



DIGITAL QUICK START

Your easy-to-follow guide to setting up
Charter Business™ Digital Cable TV

SCIENTIFIC ATLANTA HD

EXP3100HD/EXP3250HD/
EXP8010HD/EXP8300HD

Charter Business™ Digital Cable TV SELF-INSTALL GUIDE



Call 800-314-7195
www.Charter-Business.com

Table of Contents

Welcome	1
Safety and Install Tips	2
Your HD Receiver Back Panel	3
Installation Diagrams	4
Programming Your HD Picture Settings	10
Troubleshooting	12

Note: The install diagrams on pages 4-9 illustrate a number of different configurations depending upon the type of devices that you have in your entertainment system. Select and complete the one diagram out of these pages that best fits your business needs.

Welcome

Congratulations on your new Charter Business HDTV™ digital receiver. This Quick Start Guide provides install instructions for the Charter Business High-Definition Digital Video Receiver.

With your new HD receiver, you are entering the most advanced generation of TV viewing available. We know you will be thrilled with what you see.

As with all Charter Business digital services, you get more channels to choose from, an easy-to-use on-screen program guide and unparalleled video and audio quality.

Follow these instructions to get started:

- Review the safety and install tips on page 2.
- Identify the install diagram on pages 4-9 that best fits your system.
- Connect your Charter Business HDTV receiver and plug it in, but do not turn it on yet.
- Wait until you see either four dashes (- - -) or the current time on the LED of your HD digital receiver which will indicate that the digital program content download is complete. (This may take up to 15 minutes)
- Program your HD picture settings and then try out your service to confirm the installation was successful. (See page 10)



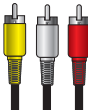
Safety and Install Tips

Safety First

- Do not plug the digital receiver into an electrical outlet until **after** you have connected it to the TV, the cable wall outlet and any other devices.
- Position the high-definition digital receiver with at least 2 inches of space on all sides to allow the device to properly cool when operating.
- Ensure that the high-definition digital receiver is not near an external heat source that could raise the temperature of the unit.
- Do not expose the HD digital receiver to moisture. Unplug the receiver before cleaning and avoid using liquid or aerosol cleaners.
- Use a surge protector.

Useful Install Tips

- Connect the HD digital receiver directly to the cable wall outlet.
- Be sure that all connections between the TV, VCR, HD digital receiver and the cable wall outlet are secure.
- There are three possible cable options that can be used to connect your HD digital receiver to your HDTV depending upon the model of your digital receiver and HDTV. This kit includes a standard set of component cables which are one of the most common connection option for HD picture. DVI and HDVI cables are sold separately.



- a. Component Input Cables** (included in this kit)
High-quality video connection that uses three separate component cables, generally color-coded green, blue and red. These are also called Y, Pb, Pr cables.



- b. DVI Connectors** (sold separately)
Digital Video Interface cables are all digital, high-quality video connectors that are more common on newer high definition televisions.

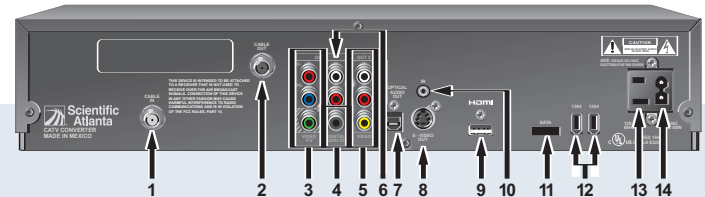


- b. HDMI Connectors** (sold separately)
HDMI cables or High Definition Video and Multichannel Audio cables transmit video and audio in a single cable. HDMI is only available on newer model HDTV's. (Not all Charter HD digital receivers have ports for HDMI cables)

- See <http://charter.com/quickstart> for additional wiring configurations such as the home theater and surround-sound systems.

Your HD Digital Receiver Back Panel

The back panel of the HD digital receiver has a number of different ports for connecting the HD digital receiver to the wall, the TV and other devices. The diagram below describes the most commonly ports used.



MODEL MAY VARY

KEY	DESCRIPTION
1 CABLE IN	Connects to the coaxial cable from the cable wall outlet.
2 CABLE OUT	Connects to the coaxial cable that goes to the TV or VCR.
3 PrPbY	Connects the digital receiver to the component video input (YPbPr) on the HDTV.
4 DIGITAL AUDIO OUT	Connects an RCA cable to the digital audio input on a surround-sound receiver.
5 SECONDARY VIDEO OR AUDIO OUT	Connects to a VCR for archiving saved content from the digital video recorder or to another set of inputs (composite) on your TV.
6 AUDIO OUT	Connects RCA cables (left and right) to audio inputs or to a TV with stereo outputs.
7 OPTICAL AUDIO OUTPUT	Connects an optical cable to send a digital audio signal to a surround-sound receiver or other digital audio device. (optional)
8 S-VIDEO OUT	Connects the S-Video cable to your TV or VCR. (optional)
9 HDMI/DVI	Connects an HDMI or DVI cable to the HDMI/DVI port on an HDTV.
10 SATA	Connects to an external hard disk for expanded recording capacity. (not available on all models)
11 AC OUTLET	Supplies AC power to another device such as a TV. (optional)
12 AC IN	Connect the power cord for the HD receiver to the wall outlet.

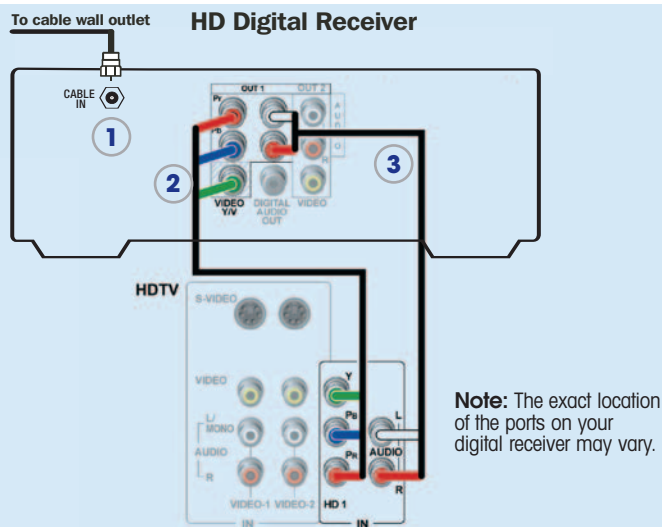
Installation Diagrams

Connecting the HD digital receiver to an HDTV using the included cables

This is a common configuration for HDTV's. Use this configuration with the component cables (red, blue, green) provided in your Charter Business Quick-Start Install Kit

What you will need:

- 1 COAX cable 
- 1 RCA cable 
- 1 Y, Pb, Pr component cable 



STEP ONE: Connect the coax cable between the cable wall outlet and the **CABLE IN** port on the HD digital receiver.

STEP TWO: Locate the component cable (**Y, Pb, Pr**) ports on the HDTV and the component cable (**Y, Pb, Pr**) ports on the HD digital receiver. (Y=green, Pb=blue, Pr=red). Connect the provided component cable (red, blue green) to the **Y, Pb, Pr OUT** ports on the HD digital receiver and the corresponding **IN** ports on the HDTV.




STEP THREE: Connect the RCA composite cables (red and white) between the **DIGITAL AUDIO OUT R (red)/DIGITAL AUDIO OUT L (white)** ports on the HD digital receiver with the **AUDIO IN R (red)/AUDIO IN L (white)** ports on the HDTV.

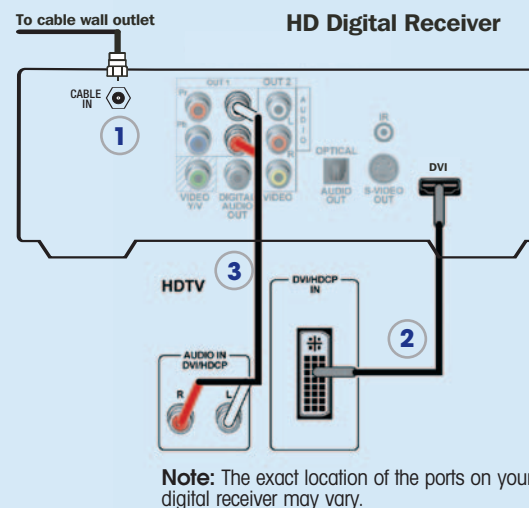
STEP FOUR: Plug in and turn on your devices. Select the input source on your HDTV that you used. See page 10 to program your HD picture settings.

Connecting the HD digital receiver to an HDTV using a DVI cable (DVI cable sold separately)

This is the configuration you will use if you already have a DVI connector for your HDTV. (not all HDTV's have this connection option)

What you will need:

- 1 COAX cable 
- 1 RCA cable 
- 1 DVI cable 



STEP ONE: Connect the coax cable between the cable wall outlet and the **CABLE IN** port on the HD digital receiver.

STEP TWO: Connect the DVI cable between the DVI port on the HD digital receiver and the **DVI/HDCP IN** port on the HDTV.

STEP THREE: Connect the RCA composite cables (red and white) between the **DIGITAL AUDIO OUT R (red)/DIGITAL AUDIO OUT L (white)** ports on the HD digital receiver with the **AUDIO IN R (red)/AUDIO IN L (white)** ports on the HDTV.

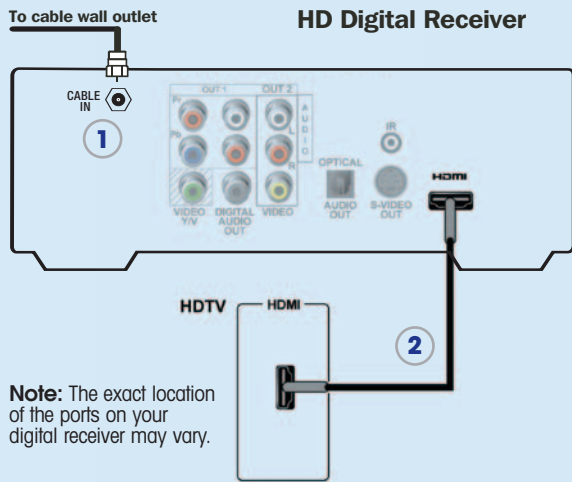
STEP FOUR: Plug in and turn on your devices. Select the DVI input source on your HDTV. See page 10 to program your HD picture settings.

Connecting the HD digital receiver to an HDTV using an HDMI connector (HDMI cable sold separately)

This is the configuration you will use if you already have an HDMI cable for your HDTV. The HDMI cable carries both digital audio and high-definition digital video signal. (Not all HDTV's and not all Charter Digital Receivers have this connection type available).

What you will need:

- 1 COAX cable 
- 1 HDMI cable 



STEP ONE: Connect the coax cable between the cable wall outlet and the **CABLE IN** port on the HD digital receiver.

STEP TWO: Connect the HDMI cable between the HDMI port on the HD digital receiver and the HDMI port on the HDTV.

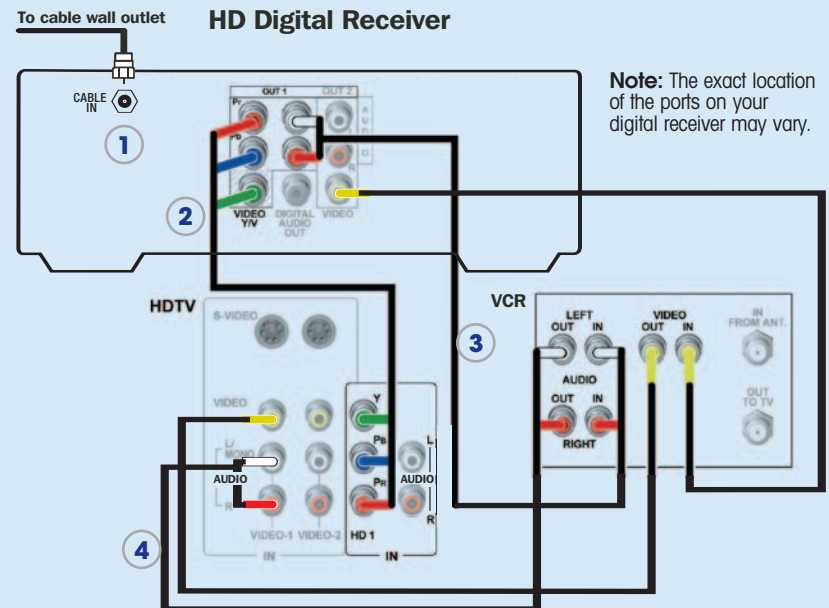
STEP THREE: Plug in and turn on your devices. Select the HDMI input source on your HDTV. See page 10 to program your HD picture settings.

Connecting the HD digital receiver to an HDTV and a stereo VCR

This configuration will allow you to watch both high-definition and standard-definition video on your HDTV as well as record and play standard-definition video through your VCR. For this configuration, your VCR may need to be turned on.

What you will need:

- 1 COAX cable 
- 2 RCA cables 
- 1 Y, Pb, Pr component cable 



STEP ONE: Connect the coax cable between the cable wall outlet and the **CABLE IN** port on the HD digital receiver.

STEP TWO: Connect the provided component cable to the **Y, Pb, Pr OUT** ports (Y=green, Pb=blue, Pr=red) on the HD digital receiver and the corresponding **IN** ports on the HDTV.

Connecting the HD digital receiver to an HDTV and a stereo VCR (continued)

STEP THREE: Connect the RCA composite cables (red and white) between the **DIGITAL AUDIO OUT R (red)/DIGITAL AUDIO OUT L (white)** ports on the HD digital receiver with the **AUDIO IN R (red)/AUDIO IN L (white)** ports on the stereo VCR. Then use the yellow RCA composite cable to connect the **VIDEO OUT** port on the HD digital receiver with the **VIDEO IN (yellow)** port on the VCR.

STEP FOUR: Connect another set of RCA composite cables between the **DIGITAL AUDIO OUT R (red)/DIGITAL AUDIO OUT L (white)** ports on the VCR with the **AUDIO IN R (red)/AUDIO IN L (white)** ports on the HDTV. Then use the yellow RCA composite cable to connect the **VIDEO OUT** port on the VCR with the **VIDEO IN (yellow)** port on the HDTV.

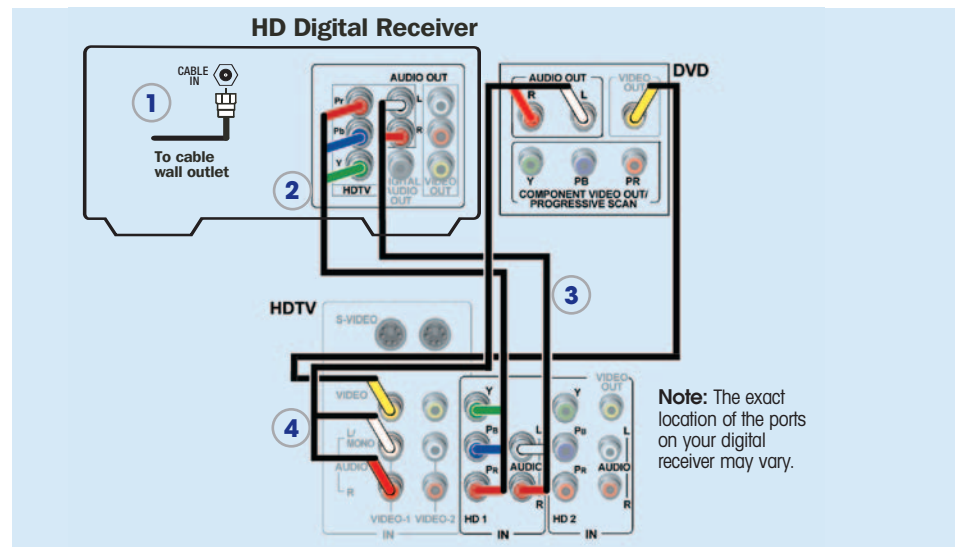
STEP FIVE: Plug in and turn on your devices. Select the input source on your HDTV that corresponds with the ports you used on the back of the HDTV. See page 10 to program your HD picture settings.

Connecting the HD digital receiver to an HDTV and a DVD player

If you have a DVD player with your HDTV connect it directly to the HDTV as indicated below.

What you will need:

- 1 COAX cable 
- 2 RCA cables 
- 1 Y, Pb, Pr component cable 



STEP ONE: Connect the coax cable between the cable wall outlet and the **CABLE IN** port on the HD digital receiver.

STEP TWO: Locate the component cable (Y, Pb, Pr) ports on the HDTV and on the HD digital receiver. (Y=green, Pb=blue, Pr=red). Connect the provided component cable (red, blue green) between the **Y, Pb, Pr OUT** ports on the HD digital receiver and the corresponding **IN** ports on the HDTV.

STEP THREE: Connect RCA composite cables (red and white) between the **DIGITAL AUDIO OUT R (red)/DIGITAL AUDIO OUT L (white)** ports on the HD digital receiver and the **AUDIO IN R (red)/AUDIO IN L (white)** ports on the HDTV.

STEP FOUR: Connect RCA audio (red and white) cables between the **DIGITAL AUDIO OUT R (red)/DIGITAL AUDIO OUT L (white)** ports on the DVD player with the **AUDIO IN R (red)/AUDIO IN L (white)** ports on the HDTV. Then connect the RCA video cable (yellow) between the **VIDEO OUT (yellow)** port on the DVD player and the **VIDEO IN** port on the HDTV.

Programming your HD picture settings

Setting the picture format

Before you begin using your HD digital receiver, you will need to set up your picture format. First, select HDTV or standard-definition TV by completing the following steps:

- Turn the HD digital receiver OFF and the TV ON
- On the front panel of the HD digital receiver, press GUIDE and INFO at the same time.
- Follow the on-screen instructions to choose HD (High-Definition) or SD (Standard-Definition) mode and wide screen (16:9) or standard screen (4:3) depending upon your TV type.
- Press POWER on the HD digital receiver to begin watching TV.

Picture formats / Picture sizes

Only programs that are produced in widescreen, HD format will fill the entire screen of a widescreen HDTV. The following examples show how different program types look when the picture format is set to Normal mode.

Standard Screen HDTV's

- 480p or 480i standard in full screen
- 480p, 480i, 720p, or 1080i wide in letterbox format




Wide Screen HDTV's

- 480p or 480i standard in full screen
- 480p, 480i, 720p, or 1080i wide in full screen



Changing picture sizes



You can change picture sizes at anytime using your remote control through one of two methods.


Method 1: Press the  key on the remote control to change to one of the following picture sizes:

- Normal
- Stretch
- Zoom

Method 2: 1. Press  on the remote control.

2. Press  or  to scroll to **Picture Size**

3. Press  or  to view the size options (Normal, Stretch, Zoom).

4. Press  to save the setting.

5. Press **Exit**.

**If you need assistance with your installation
call Charter Business at 800-314-7195**

Troubleshooting

Problem

Possible Solution

No sound

- Press MUTE on the remote control to restore the volume level.
- Check that the receiver is set to the proper input source.
- Turn your VCR on.

No picture

- Check to be sure that all cables are connected properly and that your TV is tuned to cable channel 3 or 4, if using the TO TV-VCR connections. Hand-tighten the cable connections if necessary.
- Check that your component connection cables are not crossed. Y goes to Y, Pb to Pb and Pr to Pr.
- If connected through the RCA video connection, make sure the cables are connected properly.
- Turn VCR on.
- Ensure that the proper video display format for your TV has been selected.

No Guide or wrong Guide

- Check that your HD receiver is connected directly to the cable wall outlet.

Picture or sound is noisy on one channel

- Reconnect the coax cables and hand-tighten if loose.

Sound from only one stereo speaker

- Hand-tighten or reconnect the cables.
- Ensure that wires are not frayed and plugs are not bent or broken.

No power

- Reconnect the power cord.
- Ensure that the HD receiver is plugged into an active outlet.

Remote control does not work

- Press CABLE on the remote control.
- Ensure that nothing is blocking a clear line of sight between the HD receiver and the remote control.
- Change the batteries in your remote control and then re-program your remote control.

Poor audio quality

- Use the remote control to set the relative to HD receiver volume level to approximately 3/4 of maximum volume level and then adjust the audio levels on the external devices.