



SolveigMultimedia

software that works

HyperCam 4

User Guide

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Solveig Multimedia,
Razvitiya ave. 3,
634055, Tomsk,
Russian Federation
www.solveigmm.com

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HyperCam Overview

HyperCam captures the action from your Windows screen and saves it as a standard, easily edited AVI (Audio-Video Interleaved), WMV / ASF (Advanced Systems Format) or MP4 movie file. These formats can be played under Windows, as well as the Internet, while other programs use proprietary formats that may need special viewers and be difficult, if not impossible, to edit. **HyperCam** lets you define the precise area of the screen you want to capture, unlike MS Camcorder and others that record the entire screen.

These files can be useful as teaching tools, to demonstrate software, as a start for animation, and for many other purposes. This easy-to-learn, flexible system will have you making your first screen movie in no time at all.

Features include:

- recording screen activities to AVI, WMV/ASF, MP4 files
- system-wide hot keys to start, pause, stop recording and to snap single frames
- easy precision visual screen area or window selection
- unique panning mode allowing the record area to follow the mouse pointer
- multiple video compression options
- optional popup text annotations in your movies
- optional sound with recording quality options
- capture in any screen color depth
- automatically incremented filenames for captures
- automatically generated filenames
- frame rate, compression, and key frame options
- convenient, customizable hot keys, including 'record/pause'
- integrated playback buttons
- optionally recorded mouse pointer, the true shape of the cursor is recorded
- optional mouse click starbursts with custom size, color and duration
- optionally recorded mouse click sound
- command line support
- Windows media codec support
- portable installation mode for the program to run from removable devices

See new features in [What's new in HyperCam 4](#).

The [Quick Start](#) topic is included so you can make your first screen movie in a matter of minutes. Each of the tabbed options is generally self-explanatory, but short explanations and performance tips in this document will undoubtedly make your experience with **HyperCam** a far more rewarding one.

What's new in HyperCam 4

The new version of the famous HyperCam utility has been developed by Solveig Multimedia and Hyperionics LLC in cooperation. The main features of the new version are as follows:

Version 4 new features:

- Recording of screen actions in MP4 format with standard codecs (AVC for video and AAC for audio)
- editing recorded AVI, WMV, ASF, MP4 files with HyperCam Media Editor with frame accuracy

Other programs features:

- user-friendly interface supporting skins
- capturing video in the overlay mode
- capturing audio from different inputs
- multiple audio compression options
- Windows media encoder support
- portable installation mode for the program to run from removable devices
- controlling recording via convenient HyperCam Toolbar in the system tray*

*Note: HyperCam Toolbar requires InternetExplorer 7.0 or above

Quick Start

For the purposes of this introduction, we will be using HyperCam's default values, and basic settings. Later, you will discover the flexibility and ease of use that HyperCam's options offer you.

- Start HyperCam, so it has to arise.



- From the Record tab, click on Region, and use your cursor to outline a small capture area. Its size and positions are interactively displayed in according controls. Click to confirm the size and position of your capture, and place your mouse cursor in the area.



- Press F2 (the default start/pause hot key) to begin recording or just Big red button. The HyperCam window will temporarily disappear transforming to HyperCam Toolbar to allow the capture.



- Move your cursor within the capture area, and then, after a few seconds, click F3 (the default Stop hot key) to end the capture.
- Congratulations, you have just made your first movie! It's that simple.
- Now, the file name should arise in Recent records section, where you can play, edit, browse or delete it.



Next, take the a few minutes to browse this brief help file, using the browse sequence buttons above. The knowledge and tips you will gain will make it worth your small investment in time enabling you to get the best results in the shortest possible time.

Screen Area. Recording Section

There are three methods for selecting the initial screen area for recording.

You can select your capture area graphically from the screen. A click on the Region button makes a convenient, movable and resizable rectangle appear on the screen. Use the mouse pointer or the arrow buttons to position and anchor one point of the area and then resize the window the way you need it. Note that the image size and coordinates are interactively displayed in the corresponding fields. A click on the **Fullscreen** button selects the entire screen.



When you click **the Window - Select Window** button, you can move the mouse pointer around the screen to select various screen objects such as windows, window areas, buttons, etc. These specific areas will be highlighted as the pointer moves over them. Click the left mouse button to accept the highlighted area or the right button to cancel the selection.

You can select a particular window in the Select Window combo box that contains the titles of all open windows.



You can also directly enter the StartX and StartY coordinates along with the width and height in pixels to precisely define your capture area or adjust the selected capture area.

Recording and Playing AVI, WMV, ASF or MP4 Files

After setting all the parameters for your file, defining the screen area that you want to record, and noting all the hot key assignments, you are ready to start recording. You may start recording immediately by clicking the Record (big red) button or pressing the start hot key (F2 by default). You can also start in the paused mode (you will see the blinking frame marking the area to be recorded) and pan the capture area without beginning to record. To start in the paused mode, click the Record and then Pause buttons or press the corresponding hot key (F2 by default). Then, unpauses it when ready by pressing the pause hot key (F2 if you have not changed it) again.

Once you start recording, you will see a blinking rectangle on your monitor. Everything within this rectangle, including your mouse pointer movements, will be recorded. You can also speak into your microphone and record the sound. The blinking rectangle in which the recording is taking place can be moved (see [Pan Lock in Hot Keys](#)). You can temporarily pause recording by pressing the Pause hot key (F2 by default) and then prepare the program being recorded or move the rectangle. When ready to resume recording, press the same Pause or Resume hot key again. Finally, you can stop recording by pressing the Stop hot key (F3 by default).

If you leave HyperCam open or minimize it to HyperCam Bar, you can also use the HyperCam buttons to start/stop and pause/resume recording.



As soon as you finish the recording session, the thumbnails of the new file should appear in the Recent Record area. Whenever you need to play, edit, delete or browse any record, just select it and push the corresponding button.



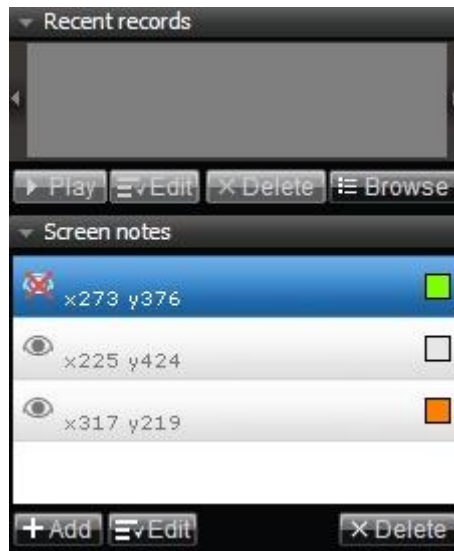
However, HyperCam does not play the file itself, it makes Windows play it for you instead using the default player installed on your system.

A click on the Edit button opens the saved file in HyperCam Media Editor that will help you to trim, join and separate the video and audio streams of your file.

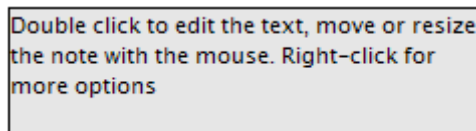


Screen Notes feature

The Screen Notes feature of HyperCam allows you to annotate your movies with pop-up text boxes while recording. To start using this feature, click the **Add** button in the **Screen Notes** section.



A small note window will appear in the middle of the screen. Initially the text in it is a short instruction on how to edit this note similar to this:



Editing a screen note

To edit the text inside the note window, double-click the note box. The entire text becomes selected and you can start typing new text at once. To finish editing, just click the left mouse button anywhere outside of the note box or press the Escape keyboard button.

To move the note box around the screen, just move the mouse pointer over it, press and hold the left mouse button and move the mouse. The note box will move with the mouse pointer, its coordinates will be shown in the Screen notes section. You can place it over the screen area you intend to record next.

To resize the note box, move the mouse pointer to the corner of the box, press and hold the left mouse button and move the mouse.

To change the font, colors and frame of the note, right-click in the middle of the note box and select [Settings](#) from the pop-up menu or click the Edit button after selecting the corresponding note in the Screen Notes section. It will open the Screen Notes Setup dialog box where you can customize the note appearance and properties.

Screen Note menu

The screen note menu appears when you click the right mouse button on any note box. This menu allows you to create and delete notes, hide or show existing notes, and save/load notes to/from a file.

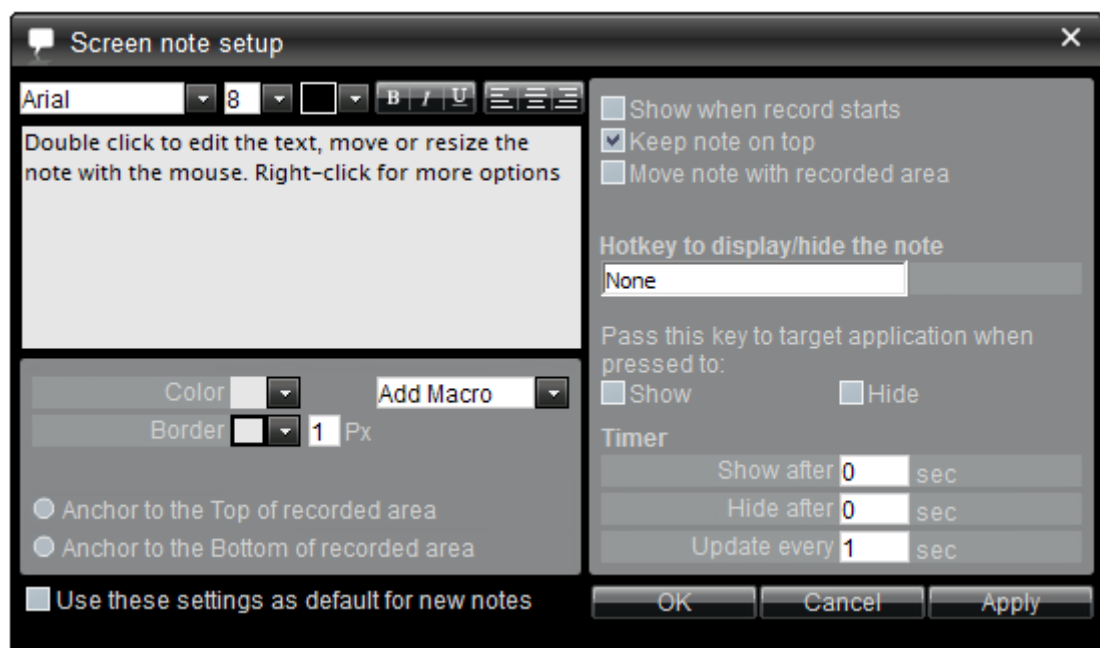
Using Screen Notes to annotate movies

You can prepare a number of notes in advance and hide them or make the notes on the fly during the recording session. Whenever you need a new note to appear, please pause recording (press the F2 hot key unless you have changed it to something else). Now create a new note by right-clicking the HyperCam button on the Windows taskbar or by right-clicking any existing and visible note. Edit the text and position of the note over the recorded area and press F2 again to resume recording.

If you need to remove this note, or reposition it, or change its text, press F2 again to pause recording, make any necessary changes in the note and press F2 to resume recording.

Screen Note Setup dialog box

In this dialog box, you can change the text and appearance of a [screen note](#) - set the width and color of its frame or even completely hide the frame, change the background color, select the font face, size and color and more.



The changes you make in the **Note Setting** dialog box become visible in the note box after you click the **OK** or **Apply** button.

The buttons above the note text box control the appearance of the note – its text font, size, color, style and alignment.

The settings to the right from the note text box define the note behavior.

By default, new note boxes have the Keep note on top option selected. This prevents the note box from being covered by other windows. You can disable this option using the Keep note on top checkbox.

If you pan the area being recorded, you may want your note box to move with it so that it appears as if it does not move in your movie. You can enable the Move note with recorded area option for that.

You can assign the hot key that will show and hide the note. To select such a hot key or a combination of keys, click in the white box next to the Hot key to display/hide note: label, and press the key or key combination. The combination may be any regular key pressed together with the Shift, Control or Alt keys. Normally, if HyperCam intercepts a hot key that activates or hides a note, this key will not be passed to the target application. However, you may decide otherwise by selecting one of the options below the hot key box. Example: suppose you are recording a program that opens the Help window after the F1 key is pressed. You can create a small note that says "F1 pressed"

and place it in the corner of your recorded frame. Also select the "Pass this key to target application when pressed to: Hide note" option. Now start recording and press the F1 key, the Help windows does not appear, instead our note saying "F1 pressed" shows up. Now press F1 again, the note disappears and the Help window of the target application appears.

You can set the timer to automatically hide the note after some time or update its text (for example, insert the %time% macro into the note text and make it update every second to have a digital clock on the note). The "Timer"=>"Update Every" option allows you to do that. You can use decimal fractions for timers shorter than 1 second, e.g. 0.5 second will make the timer act every half a second or 500 ms.

The settings below the note text box include its background color, border size and color, macros insertion and note alignment anchors.

The Insert Macro drop-down box allows you to insert a macro that is replaced later with the current date, time, the actual keys you press, the username or the recorded AVI filename and path. For example, the %key% macro will be replaced in the note text with the actual keys pressed at the time the note text is updated, such as "Ctrl+Shift+W". To have keys updated whenever you press them and cleared when you do not type, you also need to enable the timer described above.

You can also align the note exactly to the top or bottom of your video frame by selecting one of the Anchor radio boxes.

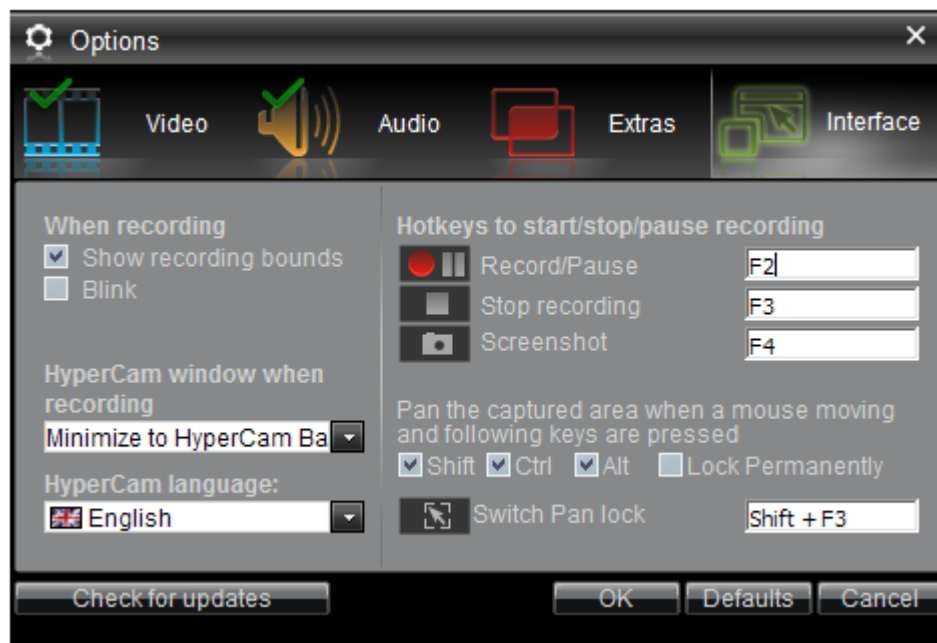
You can use the font, color and other settings of the current note as defaults for creating new notes. Select the Use these settings as defaults for new notes checkbox to do it.

Interface Options

HyperCam uses four system-wide hot keys:

- to **start, pause** recording temporarily and **resume** it again after a while (the default is F2)
- to **stop** recording the AVI, WMV, ASF or MP4 file (the default is F3)
- to **snap single frames** and save them to the BMP file while HyperCam is in the Pause mode (the default is F4)
- to switch between the **Pan Lock** mode (see the explanation below).

To redefine the hot keys, simply click inside the corresponding input box and press the key combination you want to use for the selected function. For example, if you want this key combination to be Shift+F9, please hold down the Shift key and press the F9 function key.



With the **Screenshot** hot key (F4 by default), you can make HyperCam capture and save single frames to a BMP file at the exact moments you need. Just start HyperCam, select the region and no matter which mode is on (start/resume/pause or stop), exactly one frame will be snapped and saved to a BMP file after you press this hot key.

Pan Lock

This special [HyperCam](#) feature causes the defined screen area to move along with the movement of the mouse pointer. It can be very useful in some cases to keep the size of your AVI, WMV, ASF or MP4 file down and yet to cover more screen area.

The area that is recorded to a screen movie can also be moved without using the *Pan Lock* hot key. You can select any combination of the modifier keys (Shift, Ctrl and Alt), which (when held) will cause the record frame to follow the mouse pointer movements. If you select the *Lock permanently* checkbox, the area will be moved without any modifier keys held down. This mode may be also toggled on and off using the *Switch Pan Lock* hot key during recording.

Results can be a bit disorienting if you do not use proper techniques so we suggest you experiment with this often useful mode.

The **When Recording** buttons determine if the rectangle should be shown around the recorded area or not, and what happens to the HyperCam window when you start recording. It may be left in place, iconized to the task bar, or completely hidden.

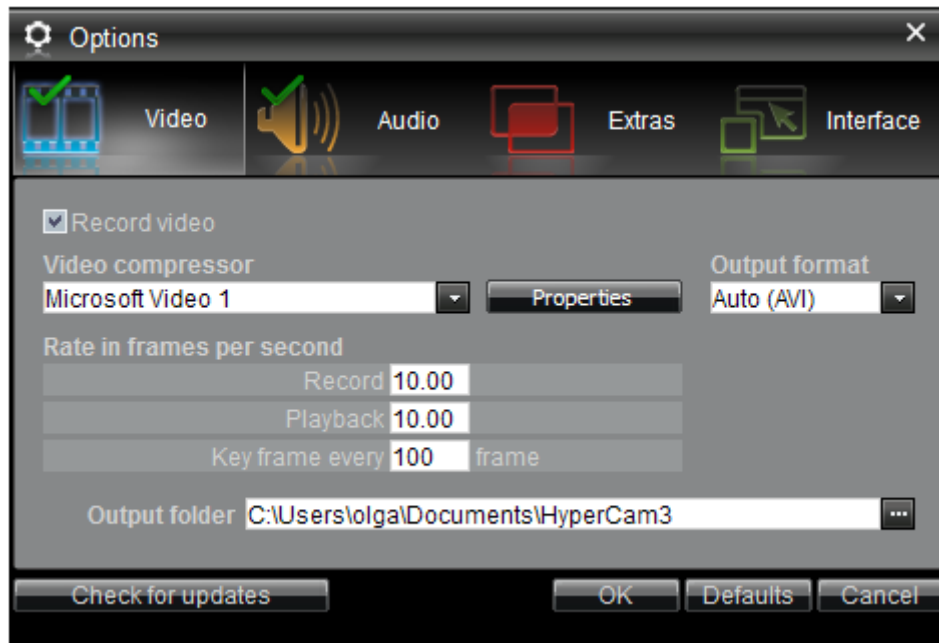
Please note that you should know the hot key to stop recording the screen movie if you iconize or hide the window, or you may find it difficult to stop recording it. Click the Hot Keys tab in HyperCam to find out (and change if necessary) the hot key assignments.

The **Defaults** button may be used to reset all the options (record area, hot keys, Audio - Video parameters, etc.) to their default values. [HyperCam](#) remembers all custom parameters that you set even if you exit and restart it later.

Video Options

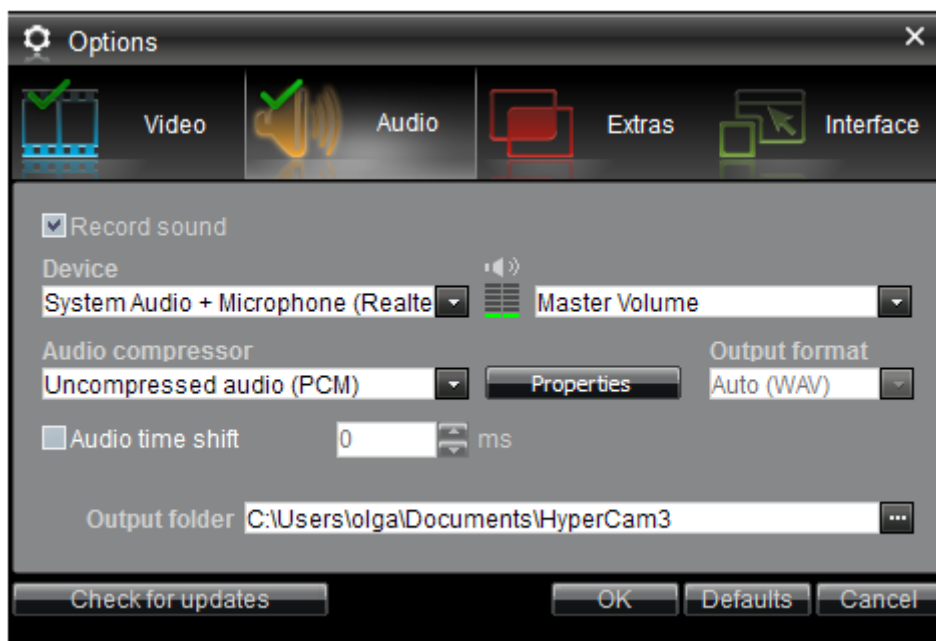
This option tab allows you to specify some parameters of the screen movie file that you record with [HyperCam](#):

- The **Video Compressor** drop-down list allows you to select the CODEC, which is the program that will compress your pictures to make screen movie files smaller and enable them to be played faster. We recommend that you use the default Microsoft Video 1 compression for all high color modes and no compression for 4-bit color. Please note that if you want to record a screen movie in the True Color mode (24 or 32 bits), the default MS Video 1 compressor will still write them as 16-color bitmaps losing some of the color resolution. You may try the "Uncompressed Video" option to actually record 24-bit bitmaps or experiment with some other video compressors that are installed on your system. To record 16 bits per pixel (65536-color mode), you could try using the Intel Indeo codec in the *Quick Compress* mode, which will be about 10-20% faster in compressing than the default MS Video 1 option.
- The **Properties** button is available for some codecs, which allows you to configure additional parameters specific to the particular codec. E.g. for Intel Indeo you can select there *Quick Compress* or regular compression, numeric password protection for the file you create, etc.
- The **Output Format** drop-down list allows you to select the video file format that describes how the movie data and metadata are stored. Each codec can be used with several formats and there are codecs being incompatible with some formats. We recommend that you select the auto mode. In this case [HyperCam](#) will use the AVI file format if possible, the WMV format for Windows media video codecs and the ASF format if the selected codec is not compatible with the formats above. Since version 4 you can also select MP4 as the output file format (for it there will be selected the AVC codec for video and AAC codec for audio).
- The **Rate in Frames per Second** options allows you to specify how many movie frames per second will be recorded. If you enter a number that is too large and your computer is not fast enough to capture and compress them, [HyperCam](#) will drop some frames or stop completely and inform you about the error. Please see [Performance Tips](#) for some advice on what to do in such situations. You can also specify a different playback rate. For example, you could record 5 frames per second, but have the movie played at 10 fps. If you do this, the **Record Sound** checkbox becomes cleared and unavailable because any recorded sound would be played at twice the normal speed.
- The **Key frame every [] frames** option determines how often full frames are written to the AVI, WMV, ASF or MP4 file. Frames between them can only have differences between the current and preceding frame. Higher values can help you achieve slightly better frame rates, but they can also make it difficult to edit your screen movie file in the video editor later.
- You can change the **Output folder** if you enter the output file location you prefer. The filenames being created by [HyperCam](#) consist of the creation date, time and resolution. For example, the 2009_11_30_20_35_43_968x388.AVI file was created on 2009.11.30 at 20:35:43 with the 968x388 resolution. You can also click the "Browse" button to select the folder.



Audio Options

- The **Record Sound** checkbox enables or disables recording from your system microphone or other sound input. Please note that when you record sound on some systems, you will not hear the sounds normally produced by your computer and the running programs. This is due to the fact that most sound cards and their drivers work in the half-duplex mode meaning that they can either record or play sounds, but not both at the same time.
- The **Device** option allow you to select the audio device to grab sound from. It can be your internal or external sound card or a webcam with a microphone.
- The **Source** option enumerates all capture channels available from the sound card driver. E.g. with the **Stereo Mix** option enabled, HyperCam should grab the same audio that can be heard through the speakers.
- The **Audio Compressor** drop-down list allows you to select a CODEC, which is the program that will compress your audio to make AVI, WMV, ASF or MP4 files. The default value is uncompressed – PCM audio.
- The **Properties** button is available for some codecs, which allows you to configure additional parameters such as Sample Rate, Sample Size, Bitrate, Mono/Stereo.
- If the resulting video file is out of sync, you can use the **Audio time shift** option. The time is specified in milliseconds. If the sound is behind the video, you should specify a negative value. If the sound is ahead of the video, you should specify a positive value.

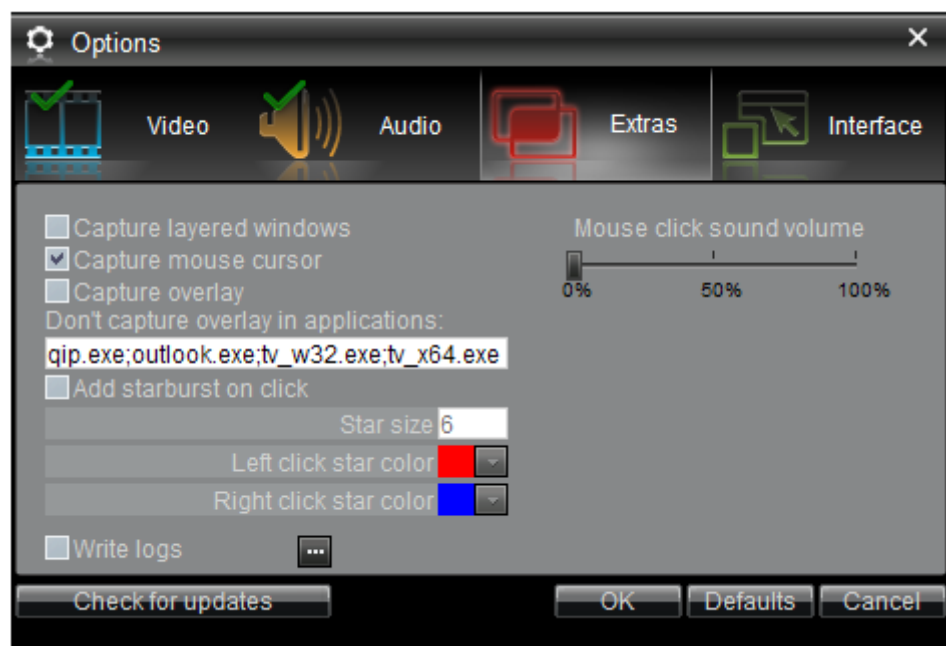


Extras Options

The Extras tab in [HyperCam](#) allows you to modify additional recording parameters, such as whether to record the mouse pointer or starbursts on mouse clicks, their size and color. Here you can also enable recording the sound of mouse clicks. Just move the slider to a position different from 0. Mouse click sounds will be recorded only if you also enable the **Record Sound** option on the **Audio** tab.

The **Capture layered windows** option allows you to capture things like Office Assistant in Word or semi-transparent windows in Windows 2000 or XP. This option may slow down the capture performance so enable it only when necessary.

The **Capture overlay** option allows recording of the screen area from some video players and other applications.



Performance Tips

If your machine is not fast enough to record as many frames per second as you specified, **HyperCam** will try to drop some frames and keep up with as many as possible. However, if it detects that more than 50% of the frames must be dropped, it will stop with an error message. What can you do to increase the fps rate?

- Consider using a smaller value in the **Rate in Frame per Second** option than the one currently specified.
- Try recording your AVI, WMV, ASF or MP4 file to the fastest hard disk you have available.
- Try increasing the Key frame value on the Video tab higher, it can help a little in improving the fps rate.
- Consider recording a smaller picture to achieve higher frame rate for your movies. You could make a good use of the HyperCam pan feature to make up for the lower size of your picture.
- Finally, if you really need a high fps rate and a large picture size, you may need to consider using a machine with a faster CPU. Dual (and even more) processor machines running under Windows XP, Vista or Windows 7 will be to your advantage as well because HyperCam uses three program threads when recording. Windows will schedule the threads among all available processors to give you better performance.

Please visit also the HyperCam Support Area at <http://www.solveigmm.com/> for more recent tips.

Command Line Options

HyperCam can be started from a batch file, command prompt or another application with a number of command line options (switches) that override the default settings saved in the system registry and can also cause it to start recording immediately. Here is the list of command line switches:

- rec* HyperCam starts recording immediately at its startup. The HyperCam window is minimized to the taskbar.
- recx* Same as *-rec*, but when recording is stopped (e.g. the user presses the hot key to stop recording), HyperCam will be closed.
- hwNN* Selects the recording area to be the same as the area of the window (including its frames and titlebar) with the handle NN, where NN is a number in decimal notation. This option is mainly useful when HyperCam is called from other applications.
- xNN -yNN -wNN -hNN* Selects the recording area (x - left, y - top, w - width, h - height) in pixel coordinates. The upper left corner of the screen is (0, 0). If any value is omitted from the command line, the default value saved in the registry is used.
- fNN* Selects the frame rate (in frames per second). NN is a number, decimal fractions are accepted.
- a* This option is for specifying the output screen movie filename. The next argument should be the filename itself, for example, HyperCam -a test.avi. Use double quotes to surround the filename, if it contains any spaces.
- i+ or -i-* Turns on (+) or off (-) adding an incremental number to the filename.
- s+ or -s-* Turns on (+) or off (-) recording sound.
- kNN* Sets the key frame value for compressed AVI, WMV, ASF or MP4 files. NN is an integer number.
- hidden* Runs the program with the HyperCam window hidden.

Example:

```
SMM_HyperCam.exe -rec -x100 -y100 -w300 -h200 -i- -a test.avi
```

will start HyperCam in the recording mode. The recorded area will start at (100,100), the width will be 300 pixels and the height will be 200 pixels. The screen movie filename is "test.avi" and no numbers will be appended to the filename.

Controlling another HyperCam window from the command line

The following command line options can be used to control another HyperCam window started earlier. If no other HyperCam window is started, these options do nothing.

- start* Starts recording, same as if you click the **Start Rec.** button or press the start hot key. If HyperCam is in the paused mode, it will resume recording.
- stop* Stops recording.

- pause* Pauses recording or starts paused if **HyperCam** is not recording at all.
- resume* Resumes recording, if it is paused.
- hide* Hides the **HyperCam** window.
- show* Shows the **HyperCam** window in its previous state (if it was minimized when hidden, it will be still minimized after this command).
-
- minimize* Minimizes the **HyperCam** window.
- restore* Restores the **HyperCam** window.
- exit* Exits **HyperCam** completely.

Additional options

1. Ensuring that only one instance of HyperCam is started

Only one instance of the HyperCam window is started by default. If you try to run a second instance, you will only activate and bring to front the already open window. If for some reason you do need two HyperCam windows (e.g. to record the HyperCam program usage tutorial), run

```
SMM_HyperCam -newwin
```

2. Finding out the current program status

Run

```
SMM_HyperCam -getstat
```

This will only query the running instance for its status and exit immediately without doing anything else, showing any windows, etc. You can read the value from the program exit status or if that is not possible, read it from the registry:

```
Key: HKEY_CURRENT_USER\Software\Solveig Multimedia\HyperCam 3\State
```

```
Value: Status (type REG_DWORD)
```

The values are: 0 – HyperCam is not running at all, 1 – stopped, 2 – recording, 3 – paused

Purchase and Registration

You can license this program right from our web page at <http://www.solveigmm.com/en/products/hypercam/>.

Click the Buy Now link there. We offer many different ways to order it, including secure web forms, phone, fax and mail orders, as well as corporate purchase orders. However, since the order information is likely to change in the future and your downloaded copy of HyperCam may be several months or even years old, you should access our webpage for the most current order information.

Please see these online guidelines helps to register HyperCam and HyperCam Portable.

For HyperCam standard license:

<http://www.solveigmm.com/en/howto/how-to-register-hypercam/>

For HyperCam portable license:

<http://www.solveigmm.com/en/howto/how-to-register-hypercam-3-portable/>

To find the current prices, please visit us on the web at <http://www.solveigmm.com/>.

Contact Information

For the latest version of [HyperCam](#) and details on our other software, please visit our website at <http://www.solveigmm.com>

Thank you for using [HyperCam](#)! Please do contact us for technical support, questions, comments, and suggestions for improvement you may have!

E-mail: support@solveigmm.com

Solveig Multimedia
Tomsk, 634055 Razvitiya Ave. 3
Russian Federation

Tel: +7382 270 1455 ext. 2049
Fax: +1 (801) 991-5443