

Shuttle®

Shuttle Digital Hub User Guide

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This device complies with Part 15 of the FCC Rules, Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

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9M0-A64M10-00E0

Safety Information

Read the following precautions before setting up a Shuttle Digital Hub.

WARNING: Forbid users to dismantle and install by oneself.

Installation Notices

Do not place this device underneath heavy loads or in an unstable position.

Do not expose this device to high levels of direct sunlight, high-humidity or wet conditions.

Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.

Do not block the air vents to this device or impede the airflow in any way.

WARNING: When using this device, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- ✱ Do not use this product near water; for example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- ✱ Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.
- ✱ Do not use this product to report a gas leak in the vicinity of the leak.

WARNING: Install the computer near an AC outlet. The AC power cord is your PC's main AC disconnecting device and must be easily accessible at all times. For your safety, the power cord provided with your PC has a grounded plug. Always use the power cord with a properly grounded wall outlet, to avoid the risk of electrical shock.

Laser Product Label

The following label or equivalent is located on the surface of laser products:

This label indicates that the product is classified as a CLASS 1 LASER PRODUCT. This label appears on a laser device installed in your product.



Shuttle System EMI Test Statement

Shuttle System have been via the EMI test in terms of series of regulations: EN55013/EN55020/EN55022/CISPR22/AS/NZS3548 Class B, EN55024 (1998/AS/NZS), EN4252.1 (1994), EN61000, ANSI C63.4 (1992), CFR47 Part 15 Subpart B, and CNS13438 (1997). The items tested are illustrated as follows:

(A) Voltage: AC 110V/60HZ & AC 230V/50HZ

(B) Tested Product Information:

Product Name: System

Status: Sample

Model Name: M1000

S/N: N/A

CPU:

External Frequency: 133 MHz

Intel Pentium M 780 2.26G, Intel Pentium M 770 2.13G

VGA Port: one port with 15 pins

DVI Port: one port with 29 pins

USB 2.0 Port: four ports with 4 pins respectively

1394 Port: one port with 4 pins and one port with 6 pins respectively

LAN Port: one port with 8 pins (10Mbps/100Mbps/1000Mbps)

Center/Bass-Out Port: eight ports

Mic-In & Earphone Ports: one port for each

IR out: three jacks

Audio TV source In: two RCA jack

Video TV source In: one RCA jack

S-Video TV source In: one port with 4 pins

TV cable/Antenna In (Coaxial): one port

FM Antenna In (Coaxial): one port

S-Video out: one port with 7 pins

Component video out: three RCA jacks

SPDIF-Out (Coaxial) Port: one port

SPDIF-Out (Optical) Port: one port

SPDIF-In (Optical) Port: one port

Clear CMOS button: one port

DIMM Memory (optional): SO-DIMM DDR333 256 MB *2

Power Cable: Detachable and Shielded (with a GND pin)

Monitor: CRT

Maximum Resolution: 2048 X 1536 V:60Hz

All CPUs have completely been tested, and values offered by the worst EMI combination of CPU external frequency are listed as follows:

Test Mode	External Frequency	CPU	CPU Open/Close
1	133MHz	Intel Pentium M 2.26G	Close
2	133MHz	Intel Pentium M 2.26G	Open

(C) Remedy for the Tested Product & Its EMI Interference:

Remedy: N/A

EMI Interference:

Crystal: 14.318MHz(X2)/ 25MHz(X5)/ 32.768KHz(X9)/ 12MHz(X9)
24.576MHz(ZX11)/ 24.576MHz(ZX6).

Clock Generator: ZU7

(D) Supported Host Peripherals:

Host Peripheral	Product Name	Model Name
# 1	Case	M1000
# 2	Power Supply	PC480180M
# 3	Serial ATA Seagate	ST3250823SCE
# 4	DVD Player	BDR-L06S
# 5	VGA Card	NV6200
# 6	Tuner Card x2	Avermedia M113

(E) Notices for Assembling Computers:

1. Cases should be made of iron or other metal that has good electric conductivity.
2. Cylinders in a case should be made of metal, and as having a mainboard mounted in a case, make sure screws are all utilized and fastened on a mainboard.
3. An I/O shielding should be contacted with I/O metallic parts of a mainboard.
4. Cables should appropriately be arranged and fixed in a case. Follow instructions:
 - Leave IDE cables not crossed upon CPU and SDRAM;
 - Leave power cables minimum in length, and not crossed upon a mainboard;
 - Leave CPU fan cables minimum in length, and not near CPU;
 - Leave cables on panels and other spare cables tied in a computer case.
5. Make sure an EMI shielding attached to a case has properly been installed.
6. Make sure a 5.25" and screws are fastened to an EMI shielding.
7. Make sure a case is closely in contact with EMI connected points.
8. Make sure there is no cleft in a case which is not deformed.
9. Make sure a PCI door is bound to a case.
10. Make sure cables of other devices (fans or some others) are fixed in a case.

Federal Communication Commission Interference Statement

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 communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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.

This device 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

SHUTTLE INC. declared that PN18 is limited in CH1~11 from 2412 to 2462 MHz by specified firmware controlled in USA.

This device is intended only for OEM integrators under the following conditions:

The antenna must be installed such that 20 cm is maintained between the antenna and users, and the transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end produce (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: S8C-PN18".

Manual Information That Must be Included

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the users manual of the end product which integrate this module.

The users manual for OEM integrators must include the following information in a prominent location "IMPORTANT NOTE: To comply with FCC RF" exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

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Welcome

Thank you for purchasing the Shuttle Digital Hub.

The Shuttle Digital Hub brings you to the forefront of home multimedia convergence. Get ready to say goodbye to your VCR, CD, DVD, and receiver appliances.

The Shuttle Digital Hub's advanced features and simple-to-use interface make it easy to enjoy TV, video, music and photographs with your friends and family.

Organize your photo albums and digital music collection, schedule regular recordings of your favorite TV programs, and create DVDs of your home movies or TV shows. Get the best multimedia and PC experience with the Shuttle Digital Hub.

The Shuttle Digital Hub integrates fully with your existing AV equipment. Multiple connectors allow you to connect to a range of audio and video devices, while wireless networking makes it easy to access your multimedia content from any PC or Media Center device throughout your digital home.

This User's Guide helps you to set up your Shuttle Digital Hub and introduces you to its many features and abilities.

Chapter Contents:

"Functional Overview" on page 3

"Keyboard" on page 7

"Remote Control" on page 11

Benefits and Features

Benefits

- Complete PC and digital entertainment solution for your home.
- Time shifting capabilities (Pause and replay live TV).
- Schedule automatic recordings for your favorite shows with free electronic program guides (EPG).
- Enhance your digital photos and build slideshows to enjoy with your friends.
- Edit home movies, add advanced visual effects and record them to DVD.
- Create a digital jukebox with playlists to suit every mood or occasion.
- Use email and online text, audio, and video messaging to keep in constant touch with loved ones.
- Enjoy high-definition 7.1 channel surround sound.
- Connect to any television and/or PC monitor for high quality visuals.
- Access all the functions of your digital home, with a fully integrated wireless keyboard and remote.
- Get music and movies-on-demand, shop on-line, and surf the World Wide Web.
- Use the full library of PC productivity, game, and educational software.

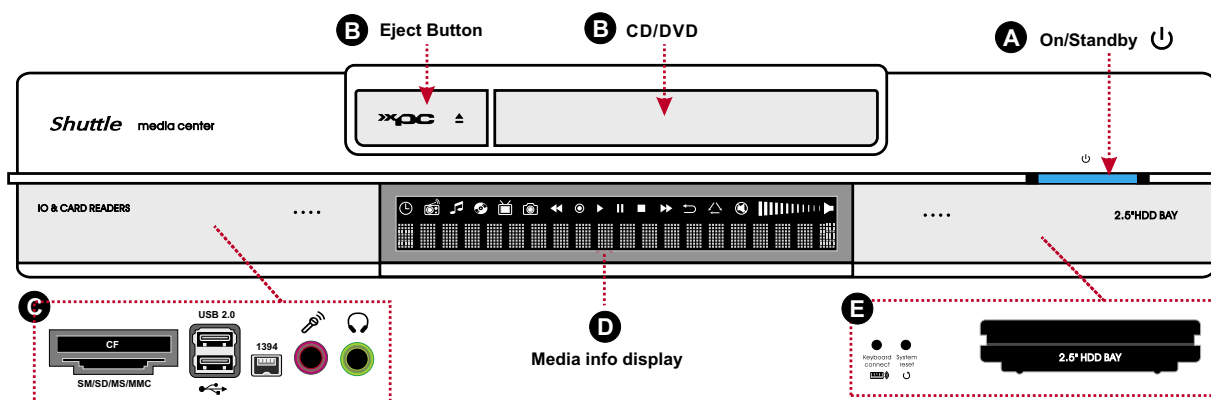
Features



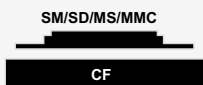



- | | |
|---|--|
| ■ Sleek chassis, stylish design – sits within any home entertainment center | ■ USB and FireWire – connect to numerous PC devices such as printers and scanners |
| ■ VFD display – gives instant visual feedback on the status of the Shuttle Digital Hub | ■ High-speed networking – Gigabit Ethernet and wireless 802.11b/g network capabilities |
| ■ Built-in media library – store and organize your photos, music, and video recordings | ■ Portable storage enclosure – store your most important media files on a removable disk |
| ■ Advanced editing tools – touch up and edit your digital pictures and home movies | ■ Multiple analog and digital AV connectors – connect to a wide range of audio and video equipment |
| ■ 8-in-1 card reader – quickly transfer media from your digital cameras and music players | ■ DVD recorder – backup your favorite videos to disc |
| | ■ Away Mode - advanced energy efficiency features |



★ Functional Overview

Front Panel

The following illustration shows the Shuttle Digital Hub front panel. Your model might not have all features.

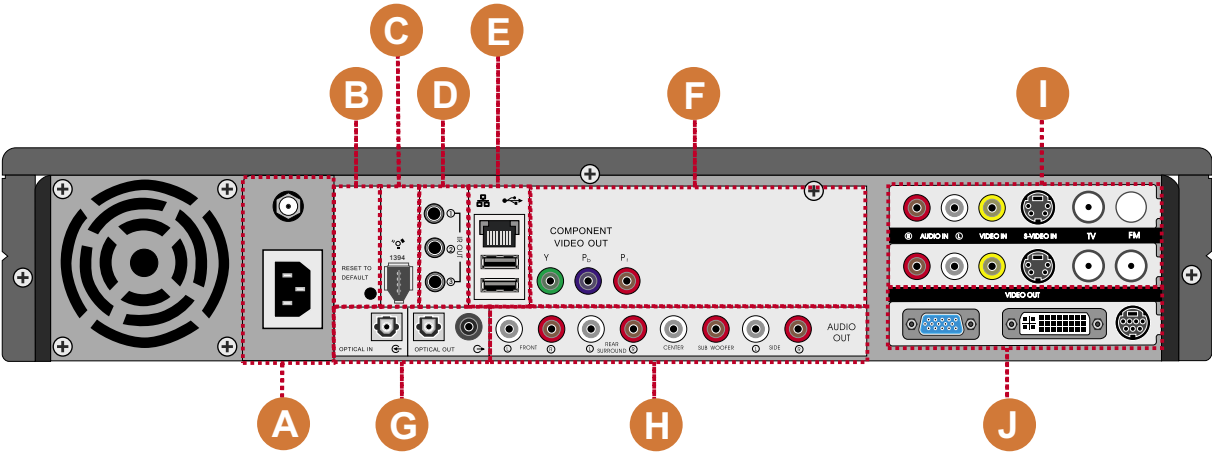






Item		Function	Comments
A		Power button and LED Press and hold button four seconds to turn off. Push for Away Mode.	Solid blue: On Solid amber: Away Mode Twinkle amber: Standby
B		CD/DVD	CD/DVD player/recorder
		Eject Button	Push the Eject button to open. Push the tray or Eject button to close.
C		8-in-1 Memory card readers, SmartMedia/xD, MMC/SD, CompactFlash I/II, Micro drive, MS/MS-Pro	
	 USB 2.0	USB 2.0 (2)	4-pin USB 2.0 port
	1394	1394	FireWire (IEEE 1394), 4-pin input-output for Digital Video
		Microphone	In 1/8-inch mini-jack
		Headphone	Out 1/8-inch jack
D		Media display	Front-panel text content displayed from Media Center


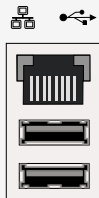
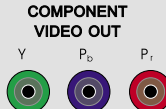



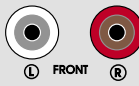


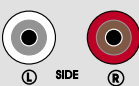
E	<div>Keyboard connect </div>	Keyboard connect switch for wireless keyboard synchronization	Push connect button on keyboard then push this button to reconnect the wireless keyboard.
	<div>System reset </div>	System Reset	Hardware reset.
	2.5" HDD BAY	Personal Media Drive Bay	Removable Shuttle Personal Media Drive behind top right door






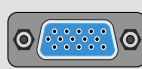
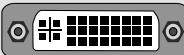

Back Panel

The following illustration shows the Shuttle Digital Hub back panel. (Location and number of connectors may vary by model.)



Item		Connector	Type	Color	Supported format
A		AC In	AC 110-240V 50-60 Hz	Black	Power
		Wireless LAN	Removable Antenna	Gold	802.11b/g
B	<div>RESET TO DEFAULT </div>	RESET TO DEFAULT	Button	Black	Clear CMOS
C	<div> 1394</div>	1394	6-pin DV input/utput for digital video or other device	Silver	FireWire (IEEE 1394)

Item		Connector	Type	Color	Supported format
D		IR OUT	Jack	Black	IR emitter
		Ethernet 10/100/1000	RJ-45	N/A	10/100/1000
		USB 2.0 (High Speed)	2 ports	Silver	USB 2.0
F		Component Video Out (interlaced or progressive scan)	3 RCA jacks	Green:Y Blue:Pb Red:Pr	Analog: Default: 480i; all-interlaced display up to 1080i, Plus 480p, 720p (Not all modes support DVD playback due to content protection.)
G		Digital Audio In	Optical	Black	S/PDIF 5.1 input only
		Digital Audio Out	Optical	Black	S/PDIF 5.1 output only
		Digital Audio Out	Coaxial	Black	S/PDIF 5.1 output only
H		Audio 7.1 Pre-Out FRONT	RCA jacks	White:left Red:right	Analog Stereo: 7.1, 6.1, 5.1, 4.1
		Audio 7.1 Pre-Out REAR SURROUND	RCA jacks	White:left Red:right	Analog Stereo: 7.1, 6.1, 5.1, 4.1
		Audio 7.1 Pre-Out CENTER/ SUBWOOFER	RCA jacks	White:center Red:Subwoofer	Analog Stereo: 7.1, 6.1, 5.1
		Audio 7.1 Pre-Out BACK	RCA jacks	White:left Red:right	Analog Stereo: 7.1

Item		Connector	Type	Color	Supported format
I		Audio TV Source In 1/2	RCA jack	White:left Red:right	Analog
		Video (Composite) TV Source In 1/2	RCA jack	Yellow	Analog: Up to 1024 x 768 @ 60 Hz
		S-video TV Source In 1/2	Y/C video Analog 4-pin	Black	Analog: Up to 1024 x 768 @ 60 Hz
		Cable/Antenna In 1/2	Coaxial	Silver	RF
		FM Antenna	75 Ohm Coaxial	Silver	FM radio, RF
J		VGA Out	15-pin D-sub	Blue	Analog: Up to 2048 x 1536 with panning depending on display size
		Digital Video Out	DVI-I 29-pin D-sub Digital/analog	White	Analog: Up to 1600 x 1200 Up to 2048 x 1536 with panning depending on display size
		S-video Out	Y/C video Analog 7-pin	Black	Analog: Up to 1024 x 768 @ 60 Hz






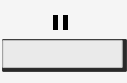
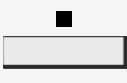





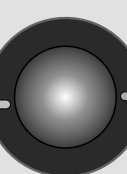
* Keyboard

The following illustration shows the Shuttle Digital Hub wireless keyboard.



The following table shows the wireless keyboard features and function keys from left to right.

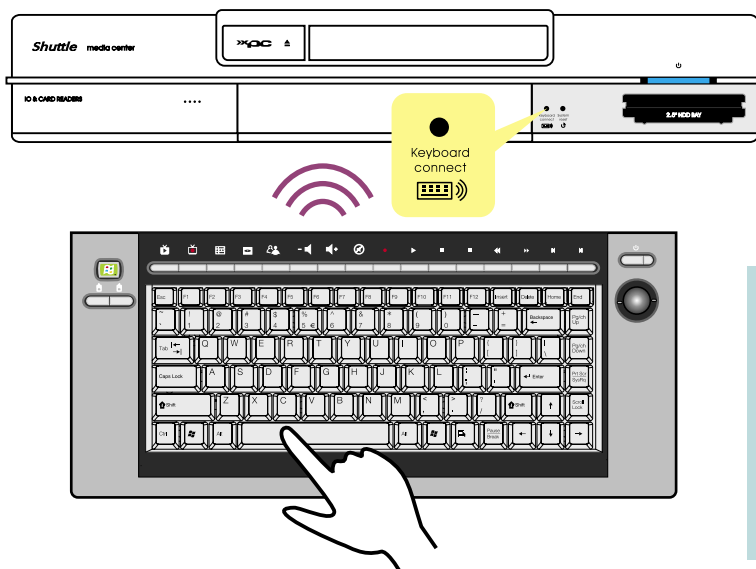
	Icon	Item	Description
A		Media Center	Starts Media Center.
		Mouse button left, right	Left-click, Right-click
B		Live TV	Is a shortcut to the fullscreen view of live TV.
		Recorded TV	Opens the Recorded TV window.
		Guide	Opens the Television Program Guide to display available TV channels and programs to watch and record.
		DVD MENU	Opens Play DVD window in Media Center or opens the main menu of a DVD movie, if available.
		Messenger	Opens your messenger program.

Icon	Item	Description
B		- VOL Decreases speaker volume.
		+ VOL Increases speaker volume.
		Mute Turns speaker sound on and off.
		Record Records a selected television program and stores it on the hard disk drive.
		Play Plays the selected media.
		Pause Pauses audio and video tracks and live or recorded TV programs.
		Stop Stops the selected media.
		Rew (Rewind) moves the media backward (press button for three speeds).
		Fwd (Fast-forward) moves media forward (press button for three speeds).
		Replay Rewinds live or recorded TV eight seconds, or beginning of music track, or DVD chapter.
		Skip Moves media forward - for example, 30 seconds in videos and live TV, or one music track, or one DVD chapter.
C		On/ Away Mode Take Shuttle Digital Hub enter into Away Mode when system on, and wake system on when in Away Mode.
		Activity LED LED Blink when pushing any button on keyboard. Amber: Caps Lock ON Blue : Caps Lock OFF
		Trackball Moves cursor on screen.

Wireless Keyboard Operation

Your Shuttle Digital Hub includes a wireless keyboard that uses a built-in receiver/transmitter instead of a connector cable to communicate.

The Keyboard Connect button, behind the lower-right door of the Shuttle Digital Hub front panel. Approximate range is 12 feet (3.66 meters).



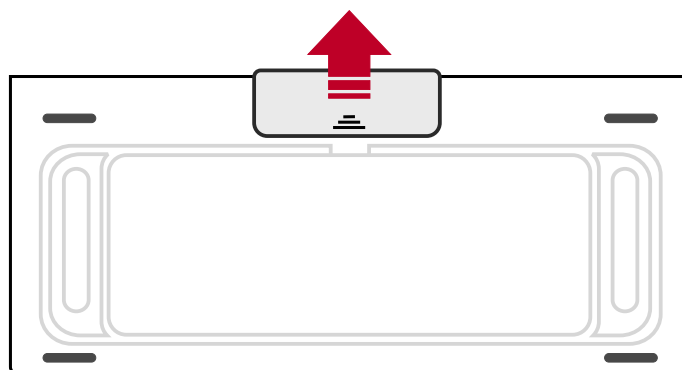
NOTE

Use four alkaline batteries in the keyboard.

Replacing the Keyboard Batteries

Keep spare batteries on hand. Battery life will vary with the use of the system.

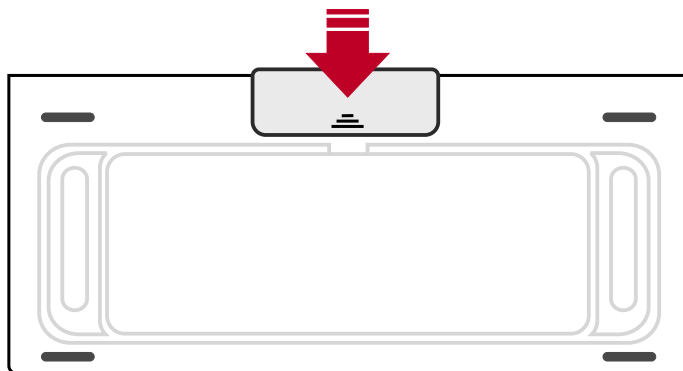
- (1) Slide the battery cover off the back of the keyboard.



- (2) Insert four AA batteries (alkaline). Make sure the battery positive and negative ends are inserted correctly!



(3) Replace the battery cover.



(4) Make sure the Shuttle Digital Hub is powered on.

(5) Test the keyboard.

- The keyboard is set to connect to the Shuttle Digital Hub automatically.

(6) If the keyboard does not operate:

- a. Check the battery orientation.
- b. Sync the keyboard. See "Syncing the Keyboard" on page 88.

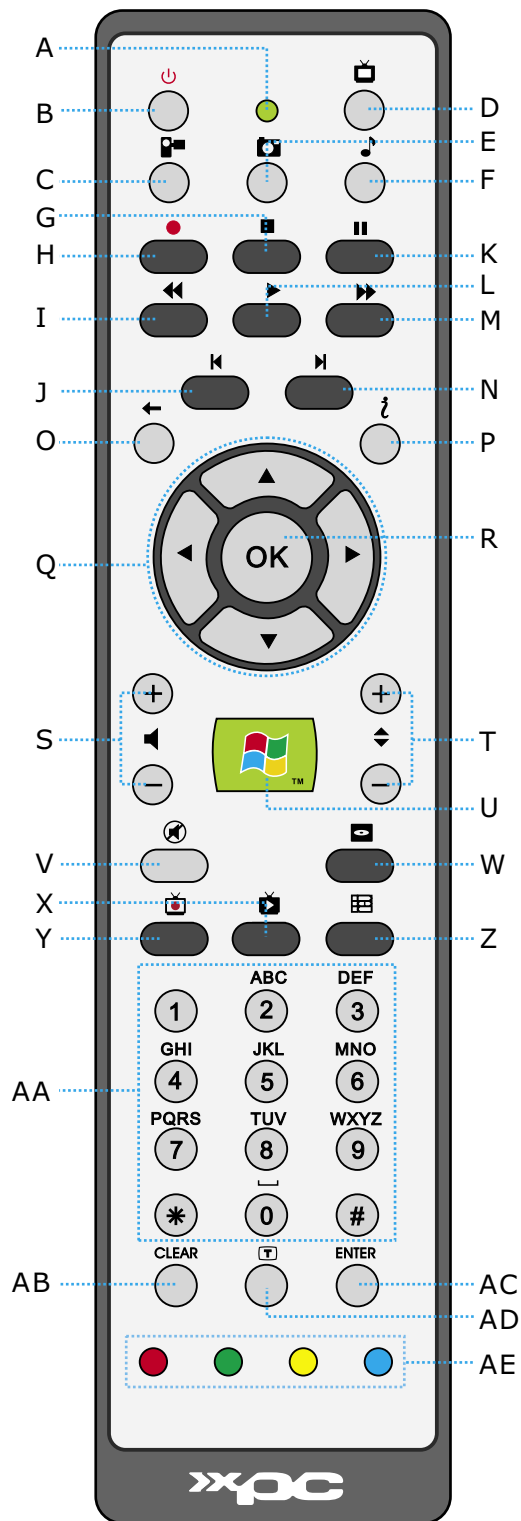
If you have no batteries and must use a keyboard, attach a USB keyboard to the back or front panel. You can also use the remote for many functions.






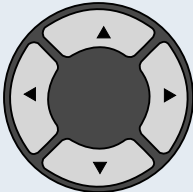





* Remote Control


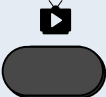
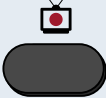
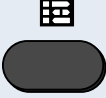








Remote Control Buttons

(Features and location may vary.)

Item	Icon	Description
A LED		Activity indicator lights on pressing a button.
B Away		Puts the Shuttle Digital Hub into and out of a powerreduced Away Mode. It does not turn the Shuttle Digital Hub off.
C My Videos		Starts My Videos.
D My TV		Starts My TV.
E My Pictures		Starts My Pictures.
F My Music		Starts My Music.
G STOP		Stops the selected media.
H REC		Records a selected television program and stores it on the hard disk drive.
I Rew		(Rewind) moves the media backward (press button for three speeds).
J Replay		Rewinds live or recorded TV eight seconds, or beginning of music track, or DVD chapter.
K Pause		Pauses audio and video tracks and live or recorded TV programs.



Item	Icon	Description
L Play		Plays the selected media.
M FWD		(Fast-forward) moves media forward. (press button for three speeds).
N SKIP		Moves media forward - for example, 30 seconds in videos and live TV, or one music track, or one DVD chapter.
O Back		Returns to the previous window within Media Center.
P More		(i) Displays available information about a selected media file and displays more information and options.
Q Arrow		Buttons move the cursor to navigate within all Media Center windows. They also move forward and backward through slideshow images.
R OK		Selects the desired action or window option. It acts as the Enter key.
S Volume		Increases (+) and decreases (-) sound.
T CH/PG		Up (+) and down (-) change the TV channel or move pages up and down, depending on available options.
U Media Center		Opens Media Center to the main menu.
V MUTE		Turns sound off. The word Mute is displayed on the Media Center screen when Mute is turned on.

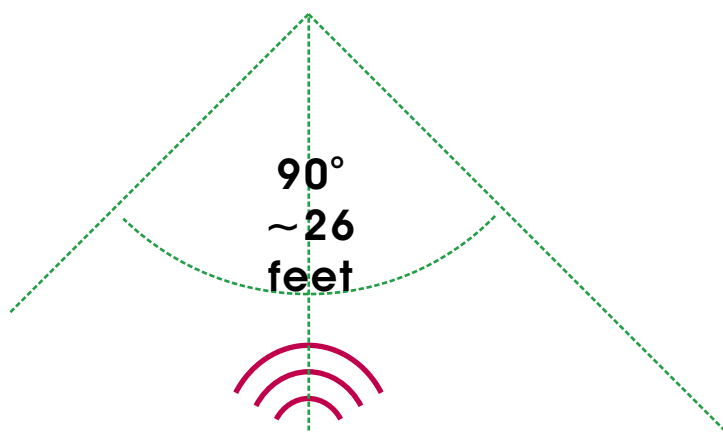
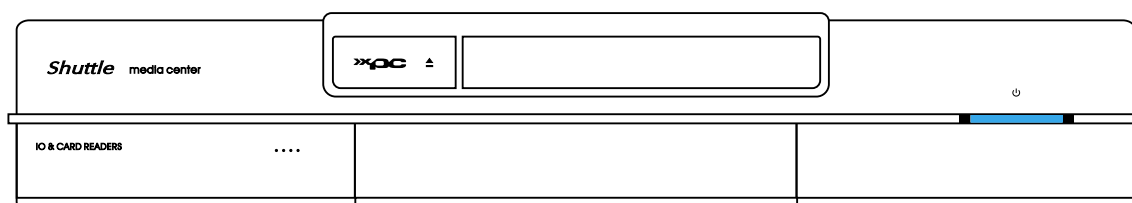
Item	Icon	Description
W DVD MENU		Opens Play DVD window in Media Center or opens the main menu of a DVD movie, if available.
X LIVE TV		Is a shortcut to the fullscreen view of live TV. It also moves to the current point in a live TV program after pausing live TV.
Y RECORDED TV		Opens the Recorded TV window.
Z GUIDE		Opens the Television Program Guide to display available TV channels and programs to watch and record.
AA 0 to 9, #, *		Are the numeric keypad buttons to change channels or enter text into the Media Center search or text box.
AB CLEAR		Deletes the selection and works as the Backspace key does on a keyboard.
AC ENTER		Selects the desired action or window option. In fullscreen mode, press Enter to jump to the last channel you were watching.
AD TELETEXT		If available in your area, Teletext is a free service that provides varied information such as news, weather, sports results, and other items of interest. Press the "Teletext" button and follow the on-screen prompts to navigate through the available services.
AE		Function will shown in the red area at the bottom of screen. The information provided varies based on your area and television network.
		Function will shown in the green area at the bottom of screen. The information provided varies based on your area and television network.
		Function will shown in the yellow area at the bottom of screen. The information provided varies based on your area and television network.
		Function will shown in the blue area at the bottom of screen. The information provided varies based on your area and television network.

Remote Control Operation

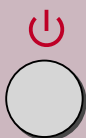
Use the remote control to open the Media Center program; view TV, record TV programs, play previously recorded TV programs, and play music, movies, or video. See "Using the Remote Control" in the Media Center Edition 2005 Software Guide for detailed instructions on using the features of the remote control.

To use the remote control, just point it at the Shuttle Digital Hub and press a button. Use the remote control at a maximum distance of 26 feet (8 meters) from the remote sensor and at a maximum of 45 degrees (90 degrees total) from the center of the remote sensor.

The remote control will not operate until the Shuttle Digital Hub is powered on and fully booted up.



Away button is only button.



No LED function on it. Please indicate the activity LED to A.



NOTE

Media Center must be in fullscreen (or have focus) for consistent remote control operation. Performance in your room may vary.

Remote operation

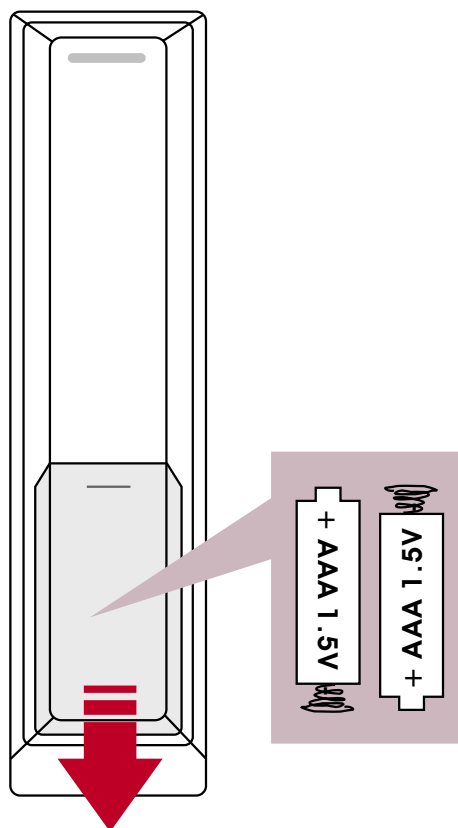
Installing the Remote Control Batteries

- (1) Slide the battery cover off the back of the remote control.
- (2) Insert the two AAA alkaline batteries (provided).

Make sure the battery positive and negative ends are inserted correctly!

- (3) Replace the battery cover.
- (4) Test the remote control by pressing any key.

The indicator light should blink.

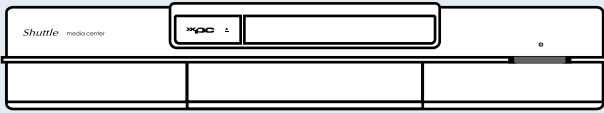
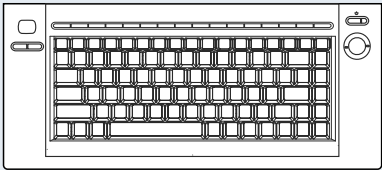
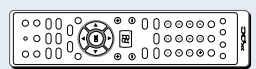

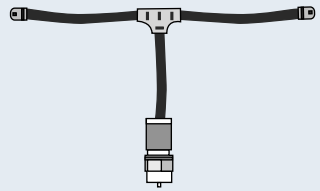
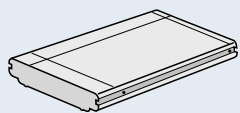

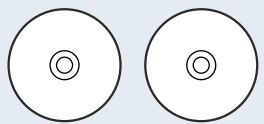



NOTE

Use four alkaline batteries in the keyboard.

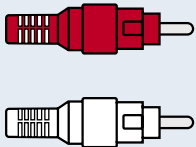
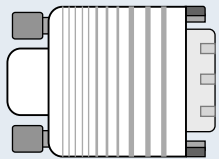
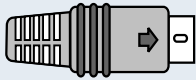
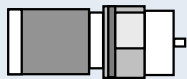
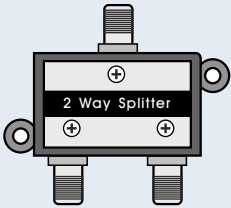
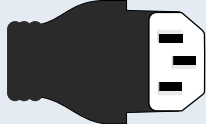
* Inventory

The following items are supplied with the Shuttle Digital Hub:

Name	Picture
Shuttle Digital Hub unit	
Keyboard	
Remote control	
Cables	
FM antenna	
2.5" HDD bay	
Shuttle Digital Hub Software Guide x1 Shuttle Digital Hub User Guide x1	
PowerDVD x1 Shuttle Extras CD x1	
Batteries AA x4 / AAA x2	

Cables Included

Your Shuttle Digital Hub comes with the following cables.

Cable	Name	Description
	Stereo	RCA Red, White ends. Used for Audio Out.
	DVI-D	Digital video out. Connect to DVI-I or DVI-D input of the HDTV or monitor.
	S-video	Black. Used for Video Out.
	Coaxial (2 with dual tuner option)	Used for TV source input from cable set-top-boxes, or antennas.
	Coaxial Splitter (dual tuner option)	Used with coaxial cable for dual tuners only.
	AC Power	Black 125V ~ 10A.

English

This chapter describes the most typical, and some advanced, audio setup options for connecting audio out and audio in.

To connect TV Source In audio and video, see "Connecting TV Source In" on page 50.

Your system may have different components.

Speakers, AV receivers and other equipment are sold separately. Refer to the product documentation for these products.

The diagram illustrates the front and rear panels of the receiver. The front panel features a large display, two circular buttons, and a row of seven buttons. The rear panel shows various input and output ports, including Optical In/Out, Component Video Out, and Audio Out. Red arrows point from the front panel to the rear panel.

Sound Connector Jacks

The audio connectors are RCA type jacks that connect from the back of your Shuttle Digital Hub to a TV, powered speakers or an AV receiver. The Shuttle Digital Hub has separate Audio In connections (analog).

The Shuttle Digital Hub has two Digital Audio Out connections (SPDIF) that are coaxial and optical. Use analog Audio 7.1 Pre-out or Digital Audio Out connectors, but not both. Use only one Digital Audio Out connector at a time.

NOTE

If your audio equipment has multiple input and output connections, then it has front panel input and output switches.

You must select the correct input and output from the audio equipment front panel or remote control to hear sound and see video.

Speaker Types

A stereo speaker set is a left-right, two-channel speaker system. A multichannel audio speaker system has a subwoofer, left-right front and left-right surround channel, and it may include a left-right surround back channel and a center speaker. Surround back speakers are included in more advanced 7.1 systems. A subwoofer provides enhanced bass sounds.

The ".1" indicates a subwoofer. For example, 7.1 channels refer to an eight-speaker mode and uses two front speakers (left-right), two side speakers (left-right), two rear speakers (left-right), a center speaker, and a subwoofer. See "Speaker Configurations" on page 20 for more information on speaker arrangements.

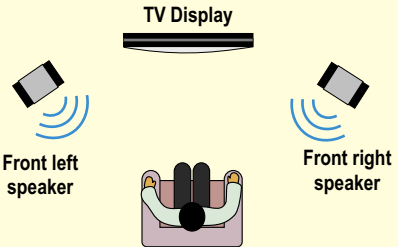
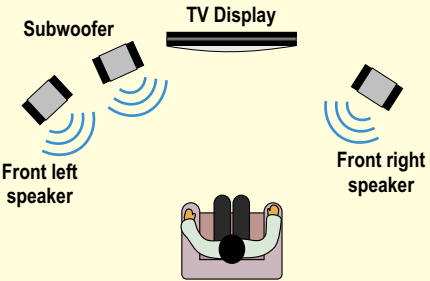
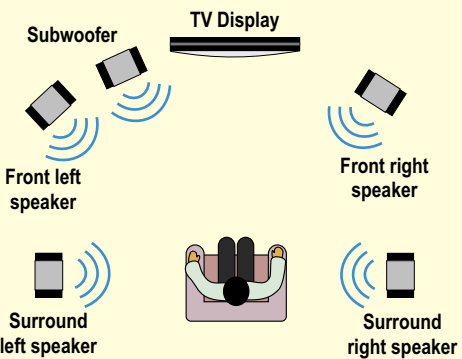
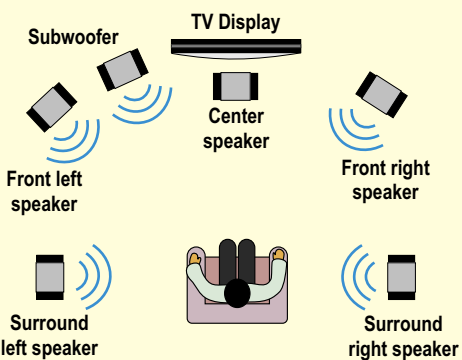
Audio amplifiers

The Shuttle Digital Hub does not supply an amplified audio signal. You can connect the Shuttle Digital Hub to:

- Passive speakers connected through a home audio system. A home audio system does not require active speakers because the receiver provides amplification.
- Active (powered) speakers directly. An active speaker system must have its own power cord.

Speaker Configurations

You can set up your Shuttle Digital Hub for the following supported audio configurations:

Speaker system	Home audio system description	Recommended arrangement	See:
2 (stereo)	Two speakers: Left speaker, right speaker		"2.0 Home Stereo Installation" on page 24 Or "2.1 Powered Speakers" on page 31
2.1	Two speakers: Left speaker, right speaker One subwoofer		"2.1 Home Stereo Installation" on page 24 Or "2.1 Powered Speakers" on page 31
4.1	Two front speakers: left speaker, right speaker Two side speakers: surround left speaker, surround right speaker One subwoofer		"4.1 Home Theater Audio" on page 25 Or "4.1 Powered Speakers" on page 32
5.1	Two front speakers: left speaker, right speaker Two side speakers: surround left speaker, surround right speaker One center speaker One subwoofer		"5.1 Home Theater Audio" on page 26 Or "5.1 Powered Speakers" on page 33

Speaker system	Home audio system description	Recommended arrangement	See:
6.1	<p>Two front speakers: left speaker, right speaker</p> <p>Two side speakers: surround left speaker, surround right speaker</p> <p>One rear surround back speaker</p> <p>One center speaker</p> <p>One subwoofer</p>		<p>If your 6.1 AV receiver has only 5.1 (6) inputs, see the following: "5.1 Home Theater Audio" on page 26</p> <p>Or</p> <p>"5.1 Powered Speakers" on page 33</p>
7.1	<p>Two front speakers: left speaker, right speaker</p> <p>Two side speakers: surround left speaker, surround right speaker</p> <p>Two rear speakers: surround back left speaker, surround back right speaker</p> <p>One center speaker</p> <p>One subwoofer</p>		<p>"7.1 Home Theater Audio" on page 27</p> <p>Or</p> <p>"7.1 Powered Speakers" on page 34</p> <p>If your 7.1 AV receiver has only five inputs, see "5.1 Home Theater Audio" on page 26</p>
Digital audio 5.1	Digital speakers or digital input connector on the audio system		<p>"Digital Home Theater Audio" on page 28</p> <p>Or</p> <p>"Digital Powered Speakers" on page 35</p>

★ TV Audio Connection

You can connect your TV, monitor or display audio directly to your Shuttle Digital Hub for two speaker sound.

If your TV has multiple inputs, you can use your TV as a switch for audio and video.

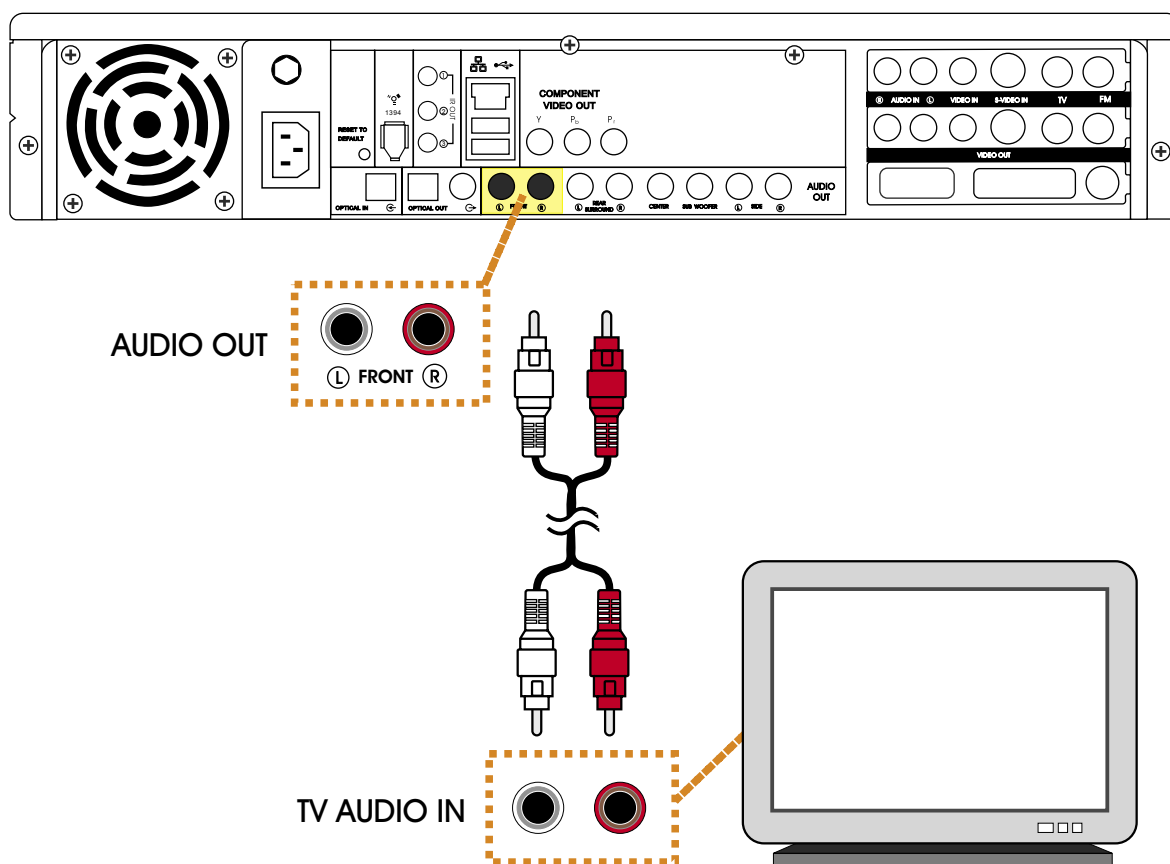
Connecting TV Audio

To connect a TV, monitor or display audio directly:

- Connect an RCA stereo cable (white - left, red - right) from the Shuttle Digital Hub back panel Audio Out connector to a TV audio in connector.

For additional information on connecting the speakers, refer to the documentation that came with your speakers and AV receiver.

The following diagram shows a basic TV audio installation:



* AV Receiver Audio Connection

You can connect your Shuttle Digital Hub to your home stereo or home theater multichannel AV Receivers or audio amplifiers using your existing speakers.

NOTE

You can also connect video through your AV receiver or to your TV directly.

Select the configuration that most closely matches your home system, see:

"2.0 Home Stereo Installation" on page 24

"2.1 Home Stereo Installation" on page 24

"4.1 Home Theater Audio" on page 25

"5.1 Home Theater Audio" on page 26

"7.1 Home Theater Audio" on page 27

You can also use a digital connection.
See "Digital Home Theater Audio" on page 28

AV Receiver Equipment Overview

You can connect audio and video from the Shuttle Digital Hub, through an AV receiver, to the TV input.

Use this method to connect AV receivers or audio-only home receiver/ amplifiers that have standard RCA type input connectors. **You may have to select a front panel button on your AV receiver to switch audio inputs to hear sound.**

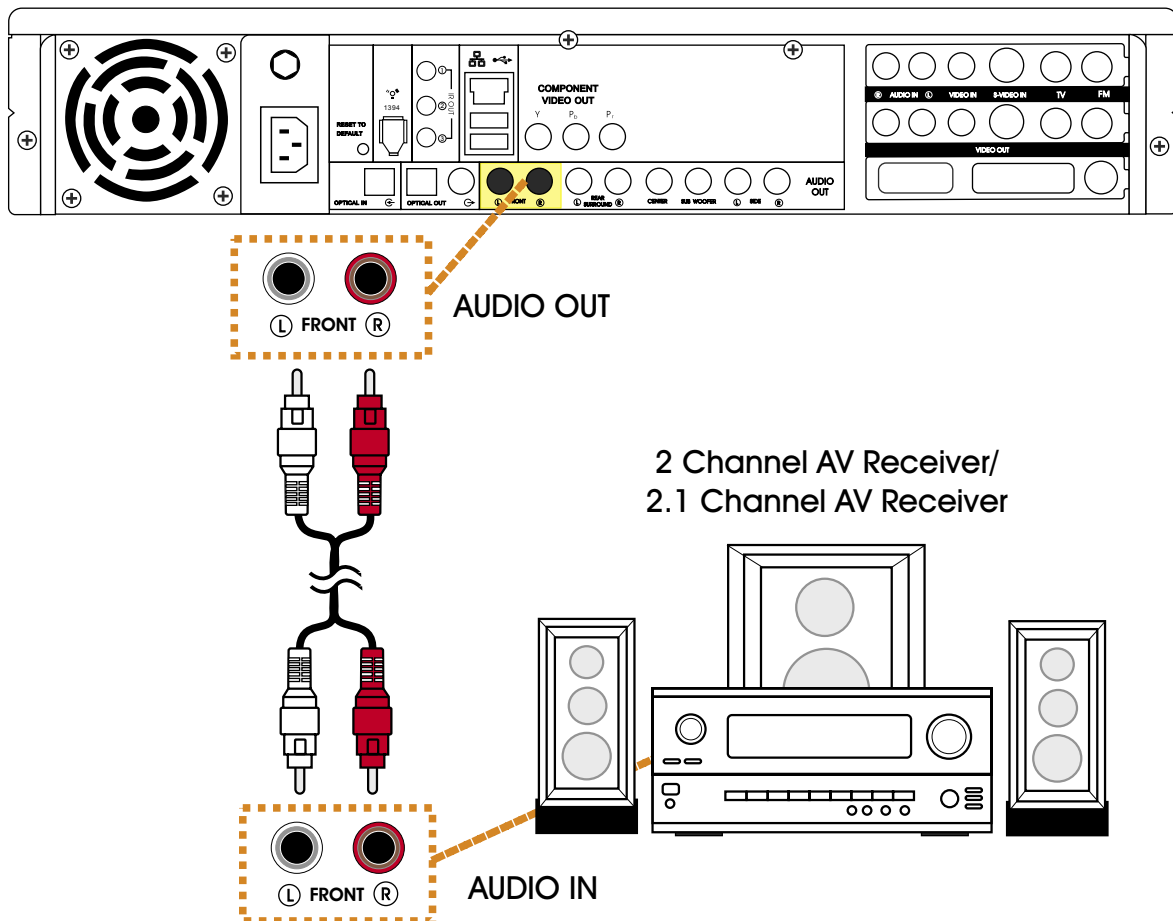
Connecting a home stereo to an Shuttle Digital Hub typically requires audio cables that are long enough to connect from the Shuttle Digital Hub to the stereo or AV receiver. You may need to purchase additional cables.

2.0 Home Stereo Installation

The following diagram shows a typical two-channel (2.0) speaker installation that uses passive stereo speakers connected through a home stereo standard left and right input. This is only a suggested configuration. Your system may be different. Receiver/amplifier audio input connectors may be labeled CD, DVD, or DVD In.

2.1 Home Stereo Installation

The following diagram shows a typical two-channel (2.1) speaker installation that uses passive stereo speakers connected through a home stereo standard left and right input. This is only a suggested configuration. Your system may be different. Receiver/amplifier audio input connectors may be labeled CD, DVD, or DVD In.



NOTE

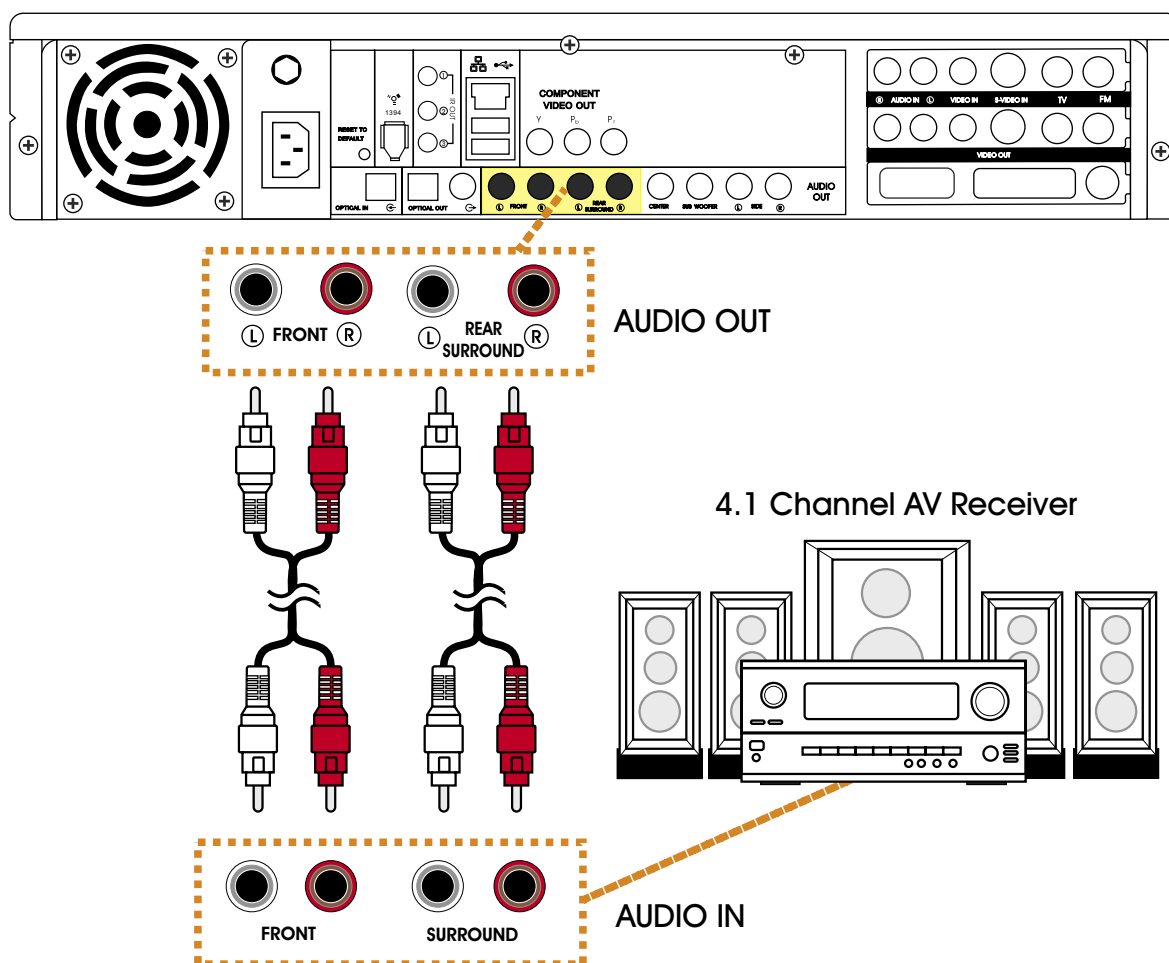
Some AV receivers generate the subwoofer output without a subwoofer input; in this case, you do not need to connect the subwoofer output from the Shuttle Digital Hub. Refer to your AV receiver product documentation.

4.1 Home Theater Audio

The following diagram shows a typical advanced home theater audio four-channel 4/4.1 speaker installation that requires multichannel inputs on a receiver/amplifier.

This is only a suggested configuration. Your system may be different.

Receiver/amplifier audio input connectors may be labeled Surround, 4.1 or 4 Channel inputs, CD, DVD, or DVD In.



NOTE

Some AV receivers generate the subwoofer output without a subwoofer input; in this case, you do not need to connect the subwoofer output from the Shuttle Digital Hub. Refer to your AV receiver product documentation.

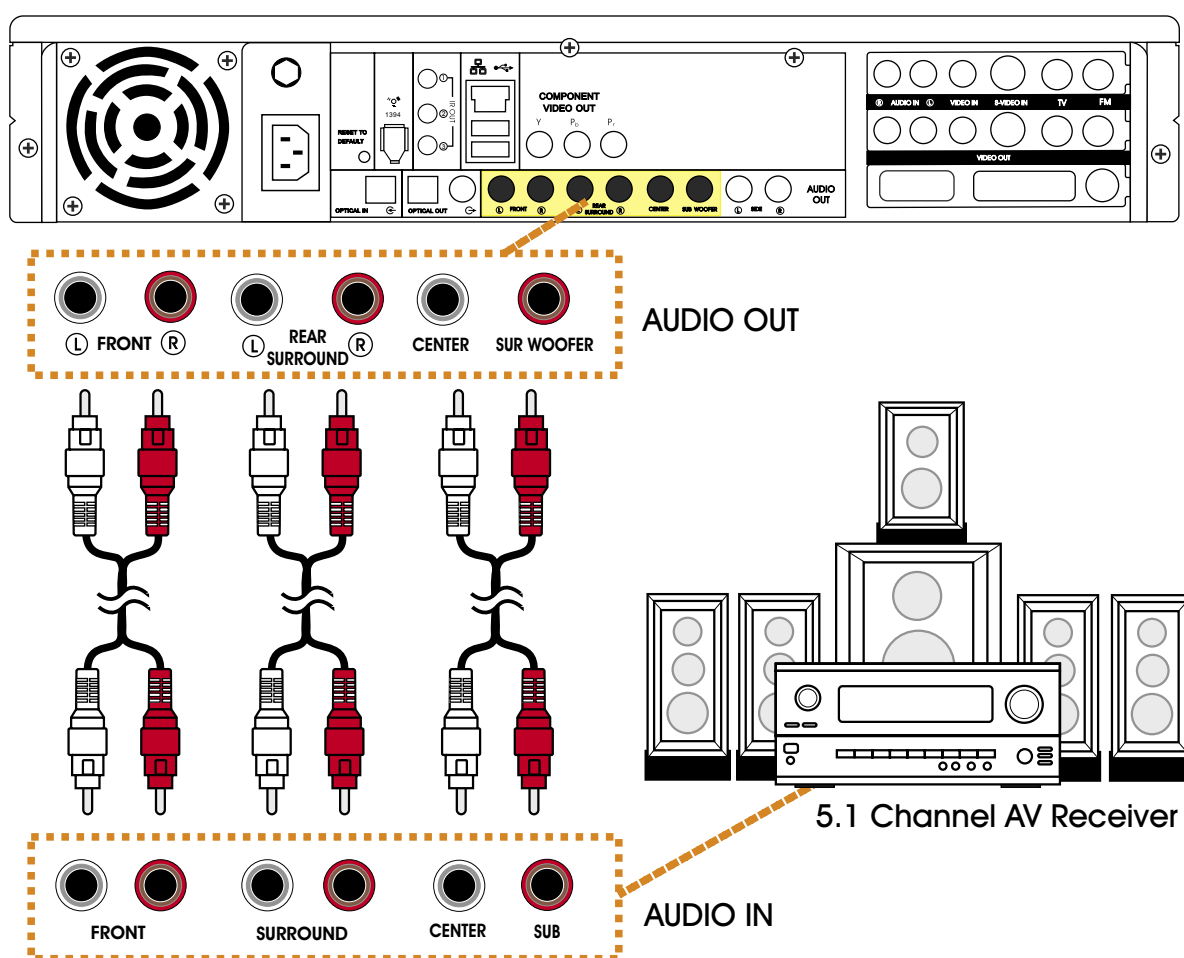
5.1 Home Theater Audio

The following diagram shows a typical advanced home theater audio six-channel 5.1 speaker installation that requires multichannel inputs on an AV Receiver. This is only a suggested configuration.

Your system may be different. Use this configuration for 6.1 and 7.1 AV Receivers that upmix the rear speaker(s).

Refer to your AV Receiver product documentation.

AV Receiver audio input connectors may be labeled Surround, 5.1 or 6 Channel Inputs, DVD, Ext. In, or Multichannel Inputs.



NOTE

Both Media Center speaker settings and DVD audio settings must be changed for proper audio setup. Go to "Configuring Audio Output" on page 93 and note your speaker configuration choice for later software setup steps.

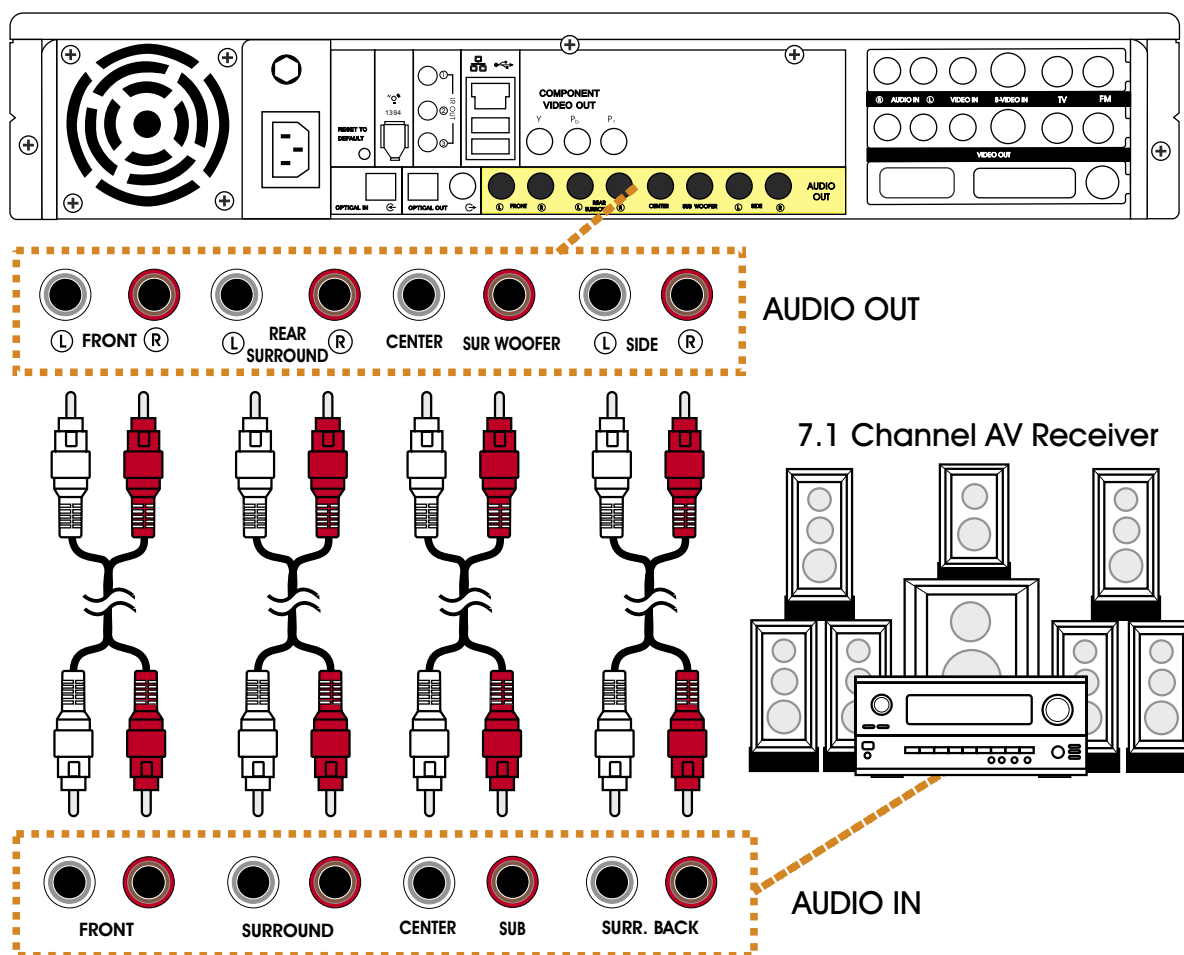
7.1 Home Theater Audio

The following diagram shows a typical advanced home theater audio eight-channel 7.1 speaker installation that requires multichannel inputs on an AV Receiver. This is only a suggested configuration.

Your system may be different. If your AV receiver supports 7.1 and has only 5.1 inputs, see "5.1 Home Theater Audio" on page 26. AV Receiver audio input connectors may be labeled Surround, 7.1 or 8 Channel inputs, DVD, Ext. In, or Multichannel Inputs.

NOTE

Some AV receivers can generate (upmix) the 7.1 audio with 5.1 channels. Refer to your AV receiver product documentation.



NOTE

Both Media Center speaker settings and DVD audio settings must be changed for proper audio setup. Go to "Configuring Audio Output" on page 93 and note your speaker configuration choice for later software setup steps.

Digital Home Theater Audio

The Shuttle Digital Hub supports digital audio output.

- For TV and music: two-channel stereo. (Your AV receiver may separate the audio signal into multiple channels.)
- For DVD playback: the multiple channel Dolby Digital 5.1 or DTS Digital encoded audio signal passes to your AV receiver for decoding. Refer to your AV receiver product documentation.

You can connect the either coaxial or optical digital audio cable, depending on your system. If you have both cables, connect only one cable. Do not connect analog multichannel speaker outputs if you connect the digital output.

- Insert optical cords straight in until they click into place.
- Do not bend or tie optical cords.

To connect digital audio from your Shuttle Digital Hub to an AV receiver:

- (1) Connect the Digital Out connector on the back panel of your Shuttle Digital Hub, to the Digital Input (SPDIF) on your AV receiver or digital audio system.
- (2) Select the AV receiver input.
- (3) Use the AV receiver to adjust the volume.

NOTE

Some AV receivers can generate (upmix) the 7.1 audio with 5.1 channels. Refer to your AV receiver product documentation.

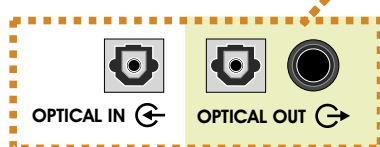
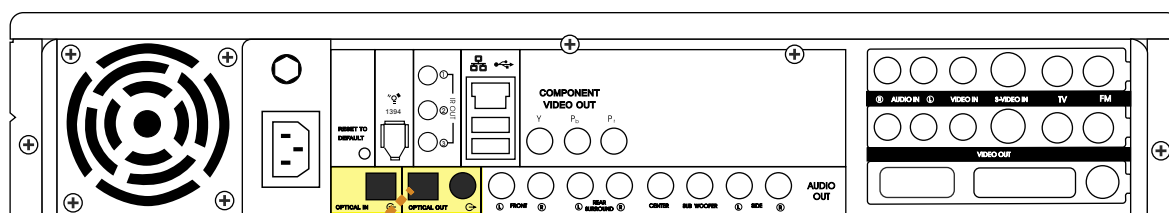
The following diagram shows a typical advanced home theater audio six-channel 5.1 speaker installation that requires a digital input on an AV Receiver. This is only a suggested configuration. Your system may be different, such as having more speakers.

NOTE

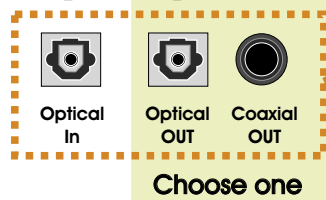
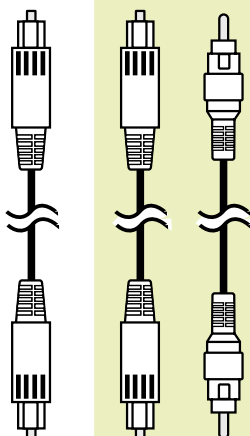
Both Media Center speaker settings and DVD audio settings must be changed for proper audio setup. Go to "Configuring Audio Output" on page 93 and note your speaker configuration choice for later software setup steps.

Digital 5.1 multichannel audio system connection:

Recommended for best digital audio experience.



Digital Audio
SPDIF In/Out



Digital Audio SPDIF In/Out

★ Powered Speaker Audio Connection

You can connect active (powered) speakers directly to your Shuttle Digital Hub. An active speaker system must have its own power cord. You may need Y adapter cables.

Select the configuration that most closely matches your home system, see:
"2.1 Powered Speakers" on page 31
"4.1 Powered Speakers" on page 32
"5.1 Powered Speakers" on page 33
"7.1 Powered Speakers" on page 34
You can also use a digital connection. See "Digital Powered Speakers" on page 36

Y adapter cables

The Shuttle Digital Hub has RCA type output connectors. You may need to connect Y adapter cables between your Shuttle Digital Hub analog audio output and your powered speaker inputs. You can also use them for audio inputs depending on your equipment.

Use Y adapter cables with one female 1/8-inch (3.5 mm) stereo mini-jack on one end and two male RCA connectors on the other end. These cables can be found in the accessory box.

The number of Y adapter cables you need to connect to your home stereo system depends on the number of speakers you install.

Select the cable that most closely matches your home system:
2.1 speaker system: 1 Y adapter cable
4.1 speaker system: 2 Y adapter cables
5.1 speaker system: 3 Y adapter cables
7.1 speaker system: 4 Y adapter cables

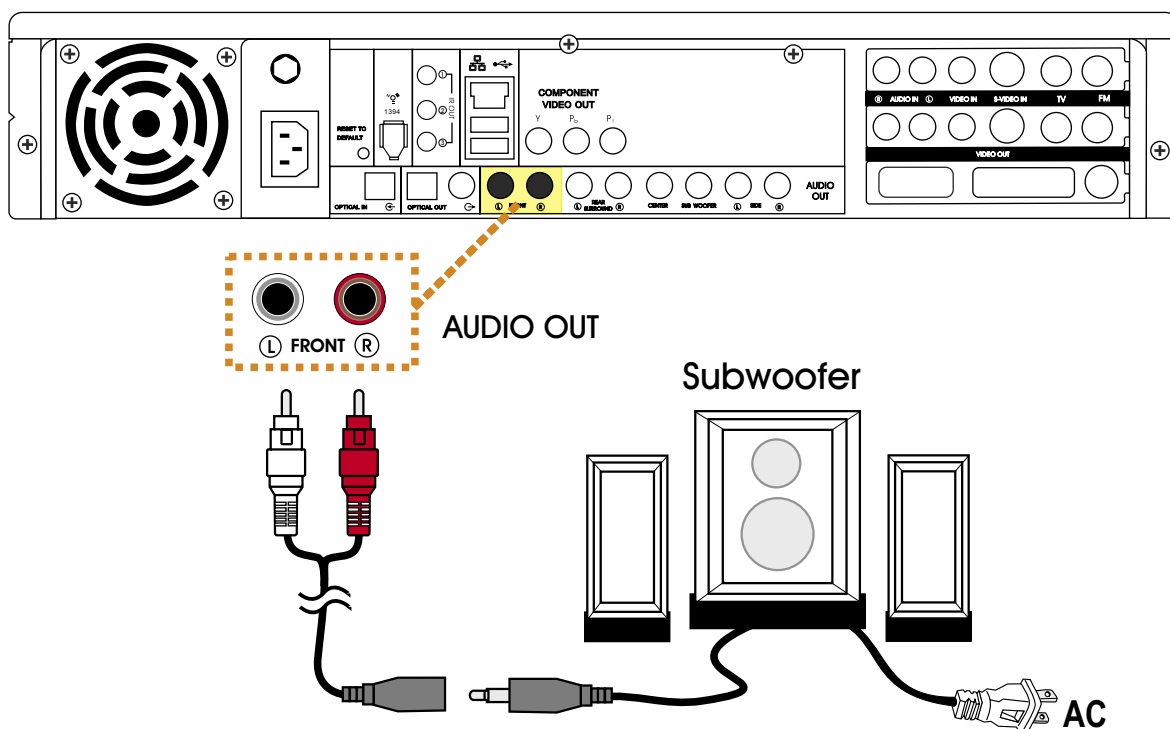
2.1 Powered Speakers

To connect simple left/right stereo (2.0) active speakers:

Or

To connect two speakers and a subwoofer for 2.1 speaker output:

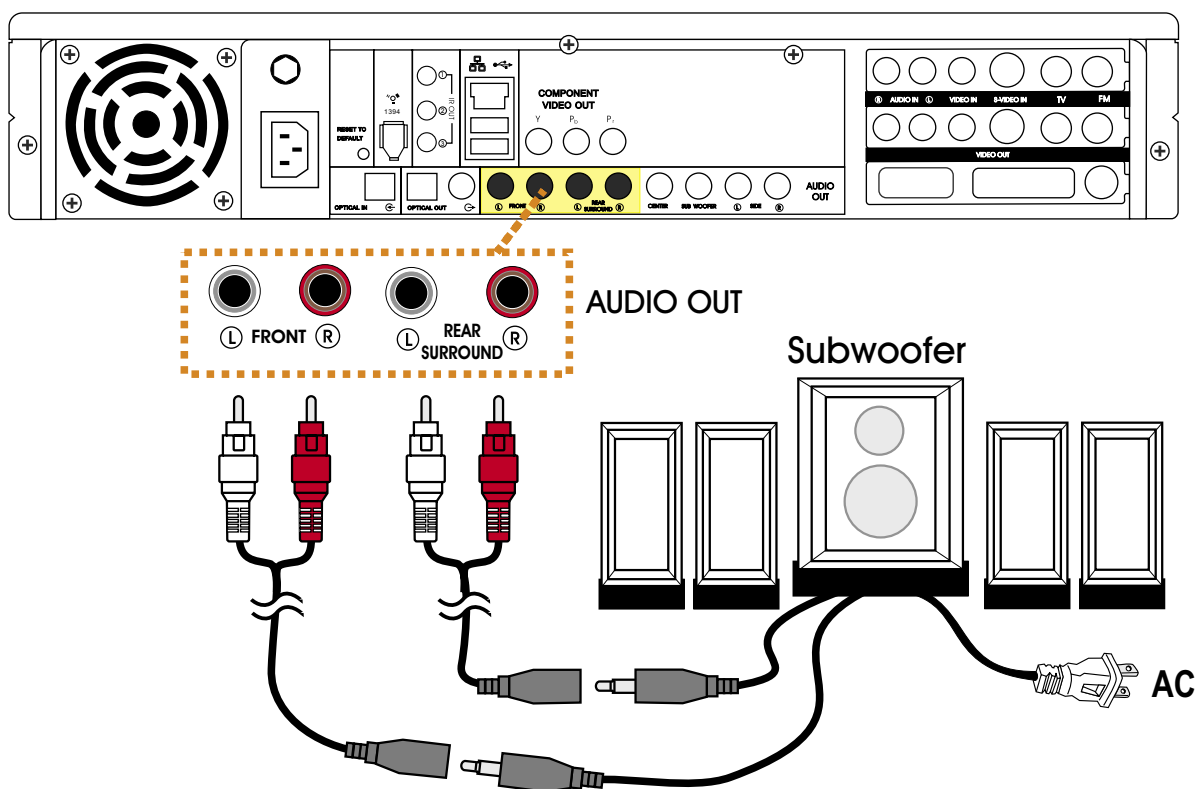
- (1) Connect the RCA connector end of the Y adapter cable to the Front Right and Front Left Audio Out connectors on the back of your Shuttle Digital Hub.
- (2) Connect the female 1/8-inch (3.5 mm) mini-jack end of the Y adapter cable to the audio line in cable of the speaker amplifier.
- (3) Plug in the speaker system power. Refer to the speaker documentation.
- (4) Turn on the speaker system.



4.1 Powered Speakers

To connect two front speakers, two surround speakers, and a subwoofer for four-channel (4.1 speaker) output:

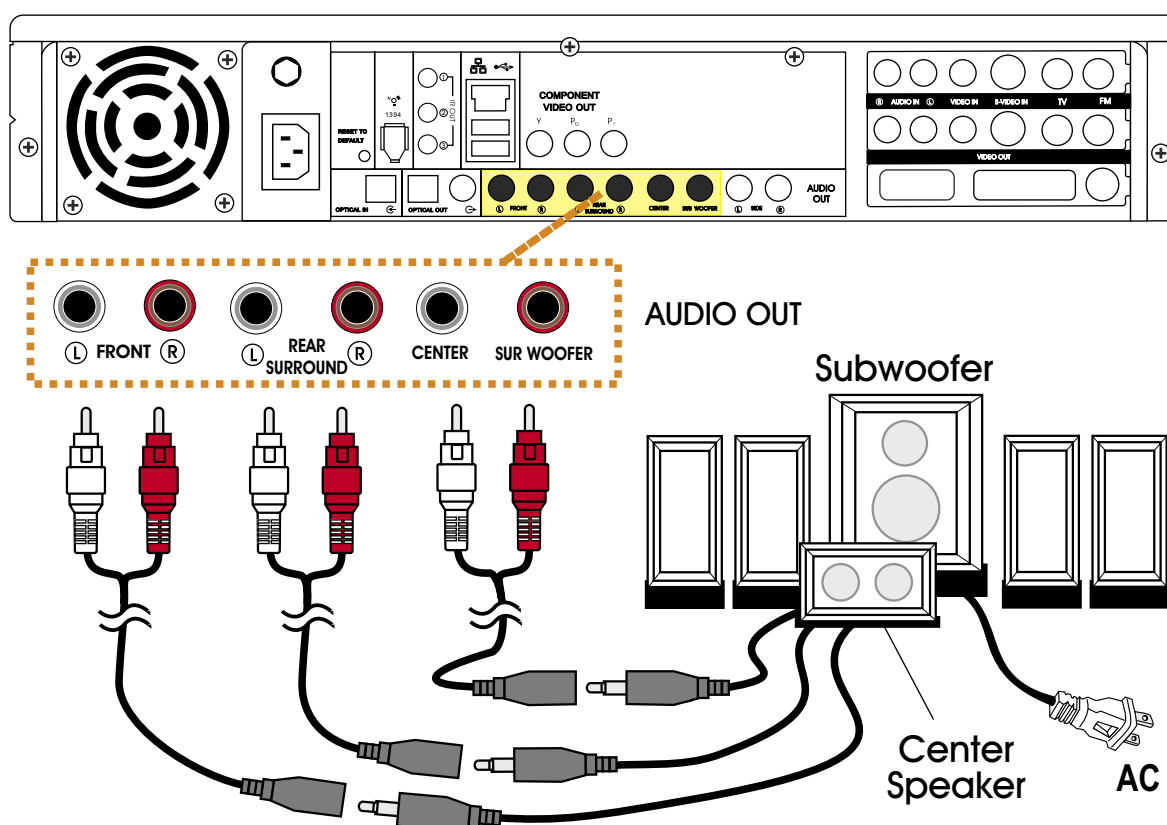
- (1) Connect the RCA connector end of the Y adapter cables to the Audio Out connectors Front Right, Front Left, Surround Right, Surround Left on the back of your Shuttle Digital Hub.
- (2) Connect the female 1/8-inch (3.5 mm) mini-jack end of the Y adapters to the audio line in cables of the speaker amplifier.
- (3) Plug in the speaker system power. Refer to the speaker documentation.
- (4) Turn on the speaker system.



5.1 Powered Speakers

To connect two front speakers, two surround speakers, a center speaker, and a subwoofer for six-channel (5.1 speaker) output:

- (1) Connect the RCA connector end of the Y adapter cables to the Audio Out connectors Front Right, Front Left, Surround Right, Surround Left, Center on the back of your Shuttle Digital Hub.
- (2) Connect the female 1/8-inch (3.5 mm) mini-jack end of the Y adapters to the audio line in cables of the speaker amplifier.
- (3) Plug in the speaker system power. Refer to the speaker documentation.
- (4) Turn on the speaker system.



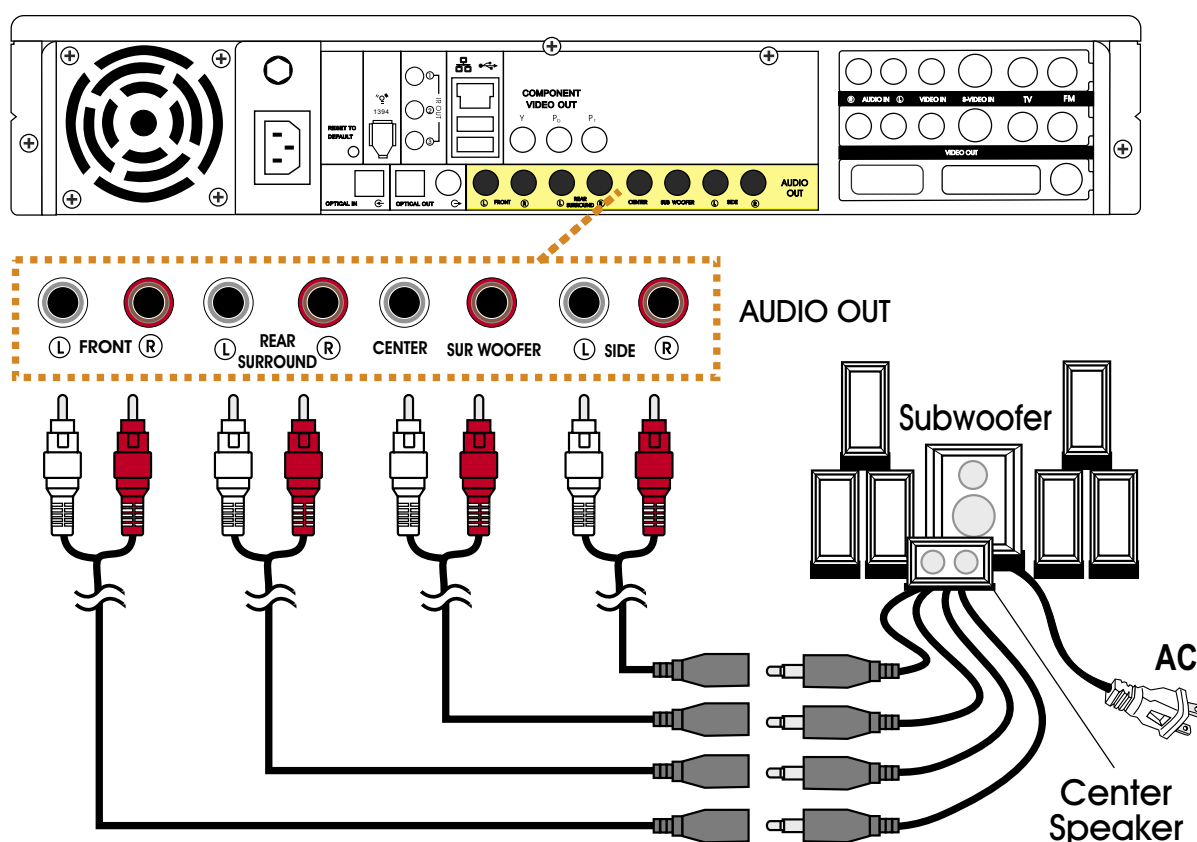
7.1 Powered Speakers

You can install a 7.1 audio system to your Shuttle Digital Hub. To connect two front speakers, two surround speakers, two surround back speakers, a center speaker, and a subwoofer for eight-channel (7.1 speaker) output:

- (1) Connect the RCA connector end of the Y adapter cables to the Audio Out connectors Front Right, Front Left, Surround Right, Surround Left on the back of your Shuttle Digital Hub.
- (2) Connect the female 1/8-inch (3.5 mm) mini-jack end of the Y adapters to the audio line in cables of the speaker amplifier.
- (3) Plug in the speaker system power. Refer to the speaker documentation.
- (4) Turn on the speaker system.

NOTE

Some powered speakers can generate (upmix) the 7.1 audio with 5.1 input channels. Refer to your product documentation.



Digital Powered Speakers

You can install a digital audio system with up to two front speakers, two surround speakers, two surround back speakers, a center speaker, and a subwoofer to your Shuttle Digital Hub.

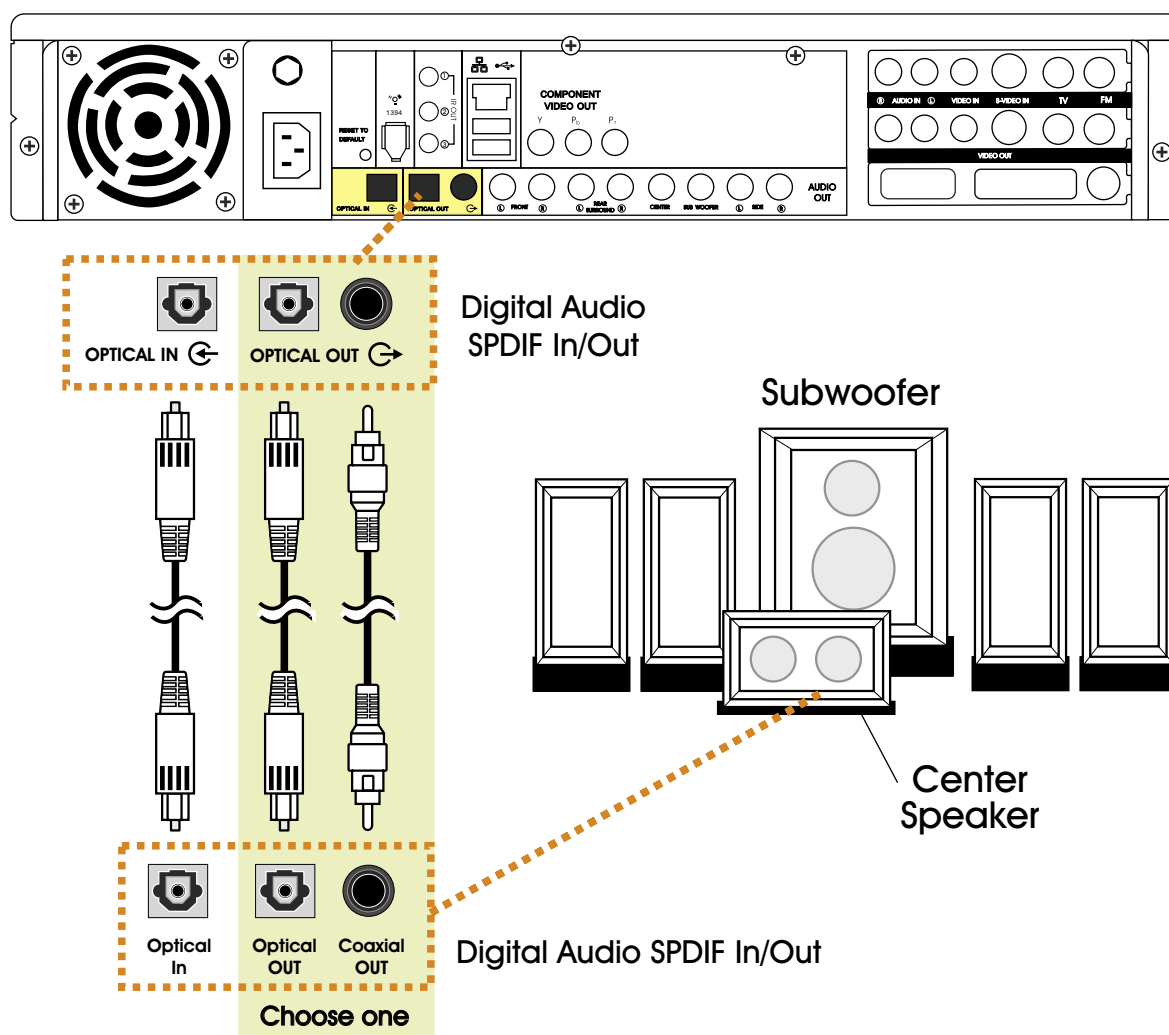
NOTE

Some powered speakers can generate (upmix) the 7.1 audio with 5.1 input channels. Refer to your product documentation.

Do not connect analog multichannel speaker outputs if you connect the digital output.

You can connect either the coaxial or optical digital audio cable, depending on your system. If you have both cables, connect one cable only.

- Insert optical cords straight in until they click into place.
- Do not bend or tie optical cords.



To connect six-channel (5.1 speaker) digital output to a speaker digital input:

- (1) Connect a digital audio coaxial or optical cable to a Digital Audio Out connector on the back of your Shuttle Digital Hub.
- (2) Connect the digital audio coaxial or optical cable to the speakers.
- (3) Plug in the speaker system power. Refer to the speaker documentation.
- (4) Turn on the speaker system.

Monitor Speakers

You can connect powered monitor speakers directly to your Shuttle Digital Hub.

You may need Y adapter cables.

You can:

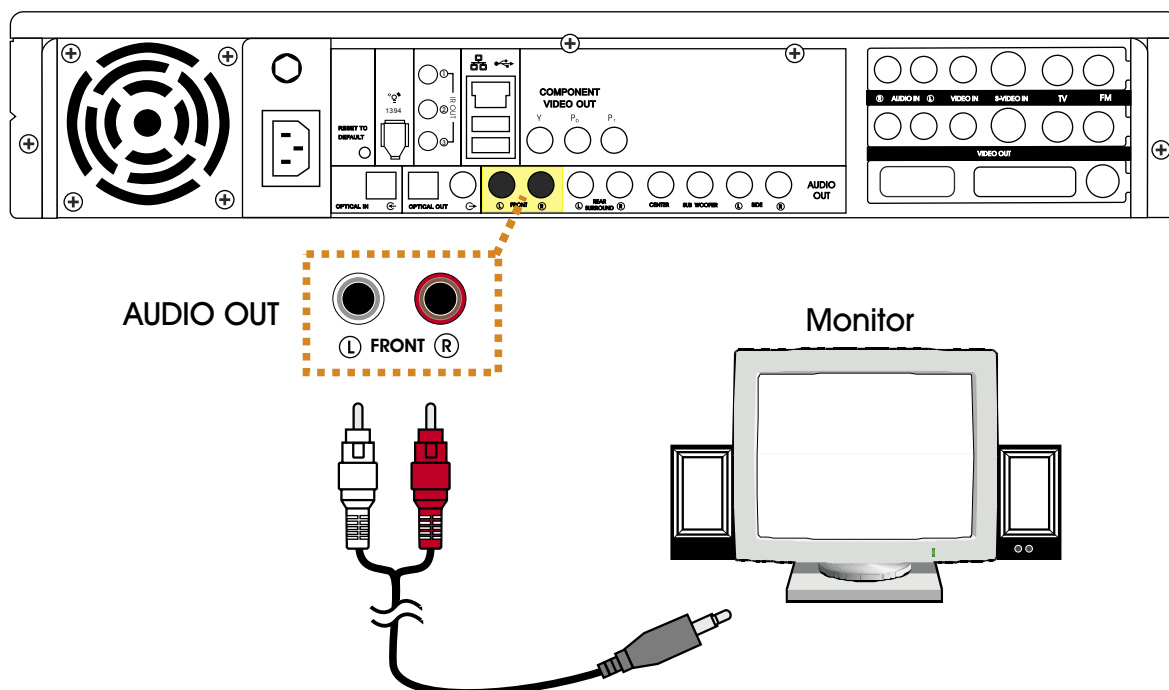
- Connect simple left/right stereo 2.0 powered monitor speakers.

Or

- Connect two powered speakers and a subwoofer for 2.1 monitor speaker output.

NOTE

Monitor speaker configurations and connections may vary. Your system may be different.



* FM Radio Antenna

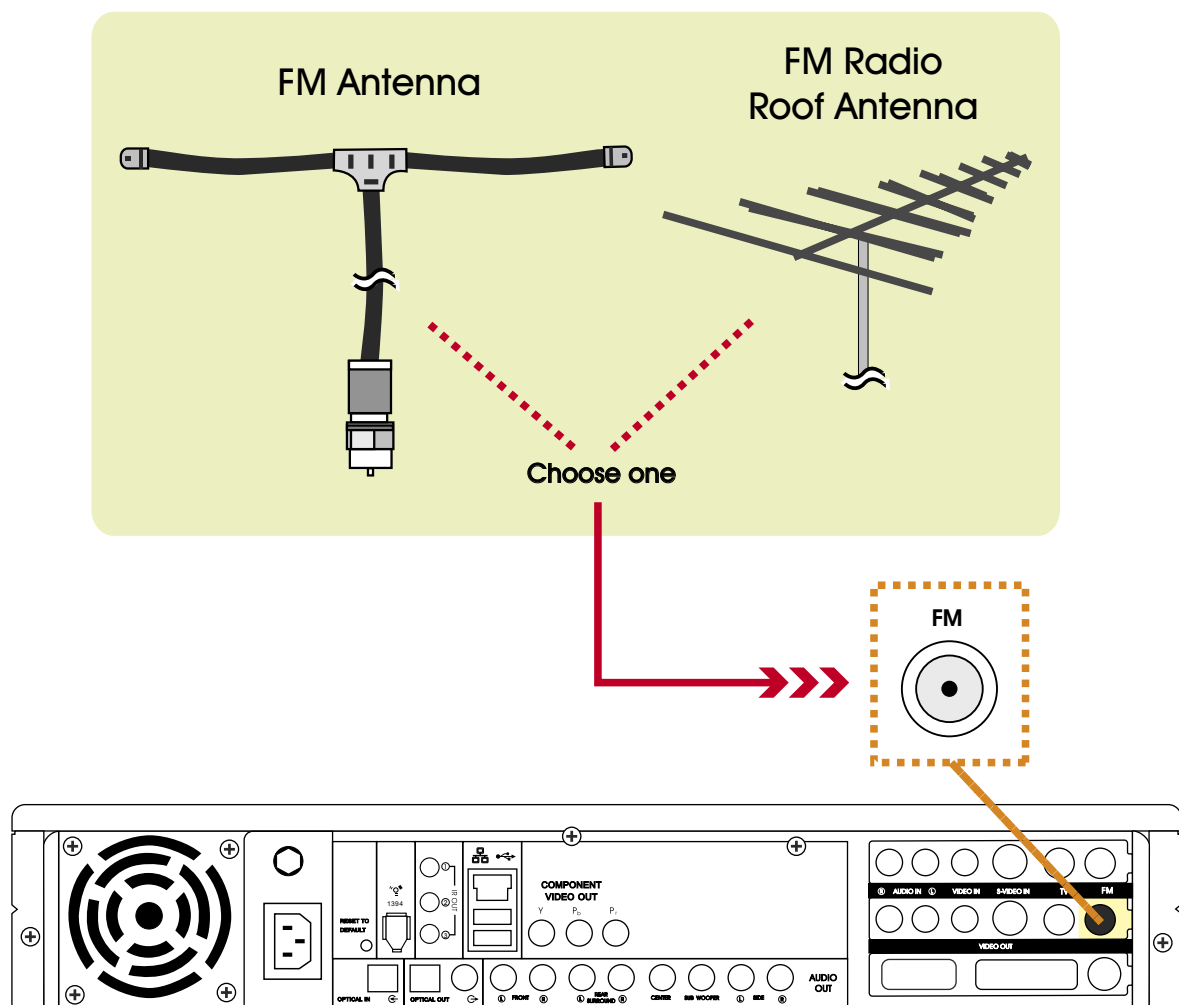
The Shuttle Digital Hub includes an FM radio tuner.

To connect the FM radio antenna:

- (1) Plug the FM radio antenna cable into the FM (Tuner) In connector on the back panel (75-Ohm Coaxial).
- (2) You may want to extend the ends of the cable to improve your FM radio signal reception.

The following diagram shows a typical FM antenna indoor connection. This is only a suggested configuration. Your system may be different.

The following diagram shows a typical FM antenna rooftop connection.



This chapter describes how to connect the Shuttle Digital Hub to a TV or display monitor, so you can watch TV and view the screen. It includes the most typical, and some advanced, video output options.

You must have a display such as a TV or monitor connected to the Shuttle Digital Hub for proper operation.

Shuttle Digital Hub support many different video options, connections, and configurations of TVs and monitors.

Your system may have different equipment.



Chapter Contents :

"Video Out Overview" on page 38
"Typical Video Out Connections" on page 42
"Video Out to TV" on page 43
"Video Out from AV Receiver to TV" on page 45
"Video Out to Monitor" on page 47
"Video Out to TV and Monitor" on page 48

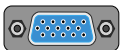

* Video Out Overview

Video Out Connection Overview

The back panel connector that you hook up to your TV is labeled Video Out. For a standard television, choose one of the following Video Out connectors and corresponding cables:

-  S-video
-  Component (Y, Pb, Pr)

For a "High Definition" plasma, LCD, or HDTV display or monitor, choose one of the following Video Out connectors and cables:

-  VGA
-  DVI

NOTE

It's strongly recommend using LCD, monitor, HDTV display or plasma with VGA or DVI connector as your default video output device.

NOTE

Component video output requires specific configurations for certain display types and resolutions. Go to your model number page at <http://global.shuttle.com/Support/Support.asp> for instructions on using component video.

The type of video cable you need depends on your TV:

- If your TV has a composite video jack, you may need a composite video cable.
- If your TV has an S-video jack, you need an S-video cable. An S-video cable provides separate color and black-and-white image signals, and delivers a sharper image than a composite video cable does.
- For component video, see "Component Video Settings" on page 40.

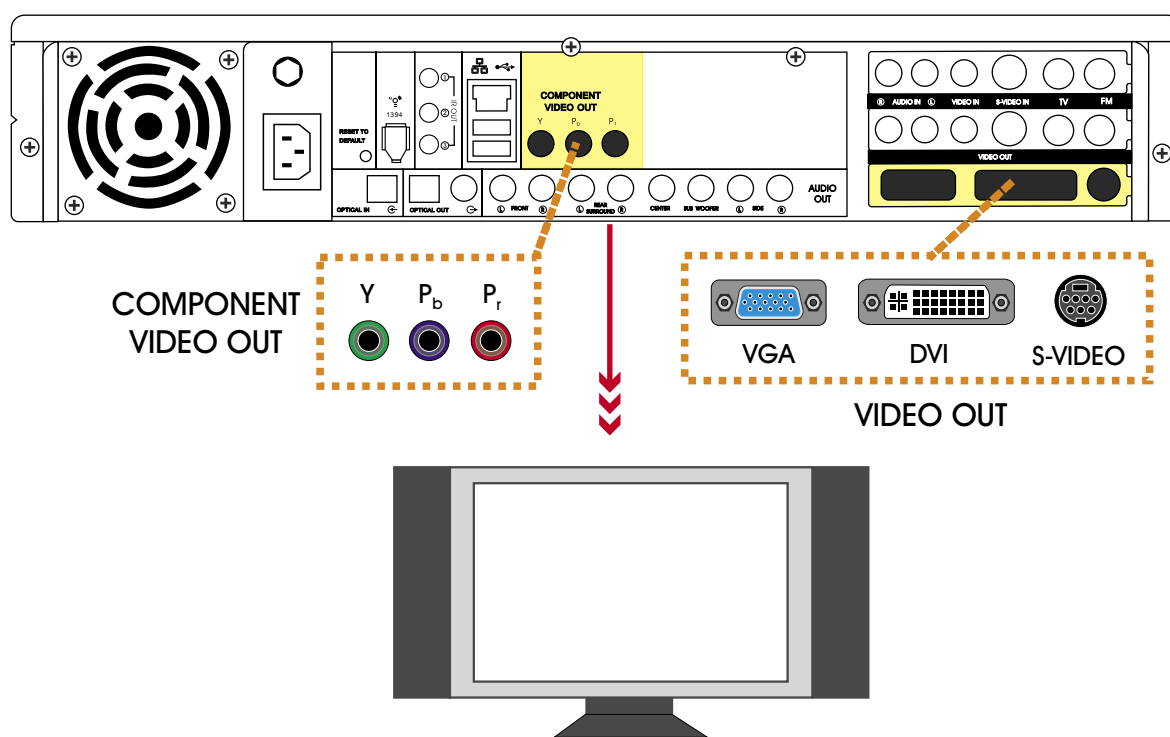
To connect a TV to the Shuttle Digital Hub, you may need a video cable and an audio cable. Use a video cable to connect the Video Out on the Shuttle Digital Hub to your TV Video In. These cables are included in the box. You may need other or additional cables, depending on your TV or monitor.

When using an AV receiver, the Video Out cables can be connected directly to a TV and just the audio is connected and switched through an AV receiver, or video and audio is connected and switched through an AV receiver.

When using an AV receiver, do not switch video types such as connecting a Component In to a Composite Out. Not all AV receivers support signal conversion.

Video Output Connectors

Location and number of connectors may vary by model.



Component Video Settings

You must configure settings to view component video on your TV properly. Go to your model number page at <http://global.shuttle.com/Support/Support.asp> for instructions on using component video.

Overview

You must change the default desktop resolution of 800 x 600 to 640 x 480 for the best DVD playback and Media Center experience. A resolution of 800 x 600 is best for Windows desktop dialog boxes. See “Adjusting the Desktop Display” on page 137.

The component video default output is 480i (interlaced) to provide a picture on most TVs. Driver adjustments are required to configure progressive scan for TVs that support progressive scan.

Progressive scan format provides a better desktop viewing experience than interlaced format.

NOTE

Shuttle recommends initial setup using VGA or composite video.

Content-protected DVD playback is limited to the following when component video is connected:

Component Format	Desktop Resolution
480i (interlaced)	640 x 480 @ 30 Hz
480p (progressive)	640 x 480 @ 60 Hz

TV Display Overview

The Shuttle Digital Hub allows you to connect to a TV to view the monitor image on a TV screen. With the TV connected, you can view the Shuttle Digital Hub image, watch TV or DVD movies, or playgames on your TV.

You must manually set up dual displays. Only either the TV or monitor, not both, will display after initial power up.

Audio and Video Switching Overview

AV receiver: You can use your AV receiver as a switch to direct the video to your TV and the audio to your speakers from the Shuttle Digital Hub. This method gives you the best audio quality, and is easy to switch audio/video inputs through your AV receiver remote. If your AV receiver has multiple input and output connections, then it has front panel input and output switches. You must select the correct input and output on the AV receiver front panel or remote control to hear sound and see video.

TV: If you have multiple audio/video inputs on your TV, you can use your TV as an audio/video switch and control inputs through your TV remote. If your TV has multiple input connections, then it has a front panel input switch. You must select the correct input and output on the TV front panel or remote control to hear sound and see video.

Monitor: If you have multiple audio/video inputs on your monitor, you can use your monitor as an audio/video switch. You will probably not be able to use a remote control to switch.

If your monitor has multiple input and output connections, then it has a front panel input switch and output switch.

You must select the correct input and output on the monitor front panel to hear sound and see video.

NOTE

If your video equipment has multiple input and output connections, then it has front panel input and output switches. You must select the correct input and output from the video equipment front panel or remote control to hear sound and see video.

Using the Remote Control with Your TV

You can use the Shuttle Digital Hub remote control to change channels and adjust volume if you have a cable box or satellite receiver, have installed the Infrared Transmitter cable, and have configured the remote control after initial power up.

Always point the Shuttle Digital Hub remote control at the Shuttle Digital Hub front panel. The infrared remote sensor, behind the front panel window, receives signals from the remote control.

You can control one or two set-top-boxes via one or two Infrared Transmitter cables (IR blaster) connected to Shuttle Digital Hub IR OUT.

You must carefully position the Infrared Transmitter cable tip on the set-topbox to ensure the set-top-box receives the IR signal from the Shuttle Digital Hub. See "Infrared Transmitter Connection" on page 62.

* Typical Video Out Connections

This section describes how to hook up the Video Out connectors on the back panel of the Shuttle Digital Hub into your home system so you can watch TV.

These are only suggested configurations. Your system may be different. Select the configuration that most closely matches your home system.

You may set up your Shuttle Digital Hub for the following supported configurations:

Display/video configuration	See:
Video Out from Shuttle Digital Hub to TV, through a direct connection	"Video Out to TV" on page 43
Video Out from Shuttle Digital Hub, through an AV receiver, to a TV	"Video Out from AV Receiver to TV" on page 45
Video Out from Shuttle Digital Hub to a monitor, through a direct connection	"Video Out to Monitor" on page 47
TV and Monitor from Shuttle Digital Hub, dual display option (You must manually set dual displays.)	"Video Out to TV and Monitor" on page 48
Other Video Equipment	"Connecting Video Equipment" on page 66

Then see:
"Connecting TV Source In" on page 50
"Connecting Video Equipment" on page 66

★ Video Out to TV

Switching: If you have multiple audio/video inputs on your TV, you can use your TV as an audio/video switch and control inputs through your TV remote.

Connectors: For a standard television, choose one of the following Video Out connectors and cables:

■  S-video

■  Component (Y, Pb, Pr)

For a plasma, LCD, or HDTV display, choose one of the following Video Out connectors and cables:

■  VGA

■  DVI

NOTE

Component video output requires specific configurations for certain display types and resolutions. Go to your model number page at <http://global.shuttle.com/Support/Support.asp> for instructions on using component video.

Equipment: The TV and some cables are not included with the Shuttle Digital Hub. Refer to the documentation that came with your TV/display. You can also connect a video projector using this procedure.

Configuration: You can adjust the TV display. The detail of configuration steps can be found on <http://global.shuttle.com/Support/Support.asp>.

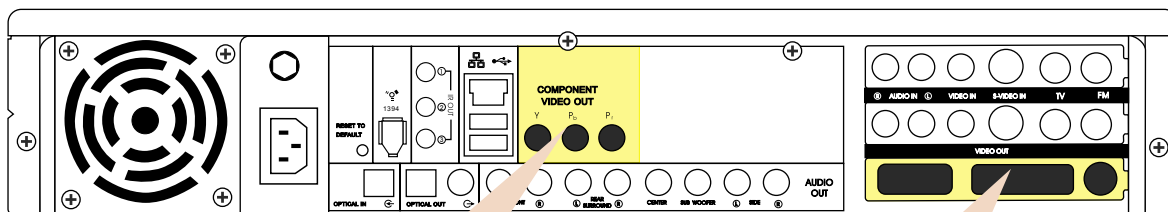
Procedure: Connect a video cable from the Shuttle Digital Hub back panel Video Out directly to the TV Video In.

NOTE

If the Video Out S-video and composite connections are not connected to a TV or video input when the Shuttle Digital Hub is turned on, the S-video and composite jacks turn off automatically and you see no picture.

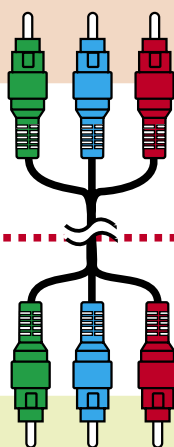
You must restart; press and hold down the power button for four seconds to restart your Shuttle Digital Hub to ensure Video Out connection to your TV or AV receiver.

TV Out (high definition)



COMPONENT VIDEO OUT

Y Pb Pr



Component

HDTV IN

Component

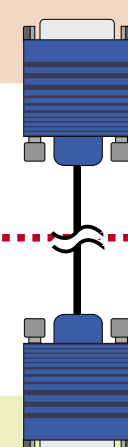
TV IN

VIDEO OUT

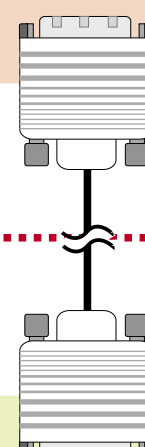
VGA

DVI

S-VIDEO



VGA



DVI



S-VIDEO

Choose one

NOTE

Not recommended for initial setup.



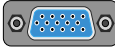

* Video Out from AV Receiver to TV

Switching: Switch audio and video through your AV receiver if your AV receiver switches video and has the correct connections. This method gives you the best audio quality, and you can easily switch audio/video inputs through your AV receiver remote.

Connectors: For a standard television, choose one of the following Video Out connectors and cables:

-  S-video
-    Component
Y Pb Pr

For a plasma, LCD, or HDTV display, choose one of the following Video Out connectors and cables:

-  VGA
-  DVI

Equipment: The TV, AV receiver, and some cables are not included with the Shuttle Digital Hub. See the documentation that came with your TV and AV receiver.

Configuration: You can adjust the TV display. The detail of configuration steps can be found on <http://global.shuttle.com/Support/Support.asp>.

Procedure: (1) Connect a video cable from the Shuttle Digital Hub back panel Video Out to the AV receiver Video In.
(2) Connect a video cable from the AV receiver Video Out to the TV Video In.

Use the same connector type if your AV receiver does not support cross connecting.

NOTE

Component video output requires specific configurations for certain display types and resolutions. Go to your model number page at <http://global.shuttle.com/Support/Support.asp> for instructions on using component video.

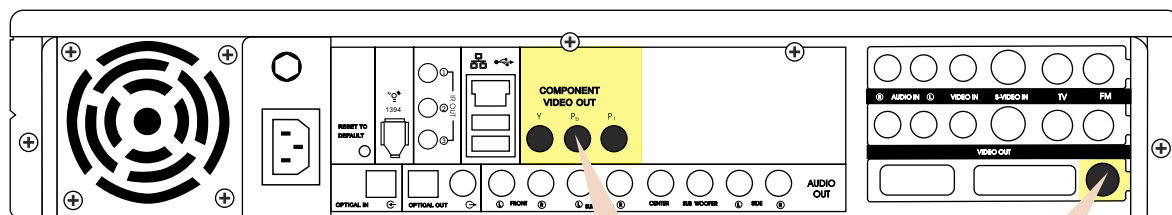
NOTE

If your TV and AV receiver has multiple input and output connections, then it has front panel input and output switches. You must select the correct input and output from the TV and AV receiver front panel or remote control to hear sound and see video.

NOTE

If the Video Out S-video and composite connections are not connected to a TV or video input when the Shuttle Digital Hub is turned on, the S-video and composite jacks will turn off automatically. You must restart; press and hold down the power button for four seconds to restart your Shuttle Digital Hub to ensure Video Out connection to your TV or AV receiver.

TV Out (through AV receiver)



COMPONENT
VIDEO OUT

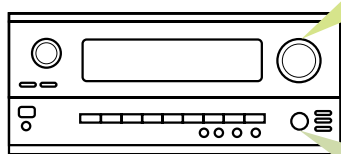
Y Pb Pr

VIDEO OUT

S-VIDEO

Choose on <<<<

AV RECEIVER



AV RECEIVER IN

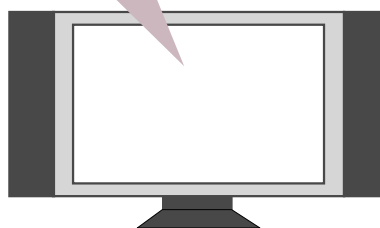
AV RECEIVER OUT

Choose one and
keep same type
as AV Receiver In <<<<

TV IN

NOTE

Not recommended
for initial setup.



★ Video Out to Monitor

Switching: If you have multiple audio/video inputs on your monitor, you can use your monitor as an audio/ video switch. You will probably not be able to use a remote control as a switch.

Connectors: For a monitor, choose one of the following Video Out connectors and cables:



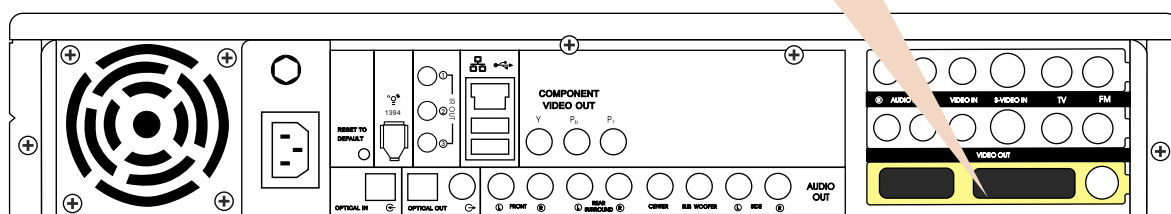
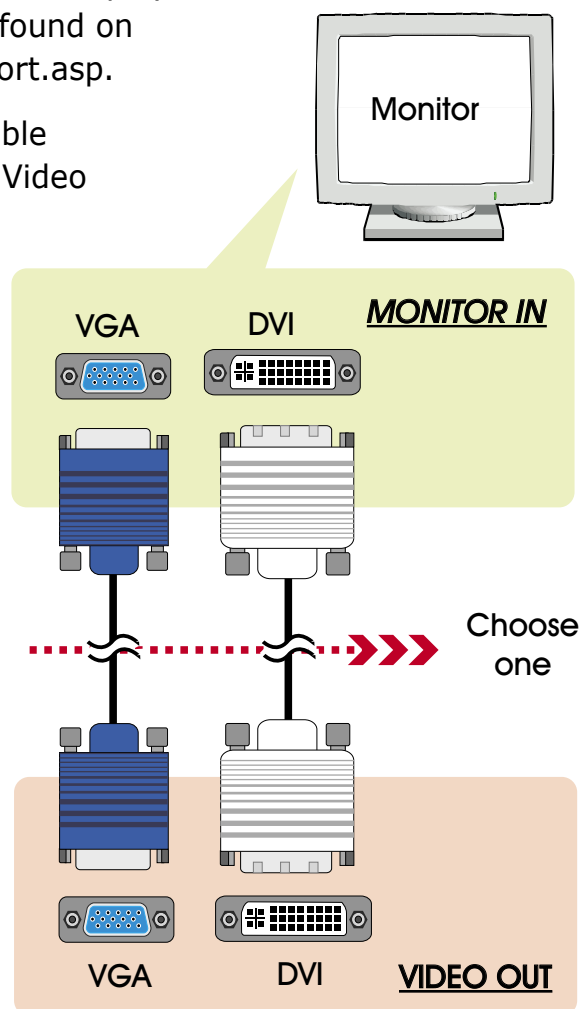
Equipment: The monitor and some cables may not be included with the Shuttle Digital Hub. See the documentation that came with your monitor.

Configuration: You can adjust the monitor display. The detail of configuration steps can be found on <http://global.shuttle.com/Support/Support.asp>.

Procedure: Connect a monitor video cable from the Shuttle Digital Hub back panel Video Out directly to the monitor Video In.

NOTE


If your monitor has multiple input connections, then it has a front panel input switch. You must select the correct input from the monitor front panel or remote control to hear sound and see video.



* Video Out to TV and Monitor

Switching: If you have multiple audio/video inputs on your TV or monitor, you can use your TV or monitor as an audio/video switch. You can use a TV remote control to switch inputs. If your AV receiver switches video and has the correct connections, you can connect your TV or monitor through your AV receiver.

Connectors: For a television, choose one of the following Video Out connectors and cables:

-  S-video
-  Component
Y Pb Pr

For a monitor, choose one of the following Video Out connectors and cables:

-  VGA
-  DVI

You can use the following combinations to connect your TV and monitor:

Display	Use with
VGA	Video (composite), S-video, Component (Y, Pb, Pr), DVI
DVI	Video (composite), S-video Component, (Y, Pb, Pr), VGA

You cannot view any combination of Video (composite), S-video, Component (Y, Pb, Pr) at the same time with dual displays.

Equipment: The TV, monitor, and some cables may not be included with the Shuttle Digital Hub. See the documentation that came with your TV and monitor.

NOTE

Component video output requires specific configurations for certain display types and resolutions. Go to your model number page at <http://global.shuttle.com/Support/Support.asp> for instructions on using component video.

NOTE

If the Video Out S-video and Video (composite) connections are not connected to a TV or video input when the Shuttle Digital Hub is turned on, the S-video and composite jacks will turn off automatically. You must restart; press and hold down the power button for four seconds to restart your Shuttle Digital Hub to ensure Video Out connection to your TV or AV receiver.

Configuration: You can adjust the TV and monitor displays. The detail of configuration steps can be found on <http://global.shuttle.com/Support/Support.asp>.

- Procedure:**
- (1) Connect a monitor video cable from the Shuttle Digital Hub back panel Video Out directly to the monitor Video In. Use the VGA or DVI Video Out connectors.
 - (2) Connect your TV to the Shuttle Digital Hub back panel. Use the Video (composite), S-video, or component (Y, Pb, Pr) Video Out connectors.
 - (3) After initial turn-on, you will need to activate dual displays. The detail of configuration steps can be found on <http://global.shuttle.com/Support/Support.asp>

NOTE

If your TV or monitor has multiple input connections, select the correct input on the TV or monitor.

4 Connecting TV Source In

This chapter describes how to connect TV source input from a set-top-box such as a cable box or satellite receiver to the Shuttle Digital Hub. Infrared Transmitter cable installation is also included.

You connect the Shuttle Digital Hub to an existing setup for your TV signal source. This chapter includes the most typical, and some advanced, input options.

The Shuttle Digital Hub supports many different video source input options, connections, and set-top-box configurations, such as a cable box or satellite receiver.

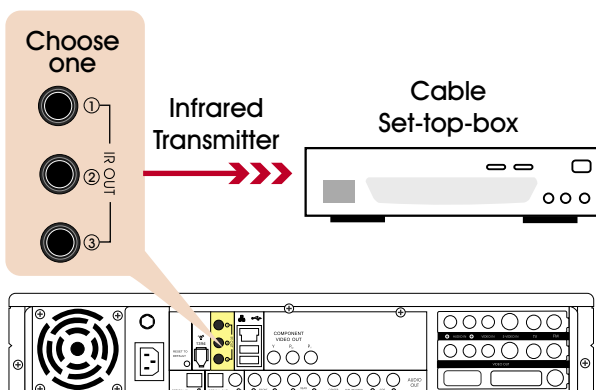
Your home system may have different components.

Chapter Contents :

"TV Source Overview"on page 50
"Typical TV Source Connections"on page 52
"Cable Connection"on page 53
"Satellite Connection"on page 58
"Infrared Transmitter Connection"on page 62
"Antenna Connection"on page 64

NOTE

For additional information on connecting the cable box or satellite receiver, refer to the documentation that came with your equipment.



* TV Source Overview

TV Signal Source Overview

You must have a TV signal into the Shuttle Digital Hub for proper operation. The back panel connectors are TV Source 1 In and TV Source 2 In:

- For a cable TV box, digital cable box, or satellite receiver: use TV Source 1 In or TV Source 2 In (select models only).
- For an analog cable RF coaxial connector: use cable antenna.

A set-top cable TV box is provided by your cable TV provider to unscramble premium channels.

For Dual Tuner configurations, both TV sources must be of the same type: either cable TV, digital cable TV, satellite TV, or antenna. The TV sources must also have the same, identical channel line-up; for example, if you are using two satellite TV sources they must provide the exact same channels. All TV viewing and scheduling is provided through the Television Program Guide in Media Center, so both TV sources must have identical Television Program Guides.

The Shuttle Digital Hub records television and allows you to control the television channels. The Shuttle Digital Hub has two tuner configurations available:

TV Source Connectors Overview

Your standard television has one or more of the following video input connectors and cables:

-  Coaxial (RF)
-  Video (composite)
-  S-video

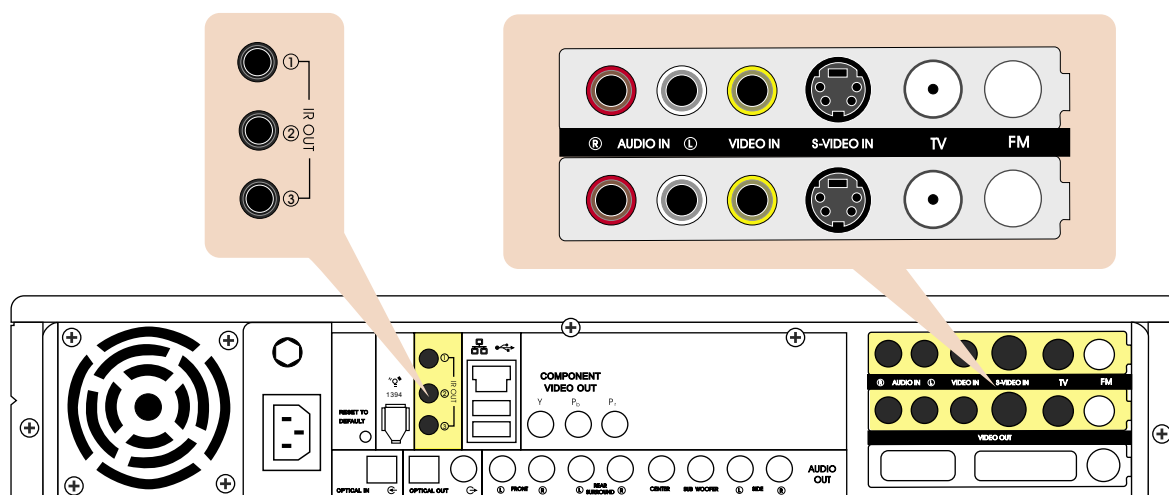
The type of video cable you need depends on your TV:

- If your TV has an S-video jack, you need an S-video cable. Use an S-video cable to connect the TV Out on the Shuttle Digital Hub to your TV. An S-video cable provides separate color and black-and-white image signals, and delivers a sharper image than a composite video cable.

- If your TV has a composite video jack, you need a composite video cable.

You may need other or additional cables, depending on your TV signal source.

Do not switch video types such as connecting a Coaxial In and a Composite Out. Not all set-top-boxes and AV receivers support signal conversion.



* Typical TV Source Connections

These are only suggested configurations. Your system may be different. Select the configuration that most closely matches your home system:
TV source type Display/video configuration Connector See:

TV source type	Display/video configuration	Connector	See:
Cable	Cable directly from the wall (without a cable TV set-top-box or digital cable receiver)	Cable/Ant	"Cable Only" on page 53
	One cable TV box or digital cable receiver	TV Source 1 In Or Cable/Ant 1	"One Cable TV Box or Digital Cable Receiver" on page 54
	Two cable TV boxes, or digital cable receivers	TV Source 1 In TV Source 2 In Or Cable/Ant 1 Cable/Ant 2	"Two Cable TV Boxes, or Two Digital Cable Receivers" on page 56
Satellite	One satellite receiver	TV Source 1 In Or Cable/Ant 1	"One Satellite Receiver" on page 58
	Two satellite receivers	TV Source 1 In TV Source 2 In Or Cable/Ant 1 Cable/Ant 2	"Two Satellite Receivers" on page 60
Antenna	TV Antenna	Cable/Ant 1 In Cable/Ant 2 In	"Antenna Connection" on page 64

Then see:

"Infrared Transmitter Connection" on page 62 (cable TV box, digital cable receiver, or satellite receiver only)

"Connecting Video Equipment" on page 66

* Cable Connection

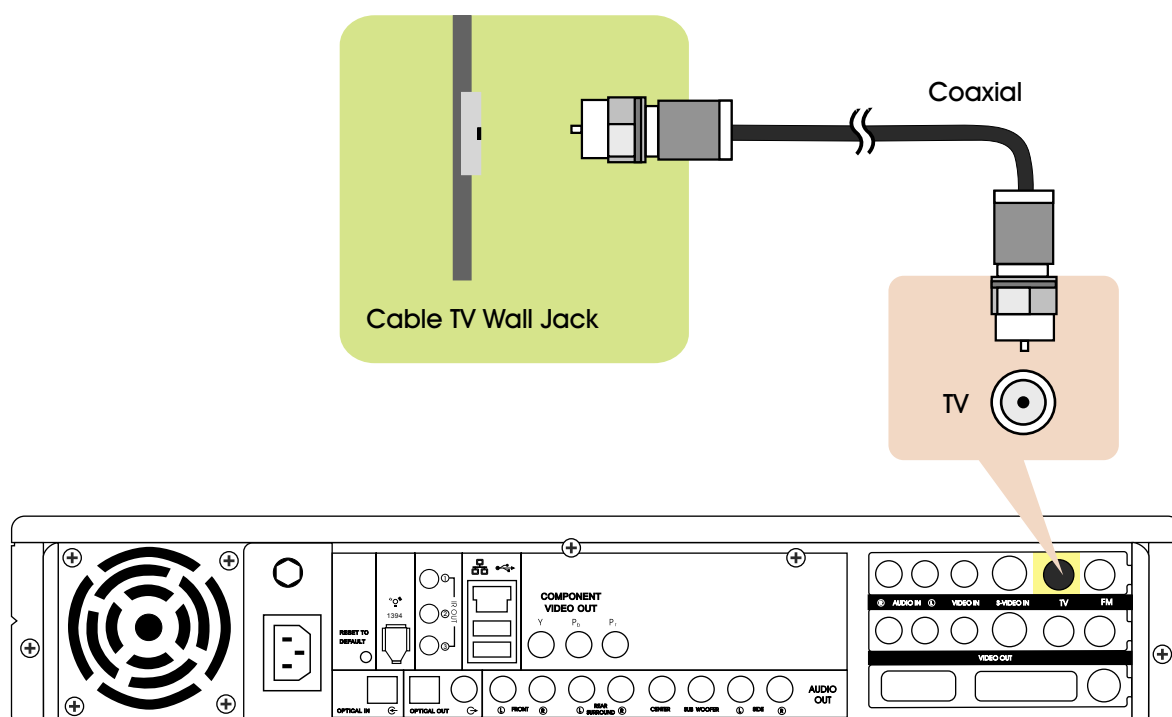
Cable Only

Location and number of connectors may vary by model.

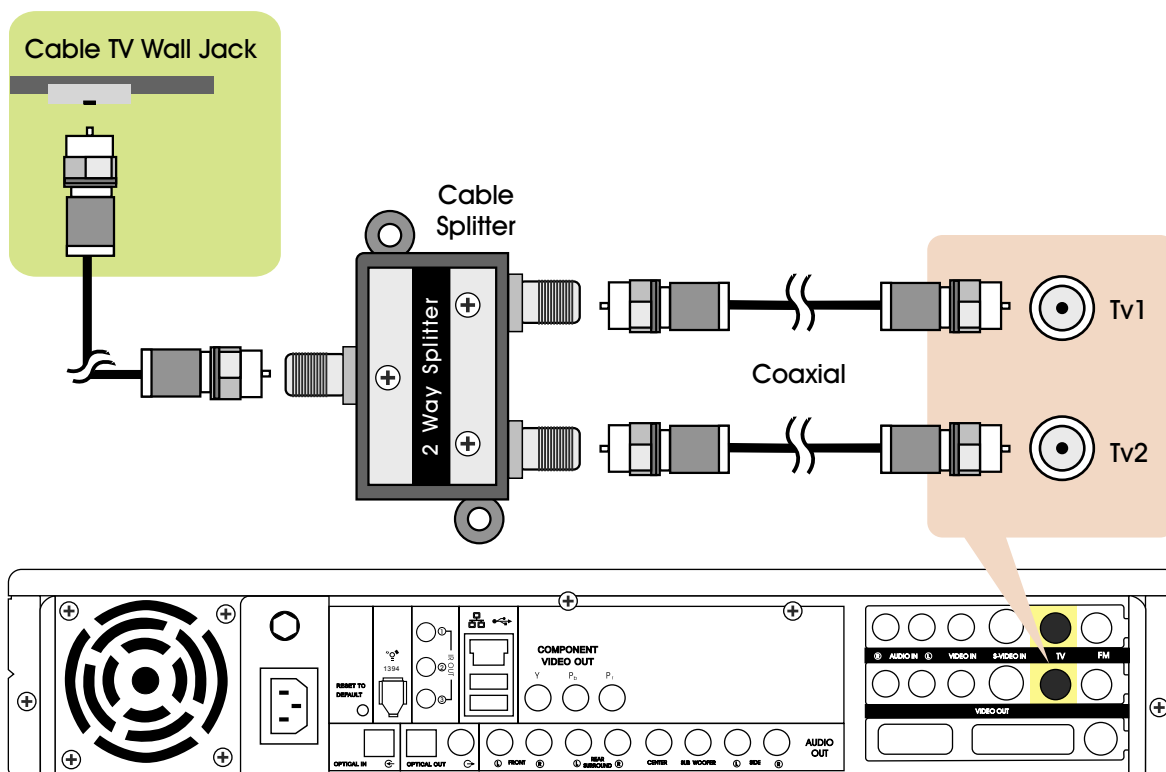
If you are using a cable without a set-top-box or digital cable receiver, do the following to connect the TV signal source:

- (1) Plug the connector of a coaxial cable from your TV cable (wall) into the Cable/Ant connector on the back of the Shuttle Digital Hub.
- (2) Turn the connector to tighten it.
- (3) Install a splitter as shown in the following illustration (select models only).

TV signal source (Cable)



Cable Only with Splitter




TV signal source — Cable and dual tuners with splitter (select models only)


* One Cable TV Box or Digital Cable Receiver


Connect the TV signal source from the Cable TV set-top-box or digital cable receiver (not provided) into the Shuttle Digital Hub.

If you are using a set-top-box or digital cable receiver with S-video or composite video output, do the following:

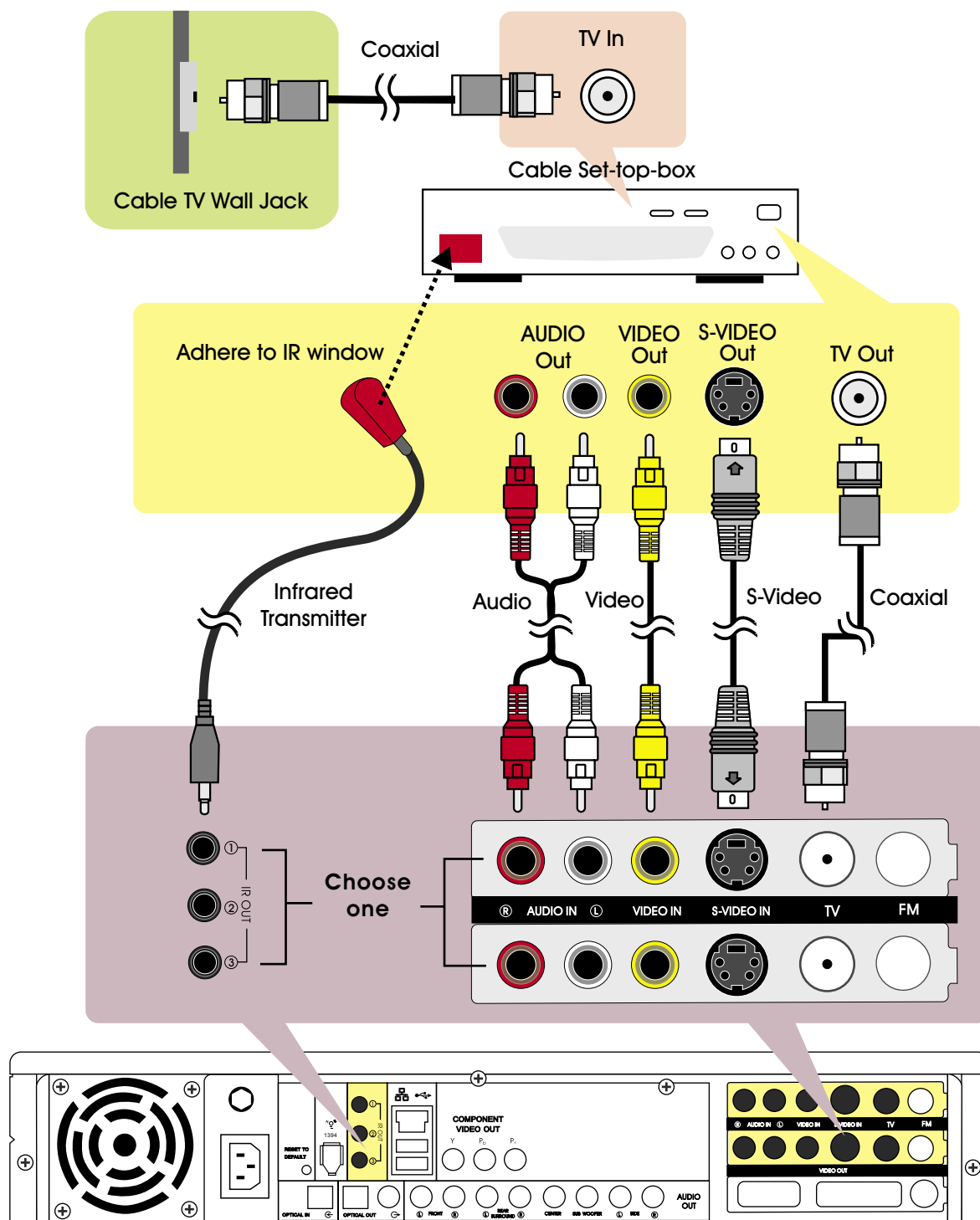
- (1) Make sure that a coaxial cable connector from your cable TV source(wall) is plugged into the set-top-box or digital cable receiver In connector.
- (2) Connect a video cable:
 - a. Choose a video out connector:

 Coaxial (RF)

 Video (composite)

 S-video
 - b. Connect the video cable from the set-top-box or digital cable receiver back panel Video Output connector.
 - c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 1 In connector.

- (3) Connect stereo audio cables (skip this step if using coaxial [RF]):
- From the set-top-box or digital cable receiver back panel Audio Out right (red) and Audio Out left (white) connectors.
 - Into the Shuttle Digital Hub back panel TV Source 1 In Audio right (red) and Audio left (white) connectors.
- (4) Connect the set-top-box Infrared Transmitter cable (required for signal). See "Infrared Transmitter Connection" on page 62.



* Two Cable TV Boxes, or Two Digital Cable Receivers

You must have two identical set-top-boxes, such as two digital cable receivers or two cable TV boxes (not included), from the same TV source and the Shuttle Digital Hub dual tuner option (select models only) to set this up. This configuration will allow you to watch live TV on one channel and record another channel at the same time.

Connect the TV signal source from each set-top-box or digital cable receiver into each of the Shuttle Digital Hub tuners' TV Source 1 and TV Source 2. If you are using two matching set-top cable boxes or digital cable receivers with S-video or composite video output, do the following:

(1) Make sure that:

- **Cable TV box:** A coaxial cable connector from your cable source (wall) is plugged into a cable splitter (provided), then into each cable set-top-box In connector.
- **Digital cable receiver:** A coaxial cable connector from two cable sources (wall) is plugged into each digital cable receiver IN connector.

(2) Connect a video cable for set-top-box 1.

a. Choose a video out connector:



- b. Connect the video cable from the set-top-box or digital cable receiver back panel Video Output connector.
- c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 1 In connector.

(3) Connect stereo audio cables for set-top-box 1 (skip this step if using coaxial [RF]):

- a. From the set-top-box or digital cable receiver back Audio Out right (red) and Audio Out left (white) connectors.
- b. Into the Shuttle Digital Hub back panel TV Source 1 In Audio right (red) and Audio left (white) connectors.

(4) Connect a video cable for set-top-box 2:

- a. Choose a video out connector, use the same type as set-top-box 1:



- b. Connect the video cable from the set-top-box or digital cable receiver back panel video output connector.
- c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 2 In connector.

(5) Connect stereo audio cables for set-top-box 2
(skip this step if using coaxial [RF]):

- a. From the set-top-box or digital cable receiver back Audio Out right (red) and Audio Out left (white) connectors.
- b. Into the Shuttle Digital Hub back panel TV Source 2 In Audio right (red) and Audio left (white) connectors.

(6) Connect the set-top-box 1 Infrared Transmitter cable (required for signal). See "Infrared Transmitter Connection" on page 62.

(7) Connect the set-top-box 2 Infrared Transmitter cable (required for signal). See "Infrared Transmitter Connection" on page 62.

★ Satellite Connection

One Satellite Receiver

Connect the TV signal source from the satellite receiver into the Shuttle Digital Hub. If you are using a satellite receiver (not provided) with S-video or composite video output, do the following:

(1) Make sure that a coaxial cable connector from your dish source is plugged into the satellite receiver In connector.

(2) Connect a video cable.

a. Choose a Video Out connector:



b. Connect the video cable from the satellite receiver back panel video output connector.

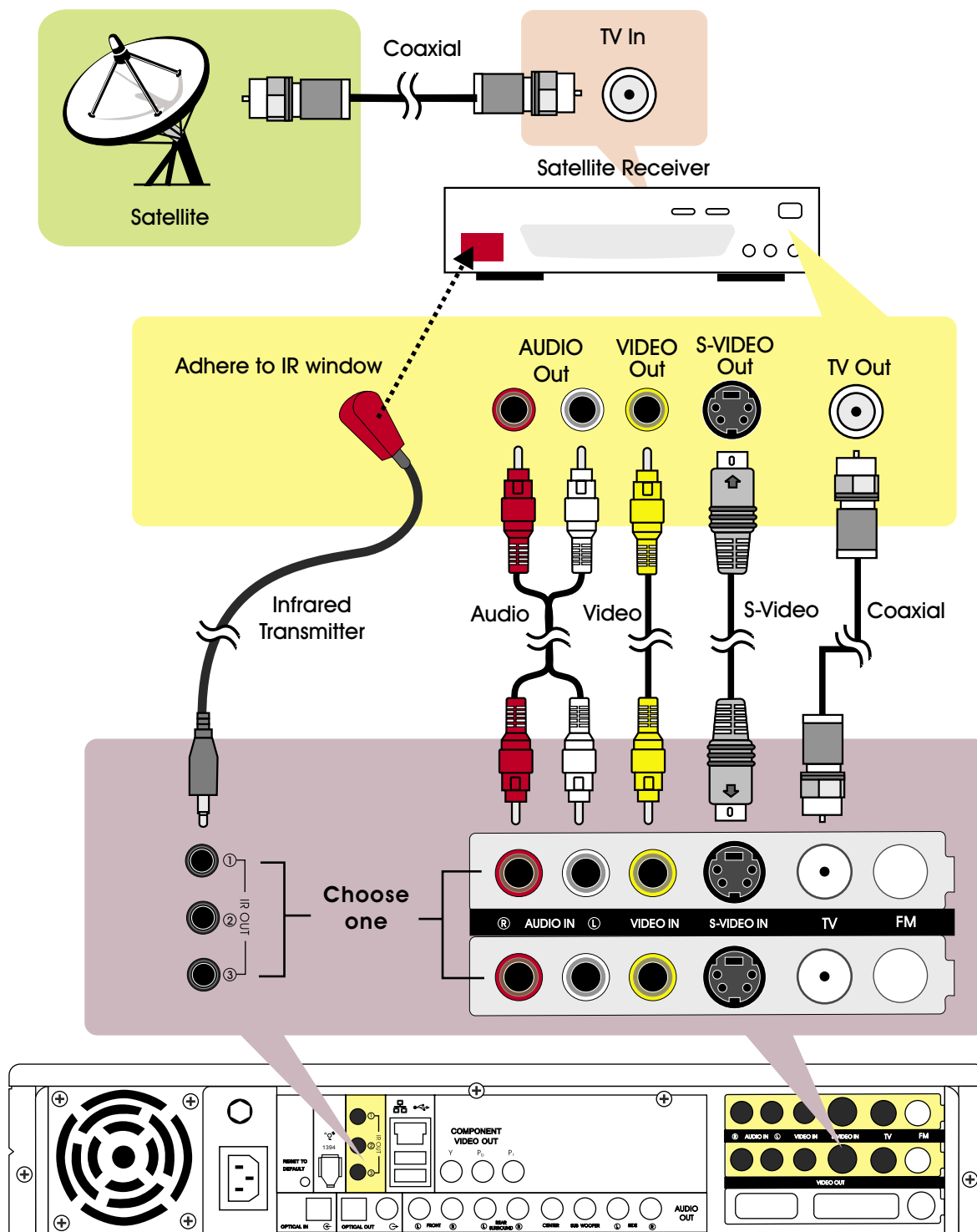
c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 1 In connector.

(3) Connect stereo audio cables (skip this step if using coaxial [RF]):

a. From the satellite receiver back panel Audio Out right (red) connector and Audio Out left (white) connectors.

b. Into the Shuttle Digital Hub back panel TV Source 1 In Audio right (red) and Audio left (white) connectors.

(4) Connect the satellite receiver Infrared Transmitter cable (required for signal). See "Infrared Transmitter Connection" on page 62.




★ Two Satellite Receivers


You must have two identical satellite receivers from the same source and the Shuttle Digital Hub dual tuner option (select models only) to set this up. This configuration will allow you to watch live TV on one channel and record another channel at the same time.


Connect the TV signal source from each satellite receiver into each Shuttle Digital Hub tuner.


If you are using two matching satellite receivers with S-video or composite video output, do the following:


- (1) Make sure that a coaxial cable connector from your dish source is plugged into two cable outputs, and each satellite receiver In connector.
- (2) Connect a video cable for satellite receiver 1:
 - a. Choose a Video Out connector:


 Coaxial (RF)

 Video (composite)

 S-video
 - b. Connect the video cable from the satellite receiver back panel video output connector.
 - c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 1 In connector.
- (3) Connect stereo audio cables for satellite receiver 1 (skip this step if using coaxial [RF]):
 - a. From the satellite receiver back panel Audio Out right (red) connector and the Audio Out left (white) connectors.
 - b. Into the Shuttle Digital Hub back panel TV Source 1 In Audio right (red) and Audio left (white) connectors.
- (4) Connect a video cable for satellite receiver 2:
 - a. Choose a video out connector, use the same type as satellite receiver 1

 Coaxial (RF)

 Video (composite)

 S-video
 - b. Connect the video cable from the satellite receiver back panel video output connector.
 - c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 2 In connector.

- b. Connect the video cable from the satellite receiver back panel video output connector.
 - c. Connect the video cable into the Shuttle Digital Hub back panel TV Source 2 In connector.
- (5) Connect stereo audio cables for satellite receiver 2 (skip this step if using coaxial [RF]):
- a. From the satellite receiver back panel Audio Out right (red) connector and Audio Out left (white) connectors.
 - b. Into the Shuttle Digital Hub back panel TV Source 2 In Audio right (red) and Audio left (white) connectors.
- (6) Connect the satellite receiver 1 Infrared Transmitter cable (required for signal). See "Infrared Transmitter Connection" on page 62.
- (7) Connect the satellite receiver 2 Infrared Transmitter cable (required for signal). See "Infrared Transmitter Connection" on page 62.

★ Infrared Transmitter Connection

Infrared Transmitter Overview

The Shuttle Digital Hub includes infrared transmitters that make it easy to control one or two set-top-boxes. If you connect a set-top-box such as a digital cable box or a satellite receiver to the Shuttle Digital Hub, then you must also use the Infrared (IR) Transmitter control cable.

The **remote control** sends commands to the Shuttle Digital Hub which relays these commands via the IR transmitter control cables to the cable box or satellite receiver.

The **Infrared Transmitter** control cable has a sender tip (IR Blaster) that attaches to the front of the cable box (or other set-top-box) and plugs into the back of the Shuttle Digital Hub.

You must carefully position the Infrared Transmitter control cable sender tip on to the set-top-box front panel to ensure the set-top-box receives the signal.

The **remote receiver** is on the front of the cable box, digital cable box, or satellite receiver. It receives Infrared commands from your cable box remote control or from the IR transmitter cable.

The remote receiver is sometimes hidden behind a panel of dark, transparent plastic.

You can use a flashlight to locate it. For more information about the remote receiver, refer to the documentation for your cable box, digital cable box, or satellite receiver.

NOTE

The Infrared Transmitter connection is required for a signal with a set-top-box.

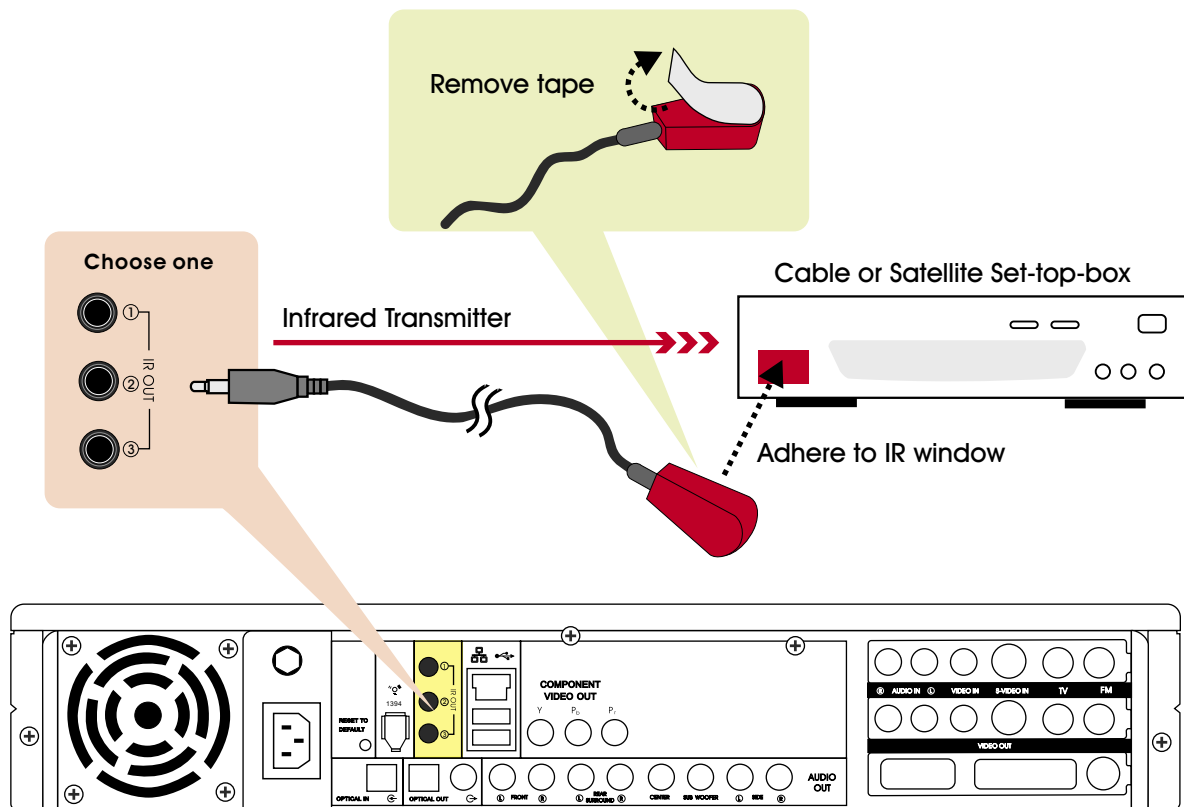
- Infrared Transmitter connection (one set-top-box)
- Infrared Transmitter connection (two set-top-boxes; select models only)
- Infrared Transmitter connection (three set-top-boxes; select models only)

Infrared Transmitter Installation

If you have a cable TV receiver, satellite receiver, or other set-top-box that controls your TV signal, connect the Infrared Transmitter Sensor:

- (1) Route the IR transmitter cable from the back of the Shuttle Digital Hub to the cable TV, digital cable, or satellite receiver set-top-box.
- (2) Locate the IR remote receiver area on the front of the set-top-box. This is where you aim the set-top-box remote control to change channels, change the sound level, and so on.
 - The IR remote receiver area may be behind an obvious window on the set-top-box.
 - Use the set-top-box remote control to locate its IR remote receiver area: Hold the remote control very close (within 1-inch /2.54-centimeters) and press a remote button to change the channel or power off the box. As you push a button, gradually move the remote control across the front of the box until the box responds.
 - Hold a flashlight close to the front of the set-topbox and look for a transparent window with a small box inside. Test the area by holding the box remote close to the window and pushing a button until the box responds.
- (3) Use a piece of tape to temporarily hold the IR transmitter cable tip over the set-top-box IR remote receiver area while you test the function.
- (4) Plug the IR transmitter cable into the Infrared Transmitter connector on the back of the Shuttle Digital Hub.
- (5) Test the operation by pointing the Shuttle Digital Hub remote control at the Shuttle Digital Hub IR receiver and pressing a channel button. (Be sure you use the Shuttle Digital Hub remote and point it at the Shuttle Digital Hub.)
- (6) For permanent attachment, remove the paper from the IR transmitter cable tip and press the tip onto the IR remote receiver area on the set-top-box.
- (7) Repeat these steps for the second set-top-box.

The following illustration shows the Infrared Transmitter installation.



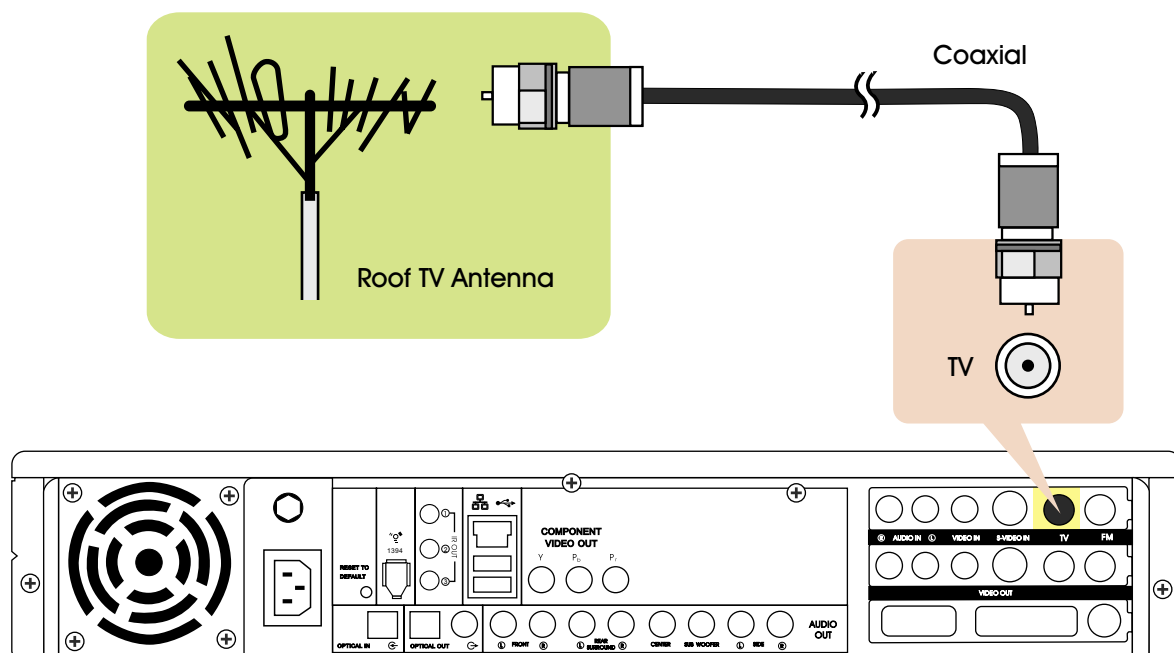
Infrared Transmitter to cable, digital cable receiver, or satellite receiver set-top-box.

* Antenna Connection

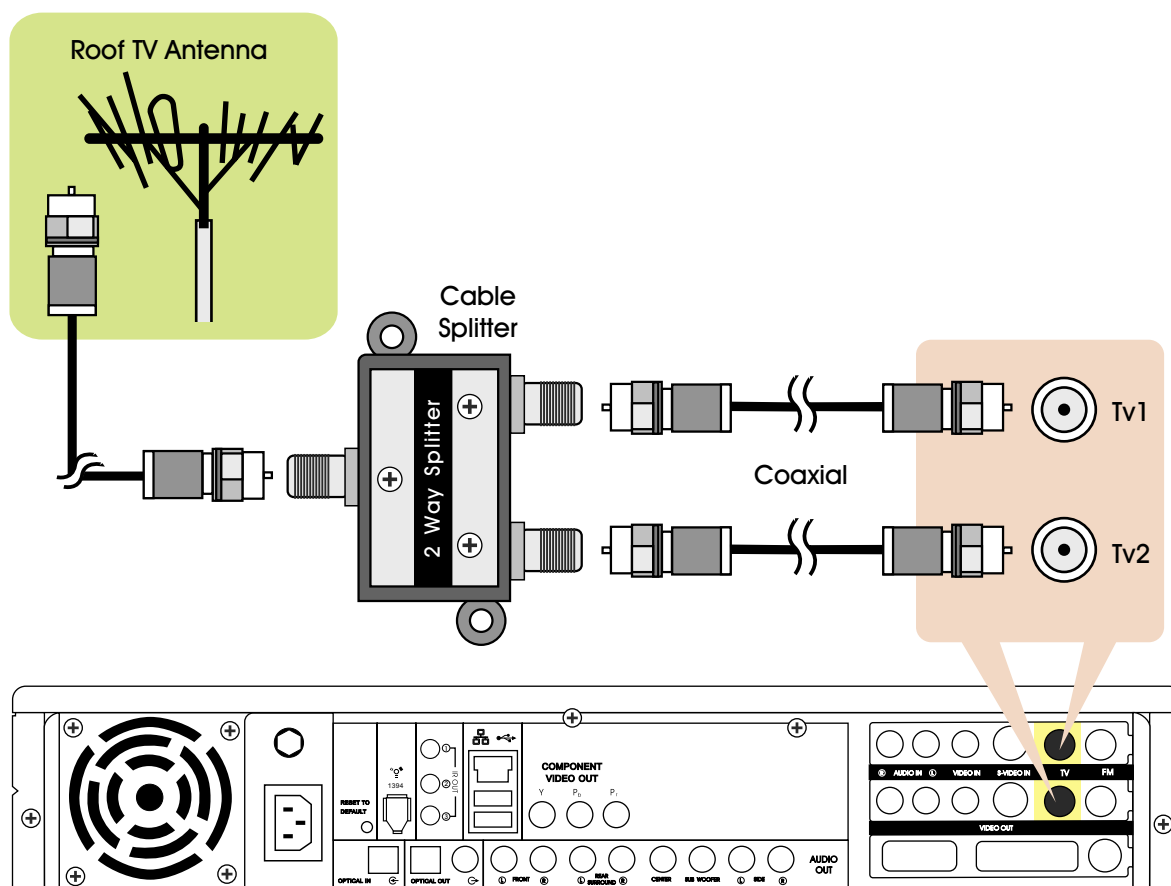
If you are using a broadcast television antenna (not provided) with no cable TV box, digital cable box, or satellite receiver, do the following to connect the TV signal source:

- (1) Plug the connector of a coaxial cable from your external or internal TV antenna into the Cable/Ant connector on the back of the Shuttle Digital Hub.
- (2) Turn the connector to tighten it.

TV signal source (TV antenna)



TV signal source – TV antenna and dual tuners with splitter



This chapter describes how to connect video playback and recording equipment to the Shuttle Digital Hub. Equipment includes VCRs and camcorders. This chapter also includes the most typical, and some advanced, options.

The Shuttle Digital Hub supports many different video input and audio/video output options and connections.

Your system may have different components.

Chapter Contents :

"Video Equipment Overview" on page 66
"Typical Video Equipment Connections" on page 67
"VCR Connection" on page 68
"Video Camera Connection" on page 72

* Video Equipment Connection Overview

Standard video equipment has one or more of the following video out connectors and cables:

-  Coaxial (RF)
-  Video (composite)
-  S-video

The type of video cable you need depends on your video equipment:

- If your video equipment has an S-video jack, you need an S-video cable. An S-video cable provides separate color and black-and-white image signals, and delivers a sharper image than a composite video cable does.
- If your video equipment has a composite video jack, you need a composite video cable.

You may need other or additional cables, depending on your video equipment.

NOTE

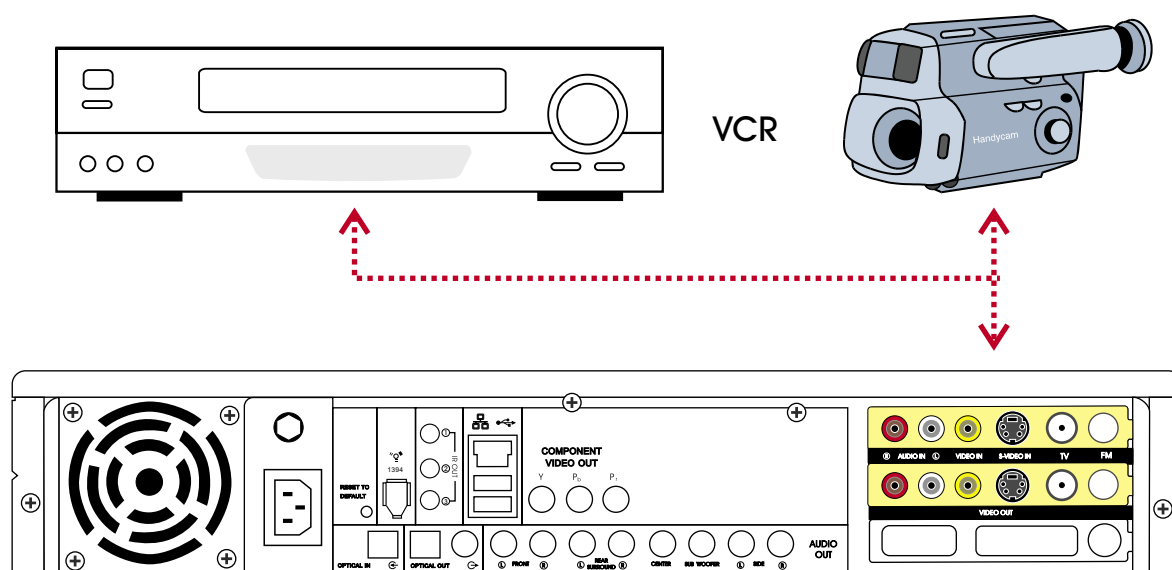
If your video equipment has multiple input and output connections, then it has front panel input and output switches.

You must select the correct input and output from the video equipment front panel or remote control to hear sound and see video.



You can also connect your digital video camera to work with the Shuttle Digital Hub through FireWire (IEEE 1394) connectors.

Location and number of connectors may vary by model.



DVD Player

The Shuttle Digital Hub has a built-in DVD player/recorder.

NOTE

The Shuttle Digital Hub is not designed to record retail movie title DVDs.

NOTE

Connect video game boxes directly to your TV.

* Typical Video Equipment Connections

This section describes how to connect the Shuttle Digital Hub to an existing setup of your video equipment. These are only suggested configurations. Your system may be different. Select the configuration that most closely matches your home system:

TV source type	Display/video configuration	See:
VCR	VCR direct to Shuttle Digital Hub	"VCR Direct in Connection" on page 68
	From Shuttle Digital Hub to VCR to TV	"Wall to VCR to TV Using Coaxial Cable" on page 69
Camcorder	Digital	"Connecting a Digital Video Camera" on page 72
	Analog	"Connecting an Analog Camcorder" on page 74

* VCR Connection

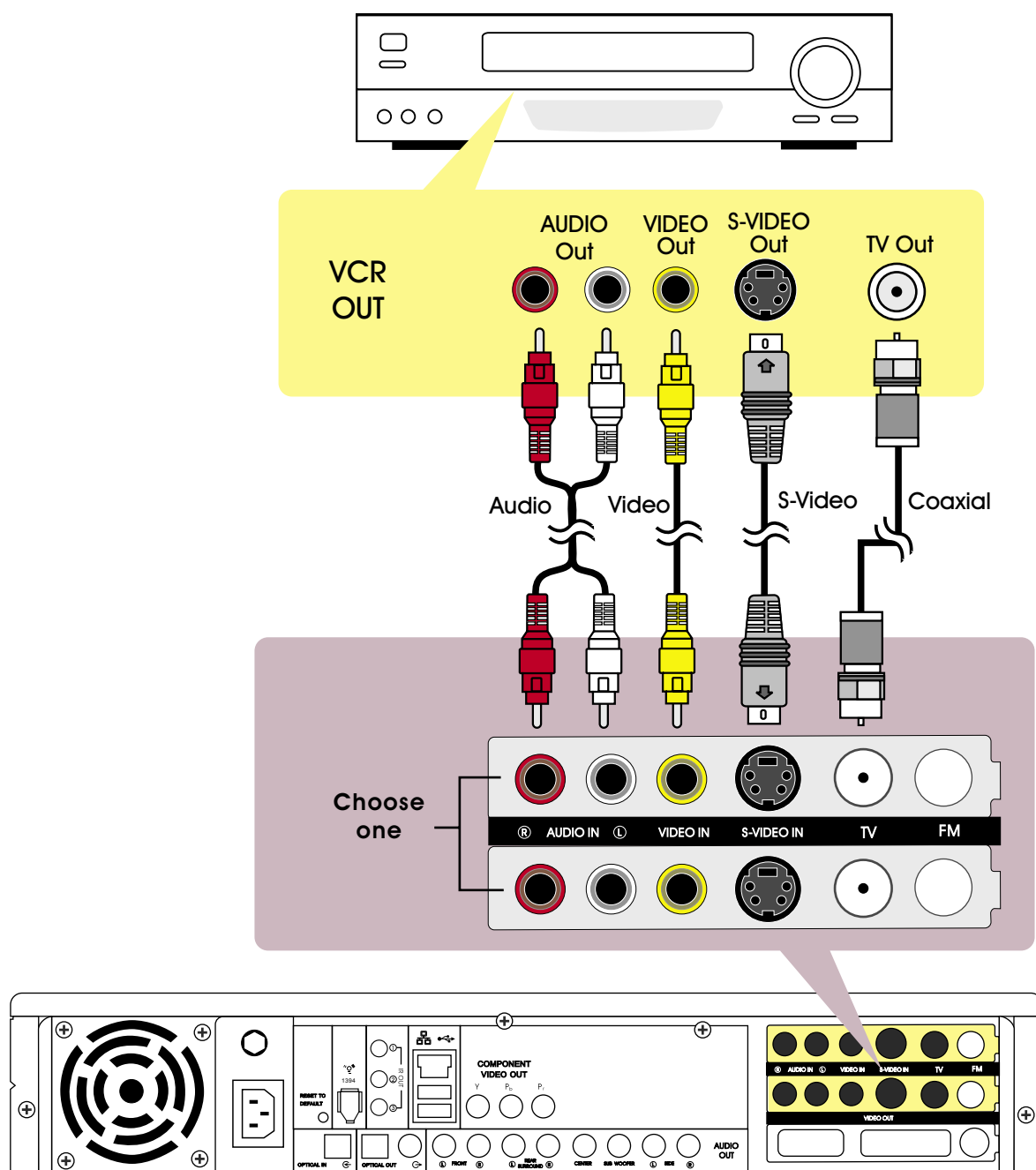
VCR Direct in Connection

You can connect a VCR to record your tapes to the Shuttle Digital Hub hard disk drive.

NOTE

Some retail VHS tapes have content protection measures that corrupt recorded images or do not allow recording.

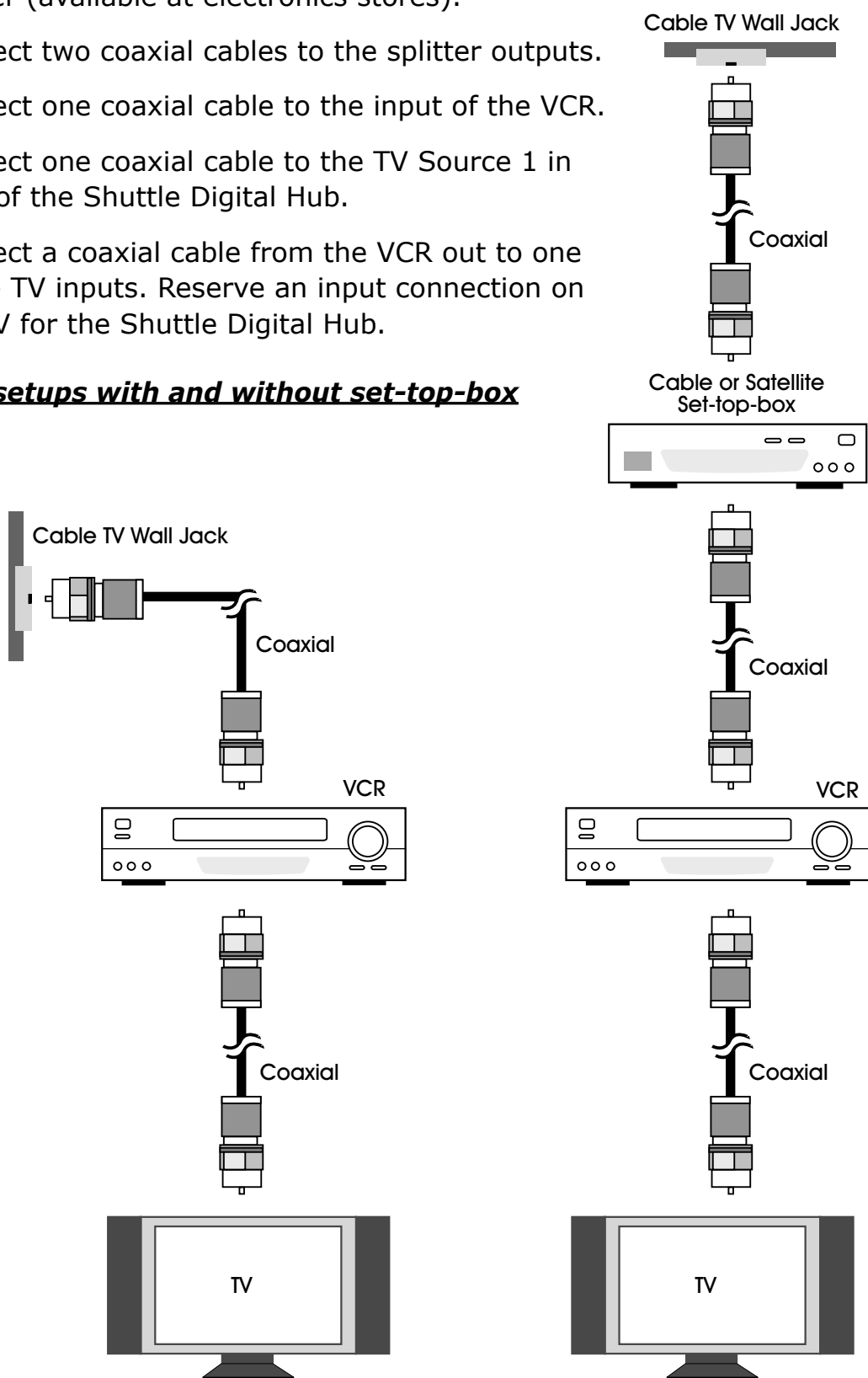
VCR connection



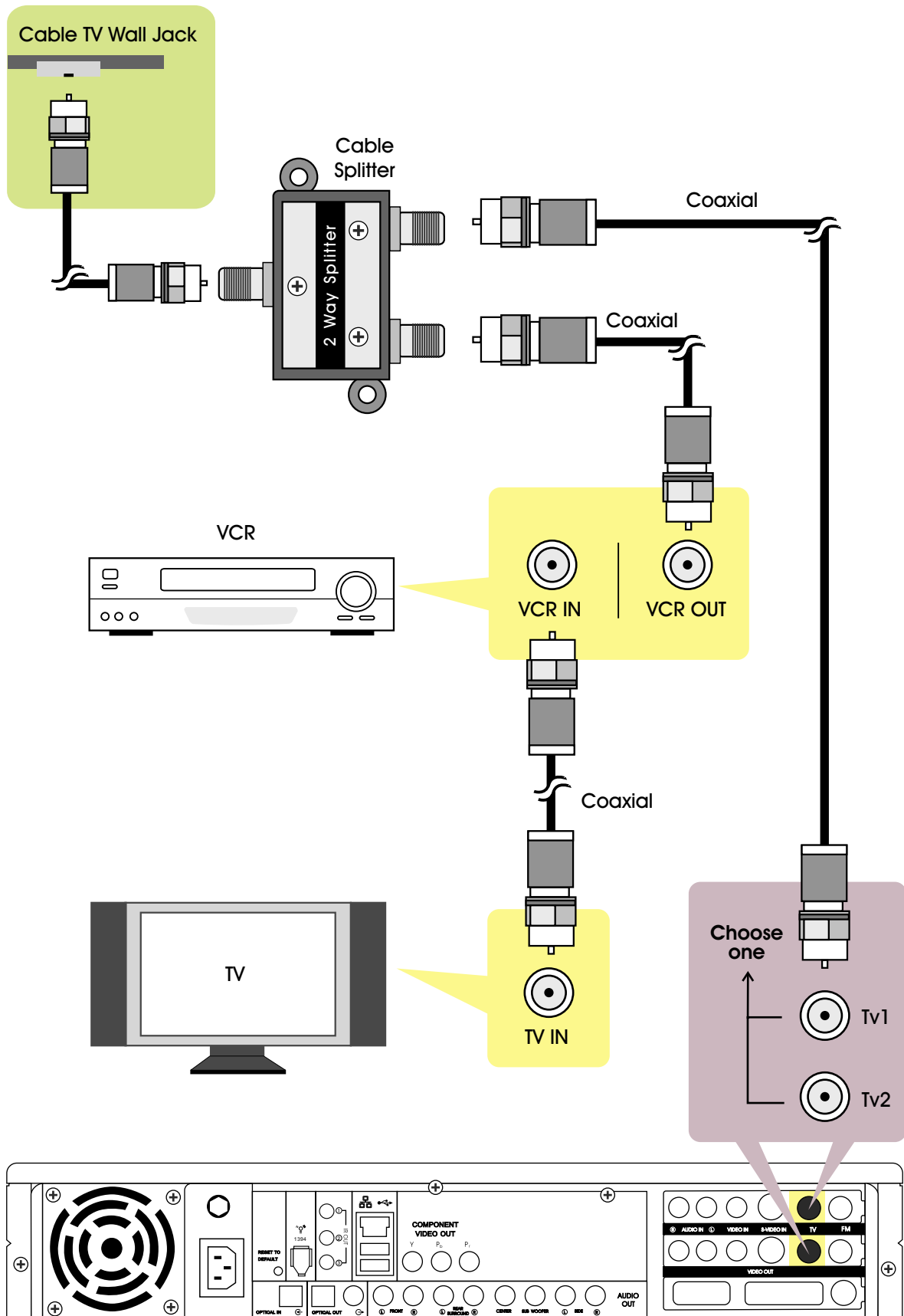
Wall to VCR to TV Using Coaxial Cable

- (1) Remove the coaxial cable at the input to the VCR.
- (2) Connect the coaxial cable to the input of a signal splitter (available at electronics stores).
- (3) Connect two coaxial cables to the splitter outputs.
- (4) Connect one coaxial cable to the input of the VCR.
- (5) Connect one coaxial cable to the TV Source 1 in back of the Shuttle Digital Hub.
- (6) Connect a coaxial cable from the VCR out to one of the TV inputs. Reserve an input connection on the TV for the Shuttle Digital Hub.

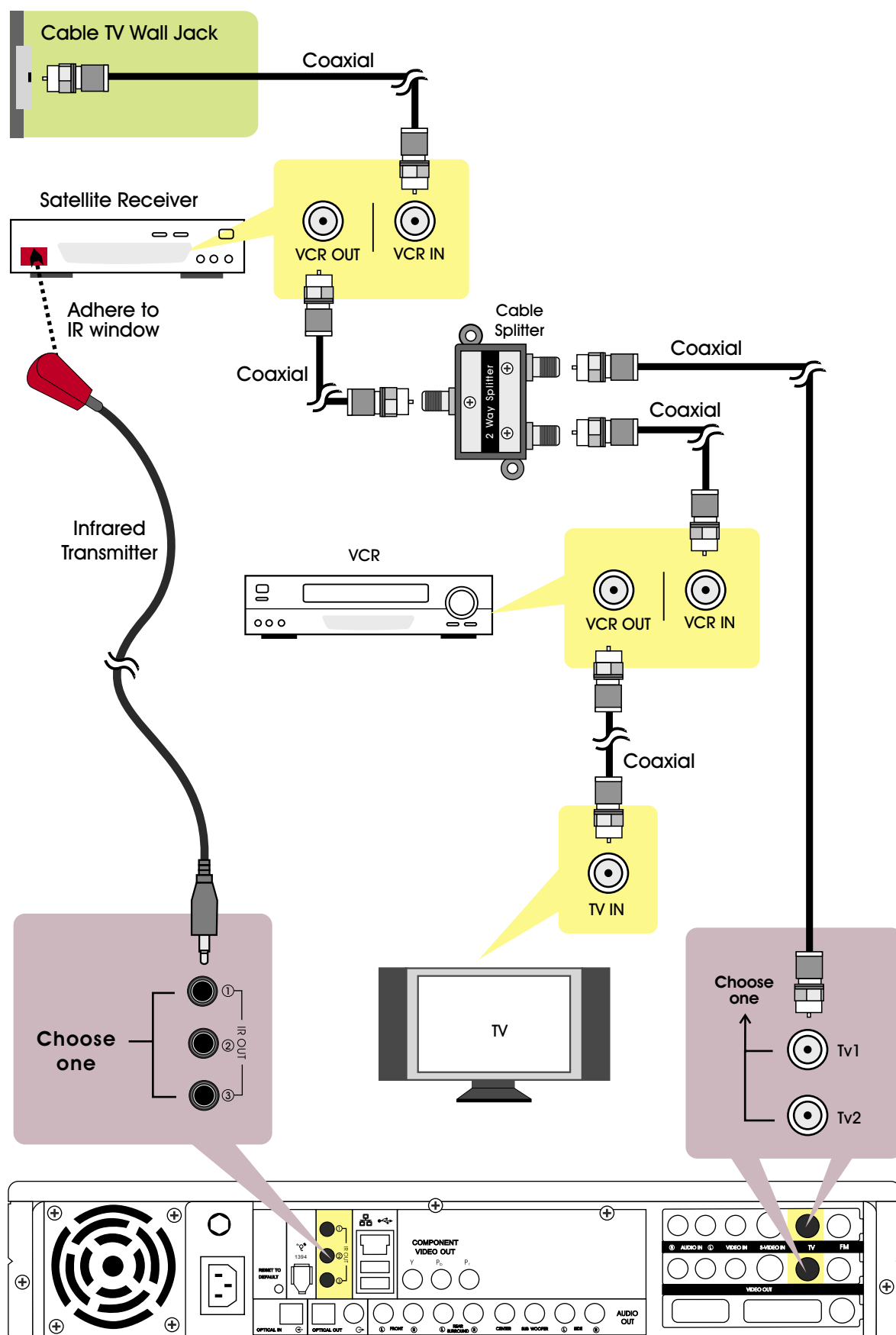
Existing setups with and without set-top-box



Wall to VCR to TV using coaxial cable (Add the Shuttle Digital Hub with a splitter)



Wall to set-top-box VCR to TV using coaxial cable (add with a splitter)



* Video Camera Connection

Refer to the Shuttle support Web site for detailed information on advanced video setup. See "Shuttle Web Site Support" on page 102.

Connecting a Digital Video Camera

Connectors:

Use the 4-pin FireWire (IEEE 1394) connector on the front or 6-pin FireWire (IEEE 1394) connector on the back panel of the Shuttle Digital Hub to connect a digital video camera. This connector is bi-directional. Some cameras use a USB connector. See the documentation that came with your digital video camera. See "USB Device Connection" on page 81.

Equipment:

Most digital video cameras use either a 4-pin to 4-pin or a 4-pin to 6-pin FireWire (IEEE 1394) video camera transfer cable. You may have to purchase a 4-pin to 4-pin FireWire (IEEE 1394) cable to use the 4-pin FireWire (IEEE 1394) connector on the Shuttle Digital Hub front panel.

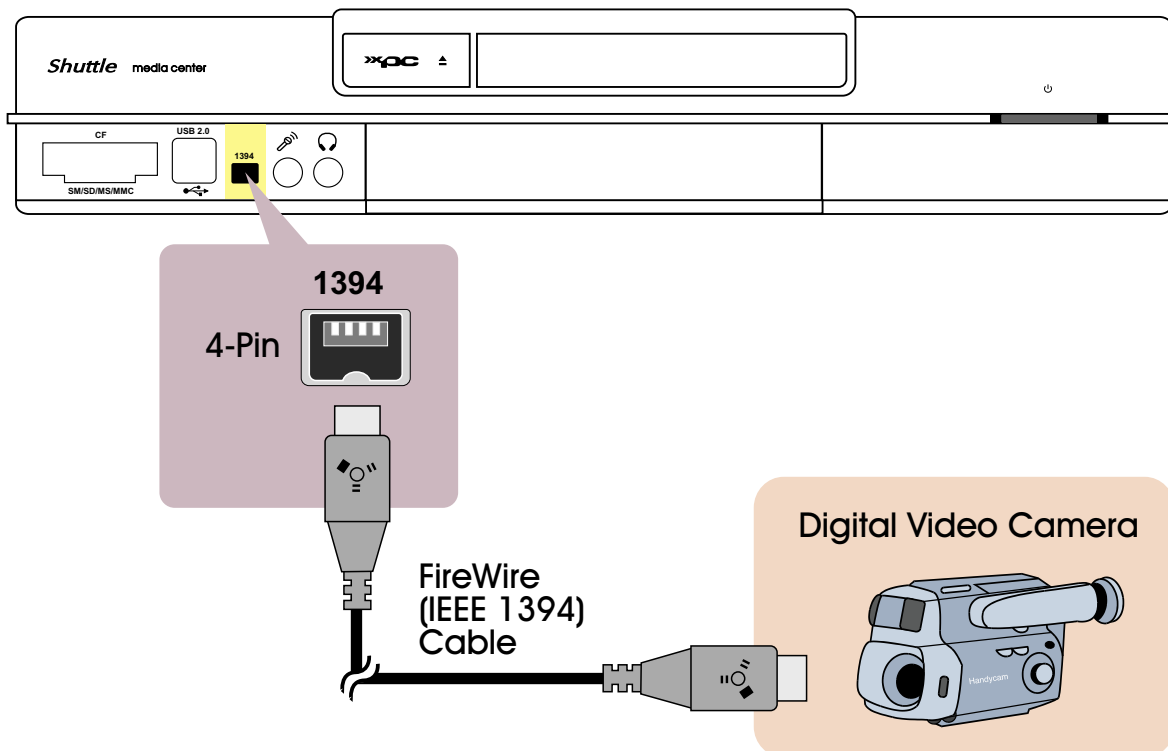
Procedure:

The following instructions apply only to digital video cameras. See "Connecting an Analog Camcorder" on page 74 for analog video cameras. If a Digital Video Device Auto Play window appears when you connect your camera, click Cancel.

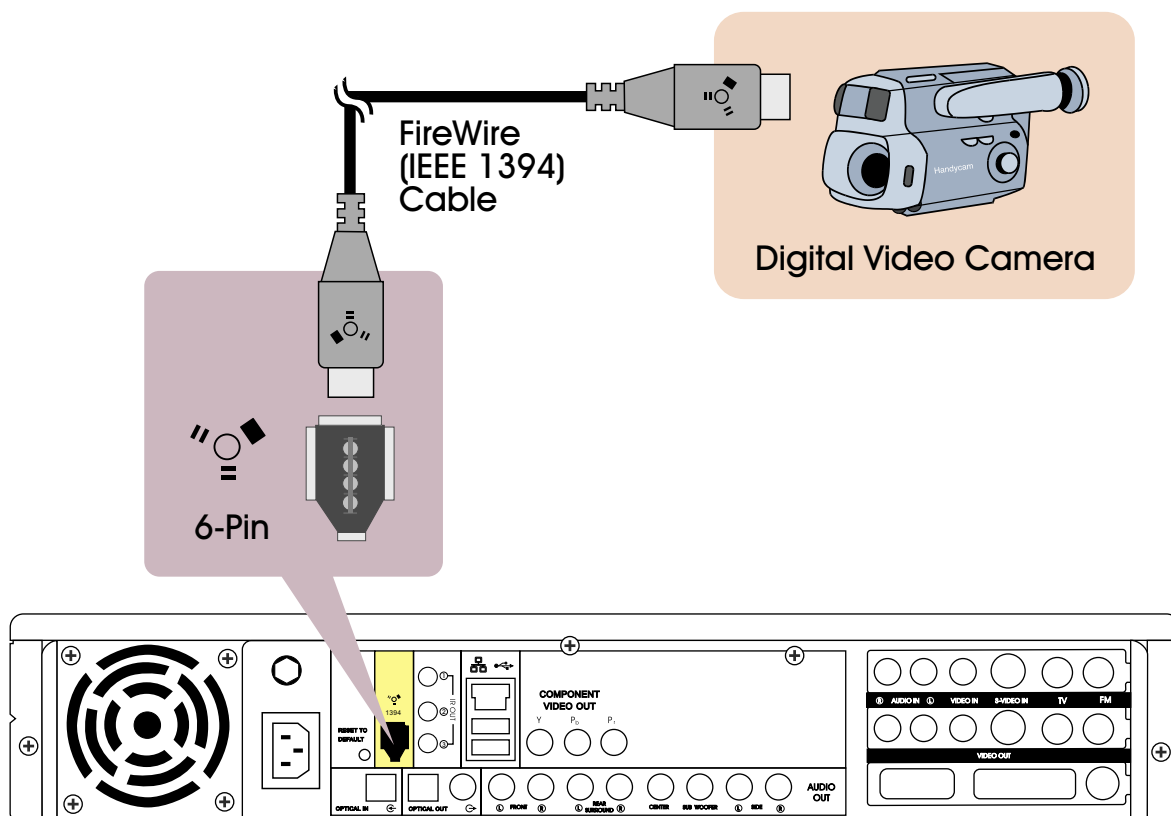
To connect a digital video camera:

- (1) Turn on the Shuttle Digital Hub, and wait for the desktop to appear. See "Initial Configuration" on page 86.
- (2) Turn on the digital video camera.
- (3) Connect the video camera transfer cable from the camera to a FireWire (IEEE 1394) connector on the front (4-pin) or back (6-pin) of the Shuttle Digital Hub.
- (4) A Found New Hardware message appears. Wait two or three minutes for the system to make the necessary settings for the new device. When installation is complete, a message appears telling you the camera is ready to use.

Connect a digital video camera (front panel)



Connect a digital video camera (back panel)



Recognizing the camera

Recognizing the camera

If the Shuttle Digital Hub does not recognize your digital video camera:

- (1) Start up the Shuttle Digital Hub. See "Initial Configuration" on page 86.
- (2) Click Start, and then click Control Panel.
- (3) Click Performance and Maintenance, if available, and then double-click the System icon.
- (4) Click the Hardware tab, and then click the Device Manager button.
- (5) Click the plus sign (+) next to imaging devices. If the name of the camera appears under imaging devices the device is ready. If the name is not there, try the following:
 - Click Action, and then Scan for hardware changes. Look in Device Manager for a new addition under imaging devices.
 - Unplug the video camera's transfer cable from the Shuttle Digital Hub. Power cycle the camera and plug it back in. Look in Device Manager for a new addition under imaging devices.

For more information about viewing your pictures or digital video files in Media Center or copying your pictures to CD, see the Media Center Edition 2005 Software Guide.

Connecting an Analog Camcorder

Connecting an analog camera for video input (capture)

Connectors:

When connecting an analog video camera for input to the Shuttle Digital Hub, use the Video and Audio In connectors on the front of the Shuttle Digital Hub.

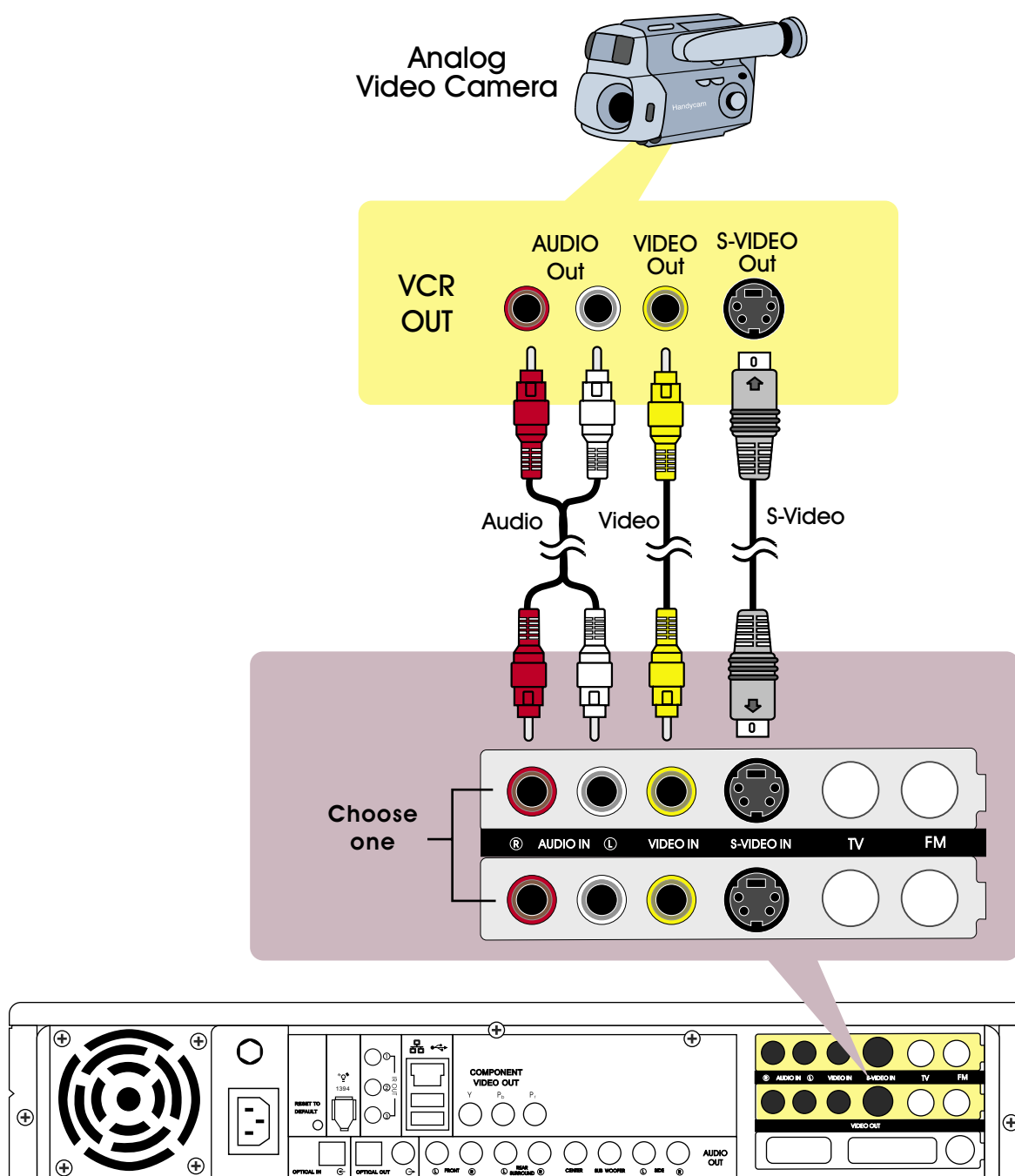
Procedure:

The following instructions can also be used to connect digital cameras with analog outputs. See the documentation that came with your video camera.

To connect an analog video camera:

- (1) Turn on the Shuttle Digital Hub, and wait for the desktop to appear. See "Initial Configuration" on page 86.
- (2) Connect the video camera transfer cable from the camera to the S-video connector or to the composite and audio connectors on the front of the Shuttle Digital Hub.

Connect an analog video camera for source input



6

Connecting the Network

Your system must have working broadband Internet to operate properly.

The Shuttle Digital Hub supports many different network options, connections, and configurations. You can connect your Shuttle Digital Hub to a:

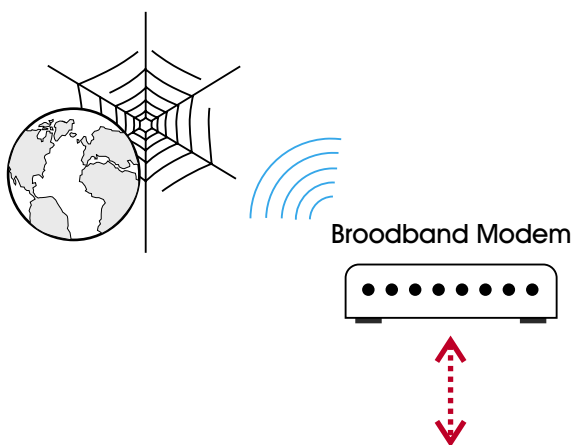
- Wireless 802.11b/g network
- Wired Ethernet Port 10/100/1000

You can connect your peripheral devices to work with the Shuttle Digital Hub through USB or FireWire (IEEE 1394) connectors.

This chapter describes the most typical, and some advanced, options to connect your Shuttle Digital Hub to the Internet, to a network, and to peripheral devices. Your system may have different components.

Chapter Contents :

"Connecting the Wireless Network Antenna" on page 77
"Connecting a DSL/Cable Modem" on page 79
"Connecting Through a Router" on page 80
"USB Device Connection" on page 81
"Connecting an Shuttle Personal Media Drive" on page 83



NOTE

Some peripheral devices are not included with the Shuttle Digital Hub.

NOTE

For additional information on connecting network equipment, refer to the hardware and ISP (Internet Service Provider) documentation that came with your network.

✴ **Connecting the Wireless Network Antenna**

You can connect the Shuttle Digital Hub to a 802.11/b/g wireless network. The transceiver is built in to the Shuttle Digital Hub. An external antenna is supplied with your system. You must connect this antenna to connect to the wireless network. Refer to the Quick Install Guide and CD manual included in the accessory box.

Your Shuttle Digital Hub functions as a Wireless Local Area Network (WLAN), connecting with other wireless product(s) via 802.11 technology. The 802.11/b/g wireless LAN allows you to connect to the Internet from other devices that are compatible with the 802.11 wireless LAN.

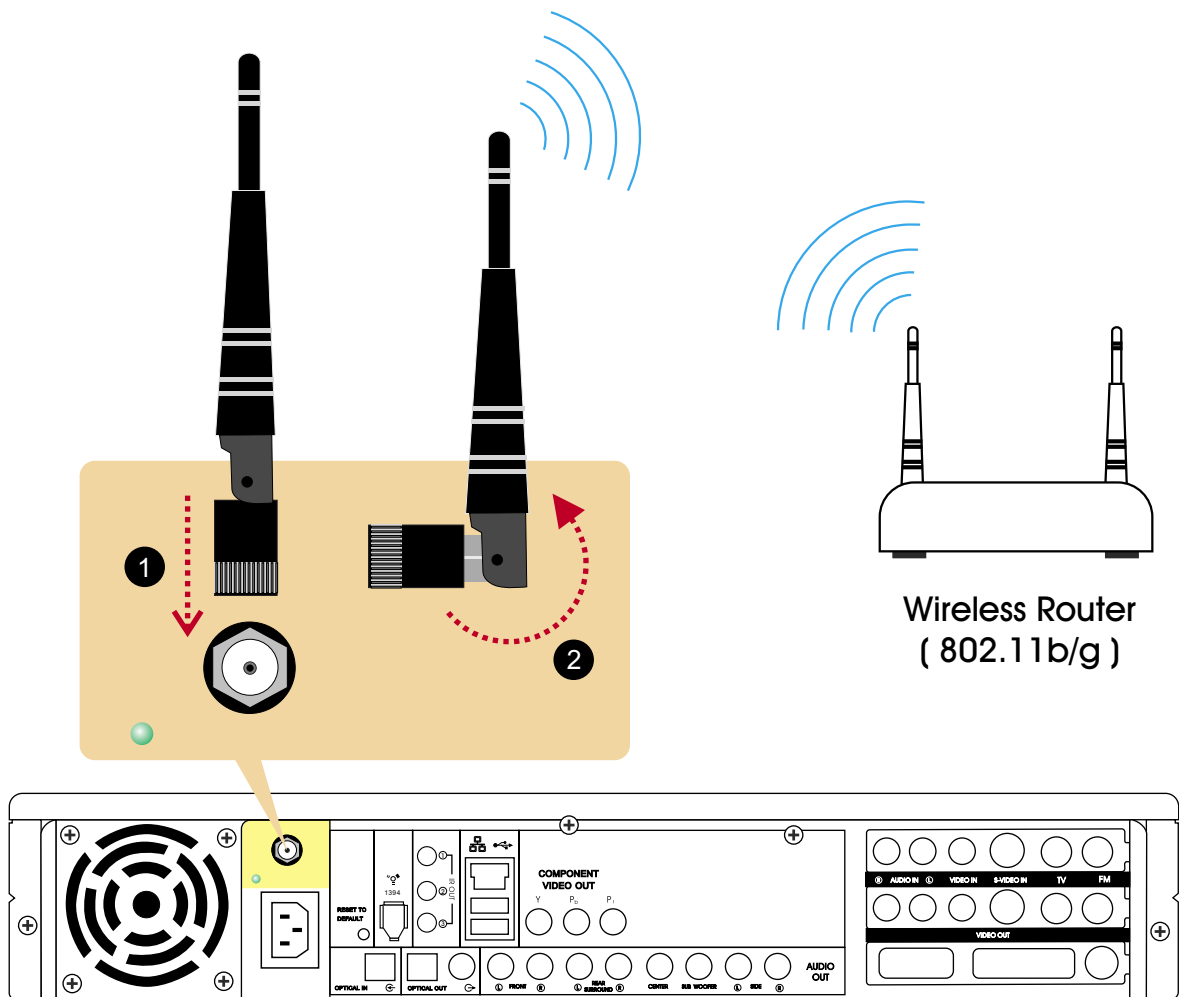
You can establish a wireless network using your Shuttle Digital Hub as a Wireless Access Point or you can use your Shuttle Digital Hub as a client if you already have a wireless network functioning. You need an existing wireless LAN network with an Internet connection (please consult your ISP for further information).

To connect a Wi-Fi antenna to the Shuttle Digital Hub:

- (1) Screw the included antenna into the Wireless LAN Removable Antenna connector on to the back panel as shown in the following illustration:
- (2) You may want to move the end of the antenna away from the Shuttle Digital Hub to improve your signal reception.
- (3) Check the following:
 - a. The wireless router is connected to a DSL/cable modem.
 - b. The DSL/cable modem is connected to an outside Internet connection.
 - c. The wireless router power LED and connect LEDs are on.
 - d. The DSL/cable modem power LED and connect LEDs are on.
 - e. Your wireless network functions properly.
- (4) Select how you want to set up your network:
 - a. If you would like a wireless connection between the Shuttle Digital Hub and your existing wireless network, establish a wireless network using your Shuttle Digital Hub as a client. The Media Center setup wizard has a step for this option. This is the Default mode.

- b. If your Shuttle Digital Hub is connected to the Internet and you would like to wireless-connect other machines to this Shuttle Digital Hub, establish a wireless network using your Shuttle Digital Hub as a Wireless Access Point. For more information, refer to the Quick Install Guide and CD manual included in the accessory box.

Wireless Router Internet connection



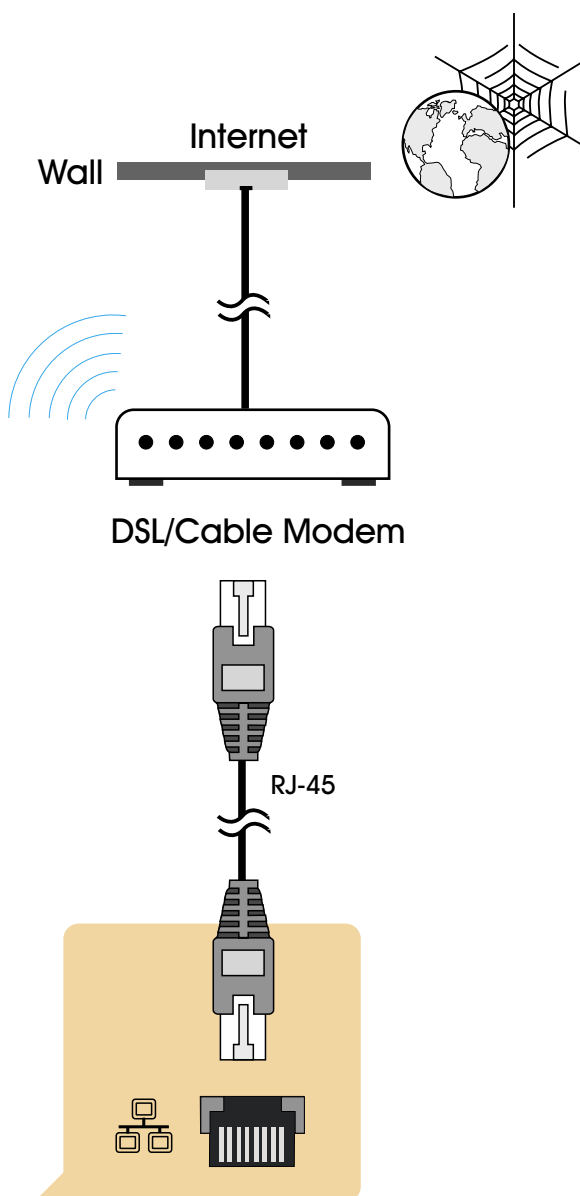
* Connecting a DSL/Cable Modem

You typically connect the Shuttle Digital Hub to the Internet through a DSL/Cable modem.

Refer to your DSL/cable modem and ISP documentation to establish a connection.

To connect the Shuttle Digital Hub to the Internet through a DSL or Cable Modem broadband connection:

- (1) Connect an RJ-45 network cable (not provided) from the Shuttle Digital Hub back panel Ethernet connector to a DSL or Cable modem.
- (2) Check the following:
 - a. The DSL or cable modem is connected to an outside Internet connection.
 - b. The DSL or cable modem power LED and connect LEDs are on.



DSL/Cable modem direct Internet connection

* Connecting Through a Router

You can connect the Shuttle Digital Hub to a LAN network and then to a DSL modem or Cable modem. You can use your Shuttle Digital Hub as a client if you already have a home network functioning.

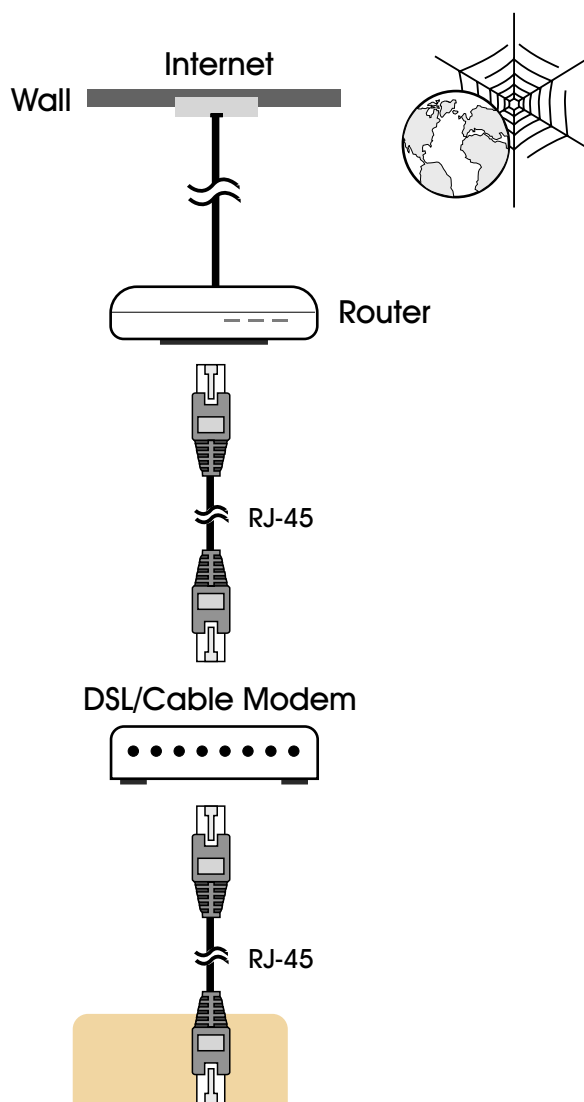
Refer to your router, DSL/cable modem, and ISP documentation to establish a connection.

To connect to the Internet, through a router and a broadband connection, to the Shuttle Digital Hub:

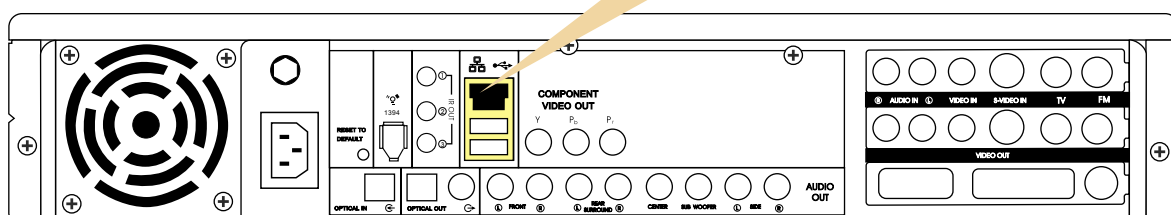
- (1) Connect an RJ-45 network cable (not provided) from the Shuttle Digital Hub back panel Ethernet connector to a 10BaseT, 100BaseT, or 1000BaseT port on the router.

- (2) Check the following:

- a. The router is connected to the DSL/cable modem.
- b. The DSL/cable modem is connected to an outside Internet connection.
- c. The router power LED and connect LEDs are on.
- d. The DSL/cable modem power LED and connect LEDs are on.



Router Internet connection



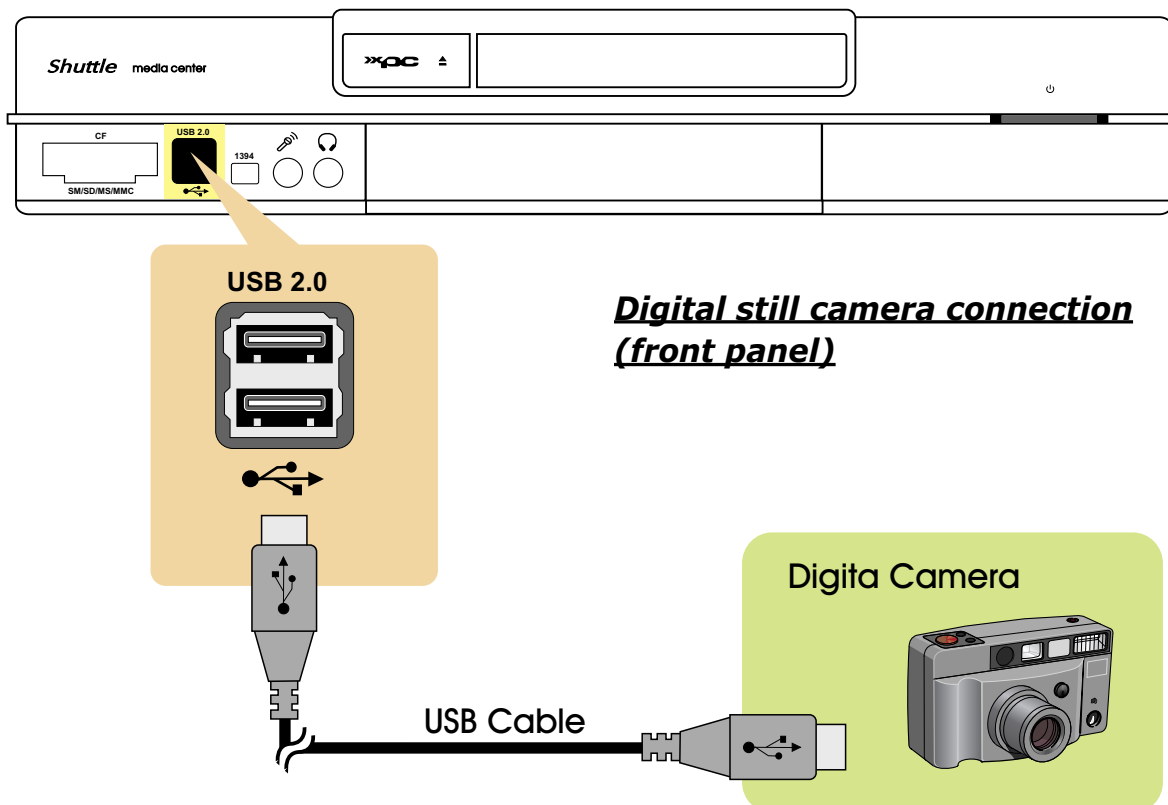
* USB Device Connection

Digital Still Camera

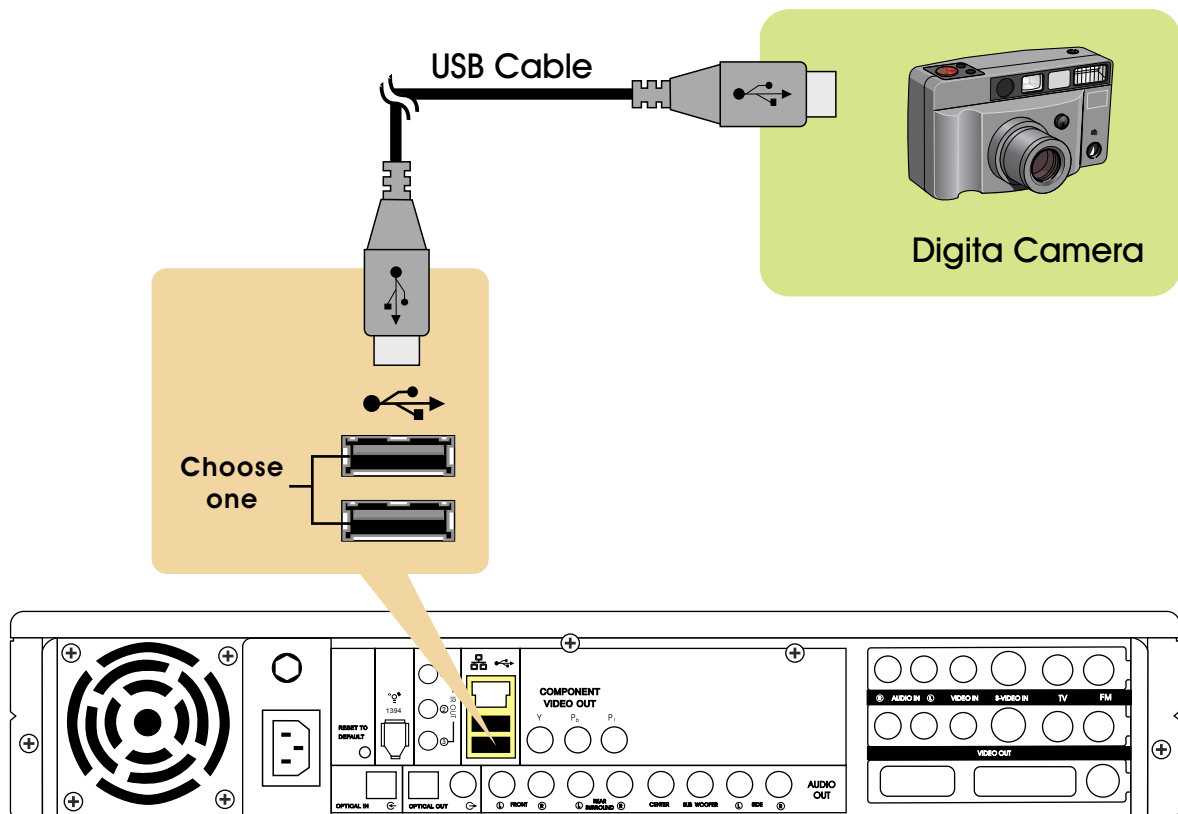
The following instructions apply only to digital still cameras. When connecting a digital still camera, use a USB connector on the front or back of the Shuttle Digital Hub.

To connect a digital still camera:

- (1) Turn on the Shuttle Digital Hub. Wait for the desktop to appear. Minimize or close Media Center.
- (2) Turn on the digital still camera. See the documentation that came with your camera.
- (3) Connect the camera transfer cable into the camera.
- (4) Connect the camera transfer cable into an open USB connector on the front or back of the Shuttle Digital Hub. Most digital still cameras use either the USB or FireWire (IEEE 1394) connector.
- (5) A Found New Hardware message displays. Wait two or three minutes for the system to make the necessary settings for the new device. When installation is complete, a message displays telling you the camera is ready to use.



Digital still camera connection (back panel)



Other USB Devices

You can connect other peripheral devices to the front or back of the Shuttle Digital Hub through USB or FireWire (IEEE 1394) ports.

The following devices can be connected to the Shuttle Digital Hub USB 2.0 high speed ports:

- | | |
|------------------------|------------------------------------|
| ■ iPod | ■ MP3 player |
| ■ USB drive | ■ External hard drive |
| ■ Printer | ■ Scanner |
| ■ Digital video camera | ■ Digital still camera |
| ■ Memory card reader | ■ PDA (personal digital assistant) |
| ■ Handheld computer | ■ Keyboard |
| ■ Mouse | |

These devices are not included with the Shuttle Digital Hub. See the documentation that came with your device.

To connect the Shuttle Personal Media Drive to the Shuttle Digital Hub through a USB, see the documentation that came with the Shuttle Personal Media Drive.

* Connecting an Shuttle Personal Media Drive

The Shuttle Digital Hub front panel includes a drive bay that houses the Shuttle Personal Media Drive. The drive bay has an internal USB port and power connector. The Shuttle Personal Media Drive can also function as an external USB hard disk drive. You must connect an external USB port and power cable.

You can easily insert and remove the drive from the bay without turning off the Shuttle Digital Hub. You can use the Shuttle Personal Media Drive without installing the included software. However, Shuttle recommends that you install the software and documentation to have access to additional features.

For more information about installing the software, refer to the documentation that came with the Shuttle Personal Media Drive. For more information about using an Shuttle Personal Media Drive to store and transfer information, refer to the Media Center Edition 2005 Software Guide.

Do not move the drive while it is operating, to avoid hardware damage and potential data loss. You can safely remove your drive only after you have completely run the Safely Remove Hardware wizard.

After you have safely disconnected and powered off the drive, handle the drive by the plastic endcaps to avoid touching the aluminum sides if they are hot.

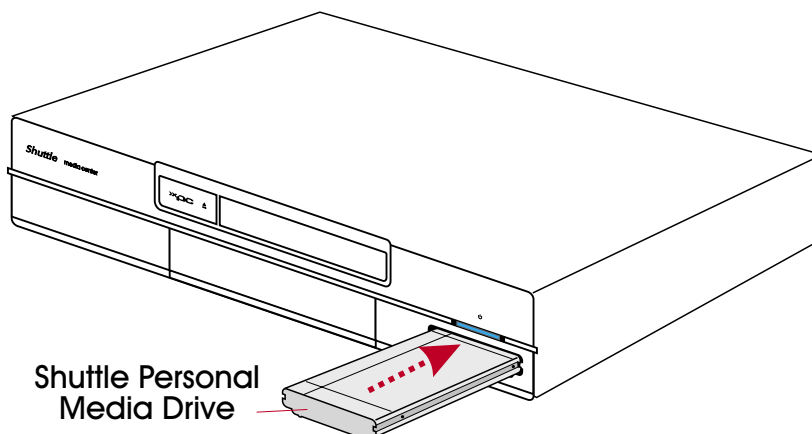


Installing an Shuttle Personal Media Drive

To connect an Shuttle Personal Media Drive to the Shuttle Digital Hub:

- (1) Open the 2.5" HDD bay front panel door.
- (2) Slide the drive all the way into the drive bay until the drive is firmly connected to the internal connector. Do not force the drive into the bay; it should slide easily into the bay.
- (3) If the Shuttle Digital Hub is turned on, the blue LED on the front of the drive lights up when the drive is inserted correctly.

Shuttle Personal Media Drive installation

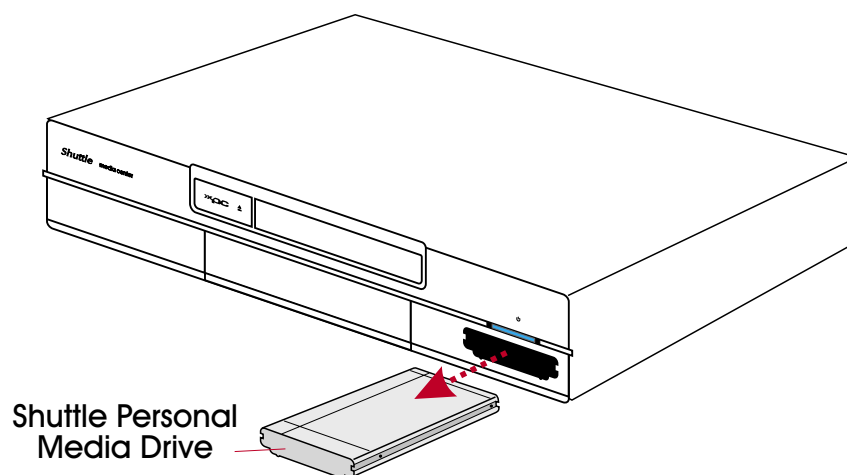


Disconnecting an Shuttle Personal Media Drive

You can safely remove the Shuttle Personal Media Drive when both the amber activity and blue LEDs are off.

To disconnect your Shuttle Personal Drive safely:

- (1) Close Media Center and all other programs that may be accessing your Shuttle Personal Media Drive.
- (2) Double-click the Safely Remove Hardware icon in the system tray at the bottom of the desktop. If this icon is hidden, click the arrows on the taskbar to display it. The Safely Remove Hardware window opens.
- (3) Double-click USB Mass Storage Device to locate your Shuttle Personal Media Drive. USB Mass Storage Device may be listed twice. One may contain a memory card reader or other mass storage drive.
- (4) Select the Shuttle Personal Media Drive, and then click OK. This name of the drive may appear as Generic Volume, followed by the assigned drive letter. A Safe to Remove Hardware message appears in the system tray at the bottom of your desktop letting you know that the device is safe to disconnect.
- (5) Click Close.
- (6) Open the Shuttle Personal Media Drive bay front panel door.
- (7) Disconnect the drive from the Shuttle Digital Hub.



To avoid hardware damage and data loss, always disconnect the drive safely, when it is not active. When the blue LED is blinking, the drive is active, saving or transferring data.



NOTE

When your Shuttle Digital Hub is in Away mode (reduced power state), the drive turns off.

This chapter describes how to set up your Shuttle Digital Hub software, including how to configure the Shuttle Digital Hub for proper operation.

When you complete the procedures in this chapter, you can use your Shuttle Digital Hub in your home Hub. Refer to the Media Center Edition 2005 Software Guide.

Chapter Contents :

"Starting the Shuttle Digital Hub for the First Time" on page 86

■ "Installing the Keyboard Batteries (Initial)" on page 86

■ "Initial Start Up" on page 87

■ "Syncing the Keyboard" on page 88

"Media Center First-Run" on page 89

"Configuring Audio" on page 91

Make sure you have followed all safety instructions for your Shuttle Digital Hub, especially the important AC Power information.



NOTE

You should only perform the procedures in this chapter after all cables have been connected.

* Starting the Shuttle Digital Hub for the First Time

Installing the Keyboard Batteries (Initial)

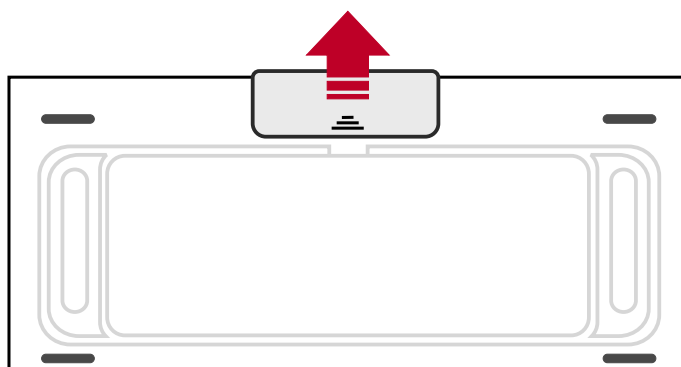
The keyboard comes with batteries pre-installed.

The batteries are fresh from the factory.

- 1 Turn the keyboard over.
- 2 Pull the tab.

NOTE

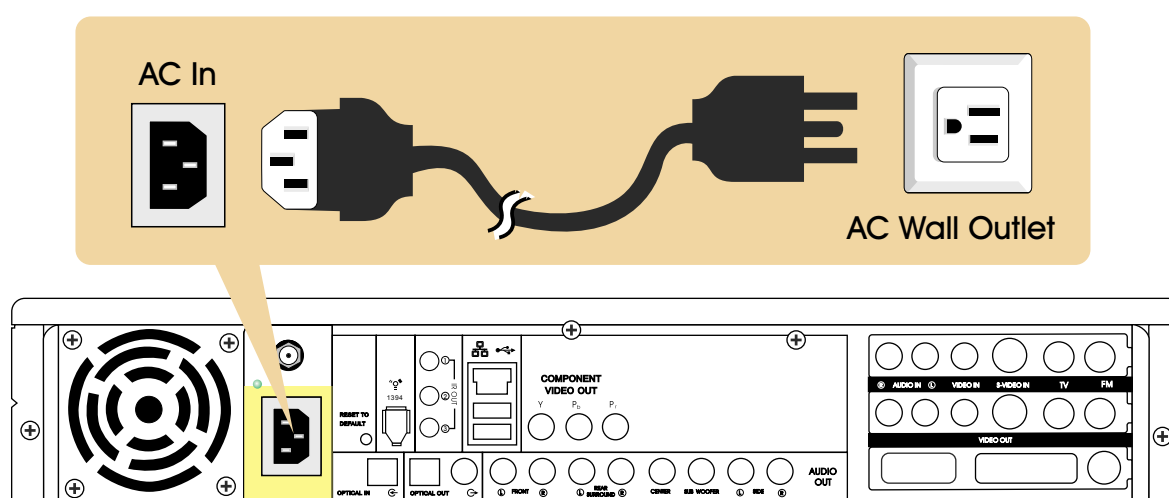
Use only AA alkaline batteries in the keyboard.



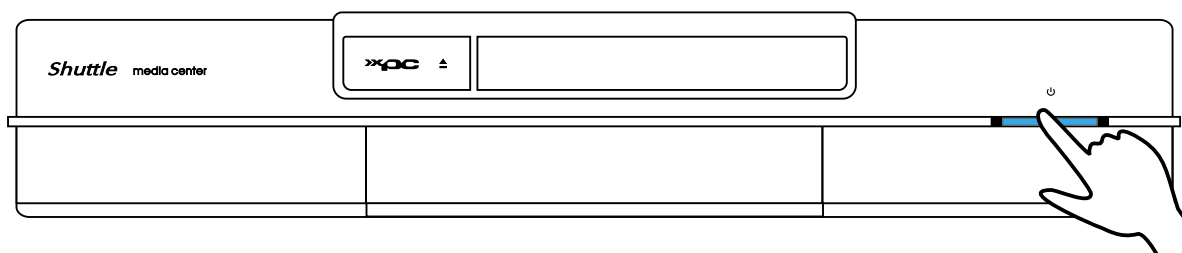
Initial Start Up

After you have connected the equipment, you are ready to turn on the system.

- (1) Make sure the video and audio cables are connected before you turn on the TV and the Shuttle Digital Hub.
- (2) Apply power to all connected system equipment, such as TVs, set-top-boxes, and AV receivers.
- (3) Plug the Shuttle Digital Hub AC power cable into a wall outlet.
 - Use a surge protector to prevent power surges or voltage spikes.



- (4) Press the power button on the front of the Shuttle Digital Hub. The system starts.



- (5) See "Syncing the Keyboard" on page 88.

The display on the TV screen may not be optimized until after you set the display settings.

Make sure you have followed all safety instructions for your Shuttle Digital Hub, especially the important AC Power information.



Syncing the Keyboard

Test the keyboard after the operating system is loaded. Move the trackball to see if the cursor moves.

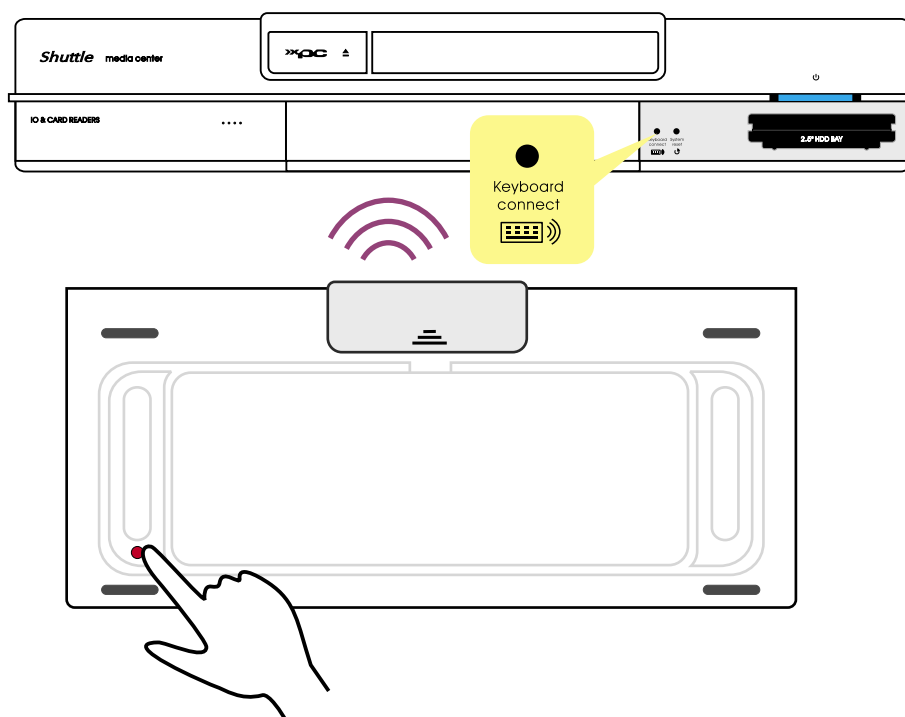
If the keyboard does not operate, you must synchronize the keyboard with the Shuttle Digital Hub.

To sync the keyboard:

- (1) After you have made all connections and have performed the initial startup procedure, make sure the Shuttle Digital Hub is turned on.
- (2) Briefly press the Keyboard Connect button on the Shuttle Digital Hub front panel, behind the left door.
- (3) Press the red connect button once on the bottom of the keyboard. The Activity LED on keyboard flashes and stops, indicating a successful sync.

Important: If you press the button twice, you will need to repeat steps 1 through 4.

- (4) Test the keyboard. Move the trackball and see if the cursor moves.
- (5) If the keyboard does not operate:
 - a. Check the batteries.
 - b. Repeat steps 1 through 4.



✴ Media Center First-Run

The initial Media Center setup wizard consists of required setup and the optional setup.

Required Set-up

The system displays the initial Media Center setup wizard for the first power-up or until the Media Center setup is completed. The wizard includes steps for your network or broadband connections. Connect the Shuttle Digital Hub to your wired network or broadband connections prior to power-on.

To set up Media Center for the first time:

- (1) Follow the onscreen instructions for the initial Media Center startup wizard. These instructions include choosing:
 - How Media Center connects to the Internet.
 - To join a wireless network, if you have one.
 - To join an existing (wired) network, if you have one.
- (2) The wizard sets up the required components. To continue, set up optional components as required. See "Optional Set-up" on page 89.

NOTE

When Media Center is open, you can press F1 on the keyboard to open Media Center Help.

Optional Set-up

This procedure for optional components within the Media Center wizard can be done later; you can define or change these settings using the Media Center settings.

In this portion of the Media Center wizard, you will:

- Configure tuners, TV signal, and Television Program Guide information.
- Select and adjust Media Center display settings.
- Set up speakers.
- Teach the Shuttle Digital Hub to control your cable TV or satellite receiver set-top-box.

To set up optional components in Media Center:

- (1) Follow the onscreen instructions for the Media Center optional components startup wizard.
- (2) Confirm your country/region.
- (3) Set up the TV signal, manually or automatically. Make sure a TV source is connected. The wizard scans for signals if you select automatic. It also sets up a set-top-box.
- (4) Set up and download the Television Program Guide You need your zip or postal code.
- (5) Choose and, if needed, adjust the display settings.
- (6) Choose the number of speakers you have.
You can also test the speakers.
- (7) If you selected 5.1 or 7.1 speakers, or if you are using SPDIF (digital), you must set the DVD player.

See "Configuring audio for the DVD Player" on page 94.

NOTE

When Media Center is open, you can press F1 on the keyboard to open Media Center Help.

If Your Connections Don't Work

You can use Media Center wizards to walk you through the connection process:

- (1) Press Media Center on the remote control.



You can also click **Start** on the taskbar, and select **Media Center**.

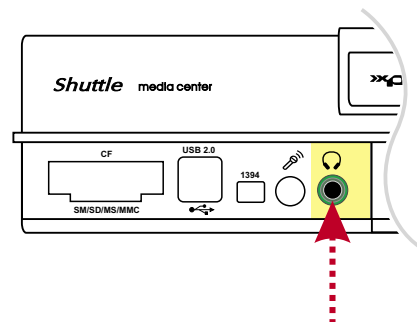
- (2) Click **Settings**.
- (3) Click one of the following topics:

a. General	b. TV	c. Pictures
d. Music	e. DVD	f. Messenger and Caller ID
g. Radio	h. Help	
- (4) Follow the onscreen instructions.
- (5) If you cannot connect to the Internet, the wizard displays automatically.

* Configuring Audio

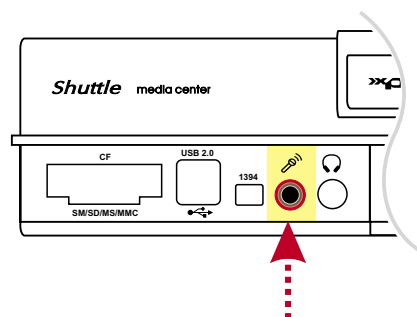
Your Shuttle Digital Hub comes with a headphones connector (1/8-inch [3.5 mm]) on the front panel. The headphones connector is labeled with a headphones icon.

The Audio Out speakers are muted when you plug in the headphones, but SPDIF does not mute.



* Connecting a Microphone

Your Shuttle Digital Hub has a microphone connector on the front panel.



Selecting recording devices

To select a sound recording device:

- (1) Click **Start** on the taskbar.
- (2) Choose **Control Panel**.
- (3) Click **Sounds and Audio Devices** (or **Sounds, Speech, and Audio Devices**). The Sounds and Audio Devices window opens.
- (4) Click the **Audio** tab. The window opens.
This window is easier to read on a monitor. You can lower the display resolution to read the window. You will need the keyboard and mouse.
- (5) In the Sound Recording area, click the **Volume** button, and then choose the source for sound recording.
- (6) Click **OK**.
- (7) Close the window.

NOTE

Audio distortion may occur if recording volume is set too high.

* Adjusting the Volume

To adjust speaker volume, use the:

- Remote control.
- TV.
- AV receiver.
- Buttons on the keyboard.
- Volume knob on the speakers.
- Volume knob on the subwoofer.
- Volume knob on the monitor (if connected).
- Volume controls within a program, such as the volume buttons on the Media Center navigation bar or on the remote control.
- Volume icon on the taskbar. Double-click and adjust the volume.



Some applications may play back at low volume, even when the volume knob is turned to the maximum position. If this is the case, double-click the **Volume** icon on the taskbar and increase the volume.

Locating the volume icon

If you do not see the Volume icon on the taskbar:

- (1) Click **Start**, and then **Control Panel**. Click **Sounds, Speech, and Audio Devices**, if it is present.
- (2) Double-click **Sounds and Audio Devices**. The Sounds and Audio Devices Properties window opens.

This window is easier to read on a monitor. You can lower the display resolution to read the window. You will need the keyboard and mouse.

- (3) Click the **Volume** tab. Place a check in the Place volume icon in the taskbar check box.
- (4) Click **Apply**, and then click **OK**.
The Volume icon appears in the taskbar.

* Configuring Audio Output

You must adjust the audio settings in two places after you have installed and connected the Shuttle Digital Hub to your audio system.

Configure both the Media Center speaker settings and audio for the DVD player.

The following table shows which procedures to perform for your audio system. If you set up speakers using the Media Center Optional Settings wizard, then set up the audio for the DVD player only.

Media Center speaker settings (TV Audio)	DVD audio setting	Procedure
2 (default)	2 speakers; Dolby Surround Compatible (default)	Default, no audio output configuration required.
5.1	5.1	Change Settings in "Configuring audio for Media Center" on page 133 and "Configuring audio for the DVD Player" on page 133.
7.1	7.1	Change Settings in "Configuring audio for Media Center" on page 133 and "Configuring audio for the DVD Player" on page 133.
Digital Audio SPDIF on (default)	Digital Audio SPDIF off (default)	Change Settings in "Configuring audio for the DVD Player" on page 133. If you use digital audio, the Media Center SPDIF default setting is on, but the DVD Player SPDIF default setting is OFF. You must change the DVD SPDIF default setting to ON to hear all channels in DVD digital audio.

Configuring audio for Media Center

To configure multichannel audio output for Media Center audio:

- (1) Press Media Center on the remote control.



You can also click **Start** on the taskbar, and select **Media Center**.

- (2) Click **Settings, General, Media Center Setup**, and then **Setup your Speakers**. The Speaker Setup screen displays.
- (3) Click **Next**.
- (4) Under **Specify how many speakers you have**, Select the speaker number that matches your system. For example, select **5.1**. Click **Next**.
- (5) Select **Test**. If you hear tones from all your speakers, click **Next**. If you do not hear tones from all your speakers, follow the onscreen instructions.
- (6) Click **Finish**.

NOTE

If your speaker configuration is not displayed, click the Sound Effect speaker icon in the desktop system tray.

Configuring audio for the DVD Player

To configure multichannel audio output for the Media Center DVD playback:

- (1) Press Media Center on the remote control.



You can also click **Start** on the taskbar, and select **Media Center**.

- (2) Click **Settings, DVD, Audio**, and then **Configuration**.
- (3) Set sound output to match your speaker system. For example, select **5.1**. If you have digital audio, select S/PDIF.
- (4) Click **Save**.

This section contains possible solutions for some problems you may be experiencing with the Shuttle Digital Hub.

Chapter Contents :
Solving audio problems, see "Audio" on page 95.
Solving video problems, see "Video" on page 96.
Other sources of information, see "Getting Help" on page 101.

* Problems and Solutions

Audio

Find the description that most closely matches your audio problem and try the corresponding solution.

Problem	Solution
I don't have sound from my speakers.	<ul style="list-style-type: none"> ■ Verify sound cable connections. ■ Check volume and mute settings. See "Adjusting the Volume" on page 92. ■ Reconfigure the software for surround sound. See "Configuring Audio Output" on page 93. ■ Reinstall the sound card drivers by using driver CD that came with your Shuttle Digital Hub. ■ Use active, powered speakers, or speakers with an amplifier.
I have low volume sound from my speakers.	<ul style="list-style-type: none"> ■ Check volume and mute settings. See "Adjusting the Volume" on page 92. ■ Some programs may result in low volume, even when the volume knob within the program is turned to the maximum position. If this is the case, double-click the Volume icon on the taskbar and increase volume.
The Shuttle Digital Hub doesn't make any sound.	<ul style="list-style-type: none"> ■ Check that the AV Receiver or powered speakers are turned on and are set to the proper input. ■ Increase the volume on the remote control. ■ Press the Mute button on the keyboard or on the remote control to see if the Mute feature is turned on. ■ Use the keyboard controls to increase the volume. ■ Click the Volume icon on the Windows taskbar. Increase the volume, and make sure the Mute box is not checked.

	<ul style="list-style-type: none"> ■ Double-click the Volume icon on the Windows taskbar. The Play Control window opens. Make sure none of the Mute check boxes are selected. Adjust the volume slide bars to increase volume. ■ If your speakers have a power button, check whether it is turned on and whether the power supply is connected to the power source. ■ Check the speaker connections. ■ Remove any connected headphones.
Surround sound isn't working.	See "Configuring Audio Output" on page 93.

Video

Find the description that most closely matches your problem and try the corresponding solution.

Problem	Solution
I am using a TV with the Shuttle Digital Hub, but I cannot see anything.	<ul style="list-style-type: none"> ■ Check that the correct input source is selected on the TV. ■ Check that the TV is connected to the Shuttle Digital Hub. See "Video Out to TV" on page 43. ■ Check that the TV Out image is enabled. The detail of configuration steps can be found on http://global.shuttle.com/Support/Support.asp
I cannot see anything on the TV. I can hear it, though.	<ul style="list-style-type: none"> ■ If the Video Output S-video and composite connections are not connected to a TV or Video Input when the Shuttle Digital Hub is turned on, the S-video and composite jacks will turn off automatically. You must turn off, by pressing and holding down the power button for four seconds, and restart your Shuttle Digital Hub to ensure Video Out connection to your TV or AV receiver. ■ Check your input switches.
The Shuttle Digital Hub doesn't recognize my digital video camera.	See "Recognizing the camera" on page 74.
My remote control doesn't work.	<ul style="list-style-type: none"> ■ Check that the remote control indicator light on the remote lights up when you press a button. If it does not, replace the batteries. ■ Make sure that the batteries for the remote control are charged and installed correctly. ■ Make sure the front of the remote sensor on the Shuttle Digital Hub is not blocked (behind display window). ■ Point the remote control at the Shuttle Digital Hub (not at the TV) within a 45-degree angle range, and less than 26 feet (8 meters) away.

	<ul style="list-style-type: none"> ■ If a pressed key repeats itself (or sticks), try altering the lighting conditions in the room or moving the location of the Shuttle Digital Hub, if this continues. ■ Press the Enter button on the remote control after changing a channel. ■ If the remote control works in Media Center but not when changing channels, you need to reconfigure the Media Center software settings for the cable set-top-box or satellite receiver. Refer to the Media Center Edition 2005 Software Guide.
My remote sensor is not receiving a signal from the remote control.	<ul style="list-style-type: none"> ■ Check that the remote control indicator light on the remote lights up when you press a button. If it does not, replace the batteries. <p>Or</p> <ol style="list-style-type: none"> (1) Click Start on the desktop, right-click My Computer, and then select Properties. (2) Click the Hardware tab, and then click Device Manager. (3) Click the plus (+) sign next to Universal Serial Bus Controllers. (4) If the eHome Infrared Receiver is listed under Universal Serial Bus Controllers, Windows is properly detecting the IR Receiver. If it is not listed, go to the next step. (5) Turn off the Shuttle Digital Hub. Remove all external USB devices. Remove the power cord for 30 seconds. Then reconnect external devices and power. Repeat steps 1–4.

System

Find the description that most closely matches your problem and try the corresponding solution.

Problem	Solution
My Shuttle Digital Hub won't turn on at all.	<ul style="list-style-type: none"> ■ When you press the On button on the front of the Shuttle Digital Hub, the following events should happen: <ol style="list-style-type: none"> a. The Shuttle power button should light and the front display lights up. b. The hard disk drive and fans spin. ■ If the Shuttle Digital Hub doesn't go through the previous procedure, check the following: <ol style="list-style-type: none"> a. The power cord and all cables are securely plugged into the Shuttle Digital Hub. b. The power cord is plugged into a grounded outlet. Check to see whether the outlet works by plugging another item into it.

	<p>c. Look the VFD. If the VFD shows "Shuttle XPC", then AC power is available.</p> <p>d. The TV or monitor is connected to the Shuttle Digital Hub, plugged in, and turned on.</p> <p>e. Make sure that the Shuttle Digital Hub is not too hot, and that vents are not blocked.</p>
I installed a new printer or other device, and it won't work.	<ul style="list-style-type: none"> ■ Be sure that you installed the device drivers that came with the new device. ■ You may need an updated driver for Windows XP. For non-Shuttle peripherals, contact the vendor directly. For Shuttle peripherals, visit the Shuttle Web site.
Shuttle Digital Hub (or part of it) doesn't seem to be working.	<ul style="list-style-type: none"> ■ When the Shuttle Digital Hub is in away mode (the On button power indicator light is solid amber). Press the Away button on the keyboard or the away button on the remote control to turn on the unit. ■ Make sure the keyboard syncs with the Shuttle Digital Hub. See "Syncing the Keyboard" on page 88. ■ Try restarting the Shuttle Digital Hub as follows: <ul style="list-style-type: none"> a. Click Start on the taskbar. b. Click Turn Off Computer. c. Click Restart. ■ If the Shuttle Digital Hub shows no response to mouse or keyboard actions, reset the Shuttle Digital Hub: <ul style="list-style-type: none"> a. Press and hold the On button for more than four seconds until the Shuttle Digital Hub turns off. b. Wait a few seconds, and turn the Shuttle Digital Hub back on. ■ It's possible that a voltage spike, power outage, or brownout has occurred. Symptoms of voltage spikes include a flickering video display, unexpected Shuttle Digital Hub startups, and the Shuttle Digital Hub not responding to your commands. A voltage spike can occasionally corrupt or destroy files, so it is a good idea to consistently make backup copies of your data files. Prevent voltage spikes by installing a surge suppressor between the power outlet and the Shuttle Digital Hub power cord. <div data-bbox="900 873 1046 907" data-label="Section-Header">NOTE</div> <div data-bbox="896 927 1311 1077" data-label="Text"> <p><i>Using the On button to reset the Shuttle Digital Hub is not recommended and should be used only as a last resort.</i></p> </div>

<p>My keyboard or the trackball doesn't work even though the Shuttle Digital Hub and TV or monitor seem to work.</p>	<ul style="list-style-type: none"> ■ Make sure the keyboard syncs with the Shuttle Digital Hub. See "Syncing the Keyboard" on page 88. ■ Try restarting the Shuttle Digital Hub as follows: <ol style="list-style-type: none"> a. Click Start on the taskbar. b. Click Turn Off Computer. c. Click Restart.
<p>The TV or monitor doesn't work, even though the Shuttle Digital Hub appears to.</p>	<ul style="list-style-type: none"> ■ Make sure the TV or monitor is turned on- it has its own power button. ■ Make sure the proper TV or monitor input is selected. ■ Check the cable connection between the monitor and the Shuttle Digital Hub. The cable connectors must be pushed in all the way prior to powering on the Shuttle Digital Hub. ■ Ensure that the cables to your monitor and your TV connect to the Video Out connectors on the Shuttle Digital Hub. ■ Adjust the brightness and contrast controls on the monitor. ■ Make sure the monitor power cord is plugged into a grounded outlet. Check to see whether the outlet works by plugging another item into it. (If the light on the front of the monitor is lit, the monitor is getting power.) ■ Try restarting the Shuttle Digital Hub as follows: <ol style="list-style-type: none"> a. Click Start on the taskbar. b. Click Turn Off Computer. c. Click Restart.
<p>My software stopped working.</p>	<p>If your program came on a CD, follow the instructions that came with the software to reinstall it.</p>
<p>I cannot remove a CD or DVD.</p>	<p>You cannot remove a CD or DVD after you have turned off the Shuttle Digital Hub. Turn on the Shuttle Digital Hub and press the Eject button to extend the tray.</p>
<p>The memory card reader won't read my memory cards.</p>	<ul style="list-style-type: none"> ■ The memory card reader is a device that uses the Safely Remove Hardware task. This appears as a Windows system tray icon next to the time. Do not click Stop in the Safely Remove Hardware window. If you do click Stop, the drive is disconnected. If this happens, restart the Shuttle Digital Hub. ■ Do not insert or remove memory cards when the data being transferred. To do so may cause data loss, or it may permanently damage the card reader. ■ Format a memory card before you use it. Click Start and then click My Computer. Under Removable Storage, right-click the memory card icon and select Format. Click Start. Click OK on the Format Complete Window, and then click Close to finish.

	<ul style="list-style-type: none"> ■ Some cards have a read/write or security switch on the card. Make sure the read/write switch is set to Write Enabled before attempting to write data to it. ■ Make sure the amount of data you are storing has not exceeded the storage limit of the card. ■ Make sure the memory card is one of the supported types: CompactFlash I/II and Micro drive, Memory Stick, Memory Stick Pro, MultiMedia, Secure Digital, SmartMedia. ■ Make sure the memory card is fully inserted into the correct slot. ■ Inspect the ends of the memory cards for dirt or material closing a hole or spoiling a metal contact. Clean the contacts with a lint-free cloth and small amounts of isopropyl alcohol. Replace the memory card if necessary.
My Shuttle Digital Hub is experiencing video errors.	<ul style="list-style-type: none"> ■ Your file may be corrupt or in an unsupported format. Open the video file in a video editor such as Power DVD Creator, and then resave the file in a supported format. ■ There may be a problem with the codec. For more information, look in Windows Media Player Help, and then search for codec.
My DVD won't play.	<p>You can put data files on a DVD to store them or transfer them to another Shuttle Digital Hub. However, data files on a DVD do not play in a DVD player. Rerecord your files to a file format that can be read by some DVD players.</p> <p>If you are using component output, you may need to change the configuration. See "Component Video Settings" on page 40. Check your DVD country/region.</p>
My DVD won't play a DVD audio disk.	<p>This format is not supported by the DVD player.</p>
Codec errors are occurring when I play certain files.	<p>Codec is an abbreviation for compressor-decompressor. A codec is software or hardware used to compress and decompress digital media.</p> <p>If you get a codec error when playing an audio file, open the file in Windows Media Player. Configure Windows Media Player to automatically download codecs. You must be connected to the Internet to download the codec file.</p>
My music files don't appear in the Media Library.	<p>Make sure you use Windows Media Player to add your music files to the Media Library. Check whether the Windows Media Player setting for access rights of other applications is set to No access. It must be set to Read only or Full access for your music files to appear. Refer to Windows Media Player Help for more information.</p>

NOTE

If you need more information about using or troubleshooting Media Center, refer to the Media Center online Help or Help and Support in the Start menu.

* Getting Help

Help and Support Center

For help, press the Help button on your keyboard, or click **Start** on the taskbar and select **Help and Support**.

The **Help and Support Center** is onscreen Help information about your Shuttle Digital Hub. Here you can find:

- Links to reinstall drivers.
- Access to technical support options.
- Commonly asked questions about your Shuttle Digital Hub.

To open the Help and Support Center:

1 Press the **Help** button on your keyboard (the **?** button).

Or



Start Media Center. Click on the Help (?) icon on the top left of the screen.

Or

Click **Start** on the taskbar and click **Help and Support**.

Shuttle Web Site Support

The Shuttle Web site provides:

- Supplemental information about the Shuttle Digital Hub and products
- Shuttle Support contact
- Software updates
- Software patches
- Online Information and technical support for your Shuttle Digital Hub
- Online manuals for your Shuttle Digital Hub

To use the Shuttle Web site:

(1) Connect to the Internet: Open your Web browser,

Or

Press Connect on your keyboard.

(2) Type the Web site address into your Web browser address box.
Press Enter.

- (3) Access the Shuttle Support Web site.
Type **http://www.shuttle.com** into the Web browser address box.
Press Enter.
- (4) Select your country/region from the list.
- (5) Press the "Support" tag on the top of the window.

Troubleshooting Shuttle Customer Care

You can get help over the telephone from Shuttle. When you call Shuttle Customer Care, have your model number and serial number available.

See the keyboard or the Warranty and Support Guide for the support telephone numbers.

Microsoft Web Site

Search the Microsoft Web site

(**http://www.microsoft.com**) for Knowledge Base articles and updates on Microsoft Windows XP Media Center Edition 2005.

You can also use the Online Spotlight link to get to the Microsoft Windows XP Media Center Web site.

To get the latest news and information about your Microsoft Windows XP Media Center program:

- (1) Press the Media Center button on your remote control.
- (2) Select **Online Spotlight** from the Media Center Start menu.

