

Unclicking the **Pause button** will cause the audio/video program to start playing from the point where the button was originally pushed. Most **WinTV** functions are active while in the **Pause** or **Pause Live**

mode. For example, you can change volume, resize the TV window, go into "no-title mode", etc.

While in Pause mode, the **Video Position bar** shows the amount of the **Replay Buffer** which is filled with video. For example, if the Video Position indicator shows halfway, it means that half of the Replay Buffer is filled. If you find you cannot Pause as many minutes as you would like, increase the size of the **Replay Buffer**.

While in Pause mode, the A/V stream is always saved in the Replay Buffer. To stop saving the A/V stream in the Replay Buffer, you must exit the Pause mode by clicking the **TV mode button**.

Replay button:

While in the Pause mode, hitting the Replay button acts like the **Instant Replay** you see on TV broadcast sporting events: the audio/video goes back in time and you repeat what you have previously seen.

Each click of the **Replay button** causes audio/video to go back 10 seconds. For example, if you want to repeat the audio/video you saw 10 seconds ago, you would click the **Replay button once**. If you want to see the video you saw one minute ago, you would need to **click the Replay button six times**.

For extended replay times, you might find it more convenient to grab the **Video Position indicator control bar** and move it to the left. Once you let the control bar go, audio/video starts to play (it might take a few seconds for the **WinTV2000** application to start playing). You might have to move the Video Position indicator to the left and right to find the desired spot to start replaying audio/video.

While **Replaying**, your audio/video program continues to be recorded in the Replay Buffer. Therefore, if you have clicked the Replay button 3 times (**so that you are replaying the audio/video seen 30 seconds ago**), the video you see in the WinTV window will be 30 seconds behind the "live" audio/video program.

Skip Ahead Button

Clicking the **Skip** button will skip the video ahead 10 seconds.

Rewind Button:

Clicking the **Rewind** button while playing video will rewind the recorded video. Clicking the **Rewind** button again will continue the playing.

Fast Foward Button:

Clicking the **Fast Foward** button one time will fast foward your video at **2X speed**. Clicking the **Fast Foward** button two times will fast

foward your video at **8X speed**.

Slow Motion Button:

Clicking the **Slow Motion** button while playing video will play in Slow Motion. Clicking the **Slow Motion** button again, will continue playing normally.

MPEG compression formats & record directories

To set the directory where your video recordings will be stored, click the **PREF button** (Preferences menu) on **WinTV2000**, then **Capture** and then on the **MPEG tab**. Set the **DVCR File Path** to directory where you would like to store your video recordings.

The **WinTV-PVR** supports several formats for MPEG video compression, called **Quality Levels**. The differences in these formats are:

- The higher the datarate, the better the video quality you see from live TV and your recordings. The higher the datarate, the more disk space which will be required.
- CPU horsepower required during playback and pause mode.
- The compatibility when creating Video CD's or S-VCDD's.

To configure the **MPEG Quality Level**, on **WinTV2000** click the **PREF button** (Preferences menu), then **Capture** and then the **MPEG tab**. Here are the video formats and the amount of disk space per hour used:

	MPEG1	VCD	.65 Gigabytes/hour
	MPEG2	2.0MBits/sec (Full D1)	.9 Gigabytes/hour
	MPEG2	2.0MBits/sec (Half D1)	.9 Gigabytes/hour
	MPEG2	12.0 MBits/sec (Full D1)	5.4 Gigabytes/hour
	MPEG2	12.0 MBits/sec (CBR)	5.4 Gigabytes/hour
	DVD Standard Play	8.0MBits/sec	3.1 Gigabytes/hour
	DVD Long Play	6.2Mbits/sec	2.4 Gigabytes/hour
	DVD Extra Long Play	2.5 Mbits/sec	1.2 Gigabytes/hour

- **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.

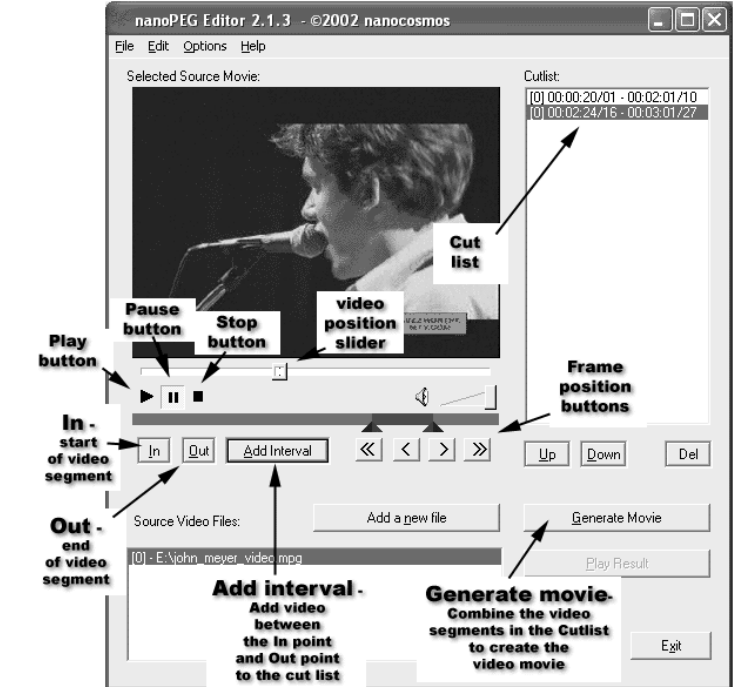
When you are finished click **Close**. The **WinTV** program does not have to be running for the **Scheduler** to work. If **WinTV** is not running, it takes about 10 seconds to start **WinTV-PVR** and to start the recording of TV.

WinTV MPEG Editor

The Hauppauge MPEG Editor is an MPEG1/MPEG2 cut and join editor. You can cut segments from videos, or combine videos (of the same MPEG format) together. The MPEG editor makes its cuts on what are called "MPEG I-frames". These types of cuts do not require a re-encode, and therefore preserves the quality of the original video.

This version of the MPEG has these features:

- Edit (cut) MPEG1 and MPEG2 files.
- Join MPEG files of the same resolution and bit rate
- Remultiplex Video CD compatible files so they can be "burnt" into VCD's



C:\Program Files\WinTV directory.

To install the IR Remote receiver:

- Turn off your computer. Plug the **sub-mini jack** at the end of the **IR Receiver cable** into the **Remote control (IR) receiver socket** of the **WinTV-PVR**.
- Place the **IR Receiver** on your desktop so that the infrared light from the **IR Remote transmitter** can reach the **IR Receiver**.
- Turn on your computer.
- If you have previously installed the **WinTV applications**, the IR software should automatically run, and you will see the **WinTV Remote icon** in the **Device Tray**.

Some remote control buttons

0 - 9 buttons: 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.

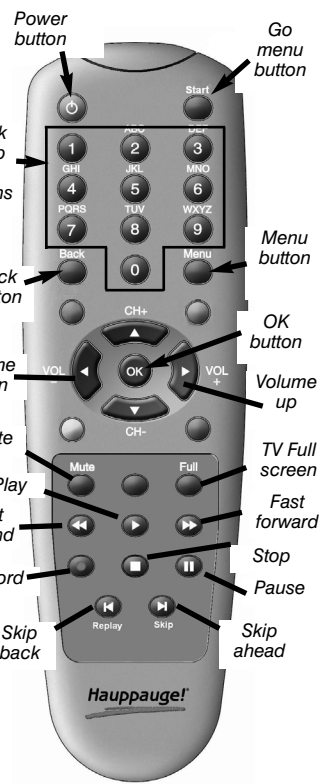
Go button: brings up the WinTV task list. Allows you to start WinTV2000, WinTV32 or WinTV-radio.

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

Green power button: will close the WinTV application.

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.

Making DVDs from your WinTV-PVR recordings

DVD players which are compatible with CD's and MP3's can also read DVD's burned using MPEG video files created with the WinTV-PVR.

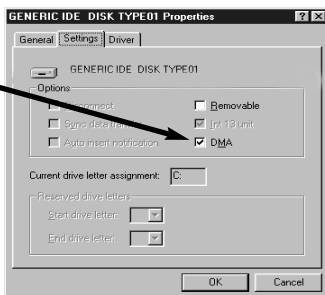
If you plan to burn a **DVD with MovieFactory** or any other DVD authoring software package, you should use either the "DVD Standard Play", the "DVD Long Play" or "DVD Extra Long Play". These formats will allow you to make DVD's with the following recording lengths:

DVD Standard Play: 1 hour 30 minutes on DVD+R/RW disks
DVD Long Play: 1hour 50 minutes on DVD+R/RW disks
DVD Extra Long Play: 4 hours on DVD+R/RW disks

Tips on System Optimization:

These are tips that will help you improve capture and playback performance of video files on you PC.

- 1.) Do not use DoubleSpace or any other disk compression scheme! This severely slows down your hard disk.
- 2.) Make sure DMA is checked for your Hard disk drives in **Device Manager**. Right click your mouse on the **My Computer** icon on your desktop, and click on **Properties**. Click on the **Device Manager** tab and double click on **Disk Drives**. Highlight **GENERIC IDE DISK TYPE** and click on **Properties**. Click on **Settings**. Make sure **DMA** is selected.
- 3.) Defragment your Hard Disk. To Defragment your hard disk, in Windows click on **Start / Programs / Accessories / System Tools** and click on **Disk Defragmenter**.
- 4.) You can use 7200 RPM disk drives. Also, there are several hard disks on the market which are designed for higher performance video captures. These drives use 1:1 interleaving and track caching



SVCD Standard Play 2.5Mbps/sec .8 Gigabytes/hour

Note: CBR is constant bit rate, VBR is variable bit rate.

Which record format should you use?

If you would like to burn a DVD, then chose either **DVD Standard Play**, **DVD Long Play** or **DVD Extra Long Play**. DVD formats record at 720x480 (720x576 with PAL video sources) using 48.0 kHz stereo audio. If you want to watch the recorded video on your PC, for the best video quality chose **MPEG2 12.0MB/sec** or **DVD Standard Play**. If you do not have much disk apace, try the **MPEG-2 2.0MB/sec**.

SVCD is a nice compromise between video quality and hard disk space. Video is recorded at 480x480 (480x576 for PAL video) at a datarate up to 2.5Mbps/sec.

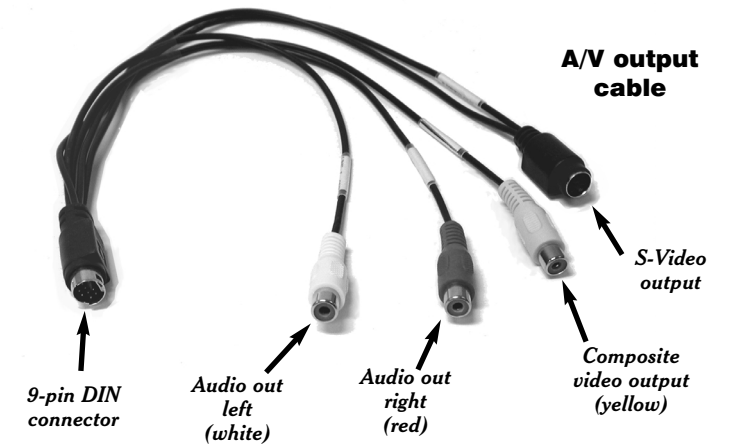
For creating Video CD's for playback on your home DVD player, chose the **MPEG1 VCD** format.

Once chosen, the Quality Level format is set for both the Pause and Record modes. The format cannot be changed while Recording or while in the Pause mode.

Video output (WinTV-PVR-350)

The **WinTV-PVR-350** can output your "live" and recorded video to an external video monitor or video recorder. With the Video Output feature of the **WinTV-PVR-350**, you can:

- Watch your TV shows on an external TV set, pausing or recording just as you could when watching TV on your VGA monitor
- You can record a TV show, and then play it back to your TV set.
- Record your home videos, edit them with WinTV Editor, and then watch them on your home TV set.



- Remultiplex S Video CD compatible files so they can be "burnt" into SVCD's
- Split large MPEG videos into pieces, so that these can be burned onto CD-ROM or DVD media
- Has a "play" option so you can play the file you have just edited without having to close the editor

How to use the WinTV Editor:

Click on the **Add source** button or click on **File / Add** source to bring the file you want to edit into the MPEG editor. The **WinTV-PVR** uses the c:\My Documents\My Videos directory as the default directory to save video files created by the **WinTV-PVR**. When the selected file is opened, it will start playing back in the video window. Click the **Stop** button to stop playback.

Grab the **video position slider**, and move it to the beginning of the video segment you want to keep. The video frame will be shown in the video window. You can also use the controls under the video window (play, pause, stop and the frame control buttons).

When you have correctly positioned to the video frame you want, click the **In button**. This will define the starting point of the video interval.

Grab the **video position slider** and move it to the end position of the clip you want to keep, then click the **Out button**.

Click **Add Interval** to add the defined clip to the cut list. Repeat until you have put all the desired video clips in the "cut list".

When you have finished with your cut list, click the **Generate output** button. All intervals in the cut list will appear in the final video. The Generate Output step normally takes awhile.

Your MPEG video is named **nanoEDIT.mpg**. Be sure to rename this before cutting another video, otherwise the file will be overwritten! Before you click **Generate Output**, click **File / SelectOutputFile** to change the file name of your recorded file.

To cut away an advertisement, click the **In button** at the beginning of the video sequence, then click the **Out button** just before the advertisement starts. Click **Add Interval**. Then click the **In button** at the end of the advertisement, and click the **Out button** at the end of the video sequence you want to keep. Then click **Add interval**.

To cut away advertisements from a movie, you must define all pieces you want to keep (everything which belongs to the movie) and add them to the cut list.

Remultiplex File for VCD

Note: If you have an VCD file open, when you click on **Generate Movie**, the file will be saved as a "burnable" VCD file. But if you have a VCD file on your PC and would like to simply make it burnable, use this option.

Connecting the A/V cable to a TV set:

1. Plug the **9-pin DIN connector** on the **A/V output cable** into the **A/V output connector** on the WinTV-PVR-350. This connector is "keyed" so you cannot plug it in backwards.
2. The A/V cable has an **S-Video output connector (black)** and a **Composite output connector (yellow)**. Some TV sets have S-Video inputs, and others use Composite connectors. Chose the correct one for your TV set, and connect a video cable (not supplied) between your TV set and the A/V output cable.
3. The A/V cable has **Audio out left (white)** and a **Audio out right (red)** jack. Connect these to the audio input jacks on your TV set (not supplied).
4. Turn on the video output feature in the WinTV2000 application by **clicking and holding your RIGHT mouse button** on the WinTV window, clicking on **Video Output** and then clicking **On**.

Note: some TV sets do not have S-Video or Composite jacks. To connect to a TV set, it MUST have S-Video or Composite video inputs, plus audio input jacks.

Note: with the WinTV-PVR-350, when VideoOut is turned on the Fast Forward is limited to 2X speed.

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 **WinTV2000**, 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. The default time is about 3 minutes from the current time. Click on

You will be prompted for a **File name**. Enter the name of a file which has VCD characteristics (MPEG-1, datarate not exceeding 1.1Mbps/sec, etc.). Next, enter the name of the "burnable" VCD file to be written. The file will be remultiplexed into a "burnable" VCD format.

Note: If you enter the name of a file which is not VCD compliant, an error message will pop up.

Remultiplex File for SVCD

If you have a SVCD file on your PC and would like to make it burnable onto a SVCD, use this option.

You will be prompted for a **File name**. Enter the name of a file which has SVCD characteristics (MPEG-2 with 2.2Mbps/sec datarate, 44.1KHz audio and 480x480 image sizes for NTSC video sources). Next, enter the name of the "burnable" SVCD file to be written. The file will be remultiplexed into a "burnable" SVCD format.

Note: If you enter the name of a file which is not SVCD compliant, an error message will pop up.

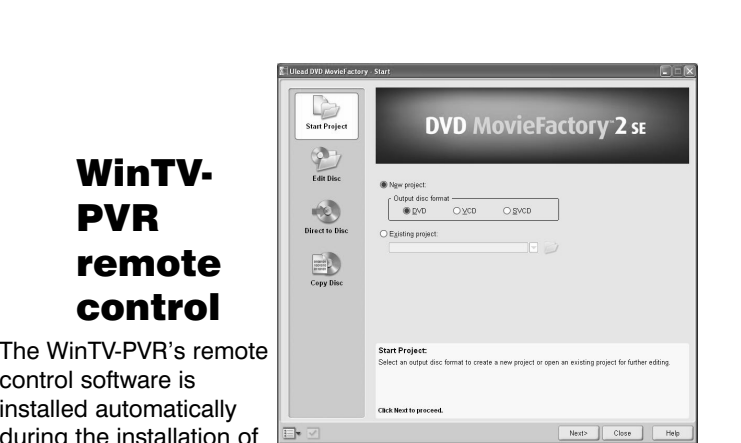
Ulead DVD MovieFactory 2SE

Start project: Used to author and burn DVD's, SVCD's and VCD's. Create chapter menus, mix videos, JPEGS and music.

Edit disk: Edit videos or menus from DVD+RW's.

Direct to disk: not used.

Copy disk: Burn copies of existing disc images to CD/DVD.



WinTV-PVR remote control

The WinTV-PVR's 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, run **IR32.EXE** from the

to eliminate gaps caused by a hard disk drive seeking to the next track. They are available with both IDE and SCSI interfaces.

Troubleshooting

Installation tips and software updates can be found at :
http://www.hauppauge.com/pages/support_pvr250-350.html
http://www.hauppauge.com/pages/support_pvr150.html
Our FAQ can be found at:
http://www.hauppauge.com/pages/support_faq_pvr250-350.html

Error: "No common media type between these pins"

The WinTV-PVR 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.

Error: "Error code 10" during installation

This is caused by a failure to load the WinTV-PVR drivers. Run **HCWClear** from the **WinTV-PVR Installation CD-ROM**, then reboot and reinstall the WinTV-PVR. If this still gives you an error message, move the WinTV-PVR to another PCI slot and reinstall the drivers.

Conflicts with Intervideo WinDVD

The WinTV-PVR uses a version of WinDVD to display video in the WinTV window. Sometimes we have found that a previously installed version of WinDVD will conflict with the version of WinDVD which is installed with the WinTV-PVR. 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-PVR installation provides a MediaPlayer compatible DVD player.

Problem: Poor Reception or Not detecting all channels:

Poor TV reception is generally the result of an Weak TV signal. When using a "roof-top" antenna, an aerial booster may be required if there is poor TV reception. If you find that some or all of the channels have not been detected, you can insert channels manually. 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.

FCC Statement Radio Interference Statement:

The **WinTV-PVR** 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 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.

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