rear (surround) speakers.
- **Front Distance**
Adjusts the sound delay from the left and right front speakers. Measure and enter the distance from your main seating location to the left and right speakers on the screen.
- **Center Distance**
Adjusts the sound delay from the front center speakers. Measure and enter the distance from your main viewing location to the speakers in the middle of the screen.
- **Rear Distance**
Adjusts the sound delay from the rear (surround) speakers. Measure and enter the distance from your main seating location to the rear speakers.
- **Test Tone**
Lets you check and adjust the sound level for each speaker. See the next section for details.

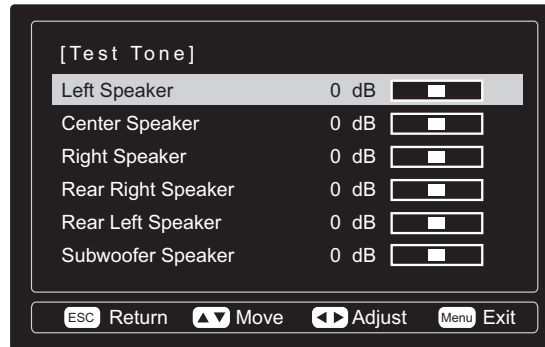
Note

You can also adjust the Voice, Bass, Treble, and Surround settings by selecting the AUDIO menu on the remote control, and then selecting TONE. Press TONE repeatedly to select each setting.

Using Test Tones to Adjust the Sound

Use the test tones to adjust the volume for each speaker independently or to verify that each speaker is working properly. Use a sound-level meter to ensure that the tone emitted from each speaker is 75 dB. If you're not using a meter, make sure all the speakers sound consistent in volume.

- 1 Make sure the MAIN menu is displayed on the remote control, press the **MENU** button, select **Audio**, then select **Test Tone**. You see this screen:



The speakers automatically begin emitting tones, one by one.

- 2 Use a sound-level meter to measure the volume from the usual seating area. Set the meter for C weight and slow response.

Use the **▲** or **▼** button to move the test tone to a different speaker. Press the **▲** button as needed to keep the test tone from advancing to the next speaker.

- 3 Use the **◀** or **▶** button to change the speaker's output. Make sure all the speakers output sound at 75 dB.
- 4 When you're done adjusting the settings, press the **MENU** button to exit the menu system.

Changing the Surround Sound Format

Depending on your audio source, you may be able to select from one or more surround sound formats.

- 1 Make sure the MAIN menu is displayed on the remote control, then select the **AUDIO** option.
- 2 Select the **SURR** (Surround) option to change the audio format. Each time you press **SURR**, the format changes to one of the following settings:
 - **DPLII Movie** or **DPLII Music** (Dolby Pro Logic II) for extracting 5.1-channel sound from recordings made with Dolby Surround technology. If the source is digitally encoded, you see the type of encoding—**Dolby Digital** or **DTS** (Digital Theatre Sound)—displayed on the screen.
 - **STEREO** for digital and analog sources recorded in 2-channel stereo, when you don't want to hear it using any surround sound effects.

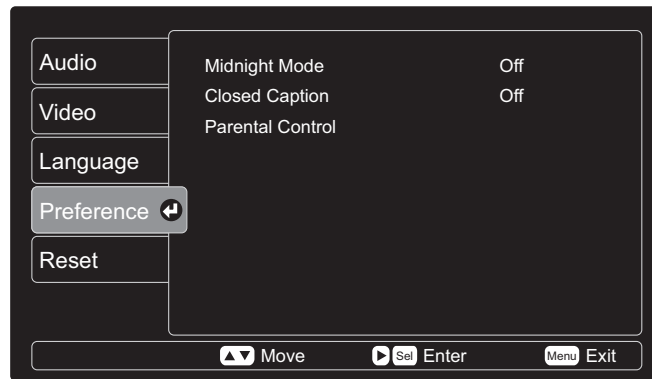
Note

When you're viewing a particular source, you can press the **OSD** (On-Screen Display) button to display the current audio format.

Using Midnight Mode

Midnight Mode adjusts the sound for late-night viewing when you want to avoid disturbing others. The volume is reduced at the bass end with volume highs and lows being compressed to a narrower range.

- 1 To access the Midnight Mode setting, make sure the MAIN menu is displayed on the remote control, press the **Menu** button, then select **Preference**. You see this screen:



- 2 Select **Midnight Mode**, then select **Off**, **Medium**, or **Full**.

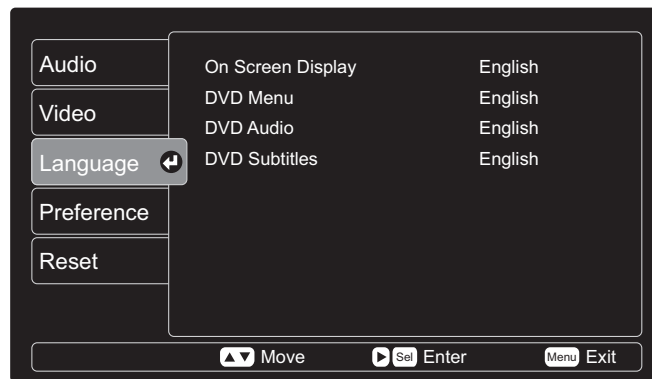
Using Other Features

In addition to its audio and video settings, the on-screen menu system lets you select language options, turn on closed captioning, and use parental controls to restrict access to rated DVDs.

Choosing the Language

You can change the language that the on-screen display and various DVD features appear in. For each option, you can choose from English, French, or Spanish.

To access the Language menu, make sure the MAIN menu is displayed on the remote control, press the **Menu** button, then select **Language**. You see this screen:



You can adjust the following settings:

- **On Screen Display**
Lets you change the language for the menu screens discussed and shown in this chapter.
- **DVD Menu**
Lets you select the default language for the menu you see when you first insert a DVD (the menu that lets you select its contents).
- **DVD Audio**
Lets you select the default language for the audio portion of your DVDs, when you play a DVD that has separate audio tracks in different languages. DVDs with separate audio tracks have a symbol like this to indicate the number of languages: (4) () ()
- **DVD Subtitles**
Lets you select the default language that subtitles appear in, when you turn on the subtitles option for a DVD that has subtitles. DVDs with subtitles have a symbol like this to indicate the number of subtitled languages: (2) () ()

Using Parental Controls

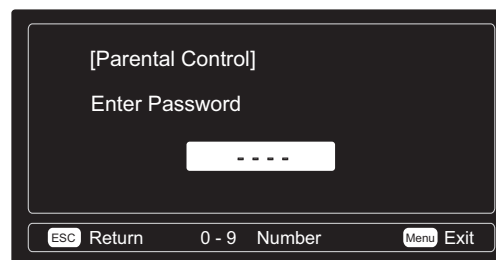
You can control access to rated DVDs to prevent children from viewing unsuitable content. To set up parental controls, you'll need to create a 4-digit numeric password.

Note

The parental controls cannot be used to prevent viewing of unrated DVDs.

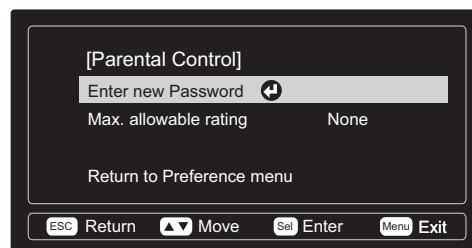
To set up parental controls, follow these steps:

- 1 Make sure the MAIN menu is displayed on the remote control. Press the **Menu** button, select **Preference**, then select **Parental Control**. You see this screen:



- 2 Select the **DVD** option on the remote control. (You must be in DVD mode to use the numeric keypad, as required in step 3.)
- 3 Enter your parental controls password. If this is your first time using the parental controls, enter the default password 1234.

You see this screen:



- 4 If this is your first time using the parental controls, select **Enter new Password**. Use the numeric keypad on the remote control to create a 4-digit numeric password. Confirm the password by re-entering it on the next screen.

Note

Be sure to write down the password and keep it in a safe place. You'll need the password if you want to change the parental control settings in the future.

- 5 Select **Max. allowable rating** and select the highest rating you want to allow for viewing.

Rating	Description
G	General audience
PG	Parental guidance suggested
PG13	Parents strongly cautioned
R	Restricted – No one under 17 admitted without a parent or adult guardian
NC17	No one under 17 admitted
None	No rating selected

- 6 When you're done changing the settings, press the **MENU** button to exit the menu system.

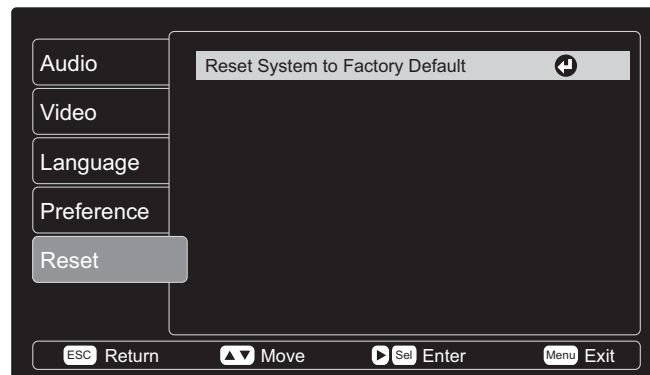
Restoring Factory Defaults

If you customize the picture and sound but don't find your changes satisfactory, you can restore the system to its original settings. You should use this function only if necessary, because it may restore a number of settings you'd like to keep.

Caution

When you restore the settings, the audio, video, language, and source assign settings are returned to their original state.

- 1 Make sure the **MAIN** menu is displayed on the remote control, press the **MENU** button, then select **Reset**. You see this screen:



- 2 Press **Sel** (Select) to return to the factory default settings, or press the **Menu** button to cancel.
- 3 At the confirmation screen, select **Yes**. The AV controller restores its settings and shuts itself down.

Note

You can also restore the remote control to its original settings. See "Restoring Remote Control Factory Defaults" on page 83.

Cleaning and Maintenance

Follow the instructions in this chapter when your Ensemble HD system needs ordinary cleaning, as described below. Routine maintenance is not required. However, you may need to perform the following basic tasks on occasion:

- “Adjusting the Screen Length” on page 54
- “Adjusting the Image Position and Focus” on page 56
- “Checking the Projector Lamp” on page 58
- “Replacing Remote Control Batteries” on page 59

Warning

Never open the cover on the projector or other components. Dangerous electrical voltages can injure you severely. Do not try to service this product yourself, except as specifically explained in this *User's Guide*.

Cleaning

Warning

Before you clean any part of the system, turn the system off and unplug the power cord.

Cleaning the Screen

If the screen gets soiled, clean it using a clean, white, 100% cotton cloth. Dampen the cloth with clean, clear water (do not use detergents). Gently wipe the soiled area in one direction only. Do not use a circular motion. Wipe any moisture from the screen using a dry cotton cloth.

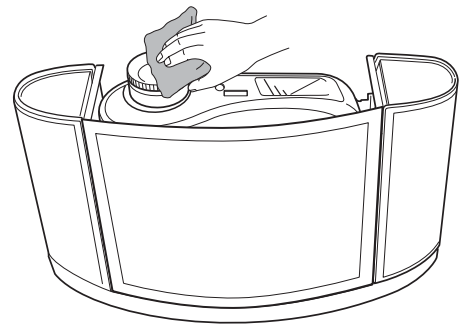
A lint roller or masking tape may be used to remove loose dust or lint.

Cleaning the Projector Lens

Clean the lens if you notice dirt or dust on the surface. To remove dirt or smears, use lens-cleaning tissue. If necessary, moisten a soft cloth with lens cleaner and gently wipe the lens surface.

Caution

Clean the lens gently to avoid changing the focus or misaligning the image with the screen. If this happens, see “Adjusting the Image Position and Focus” on page 56.



Cleaning System Components

You can clean the outside of the system components to remove dust and fingerprints. Before cleaning, turn off the system and unplug the power cord.

- To remove dirt or dust, wipe the component with a soft, dry, lint-free cloth.
- To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent. Then wipe the component and dry it with a dry cloth.

Caution

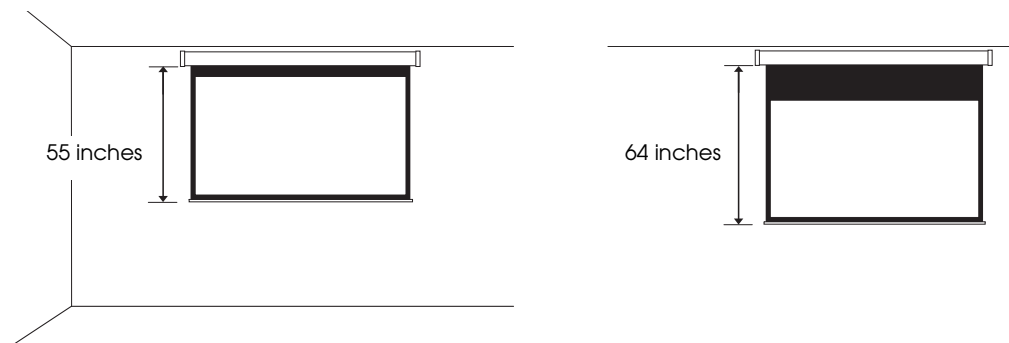
Never use wax, alcohol, benzene, thinner, or other chemical detergents. These can damage components.

Adjusting the Screen Length

You can adjust how far the screen comes down when you open it. The screen is factory-set to come down 55 inches, but you can set it to come down as far as 64 inches, with a 12-inch black drop at the top.

Note

If you change the position of the screen, you'll have to reposition the image. See page 56 for instructions.



- 1 Make sure the MAIN menu is displayed on the remote control. If necessary, press the **MAIN** button.
- 2 Press the **PAGE**  button to display additional components.
- 3 Press the button to the right of **PROJ** to select the projector menu.
- 4 Use the following commands to raise and lower the screen, and to stop it at the desired position:
 - **S-UP** to raise the screen
 - **S-DWN** to lower the screen

When the screen comes to a stop, press **S-DWN** again to lower it beyond the current stop-position. You can bring it down as far as the maximum length set by the adjustment screw described in “Manual Screen Adjustment” on page 55.

- **S-STP** to stop the screen
- 5 Once the screen is positioned where you want it, press **S-SET** to set the screen position.

- 6 Press **S-UP** to raise the screen fully.

Note

You must raise the screen all the way for the new position to take effect.

- 7 Press **S-DWN** re-open the screen. Verify that it comes down and stops at the desired position.

Manual Screen Adjustment

If you weren't able to adjust the screen length precisely enough using the remote control, you can adjust it using the 4-mm Allen wrench that came with your system. This adjustment sets the maximum length that the screen can come down.

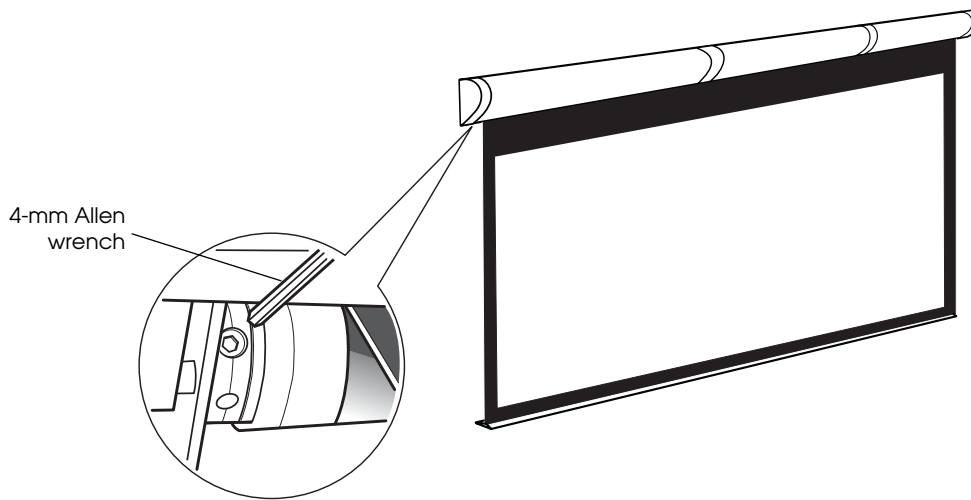
Caution

Do not allow the screen to descend more than 64 inches (with a black drop of more than 12 inches), or the fabric could separate from the roller.

- 1 After adjusting the screen length as described in the previous section, press **S-DWN** on the remote control to lower the screen fully.
- 2 Locate the lower-limit adjustment screw on the left side of the screen roller, inside the screen casing.

Caution

Do not turn the upper-limit adjustment screw, located to the rear of the lower-limit adjustment screw.



- 3 Use a 4-mm Allen wrench to rotate the adjustment screw:

To raise the screen: Turn the screw clockwise.

To lower the screen: Turn the screw counterclockwise.

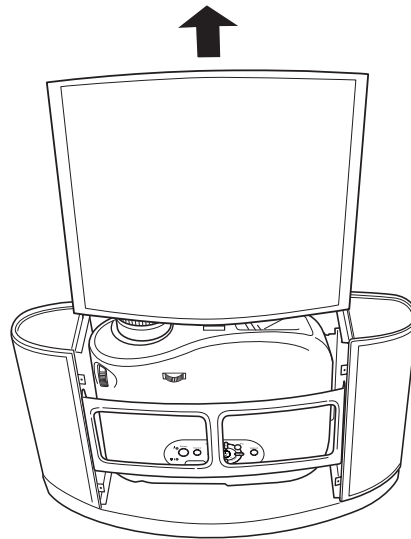
Each turn changes the screen's stop-position by two-thirds of an inch. However, since the screen doesn't move as you adjust it, you'll need to estimate how far to turn the screw. After turning the screw the estimated number of turns, remove the Allen wrench and press **S-UP** on the remote control to raise the screen fully. Then press **S-DWN** to re-open the screen. Verify that it comes down and stops at the desired position.

Adjusting the Image Position and Focus

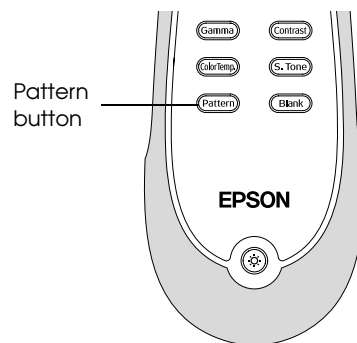
If you adjusted how far the screen comes down (see page 54), you'll need to reposition the image on the screen as described below. You may also need to reposition or refocus the image if you cleaned the lens and accidentally changed it from its original position.

Repositioning the Image

- 1 Remove the cover on the bottom of the projector enclosure to access the lens shift dials on the projector. Slide the cover straight forward, then remove it. (The cover is held in place with clips, which may be tight.)



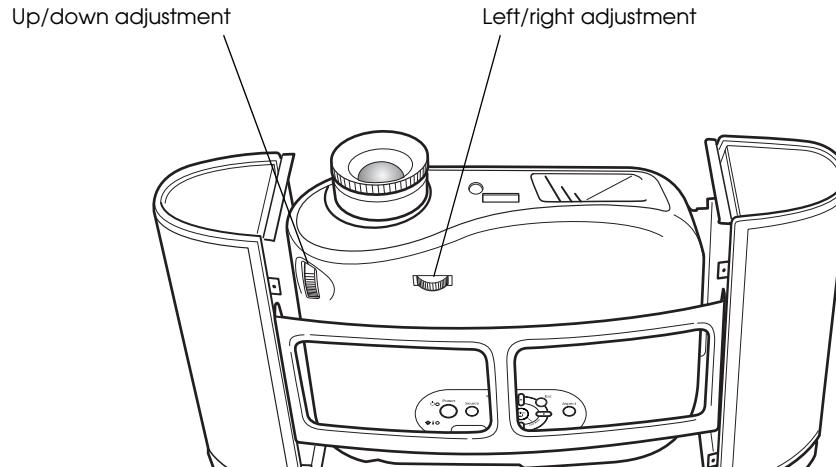
- 2 If desired, you can display a test pattern to help adjust the image position. You'll need to use the remote control that came with the projector (not the Ensemble HD remote). Press the **Pattern** button on the remote control to display the pattern. Press the **Pattern** button again to turn it off.



- 3 Use the horizontal lens shift dial to move the image left or right. Use the vertical lens shift dial to move the image up or down.

Note

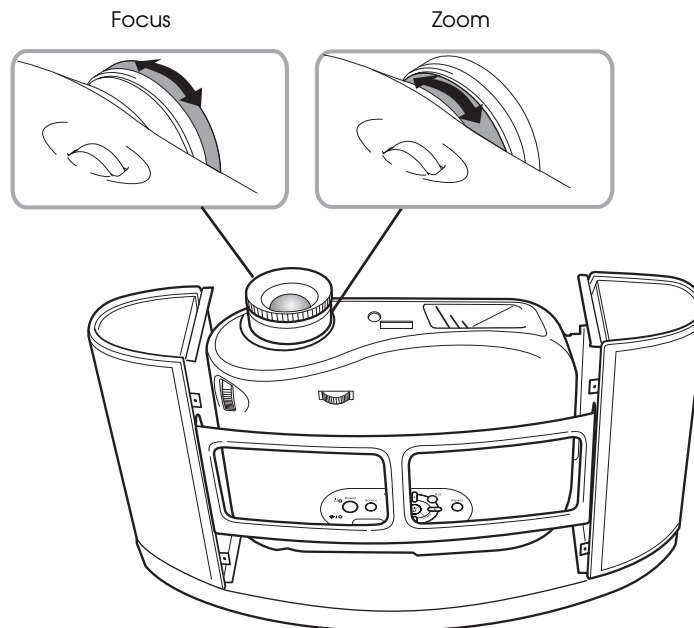
Do not try to move the lens by hand, or you may damage the projector. Always use the lens shift dials to change the image position. If a lens shift dial becomes hard to turn, you cannot adjust the position any further.



- 4 When you're done adjusting the image position, replace the cover on the bottom of the projector enclosure.

Focusing and Resizing the Image

Use the focus ring to sharpen the image, or the zoom ring to resize it.



Checking the Projector Lamp

The projector lamp lasts for up to 3000 hours. You can use the **Info** menu to check how long it's been in use (see below). It's time to replace the lamp when:

- The projected image gets darker or starts to deteriorate.
- The message **Replace the lamp** appears on the screen when you start projecting.
- The projector's warning light flashes red at half-second intervals (see below for details).

Note

Lamp life results will vary depending on mode selected, environmental conditions, and usage. Turn off this product when not in use to prolong the life of the projector.

Checking the Info Menu

If you have access to the remote control that came with the projector (not the Ensemble HD remote), you can use it to check the projector's **Info** menu to find out how long the lamp has been in use. If you don't have the remote control, you'll need to remove the cover on the bottom of the projector enclosure (see page 56) and then use the buttons on the projector's control panel to display the **Info** menu.

- 1 Press the **Menu** button on the projector's remote control or on its control panel.
- 2 Use the menu navigation buttons to open the **Info** menu.
- 3 Check the **Lamp Hours** to determine how long the lamp has been in use.

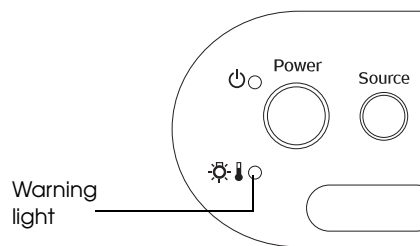
Note

The Lamp Hours shows 0H until you've used the lamp for at least 10 hours.

Checking the Warning Light

If you suspect that the lamp needs to be replaced, check the warning light on the projector's control panel.

- 1 Remove the cover on the bottom of the projector enclosure (see page 56).
- 2 Check the warning light, pictured below.



If the warning light is flashing red at half-second intervals, the lamp needs to be replaced. Contact your dealer or a qualified servicer, or contact Epson for help (see page 69).

Replacing Remote Control Batteries

If the Ensemble HD remote control isn't working correctly, check the following:

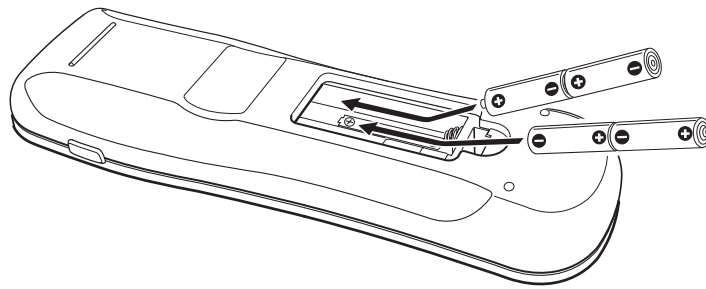
- Aim the remote control at the top of the screen and try operating the screen. If the remote control works only when you aim it at the top of the screen but not elsewhere in the room, you may need to replace the batteries.
- Press the **LIGHT** button on the side of the remote control and verify its screen and buttons light up. (You need to be in a darkened room to see this.) If they don't light up, replace the batteries.
- Check for a **LOW BATTERY** message at the bottom of the remote control's LCD screen.

Follow the steps below to replace the batteries in the remote control.

Note

All user-made settings are stored in non-volatile memory and are preserved when the batteries are taken out.

- 1 Remove the battery compartment cover on the back of the remote control.
- 2 Insert 4 AAA batteries as shown below.



- 3 Replace the cover.

Solving Problems

If you're having a problem with the Ensemble HD system, check for a solution in one of these sections:

- “Basic Operation Problems” below
- “Picture Problems” on page 62
- “Sound Problems” on page 64
- “Problems Using the Screen” on page 65
- “Problems Using the Remote Control” on page 66
- “Problems Using the DVD Player” on page 67
- “Problems Using the Radio” on page 67
- “Problems Using an External Component” on page 68

If you cannot solve the problem on your own, contact Epson for help (see page 69).

Basic Operation Problems

Problem	Solution
The system doesn't turn on.	Make sure the MAIN menu is displayed on the remote control, then press the ON button to turn the system on or the OFF button to turn the system off. The remote control's batteries may need to be replaced. See page 59. Check the blue light at the top of the screen. When the screen is raised, the light remains on. This indicates that the system is receiving power. If the light is not on, make sure your electrical outlet is working and isn't controlled by a wall switch or timer. Check that the power cords on the back of the subwoofer are connected securely. Check the power switches on the back of the subwoofer. Make sure the PWR ON MODE switch is in the AUTO position and the MASTER POWER switch is turned on.
The projector doesn't turn on.	Press the MAIN button on the remote control, then press the ON button. Keep the remote control pointed at the screen for several seconds after you press the button to ensure that the projector turns on. Try to turn on the projector by itself. Open the PROJ menu on the remote control, then press the ON button. The lamp may need to be replaced. See “Checking the Projector Lamp” on page 58.

Problem	Solution
The AV controller doesn't turn on.	Make sure the AV controller is receiving power. When it's in standby mode, the light around the ON/STANDBY button is orange. If the light is off, the unit is not receiving power. Check the power cord to make sure it's securely connected to the subwoofer or a working electrical outlet. Press the ON/STANDBY button to turn on the AV controller. The light around the button turns blue when the unit is on. Try to turn on the AV controller using the remote control. Make sure the MAIN menu is displayed on the remote control (if necessary, press the MAIN button). Then either press the ON button, or select the DVD or RADIO option. If the AV controller does not turn on, replace the remote control's batteries (see page 59). Make sure the control cable is connected to the IR IN port on the back of the AV controller.
The screen can't be raised or lowered.	See "Problems Using the Screen" on page 65.
There is no sound.	See "Sound Problems" on page 64.

Picture Problems

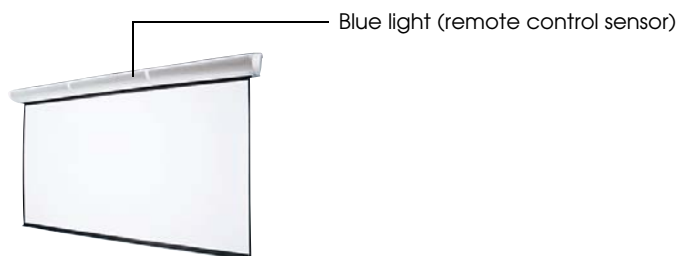
Problem	Solution
You don't see a picture.	Make sure the projector is turned on. Press the MAIN button on the remote control, then press the ON button. Keep the remote control pointed at the screen for several seconds after you press the button to ensure that the projector turns on. If you're sourcing video from an external component, make sure that component is turned on. The lamp may need to be replaced. See "Checking the Projector Lamp" on page 58. Make sure the video cable is connected to the HDMI OUT port on the back of the AV controller. If you've connected an external component, check for loose or disconnected cables on the back of the component and the AV controller. If you've connected an external component, check the Source Assign screen. Make sure the correct label is assigned to the video port to which the component is connected (see page 34).
You see light or dark pixels on the screen.	The projector's display is more than 99.99% accurate. However, some individual pixels (dots) may appear light or dark due to the inherent limitations of LCD manufacturing technology.
You notice smudges or dirt in the image.	You may need to clean the screen (see page 53) or the projector lens (see page 53).
The image sometimes gets scrambled or broken up.	Use a soft, lint-free cloth to clean the disk. Wipe gently in a straight line from the center of the disc toward the outside. If necessary, moisten the cloth with water, mild detergent, or rubbing alcohol. Avoid using abrasives, solvents, or other cleansers.
You see scrolling horizontal bars in the picture ("hum bars") when watching satellite or cable TV, or you hear a buzzing sound.	Connect a ground loop isolator to the satellite or CATV cable close to where it connects to your equipment. You can purchase this module from electronics retailers. The module filters out interference caused by your cable or satellite system's outdoor ground connection. Or you can use a coaxial surge protector. WARNING: Never disconnect the cable's ground connection or disable the grounding pins on your power cords. These exist for the protection of both you and your equipment.

Problem	Solution
The image is too soft or out of focus.	If you cleaned the lens, you may have accidentally changed the position of the focus ring. See "Adjusting the Image Position and Focus" on page 56. Adjust the sharpness of the image using the Sharpness settings (see "Adjusting the Picture" on page 42). Be careful not to over-adjust the sharpness, or you may get banding in some images.
The image isn't positioned correctly on the screen.	If the image isn't at the right height, you may need to adjust how far the screen comes down. See "Adjusting the Screen Length" on page 54. If you cleaned the lens, you may have accidentally changed the lens position or the position of the zoom ring. See "Adjusting the Image Position and Focus" on page 56.
The image is cut off, squeezed in one direction, or stretched out.	Press the ASP (Aspect) button on the remote control to select a different aspect ratio setting. See "Adjusting the Aspect Ratio" on page 43. If you've connected a second DVD player as an external component, make sure it's set to output a widescreen 16:9 image.
There are black bars at the top and bottom of the image.	Press the ASP (Aspect) button on the remote control to select a different aspect ratio setting. See "Adjusting the Aspect Ratio" on page 43. If you're watching a movie released in a theatrical widescreen format (such as 1.85:1 or 2.35:1), you must display it with black bars at the top and bottom if you want to see the whole image. That's because high-definition TVs and home entertainment systems use the slightly narrower 16:9 (1.78:1) aspect ratio.
The image is too dark.	Make sure you've selected the best Color Mode for your viewing environment. See "Adjusting the Color Mode" on page 42. After setting the Color Mode, you may need to fine-tune the brightness and contrast. See "Adjusting the Picture Quality" on page 45. If the projector lamp is old, you may need to replace it. See "Checking the Projector Lamp" on page 58.
The colors don't look right.	Make sure you've selected the best Color Mode for your viewing environment. See "Adjusting the Color Mode" on page 42. After setting the Color Mode, you may need to fine-tune the color settings. See "Adjusting the Picture Quality" on page 45. If you've changed several settings and the picture still doesn't look right, you can return all the settings to their original state. However, this option should be used only if necessary. See "Restoring Factory Defaults" on page 51.

Sound Problems

Problem	Solution
There is no sound.	Check the power switches on the back of the subwoofer. Make sure the PWR ON MODE switch is in the AUTO position and the MASTER POWER switch is turned on. Press the MUTE button on the remote control to make sure the sound wasn't muted or turned off. Unplug any headphones that may be plugged into the AV controller. Try increasing the volume. Depending on your audio source, it's possible that no sound may be heard at the low end of the +dB range. If you've connected an external audio device such as an MP3 player, make sure its volume control is adjusted to allow sound output. If you've connected an external audio device such as an MP3 player or tape deck, be sure to select the correct audio port: Select the AUDIO option on the remote control, then select either AUD1 (for the Audio 1 port in back of the AV controller) or AUD2 (for the Audio 2 port in front). If you've connected an external component, check the Source Assign screen. Make sure the selected Audio Input matches the port to which the audio is connected (see page 34). If you've connected an external video component using an HDMI cable, make sure HDMI audio is enabled in the component's setup menu. If your component doesn't support HDMI audio, you may need to connect a coaxial or optical cable to carry the audio signal (see page 33). Check for loose or disconnected cables on the back of the subwoofer and AV controller.
The high and low parts of the sound spectrum seem weak.	Make sure Midnight Mode isn't turned on. See "Using Midnight Mode" on page 48.
Bass tones aren't loud enough.	Use the Bass setting to increase the bass. See "Adjusting the Sound" on page 46. Use the Test Tones function to increase the output of the subwoofer. See "Using Test Tones to Adjust the Sound" on page 47. If you rearranged your room or moved your subwoofer to a different location, try switching the PHASE control on the back of the subwoofer.

Problems Using the Screen



Problem	Solution
You cannot lower the screen.	Check for a blue light at the top of the screen. The light indicates that the screen is receiving power. If the light is off, make sure the power cords on the back of the subwoofer are connected securely. Select the PROJ (Projector) option on the remote control, then select S-DWN to lower the screen. The screen may be stuck in the closed position. Grasp the weighted bar that hangs from the bottom of the screen and pull it slightly to free it. Then try opening the screen again with the remote control. The screen motor may have overheated if you repeatedly raised and lowered the screen. Let the motor cool for 5 to 10 minutes, then try operating the screen again. Check for problems with the remote control (see page 66).
You cannot raise the screen.	Check that the blue light at the top of the screen flashes when you make a selection with the remote control. The light indicates that the screen is receiving power. If the light does not flash, make sure the power cords on the back of the subwoofer are connected securely. Select the PROJ (Projector) option on the remote control, then select S-UP to raise the screen. The screen motor may have overheated if you repeatedly raised and lowered the screen. Let the motor cool for 5 to 10 minutes, then try operating the screen again. Check for problems with the remote control (see page 66).
The screen comes down too far, or not far enough.	The screen can be adjusted so it comes down anywhere from 55 to 64 inches. If the setting was inadvertently changed, see "Controlling the Screen" on page 15 to reset it.
The image isn't positioned correctly on the screen.	You may need to adjust how far the screen comes down. See "Adjusting the Screen Length" on page 54. If you cleaned the lens, you may have accidentally changed the lens position or the position of the zoom ring. See "Adjusting the Image Position and Focus" on page 56.

Problems Using the Remote Control

Problem	Solution
The system doesn't respond to the remote control.	Make sure you're within about 20 feet of the screen. Point the remote control toward the sensor at the top of the screen. You may need to replace the remote control's batteries (see page 59). If you suspect they are weak, press the LIGHT button on the side of the remote control and verify its screen and buttons light up. (You need to be in a darkened room to see this.) If they don't light up, replace the batteries. Turn off any fluorescent lights. Make sure the screen is not in direct sunlight. Turn off nearby equipment that emits infrared energy, such as a radiant room heater. If you changed any of the remote control's RF settings (see page 81), make sure you didn't disable the remote control's IR LED.
The ON and OFF buttons don't operate the system.	Press the MAIN button first, then press either ON or OFF. Keep the remote control pointed at the screen for several seconds after you press the button to ensure that all the components in the system turn on or off.
When the numeric keypad is used, there is a delay before your selection is transmitted.	After entering digits with the keypad, press the SEL (Select) button to transmit your selection right away. If you don't press SEL, the selection will be transmitted after a brief delay.
The ENT (Enter) button doesn't work with the numeric keypad.	The ENT (Enter) button is meant for use with other components that may require it, such as cable box. Use the SEL (Select) button with the numeric keypad when operating the Ensemble HD system.
You want to return to the main menu of the DVD you're watching to select its contents.	Press the MENU or GUIDE button to display the main menu of a DVD. (The MENU button displays the Ensemble HD setup menu if the MAIN menu is displayed on the remote control. If a different menu is displayed, such as CABLE or SAT, it displays the menu system for that component.)
You want to view information about the selected audio or video source.	Press the OSD (On-Screen Display) button on the remote control.
You want to view chapter information for the DVD you're watching, or check the amount of time remaining.	Press the INFO button on the remote control.
You tried using advanced remote control setup features, and now the remote control doesn't work correctly.	You can restore the remote control's original settings. See "Restoring Remote Control Factory Defaults" on page 83.
The remote control has been lost or damaged.	Contact Epson for help (see page 69).

Problems Using the DVD Player

Problem	Solution
The DVD/CD tray doesn't open or close.	Make sure a flash drive isn't inserted into the USB slot. The flash drive takes precedence over the operation of the DVD player. When a flash drive is inserted, the DVD player cannot be used and a disc cannot be inserted or ejected.
You want to view chapter information for the DVD you're watching, or check the amount of time remaining.	Press the INFO button on the remote control.
The display shows the amount of time remaining instead of the elapsed time for a DVD chapter, CD track, or MP3 audio file.	Press the INFO button on the remote control to select the desired display format, or to turn off the on-screen display.
You want to return to the main menu of the DVD you're watching to select its contents.	Press the MENU or GUIDE button to display the main menu of a DVD. (The MENU button displays the Ensemble HD setup menu if the MAIN menu is displayed on the remote control. If a different menu is displayed, such as CABLE or SAT, it displays the menu system for that component.)

Problems Using the Radio

Problem	Solution
You get poor radio reception.	The antennas included with the AV controller are sufficient to receive strong, local stations. To receive weaker stations, connect an antenna designed for stronger reception, such as an outdoor antenna. See your antenna's manual or the Ensemble HD <i>Installation Guide</i> to make connections for proper grounding protection.
You installed an outdoor antenna and properly grounded it, but you get audio hum or buzz as a result.	Connect a ground loop isolator to the coaxial antenna cable close to where it connects to the AV controller. You can purchase this module from electronics retailers. The module filters out interference caused by the outdoor ground connection. Or you can use a coaxial surge protector. WARNING: Never disconnect the antenna's ground connection or disable the grounding pins on your power cords. These exist for the protection of both you and your equipment.

Problems Using an External Component

Problem	Solution
You've connected a new component, but can't operate it with the remote control.	You have to enter the setup code for your new component. See "Setting Up the Remote Control" on page 36.
You've connected a DVD player and the image is elongated or has prominent black bars at the top and bottom.	Make sure the DVD player's monitor type setting (or similarly named function) is set to output a widescreen 16:9 image.
You've connected a new component, but you're not getting audio and/or video when you select the device with the remote control.	You need to match up the device name with the ports to which you've connected the audio and video. See "Linking Audio and Video Sources" on page 34.
You've connected a type of device not included in the remote control's menu system, such as an HDTV tuner or DVD recorder.	See "Customizing the Remote Control Menu" on page 39.
You want to add a new device to the 10 devices already included in the remote control's menu system.	The remote control supports up to 10 devices, which are already programmed into it. Therefore, you cannot add a new device, but you can modify an existing one to customize it for your new component. See "Customizing the Remote Control Menu" on page 39.
You've changed the name of a device listed on the remote control, but now when you select it, the name shown on the projection screen doesn't match the name shown on the remote control.	You can change the device name on the remote control, but it will no longer match the name shown on the projection screen when you select the device for viewing.

Where To Get Help

Internet Support

Visit Epson's support website at **epson.com/support** and select your product for solutions to common problems. You can download documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

Speak to a Support Representative

To use the Epson PrivateLine® Support service, call (800) 637-7661 and enter the PIN on the Epson PrivateLine Support card that came with your projector. This is the fastest way of speaking to a live representative, and it's free. This service is available 6 AM to 6 PM, Pacific Time, Monday through Friday, for the duration of your warranty period.

You may also speak with a projector support specialist by dialing (562) 276-4394, 6 AM to 6 PM, Pacific Time, Monday through Friday.

Days and hours of support are subject to change without notice. Toll or long distance charges may apply.

Before you call Epson for support, please have the following information ready:

- Product name (Ensemble HD home cinema system)
- Product serial number (located on the back of the weighted bar at the bottom of the screen, on the right side of the screen as viewed from the front)
- Proof of purchase (such as a store receipt) and date of purchase
- Description of the problem

Purchase Supplies and Accessories

You can purchase genuine Epson supplies and accessories from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). Or you can purchase online at **www.EnsembleHD.com** (U.S. sales only).

Using Advanced Remote Control Features

The features described in this chapter let you customize the behavior of the remote control. In most cases, you won't have to perform any of these customizations—for example, if you want to set up the remote control to work with a new component, you only have to enter its setup code as described on page 37. This chapter is mainly for users who want to take full advantage of their remote control's advanced settings.

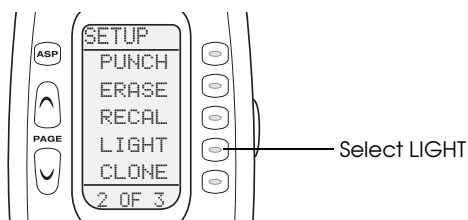
See these sections:

- “Adjusting the LCD Screen” (below)
- “Learning Commands from Another Remote Control” on page 72
- “Advanced Remote Control Setup” on page 75
- “Using an RF Base Station” on page 81
- “Restoring Remote Control Factory Defaults” on page 83

Adjusting the LCD Screen

You can adjust the amount of time the LCD screen's backlight stays on when you press the **LIGHT** button on the side of the remote control. You can also adjust the screen's contrast (see page 72).

- 1 Enter Setup mode by pressing and holding both the **MAIN** and **ENT** buttons for three seconds. The top of the screen displays **SETUP**.
- 2 Press the **PAGE**  (page down) button to view more options.
- 3 Select the **LIGHT** option.

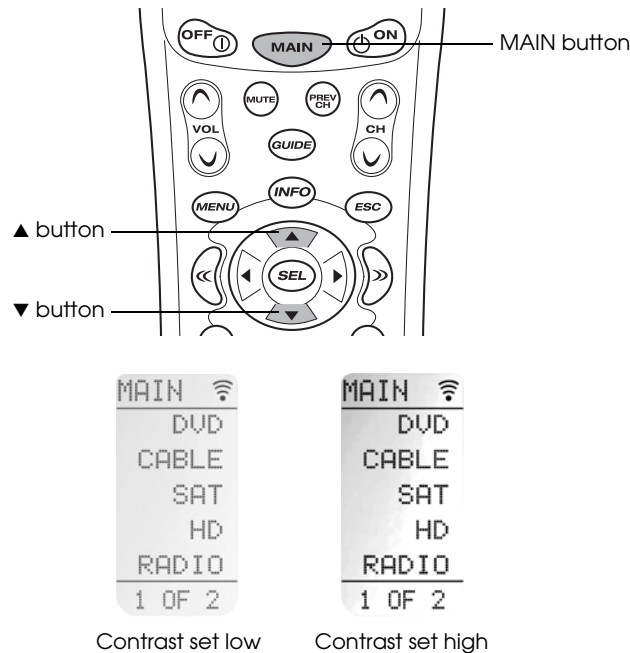


- 4 Do one of the following:
 - Enter the amount of time you would like the light to stay on using the numbered keypad (0-99 seconds).
 - If you'd rather not have the backlight come on at all (this extends battery life), select the **ON** option: **ON** changes to **OFF**.
- 5 Select the **SAVE** option to save your settings.
- 6 Press the **MAIN** button to return to normal operation.

Adjusting the Contrast

You can make the text on the remote control's LCD screen appear darker or lighter by adjusting the contrast.

- To darken the text, press and hold both the **MAIN** and **▲** buttons at the same time.
- To lighten the text, press and hold both the **MAIN** and **▼** buttons at the same time.



Learning Commands from Another Remote Control

The Ensemble HD remote control can learn commands from another remote control, one button at a time. You may need to use this procedure if you weren't successful in programming the remote control with a three-digit device code as described on page 37.

Note

If you have two Ensemble HD remote controls and have customized one of them, you can copy your changes from one to the other. See "Cloning Your Remote Control" on page 74.

- 1 First choose names for any new commands, and add them to the appropriate menu for your device on the Ensemble HD remote control (see "Editing Device Names and Commands" on page 75).
- 2 Line-up the remote controls, head to head, one or two inches apart.

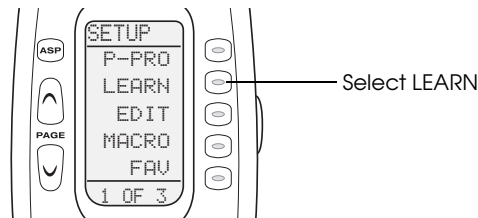


- 3 On the Ensemble HD remote control, press and hold both the **MAIN** and **ENT** buttons for approximately three seconds. The top of the screen displays **SETUP**.

Note

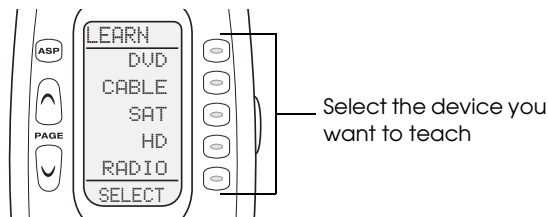
You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 4 Select the **LEARN** option.



The top of the screen changes to **LEARN** and the screen lists several devices.

- 5 Select the device you would like to teach a command to by pressing the button to its right. If you don't see the device you want, press the **PAGE**  or  (page up or down) button to view more options.



- 6 On the Ensemble HD remote control, press any button you want to teach a command to. It can be either a physical button on the remote control or a command displayed on the menu screen.

Note

If you don't see a command on the screen for the function you want to teach, press the **PAGE**  or  button to display more options. You can also add or edit text for a new command (see "Editing Device Names and Commands" on page 75). The only buttons you can't teach are the **PAGE**, **MAIN**, and **ASP** buttons.

Once you press a button, the top of the screen changes from **LEARN** to **READY**:



- 7 Press and hold the button for the corresponding function on your old remote control until the screen changes to either GOOD or FAILED (failed).



If GOOD appears at the top of the screen, you were successful. Continue by pressing the next button you want to teach. Repeat steps 6 and 7 until you have programmed all the buttons you want.

If FAILED appears, try to teach the same button again by repeating steps 6 and 7. If you continue having difficulties, try the following:

- Move to another room. Plasma TVs, sunlight, and halogen or quartz lighting can interfere with the learning process.
- Although the old remote control seems to work fine, its batteries may be old. Use fresh batteries.
- Vary the distance between the remote controls gradually. Try 1/4 inch, 1 inch, 2 inches, and so on, up to 4 feet.
- Repeatedly press the button on the old remote control instead of pressing and holding it during the learning process.

- 8 Once you've finished, press the MAIN button to return to normal operation.

Cloning Your Remote Control

If you have two Ensemble HD remote controls and have customized one of them, you can copy your changes from one to the other.

- 1 On each remote control, press and hold both the MAIN and ENT buttons for approximately three seconds. The top of the screen displays SETUP.

Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 2 Select the CLONE option.
- 3 Line up the remote controls, head to head, one or two inches apart.



- 4 On the remote control you want to modify, select RECV (Receive). On the remote control whose settings you want to keep, select SEND.
- 5 Select START on each remote control to begin cloning.

Note

Cloning can take several minutes to complete. You see GOOD displayed when the process is finished.

- 6 Once cloning is finished, press the MAIN button to return to normal operation.

Advanced Remote Control Setup

You can change the behavior of your remote control by editing device names (menu screen titles), editing command names, creating macros, adding or hiding menu pages, and setting up “punch through” commands (rarely used). See these sections:

- “Editing Device Names and Commands” below
- “Setting Up Macros” on page 77
- “Adding or Hiding Pages” on page 78
- “Erasing Learned Buttons and Macros” on page 79
- “Using Remote Control Punch-Through” on page 80

Editing Device Names and Commands

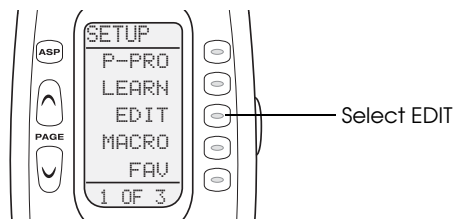
Each type of device (DVD, CABLE, etc.) has its own menu with commands listed on multiple pages. You can customize the name of the device (which is also the name of the menu) or any command listed in the menu. If you are adding a new command from another remote control (see page 72) or creating a macro (see page 77), you’ll first need to add the command name to a blank space in the menu, as described below. If there isn’t a space already, you’ll need to add a blank page (see “Adding or Hiding Pages” on page 78).

- 1 Press and hold both the **MAIN** and **ENT** buttons for approximately three seconds. The top of the screen displays **SETUP**.

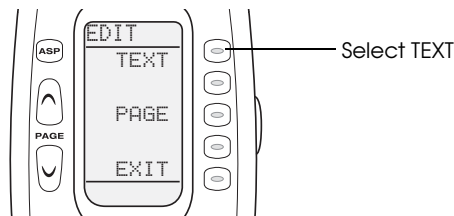
Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 2 Select the **EDIT** option.



The top of the screen changes to **EDIT**:

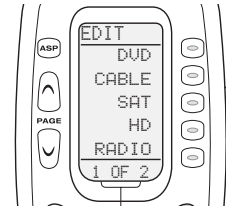


- 3 Select the **TEXT** option.

Note

The **PAGE** option is for hiding or adding pages. See “Adding or Hiding Pages” on page 78.

The top of screen displays EDIT, as shown at right, and you see a list of devices (DVD, CABLE, SAT, etc.).



4 Do one of the following:

- To edit an existing command, select the device that has the command in its menu that you want to edit, then select the command. If necessary, press the **PAGE** button to display the second page of devices.

Note

If you can't open a device menu, continue pressing **PAGE** until the top of the screen displays EDIT and you see the device name you want.

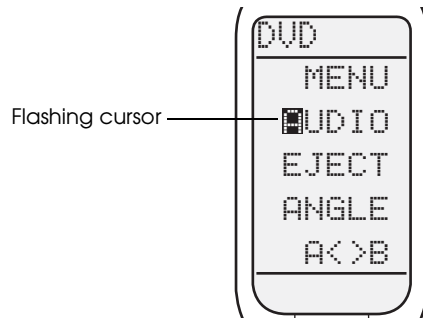
- To add a command to a blank row, first select the device that has the blank row in its menu that you want to edit, as described above. Then press the **PAGE** button until the last page of commands is displayed with the blank row where you want to add text. Press the button to the right of that row.

Note

If there are no blank rows, you can add a new blank page as described in "Adding or Hiding Pages" on page 78.

- To edit a device name, press the **PAGE** button until the top of the screen displays MAIN and you see the page that has the name of the device you want to edit, then select the device.

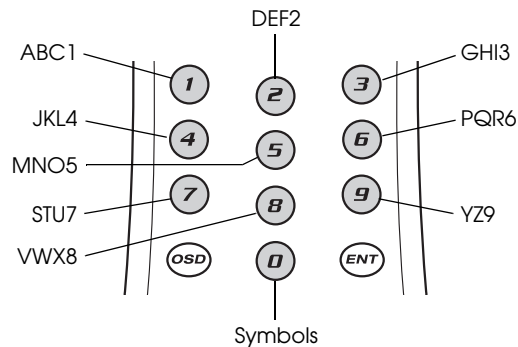
The cursor flashes at the first character point in the line of text:



5 Use the or button to change the cursor position.

To delete a character, press . To delete all characters, press .

Use the numeric keypad to enter characters in the same way as you send text-messages with many cell phones. Each time you press a button, it selects a different character represented by that button, as shown below:



- 6 When you have finished editing the line of text, press the button to its right. You see **SAVED** displayed at the bottom of the screen.
- 7 To edit any other commands for the same device, select the command and repeat steps 5 and 6.
- 8 When you've finished making edits, press the **MAIN** button several times to return to normal operation.

Setting Up Macros

A macro lets you perform several operations in sequence automatically. For example, when you press the **ON** button to turn on the Ensemble HD system, the remote control turns on the projector, turns on the AV controller, and lowers the screen—all with one press of a button.

If you find there are other operations you sometimes perform together—for example, turning on your cable box and DVR—you can create a macro to perform the operations automatically. You store the macro by saving it as a menu option for a particular device (for example, you could create a macro called **SYS ON** in the **DVR** menu).

Note

You cannot use any of the physical buttons on the remote control to store a macro.

- 1 Choose a name for the new macro and add it to the desired menu (see “Editing Device Names and Commands” on page 75).
- 2 Press and hold both the **MAIN** and **ENT** buttons for approximately three seconds. The top of the screen displays **SETUP**.

Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 3 Select the **MACRO** option.
- 4 Navigate through the menu pages to the newly created menu item you want to turn into a macro, and press the button to its right.

The bottom of the screen flashes **Step 0**.

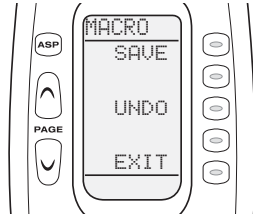
- 5 Press the sequence of buttons for all the steps you want the macro to perform. Each time you press a button, the bottom of the screen flashes **Step 1**, **Step 2**, etc. Your macro can hold up to 190 steps.

Note

You can program delays into the macro by pressing the **||** pause button. Each time you press the **||** pause button, it adds a one-half second delay.

- 6 When you're done entering all the steps of the macro, press the **LIGHT** button on the side of the remote control.

You see this screen:



- 7 Select one of the following:

- **SAVE** to save the macro
- **UNDO** to erase the last step of the macro and continue programming it
- **EXIT** to erase the whole macro and return to step 4 on page 77

- 8 When you've finished, press the **MAIN** button several times to return to normal operation.

Adding or Hiding Pages

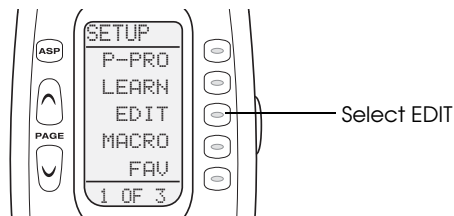
Each device menu (DVD, CABLE, etc.) has eight pages or screens. The commands that are visible in each menu occupy only a few of the pages, with the remaining pages being hidden. If necessary, you can add new pages (to make them visible), or hide existing ones. You may also need to add a page in order to create space for a new command or macro.

- 1 Press and hold both the **MAIN** and **ENT** buttons for approximately three seconds. The top of the screen displays **SETUP**.

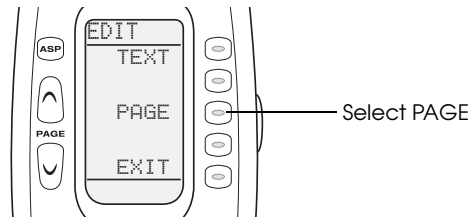
Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 2 Select the **EDIT** option.



The top of the screen changes to EDIT:

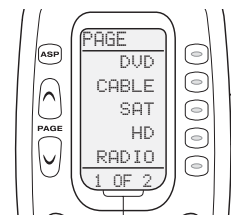


- 3 Select the **PAGE** option.

Note

The TEXT option is for editing device names and commands. See "Editing Device Names and Commands" on page 75.

The top of screen displays PAGE, as shown at right, and you see a list of devices (DVD, CABLE, SAT, etc.).



- 4 Navigate to the page you want to add or hide.

If a page is already visible, it says **HIDE?** at the top of the screen. If a page is currently hidden, it says **ADD?**.

- 5 Press the **LIGHT** button on the side of the remote control to add or hide the page.

Repeat steps 4 and 5 to add or hide additional pages.

- 6 When you've finished, press the **MAIN** button several times to return to normal operation.

Erasing Learned Buttons and Macros

You can erase any commands that were learned from another remote control or any macros you created.

Note

This operation does not erase the text used for commands or macros, just the functions that they perform. If you want to delete the text itself, see "Editing Device Names and Commands" on page 75.

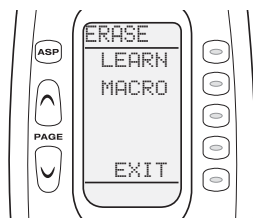
- 1 Press and hold both the **MAIN** and **ENT** buttons for approximately three seconds. The top of the screen displays **SETUP**.

Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 2 Select the **ERASE** option.

You see this screen:



3 Select one of the following:

- **LEARN** to erase commands that were learned from another remote control
- **MACRO** to erase macros you created

4 At the next screen, select one of the following:

- **ALL** to erase all learned commands or macros. When you select this option, you see **SURE?** displayed on the screen. Select **SURE?** to erase the settings, or select **EXIT** to cancel.
- **DEVIC** to erase all commands or macros for a specific device. When you select this option, you see a list of devices (DVD, CABLE, SAT, etc.). Select the device whose settings you want to erase. You see **ERASED!** displayed at the bottom of the screen.

Caution

Be careful to select the correct device. If you select the wrong one, you won't have the option to cancel.

- **KEY** to erase a single command or macro. When you select this option, you see a list of devices (DVD, CABLE, SAT, etc.). Select the device that has the command or macro in its menu that you want to erase, then select the command or macro. You see **ERASED!** displayed at the bottom of the screen.

Caution

Be careful to select the correct command or macro. If you select the wrong one, you won't have the option to cancel.

5 Press the **MAIN** button several times to return to normal operation.

Using Remote Control Punch-Through

The Ensemble HD remote control is pre-programmed to let you operate various devices, each from its own menu. For example, if you've connected a high-definition DVD player, you can operate it from the HD menu; or you can operate a satellite receiver from the SAT menu. However, you may want to be able to operate your high-definition DVD player from the MAIN menu so you can also access the Ensemble HD setup menu, and adjust the picture or sound at the same time, for example. To do this, you create a "punch through." This lets you use the remote control to operate certain functions of one device, while you have the menu screen open for another device. (You can punch commands through any menu, not just the MAIN menu.)

Note

The volume control is automatically punched through to your home theater system from every device.

Follow these steps to set up a punch-through:

- 1** Enter Setup mode by pressing and holding both the **MAIN** and **ENT** buttons for three seconds. The top of the screen displays **SETUP**.

Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 2** Select the **PUNCH** option. (You may have to press **PAGE**  or  to see it.)

- 3 Select the button group that contains the type of function you want to punch through:
 - **CH:** Channel up/down and number buttons (0–9 and Enter)
 - **PLAY:** Play, pause, stop, rewind, and fast-forward
 - **VOD (Video On Demand):** Guide, Menu, Info, ESC, arrow buttons (▲ ▼ ◀ ▶), and Select
 - **POWER:** Power on and off

The bottom of the screen displays PUNCH TO.

- 4 Select the menu from which you want to be able to operate the device that's not normally controlled by that menu, or press the **OFF** button to select the **MAIN** menu. For example, to operate your satellite receiver from the **MAIN** menu, press the **OFF** button.

The bottom of the screen displays PUNCH FROM.

- 5 Select the device that you want to be able to operate—for example, **SAT** for a satellite receiver.

The bottom of the screen displays SAVED.

- 6 Repeat steps 3 through 5 to set up additional punch-throughs, or press the **MAIN** button twice to return to normal operation.

Using an RF Base Station

You can use the Ensemble HD remote control to operate components such as a cable box or satellite receiver, even if they're hidden inside a cabinet. You can do this by using an optional RF base station (radio-frequency receiver) to relay the remote control's commands. An RF base station lets you send commands to components that are not located near the AV controller, or are located inside a closed space such as a cabinet. The base station receives RF commands from the remote control and relays them to each of your components, wherever they're located. (This is possible because the Ensemble HD remote control emits both IR and RF signals.)

Note

The AV controller included with your system can be used in a closed space even without a base station. That's because the sensor that receives commands for it is located at the top of the screen.

The Ensemble HD remote control is compatible with RF base stations made by Universal Remote Control (www.UniversalRemote.com). Both addressable and non-addressable versions are available. Addressable ones let you avoid interference from other RF remote controls being used nearby. See the next section for instructions on setting up an addressable base station. (If you have a non-addressable base station, you probably won't need to change any of the RF settings.)

Setting Up an Addressable Base Station

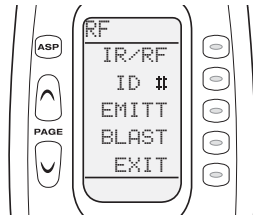
If you have an addressable base station, there are several RF settings you may need to adjust on the remote control. At a minimum, you should set the ID # to match the one assigned to your base station.

- 1 Press and hold both the **MAIN** and **ENT** buttons for approximately three seconds. The top of the screen displays **SETUP**.

Note

You have 30 seconds to complete each step. After that, the remote control returns to normal operation.

- 2** Select the RF option. You see this screen:



- 3** Select the setting you want to adjust:

- **IR/RF** to cause the remote control to emit IR signals only, RF signals only, or IR and RF signals at the same time. If a component receives IR signals directly from the remote control and from the base station at the same time, the signals may interfere with each other, so you should set the remote control to use only RF signals with that component. (You can select the component in step 4.)
- **ID #** to select the receiver ID # of your addressable base station. Select an address other than 0 (zero) to prevent interference from other RF remote controls in the vicinity.
- **EMITT** to route commands through specific emitters plugged into the base station. (The ID # must be set to a non-zero address to select this option.)
- **BLAST** to turn the base station's IR blaster on or off. You may want to turn it off if the blaster's high-power LED saturates or overpowers the sensors of some AV components. (The ID # must be set to a non-zero address to select this option.)

- 4** On the next screen, select whether you want the setting to apply to the menu options for all 10 devices listed on the MAIN menu of the remote control (select **ALL**) or just the ones for a specific device (select **DEVIC**).

If you select **DEVIC** (Device), the next screen lets you select the device you want the setting to apply to. Select from **DVD**, **CABLE**, **SAT**, etc. (Use the **PAGE**  or  button to display all the devices.)

- 5** On the next screen, finish adjusting the selected setting:

- For the IR/RF setting, select **IR&RF**, **IR**, or **RF**.
- For the ID # setting, select **UP** or **DOWN** to change the ID #.
- For the EMITT setting, select **ALL** to route the signal through all the emitters. Or select **UP** or **DOWN** to change the Line Output number (this refers to the jack where you plugged in the emitter for a specific component).
- For the BLAST setting, select **ON** or **OFF**.

- 6** Select **SAVE** to save your setting.

- 7** Select **EXIT** to return to the SETUP menu, or press the **MAIN** button twice to return to normal operation.

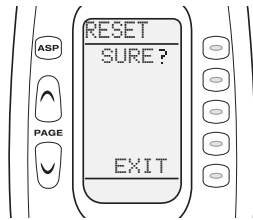
Restoring Remote Control Factory Defaults

If you customize the remote control and find that it no longer works correctly, you can restore it to its original settings.

Caution

This procedure erases all commands and macros you taught the remote control, and any other customized changes you may have made.

- 1 To restore the remote control, press and hold the **MAIN** and **■** stop buttons for about 10 seconds. During this time, you see **WARNING** flash at the bottom of the screen.
- 2 When you see the **RESET** screen shown below, release the buttons.



- 3 Select **SURE?** to erase all customized settings, or select **EXIT** to cancel.

After you restore the remote control, it re-initializes and you see the **MAIN** menu after several seconds.

Remote Control Codes

The program codes provided in this chapter let you set up your remote control to work with devices made by other companies. See “Connecting and Using Other Components” on page 31 for instructions on using such devices with your system.

If you need to recall the code number you selected for a device, see “Recalling Programmed Codes” on page 86.

Using the Code Tables

The code tables in this chapter (starting on page 87) let you quickly program your remote control to work with different brands of equipment you may own. See “Setting Up the Remote Control” on page 36 for instructions.

The codes are divided into categories (TV, cable, DVD, etc.). Each category may include different types of components. For example, the DVD category includes TV/DVD combo units. In each section, the code numbers are listed by brand (Sony, Panasonic, etc.). Some brands have more than one code for you to try.

Type of device	Included devices	See this page...
TV	TVs, plasma screens, projectors, and monitors	page 87
Cable	Cable TV descramblers and tuners WebTVs	page 93
DVD	DVD players TV/DVD combos TV/DVD/VCR combos DVD/VCR combos DVD recorders Laser disc players	page 96
VCR	VCRs TV/VCR combos	page 99
Audio	Amps, preamps, A/V receivers XM radios and tuners	page 102
Satellite	Satellite receivers	page 108
CD	CD players and changers	page 111
DVR	Digital video recorders (TiVo, Replay, etc.)	page 114
Auxiliary	Custom installation products Media PC controls Game systems iPod controls Tape decks Lighting systems	page 114

Recalling Programmed Codes

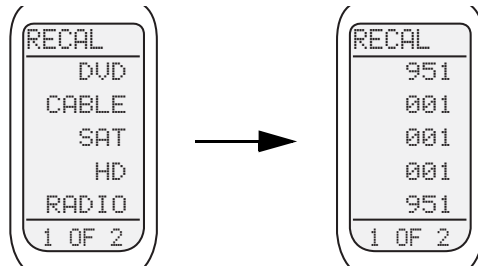
In case you need to recall the code numbers you used to program the remote control, you can display them by following these steps:

- 1 Enter Setup mode by pressing and holding both the **MAIN** and **ENT** buttons for three seconds. The top of the screen displays **SETUP**.
- 2 Press the **PAGE** ▼ (page down) button to view more options.
- 3 Select the **RECAL** (Recall) option.

The screen alternately displays the device names, followed by their code numbers, as shown below.

Tip

Pay attention to the page numbers at the bottom of the screen. Page 1 codes go with page 1 devices, and page 2 codes with page 2 devices.



- 4 Press the **MAIN** button to return to normal operation.

Code Tables

TV components

Brand	Code number
ADMIRAL	072 081 161 160
ADVENT	247 388
AKAI	197 146 248 404 405 458 473 474 475
AMARK	112 143
AMPRO	073 167 157 183
AMSTRAD	052
ANAM	043 054 056 080 112 131
AOC	197 004 112 058
APEX DIGITAL	006 310
ASTAR	477
AUDIOVOX	076 103 273 388 452 453 454 503
AVENTURA	401
AVION	441
BARCO	233
BENQ	423 443
BLAUPUNKT	088
BOXLIGHT	266
BROKSONIC	238
CAIRN	201
CANDLE	197 002 003 004
CAPEHART	058
CETRONIC	043
CITIZEN	197 002 003 004 043 101 103 143
CLASSIC	043
CONCERTO	004
CONTEC	043 050 051
CORONADO	143
CRAIG	043 054
CROWN	043 143
CURTIS MATHES	197 101 004 143
CXC	043
DAEWOO	004 016 043 044 076 077 103 114 125 127 143 269 369

TV components (continued)

Brand	Code number
DAYTRON	004 143
DELL	319 320 321
DIBOSS	329
DIGITAL PROJECTION	437
DREAMVISION	235 312 313 314 343 344 345
DURABRAND	401
DWIN	177 257
DYNASTY	043
DYNATECH	062
DYNEX	399
EIKI	187
ELECTROGRAPH	470
ELECTROHOME	024 076 143 196
EMERSON	197 004 005 028 043 047 048 050 051 076 077 096 143 151 153 154 155 401
EPSON	324
ESA	323
FISHER	007 057
FUJITSU	198 223 219 246 299 346 396 410
FUNAI	028 043 052 401
FUTURETECH	043
GATEWAY	242 268
GE	197 008 009 034 056 073 074 130 144 155 160 161 165 004 091 157 183
GEM	391
GOLDSTAR	004 102 106 112 113 116 119 127 143
GRUNDIG	220 083
HAIER	501 502
HALL MARK	004
HANNSPREE	381
HISENSE	419 442
HITACHI	004 009 010 011 012 023 075 143 158 163 166 072 221 250 311 361 380 411 460
HP	316 327 378 379 421
HUMAX	518

TV components (continued)

Brand	Code number
HYUNDAI	337 338
ILO	472
INFINITY	164
INFOCUS	230 330 331 332 333 252 409 449
INSIGNIA	350 354 399 400 401 402 403 454 457
JBL	164
JCPENNEY	197 004 008 009 024 030 065 101 143 156 160
JENSEN	013
JVC	034 038 070 083 145 199 210 240 241 244 245 317 318 406 420 471
KEC	043
KENWOOD	197 070
KLEGG	466
KLOSS	002 059
KMC	143
KNOLL SYSTEMS	230 409
KONKA	457
KTV	197 043 143 154
LG	243 284 283 286 363 364 365 366 522 523
LODGENET	072
LOEWE	222 223 224 164 322 422
LOGIK	072
LUXMAN	004
LXI	166 007 015 052 081 160 164
MAGNAVOX	197 003 004 022 059 060 061 063 064 127 160 164 094 226 264 390 467
MARANTZ	197 164 184 397 281
MATSUI	164
MAXENT	242
MEMOREX	007 072 004
METZ	088
MGA	197 004 024 028 042
MINERVA	088
MINTEK	362
MISAKAI	401

TV components (continued)

Brand	Code number
MITSUBISHI	004 024 028 040 042 109 124 146 191 225 237 267 300 348 450 519 525
MTC	197 004 062 101
NAD	015 025
NEC	132 130 134 197 040 016 024 056 019 236 237 262 272 281 428 448
NIKEI	043
NORCENT	367
NUVISION	351
OLEVIA	432 376 394 504
ONKING	043
ONWA	043
OPTOMA	249 265 270 360
OPTONICA	019 081
ORION	096
PANASONIC	034 056 080 092 164 208 261 296 295 297 298 359 377 383 429 430 524
PHILCO	197 003 024 056 059 060 063 064 164 004
PHILIPS	197 003 004 005 038 059 093 164 127 184 206 259 260 264 274 294 424 425 431
PHILIPS/MAGNAVOX	239 260 294
PIONEER	197 018 023 025 116 135 190 203 204 209 234 237 334 335 336 374 385 393 397 438 447 459 520
PLANAR	513
POLAROID	352 353 354 355 356 357 358 388 493 494 505 506 507 508
PORTLAND	077 004 143
PROJECTION DESIGN	417 418
PROSCAN	144 160 161 165 167
PROTON	004 058 131 143 171 173 193 392
PROTRON	392 398 498 499 500
PROVIEW	493
QUASAR	034 056 092
RADIO SHACK	019 043 143 004 127
RCA	160 161 165 065 156 144 197 004 023 024 056 074 152 333
REALISTIC	007 019 043 047
REVOLUTION HD	466
ROCTEC	186

TV components (continued)

Brand	Code number															
RUNCO	168	169	178	179	180	181	182	183	073	157	340	341	342	395	414	415
	416	476														
SAMPO	197	058	004	202												
SAMSUNG	004	050	089	101	105	127	143	160	211	228	229	253	254	258	275	309
	375	384	427	434	461	462	463	464	515	516	517					
SANSUI	399															
SANYO	166	007	020	053	057	082	187	266	347	509	510	511	512			
SCEPTRE	276															
SCOTT	004	028	043	048	143	497										
SEARS	015	030	004	007	028	057	143	094	160	082	165	166				
SELECO	189	200	212	227	205											
SHARP	170	081	019	028	029	014	004	022	143	175	214	251	263	306	307	308
	468	496														326
SHERWOOD	349															
SIEMENS	088															
SIGNATURE	072															
SIM2	205	200	313													
SOLE	231	232														
SONY	070	085	139	147	126	185	194	207	213	277	278	279	412	413	444	445
	491	492	521													446
SOUNDESIGN	004	028	003	043												
SPECTRICON	112															
SPECTRONIQ	499	500														
SSS	004	043														
SUPERSCAN	401															
SUPRE MACY	002															
SVA	328															
SYLVANIA	197	003	059	060	063	064	164	044	160	127	052	401	469	514		
SYMPHONIC	052	401														
SYNTAX OLEVIA	376	394	432	504												
TANDY	081															
TATUNG	056	062														
TCL	426															
TECHNICS	034	080														
TECHWOOD	004															

TV components (continued)

Brand	Code number
TEKNIKA	002 003 004 024 028 043 072 101 143
TELEFUNKEN	037 046 086 087
TELERENT	072
TERA	172
THOMPSON	215
TMK	004
TOSHIBA	007 015 030 040 062 101 138 216 287 290 291 230 288 289 292 293 315 237 325 382 455 456 465 479 480
TOTEVISION	143
UNIVERSAL	008 009
VIDEO CONCEPTS	146
VIDIKRON	174 184 188 192 340 342 395 406 414 415 439 440
VIDTECH	004
VIEWSONIC	271 242 389 390 433
VIORE	472
VITO	478
VIZIO	386 387
WARDS	004 008 009 019 028 060 061 063 064 072 074 143 164 034
WESTINGHOUSE	076 077 280 435 436 495
WINBOOK	339
YAMAHA	197 004 370 371 372 373 407 408 451
YORK	004
YUPITERU	043
ZENITH	072 073 095 103 157 183 217 243 282 283 284 285 286 363
ZONDA	112

Cable components

Brand	Code numbers
ABC	103 003 004 039 042 046 053
ADELPHIA	043 074 110 111
ADVANCED NEWHOUSE	043
ALTRIO	043
AMERICAST	099
ANTRONIX	014
ARCHER	005 007 014
ARMSTRONG	074
AT&T BROADBAND	074
ATLANTIC BROADBAND	043 074
BELL SOUTH	099
BLUE RIDGE	043 074
BRESNAN	074
BUCKEYE COMM	074
CABLEVISION	108 043 074
CENTURION	092
CENTURY	007
CHARTER	043 074 110 111
CITIZEN	007
COGECO	074
COMBANO	080 081
COMCAST	110 043 074
COMSAT	074
COMTRONICS	030
COX DIGITAL CABLE	043 074
DIGICABLE	101
EAGLE	020 030 040
EASTERN	057 066
ELECTRICORD	032
GEMINI	008 054
GE	072
GENERAL INSTRUMENT	103 002 003 004 008 009 010 069 074 104

Cable components (continued)

Brand	Code numbers
GNC	099
GOLDEN CHANNEL	030
HAMLIN	049 050 055
HITACHI	103 055
INSIGHT	074
JERROLD	103 002 003 004 008 009 010 069 074 104 109 110
M-NET	037
MAGNAVOX	010 012 064 079 094
MASSILLON	074
MEDIA ONE	107
MEDICOM	074
MEMOREX	052
MOTOROLA	103 002 003 004 008 009 010 069 074 104 109 110 111 112 120
MOVIE TIME	028 032
MOXI	111
NCTC	074
NOVAPLEX	092
NSC	015 028 038 071
OAK	031 037 053
PACE	043 074
PANASONIC	044 047
PARAGON	052
PHILIPS	006 012 013 020 085
PIONEER	103 034 051 063 076 105 043
PRUCER	059
PTS	011 071 074
PULSAR	052
QUEST	112
RCA	047
RCN	074
RECOTON	098
REGAL	049 050
REGENCY	057

Cable components (continued)

Brand	Code numbers
RODGERS	043
SAMSUNG	030 123
SCIENTIFIC ATLANTA	003 011 041 042 043 045 046 123
SEREN	043
SERVICE ELECTRIC	074
SHAW	074
SIGECOM	043
SIGNAL	030
SIGNATURE	103
SL MARX	030
SONY	108 096
SPRUCER	047 078
STARCOM	002 004 008 009
STARGATE	008 030 097 104
SUSQUEHANNA	043 074
TADIRAN	030
TIMELESS	030
TIME WARNER	043 074
TOCOM	039 040 056
TOSHIBA	052
UNIKA	007 014
UNITED CABLE	004 053
UNIVERSAL	005 007 014 032 035
VIDEOTRON	043
VIEWSTAR	012 015 018 086 087 088 089
VERIZON	121 110
WIDE OPEN WEST	043 099
ZENITH	052 060 093 100

DVD components

Brand	Code numbers
ADCOM	157
AIWA	136 146
ALPINE	098
AKAI	281
APEX DIGITAL	087 111 112 115 116 236
ARCAM	122
AUDIOVOX	284
CALIFORNIA AUDIO	021 124
CAMBRIDGE AUDIO	215 216
CARY AUDIO DESIGN	174
CINEVISION	219
CLASSE	167
COBY	258 260
CYBERHOME	133 227 271 313
DAEWOO	132
DENON	007 080 138 173 181 287 288 206 207
DURABRAND	143
EMERSON	143
ESA	143
GATEWAY	175
GE	026 027
GRADIENTE	021
GRUNDIG	083
GO VIDEO	137 091 217 218 219 220 221 222 224
HARMAN KARDON	084 140
HITACHI	101
FUNAI	143 120
ILO	268
INSIGNIA	143 292 297
INTEGRA	142 180 192 280
JVC	012 168 203 212 257 302
KENWOOD	123 151 152 013

DVD components (continued)

Brand	Code numbers
KISS	179 279
KLH	135
KRELL	104
LECSON	126
LEXICON	148 305
LG	303 057 074
LINN	306
LITEON	264 265
MAGNAVOX	096 066 143 282 032 121
MALATA	267
MARANTZ	083 105 201 202 315 211
MCINTOSH	125
MEMOREX	163
MERIDIAN	153
MINTEK	111 282
MITSUBISHI	017 121
MYRYAD	134 102
NAIM	226
NAD	088 155 278 121
NAKAMICHI	103
ONKYO	076 035 180 274 280 314
OPPO	266 311
PANASONIC	285 021 042 138 139 144 150 198 199 205 259 289 113
PARASOUND	245
PHILIPS	066 095 105 166 176 276 277 032
PIONEER	304 023 092 099 107 108 131 162 172 178 213 232 272 283 106 117 121
POLAROID	233 234 235 236 237 284 295 296 297
PRIMARE	193 194
PROCEED	086
PROSCAN	026 027
RCA	026 027 273 290 307 002
RJTECH	269
ROTEL	204

DVD components (continued)

Brand	Code numbers
SAMSUNG	275 056 070 119 137 159 165 170 200 254 301
SANSUI	154
SANYO	147 075
SENSORY SCIENCE	217 222 223
SHARP	094 294 152 013
SHERWOOD	245 246 247 248 249 250
SONY	286 033 118 126 145 160 189 191 238 239 240 241 242 243 251 252 253 261 262 263 053 110
SPECTRONIQ	310
SUPERSCAN	143
SV2000	143
SYLVANIA	143
SYMPHONIC	143
TAG MCLAREN	156
TEAC	270
THETA DIGITAL	023 032
THOMPSON	026 027
THULE	177
TOSHIBA	273 035 034 128 141 130 164 183 184 185 186 187 188 214 300 152 106
TRUTECH	293
VENTURER	149
VINC	161 308
YAMAHA	042 089 066 158 166 195 196 197 043 129
ZENITH	057 074 091 182

VCR components

Brand	Code numbers
AIWA	034 161 169
AKAI	016 043 046 124 125 142 146
AMPRO	072
ANAM	031
AUDIO DYNAMICS	012 023 039 043
BROOKSONIC	035 037 129
CANON	028 031
CAPEHART	108
CRAIG	003 040 135
CURTIS MATHES	031 041
DAEWOO	005 007 010 065 108 110 111 112 116 117 119
DAYTRON	108
DBX	012 023 039 043
DYNATECH	034 053
ELECTROHOME	059
EMERSON	005 006 017 025 027 029 031 034 035 036 037 046 101 116 129 131 138 153 162
FISHER	003 008 009 010
FUNAI	034
GE	031 063 072 107 109 144 147
GO VIDEO	132 136 155 040 115
GOLDSTAR	012 013 020 101 106 114 123
HARMAN KARDON	012 045
HITACHI	004 018 026 034 043 063 137 150 160 013
INSTANTREPLAY	031
JCL	031
JCPENNEY	012 013 015 040 066 101
JENSEN	043
JVC	012 031 043 048 050 055 060 130 150 152 166 172 173
KENWOOD	014 048 034 047
LG	171
LLOYD	034
LXI	003 009 017 034 106

VCR components (continued)

Brand	Code numbers
MAGIN	040
MAGNAVOX	031 034 041 067 068 156 164
MARANTZ	012 031 067 069 156
MARTA	101
MATSUI	027 030
MEI	031
MEMOREX	003 010 014 031 034 053 072 101 102 134 139
MGA	045 046 059
MINOLTA	013 020
mitsubishi	013 020 045 046 051 059 061 142 151 049 168 174 175
MTC	034 040
MULTITECH	024 034
NEC	012 023 039 043 048
NORDMENDE	043
OPTONICA	053 054
ORION	025
PANASONIC	066 070 083 133 140 145 157 163 074 167
PENTAX	013 020 031 063
PHILCO	031 034 067
PHILIPS	031 034 054 067 071 101 156
PILOT	101
PIONEER	013 021 048
PORTLAND	108
PULSAR	072
QUARTZ	002 014
QUASAR	066 145 075
RADIO SHACK	123
RCA	013 020 041 107 109 140 144 145 147 034 040 158
REALISTIC	003 008 010 014 031 034 040 053 054 101
RICO	058
RUNCO	148
SALORA	014
SAMSUNG	032 040 066 102 104 107 109 112 113 115 120 122 125

VCR components (continued)

Brand	Code numbers
SANSUI	022 043 048 135
SANYO	003 007 010 014 134 102
SCOTT	017 037 112 129 131
SEARS	003 008 009 010 013 014 081 101 017 073 112
SHARP	031 054 149 159 165
SHINTOM	024
SIGNATURE	034
SONY	003 031 052 056 057 058 076 077 078 149 154
SOUNDESIGN	034
STS	013
SYLVANIA	031 034 059 067
SYMPHONIC	034
TANDY	010 034
TATUNG	039 043
TEAC	034 039 043
TECHNICS	031 070
TEKNIKA	019 031 034 101
THOMAS	034
TMK	006
TOSHIBA	008 013 042 047 059 079 082 112 131 081 170
TOTEVISION	040 101
UNITECH	040
VECTOR RESEARCH	012
VICTOR	048
VIDEO CONCEPTS	012 034 046 141
VIDEOSONIC	040
WARDS	003 013 017 024 031 034 040 053 054 131
YAMAHA	012 034 039 043
ZENITH	034 048 056 058 072 080 101 171

Audio components

Brand	Code numbers
ADC	007
ADCOM	082 092 225 161 269 355 356 366
AIWA	018 104 170 202 203 213 211 188
AKAI	138 189
AMC	038 125 126 127 128 258 281 282
AMEND	054
AMX	196
ANGSTROM	142
ANTEX ELECTRONICS	588
ANTHEM	335 336 337 338 339
ARAGON	157 158 042 043 081 112
ARCAM	141 325 418 419 504 590 591 592 593 594
ARCAM	504 591
ATLANTIC TECHNOLOGY	342
AUDIO ACCESS	147
AUDIO ALCHEMY	135
AUDIO CONTROL	448 572 623
AUDIO DESIGN ASSOCIATES	194 221 011
AUDIO EASE	021 196 207
AUDIO FILE	071
AUDIO MATRIX	167
AUDIO RESEARCH	399 406 423 424 425 426
AUDIO SOURCE	273
AUDIO TECHNICA	134
B & K	096 097 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315
BOSE	409 460 548 070 170 224 347 459 532
BOSE	170 532
BOSTON ACOUSTICS	447
BRIX	555
BRYSTON	023 551
CAMBRIDGE AUDIO	522 523 524 525 630 683
CARVER	006 027 028 061 071 201 214 226 180 185 022 029 077 284

Audio components (continued)

Brand	Code numbers
CARY AUDIO DESIGN	443 519
CASIO	076
CHIRO	140
CINEMA SOUND	034 134
CITATION	148 272
CLARION	026
CLASSE	410 411 484 537 538
COLORADO VNET	539
COMPAQ	382
CURTIS MATHES	076
DELPHI	415 515
DENON	340 400 422 002 034 109 215 229 230 027 037 234 259 316 330 341 349 350 396 401 402 444 564 568 569 601 602 649 650 651 677 678 679 680 681
EAD	099 098 466 467
EIGER	149
ELAN	468 472 469 470 471 057 290 371 473 474 475 476 477 481 482 483 508 509
ESCIENT	368 381 393 451 452 453 454
FANFARE	352
FISHER	047 214 180 182 297
FLEXTRONICS	378
FOSGATE	062 231 342
GE	056 260
GOLDSTAR	008
HAFLER	174
HALCRO	596 597
HARMAN KARDON	318 231 233 254 153 154 118 121 227 277 317 329 365
HITACHI	020
IMERGE	371
INKEL	197
INSIGNIA	589
INTEGRA	486 441 570 354 371 438 439 440 442 487 586
JAMO	398
JBL	263 621 622

Audio components (continued)

Brand	Code numbers																
JCPENNEY	076 216																
JEFF ROWLAND	206																
JENSEN	058																
JVC	279	240	163	191	114	266	291	389	390								
KEF	530																
KENWOOD	412	320	026	066	145	146	181	190	197	192	182	199	151	222	180	005	
	280	319	367	374	413	414	420	517	550								
KENWOOD	550																
KINERGETICS	220	140															
KLH	331																
KLIPSCH	157	158	042	043	081	112											
KNOLL	531																
KOSS	216	573															
KRELL	376	384	500	624	150	072	321	497	498	499	672	673	674				
KYOCERA	007																
LEXICON	357	360	120	235	236	237	324	358	359	361	362	363	364				
LINN	124	377															
LUXMAN	137	139	052	165	115	004	009										
LXI	076	056															
MAGNAVOX	086	164	152	208													
MARANTZ	488	492	385	006	028	031	040	063	185	186	251	265	119	289	326	327	328
	371	489	490	491	493	563											
MARK LEVINSON	322																
MCINTOSH	238	286	496														
MCS	076																
MERIDIAN	100	012	013	628													
MICRO LAB	394																
MICROMEGA	119																
MITSUBISHI	242	243	204														
MONDIAL	157	158	042	043	081	112											
MOTOROLA	386																
MUSICAL FIDELITY	407	408	647	648													
MUSICAL FIDELITY	408	648															
MYRYAD	276	293	455	456	457												

Audio components (continued)

Brand	Code numbers
MYRYAD	457
NAD	186 113 283 478 479 598 603 604 605
NAD	113
NAIM	533 534 535
NAIM	535
NAKAMICHI	111 244 245 172 183 287 323 450 615
NEC	176
NETSTREAMS	616 617 618 619 620
NILES	403
NIRO	343
NUVO	404 405 606 607 608 609 610
NUVO	404 405 606 607
OLIVE	584
ONKYO	486 441 017 046 064 107 108 187 079 080 090 179 209 270 275 438 439 440 442 486 487 536 552 586 629
OPTIMUS	026 041 138
OUTLAW	342
PANASONIC	032 195 219 177 292 383 516 626 627
PARASOUND	333 334 553 554 129 130 132 261 294 295
PASS LABS	431
PHAST	196
PHILIPS	249 250 251 063 119 296
PIONEER	480 542 014 033 039 044 045 050 069 159 168 116 035 078 198 397 513 518 520 521 543 544 545 546 547 556
PIONEER	556
PLINIUS	458
POLKAUDIO	029 514
POLKAUDIO	514
PRIMARE	461 462 463 464 465
PRIMARE	465
PROCEED	144 268
QUAD	526
RCA	010 048 117 156 067 288 549
REALISTIC	019 056 073 075 095

Audio components (continued)

Brand	Code numbers
REQUEST	351 511 611 612 613
REVOX	162
ROKU	506 507
ROTEL	501 502 503 074 083 085 654
RUSSOUND	379 391 392 445 446 527 528 529
RUSSOUND	445 446
SAMSUNG	016 571 653
SANSUI	040 048 110 119 065 228
SANYO	047 059
SCOTT	019 091
SEARS	076
SHARP	026 051 094 131 175 181 652
SHERWOOD	447 024 038 055 102 103 105 106 051 030 348 370 388 562 675
SIMAUDIO	449
SIRIUS	585 555
SIRIUS	585 555 550
SLIM DEVICES	512
SONY	372 417 574 369 018 084 093 223 247 248 160 166 015 101 184 218 271 353 380 395 421 575 576 577 631 640 641 642 632 633 634 635 636 637 638 639
SONY	380
SOUNDESIGN	036
SOUNDMATTERS	375
SOUNDSTREAM	084 088
SSI	068
STS	007
SUGDEN	430
SUMO	171
SUNFIRE	344 345 346 494 495
TAEKWANG	138
TAG MCLAREN	387
TASCAM	625
TASCAM	625
TEAC	005 019 049 111 212 217

Audio components (continued)

Brand	Code numbers
TECHNICS	122 176 193 219 178 177 200 257 262
THETA DIGITAL	136
THULE	505
TOSHIBA	060 087 198 278 510
TURTLE BEACH	416
WARDS	180
XANTECH	508 509
XM SATELLITE RADIO	415 514 515
YAMAHA	427 557 655 643 644 026 253 169 067 123 133 173 205 264 232 089 274 285 332 373 428 429 432 433 434 435 436 437 540 541 558 559 560 561 565 566 567 578 579 580 581 582 583 599 600 645 646 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 676
YBA	485
ZENITH	143 210
ZON	587

Satellite components

Brand	Code numbers
ALPHASTAR	123
AMPLICA	050
ASTON	206
ATLANTA DTH	203
BIRDVIEW	129 113 051 126
BSR	053
CABLEVISION	148
CAPETRONICS	053
CHANNEL MASTER	013 014 015 018 036 055
CHAPARRAL	008 009 012 077
CITOH	054
COOLSAT	211
CURTIS MATHES	050
DISH NETWORK	122 167 168 184 185 186 187 188
DIRECTV	173 193 220 221 223 224 225 226 227 228
DRAKE	005 006 007 010 011 112 116 141 052
DREAM MULTIMEDIA	191 205
DX ANTENNA	024 046 056 076
ECHOSTAR	038 040 057 058 093 094 095 096 097 098 099 100 122 167 168 184 185 186 187 188
ELECTROHOME	089
EURO PLUS	114
EUROSAT	114
EXPRESSVU	122
FORCE	176
FORTEC STAR	177 178
FUJITSU	017 021 022 027 133 134
GE	151 106 150
GENERAL INSTRUMENT	003 004 016 029 031 059 101 148
GOI	122
HITACHI	139 140
HIRSCHMANN	202
HOME CABLE	080 044 029

Satellite components (continued)

Brand	Code numbers
HOUSTON TRACKER	033 037 039 104 057 051
HTS	122
HUGHES	068 154 161 162 165 166 220 221 223 224 225 226 227 228
HYTEK	053
HYUNDAI	149
ICR	023
JANIEL	060 147
JERROLD	148
JVC	122
KATHREIN	108
KPN	208
LEGEND	057
LG	170
LUXOR	144 062
MACOM	010 059 063 064 065
MARANTZ	152 153
MEMOREX	057
MICRONIK MULTIMEDIA	207
MITSUBISHI	068 154
MOTOROLA	148 171
NEXT LEVEL	148
NEXTWAVE	028 124 125
NORSAT	069 070
NTL	209
NV	195 196 197
PACE	143
PANASONIC	142 060 160
PANSAT	121 172
PERSONAL CABLE	117
PHILIPS	071 152 153 068 154 156 201
PL	023 026
PRESIDENT	019 102
PRIMESTAR	110 030

Satellite components (continued)

Brand	Code numbers
PROSAT	072
PROSCAN	151 106 150
RADIOSHACK	148
RCA	151 106 150
REALISTIC	043 074
SAB	195 196 197 198 199 200
SAMSUNG	155 123 163 169 175 179
SATCRUISER	192
SATELLITE SERVICE	028 035 047 085
SKY	164 171 174 204
SONY	103 104
STARCAST	041
STAR CHOICE	148
SUPERGUIDE	020 124 125
TEECOM	023 026 075 087 088 090 107 130 137
TOSHIBA	002 127 157 158 068 154
TOWN & COUNTRY	023 026
UNIDEN	016 025 042 043 044 045 048 049 078 079 080 086 101 135 136
VIEWSTAR	115
VOOM	148
WINEGARD	128 146
ZENITH	081 082 083 084 091 120 159

CD players

Brand	Code number
ADCOM	062 042
AIWA	059 012 065 088 089 105 122 170 187
AKAI	085 195 202
AMC	231 232
AMEND	118
ARCAM	238 275
AUDIO ACCESS	119 147
AUDIO EASE	165
AUDIO TECHNICA	046
BSR	037 057
CALIFORNIA AUDIO	103 008
CAMBRIDGE AUDIO	268
CAPETRONIC	063
CARRERA	057 080
CARVER	185 041 044 050 086 107 130 134 135 138 139 203 204 167
CASIO	111 182
CARY AUDIO DESIGN	261 262 289 290 291 292
CLASSE	267
CLARINETTE	182
CREEK	159
CROWN	035
DCS	294
DENON	002 123 281
EMERSON	042 069 102
FISHER	050 185 134 008
FRABA	111
GENEXXA	010 069 102
GOLDSTAR	080
HAITAI	093
HARMAN KARDON	018 033 047 208 272
HITACHI	042 175
INKEL	130 143 144

CD players (continued)

Brand	Code number
INTEGRA	030 273
JCPENNEY	014 061 092 141
JENSEN	158
JVC	004 022 136 163 213 214 242 243 286
KENWOOD	185 007 023 055 071 072 142 137 254
KOSS	061
KRELL	241 279 285
KYOCERA	005
LOTTE	102
LUXMAN	011 028 070 076 249 252
LXI	059
MAGNAVOX	044 107
MARANTZ	027 041 044 051 077 107 209 246 274 296 297
MCINTOSH	212 247
MCS	014 073 092
MEMOREX	010
MISSION	044 107
MITSUBISHI	179
MITSUMI	153
MODULAIRE	182
MONDIAL	147
MUSICAL FIDELITY	258 284
MYRYAD	244 265
NAD	006 005 067 178 293
NAIM	271
NAKAMICHI	217 218 219 095
NEC	014 062
NIKKO	046
NSM	044 107
ONKYO	030 038 039 168 169 273
OPTIMUS	010 050 057 058 081 082 083 085 093 195
PANASONIC	103 201 172 008 068 248
PARASOUND	233 240

CD players (continued)

Brand	Code number
PHILIPS	041 044 107 246 253
PIONEER	010 020 025 056 174 175 176 257 263
PLINIUS	288
PRIMARE	266
PROCEED	239
PROTON	044 107 228
QUAD	269
QUASAR	103 008
RADIO SHACK	182
RCA	017 042 150 276
REALISTIC	042 050 051 102 181 182 187
ROTEL	044 107 161 178 250
SAE	044 107
SANSUI	044 069 107 128 171 190 125
SANYO	050
SCOTT	069 102
SHARP	026 031 051 066
SHERWOOD	003 019 051 096 112 115 119 166
SIGNATURE	033
SIMAUDIO	280
SONY	048 081 097 126 133 177 225 226 164 229 230 259 260 277 278
SOUNDESIGN	251
SUGDEN	264
SUMO	155
SYLVANIA	044 107
SYMPHONIC	052 181
TAEKWANG	195 085
TANDY	010
TEAC	015 034 036 051 052 101 131 140 079 145
TECHNICS	060 103 200 172 184 008 068
TECHWOOD	076
THETA DIGITAL	234 235 270
TOSHIBA	006 067 091 160 148

CD players (continued)

Brand	Code number
VECTOR RESEARCH	080
VICTOR	004 022 114 124
WARDS	185 033
YAMAHA	024 046 054 186 183 245 282 283 287
YORX	182

DVR components

Brand	Code numbers
DIRECTV	117 121 122 123 124 125 126 127 128
HUGHES	117 121 122 123 124 125 126 127 128
HUMAX	118 121 122 123 124 125 126 127 128
PHILIPS	090 117 121 122 123 124 125 126 127 128
PIONEER	117 118 121 122 123 124 125 126 127 128
RCA	109
REPLAY TV	075
SONY	104 105 131
TIVO	090 117 118 121 122 123 124 125 126 127 128

Auxiliary components

Brand	Code numbers
3M	152
ADS TECH	404
AHANIX	260
AIWA	164 015 071 100 114
ALGOLITH	415 475
APPLE	401 412 476
ARCHER	155
AUDIO AUTHORITY	427 428
AURORA	300
AUTON	191 434
AURORA MULTIMEDIA	220
AVERMEDIA	437 460

Auxiliary components (continued)

Brand	Code numbers
BEDIENUNGSANLEITUNG	221
BOSE	409
CALYPSO	491 492 493 494
CE LABS	298
CELADON	211
CRESTRON	213 214 215 216 217 218
D-BOX	440
DA LITE	269
DCS	468 469 470
DDI	403
DELL	261 262 263 264 265 266 267 268
DLINK	435
DLO	418
DMX	156
DRAPER SCREEN	204
DREAMVISION	097
DVDO	299 423
DWIN	080 253
ELAN	451 452 453 454 455 456 457 458 441 442 443 444 445 446 447 448 449
ELECTROKINETICS	438
ELITE SCREENS	431 432
EVERQUEST	206
EXTRON	151 433
FARENHEIT	430
FAROUDJA	184 254
FOCAL	436
FUJI	209
GATEWAY	261 262 263 264 265 266 267 268
GRIFFIN	471
HAUPPAUGE	294 295
HP	252 261 262 263 264 265 266 267 268
HUNTER DOUGLAS	219
INTEGRA	439

Auxiliary components (continued)

Brand	Code numbers
IOGEAR	407
IPORT	419
JERROLD	153
JVC	185 416 106 116 239 240
KALEIDESCAPE	259 459
KENSINGTON	406
KENMORE	251
KENWOOD	185 005 013 023 026 064 145 146 181 190
KEY DIGITAL	273 274 275 461 462 463 464 465
KEYSPAN	297
KLIPSCH	425
LG	296
LINKSYS	270
LUMAGEN	472
LUTRON	417 077 158 159 306 308 309
LUXOM	424
MAKITA	186 201
MARANTZ	450 014 027 056 065 087
MICROSOFT	107 252 261 262 263 264 265 266 267 268 408
MINDPATH	205
NETGEAR	477
NILES	160 187 272
NSM	161
NTI	421
ONKYO	439 002 012 016 017 018 019 115
PIANO DISC	085
PINNACLE	405
POLK AUDIO	162
PRIMARE	402
RCA	258
RUNCO	466
RUSSOUND	081
SCIENTIFIC ATLANTA	156 163

Auxiliary components (continued)

Brand	Code numbers
SHERWOOD	467 038 004 028 030 033 034
SIMA	082 429
SOLO ELECTRONICS	207
SOMFY	078 079 411
SONANCE	419
SONY	164 165 166 271 261 262 263 264 265 266 267 268 414 020 022 052 084 089
SPEAKERCRAFT	473 474
STARCOM	153
TEN TECHNOLOGY	401
TURBOSCAN	167
VELODYNE	203 413
WURLITZER	410
XANTECH	168 169 170 171 172 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 420 426 188 189

Specifications

For projector specifications, see the *User's Guide* that came with your projector. For all other components, see these sections:

- “Playable Disc Types” below
- “Screen Specifications” on page 120
- “Remote Control Specifications” on page 120
- “Powered Subwoofer Specifications” on page 121
- “Surround Speaker Specifications” on page 121
- “AV Controller Specifications” on page 122

Playable Disc Types

The Ensemble HD system's DVD player accepts DVDs and compact discs in both 3-inch (8 cm) and 5-inch (12 cm) sizes.

In addition, you can play recordable DVDs (marked DVD-R) and recordable compact discs (CD-R and CD-RW). Discs must be recorded in the standard DVD Video or Compact Disc Digital Audio format, and must be finalized to be playable. Data CDs and DVDs containing MP3 or WMA audio files, or picture files in JPG format, can also be played (ISO 9660 format). You cannot play other types of discs, such as DVD-Audio, SACD, CD-ROM, DVD-RW, DVD-RAM, or DVD-ROM. Depending on the characteristics of your recorder or media, some recordable discs may not play properly.

DVDs must be recorded in the NTSC color system and be encoded for playing in Region 1. Commercial DVDs should be marked with the Region 1 symbol: .

Note

Many commercial DVDs incorporate a copy protection system. If you attempt to copy such a disc, the copy will be visually distorted. Please see “Responsible Use of Copyrighted Materials” on page 123.

Screen Specifications

General

Screen Size	100" (254 cm), nominal diagonal
Aspect Ratio	16:9 (HDTV widescreen format)
Image Area (WxH)	87" x 49" (221 x 124.5 cm)
Black Drop Length	12" (30.5 cm)
Screen Material	1.1 high-gain matte white
Motor	110 volt Somfy electric
Installation	Wall or ceiling
Screen Casing Dimensions (WxHxD)	100" x 6.0" x 9.5" (254 x 15.2 x 24.1 cm)
Weight	74 lb (33.6 kg)

Built-in Speaker System

Speakers	Left/right: (1) 4.5" (114 mm) midrange + (1) 1" (25 mm) titanium tweeter Center: (2) 4.5" (114 mm) midrange + (1) 1" (25 mm) titanium tweeter
Frequency Response	100 Hz to 20 kHz $\pm$ 3dB
Nominal Impedance	8 ohm
Crossover Frequency	3.75 kHz, 3rd order
Sensitivity	89dB

Remote Control Specifications

Type	LCD backlit display; programmable
Learning Capability	784 commands 472 macros, up to 190 steps each
IR Range (direct line-of-sight via infrared)	20 ft (6.1 m), depending on lighting conditions
IR Frequency	15 kHz to 100 kHz
RF Range (radio frequency)	50 to 100 ft (15 to 30 m), depending on environment
RF Frequency	418 MHz
Weight	8 oz (230 g), with batteries
Size (LxWxH)	8.5" x 2.4" x 1.0" (21.6 x 6.1 x 2.5 cm)
Batteries	4 AAA alkaline batteries

Powered Subwoofer Specifications

Bass Driver

Type	Ported enclosure, front-firing
Size	10" (254 mm), long throw
Frequency Response	32 to 100 Hz, ± 3 dB

Amplifier

Type	5.1-channel with built-in equalizer
Peak Output	105dB in 3000 cubic feet
Output Power	150 W (subwoofer) 70 W (center channel) 40 W $\times 4$ (front left/front right/left surround/right surround)
Frequency Response	20 Hz to 20 kHz ± 2 dB
Boundary Controls	5 pre-programmed EQs, manually selectable depending on installed location of screen
Anti-boom Adjustment	Manually selectable frequency and gain; smooths room-induced bass peak

Physical

Dimensions (W $\times$ H $\times$ D)	14.9" $\times$ 16.1" $\times$ 18.0" (37.8 $\times$ 40.9 $\times$ 45.7 cm)
Weight	35 lb (16 kg)

Surround Speaker Specifications

Type	4" (10 cm) coaxial speaker; side/reflective surround
Speaker Mounting	Built into projector enclosure; also removable for ceiling installation
Frequency Response	100 Hz to 20 kHz
Dimensions of Projector Enclosure (W $\times$ H $\times$ D)	26.9" $\times$ 6.4" $\times$ 12.7" (68.3 $\times$ 16.3 $\times$ 32.3 cm)
Weight of Projector Enclosure	15 lb (6.8 kg)

AV Controller Specifications

Built-in AV Capabilities	DVD/CD player AM/FM tuner USB flash drive
Playable Disk Types	See page 119
Video Processor	Pixelworks chipset
Video Output	1080p/720p, depending on projector
Video Input Ports	HDMI (x2) Component video S-video Composite video (CVBS)
Compatible Video Formats	NTSC
Audio Input Ports (for use with video sources)	HDMI Optical Coaxial Analog
Other Audio Ports	Audio 1 (analog input for use with tape deck) 2Ch Out (analog output for use with tape deck) Audio 2 (analog input for use with MP3 player or other portable audio device) DB15 (5.1 channel output; connects to subwoofer)
Video Output Port	HDMI
Size (W×H×D)	13.5 in × 4.0 in × 10.5 in (34.3 × 10.2 × 26.7 cm)
Weight	7.5 lb (3.4 kg)

Notices

Responsible Use of Copyrighted Materials

Epson encourages each user to be responsible and respectful of the copyright laws when using any Epson product. While some countries' laws permit limited copying or reuse of copyrighted material in certain circumstances, those circumstances may not be as broad as some people assume. Contact your legal advisor for any questions regarding copyright law.

Use of this equipment for other than private viewing of programs broadcast on UHF or VHF, or transmitted by cable or satellite companies, for the use of the general public may require authorization from the broadcast/cable/satellite company and/or program owner.

FCC Compliance Statement

For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For Canadian Users

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Declaration of Conformity

We: Epson America, Inc.
Located at: MS 3-13
3840 Kilroy Airport Way
Long Beach, CA 90806
Telephone: (562) 290-5254

Declare under sole responsibility that the product identified herein, complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trade Name: Epson
Type of Product: Ensemble HD – Complete Home Cinema System
Model: ELPHC100/ELPHC200

Epson America, Inc. Limited Warranty

Epson Ensemble HD Home Theater System

What Is Covered: Epson America, Inc. (“Epson”) warrants to the original retail purchaser of the Epson Ensemble Home Theater System (which includes the projector, screen, speakers, sub-woofer, AV controller, projector cradle, projector mount, and wiring package) covered by this limited warranty statement that the System, if purchased new and operated only in the United States or Canada, will be free from defects in workmanship and materials for a period of two (2) years from the date of original purchase. This limited warranty applies only to the System and not to the projector lamp, which carries a ninety (90) day warranty from the date of original purchase.

What Epson Will Do to Correct Problems: Should any element of the System or the lamp prove defective during the limited warranty period, please call the Epson ConnectionSM at (800) 637-7661 + PIN or (562) 276-4394 in the U.S. and (905) 709-3839 in Canada for warranty instructions and return authorization. When you call, please be prepared to provide the service technician with the product model and the product serial number (located on the back of the screen weight bar), along with proof of the date of original purchase. The service technician will provide telephone diagnostics to determine whether your unit needs service, and detailed instructions if it is determined that service is needed. When Epson authorizes an exchange for the defective unit, Epson will ship a replacement product to you, freight prepaid, so long as you use an address in Canada or the U.S. (excluding Puerto Rico and U.S. Possessions). Shipments to other locations will be made freight collect. You are responsible for securely packaging the defective unit and returning it to Epson within ten (10) working days of receipt of the replacement. Epson requires a debit or a credit card number to secure the cost of the replacement product in the event that you fail to return the defective one. When service involves the exchange of a unit or its parts, the items replaced become the property of Epson. The exchanged product or part may be new or refurbished to the Epson standard of quality, and, at Epson’s option, the replacement may be another model of like kind and quality. Epson’s liability for replacement of the covered product will not exceed the original retail selling price of the covered product. The new items assume the remaining warranty period of the original product. If Epson chooses to replace a defective product or part, a replacement product or part will be shipped to you at no charge, but it is your responsibility to pay any labor costs for installation and removal.

What This Warranty Does Not Cover: This warranty covers only normal use of the product. Twenty-four-hour-per-day or other excessive continual use is not considered normal use. This warranty does not cover consumables (e.g., fuses or filters) other than lamps. This warranty is not transferable. Epson is not responsible for warranty service should the Epson label or logo or the rating label or serial number be removed. Epson is not responsible for warranty service should the product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters such as fire, flood, and lightning, improper electrical current, software problems, interaction with non-Epson products, or service other than by an Epson Authorized Servicer. If a claimed defect cannot be identified or reproduced in service, you will be held responsible for costs incurred.

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In Canada, warranties include both warranties and conditions.

Some jurisdictions do not allow limitations on how long an implied warranty lasts and some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction.

To find the Epson Authorized Reseller nearest you, visit our website at: www.epson.com.

To find the Epson Customer Care Center nearest you, visit epson.com/support.

You can also write to:

Epson America, Inc., P.O. Box 93012, Long Beach, CA 90809-3012.

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