HD PVR \ Colossus Media Center Support Release Notes Version 1.2.29271 9/28/2011

Support for Windows Media Center allows you to use one HD PVR or Colossus to watch, pause and record high definition TV under Windows 7 Media Center from a cable TV or satellite set top box. It operates in a similar way as other Hauppauge TV tuners for Windows Media Center, but records in high definition using H.264 encoding.

This document provides information specific to the indicated version of the installation package. The package contains almost all the components you will need to install Media Center Support. In the package you will find:



- <u>ir32</u> installation files for IR receive and blaster functionality.
- <u>mce</u> the Media Center Support installer (setup.exe)
- <u>Install Guide</u> these instructions

In addition, you will need the latest driver for your particular device. Please go to the support page for your device to get the necessary driver:

HD PVR - http://www.hauppauge.com/site/support/support_hdpvr.html

Colossus - http://www.hauppauge.com/site/support/support_colossus.html

Minimum Requirements

Formal hardware requirements have not yet been established. The following hardware specifications are for one of the test systems used during development and are provided as a point of reference. This system exhibited 34% CPU utilization with a 1080i source.

- Pentium D 2.8GHz
- 2GB DDR2 533
- nVidia 9500GT ¹

- HD PVR (all revisions)
- Windows 7 Home Premium or higher ²

Notes:

1: We strongly recommend using a graphics card supporting hardware acceleration (nVidia 8600 or better or ATI equivalent).

2: Media Center Support requires Windows 7 and will not work with Windows XP Media Center edition or any Windows Vista version.

Installation Instructions:

- 1) Uninstall any previous versions (Start \rightarrow Control Panel \rightarrow Programs and Features).
- 2) For new installations either connect the HD-PVR to a USB port on the PC and power the HDPVR or install the Colossus into an available PCI-E slot.
- 3) Update the driver
 - a) Download the latest driver from the support page listed above.
 - b) Unzip the installation package by right clicking and choose extract all



c) Run HCWdriverinstall.exe

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E Desktop	Driver49	5/2/2011 10:31 AM	File folder		
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3 Recent Places	hcwdlc64.cat	4/21/2011 8:45 AM	Security Catalog	9 KB	
Recorded TV	hcw01c64.inf	4/21/2011 8:41 AM	Setup Information	6 KB	
	hcwdlcap.cat	4/21/2011 8:45 AM	Security Catalog	9 KB	
🖌 🥅 Desktop	bcwD1cap.inf	4/21/2011 8:41 AM	Setup Information	6 KB	
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🛛 🤣 Homegroup	a) hcwD1e64.inf	4/21/2011 8:41 AM	Setup Information	5 KB	
Image:	hcwdlenc.cat	4/21/2011 8:45 AM	Security Catalog	10 KB	
Image: Second	a) hcwD1enc.inf	4/21/2011 8:41 AM	Setup Information	5 KB	
Network	HcwOriverInstall.cfg	3/16/2011 5:48 PM	CFG File	1 KB	
Ess Control Panel	HcwDriverInstall.exe	3/16/2011 8:28 PM	Application	2,772 KB	
Recycle Bin	hcwhdpvr.cat	6/29/2010 5:20 PM	Security Catalog	9 KB	
A 🎉 HDPVR-MCE-29111	a hcwhdpvr.inf	6/24/2010 10:42 AM	Setup Information	11 KB	
Driver	hcwhdpvr_64.cat	6/29/2010 5:20 PM	Security Catalog	10 KB	
🎍 ir32	 hcwhdpvr_64.inf 	6/24/2010 10:42 AM	Setup Information	10 KB	
🎍 mce					
16 items					
AD REITS					
4					



If you get the below message choose install (note this may occur several times during the install process)



If driver install fails:

a) Click the Win7 start button and open the "Control Panel"



b) In the Control Panel click on "Device Manager"

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Action Center	Administrative Tools	Altino SVS
Re AutoPlay	Backup and Restore	Resocker Drive Encryption
Color Management.	Credential Manager	P Date and Time
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Devices and Printers	E Display	Case of Accel Device Manager
Folder Options	LA Forts	Getting Starte View and update your hardware's
HomeGroup	E Indexing Options	Distanted Optionit
E Keyboard	IIII Location and Other Sensors	@ Mail
3 Mouse	12 Network and Sharing Center	Notification Area Icons
NVIDIA Control Panel	Derental Controls	Performance Information and Tools
Personalization	Phone and Modern	Power Options
Programs and Features	Q QuickTime	C Recovery
S Region and Language	RemoteApp and Desktop Connections	4 Sound
() Speech Recognition	Sync Center	1 System
1 Taskbar and Start Menu	Troubleshooting	R User Accounts
Windows CentSpace	Ibl Windows Defender	P Windows Firewall
1 Windows Update		

c) If the driver is not currently installed the HDPVR or Colossus will appear under the "Other devices" category. If the driver is installed the device will appear under the "Sound, video and game controllers" category. If the device does not appear in either location please check your connections.

🖆 Device Manager	🚔 Device Manager	, o x
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4) Install and configure the IR software

- a) Download and save the MCE install package.
- b) Unzip the installation package by right clicking and choose extract all
- **C)** Run the two executables found in the "ir32" folder of the installation package (IR32.exe and IRBlast.exe). Each executable will guide you through the installation process. If you previously installed older versions of this software you must update to this version.

ganize 🔻 🛛 Include	in library ▼ Share with ▼ New folde	er		
7 Favorites	Name	Date modified	Туре	Size
Nesktop	- 易 IR32	1/13/2011 12:00 PM	Application	447 KB
🐌 Downloads	🖟 IRBlast	1/13/2011 12:04 PM	Application	454 KB
 ↓ Libraries Documents Music Pictures Videos Computer Local Disk (C;) Local Disk (D;) Network 				

d) When the software is installed you must configure the IR blaster software to work with your particular Set-top box. To configure the IR blaster launch the "BlastCfg" application in the "Hauppauge WinTV" start menu folder.

Accessories Administrative Tools Application Verifier	*	softwar Set-top
ArcSoft TotalMedia Extreme		Documents
Beyond Compare 3 Eciti		Pictures
CodeWright Debugging Tools for Windows (x86)		Music
FileZilla FTP Client Games	1	Games
Hauppauge WinTV B BlastCfg		Computer
Restart IR	۳	Control Panel
Stop IR Trunes Maintenance		Devices and Printers
🎍 Malwarebytes' Anti-Malware		Default Programs
Microsoft Developer Network Microsoft DirectX SDK (February 2010) Microsoft Expression		Help and Support
4 Back		Run
Search programs and files)	Stut down

e) The BlastCfg window will open. Configure for your particular STB and test by clicking on the "Send" button. The STB should tune to the indicated channel (123 by default).

Blaster Configuration	
English OK	Version 7.2.27294 API=2.4, FW=2.1.0
Region North America Device Type Cable Box Vendor / Model	Blaster Port-
Code8t 74 Power On/Off Test Next Test All	R Channel Test 123 Send Advanced Config

f) If your STB is not listed you will have to "learn" the numeric keys on your remote. Click on "Advanced Config... then "Learning...". Click on the key you want to learn and follow the on screen prompts. Note: It is important that you hold the remote ~1 inch from the HDPVR IR window or the round IR receiver on the Colossus IR cable during learning. When you have learned all the numeric keys test the configuration as described above.

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English OK	7.2.27294 API+2.4, FW+2.1.0
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North America	
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Cable Box ·	
endor / Model	- Baster Pot
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Bend Enter also Channel Load Defaults Save Setting Learning Action 1 G Learning	a Learning
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5) Run the HD PVR MCE Installer

Run the executable found in the "mce" folder of the installation package. Follow the installer prompts and reboot the PC if directed.



After the reboot go to "Start → All Programs → Hauppauge" and select "HDPVR MC Setup"



6) Configure the Device

Select the device from the list (note that only one device is supported at this time). With the device highlighted, choose the audio and video inputs as well as the Source type (Cable or Satellite). When finished click "Apply All Changes" and reboot (note the system will not automatically reboot).

Devices (Advanced) WMC Corfig I2C v 1.0.29178.0 Check a device to be used with Windows Media Center Image: Component Image	Hauppauge Device Central		×
Check a device to be used with Windows Media Center Image: Device Details Device Details Audio Input Video Input Source Image: Device Details Cable Image: Device Details Image: Device Details Audio Input Video Input Source Image: Device Details Image: Device Details Audio Input Video Input Cable Image: Device Details Image: Device Details Apply All Changes Image: Device Details	Devices (Advanced) WMC Config 12C		v 1.0.29178.0
Apply All Changes	Check a device to be used with Windows Media C HD PVR Model 49001 Rev C2 Serial# 10617322	Center Device Details Audio Input Video Input Sou Line ▼ Component ▼ Cal V Use Internal Blaster Open Always Use External Blaster App Path App Args Deviced	irce ble v
Apply All Changes		Advanced:	
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Operation

Media Center Support provides seamless integration with the Windows 7 Media Center environment. Run Media Center "TV Setup" and configure as you would with any other tuner device.

Windows Media Center			- • ×
	TV Setup	Windows Media Center 🤓	
	TV Signal Detection Result Windows Media Center detected the following: Digital Cable (1 tuner) Is this configuration correct and complete? Yes, configure TV with these results No, let Windows Media Center detect again		
	Back	lext Cancel	

Media Center detects the HDPVR\Colossus as a "Digital" tuner

Known Issues

- 1) This release only supports a single device
- 2) You may notice prolonged hard disk activity at times during the setup process. We found that continuing the setup process during this activity may cause setup to fail. After selecting the TV provider lineup you are asked to confirm the configuration. We suggest you do not click on next until you see minimal hard disk activity for 15 seconds.

Windows Media Center	
TV Setup	Windows Media Center 🗐
TV Signal Configuration	
The following TV signals will be confi Digital Cable: Hauppauge, Cablevisio	gured for Windows Media Center: n of Hauppauge (Digital) (1 tuner)
Select Next to confirm.	
Back	Next Cancel

3) The scanning percent complete indicator is not working. The indicator will show 100% however the channel discovery process is still in progress. We suggest you wait until the channel count does not increment for 15 seconds and minimal hard disk activity is observed before clicking on "Next". After the setup is complete media center will rescan the database please wait till the hard drive stops before leaving the settings screen.

TV Setup	Windows Media Center 🚳
TV Channel Scan	
Windows Media Center has finish	ed scanning for TV channels you receive.
Scan again	Delete All
CineMAX Telemicro Internacional	
MSG Plus Music Choice: Soundscapes Music Choice: Rap	
	3 of 505 🔨 🗸

4) The software can be installed on a PC with an existing Arcsoft software installation (TME or Showbiz), however you will need to reboot after using Arcsoft or the HDPVR\Colossus may no longer operate under MCE.

Additional Information

This version of the configuration tool supports external blasting using a command line.

Colossus [#0000#] Model 131201 Rev C1 Serial# 10836171 Colossus [#0001#] Model 131201 Rev C1 Serial# 10839808	Device Deta Audio Input	ails	Video Input	Source
	Line	•	Component 🔹	Satellite 👻
	✓ Use Inter	mal Blas	ster	
	Oper	n Always	5	
	Use Exte	emal Bla	ster	
	App Path	h C:\P	rogram Files\Timmmoore\	channel.exe
	App Args	s -a0 4	f %i %c	
	Devicelo	4		
	Pause O	n Chann	nel Change	
Ann	v All Changes			
	y Air Crianges			
Show Advanced Details				

In "App Path" enter the full path and application name to be executed. In "App Args" specify the command line arguments allows you to pass information such as channel number or device id %c will do channel number %i will do device id. Please note we do not provide support for external blasters.

Comments and Feedback

If you would like to comment or provide feedback on this documentation or your experience with this software please email the development team at:

hdpvrb@hauppauge.com

Revision History

1.0.28145

- Initial release

1.0.28171

- Fixed IR blaster failed after system resume.
- Fixed video glitch when connected to PAL capable PS3

1.0.28193

- Include latest WHQL'd HDPVR analog driver (1.5.7.0).
 - Fix HDPVR hang when configured for AAC audio and 720p video and transitioning between the XBOX360 dashboard and a game
 - Fixed sleep/resume hangs
 - Fixed video "flicker" when connected to EU version of PS3.
 - Several changes to improve general reliability.

- Include latest IR support for compatibility with other Hauppauge products.

- Added delay load of IR Blaster DLL which allows service to start if IR software is not installed or an older version than required for the HDPVR MCE software is installed. This prevents channel scan hangs caused by a stopped service.

- Added "Blaster" registry key

[HKEY_LOCAL_MACHINE\SYSTEM\PSWTuner\SWT_HDPVR\Blaster]

And several values to control blaster operation (defaults shown):

- "ActiveBlaster"=dword:0000001
 - 0 no blaster
 - 1 use HDPVR blaster
 - 2 launch external blaster application

This is a bitwise value so multiple bits can be set. When "external" is enabled the application specified by "ExtAppName" will be launched with the command line parameters specified by "ExtAppArgs".

- "FlushOnChannelChange"=dword:0000001
 - 0 internal queues are not flushed after blasting
 - 1 flush internal queues after blasting
- "PauseOnChannelChange"=dword:0000001
 - 0 encoder is not paused before blasting
 - 1 pause encoder before blasting
- "IntOpenMode"=dword:0000000
 - 0 internal blaster port is opened once and handle saved for subsequent use.
 - 1 internal blaster port is opened/closed on each use

Opening the blaster once provides faster operation but the saved handle will be invalidated if any other application accesses the blaster hardware. Once the handle is invalid the MCE software will not be able to blast. For example, if you test the blaster operation using BlastCfg.exe you must reboot the PC (or restart the service) or the blaster will fail when MCE next tries to change the channel.

"ExtAppName"="D:\MyTests\blast.exe"

Used to specify the full path and name of an external blaster application. External blaster mode must be enabled in "ActiveBlaster" for the application to be executed. Do not include opening and closing quotes in the value you specify.

• "ExtAppArgs"="-c%c"

Used to specify the command line parameters passed to the application specified in "ExtAppName". The MCE software will replace the first occurrence of %c in the command line with the channel number to be blasted.

1.0.28201

- Changed graph building logic to be independent of OS localization. Graph build failures were causing channel scans to hang at 0%.

- Changed HD PVR Tuner naming convention to be independent of legacy devices. Potential for naming conflicts to cause channel scans to hang at 0%.

1.1.28271

- Streamlined transport data handling code for improved stability.

- Eliminated the queuing of transport data and deprecated the "FlushOnChannelChange" registry key.
- Minimized variance in channel change times. Expect channel change times of ~15 seconds with the internal blaster.
- o Eliminate "weak signal" messages due to transport handling issues.

Note: Because the HDPVR utilizes a hardware H.264 encoder, it behaves differently than typical tuner based devices. The HDPVR encoder must be reset whenever the input video resolution or bit stream audio type changes. Additionally, the HDPVR encoder may reset due to input video dropouts or errors in bit stream audio. The HDPVR stops streaming at the onset of the reset and resumes ~ 2-4 seconds after the return of stable audio and video.

MCE displays a "Weak signal" message when it sees" bad" or "no" transport data from a source for a predetermined time. The reset time of the HDPVR encoder appears to fall just within the threshold to trigger a weak signal message.

The changes in V28271 address disruptions in the transport stream artificially induced due to software issues. Weak signal messages may still occur:

- 1) During channel change
- 2) During video/audio dropouts from the source

1.1.29111

- Initial Colossus Release

- Added new configuration tool

- Fixed bug causing wrong channel number to be blasted after several days of operation

1.2.29157

- Fixed bug causing audio to be lost on a channel change when using the "optical" audio input.

- Fixed BSOD during channel change on certain 64-bit systems.

1.2.29178

- Modifications to eliminate the "Weak Signal" messages when changing channels with the HDPVR.

1.2.29271

- Modifications to eliminate audio loss when changing channels with Colossus.