Colossus 2

Professional HD Video Recorder for cable TV and satellite boxes, plus video game consoles

Quick Installation Guide

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Included in the Colossus 2 box:

- **Colossus 2 H.264 high definition video recorder**, PCI Express
- **Hauppauge A/V adapter cable**, for Component video
- **HDMI video cable** 2 meter
- **IR Receive/Blaster cable** to control the channel changing on your cable TV or satellite set top box
- **HD PVR 2 Installation CD** for Windows plus WinTV v7 and Hauppauge Capture. This CD also is for the Colossus 2
- **Colossus 2 Installation Guide** (this guide)
- **Set up and using the WinTV v7 application** guide (also used for the WinTV v8 application)

Overview

The Hauppauge **Colossus 2** is an internal PCI Express board for desktop PCs, and records video in HD from a cable or satellite set top box, PC video (through the PC's HDMI video output port) or a video game console such as the Xbox One, Playstation 4 and other HDMI equiped game consoles.

Colossus 2 is essentially the HD PVR 2 model 1512 on an internal PCI Express board.

There are two video recording applications which come with Colossus 2:

- WinTV v8 is used to schedule TV recordings from a set top box
- Hauppauge Capture was designed to record video from game consoles and has a convenient one-click upload to YouTube. But many users find this easy to use recording application handy for recording video from cable and satellite set top boxes

Colossus 2 recordings are made onto a computer's hard drive in a compressed H.264 format. It records from HDMI or Component Video (also called YPrPb). You can also record S-Video or composite video using and optional A/V cable (you can purchase this on the Hauppauge Webstore). It will record at 1080p30, 720p or 480p at datarates from 1Mbit/sec up to 13.5Mbits/sec. Using Variable Bit Rate encoding, datarates will range up to 21 Mbits/sec when there is fast motion.

Note: if you are recording from a cable or satellite box or a PS3, you will use Component Video. Most set top boxes and the PS3 do not allow recording from the HDMI port.

Audio can be supplied to the Colossus 2 from stereo audio connectors on the Hauppauge AV cable, optical audio cable or HDMI. Colossus 2 comes bundled with the **WinTV v8 and Hauppauge Capture applications** to record videos. There are three types of recording formats:

TS: this is a native H.264 format used by WinTV v8 and Hauppauge Capture. TS files are often used to burn Blu-ray discs. The TS files recorded with the HD PVR 2 can be edited with Sony Vegas (all versions).

M2TS: a popular format used by many video editors

MP4: this is similar to the TS file but has an index at the beginning of the file.

Installing Colossus 2

Step 1. Install the Colossus 2 board in your PC

Turn the power off on your PC. Install Colossus 2 into a **PCI Express X1 or X16 slot**. Turn the power on to your PC.

Step 2: Connect the Colossus 2 cables.

HDMI video input

You can connect the HDMI output of some cable TV or satellite boxes and game consoles such as the PS4 and the Xbox One into Colossus 2. Colossus 2 supports HDMI sources up to 1080p60, though the maximum record resolution is 1080p30.

The HDMI video source needs to be un-encrypted. If you try to view or record encrypted video sources, you will get a black screen.

Component video input (YCrCb or YPrPb)

Plug the Hauppauge **A/V adapter cable** into **A/V input** on the back of Colossus 2. Then connect the **Component video cable** from your game console or cable TV or satellite set top box into the Hauppauge **A/V cable set**.
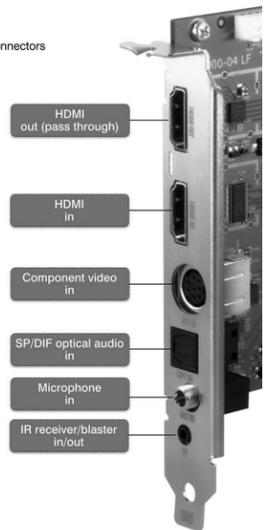
HDMI Output (no delay pass through video)

The HDMI output can support TV monitors up to 1080p60.

Connecting Colossus 2 to a cable TV or satellite set top box

There are three ways to connect to the Colossus 2 from your cable TV or satellite TV set top box:

a) **you can connect using HDMI**, though some cable TV and satellite set top boxes encrypt the HDMI output from their box. If you get a black screen on WinTV or Hauppauge Capture using HDMI, then it is likely your set top box is encrypting the HDMI output.

b) **you can connect the Component video (YCrCb or YPrPb) output** from your set top box to the

Colossus 2 back panel connectors

HDMI out (pass through)
HDMI in
Component video in
SP/DIF optical audio in
Microphone in
IR receiver/blaster in/out

A/V adapter cable located on the rear of the Colossus. The Component video colors are normally **Red/Green/Blue**.

c) **you can connect the Composite video output** of your set top box (normally the yellow RCA connector on a set top box) to the **Blue connector** on the **A/V cable set**.

Audio connections

If you are using an HDMI cable from your video source, audio is carried along with video on the HDMI cable.

If you are using Component or composite video, then you can connect audio from either the **RCA audio input** (Red/White connectors) on the **A/V cable set** or the **Optical audio input connector**

Step 3: Install the Colossus 2 Windows driver and applications

Turn on your PC, and boot into Windows.

If a '**Found New Hardware**' wizard appears, please cancel it. Allow windows to load before proceeding.

Insert the HD PVR 2 Installation CD-ROM in your PC's CD-ROM drive. This CD is used with both the Colossus 2 and the HD PVR 2.

Note: if the CD does not autorun, navigate to the CD and run the 'Setup.exe' file.
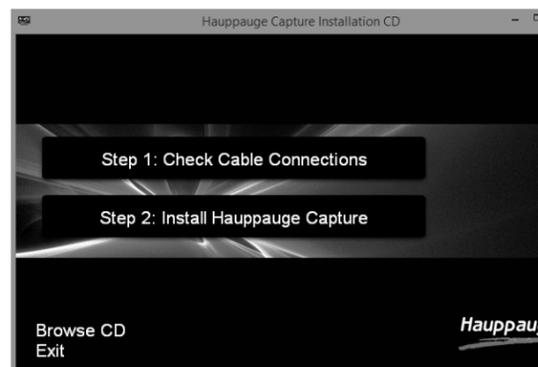
The **Hauppauge Installation CD** window will appear on the screen. Choose a language.

Step 1: Check your cables: Click **Check cable connections**

Step 2: Install Hauppauge Capture:

This step installs the Windows driver for Colossus 2, the WinTV v8 and the Hauppauge Capture applications.

Click **Step 2.** Click **Next**.

Hauppauge Capture Installation CD

- Step 1: Check Cable Connections
- Step 2: Install Hauppauge Capture

Browse CD
Exit

Hauppauge

The Colossus 2 Windows driver will be installed first.

Next, the Colossus 2 applications will be installed. The **WinTV v8** application includes a TV scheduler which allows you to record TV programs from a cable or satellite set top box. The **Hauppauge Capture application** is for recording and uploading the rcordings to YouTube.

Once complete, **you will be asked to restart your PC**. Please do so.

Note: the latest driver updates are available at: www.hauppauge.com in the Support section under HD PVR 2.

Step 4: Install the IR Blaster cable (optional - for use with a cable TV or satellite receiver box)

Note: information on the installation of the IR blaster can also be found in Set up and using the WinTV v7 application guide (included with Colossus 2).

Plug in the IR Receive/Blaster cable

Plug the jack at the end of the IR Blaster cable into the IR receiver jack on the Colossus 2.

Install the IR transmitter (blaster) at your set top box

Attach the end of the IR transmitter over the remote sensor on the set top box to be controlled. **Placement of the IR transmitter is important!** The IR transmitter only works over a 1 inch distance, so you need to make sure it is placed over the remote sensor in your set top box. Some set top boxes have the position of the remote receiver indicated on the plastic front of the set top box. With others, you might need to look carefully at the set top box for what looks like a round or square area underneath the plastic front panel. There is double sided tape on the back of the IR transmitter to hold it in place over the remote sensor in your set top box.

You will configure the IR Blaster for your set top box in the **Set up and using the WinTV v7 application** guide.

Using WinTV v8 to record TV programs from your set top box

You will find information on the setup and use of WinTV v8 in the **Set up and using the WinTV v7 application** guide (included in the Colossus 2 package).

Using Hauppauge Capture

After restarting your PC, you will see the **Hauppauge Capture icon** on your Windows desktop. Click this icon to start Hauppauge Capture.

For more information on Hauppauge Capture, how-to videos and the latest version of Hauppauge Capture, please look here:
www.hauppauge.com/capture

Hauppauge Capture

- **Capture:** to record videos
- **Edit:** to trim videos
- **YouTube:** to upload videos
- **StreamEez:** for video streaming
- **Settings** menu

Preview window: when you have chosen your video source, you should see your video here

Capture tab

Start/Stop recording:
You can also use the record button on top of the HD PVR 2 to start or stop recordings)

Name of your recording: default name is the date and time

Timed recording:
If you would like to have your recording made for a certain time (example: 10 minutes), set this to the time.
If you leave this at 00:00:00, then you will need to manually start/stop your recording

Video and Audio sources:
For a PC game, Xbox One, Xbox 360, PS4 or WiiU, set for HDMI.
For PS3 or a cable TV box, change Video input to Component and Audio input to Line in

Microphone input:
If you want to record your game commentary, select your microphone here.

Audio volume:
Set the audio volume of your game, your microphone and your PC audio here. To disable PC audio, turn this all the way to the LEFT (this is 0 volume).

Video format:
When the HD PVR 2 can 'see' your video source, it reports the format of your video here.

Snapshot button:
Click this button to take a snapshot of your video. You can also hit the spacebar on your keyboard to take a snapshot.

Quality:
This is where you set the bit rate of your recordings. The higher the bitrate, the better your video quality will be but the more disk storage your recordings will consume.
For recording, always set to Variable.

Advanced menu:
This is where you can set the video scaler, color controls, audio settings

Edit tab

File selector:
Your last recording will be at the top of the list. You can also choose any other recording.

Export to MP4:
Some video editors need an MP4 file. When you are finished trimming your videos, click this button and your video will be converted to MP4 without any loss in video quality.

Start and pause your video:
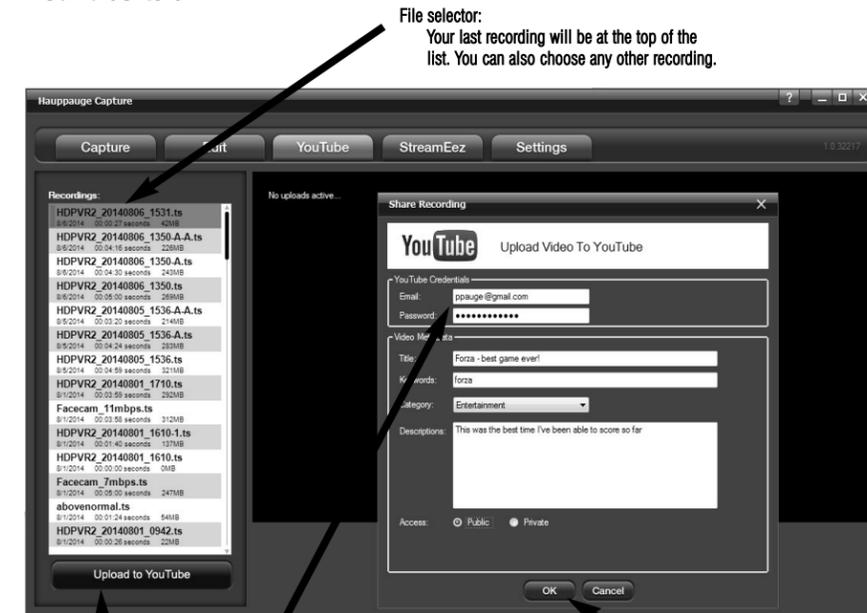You can start or pause your videos with this button

Cut from the LEFT:
When you click this button, you will delete all of the video to the LEFT of the video mark.

Video mark:
This shows you the current position in your recording of the video you see in the preview window

Cut from the RIGHT:
When you click this button, you will delete all of the video to the RIGHT of the video mark.

YouTube tab

File selector:
Your last recording will be at the top of the list. You can also choose any other recording.

Upload to YouTube:
After you have trimmed your videos, click here to upload them to YouTube.

Enter your YouTube credentials:
Enter your user name and password.

Note: if you have multiple YouTube accounts linked to one user name and password, you cannot use this function to upload to YouTube. You will need to manually upload using a web browser. Your videos can be found in the *MyVideos* folder on your PC.

Enter the Title, Keywords and Description:
This is the minimum information required by YouTube to upload your videos.
Then click OK.

StreamEez tab

Start Streaming:
Once you have logged into your account, click the *Start Streaming* button. You will then be streaming to your service.

First, set your streaming quality:
We recommend starting at 1.5Mbps and checking to see if your stream looks good.
If it is, then your Internet connection is good and you can increase the Quality to 2.0Mbps or more.

Next, select your streaming service:
You can stream with Twitch, YouTube and Ustream.
You can also add your commentary by selecting your microphone in the 'Mic input' box above.
For more information on YouTube streaming setup, go here: www.hauppauge.com/youtube

Enter your login information:
Once you have selected your service, click here and the Login box will open.
If you are using Twitch, you can also choose your Ingest server in the Location box.

Login box:
This is where you enter your user name and password. Once you have entered this information, you will see 'Gathering credentials' as we try to log onto your account.

Troubleshooting

What do the lights on back of Colossus 2 mean?

- **Blue light:** When Colossus 2 is plugged in and the Windows driver is running, the blue light is on. If the blue light is blinking, the Colossus 2 is not 'seen' by your PC. Check the Colossus 2 Windows driver and if needed, re-seat the Colossus 2.

- **Yellow light is on after you start Hauppauge Capture:** this is good and means Colossus 2 detects video and you are ready to record. If you do not have a yellow light, then your video source is not being 'seen' by Colossus 2. If you are recording from a PC gaming system, make sure your graphics card is set to 1080p60 or 720p and the refresh rate is 60Hz. Otherwise, make sure you have set the correct Video and Audio Input in WinTV v8 or Hauppauge Capture.

No video in the Hauppauge Capture preview window:

Step 1: Make sure Colossus 2 is listed in the Capture tab. If you cannot see **Colossus 2** listed, power down and re-seat the Colossus 2 (remove the board and then plug it back in).
Also, you can reinstall the Windows driver by running **Step 1: Install Colossus 2 Drivers** from the Installation CD. Reboot your PC after reinstalling the Colossus 2 drivers.

Step 2: Check the video mode of your console. It must be set at either 1080p60 or 720p. If you are using a PC game system, check our website at: **www.hauppauge.com/pcsetup**

Step 3: Check your cables. Remove each cable and make sure it's firmly reseated into each device you are using. If using HDMI cables, try swapping the HDMI cables (in cable with the out).

Step 4: Check the Video input setting. If the Video input setting is wrong, you will get a black preview window. Set **Video input** to **Component video** for a PS3 and **HDMI** for all other devices.

Step 5: If you are using a PS3, make sure you have disconnected the HDMI cable between the PS3 and your TV set. Having HDMI connected at the same time as Component video will shut off Component Video and you will not see video in the preview window. Once you have disconnected the HDMI cable, you will need to reset the PS3 by PUSHING and HOLDING the power button on the front of the PS3 until you hear the SECOND beep. This means the video mode has been reset.

Step 6: If using HDMI, verify your source device does not use HDCP copy protection (the PS3 uses HDCP on HDMI). If this is the case, use the component video cables.

Step 7: Try recording some video. If you can successfully playback a recording but you cannot see live video in the Preview window, there might be a video rendering problem (video card drivers, hardware acceleration…) Check device settings for video decoder details. To enable hardware acceleration, select "hardware acceleration" in the Settings menu in Hauppauge Capture.

If recording fails, it is likely something is wrong with the video input to Colossus 2. This could be a broken or loose video cable or you plugged the cables into the wrong connector on Colossus 2.

Pass through video problems

No video on my TV set:

Open Hauppauge Capture and verify the correct **Video input** is selected. **Video and audio input must be set initially for passthrough to work** Also, check the video mode on your game console. The video mode should be 1080p or 720p.

No video on my TV set but I can see video in the Capture tab

Check that the HDMI cable from the Colossus 2 (HDMI out) is connected to your TV monitor and the TV is set to the correct HDMI port if multiple are available on yourTV.

Try changing the output resolution from your game console. Some TV monitors may not support all HDMI output resolutions.

Wrong colors with Component Video

Check the Component video cable: unplug and replug the Red, Green and Blue video cables. Make sure the Red audio cable is not plugged into the Red video cable.