

AVS4YOU Programs Help



AVS TV Recorder

www.avs4you.com

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Contact Us


If you have any comments, suggestions or questions regarding **AVS4YOU** programs or if you have a new feature that you feel can be added to improve our product, please feel free to contact us.

When you register your product, you may be entitled to technical support.

General information:	info@avs4you.com
Technical support:	support@avs4you.com
Sales:	sales@avs4you.com
Help and other documentation:	help@avs4you.com

Technical Support

AVS4YOU programs do not require any professional knowledge. If you experience any problem or have a question, please refer to the **AVS4YOU Programs Help**. If you cannot find the solution, please contact our support staff.

 **Note:** only registered users receive technical support.

AVS4YOU staff provides several forms of automated customer support:

- **AVS4YOU Support System**

You can use the **Support Form** on our site to ask your questions.

- **E-mail Support**

You can also submit your technical questions and problems via e-mail to support@avs4you.com.

 **Note:** for more effective and quick resolving of the difficulties we will need the following information:

- Name and e-mail address used for registration
- System parameters (CPU, hard drive space available, etc.)
- Operating System
- The information about the capture, video or audio devices, disc drives connected to your computer (manufacturer and model)
- Detailed step by step describing of your action

Please do **NOT** attach any other files to your e-mail message unless specifically requested by AVS4YOU.com support staff.

Resources

Documentation for your AVS4YOU software is available in a variety of formats:

In-product (.chm-file) and Online Help

To reduce the size of the downloaded software installation files the in-product help was excluded from the installation although you can always download it from our web-site for your convenience. Please, visit AVS4YOU web-site at <http://www.avs4you.com/OnlineHelp/index.aspx> to download the latest available version of the help executable, run it and install into the AVS4YOU programs folder. After that you will be able to use it through the **Help** menu of the installed AVS4YOU software.

Online Help include all the content from the In-product help file and updates and links to additional instructional content available on the web. You can find the **Online Help** at our web-site - <http://www.avs4you.com/OnlineHelp/index.aspx>. Please note, that the most complete and up-to-date version of AVS4YOU programs help is always on the web.

PDF Documentation

The offline help is also available as a pdf-file that is optimized for printing. All PDF help files are available for download at the programs pages at AVS4YOU web-site (both <http://www.avs4you.com/index.aspx> and <http://www.avs4you.com/OnlineHelp/index.aspx>). To be able to read and print AVS4YOU PDF help files you will need to have a PDF reading program installed.

User Guides

You have access to a wide variety of resources that help you make the most of your AVS4YOU software. The step-by-step user guides will be of help not only to the novice users but also to the users that face a certain task to be performed and look for a way to do it. Please, visit our **User Guides** section of AVS4YOU web-site at <http://www.avs4you.com/Guides/index.aspx> to read the detailed instructions for various software and tasks

Technical Support

Visit the **AVS4YOU Support** web-site at <http://support.avs4you.com> to ask your questions concerning AVS4YOU software installation, registration and use. Feel free to also use our e-mail address support@avs4you.com.

Downloads

Visit the **Downloads** section - <http://www.avs4you.com/downloads.aspx> - of our web-site to find free updates, tryouts, and other useful software. We constantly update the software, new versions of the most popular programs and new software are also frequently released.

Overview

AVS TV Recorder is an easy to use application that will let you capture video from different devices, watch programs using digital TV tuners with the Hardware MPEG encoder.

User-friendly and understandable interface allows you to enjoy working with broadcast video and capture devices without frequent consulting with reference materials. You do not need to be a professional to use this tool. You can also record video and preview the results to make sure that you recorded what you had wanted.

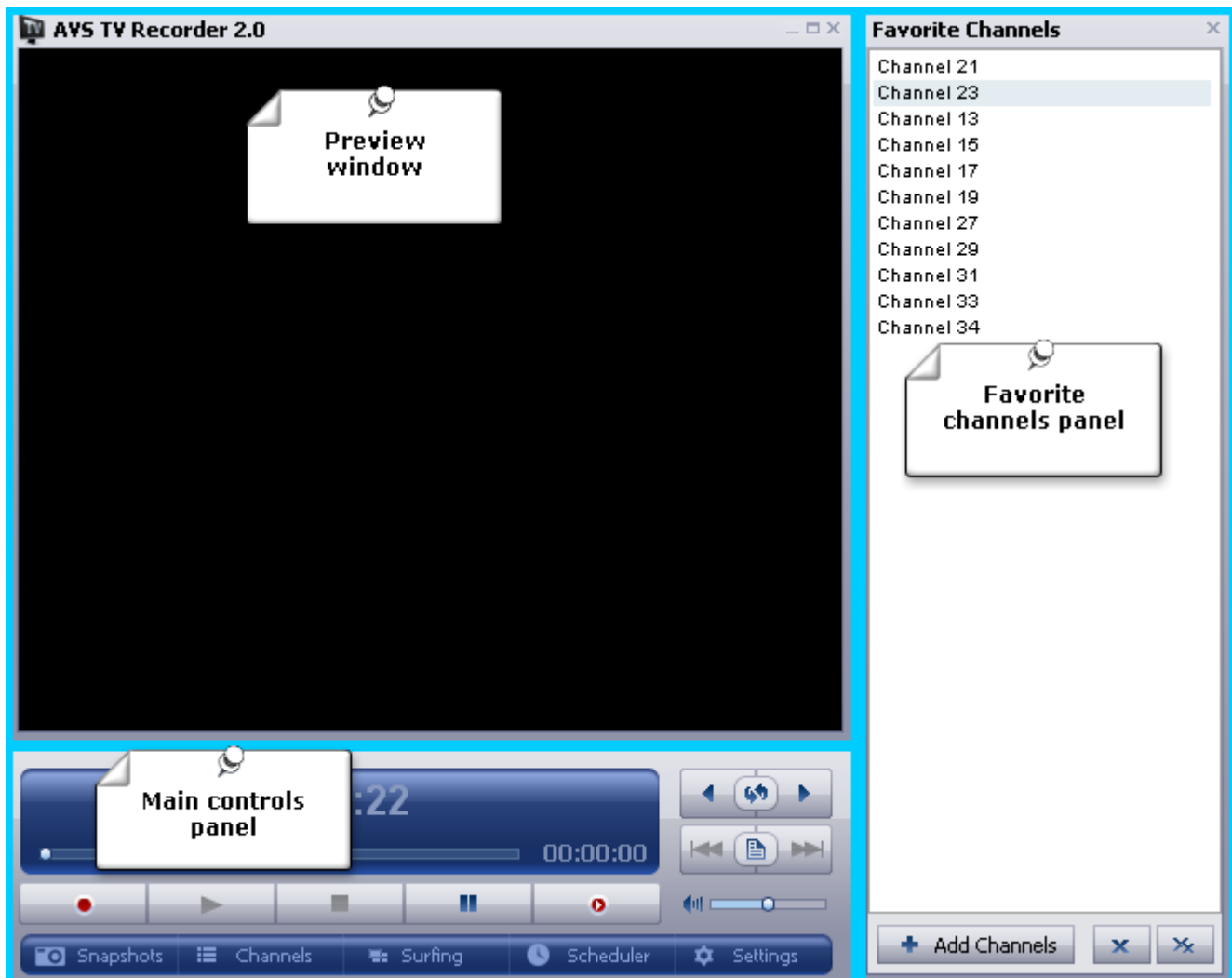
There is no need to have many different programs for video capturing and television broadcast watching - multifunctional and powerful **AVS TV Recorder** will easily deal with several tasks.

In case you need some help, please refer to this **AVS4YOU Programs Help**, if you cannot find something here or you need some explanation or assistance, just e-mail us **support@avs4you.com** or visit us on the World Wide Web **www.avs4you.com**.

To start **AVS TV Recorder** go to **Start** menu and choose **All Programs -> AVS4YOU -> Video -> AVS TV Recorder**.

Program Interface

The program interface comprises several windows and looks like this:



- **Preview window** - allows the user to preview the selected channels and watch the recorded files.
- **Favorite channels panel** - allows the user to show the list of favorite channels and manage it.
- **Main controls panel** - allows the user to configure the program and navigate through the panels.

When you run the program for the first time, you see the windowed mode of the program interface which contains the **Preview window**, the **Main controls** panel and the **Favorite Channels** panel. The next launch, these panels can be hidden or they can be completed with an additional **Snapshots** panel.

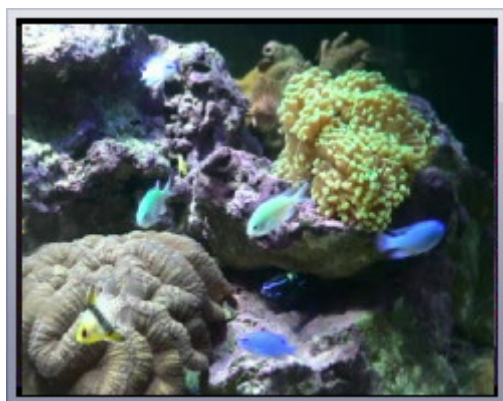
Preview Window

The **Preview window** of the program offers you the possibility to watch your favorite television shows and movies or play the recorded video files.

The program is run in a **windowed mode** by default, but you can organize the playback and broadcast viewing area as you wish. To open a **Full Screen** mode:

- double click the **Preview window**
- choose the appropriate option in the **express menu**
- use hot keys combination **Enter + Alt**


This option make the **Preview window** occupy all the available displayable surface of a screen. The modified **main controls** panel appears in the bottom of the screen, it will automatically disappear in several seconds. If you need to use it, just move your mouse. In order to go back to the windowed mode and get all the panels back, press the **Esc** button or **Enter + Alt** buttons on your keyboard.




You can also minimize the **Preview window** choosing the **Compact View** option in the **express menu** or using hot keys (**Enter + Ctrl**).

When the **Compact view** is enabled you'll see a small window in the right bottom corner of the screen without any additional panels. Use this option if you don't want to watch TV at the moment but you wait for an interesting show, film or a news program.

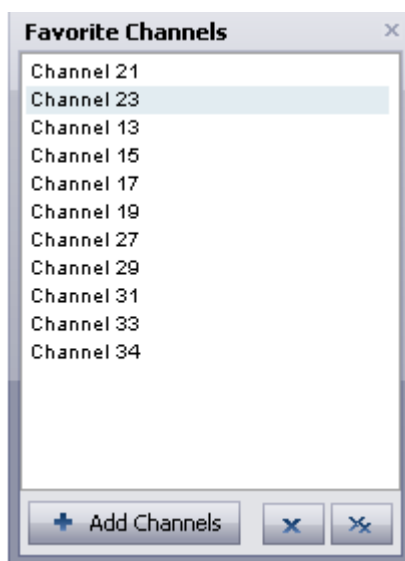
You'll be able to navigate through the program using the **express menu**. In order to go back to the windowed mode, press the **Enter + Ctrl** buttons on your keyboard.

There is also a program icon  installed in the system tray, click it with a right mouse button to **Restore** the default window layout or to **Exit** the program.

 **Note:** when you close the program, the size and layout of the palens will be memorized for next launch.




Favorite Channels Panel

The **Favorite Channels** window was designed to facilitate your navigation through the channels. Using it you no longer need to configure the TV Tuner every time to watch the same channels. All you need is to add them to the favorites list:



The **Favorite Channels** window opens every time you launch the program, if you need to close it click the **Channels** button on the **main controls** panel. You will be able to rename the channels and put them in proper order in the **Favorite Channels** window using its own **express menu**. Please, read the respective section for more details.

The following buttons are used to navigate and edit the **Favorite Channels** window:

		Use this button to add a new channel to the Favorites list.
	Remove channel	Use this button to delete the selected channel from the Favorites list.
	Clear list	Use this button to remove all the channels and clear the Favorites list.

Main Controls Panel



	Control	Description
1	Display	Shows current time or time elapsed since the file recording or playback started and also the real-time delay during the time shifting process. It also shows the process state and the name of the channel you watch or record
2	Previous Channel button	Used to return to the previous channel in the favorite list
3	Channel Back button	Used to return to the previously watched channel
4	Next Channel button	Used to advance to the next channel in the favorite list
5	Previous File button	Used to play the previous file from the recorded video files list
6	Show recorded files button	Used to open the recorded files list
7	Next File button	Used to play the next file from the recorded video files list
8	Volume level control	Used to bring the level control up and down
9	Mute button	Used to mute/unmute the sound
10	Settings button	Used to open the Settings window
11	Scheduler button	Used to open the Scheduler window, to add a new task and to modify your tasks list
12	Surfing button	Used to show several channels from the favorite list one by one every 5 seconds
13	Channels button	Used to open/close the favorite channels panel
14	Snapshots button	Used to open/close the Snapshots panel
15	Player controls	Used to manage the recording and the playback options
16	Navigation slider	Used to navigate through the playing file or in timeshift mode

Player controls

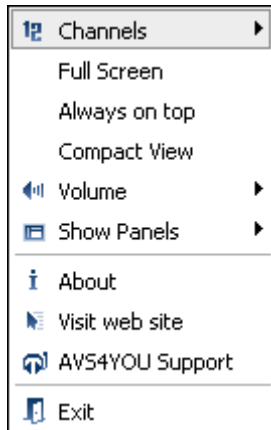
	Control	Description
1	Record	Used to start record the current channel
2	Playback	Used to start playback of the recorded video file
3	Stop	Used to stop the recording/playback of the video files
4	Pause	Used to pause the recording/playback of the video files
5	Timeshift	Used for timeshift video recording - pause, playback video fragments, rewind forward and backward live video and television programs without aborting the recording

Express Menu

Express Menu is an easy way to access the program's main controls with just one mouse click. You can activate it by clicking the right button of the mouse when the cursor is positioned on the video window. **Express Menu** buttons are grouped:

Preview window express menu

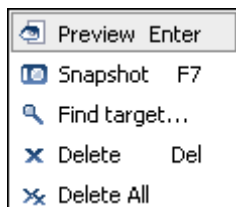
Preview window express menu is activated when you click the right mouse button within the limits of the **Preview** window. There are the following main items in this menu:



Channels	Use this option to switch between the channels from the Favorites list without the need to open the Favorites window.
Full Screen	Use this option to switch to the full screen view from the windowed mode and back.
Always on top	Use this option to make the AVS TV Recorder program always stay on top all other programs windows.
Compact View	Use this option to close all the panels and minimize the preview window.
Volume	Use this option to decrease/increase the volume level or switch the sound off/on.
Show Panels	Use this option to show or hide the main controls panel and all the other panels opened. You can select the panel to be shown or hidden from the opened submenu list or you can select to open or hide all the panels.
About	Use this option to view the information about AVS TV Recorder .
Visit web site	Use this option to open the program Overview page on avs4you.com web site.
AVS4YOU Support	Use this option to open our Support Form page.
Exit	Use this option to close the AVS TV Recorder program.

Snapshots window express menu

Snapshots window express menu is activated when you click the right mouse button within the limits of the **Snapshots** window. There are the following main items in this menu:



Preview	Use this option to see the full-size image of the selected snapshot.
Snapshot	Use this option to take a snapshot of the current video display image.
Find target...	Use this option to open the default folder on your hard drive containing all the created snapshots.
Delete	Use this option to remove the selected snapshot from the list.
Delete All	Use this option to remove all the snapshots from the list.

Favorites window express menu

Favorites window express menu is activated when you click the right mouse button within the limits of the **Favorites** window. There are the following main items in this menu:

+ Add Channel(s)	
A Rename	F2
◆ Properties	Ctrl+P
✕ Remove	Del
▲ Move Channel Up	Ctrl+Up
▼ Move Channel Down	Ctrl+Down
✕ Clear	
✓ Show action buttons	
◆ Settings	

Add Channel(s)	Use this option to open the Settings window and add the necessary channel from the scanned channels list .
Rename	Use this option to rename the currently selected channel.
Properties	Use this option to open the window showing the selected channel properties .
Remove	Use this option to delete the selected channel from the Favorites list.
Move channel up	Use this button to move the channel up in the Favorites list.
Move channel down	Use this button to move the channel down in the Favorites list.
Clear	Use this option to remove all the channels from the Favorites list.
Show action buttons	Use this option to show/hide the action buttons on the bottom of the Favorites window.
Settings	Use this option to open the Settings window.

Settings window express menu

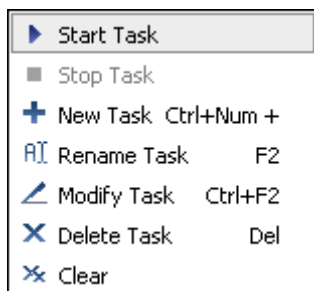
Settings window express menu is activated when you open the **Channels** tab of the **Settings** window and click one of the scanned channels with the right mouse button. There are the following main items in this menu:

◆ Properties	Ctrl+P
A Rename	F2
✕ Clear list	
+ Add to favorites	Ctrl+Num +
- Remove from favorites	Ctrl+Num -

Properties	Use this option to open the window showing the selected channel properties .
Rename	Use this option to rename the currently selected channel.
Clear list	Use this option to remove all the channels from the scanned channels list.
Add to favorites	Use this option to add the currently selected channel to the Favorites list.
Remove from favorites	Use this option to delete the currently selected channel from the Favorites list.

Scheduler window express menu

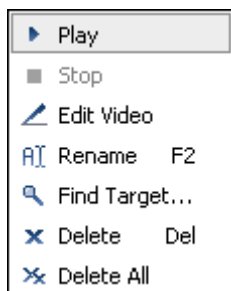
Scheduler window express menu is activated when you open the **Scheduler** window and click the right mouse button within the limits of the window. There are the following main items in this menu that correspond to the buttons in this window:



Start Task	Use this option to run the selected task.
Stop Task	Use this option to stop the selected task.
New Task	Use this option to open the Scheduled Task window and set a new task.
Rename Task	Use this option to rename the selected task.
Modify Task	Use this option to open the Scheduled Task window and change the task parameters.
Delete Task	Use this option to remove the selected task from the Scheduler window.
Clear	Use this option to remove all the scheduled tasks from the list.

Recorded Files window express menu

Recorded Files window express menu is activated when you open the **Recorded Files** window and click the right mouse button within the limits of the window. There are the following main items in this menu that correspond to the buttons in this window:



Play	Use this option to playback the recorded video files.
Stop	Use this option to stop the recorded files playback.
Edit	Use this option to edit the recorded files using AVS Video Converter .
Rename	Use this option to change the names of the currently selected recorded files.
Find target...	Use this option to open the default folder on your hard drive containing all the recorded files.
Delete	Use this option to remove the currently selected files from the list.
Delete All	Use this option to remove all the files from the list and clear it.

Working with AVS TV Recorder

AVS TV Recorder has a simple and intuitive interface and lets the user start watching the video right after it is installed.

Nevertheless you will need to configure your device that is used as a capture device before you can start watching the channels or record video.

The configuration will include several easy steps:

1. Connect your device to your personal computer. You might need to turn down your PC to install the internal devices, such as TV tuner cards and alike. If your device has a USB-interface, it is usually possible to connect it while your personal computer is running. Please read the manual that comes with your device to avoid damage and installation problems.
2. Start your computer and install the capture device drivers. They are usually placed onto the CD/DVD that comes along with the device, or you can download them from the device manufacturer's web site. For many of the devices connected via USB-cable no additional driver software is needed as it is included into the windows installation package.
3. Launch the **AVS TV Recorder** software. Click the **Settings** button to scan the channels that you will be able to watch using **AVS TV Recorder**.
4. Select the **Device Parameters** tab of the **Settings** window. Check the device parameters. See the **Device Parameters Settings** section for more detail on how to configure the capture devices.
5. Select the **Channels** tab of the **Settings** window. Click the **Start Scan** button to search for the existing channels. After that you can click the channel you would like to watch or record with the right mouse button and select the **Add to favorites** option from the **express menu**. See the **Channels Settings** section on how to add channels to the **Favorites** list and set different channels parameters.
6. To watch the channels now you need to click the **OK** button to accept all the changes and close the configuration window. If you don't have time to enjoy your favorite show at the moment, use the **Timeshifting** option to watch it later at a more convenient time.
7. If you plan to record your video, just click the **Record** button on the **player controls** panel or **use the scheduler** to set different tasks. After that you will be able to **play** the recorded video files. See also the respective sections on how to **take snapshots** from your favorite movies.

Configuring

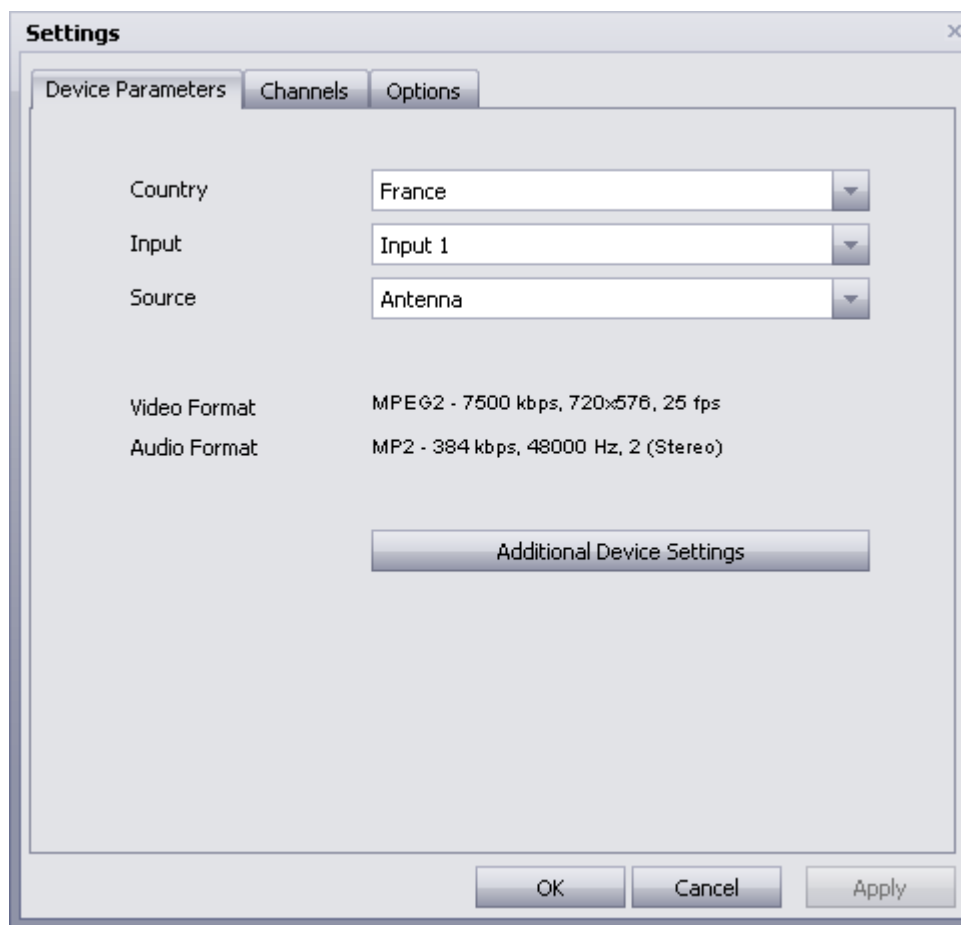
The configuration window is activated by pressing the **Settings** button on the **main controls panel** or selecting the **Settings** option in the **Favorite Channels** window **express menu**.

The configuration window consists of three tabs:

- **Device parameters** - use this tab to set the parameters of the device installed on your computer. The availability of the settings depends on the type of the device.
- **Channels** - use this tab to set the channels that will be displayed in the **Favorite Channels** window.
- **Options** - use this tab to set the recordings and snapshots paths, adjust the timeshift settings and the additional channels parameters.

Device Parameters Settings

Before you can start watching the channels you need to configure the capture device used. To open the **Device Parameters** window click the **Settings** button on the **main controls panel** and choose the appropriate tab. The **Device Parameters** tab looks like this:



Here you can see the following settings:

- **Country** - allows you to choose the country of the broadcast and scan channels in a specified frequency range.
- **Input** - allows you to choose the input jack on the tuner. The most common number of inputs are 1, 2, 4, 8, 16 and 32.
- **Source** - allows you to choose the device used to receive or amplify the broadcast signal: antenna or cable.
- **Video Format** - shows the input video file parameters such as:
 - **Compression type** - type of format used to code the video information into the video file.
 - **Bitrate** - the number of bits transferred per second, measured in kilobits per second.
 - **Frame size** - the number of pixels that form the video image (horizontally/vertically).
 - **Frame rate** - the number of video frames displayed every second.
- **Audio Format** - shows the input audio file parameters such as:
 - **Format** - the format used to encode the audio component of the movie.
 - **Bitrate** - the number of data points used to approximate the true wave form (kilobits per second).
 - **Sample rate** - sampling frequency specified in hertz.
 - **Channels** - number of channels in the audio track (mono - one channel, stereo - two channels, quadro - four channels, 4.1 - five channels, 5.1 - six channels, 6.1 - seven channels, 7.1 - eight channels).

In order to configure the video/audio format parameters click the **Additional Device Settings** button, the information window for the connected device properties will be opened. These settings depend on the capture device used and will look differently for a specific device.

When you change the video/audio format parameters, the recorded video quality and size are also customized. The smaller the parameters value is, the worse the quality of the recorded video is, however the smaller the size of the recorded video file becomes.

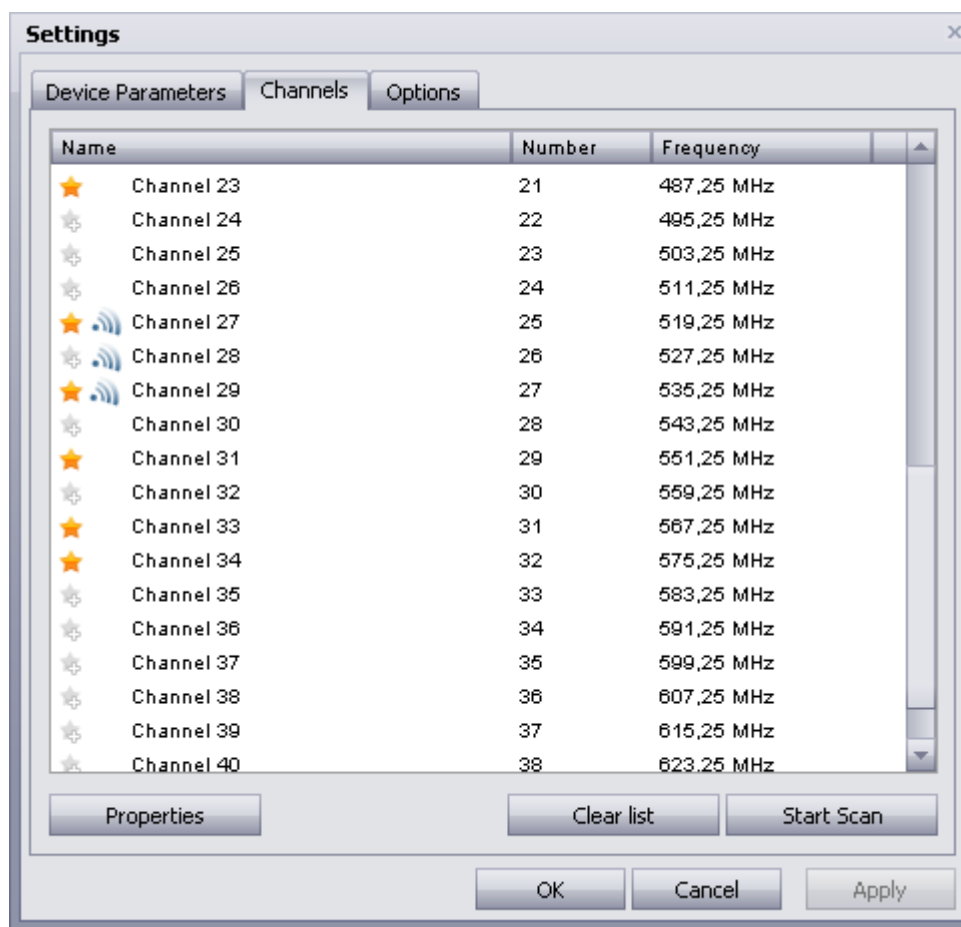
Note: please, make sure you know what you are doing, as in some cases the settings change can cause video quality degradation.


If you have no idea about what your antenna equipment information is, you should check the LNB frequency on your LNB user's guide or consult your antenna manufacturer for more information.

Click the **Apply** button to accept all the changes and continue work with **AVS TV Recorder** or **Cancel** to discard all the changes.

Channels Settings

Before you can start watching the channels you need to scan them. Please, open the **Channels** tab of the **Settings** window and click the **Start scan** button. The channels scanning process may take several minutes, please, wait till it completes to find all the available channels. Or click the **Stop scan** button to interrupt the process and continue later on, if the **Continue scan** option is set. To clear the list of the channels click the **Clear list** button, after that you can perform a new scan pressing the **Start scan** button. See the list of the scanned channels below:



After the tuner finds the channels you can select the necessary stations from the list of the present ones and add them to the favorites list. Click the gray star near the channel you want to add or click the channel itself with the right mouse button and select the **Add to favorites** option in the **express menu**. The channels already in the **Favorites list** will be marked with a yellow star ★ on the list in the settings window. The sign  means that the marked channel has a strong reception signal.

If you need to delete the channel from the **Favorites** list, click it with the right mouse button and select the **Remove from favorites** option in the **express menu** or click the yellow star ★ near the channel to delete once again.

Note: you can automatically add the channels with good signal to the favorites list during the channels scan. This option is set by default, you can disable this function in the **Options** tab of the **Settings** window.

In order to change the channels setting click the **Properties** button in the bottom of the window or select the **Properties** option in the channel **express menu**. The **Channel Properties** window appears.

- **Name** - you can see and change the name of the selected channel.
- **Video Device** - you can see the name and the model of the installed TV tuner.
- **Video Input** - you can see the used input jack on the tuner. The most common number of inputs are 1, 2, 4, 8, 16 and 32.
- **Video Source** - you can see the device used to receive or amplify the broadcast signal: antenna or cable.
- **Video Standard** - you can select the television display standard that is used in a particular part of the world. The most common standards are **PAL**, **NTSC**, **SECAM**.
- **Frequency** - the electromagnetic carrier waves upon which audio, video, or data signals is superimposed for transmission, measured in Hertz (Hz).

You have a possibility of fine tuning the selected channel using the up and down arrows or the slider below the **Frequency** field. Tune in the channel if the program could not find it due to, for instance, a weak signal.

Click the **OK** button to apply the adjusted frequency or **Default** button to set the default frequency of the channel.

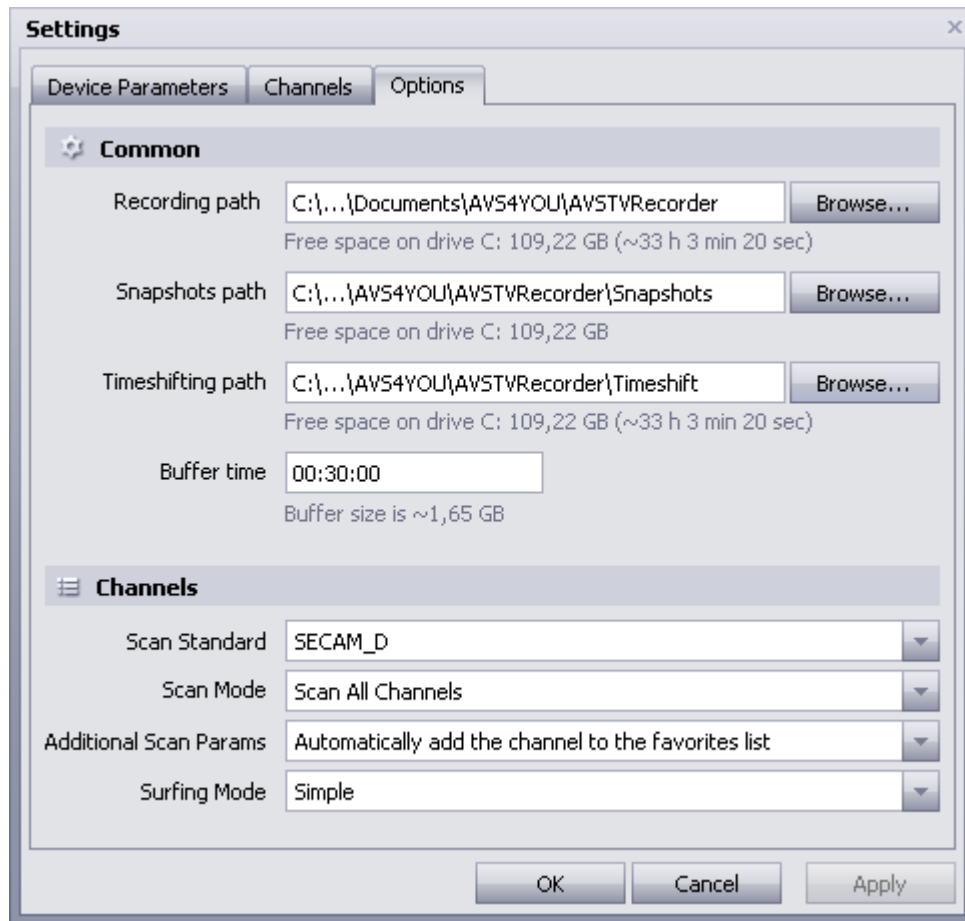
Click the **Apply** button to accept all the changes and continue work with **AVS TV Recorder** or **Cancel** to discard all the changes.

Other Options

In order to see or change some additional parameters open the **Options** tab of the **Settings** window.

It is divided in two parts:

- **Common settings** - allow you to set the directory-path where the recorded files and created snapshots are saved and to see the free space on the drive.
- **Channels settings** - allow you to set the additional channels parameters.



Common settings

- **Recording path** - the directory where the recorded video files are saved. The default directory is **Local disk:\...\Documents\AVS4YOU\AVSTVRecorder**, you can change the path and select your own folder to save the recorded files clicking the **Browse** button.

Here you can also see the amount of available space on the selected disk drive and the maximum duration of the video file.


- **Snapshots path** - the directory where the created snapshots are saved. The default directory is **Local disk:\...\Documents\AVS4YOU\AVSTVRecorder\Snapshots**, you can change the path and select your own folder to save the recorded files clicking the **Browse** button.

Here you can also see the amount of available space on the selected disk drive.


- **Timeshifting path** - the directory where the temporary data files are saved. The default directory is **Local disc:\...\Documents\AVS4YOU\AVSTVRecorder\Timeshift**, you can change the path and select your own folder to save the recorded files clicking the **Browse** button.


Here you can also see the amount of available space on the selected disk drive and the maximum duration of the video file.

- **Buffer time** - the maximum duration of the video available for **timeshift recording** (measured in hours:minutes:seconds). You can change the time value and see how large the file size will be. We recommend that you set a time value so that the **buffer size** were 100-150 MB less than the available disk space.

 **Note:** the maximum **Buffer time** is **24 hours**. But when you set such a big value, make sure you don't exceed the amount of available disk space.

Channels settings

- **Scan Standard** - the video signal format used in a particular part of the world. If you need to change the existing standard, click the following button  and select the appropriate format in the dropdown list.

 **Note:** the number of available formats depends on the selected **Country** in the **Device Parameters** tab.

- **Scan Mode** - the channel scanning process. Choose what you want: to have a possibility to **Continue scan** after clicking the **Stop scan** button or **Scan All Channels** every time you click the **Start scan** button.
- **Additional Scan Parameters** - the supplementary parameters allow you to add the channels with good signal to the favorites list during the channels scan. To do this select **Automatically add the channel to the favorites list** or not use this option if **(none)** is selected.
- **Surfing Mode** - the type of browsing through the channels from the **Favorites** list. The available **Simple mode** shows several channels one by one every 5 seconds. When you want to continue watching one of the channels, just click the **Stop** button on the **player controls** panel.

Click the **Apply** button to accept all the changes and continue work with **AVS TV Recorder** or **Cancel** to discard all the changes.

Taking Snapshots

The **Snapshots** panel appears every time you click the **Snapshots** button on the **main controls panel**. Using this window you can create snapshots and control their quality.



You can use the following options to manage your snapshots:

	Take Snapshot	Use this button create a new snapshot and see it on the Snapshots panel.
	Delete	Use this button to remove the selected snapshots from the list.
	Clear	Use this button to remove all the snapshots from the list.

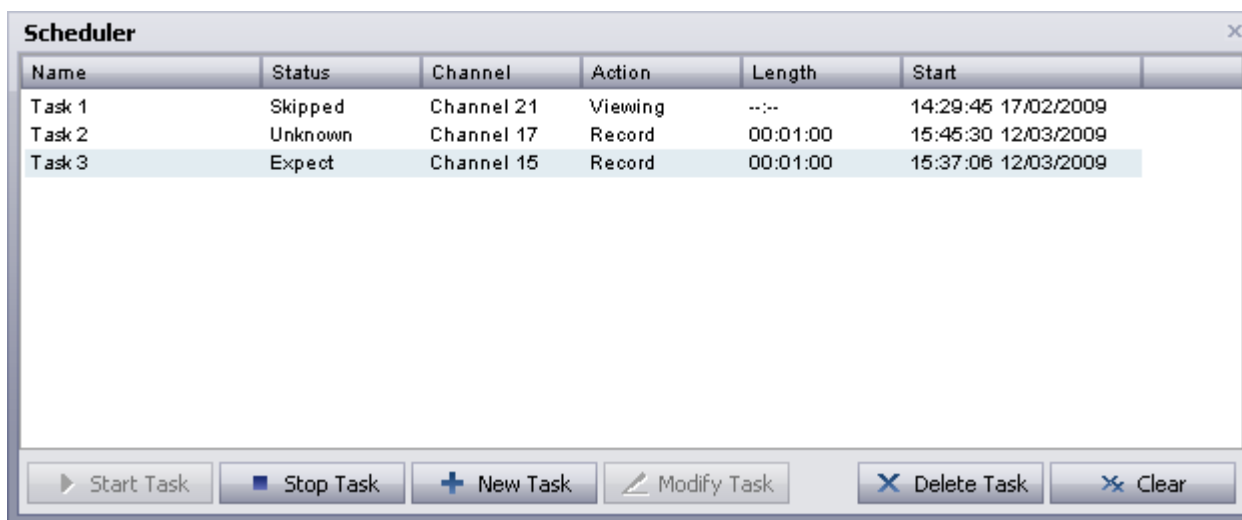
Note: you have an opportunity to take snapshots while the playing and recording video files, and even when the timeshifting function is active.

By default the name of the created image file will be **Snapshot_0000**, **Snapshot_0001** and so on. You can easily rename the selected snapshot. Click it with the right mouse button and choose the appropriate option in the **express menu**. All the image files have the **.bmp** (standard Windows bitmap file format) extension. If you double click one of the taken snapshots, it will be opened as a full-size image.

You can see all the created snapshots simultaneously using the **Find target...** option from the **express menu**. The opened window shows you the default directory where the image files are saved. If you need, you can **select another folder** for your pictures.

Using Scheduler

You can start recording the video clicking the appropriate button on the **Player controls** panel. But it's not very convenient if you need to record a program which starts in several hours. We advise you to use the **Scheduler Task** integrated in the program. Open it clicking the **Scheduler** button on the main controls panel. The **Scheduler** window looks like this:



There are six buttons in this window:

- Start Task** - Use this button to run the selected task
- Stop Task** - Use this button to stop running the current task
- New Task** - Use this button to add a new task to the scheduled tasks list
- Modify Task** - Use this button to change the parameters of the selected task
- Delete Task** - Use this button to remove the currently selected task from the list
- Clear** - Use this button to remove all the scheduled tasks from the list

The heading of the window consists of the following items:

- **Name** - the name of the scheduled task. By default will be Task 1, Task 2 and so on. You can rename the selected task choosing the appropriate option in the **express menu**.
- **Status** - current status of the scheduled task. A task can have the following status:
 - **Expect** - this status appears when you click the **Start Task** button, but the specified date and time are not reached.
 - **Executed** - this status appears while the task is performing.
 - **Unknown** - this status appears when the task has not been run, if the task is ready to be run, click the **Start Task** button.
 - **Skipped** - this status appears when the specified date and time have expired.
 - **Complete** - this status appears when the task is successfully performed.
- **Channel** - the channel used as the scheduled task source.
- **Action** - the action to be taken within the scheduled task.
- **Length** - the duration of the scheduled task in minutes.
- **Start** - the start time - date and time - of the scheduled task.

In order to add a new task, click the **New Task** button. The opened window allows you to program the following parameters:

- **Name** - the name of the new task. You can type a name for the scheduled task.
- **Channel** - the number/name of the channel used as the scheduled task source. You can select the appropriate channel from the dropdown list.



Note: the number of the available channels depends on the number of channels included in the favorites list.

- **Action** - the action to perform: **Program recording** to record the selected channel or **Viewing reminder** to change the channel at the specified time.

- **Time** - the time of the scheduled task. You can specify the time (hours:minutes:seconds) to start the task.
- **Date** - the date of the scheduled task. You can specify the date (day/month/year) to start the task.
- **Duration** - the length of the scheduled task, measured in hours:minutes:seconds.

Click the **Add** button to accept all the changes and create a new task or **Cancel** to discard all the changes and close the **Scheduled Task** window.



Note: if you want the program to perform some recording tasks, you should leave the program running and do not record any other channels manually, otherwise the tasks you set will be skipped.

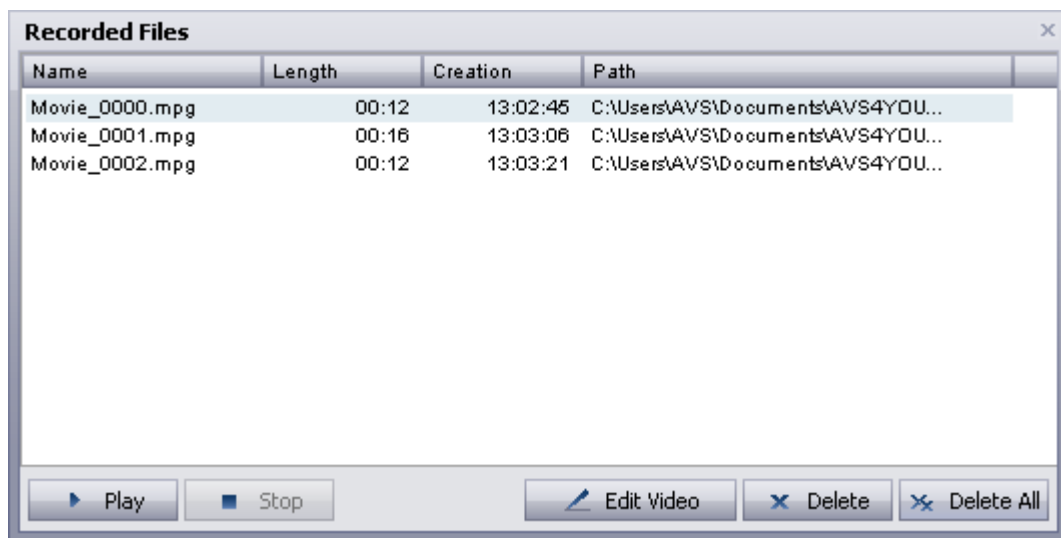
Recording and Playback Files

You can start recording the video just clicking the **Record** button on the main controls panel. After that the recording will start and you will be able to stop it pressing the **Stop** button or pause with the **appropriate button**.

Note: you cannot change the channels when the recording process is enabled.

Then you can watch the recorded file clicking the **Playback** button.

If you have already recorded several files it might be convenient to view the list of all of them at once and select the necessary one that you would like to playback. To open the recorded files window you need to press the **Show recorded files** button on the main controls panel.



After that you can do the following:

- Play** - Use this button to playback the recorded video files
- Stop** - Use this button to stop the recorded files playback
- Edit Video** - Use this button to edit the recorded files using **AVS Video Converter**
- Delete** - Use this button to remove the currently selected files from the list
- Delete All** - Use this button to remove all the files from the list and clear it

The heading of the window consists of the following items:

- Name** - The name of the recorded file as it is saved onto the computer hard disk drive
- Length** - The length of the video in this file
- Creation** - The time of the file creation
- Path** - The path to the file on your computer hard disk drive


The **Recorded Files** window has its own **express menu**.

Timeshift Option


Time shift is a non-linear recording and playback system. This option allows you to record a broadcast with the intention of watching it later at a more convenient time. Make sure you don't miss any part of the movie or show you watch, even if you should, for example, go away from your PC. This option helps you start watching the recorded program from the beginning even if the recording is not yet complete.


AVS TV Recorder allows you to use the **Timeshift** option in the following situations:

- In case you're interrupted while watching a movie.

Click the **Pause** button . You will have a fixed picture on the screen and timeshift recording will start automatically. To continue watching the movie, click the **Pause** button once again. If you need to stop the recording and watch the real-time broadcast video translation, click the **Stop** button.

- You would like to watch a news program but you are indisposed and can start to watch it half an hour later.

In order not to miss the beginning you start the timeshift recording at the beginning of the program clicking the **Timeshift** button . Then move the **Navigation slider** to the beginning of the progress bar and watch the program where you left off. To find the exact or interesting moment of the program, move the slider to the left or to the right searching for the desired scene. If you want to stop the recording and return to the live broadcast, click the **Stop** button.

 **Note:** the slider position is in direct proportion to the buffer capacity, so in the beginning you can see a long blue line which becomes shorter during the recording.

You can control the real-time video delay on the program **display**.

While the timeshift recording the program uses the free space on your hard drive to create and save the temporary data files. By default it allows you to record **30 minutes** of the broadcast video. When the available buffer size is used, the program overwrites the first parts of the recorded data. To set the **Buffer time** available for the timeshifting and adjust other parameters, open the **Settings** window and change the **Timeshift settings** in the **Options** tab.

 **Note:** you cannot change the channels when the timeshifting process is enabled.

Glossary

A

AAC

Advanced Audio Coding. Standardized, lossy compression and encoding scheme for digital audio. AAC is promoted as the successor to the MP3 format by MP3's creator, Fraunhofer IIS. Depending on the encoder used, AAC generally achieves better sound quality than MP3 at the same bitrate, particularly below 192 kbit/s. AAC's most famous usage is as the default audio format of Apple's iPhone, iPod, iTunes, and the format used for all iTunes Store audio (with extensions for proprietary Digital Rights Management (DRM) where used). AAC is also the standard audio format for Sony's PlayStation 3, the MPEG-4 video standard, and HE-AAC is part of digital radio standards like DAB+ and Digital Radio Mondiale.

ADPCM

Adaptive differential pulse-code modulation. A technique for converting sound or analog information to binary information (a string of 0's and 1's) by taking frequent samples of the sound and expressing the value of the sampled sound modulation in binary terms. ADPCM is used to send sound on fiber-optic long-distance lines as well as to store sound along with text, images, and code on a CD-ROM. This method of encoding sound data files takes up less storage space than the regular PCM format used by WAV and AIFF files--and CD audio for that matter. ADPCM comes in more than one flavor: IMA's ADPCM, for example, is used on the Sony Mini Disc to cram more data onto a smaller platter; Microsoft ADPCM is used as part of Windows 95's canon of audio codecs.

AMR

Adaptive Multi-Rate. An audio data compression scheme optimized for speech coding. AMR was adopted as the standard speech codec by 3GPP in October 1998 and is now widely used in GSM. It uses link adaptation to select from one of eight different bit rates based on link conditions. AMR is also a file format for storing spoken audio using the AMR codec. Many modern mobile telephone handsets will allow you to store short recordings in the AMR format, and some commercial programs exist to convert between this and other formats such as MP3, although it should be remembered that AMR is a speech format and is unlikely to give ideal results for other audio.

artifacts

Unusual or unwanted video distortion. Examples of artifacts include flicker, jitter, degradation of resolution, and aspect ratio abnormalities.

aspect ratio

The aspect ratio is the relationship of screen width to height. Standard broadcast TV has a ratio of 4 to 3. Widescreen commonly has a ratio of 16 to 9 (although 1.85:1 and 2.11:1 are also used). To show widescreen movies on a standard TV screen, either letterbox (with black bars above and below the image) or 'pan and scan' (which crops the movie to fit the screen) are common techniques.

audio feedback

A special kind of feedback which occurs when a sound loop exists between an audio input (for example, a microphone or guitar pickup) and an audio output (for example, a loudspeaker). In this example, a signal received by the microphone is amplified and passed out of the loudspeaker. The sound from the loudspeaker can then be received by the microphone again, amplified further, and then passed out through the loudspeaker again. This is a good example of positive feedback. The frequency of the resulting sound is determined by resonant frequencies in the microphone, amplifier, and loudspeaker, the acoustics of the room, the directional pick-up and emission patterns of the microphone and loudspeaker, and the distance between them.

AVI

Audio Video Interleave. The original Microsoft file format for Microsoft's Video for Windows standard. It is an audio video standard designed by Microsoft and is apparently proprietary and Microsoft Windows specific. It is a format developed for storing video and audio information. Files in this format have an .AVI extension. However, Video for Windows does not require any special hardware, making it the lowest common denominator for multimedia applications.

B

B-frames

Bidirectional frames - frames used in MPEG-4 format that are compressed based on the frames before and after them. Have the greatest compression ratio among all frame types. See **B-VOPs** codec settings section for more detail.

BD

Blu-ray Disc. A next-generation optical disc format meant for storage of high-definition video and high-density data. The Blu-ray standard was jointly developed by a group of leading consumer electronics and PC companies called the Blu-ray Disc Association (BDA), led by Sony and Philips. A single-layer Blu-ray disc (BD) can fit 23.3, 25, or 27 GB; this is enough for approximately four hours of high-definition video with audio. A dual-layer BD can fit 46.6, 50, or 54 GB, enough for approximately eight hours of HD video. Capacities of 100 GB and 200 GB, using four and eight layers respectively, are currently being researched; TDK has already announced a four-layer 100 GB disc.

bandwidth

A network's capacity for transferring an amount of data in a given time.

bidirectional frames

See **B-frames**.

bit rate

The number of bits transferred per second.

brightness

The value of a pixel along the black-white axis.

B-VOPs

An option that allows the codec algorithm to use so called bidirectional frames that are much smaller in size than usual frames and are predicted based on the frames before and after them.

C

capture

To record audio, video, or still images as digital data in a file.

capture device

Hardware that transfers audio and video from an external source, such as a VCR or camcorder, to a computer.

chapters

DVD discs can be split up into titles, and then further into chapters. For example, on a disc with multiple sporting events, each event may be designated as a separate title. Each period in the individual sporting event or title may be designated a chapter.

chroma motion

An algorithm that lets the codec detect motion in an advanced way and calculate the possibility to additionally compress the output file without the quality loss.

chroma optimizer

An algorithm used to produce a better impression of objects edges by reducing the noise around them.

clip

1. The audio, video, or still images within DVD discs. Clips are stored in collections.
2. The audio, video, or still images within **AVS Video Editor**.

clip creation

The process of detecting and splitting video content into separate clips.

codec

An abbreviation for COmpressor/DECompressor. Software or hardware used to compress and decompress digital media.

compression

A process for removing redundant data from a digital media file or stream to reduce its size or the bandwidth used.

content

Audio, video, images, text, or any other information that is contained in a digital media file or stream.

CSS

"Content Scramble System". The official DVD-Video digital encryption scheme.

D**data rate**

The speed of a data transfer process, usually expressed in kilobytes (thousands of bytes) per second. See also bit rate.

DC Bias (DC offset)

An offsetting of a signal from zero. The term originated in electronics, where it refers to a direct current voltage, but the concept has been extended to any representation of a waveform. DC offset is the mean amplitude of the waveform; if the mean amplitude is zero, there is no DC offset. DC offset is usually undesirable. For example, in audio processing, a sound that has DC offset will not be at its loudest possible volume when normalized (because the offset consumes headroom), and this problem can possibly extend to the mix as a whole, since a sound with DC offset and a sound without DC offset will have DC offset when mixed. It may also cause other artifacts depending on what is being done with the signal. DC offset can be reduced in real-time by a one-pole one-zero high-pass filter. When one already has the entire waveform, subtracting the mean amplitude from each sample will remove the offset if the offset is constant throughout the waveform. Otherwise, the high-pass filter should be used.

decode

The process of converting the data on a DVD into the video image on the screen.

decompress

Convert video and audio data from a compressed form back into its original form.

delta frames

See **P-frames**.

digital video (DV)

Video images and sound stored in a digital format.

to download

To transfer a file over a network in response to a request from the device that receives the data. Downloaded content is kept on the receiving device for playback on demand. In contrast, streamed content is played as it is delivered.

DVD

Digital Versatile Disc - an optical disc used to store information that has rather a large capacity as compared with usual CD's. Needs special DVD drive to read such a disc.

E**encode**

Convert video or audio into a compressed format.

F**FFT**

Fast Fourier transform. An efficient algorithm to compute the discrete Fourier transform (DFT) and its inverse. FFTs are of great importance to a wide variety of applications, from digital signal processing and solving partial differential equations to algorithms for quick multiplication of large integers. The discrete Fourier transform, occasionally called the finite Fourier transform, is a transform for Fourier analysis of finite-domain discrete-time signals. As with most Fourier analyses, it expresses an input function in terms of a sum of sinusoidal components by determining the amplitude and phase of each component. However, the DFT is distinguished by the fact that its input function is discrete and finite: the input to the DFT is a finite sequence of real or complex numbers, which makes the DFT ideal for processing information stored in computers. In particular, the DFT is widely employed in signal processing and related fields to analyze the frequencies contained in a sampled signal, to solve partial differential equations, and to perform other operations such as convolutions. The DFT can be computed efficiently in practice using a fast Fourier transform algorithm. Since FFT algorithms are so commonly employed to compute the DFT, the two terms are often used interchangeably in colloquial settings, although there is a clear distinction: "DFT" refers to a mathematical transformation, regardless of how it is computed, while "FFT" refers to any one of several efficient algorithms for

the DFT. This distinction is further blurred, however, by the synonym "finite Fourier transform" for the DFT, which apparently predates the term "fast Fourier transform" but has the same initialism.

frame

One of many sequential images that make up video.

frame drop ratio

The percentage of frames that don't have any important information and thus can be dropped.

frame rate

The number of video frames displayed per second. Higher frame rates generally produce smoother movement in the picture.

frame size

The number of pixels that form the video image (horizontally/vertically).

full motion video

Content that shows 30 (interlaced) or 24 (film content) frames per second.

G**gain**

A measure of the ability of a circuit to increase the amplitude or power of a signal. It is usually defined as the mean ratio of the signal output of a system to the signal input of the same system. It may also be defined as the decimal logarithm of the same ratio.

Thus, the term gain on its own is ambiguous. For example, 'a gain of five' may imply that either the voltage or the power is increased by a factor of five.

global motion compensation

An algorithm that helps while coding the objects that only change their size or place in the picture but keep static.

GSM

An open file format designed for telephony use in Europe, GSM is a very practical format for telephone quality voice. It makes a good compromise between file size and quality. Note that WAV files can also be encoded with the GSM codec.

H**HD DVD**

High-Definition Digital Versatile Disc or High-Density Digital Versatile Disc is a high-density optical disc format designed for the storage of data and high-definition video. HD DVD-ROM has a single-layer capacity of 15 GB, a dual-layer capacity of 30 GB, and a 51 GB single-sided triple-layer disc (which uses slightly bigger 17 GB layers), approved in September 2007 by the DVD Forum. However, the 51 GB spec is only a preliminary spec and compatibility with existing hardware is unknown at this time. HD DVD-R and HD DVD-RW has a single-layer capacity of 15 GB, a dual-layer capacity of 30 GB.

HDD

Hard disk drive.

highlight

Activate or focus menu or selection. When the cursor is moved over an option on a DVD menu, that menu often changes color. It is then "highlighted".

I**I-frames**

Also called intraframes or keyframes - frames with a very small compression ratio used to form the base of the video picture. See **B-VOPs** codec settings section for more detail.

import

The process of bringing existing digital audio, video, and still image files into **AVS Video Converter** or **AVS Video Editor** programs.

interframes

See **P-frames**.

intraframes

See **I-frames**.

J**jitter**

The smoothness of frame delivery over time.

K**keyframes**

See **I-frames**.

L**letterboxing**

The practice of transferring widescreen films to video formats while preserving the original aspect ratio.

LFO

Low-frequency oscillation. An audio signal usually below 20 Hz which creates a pulsating rhythm rather than an audible tone. LFO predominantly refers to an audio technique specifically used in the production of electronic music. The abbreviation is also very often used to refer to low-frequency oscillators themselves, which produce the effects explored in this article.

lumimasking

An algorithm used to apply more compression to very dark and very bright areas where it cannot be easily noticed by the human eye.

M**M4A**

M4A files are actually the audio layer of (non-video) MPEG-4 movies. M4A is slated to become the new standard for audio file compression. This format is also known as Apple Lossless, Apple Lossless Encoder, or ALE. It is a new codec designed to provide lossless encoding in less storage space.

matte (usually used in plural - mattes)

The masked-off areas above and below the picture area, used to maintain original aspect ratio when viewing video on the screen with a different aspect ratio.

max consecutive B-VOPs

Maximum number of sequential bidirectional frames in the video stream.

max key interval

Maximum number of delta frames (interframes) between two keyframes (intraframes).

motion search type

An algorithm that allows the codec to search for the motions in the movie and better compress them with a higher quality.

MOV

A file extension for QuickTime Video Clip. QuickTime is a video and animation system developed by Apple Computer. QuickTime is built into the Macintosh operating system and is used by most Mac applications that include video or animation. PCs can also run files in QuickTime format, but they require a special QuickTime driver. QuickTime supports most encoding formats, including Cinepak, JPEG, and MPEG. QuickTime is competing with a number of other standards, including AVI and ActiveMovie. For more information see the **Apple site** and their **Support page**.

movie file

The file created by combining the audio, video, and still images contained in your project.

MP+

A Musepack music format, a popular high quality lossy compression that offers higher audio quality than MP3. Nowadays Musepack audio files generally have the extension .mpc, but lots of files with the extension .mp+ still float around file sharing networks. Musepack is based on the MPEG-1 Audio Layer 2 standard (MP2), but includes many improvements. It is believed by audiophiles to be one of the highest quality lossy compressions available for music.

MP2

MPEG-1 Audio Layer II, sometimes Musicam. An audio codec defined by ISO/IEC 11172-3. An extension exists: MPEG-2 Layer II and is defined in ISO/IEC 13818-3. The file extension for files containing such audio data is usually .mp2. While it has largely been superseded by MP3 for PC and Internet applications, it remains a dominant standard for audio broadcasting as part of the DAB digital radio and DVB digital television standards. It is also used internally within the radio industry, for example in NPR's PRSS Content Depot programming distribution system.

MP3

MPEG-1 Audio Layer 3. An audio encoding format. It uses a lossy compression algorithm that is designed to greatly reduce the amount of data required to represent the audio recording, yet still sound like a faithful reproduction of the original uncompressed audio to most listeners. It was invented by a team of European engineers at Philips, CCETT (Centre commun d'etudes de television et telecommunications), IRT and Fraunhofer Society, who worked in the framework of the EUREKA 147 DAB digital radio research program, and it became an ISO/IEC standard in 1991. MP3 is an audio-specific format. The compression removes certain parts of sound that are outside the normal human hearing range so cannot be heard by the listener. It provides a representation of pulse-code modulation — encoded audio in much less space than straightforward methods, by using psychoacoustic models to discard components less audible to human hearing, and recording the remaining information in an efficient manner. Using MP3-compression PC-users were able to compress an ordinary music-CD to one tenth of its original size - thus 12 hours of music could be stored on a recordable CD that on the other hand could be played by a MP3-CD-player or an ordinary PC.

MPEG

Moving Picture Experts Group. Gives excellent compression with little loss in quality of the video. MPEG supports three types of data - video, audio and streaming. There are a number of standards: among them there are two flavors of MPEG available today. MPEG-1 was designed to provide VHS video quality and CD audio quality at a combined data rate of 150 kilobytes per second. MPEG-1 is displayed at 30 frames per second in a frame that is 352x240 (horizontal x vertical) pixels in size. This allows relatively high quality video images to be stored in relatively small file sizes for playback across computer networks or CD-ROM delivery. MPEG-2 is the other side of the compression coin. It is a broadcast standard specifying a playback size of 720 x 480 pixels at 60 fields per second. Data rates can range from 2 to 10 megabits per second. This means large file sizes and data rates that require specialized hardware for playback. MPEG-2 is one of the core compression technologies for DVD. See the **MPEG site** for more information.

MPEG-4

ISO/IEC open standard for video encoding developed by MPEG (Moving Picture Experts Group). It is characterized by a small output video file size and quite good picture quality even when a relatively low bit rate is used. The most known resulting output when you use MPEG-4 format for compression is the AVI file type which is commonly used in home video. It is coded with Xvid, DivX, 3ivx, Nero Digital and other video codecs. Other file types can be found in the **output file format** section.

MSC

Devices that represent USB Mass Storage Device Class (MSC or **UMS**) are seen as a removable drive in the system and some of them as a fixed drive.

MTP

Devices representing USB MTP device class use Media Transfer Protocol (MTP) supported by Microsoft Windows Media Player 10 and 11.

multimedia

Any format that contains more than one media, such as text, still images, sound, animation, and video.

N

navigation

Accessing the features of a DVD-Video disc.

NTSC

National Television Systems Committee. A committee of the Electronic Industries Association that prepared the standards for commercial television broadcasting in the United States, Canada, Japan, and parts of Central and South America. The NTSC format has 525 scan lines (rows) of resolution at frame rate of thirty frames per second.

O

OGG

An open standard for a free container format for digital multimedia, unrestricted by software patents and designed for efficient streaming and manipulation. The development of the OGG standard began in 1993, then known as "Squish". It was designed as a substitute for MP3 and WMA and by now it is almost as popular and well known as MP3. Above all, the algorithm is still being developed what is mainly due to its flexibility. Although the sound-quality gets better with every further development the files are backwards compatible and can be played with older players as well. Like MP3 OGG offers encoding at variable bitrates. Using this compression parts of the song are encoded with a higher compression than others what depends on the source. Most times, this compression goes along with squishy noises or even small interruptions. OGG is also one of the very few formats that support multi-channel compression. Surround-files could theoretically be compressed with more than two channels. OGG is, like it's predecessors, streamable and although the used player has to support this feature, it's one of many good reasons for OGG.

output file

The file that is a result of conversion of a source file.

P

P-frames

Delta frames or interframes - frames used in MPEG-4 format to increase the compression ratio. A row of P-frames is placed between two **I-frames** - thus the name interframes was given. See **B-VOPs** codec settings section for more detail.

PAL

Phase Alteration Line. This standard is used for commercial broadcasting in most of Europe, Australia, and parts of Central and South America. PAL format displays at 625 scan lines (rows) of resolution at frame rate of 25 frames per second.

pillow boxing

The practice of transferring films having aspect ratio of 1.33:1 to wide screens while preserving the original aspect ratio.

pitch

The perceived fundamental frequency of a sound. While the actual fundamental frequency can be precisely determined through physical measurement, it may differ from the perceived pitch because of overtones, or partials, in the sound. The human auditory perception system may also have trouble distinguishing frequency differences between notes under certain circumstances. According to ANSI acoustical terminology, it is the auditory attribute of sound according to which sounds can be ordered on a scale from low to high.

pixel

Picture cell. This is the smallest independent unit of a digital image; similar to each dot on your monitor.

pixel depth

The number of bits of color information per pixel.

player

A program or device that displays multimedia content, typically animated images, video, and audio.

project file

The file created when you save the results of adding various clips to the workspace when you work with **AVS Video Editor**. This file is saved with an .vep extension.

Q

QT

Apple Quick Time format for audio/video data.

quantizer

Detail removal factor (DRF), or the degree of picture blur due to details reduction. Used to allow picture compression.

quantizer offset

The offset used to calculate frames quantizer.

quantizer ratio

The ratio used to calculate frames quantizer.

R**to record**

To capture audio, video, or still images as digital data in a file.

regional coding

Region code - the software protection used on DVD discs to prevent unauthorized playback of the discs made in one country to be played in another country.

Most DVD-ROM drives let you change the region code a few times, usually between 0 and 5. Once a drive has reached the limit it can't be changed again unless the vendor or manufacturer resets the drive. This limitation cannot be overridden.

There are 7 regions: (1) Canada, U.S., US Territories; (2) Europe, Japan, South Africa, Middle East (including Egypt); (3) Southeast Asia, East Asia (including Hong Kong); (4) Australia, New Zealand, Pacific Islands, Central America, Mexico, South America, Caribbean; (5) Former Soviet Union, Indian Subcontinent, Africa (also North Korea, Mongolia); (6) China and (7) Transcontinental - used for watching DVD movies onboard the planes, ships and so forth.

resolution

See **Frame size**

RGB model

Color spectrum represented by mixing red, green, and blue (RGB) colored light in various proportions and intensities.

RM

Real Media streaming format for audio/video data. RealMedia provides one of the oldest and most widespread (85% of all web-accessing computers have RealPlayer installed) Web delivery formats. The RealMedia files (.rm) can be viewed using RealPlayer 3 and above. For more information see the **RealNetworks site** and their **user information site**.

root-mean-square

Abbreviated RMS or rms, also known as the quadratic mean, is a statistical measure of the magnitude of a varying quantity. It is especially useful when variates are positive and negative, e.g. waves. It can be calculated for a series of discrete values or for a continuously varying function. The name comes from the fact that it is the square root of the mean of the squares of the values.

S**source**

Audio and video content that can be captured and encoded from devices installed on your computer or from a file.

split

The process of dividing an audio or video clip into two parts.

still image

A graphic file, such as a .bmp, .gif, or .jpg.

storyboard

A view of the workspace that focuses on the sequencing of your clips (used in **AVS Video Editor**).

subtitle

Subtitles show the words being spoken on top of video content. They are often used for language translations.

SWF

Macromedia/Adobe Flash format, used to create video files that can be easily placed to your home page as they use not too much space and are supported by most browsers (in case the necessary plugin is installed). See the **Adobe web site** for more info on this format.

T

timeline

1. The area of the user interface that shows the timing and arrangement of files that make up a media file.
2. A view of the workspace that focuses on the timing of your clips.

titles

Video programs can be split up into titles, and then further into **chapters**. A good example of titles is when a DVD contains a movie (one title), the trailer for the movie (a second title), and biographies of the actors (a third title), all on the same disc.

transition

The method of smoothly moving from one video clip or photo to another.

trim

Hiding parts of a file or clip without deleting them from the original source. Files and clips can be trimmed by adjusting the start or end trim points. Used in **AVS Video Editor**.

U

UMS

Devices that represent USB Mass Storage Device Class (**MSC** or UMS) are seen as a removable drive in the system and some of them as a fixed drive.

V

VBR

Variable bit rate. This allows DVD compression methods to use more or less compression according to the complexity of the picture.

VHQ Mode

An algorithm that decides which format will be used to store motion vectors thus reducing the file size.

VOB

DVD video movie file. DVD is the new generation of optical disc storage technology. DVD is essentially a bigger, faster CD that can hold cinema-like video, better-than-CD audio, still photos, and computer data. DVD aims to encompass home entertainment, computers, and business information with a single digital format. It has replaced laserdisc, is well on the way to replacing videotape and video game cartridges, and could eventually replace audio CD and CD-ROM. DVD has widespread support from all major electronics companies, all major computer hardware companies, and all major movie and music studios.

VOX

Dialogic ADPCM. An open file format optimized for storing digitized voice data at a low sampling rate. VOX files are most commonly found in telephony applications, as well as an occasional arcade redemption game. Similar to other ADPCM formats, it compresses to 4-bits. Unlike a WAV file, a VOX file does not contain a header to specify the encoding format or the sampling rate, so this information must be known in order to play the file. If not known, it is normally assumed that a VOX file is encoded with Dialogic ADPCM at a sampling rate of 8000Hz. It is possible that a VOX file may be encoded in a format other than Dialogic ADPCM, but this is not common.

W

WAV/WAVE

Short for Waveform audio format, a Microsoft and IBM audio file format standard for storing audio on PCs. It is a variant of the RIFF bitstream format method for storing data in "chunks", and thus also close to the IFF and the AIFF format used on Amiga and Macintosh computers, respectively. It is the main format used on Windows systems for raw audio.

widescreen

Most TVs display in 4:3 ratio. Widescreen display shows you the same ratio that is used for movies, which is frequently 16:9. If the title is being shown on a widescreen TV it can be shown in its original aspect ratio without the display of the black bars above and below the image.

Windows Media file

A file containing audio, video, or script data that is stored in Windows Media Format. Depending on their content and purpose, Windows Media files use a variety of file name extensions, such as: .wma, .wme, .wms, .wmv, .wmx, .wmz, or .wvx.

WMA

Windows Media Audio, an audio data compression technology developed by Microsoft. The name can be used to refer to its audio file format or its audio codecs. It is a proprietary technology which forms part of the Windows Media framework. WMA consists of four distinct codecs. The original WMA codec, known simply as WMA, was conceived as a competitor to the popular MP3 and RealAudio codecs. It is the second most popular audio codec after MP3, based on the number of supported devices researched by Jupiter Research. WMA Pro, a newer and more advanced codec, supports multichannel and high resolution audio. A lossless codec, WMA Lossless, compresses audio data without loss of audio fidelity. And WMA Voice, targeted at voice content, applies compression using a range of low bit rates.

WMV

Windows Media Video, Microsoft's new standard for audio and video which is closely tied with the Windows Operating System. The player is able to play Windows Media Video (.wmv) and Advanced Streaming Format (.asf) files, and also other formats such as QuickTime, AVI, MPEG and MP3. See the **Windows Media site** for more information.

workspace

The area of **AVS Video Editor** in which you create your movies. It consists of two views: storyboard and timeline, which act as a container for work in progress.