

# Explorer Digital Set-Top Models 4240C and 4250C with Multi-Stream CableCARD Interface



## **Notice to Installers**

The servicing instructions in this notice are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions, unless you are qualified to do so.

#### Note to System Installer

For this apparatus, the coaxial cable shield/screen shall be grounded as close as practical to the point of entry of the cable into the building. For products sold in the US and Canada, this reminder is provided to call the system installer's attention to Article 820-93 and Article 820-100 of the NEC (or Canadian Electrical Code Part 1), which provides guidelines for proper grounding of the coaxial cable shield.



This symbol is intended to alert you that uninsulated voltage within this product may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this product.

Ce symbole a pour but d'alerter toute personne qu'un contact avec une pièce interne de ce produit, sous tension et non isolée, pourrait être suffisant pour provoquer un choc électrique. Il est donc dangereux d'être en contact avec toute pièce interne de ce produit.



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

# WARNING TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.



This symbol is intended to alert you of the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

Ce symbole a pour but de vous avertir qu'une documentation importante sur le fonctionnement et l'entretien accompagne ce produit.

20070131 SysInstaller 820 US/Canada/Intl

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## IMPORTANT SAFETY INSTRUCTIONS

#### **Read These Instructions**

### **Keep These Instructions**

#### **Heed All Warnings**

#### **Follow All Instructions**

## **Power Source Warning**

A label on this product indicates the correct power source for this product. Operate this product only from an electrical outlet with the voltage and frequency indicated on the product label. If you are uncertain of the type of power supply to your home or business, consult your service provider or your local power company.

#### **Ground the Product**



#### WARNING:

Avoid electric shock and fire hazard! Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

If this product connects to coaxial cable wiring, be sure the cable system is grounded (earthed). Grounding provides some protection against voltage surges and built-up static charges.

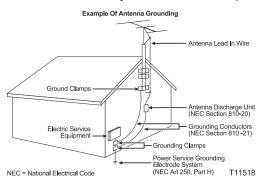
## **Outdoor Grounding System**

If this product connects to an outdoor antenna or cable system, be sure the antenna or cable system is grounded (earthed). This provides some protection against voltage surges and built-up static charges.

Article 810 of the National Electric Code (NEC) ANSI/NFPA No. 70-1990, provides the following information:

- Grounding of the mast and supporting structure
- Grounding the lead-in wire to an antenna discharge unit
- · Size of the grounding conductors

- · Location of the antenna-discharge unit
- · Connection to grounding electrodes
- Requirements for the grounding electrodes (see the following antenna grounding diagram as recommended by NEC ANSI/NFPA 70)





#### **WARNING:**

Avoid electric shock and fire hazard! Do not locate an outside antenna system in the vicinity of overhead power lines or power circuits. Touching power lines or circuits might be fatal.

### **Protect the Product from Lightning**

For added protection, unplug this apparatus during lightning storms or when unused for long periods of time. In addition to disconnecting the AC power from the wall outlet, disconnect the signal inputs.

# Verify the Power Source from the On/Off Power Light

When the on/off power light is not illuminated, the apparatus may still be connected to the power source. The light goes out when the apparatus is turned off, regardless of whether it is still plugged into an AC power source.

#### **Eliminate AC Mains Overloads**



#### WARNING:

Avoid electric shock and fire hazard! Do not overload AC mains, outlets, extension cords, or integral convenience receptacles. For products that require battery power or other power sources to operate them, refer to the operating instructions for those products.

## **IMPORTANT SAFETY INSTRUCTIONS**, continued

### **Prevent Power Cord Damage**

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where the cord exits from the apparatus.

# Provide Ventilation and Select a Location

- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not place this apparatus on a bed, sofa, rug, or similar surface.
- Do not place this apparatus on an unstable surface.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not install this apparatus in an enclosure, such as a bookcase or rack, unless the installation provides proper ventilation.
- Do not place entertainment devices (such as VCRs or DVDs), lamps, books, vases with liquids, or other objects on top of this product.

# Protect from Exposure to Moisture and Foreign Objects

Do not use this apparatus near water.



#### WARNING:

Avoid electric shock and fire hazard! Do not expose this product to liquids, rain, or moisture.



#### **WARNING:**

Avoid electric shock and fire hazard! Unplug this product before cleaning. Clean only with a dry cloth. Do not use a liquid cleaner or an aerosol cleaner. Do not use a magnetic/static cleaning device (dust remover) to clean this product.



#### WARNING:

Avoid electric shock and fire hazard! Never push objects through the openings in this product. Foreign objects can cause electrical shorts that can result in electric shock or fire.

### **Accessories Warning**



#### WARNING:

Avoid electric shock and fire hazard! Only use attachments/accessories specified by your service provider or the manufacturer.

### **Service Warnings**



#### WARNING:

Avoid electric shock! Do not open the cover of this product. Opening or removing the cover may expose you to dangerous voltages. If you open the cover, your warranty will be void. This product contains no user-serviceable parts. Refer all servicing to qualified service personnel.

Servicing is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

#### **Check Product Safety**

Upon completion of any service or repairs to this product, the service technician must perform safety checks to determine that this product is in proper operating condition.

#### **Protect the Product when Moving It**

Always disconnect the power source when moving the apparatus or connecting or disconnecting cables.



#### WARNING:



Avoid personal injury and damage to this product! Use only with the cart, stand, tripod, bracket, or table specified by the

manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

20070320 Set-Top Cable US & Canada

## Welcome

The Explorer® 4240C™ and 4250C™ Digital Set-Top with a Multi-Stream CableCARD™ (M-Card™) receives and displays digital signals and delivers programming in exceptional picture and audio quality. The M-Card provides system security and authorization of digital services. Through the 4240C and 4250C, you can also access interactive services, such as video-on-demand and pay-per-view programs. Contact your service provider for information about these and other available services. Use the instructions in this guide to install the 4240C or the 4250C and to access your program services.

Important: If the M-Card is removed, the set-top will not operate correctly.

For more information about this product, visit our website: http://www.cisco.com/web/consumer/support/index.html

## **Safety First**

Before using this set-top, read the Important Safety Instructions section of this guide.

## **Identify Your Set-Top**

To find the serial number for your set-top, look on the back for a label that is similar to the example shown here. The serial number begins with "STB SN" and is located at the top of the bar code.



- Serial Number

T13137

If your set-top requires troubleshooting in the future, your cable service provider may ask for this serial number.

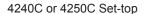
Use the space provided here to record the serial number:

1

## What's In The Carton?

The set-top carton contains the following items:







Power Cord

# **Additional Equipment You Might Need**

You might need some of the cables and adapters shown below for connecting the set-top to your home entertainment devices. See the connection information in the **Connection Diagrams** section for more information.

Check with your service provider for information about acquiring cables or adapters, or you can purchase cables or adapters from your local electronics supplier.







Composite A/V Cables





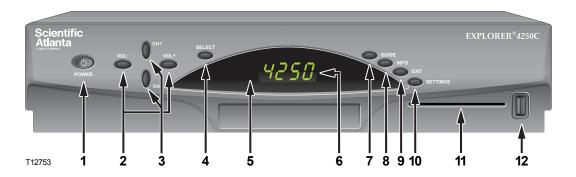




Multi-Stream CableCARD™ (obtain from your service provider)



## What's on the Front Panel?



1 Power Turns the set-top on and off

2 VOL + and VOL - Increases and decreases the volume

3 CH + and CH - Scrolls up and down through the channels

4 Select Provides access to your on-screen selection

**5 IR Sensor** Receives the infrared signal from the remote control

6 LED Display Displays the selected channel number and time of day. The LED also

displays the following:

• Power ( ( ( )

7 Guide Accesses on-screen services, such as the on-screen guide, video-on-

demand, or pay-per-view

8 Info Displays a description of the selected program. This button is available

from the on-screen guide and while viewing a program

**9 Exit** Exits menus, the on-screen guide, and program information

**10 Settings** Accesses the Settings menu

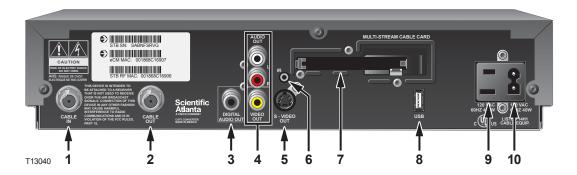
11 Smart Card Slot Reserved for future use

12 USB Port Connects to external equipment, such as a keyboard or mouse (reserved

for future use)

Note: This illustration may vary from the actual product.

## What's on the Back Panel?



1 Cable In Connects to a coaxial cable that delivers the signal from your service

provider

2 Cable Out Connects to a coaxial cable that sends analog audio and video signals to

a TV or VCR. These signals are standard-definition TV (SDTV) video and

stereo audio

3 Digital Audio Out Connects to an RCA cable to send a digital audio signal to a surround-

sound receiver or other digital audio device

4 Audio Out Connects and Video Out

Connects to the audio and video input of a TV or a VCR

**5 S-Video Out** Connects to an S-Video cable that sends an S-Video signal to your TV or

VCR. This signal is standard definition, but higher quality than other SDTV

connections

**6 IR** Connector reserved for future use

7 Multi-Stream Slot for Multi-Stream CableCARD (M-Card) module for decrypting subscription digital channels. This set-top will not operate correctly

subscription digital channels. This set-top will not operate correctly without an M-Card module. Obtain an M-Card module from your service provider

**Note**: Your service provider may provide this when you first receive the set-top.

8 USB Connects to external USB devices such as a keyboard or a mouse

**9 AC Outlet** Connects to the AC power cord from another device, such as a TV

**10 AC Power Input** Connects to the power cord to deliver power to the set-top

Note: This illustration may vary from the actual product.

## **Connecting the Set-Top**

To connect your set-top to your entertainment devices, complete these steps.



Connect the coaxial cable that carries the signal from your cable service provider to the CABLE IN connector on the back panel of the set-top.



Connect your SDTV to the set-top. See the **Connection Diagrams** section of this quide.



Identify the additional devices you will connect to the set-top and TV. See the **Connection Diagrams** section of this guide.





Plug the set-top and the TV into an AC power source.

**Important:** To protect the set-top from power surge damage, ground (earth) your cable product to provide some protection against voltage surges and built-up static charges. To avoid these voltage surges that can be caused by lightning storms and power outages, plug the set-top into a surge protector to reduce the risk of damage.



Do not turn on the set-top or TV yet.



Wait several minutes for the set-top to receive the latest software, programming, and service information. One of the following will display on the front panel of the set-top:

- · Current time
- Four dashes (----)

- 6
- Notes: If the current time appears, the update is complete.
  - If four dashes appear, you must call your service provider to get the set-top authorized.



To begin watching TV, turn the TV on, and press POWER on the front panel of the set-top or on the remote control.

## Connections for a Standard-Definition TV and VCR

When using the set-top with an SDTV, you must make *one* of the following connections to view content. Some SDTVs may not have all these connections. In addition, you can make connections to a VCR to archive recordings to a VCR tape. Refer to your TV and VCR user guides and the cabling diagrams in this guide for more detailed information.

Note: The labeling on your TV may vary slightly.

Required Connections to an SDTV (use one)		Set-Top Connections		SDTV Connections
ө	When you set up the set-top in <b>SD mode</b> , the Video Out connector on the set-top is configured as a composite video out connector.	VIDEO OUT	Video	VIDEO IN
Composite	See the <b>Connection Diagrams</b> section of this guide.	AUDIO OUT OL R	Audio	L R
30	The S-Video Out connection provides an optimal video connection to SDTVs.	S-VIDEO OUT	Video	S-VIDEO IN
S-Video		AUDIO OUT OL R	Audio	L R
Cable Out	The Cable Out connector provides a video and audio connection to an SDTV.	CABLE OUT	Audio/Video	CABLE IN/ ANT IN
Optional Connection to a VCR		Set-Top Connections		VCR Connections
VCR	For VCRs with Video and Left and Right Audio connectors, you can use the RCA connections (Video Out and Audio Out Left and Right) on the set-top.	VIDEO OUT	Video	VIDEO IN
	- · ·	AUDIO OUT OL R	Audio	L R

## **View Television Programming**

## **Access Services and Programs**

Access cable services and programs by pressing the following keys on the remote control:

- Guide

  Access the on-screen guide. The on-screen guide displays schedules of TV programs
  and other services available from your cable service provider, such as video-on-demand and
  pay-per-view programs.
- · Arrows-Select a program in the schedule.
- Info—Display a specific program description (either from the on-screen guide or while viewing a program).
- · Select-View a specific program in the guide.

#### **Avoid Screen Burn-In!**

Images such as letterbox bars or side bars, bright closed-captioning backgrounds, station logos, or any other stationary images may cause the screen in your TV to age unevenly; this is known as screen burn-in. Refer to the user's guide that came with your TV for more information.



#### WARNING:

Avoid screen burn-in!

Do not display the same fixed images on your TV screen for extended periods of time.

## **Troubleshooting**

If the set-top does not perform as expected, the following tips may help. If you need further assistance, contact your cable service provider.

#### No Picture

- · Verify that the M-Card module is installed.
- · Verify that the power to your TV is turned on.
- If the set-top is plugged into a wall switch, verify that the switch is in the ON position.
   Note: You should avoid plugging the set-top into an outlet controlled by a wall switch.
- · Verify that all cables are properly connected.
- If your system includes a VCR or stereo, verify that you have properly connected them to the set-top.
- Verify that the TV is set to the proper input channel.

#### No Color

- Verify that the current TV program is broadcast in color.
- · Adjust the TV color controls.

#### No Sound

- If your setup includes a VCR or stereo, verify that you have properly connected them to the set-top.
- · Verify that the volume is turned up.
- · Verify that the mute function is not on.

## **Automatic Software Updates**

A message appears on the TV screen when the set-top and the M-Card module are receiving software updates. In addition, download information also appears on the front panel of the set-top during these updates. Wait for the current time to display on the front panel before continuing. When the time appears, the update is complete.

Note: If you need further assistance, contact your service provider.

# **Frequently Asked Questions**

## Where Are the Connection Diagrams?

The diagrams at the end of this guide show examples of common ways to connect the set-top to your TV, DVD, and home theater receiver. However, these diagrams do not show every possible combination of devices. Refer to the user's guides that came with your other electronic devices for further information.

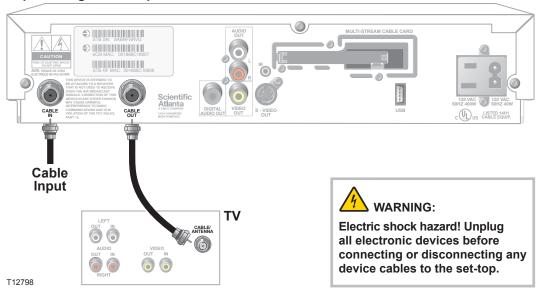
### What Cables Do I Need?

Some of the cables and adaptors shown in the diagrams may not be included with the set-top. Some of the required cables are shown in the connection diagrams.

# **Connection Diagrams**

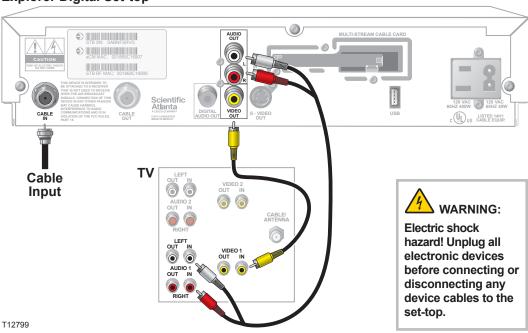
## **Connecting to a TV Using Cable Out**

## **Explorer Digital Set-top**



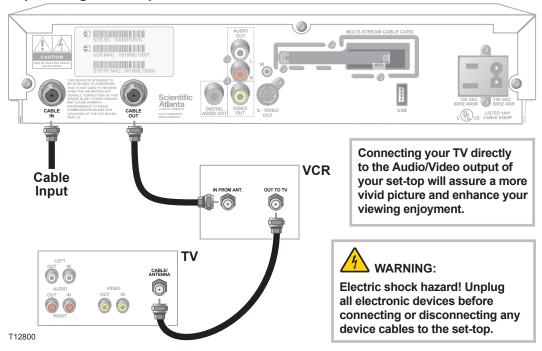
## Connecting to a TV Using Video Out and Audio Out

## **Explorer Digital Set-top**



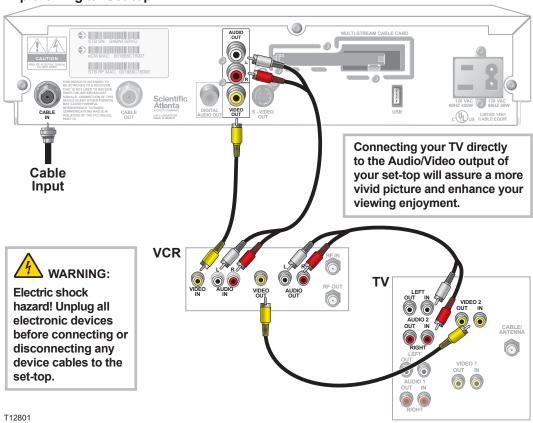
## Connecting to a TV and VCR Using Cable Out

## **Explorer Digital Set-top**



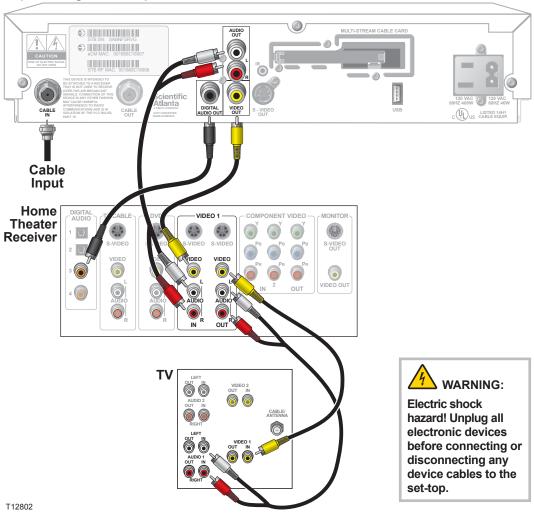
## Connecting to a TV and VCR Using Video Out and Audio Out

## **Explorer Digital Set-top**



# Connecting to a Home Theater Receiver and TV

## **Explorer Digital Set-top**



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## **FCC Compliance**

## **United States FCC Compliance**

This device 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 such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it 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 or more of the following measures:

- · Reorient or relocate the receiving antenna, if applicable.
- 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 cable company or an experienced radio/ television technician for help.

Any changes or modifications not expressly approved by Cisco Systems, Inc., could void the user's authority to operate the equipment.

The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. The phone numbers listed are for FCC-related questions only and not intended for questions regarding the connection or operation for this device. Please contact your cable service provider for any questions you may have regarding the operation or installation of this device.

# FC Declaration of Conformity

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

 the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation. EXPLORER
Digital Set-top
Model: 4240C and 4250C
Manufactured by: Cisco Systems, Inc.;
5030 Sugarloaf Parkway;
Lawrenceville, Georgia 30044; USA
Telephone 770-236-1077

## Canada EMI Regulation

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la class B est conforme à la norme NMB-003 du Canada.

20060628FDC

## Software and Firmware Use

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