

WinTV-HVR-1250

Quick Installation Guide for Windows Vista (all versions)

QI-WINTV-HVR1250-V1A - 2/1/2008 © Hauppauge Computer Works, Inc. 2007, 2008

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1. Contents of the WinTV-HVR-1250 package

- WinTV-HVR-1250 board
- Remote control transmitter with 2 AAA batteries (on some models only)
- Remote control receiver cable with velcro dot fastener (on some models only)
- WinTV-HVR Windows Installation CD-ROM with:
 - WinTV application with SoftPVR™
 - WinTV Scheduler
 - WinTV Utilities



2. What is ATSC digital TV, and how does the WinTV-HVR-1250 work?

ATSC digital TV is an over-the-air digital TV for North America. ATSC digital TV typically requires an antenna for reception, and is currently broadcast in 200 cities, with over 1500 TV stations.

Note: ATSC digital TV is NOT digital cable TV or digital satellite TV. WinTV-HVR-1600 cannot receive digital satellite TV. You can receive digital cable TV channels if they are broadcast "in the clear" (called "clear QAM").

ATSC digital TV is transmitted in several resolutions, from "standard definition" which is similar to cable TV, up to high definition which has about 16 times the resolution of normal cable TV. In any resolution, ATSC digital TV gives sharper pictures than analog cable TV and near CD quality sound.

WinTV-HVR-1250 has a single TV tuner built-in, which can receive either analog and digital cable TV or digital ATSC TV. It uses your PC or laptop's CPU for displaying TV programs on your PC screen.

The decoding of high definition ATSC is very processor intensive, and the smoothness of high definition TV programs depends upon how fast your PC or laptop system is. Other PC activities that consume CPU resources might affect the display of ATSC digital TV. Slow video, jerky video and momentary pausing of video are all results of a CPU which is temporarily being used by other activities.

The portable antenna (supplied on some WinTV models) is designed primarily for ATSC digital TV reception, and will work within 10 miles of an ATSC transmitter (reception might be limited by obstructions such as steel buildings).

For the best ATSC digital TV reception, a roof top 'Wideband or Highgain' antenna is recommended. In the U.S., a good ATSC digital antenna selector can be found at TitanTV.com under Resources.

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3. Installing the WinTV-HVR-1250 board

To install, switch off the computer and remove the computer cover. The manufacturer of your PC supplies instructions on removing the PC cover.

Note: Your PC could be damaged by electrostatic discharge. Avoid this by contacting the earthed chassis of your PC, before you open it or touch the pci card.

- Locate a free PCIe slot. Unscrew and remove the metacover plate which covers the back of the empty slot.
- Plug the WinTV-HVR-1250 board into the PCIe slot, and screw the WinTV-HVR-1250 metal cover plate to the PC.
- Replace the computer cover.

4. Connecting the Aerial and IR cable

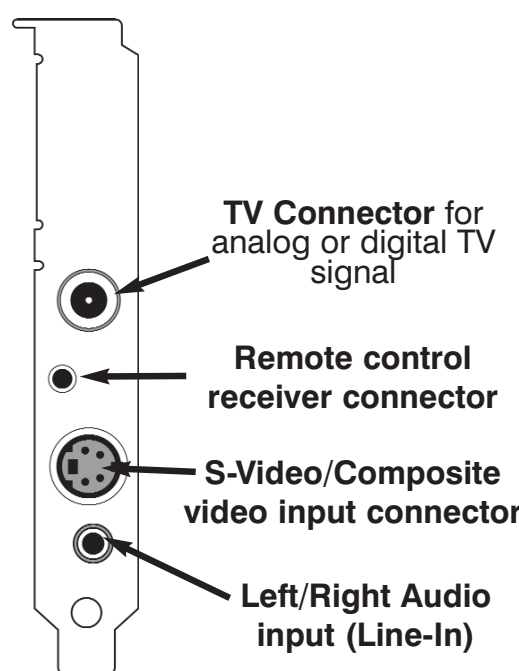
You can now connect the leads provided to the WinTV-HVR-1250. You will only need to connect using the **S-Video** or **Comp Vid In** or **Left/Right Audio In** if you are using an external audio/video source.

TV connector: either cable TV for analog and clear QAM digital or a TV antenna for ATSC TV.

Composite video input: Composite video Input (RCA)

S-Video/Composite: Video input connector. For either S-Video or composite (composite video requires the S-Video to composite adapter).

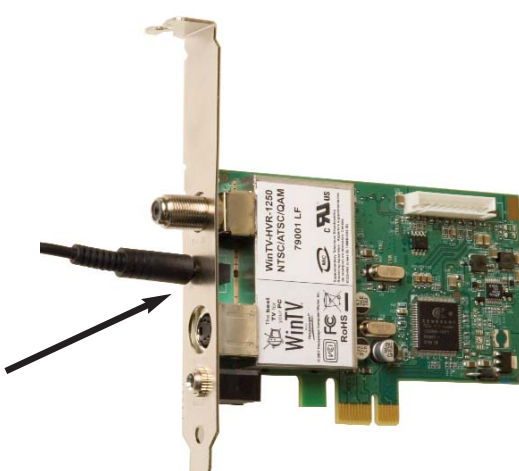
Left/right audio input: Stereo audio input using 1/8" mini stereo jack, from the audio output of your source



Connecting the Remote control receiver cable

Plug the **remote control receiver cable** into the **Remote Control Receiver Connector**.

Position the round receiver sensor (at the end of the remote control receiver cable) where it can be "seen" by the remote control transmitter. This is normally at the front of your PC.



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5. Install the WinTV-HVR-1250 driver

Installing the WinTV-HVR under Vista

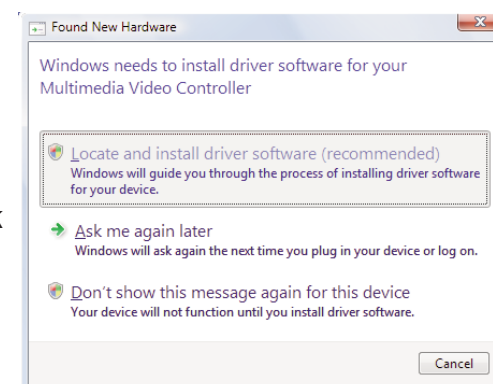
Boot into Windows Vista. Insert the **WinTV-HVR Installation CD-ROM** in your PC's CD-ROM drive.

When the **Found New Hardware** box opens, click **Locate and install driver software**.

Click **Continue**. If you see a message which asks about searching on-line, click **Don't search on-line**.

Click **Next**.

Click **Close**.



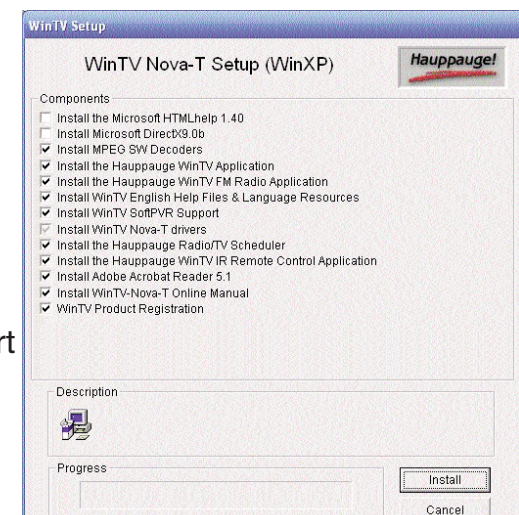
6. WinTV Software Installation

To start the WinTV software installation, click **Start / Run** then type your CD-ROM drive letter (for example: D:) and then **Setup.exe**

Chose a language, and click **Next**.

Once the installation procedure is finished you will see the **WinTV icon** on your desktop. It is also listed in the Start menu under the Program files and "Hauppauge WinTV" folder.

Can you now click on **Start / Shut Down** and **Restart** to re-start the computer.



7. The WinTV v6 application

Running WinTV for the first time

To start the WinTV application, double click on the **WinTV icon** on your desk top. When you run WinTV for the first time, a message says **Would you like to scan for channels now?** Click **YES**.

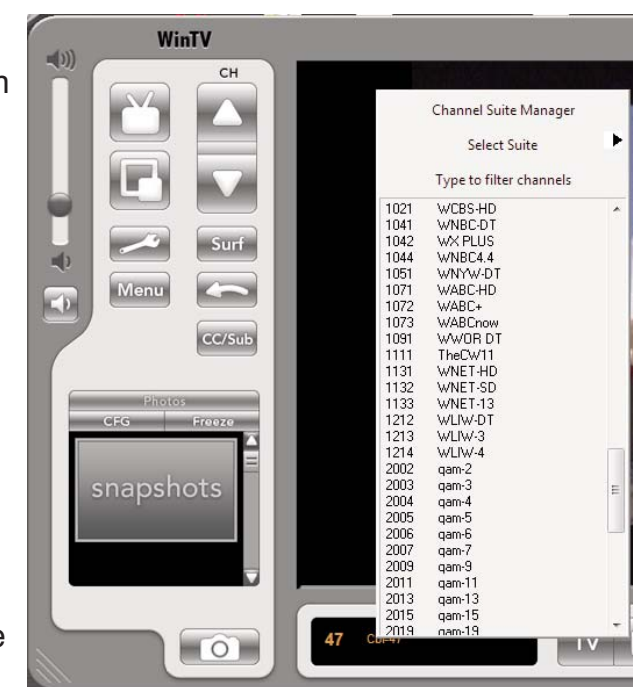
Choose "Cable TV" to scan your cable TV for both **analog** and **clear QAM digital cable TV** channels. If you choose "Antenna", both over-the-air **ATSC digital TV** and **analog channels** will be scanned.

Click the **Scan button** and WinTV will automatically scan for channels. The scanning process takes about 10 minutes. The scanning process for ATSC will scan from channels 2 to 68.

Channel names

Click your **right mouse button** in the **Channel Name** box to see a list of channels which have been scanned. You can also see the channel list by clicking **Menu / Channel Suite Manager / Sources** and then choosing either **analog**, **ATSC** or **clear QAM**.

The ATSC digital TV channels that are found will appear in the channel listing box. The Name is the name as defined by the broadcaster. The Channel number is created by the WinTV application. For ATSC digital channels, since each primary channel might have several subchannels, the channel number is calculated so that channel 22.2 would be listed as 1222. Channel 7.2 would be listed



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as 1072.

Some clear QAM channels are not broadcast with channel names. Therefore, the WinTV application simply enters these with channel numbers. For example, in the channel list you might see a channel named '2002 qam-2'. This means that this is a clear QAM channel where your local cable operator did not include a channel name with this channel.

Not all QAM channels can be viewed. WinTV will detect all QAM channels but only those which are broadcast without encryption ("in the clear") can be watched.

Rescanning TV channels

If you want to rescan for TV channels, click **Menu / Suite Manager**. To scan analog cable TV channels, under **Sources**, highlight **Analog source** and click **Auto scan**.

To scan for digital cable TV channels, under **Input Sources**, highlight **Clear QAM source** and click **Auto scan**.

To scan for ATSC digital TV channels, under **Input Sources**, highlight **ATSC source** and click **Auto scan**.

During the scan for digital TV channels, the Signal Status will show a quality level and the locked box will be checked if a channel is detected.

Other changes to channel listings

If you want to add names or fine tune an analog channel, click **Menu / Suite Manager / Sources**. Choose **Analog Source**, **ATSC source** or **clear QAM source**. You will see a list of your channels. Click on the desired channel. Click the Tune button to change channel. You can change the Name to the name of the station. To fine tune an analog channel, unclick AFT and then use the Finetune slide bar. When finished, click **Close**.

Changing channels

You can change channels by clicking the Channel Up or Channel Down buttons on the WinTV application. You can also type a channel number (for example: 27 or 1021) and WinTV will tune to that channel. If the entered channel does not exist, you will see a black window. You can also right click in the Current TV channel box, where you will see a list of channels.

Changing the TV window size

You can change the size of the WinTV window by grabbing any corner and dragging the video window to the desired size.

Displaying TV full screen

When you click the **Full screen TV button**, TV will appear full screen on your PC monitor. When finished watching TV full screen, **right click your mouse button**.

If you see video with a black box around it, click the Pref button then click TV mode tab. Check the box which says "Allow resolution change".

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"Always-on-Top" mode

Always on Top allows WinTV to be visible on your Windows desktop, on top of any applications. To turn on, click the **Always on top button**. It will turn green. To turn off, click this button again. A convenient way to use Always-on-Top is to make the TV window in the no-title mode small and make the TV window in the title mode larger. Then you can switch from a small window to a larger one by clicking the right mouse button.

To hide the WinTV toolbar (No-title mode)

Click your **right mouse button** in the WinTV's video window for the no-title mode. To restore the toolbars (the title mode), once again click your right mouse button in the video window. You can set the size of the window differently in each mode.

Pref button

Click the Pref button to open the Preferences menu:

View: These are the settings for the On Screen Display of the TV channel and Audio Volume plus controls for the Toolbar mode (Title mode), NoToolbar mode (No Title) and Full Screen (TV mode).

Movies: Here is where you configure the video and audio setting for SoftPVR. You can set the movie record directory (DVCR Record File Path), the MPEG Quality settings, and the Audio settings.

Snapshot: Set the size of your captured image, and settings for capturing motion or still images. Note: VMR must be the graphics setting to enable snapshot.

Audio: Your audio settings are configured here.

Color: Adjust the color of your TV picture here.

Menu button

Click the Menu button to open the TV setup menu. Here is the main control bar for TV channels, and duplicate controls for other functions:

Suite Manager: Configure the TV tuner (scanning, naming, channel preset,etc) setting up 'favorite channel lists')

Configuration: Duplicate configuration menus for colour, audio, MPEG settings, etc.

View: For setting an exact TV window size: 320x240, 640x480 etc.

Configuring an external A/V source in WinTV

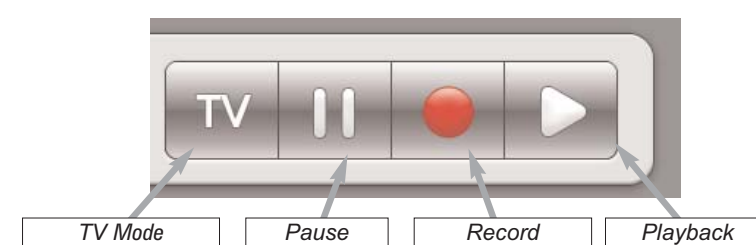
To bring video from an external audio/video source, you will need audio and video cables from your set top box.

When using an external audio/video source such as a satellite TV receiver, VCR, cable TV set top box, camcorder, game console etc, you will need to connect the S-Video input connector or Composite video input connector for video and the Audio input (Line-In) for the sound.

To configure the external A/V source, in the WinTV application click **Menu / Suite Manager** and **Sources**. To add the S-video or Composite source, highlight the entry and then select the **Video Format** from the drop down list. NTSC is the commonly used format in North America.

Select **Add** to finish. Then click **Close**. To select an external audio/video source, click the Up and Down channel buttons to cycle through TV, Composite and S-Video sources. The external A/V source is at the end of the channel list.

8. Watch, pause and record TV



Clicking on the **Record button** will cause the **Record menu** to roll down and start recording. Click the **Playback button** to open the **Playback menu**.

Recording TV with the WinTV

When recording clear QAM and ATSC digital TV, the recording format is the same as the digital TV resolution of the TV program. These recordings will consume a large amount of hard disk space. For example, if the TV program is being transmitted at the highest ATSC resolution, called "1080i", the recording will consume 5.6 Gigabytes of disk space per hour of recording.

When recording analog cable TV using SoftPVR, the 'DVD' MPEG-2 format will typically consume 2.8 Gbytes per hour.

Record and Playback menu

Recording TV

Click the **Record button** on the WinTV application to open the Record control bar, automatically generate a file name and start recording your TV program.

Clicking the **Record button** while recording will start an automatic timer. Click the Record button once for 15 minutes, twice for 30 minutes and so on.

Configuring the record formats

When recording analog TV, WinTV uses your PC or laptops processor and Hauppauge's SoftPVR to make the recording. The default recording quality is DVD. To configure the directory to store video recordings and to check the analog recording format, click the **Pref button** and then **Movies**.

Note: since ATSC digital recording uses the format the original TV program is broadcast in, there are no other recording format options.

Time counter - the time is specified in a Hour:Minute:Second format.

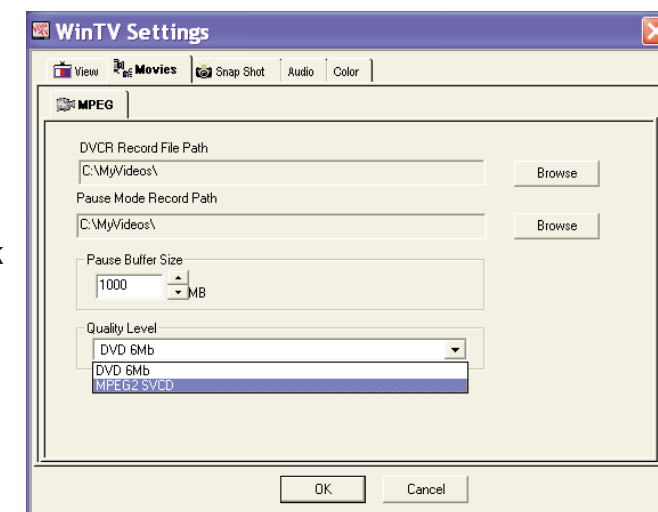
Stop: Clicking the Stop button will stop the video you are recording or playing back.

Play: Clicking the Play button will playback from disk the last video file created. When playing a video, you can rewind, fast forward, replay 10 sec or skip forward 10 sec using the buttons on the control bar.

Pause: Clicking the Pause button while Playing will pause your audio/video.

Rewind button: Clicking the Rewind button will play the video file in reverse. Clicking the Rewind button again will continue the playing of the video.

Fast forward button: Clicking the Fast Forward button one time will fast forward your video at 2X speed. Clicking the Fast Forward button two times



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will fast forward your video at 8X speed. Clicking the button again will continue playing back at normal speed.

Slow motion button: Clicking the Slow Motion button during playback will cause the video to play in slow motion. Clicking the Slow Motion button again will return the video to normal playback speed.

Playback TV recordings

Click the **Playback button** on the WinTV application to open the Playback control bar.

File button In the File menu you can:

Play a video file previously recorded: Find the file you would like to play, highlight it with your mouse (one click of the mouse button) and click Open. Then click Play.

Rename your recorded video file: To rename a video file, on the video filename click once with your right mouse button, click Rename and then type in a new name. Remember: you must keep the MPG extension on the file.

Delete recorded video files which you no longer want: Click your right mouse button on the video file once, go down the menu and click Delete.

Play: Clicking the Play button will playback from disk the last video file created. When playing a video, you can rewind, fast forward, replay 10 sec or skip forward 10 sec using the buttons on the control bar.

Pause: Clicking the Pause button while Playing will pause your audio/video.

menu.

Pause button: if watching live TV, will open the record/play menu box and stop the video. When recording, this button will pause the video but WinTV will continue to record. If playing back video, this button will pause the video playback. Click the Pause button to start playing again.

Stop button (square icon): stops the recording or playback. If in Pause mode, will exit pause.

Play button: plays the last video recorded.

Back/Exit button: will close the record, play or pause menus.

0 - 9 buttons: When in "live" TV mode, is used to directly enter channel numbers. When playing back a recording, the "1" button will skip to 10%, the "2" button 20%, etc. of the length of the recording.

Skip ahead button: holding the skip ahead button advances the video about 5 minutes per 10 seconds the button is depressed.

Skip back button: pressing and holding the Skip back button makes the video go back about 5 minutes for every 10 seconds the button is depressed.

Go button: brings up the WinTV task list. Allows you to start WinTV.

Menu button: brings up the Windows Task list. Use the left and right arrows to change to other Windows tasks.

Power button (green): if WinTV is running in "Record" mode, this button will put WinTV into the "TV" mode and close the record/playback menu. If WinTV is in "TV mode", this button will close the WinTV application.

Red button at bottom: closes WinTV Radio and opens WinTV

Green button at bottom: closes WinTV and opens WinTV Radio (on models with radio).

Yellow button at bottom: Subtitle / closed caption on / off

Blue button at bottom: creates snapshot in live TV, pause, record or playback modes.

Sub/CC (#): Sub-titles on / off

Checking the function of WinTV's IR Remote

WinTV's Remote application, IR.EXE, is loaded every time Windows is booted. You will see a **Remote icon** in the device tray. To check the remote control operation, point the **Remote transmitter** at the **Remote control receiver**. When you click the **TV button** on the Remote transmitter, after 3-4 seconds the **Remote icon** should flash, indicating that the Remote application is running. After the Remote icon flashes, the WinTV application will be run.

The Hauppauge Remote Control (optional on some models)

The WinTV remote control software is installed automatically during the installation of the WinTV applications.

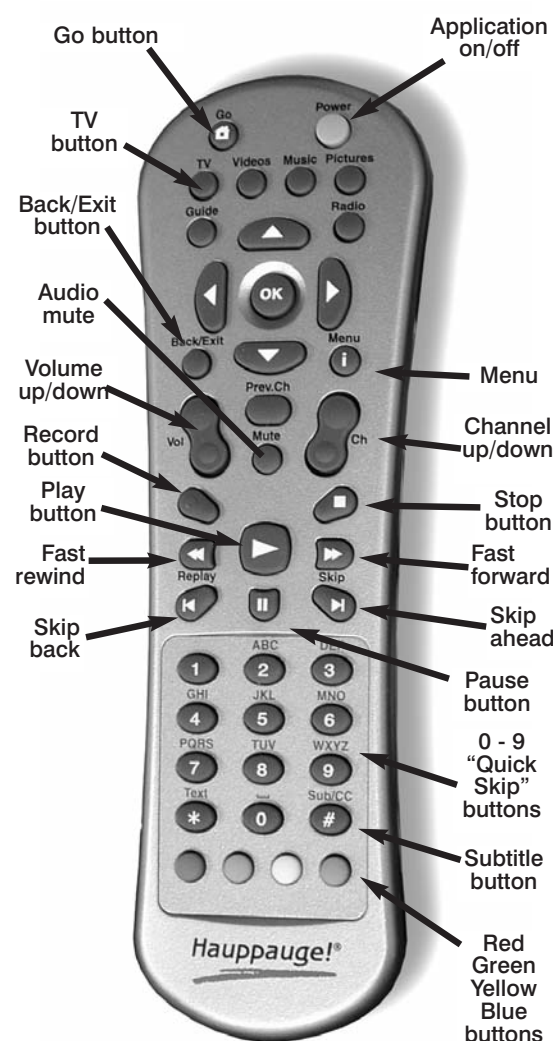
You will see the WinTV Remote icon in the Device Tray. The installation will add a shortcut to **IR.EXE** to the Startup group, so that **IR.EXE** is loaded every time after Windows has booted.

If you need to restart the remote control, select **Restart IR** from the **Start \ All Program Files\WinTV** directory.

Please ensure the following before trying to use this option:

1. **Infrared Remote control** - has batteries inserted
2. **Infrared-Receiver**, is fully connected to the IR socket of the WinTV-Card
3. **Infrared software is started** - The IR icon is on the start bar

To start WinTV press the **GO** button and a menu will appear. Use the scroll up and down button to select WinTV and press **OK** to select.



Remote control buttons

TV button: when WinTV is closed, this button starts the WinTV application. Once WinTV is running, this button makes TV go full screen, or back to "TV-in-a-window".

Red record button: starts recording using the parameters set in the Pref

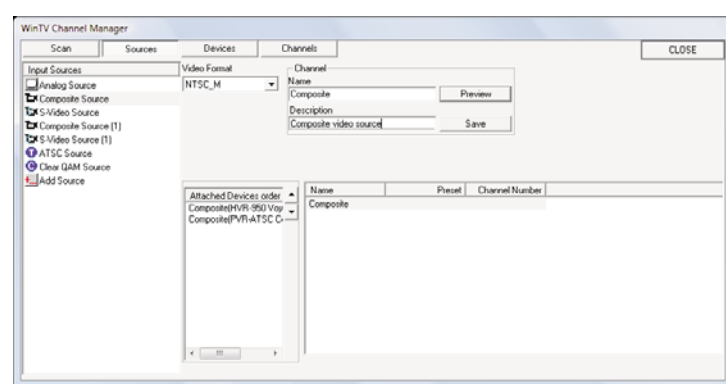
Using an external audio/video source

If you are using an external audio/video source like satellite TV receiver, VCR, cable TV set top box, camcorder, game console etc, then you will need to connect the **S-Video input connector** or **Composite video input connector** for video and the **Audio input (Line-In)** for the sound.

Configuring an external A/V source in WinTV

In the WinTV application click **Menu / Suite Manager** and **Sources**.

To add the **S-video** or **Composite** source, highlight the entry and then select the **Video Format** from the drop down list.



Note: Pal BGHDK is the commonly used format in Europe. NTSC is the broadcast format used in North America

Create a Name. Select **Add** to finish. Then click **Close**.

Selecting an External Video source (VCR, camcorder, etc.)

Click the Up and Down channel buttons to cycle through TV, Composite and S-Video sources.

Troubleshooting

Installation tips and software updates can be found at : http://www.hauppauge.com/pages/support_hvr1250.html
Our FAQ can be found at: http://www.hauppauge.com/pages/support_faq_hvr1250.html

Some notes on system compatibility

Decoding high definition ATSC TV is very CPU intensive. A graphics card with at least 64MBytes of memory and the latest graphics driver from the manufacturer makes the decoding task easier. Typically a 2.2 GHz Pentium 4 processor or equivalent with a graphics card having 64MBytes of memory is required to properly decode ATSC digital TV on your PC. A 1.6GHz AMD Sempron laptop computer tested in the Hauppauge lab used 50% of the CPU for playing ATSC 640i format, and 90% of the CPU when playing ATSC 1080i, the highest definition ATSC format.

In some cases, either a faster processor or more graphics memory might be required. Slow or jerky video and a noisy TV picture indicate system performance problems.

Jerky video with live digital TV

Jerky or distorted video can be caused by two things in your PC or laptop: a slow CPU which cannot decode the ATSC TV signal fast enough, and a graphics system which cannot keep up with the high datarates of ATSC TV. Many times, improving the performance of the graphics display will fix the jerky video display of ATSC digital TV. Here are some tips on improving graphics performance:

- Use the latest graphics driver: graphics drivers are often 'tweaked' to improve performance, especially the built-in graphics on laptops. Check the Microsoft Windows update site to download the latest graphics driv-

er for your computer. For Dell computers, check the Dell website for the latest graphics driver.

- Use Hauppauge's Primary program to optimize graphics performance: Primary.exe is used to change the display mode of a graphics card for TV watching. This does not affect any other Windows program. Primary.exe is found in the Hauppauge WinTV program group. The default mode used by WinTV is Force Primary. Force Primary uses your processor to move the digital TV image into the graphics memory. It is more CPU intensive but often fixes display problems on some laptops. Note: Snapshot does not work in 'Force Primary' mode.

To use hardware graphics acceleration, close WinTV, then run **Primary**. Click **Allow VMR**. Close Primary and rerun WinTV. The Allow VMR setting will allow your graphics system to use hardware acceleration for video decode. **Note:** hardware acceleration does not work on all systems.

Note: if you have an nVidia graphics card, you can use VMR7.

If this setting does not help, or if you experience WinTV not responding after a channel change, then your graphics system cannot use hardware graphics acceleration.

In this case, run **Primary**. Click '**Force Primary**' then rerun WinTV.

Only some channels are found during ATSC channel scan

If you are only receiving some known TV channels when scanning, it means your TV antenna is not adequate to pick up the channel. You will need either an antenna signal booster (a Radio Shack antenna amplifier will work) or a high gain antenna. Here's a link to an ATSC antenna selector: <http://www.antennaweb.org/aw/address.aspx>

Black window when selecting an ATSC channel

A black window when selecting an ATSC channel means that the WinTV-hvr-1250 is not getting a signal. This is most often due to poor reception. See "Only some channels are found during ATSC channel scan" above.

Uninstalling the WinTV driver and applications

Run the hwcLEAR.exe from the installation CD. Select OK A black screen will briefly appear and once it has disappeared the software will be removed. If you now re-start the computer you will be at Step 4 of the installation.

"Error code 10" during installation

This is caused by a failure to load the WinTV-hvr-1250 drivers. Uninstall the software (as above) and then follow the instructions from page 3. If this still give you an error message, move the WinTV-hvr-1250 to a different slot and re-install the drivers again.

Error: "No common media type between these pins"

The WinTV-HVR uses your PC's processor to display the TV image. If the processor is too slow, or if there is something in the system which is taking system resources, you might get this message.

Check the VGA acceleration in Device manager. make sure it is set to "Full". Also check your VGA resolution. You might need to bring the number of Colors down one notch.

Conflicts with Intervideo WinDVD

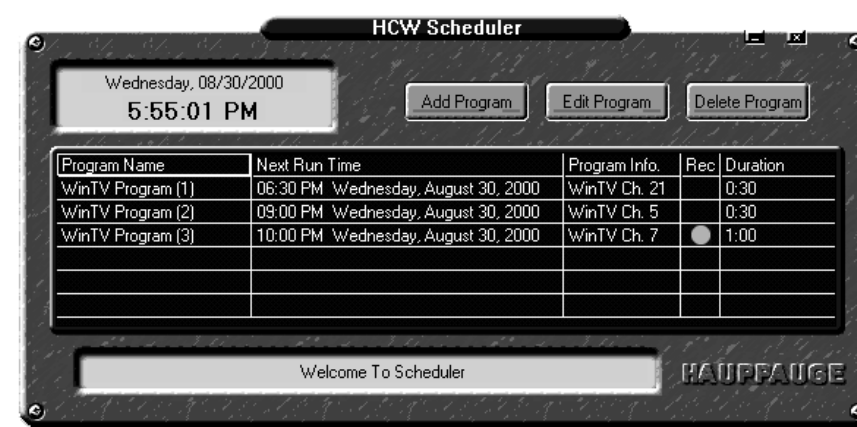
Sometimes we have found that a previously installed version of WinDVD will conflict with the WinTV-HVR. Symptoms include: black screen but you can hear audio, failure to scan for channels, you can't change MPEG formats without errors, bad audio/video sync, and others.

Uninstalling WinDVD will fix this problem. You uninstall WinDVD through the "Add/Remove Programs" in Control Panel. You will still be able to play DVD movies in MediaPlayer, since the WinTV-HVR installation provides a MediaPlayer compatible DVD player.

9. WinTV-Scheduler

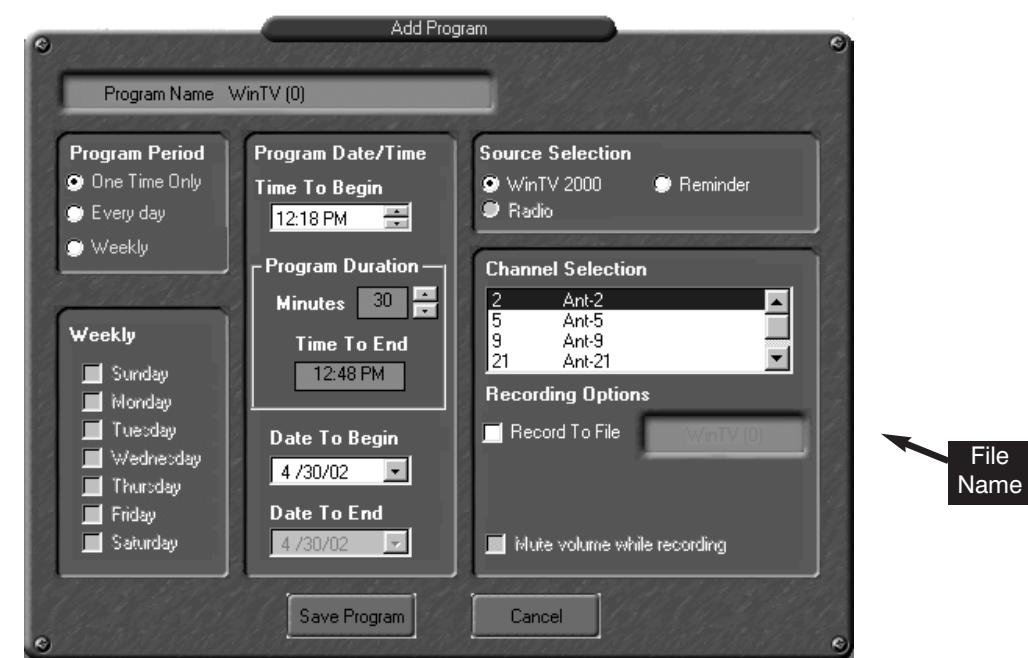
WinTV-Scheduler allows you to schedule the recording of TV shows. **WinTV-Scheduler**, once it is set, can be closed, and the **WinTV** application will "wake up" at the desired time and tuned to the desired channel.

After installation, **WinTV-Scheduler** can be found on your desktop. **WinTV-Scheduler** works by using the **Windows Task Scheduler** to launch **WinTV**



at the chosen time. **WinTV-Scheduler** sets up a command line in Task Scheduler to run **WinTV**, specifying a TV channel and a length of time to record.

To set up an event for timed watching or recording, run **WinTV-Scheduler** and click on the **Add Program**.



The items that need to be set for each event are:

- **Time to Begin Program:** set to the desired start time. Click on the hour to set the hour, the minute to set the minute. **Note:** It takes about 15 seconds to launch the **WinTV** and start recording.
- **Time to End Program:** set to the time to end this event.
- **Program Period:** one time, daily, weekly
- **Date to Begin Program:** today's date is the default. Change this if you want to schedule on another date.
- **Source selection:** leave set at **WinTV** to bring up the **WinTV** at the requested time and on the requested channel.
- **Channel selection:** chose one of your scanned channels.
- **Recording options:** click on **Record to File** to record your show. Leave this button unchecked to watch TV at the requested time. You can also **name your file** to record, in the dialog box below.

Once these are set, click **Set Program**. You can add more **Events**, clicking **Set Program** after each event is set.

When you are finished click **Close**. The **WinTV** program does not have to be running for the **Scheduler** to work. If **WinTV** is not running, it takes about 15 seconds to start **WinTV** and to start the recording of TV.

Problem: Poor Reception or Not detecting all channels:

Poor TV reception is generally the result of a weak TV signal. When using a 'roof-top' antenna, an aerial booster may be required if there is poor TV reception.

Also, in some areas using cable TV, a format called **Cable HRC** is used. If so, try rescanning but use **CABLE (HRC)** instead of cable in the Broadcast/Cable box.

How do I configure the Audio for the WinTV-HVR?

Your PC's sound card is used to amplify the audio during "live" TV, record and playback. The WinTV application's **Volume Adjust** slide bar adjusts the volume by raising and lowering the WaveOut volume control in the sound card.

FCC/CE Statement

Radio Interference Statement:

The WinTV products have 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 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, 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.

FCC ID: H90WINTV

CE Statement: This equipment has been tested and complies with EN 55013, EN 55020 and IEC 801-3 part 3 standards.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance to the FCC Rules could void the user's authority to operate the equipment.

UL 60950-1: In accordance with sub-clause 1.7.2, the installation instructions should note that the cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable. This aligns the instructions with the third dashed paragraph of the new exception.

CSA 60950-1: Make sure that the cable system is grounded to provide protection against voltage surges and built up static charges.

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<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

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