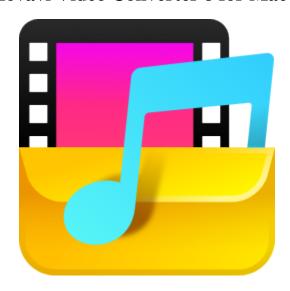
# **Movavi Video Converter 8 for Mac**



**Don't know where to start?** Read these tutorials:

Converting videosConverting for devicesConverting audioChange the video formatWatch videos on your phone or tabletPlay any audio anywhere

More questions?
Write us an e-mail at <a href="mailto:support@movavi.com">support@movavi.com</a>

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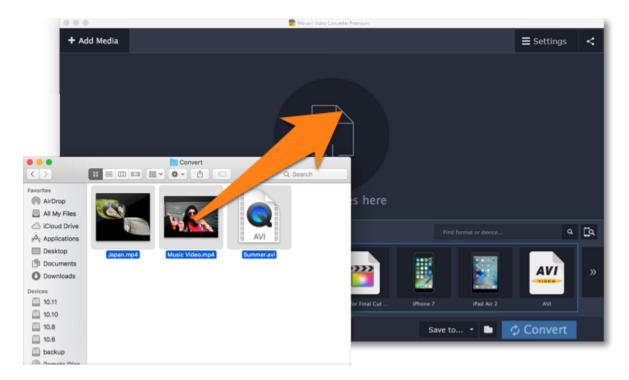
# Quick start guide

**Converting media files** 

# **Step 1: Open media files**

Find the files you want to convert in **Finder** and drag them onto the **Movavi Video Converter** window. The files will now be added to the conversion queue.

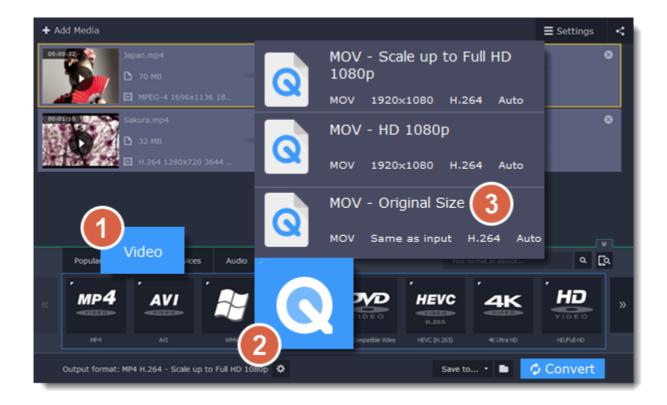
Learn about adding media



# **Step 2: Choose output format**

- **1.** Click the **Video** tab to show a list of video formats and presets.
- 2. The video formats are sorted into groups. Click the group with the output format you want to use.
- **3.** A list of presets will appear. Here, you can choose a different resolution for the files, or choose the preset without a specified resolution to convert with the original resolution (for example, "MOV").

The currently selected output format will be shown at the bottom of the window.

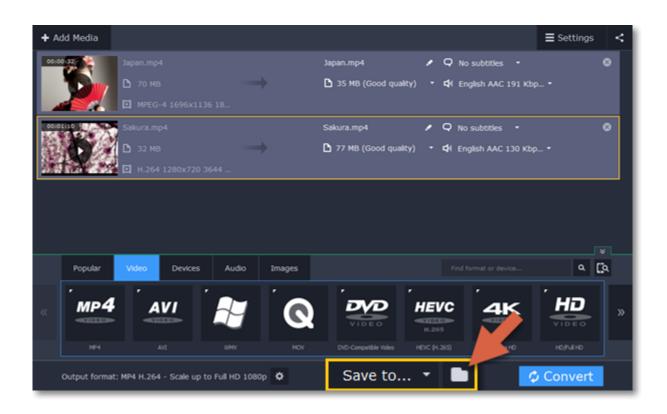


#### **Step 3: Choose output folder**

At the bottom of the window, check the **Save to** box to see where the new converted files will be saved. To save them to a different folder, click the folder icon and choose the new location in the Finder box.

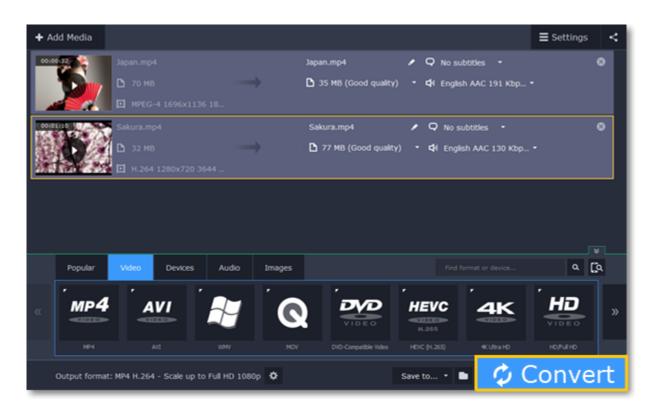
Learn more

Uploading files to iTunes



#### **Step 4: Convert**

Finally, click **Convert** in the bottom right-hand corner to start processing the files.



## **Remove trial restrictions**

When you first open your copy of **Movavi Video Converter**, it will be running in **LIMITED TRIAL MODE**. In trial mode, you can try out all of the main features, but the following trial restrictions will apply:

#### What's the difference between trial mode and the full version?

In trial mode, you can try all of the features of the full version, however, several restrictions apply:

TULL VERSION
Lifetime license
No annoying watermarks
<ul><li>Unlimited audio conversion</li></ul>
<ul> <li>Fast SuperSpeed mode for quickly changing video format</li> </ul>
Free updates
<ul> <li>Discounts on other Movavi products and upgrades</li> </ul>

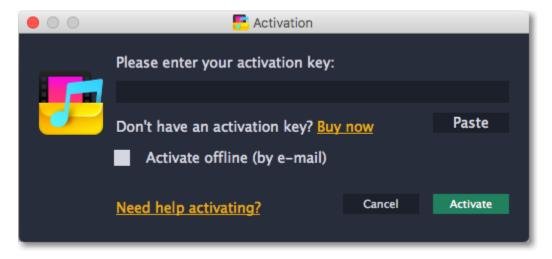
#### **Step 1: Buy activation key**

- 1. Click the button below to go to the purchase page and click the **Buy Now** button there.
- **2.** You will be taken to our web store. Fill in your billing information and payment options and proceed with the purchase form. **IMPORTANT!** Be sure to enter a valid e-mail address: it will be used to deliver your activation key.
- **3.** Once you have placed your order, you will shortly receive a confirmation for your order and an e-mail from support@movavi.com containing your activation key.

# **Buy Activation Key**

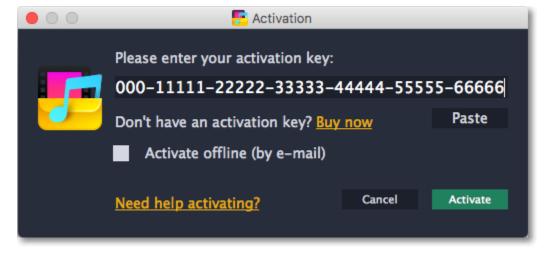
#### **Step 2: Open the activation window**

- 1. Launch Movavi Video Converter.
- 2. Open the Movavi Video Converter application menu and select Activate Software. The activation window will appear.



## **Step 3: Enter your activation key**

- 1. Enter or paste your activation key into the corresponding box of the Activation window.
- **2.** Click **Activate** to verify your activation key.



If you have entered the key correctly, you should see a message confirming successful activation. Click OK to complete the activation process and restart the program.

# Having problems with activation?

If activation is not working as expected, try the following:

- Make sure that the activation key is entered correctly and is intended for the program you are activating.
- Try activating offline via e-mail.
- Contact us at <a href="mailto:support@movavi.com">support@movavi.com</a> and we'll help you solve the problem!

## **Activating without Internet access**

If the computer you have installed **Movavi Video Converter** on is not connected to the Internet, you can activate the program via e-mail. See detailed instructions

# How to get an activation key

You can get an activation key either from our official website or from any of our partners in your region. Follow the steps below to buy an activation key from the Movavi website:

#### Step 1: Go to the purchase page

To open the purchase page for Movavi Video Converter:

• In the Movavi Video Converter application menu, choose Buy Activation Key, or

• Follow the link below...

# **Buy Activation Key**

## Step 2: Choose a license type

- If you plan to use **Movavi Video Converter** at home, click **Buy Now** on the purchase page to proceed with buying the personal license.
- If you plan to use **Movavi Video Converter** at work, in a government institution, or gain profit in any way, click **Business license** on the purchase page.

After that, you will be redirected to an online store depending on your region and the available payment methods. All of our vendor partners are secure and completely safe.

#### Step 3: Fill in your billing details

- 1. Choose any of the available payment methods.
- **2.** Fill in the information required on the page.
- **3.** Enter a valid e-mail address. This e-mail will be used to deliver your activation key.

## **Step 4: Get your activation key**

After the purchase has been verified, you will receive a letter containing your activation key. Now you can use it to activate the program.

**Activation instructions** 

Activating without Internet access

#### If you haven't received your activation key within the hour:

- Check the **Spam** folder of your mailbox
- Contact support

## **Activating Video Converter**

Activating Movavi Video Converter will allow you to remove all of the trial restrictions and use the program forever.

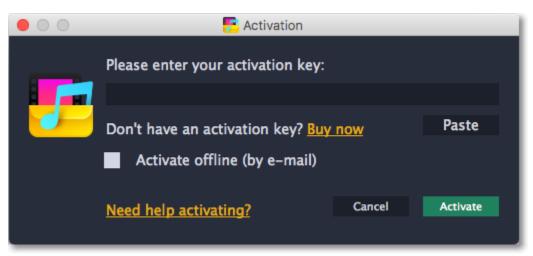
#### You will need:

Movavi Video Converter activation key. You should receive your key via e-mail right after your purchase is completed. Don't have a key? Buy now

• Internet access. Don't have Internet access? See this guide on offline activation

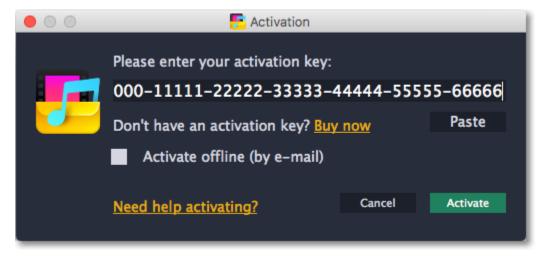
## Step 1: Open the activation window

- 1. Launch Movavi Video Converter.
- 2. Open the Movavi Video Converter application menu and select Activate Software.



## Step 2: Enter your activation key

- 1. Enter or paste your activation key into the corresponding box of the Activation window.
- 2. Click Activate to verify your activation key.



If you have entered the key correctly, you should see a message confirming successful activation. Click OK to complete the activation process and restart the program.

## Having problems with activation?

- Check that the activation key is entered correctly and is intended for the program you are activating.
- Try offline activation.
- Contact our support team

# **Activating without Internet access**

Activating **Movavi Video Converter** will allow you to remove all of the trial restrictions and use the program forever. If you don't have Internet access on your computer, you can use any other computer or mobile device to complete the steps that require a connection.

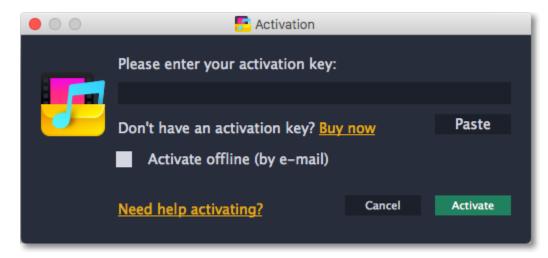
#### You will need:

Movavi Video Converter activation key. You should receive your key via e-mail right after your purchase is completed. Don't have a key? Buy now

• A device or another computer that can be used to send and receive e-mail

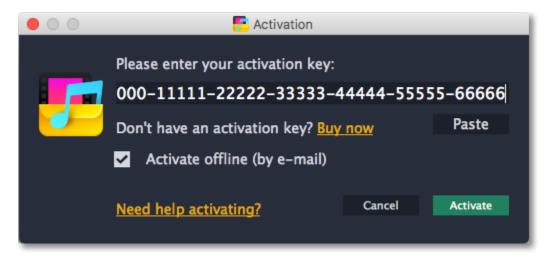
#### **Step 1: Open the activation window**

- 1. Launch Movavi Video Converter.
- **2.** Open the **Movavi Video Converter** application menu and select **Activate Software**. The following box will appear:



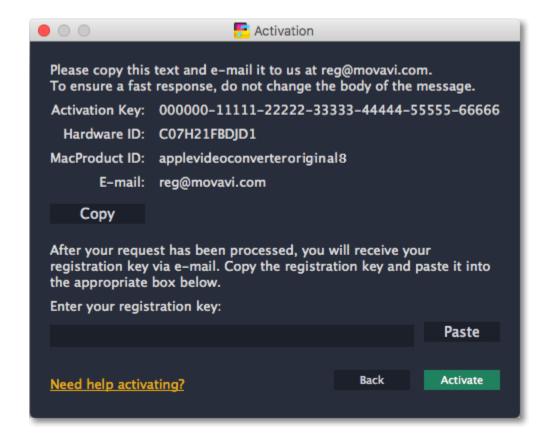
**Step 2: Enter your activation key** 

- 1. Enter or paste your activation key into the corresponding field.
- 2. Select the Activate offline option.
- 3. Click **Activate** to proceed to the next step.

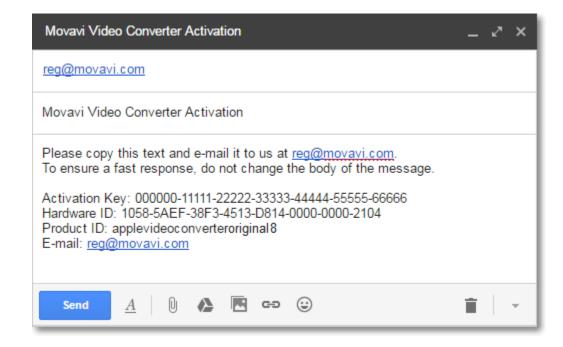


Step 3: Send an e-mail with the provided information

The next window contains important activation information that you will need to send us via e-mail in order to activate your program.



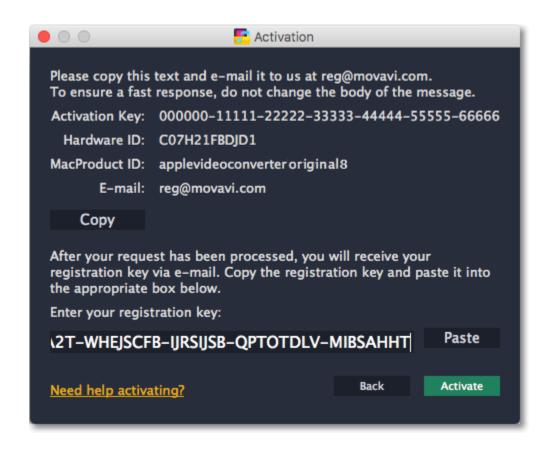
- 1. Click the Copy button to copy the information in the window. If necessary, save or transfer this information to the computer or device that you will be sending the e-mail from.
- 2. On the computer with an Internet connection, open your mail client and compose a new e-mail. Paste the information you've copied earlier into the message body and send this e-mail to <a href="mailto:reg@movavi.com">reg@movavi.com</a>. The activation server will then verify your activation key and send you an automatic response containing a registration key, which you will need to enter into the Activation window. You should receive the server's reply within an hour.



To ensure a quick reply from our activation server, please do not alter the message subject or body

## Step 4: Enter your registration key

- 1. When you have received your registration key, save it and go back to the Activation window.
- 2. Enter the registration key into the corresponding box.
- 3. Click Activate to submit the information.



If everything is correct, you will see a successful activation message. Click **Finish** to complete the activation and close the activation wizard.

Once activation is complete, you may be asked to restart the application.

If you have entered the key correctly, you should see a message confirming successful activation. Click OK to complete the activation process and restart the program.

#### If offline activation doesn't work:

- Make sure you have entered the activation key and the registration key correctly and try again
- Check that you are activating the right application.
- Make sure you have administrator rights on your computer

If you have any questions or problems while activating your Movavi software, feel free to contact us and we'll help you out!

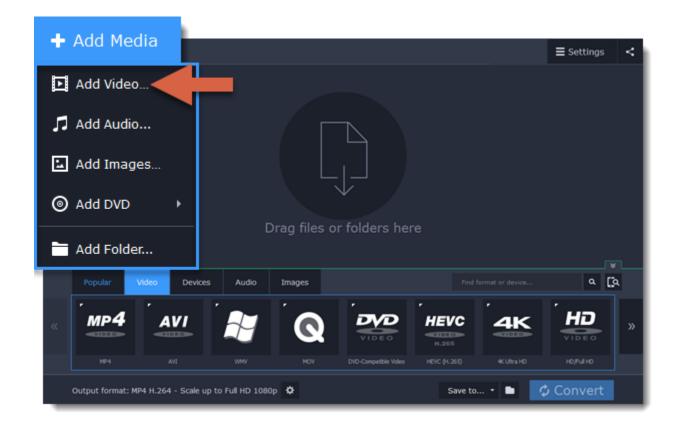
Our e-mail: <a href="mailto:support@movavi.com">support@movavi.com</a>
Click here to open live chat

## Converting video

## Step 1: Open the videos

Before you start, you will need to open the videos in Movavi Video Converter.

- 1. Click the Add Media button at the top and choose Add Video from the pop-up menu.
- 2. A Finder dialog box will open. Select the files you want to convert.
- 3. Click Open. The files will now be added to the file list.



#### **Step 2: Choose output format**

In the lower half of the window, you will find a list of output formats.

- 1. Click the Video tab.
- **2.** Click the format you want to use. For example, MOV.
- **3.** Choose the preset with the codec and resolution that you want to use. To convert without changing the resolution, click the line marked "Same as input". For example: "MOV", or "AVI MPEG-4 Original size"

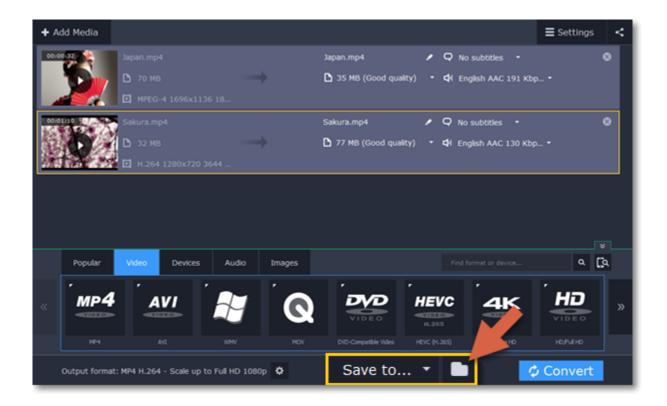
**Customizing presets** 



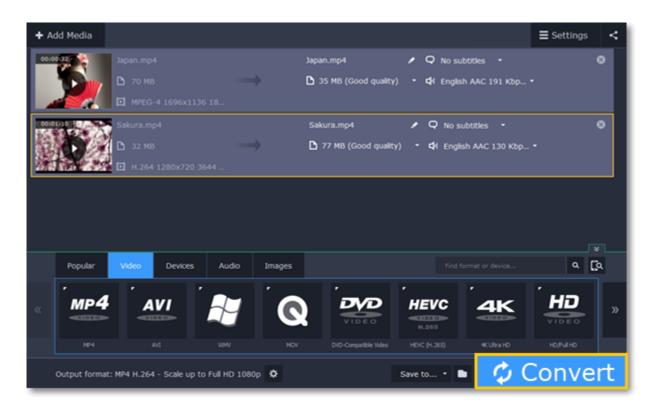
# Step 3: Check output folder

At the bottom of the window, check the **Save to** box. This is where the output files will be saved. To use a different folder, click the folder icon select the new output folder.

Changing output folder



Finally, click the **Convert** button to start processing the videos. This may take anywhere from a few seconds to several hours, depending on the size and number of video files.

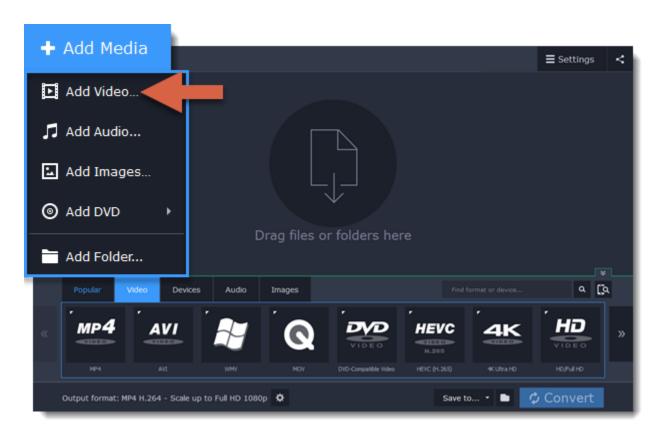


# **Converting for social networks**

Social networks like YouTube or Facebook don't accept all video formats. Follow the steps below to convert your videos to a format compatible with the social networks.

#### **Step 1: Open the videos**

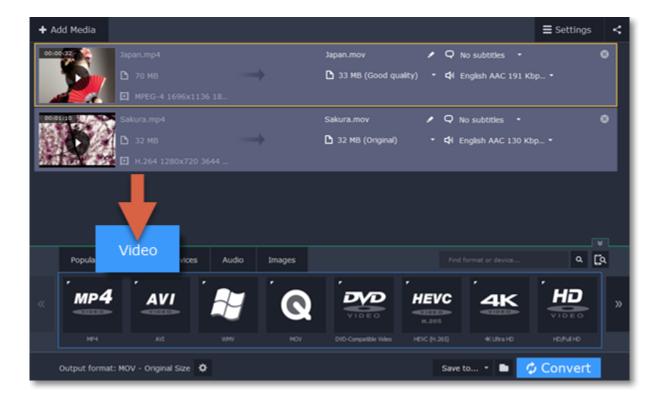
- 1. Click Add Media and choose Add Video from the pop-up menu.
- 2. A Finder window will open. Choose the videos you want to convert and click Open. The videos will be added to the file list.



Step 2: Choose a social network preset

1. In the lower half of the window, click the Video tab to show all video formats.

- 2. Use the arrow on the right to scroll through the list and click the **Online Video** group.
- **3.** Choose the social network and resolution that you want to use. This will set the optimal format and codec settings for uploading to this social network.

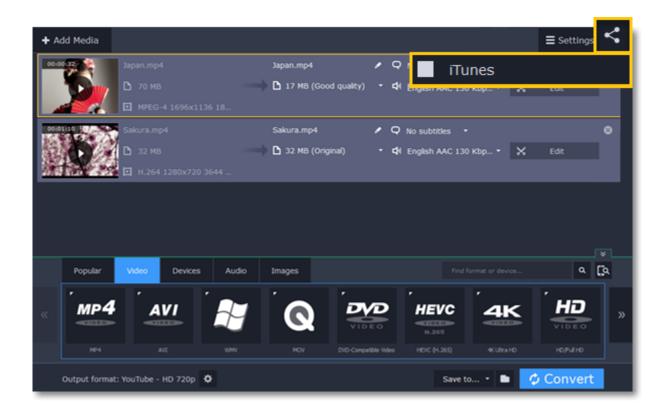




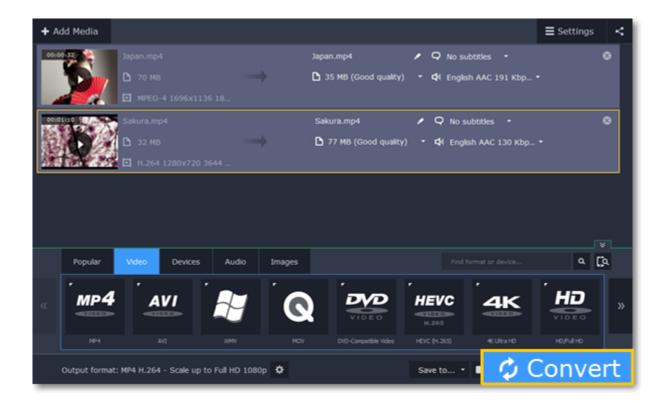
## **Step 3: Convert and share**

- **1.** Click the folder icon next to the **Save to** box to choose where the output files will be stored.
- 2. To share the videos right away, click the **Upload to** button and choose the services that you want to upload videos to.

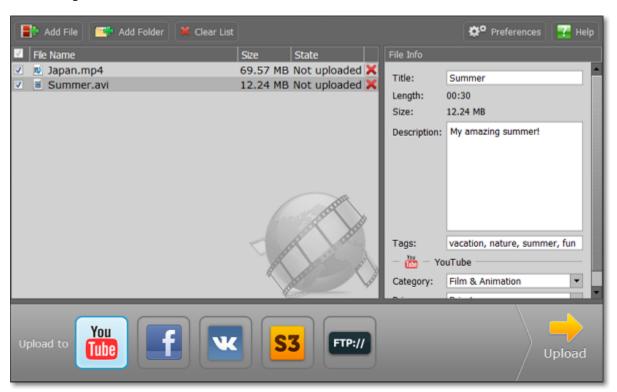
**Note:** to upload videos, you will need Movavi Share Online, a free add-on that you can use for batch uploading. If Share Online is not installed, you will be prompted to download and install it.



**3.** Finally, click **Convert** to start converting the videos.



**4.** If you've selected sharing options, the files will open in **Share Online** as soon as conversion has finished. There, log in to the services, provide a title and description for each video and click **Upload**.



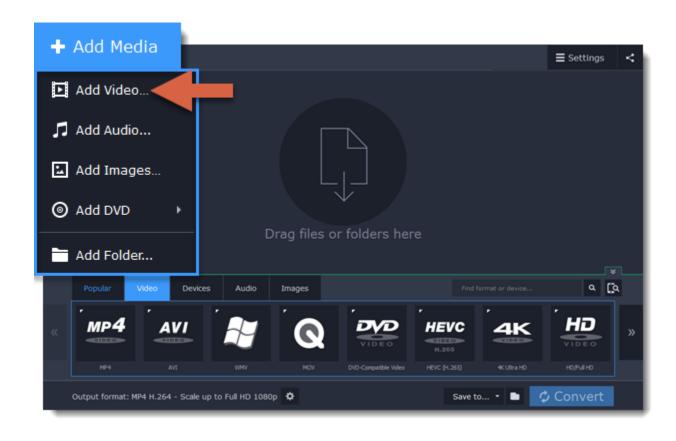
## Convert videos for the web

To upload a video online, whether to a personal website or to a video hosting service, you will need to do two things: convert it into a suitable format and upload it onto the web.

# **Step 1: Open videos**

- 1. Click the Add Media button and choose Add Video from the pop-up list.
- **2**. A **Finder** box will open. Select the files you want to convert and click **Open**.

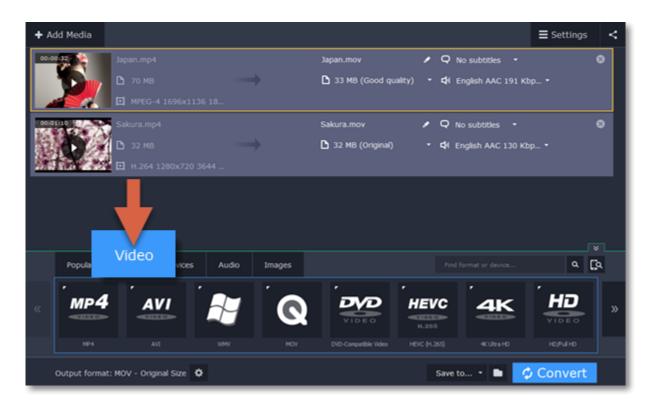
How to open videos



Step 2: Choose a web preset

1. Click the Video tab for video output formats and presets.

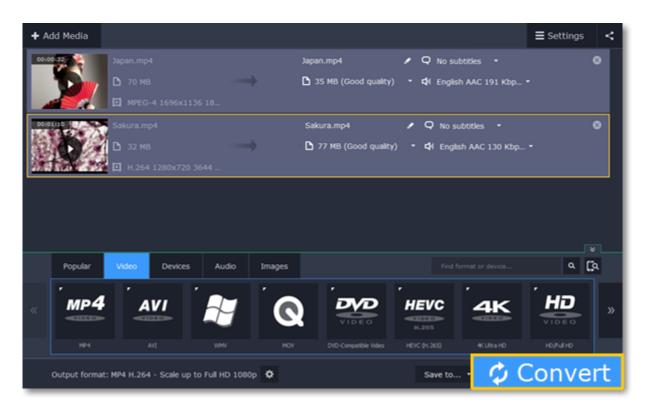
- 2. Use the arrow on the right to scroll through the list and click the **Web-Compatible Video** group.
- 3. In the pop-up list, choose the format and resolution that you want to use.





# **Step 3: Convert and upload**

Check the **Save to** box to see where your web-ready files will be saved. To change the folder, click the folder icon . When you're ready, click **Convert** to start processing your videos. When conversion is finished, you can start uploading your files to your blog or website.



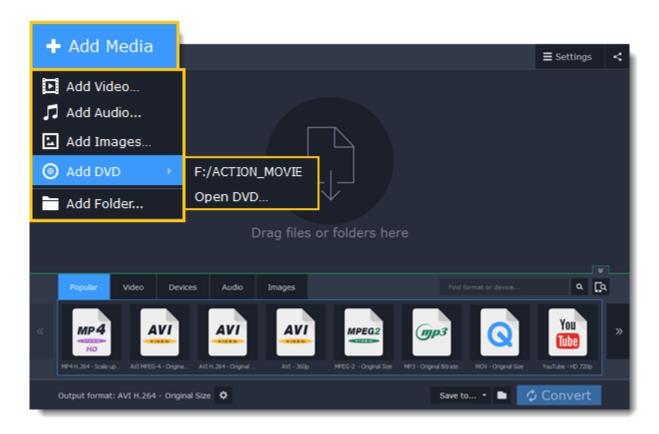
# **Converting DVDs**

The era of the DVD disc is coming to an end, and not all homes now have a DVD drive. Make your favorite movies future-proof by backing them up to your computer.

## Step 1: Open DVD

- 1. Insert the disc into your DVD drive. If you have an external DVD drive, connect it to the computer.
- 2. Click Add Media in the upper left-hand corner of the window.

- 3. Hold your mouse pointer over Add DVD.
- **4.** Click the disc name in the menu that appears. If you don't see the DVD in the list, click **Open DVD** and find the DVD location.



Tip: some DVDs are protected from illegal copying and cannot be converted. Movavi Video Converter is not intended for copying protected media.

#### **Step 2: Choose video format**

- 1. In the lower part of the window, click the **Video** tab to see a list of video formats.
- **2.** Choose the group with the format you like.
- 3. Click that format and pick a video resolution. To convert with the original resolution, choose the line marked with "Same as input".



#### **Step 3: Choose files and streams (optional)**

Many DVDs come with bonus clips, as well as a number of subtitle tracks. Select just the files you need to save disk space:

#### **Bonus files**

To remove bonus files that you don't need, click the sicon to the right of the video.

#### **Audio tracks**

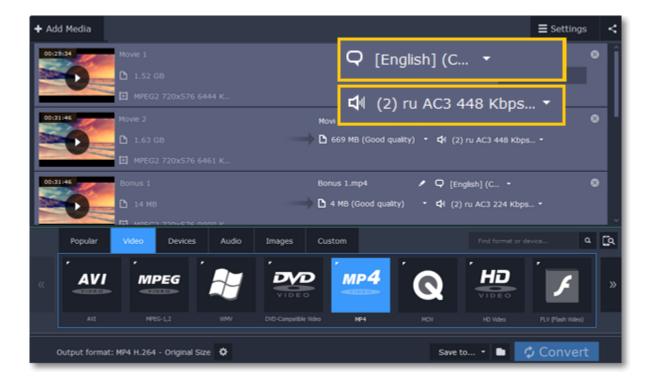
- 1. Find the audio information in the right-hand part of the file list and click on it to open the list of audio tracks.
- 2. Deselect the audio tracks that you don't want to keep.

Learn more about audio tracks

#### **Subtitles**

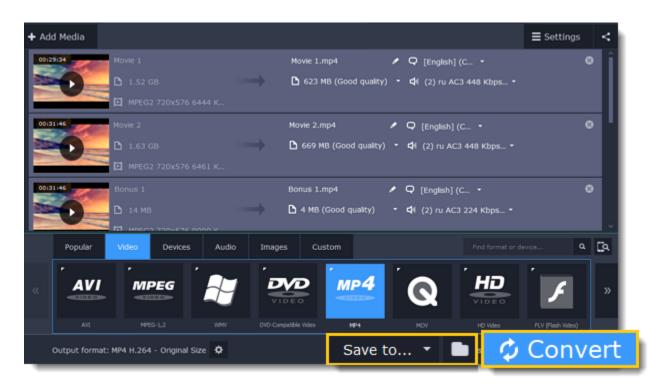
- 1. Find the subtitle information in the right-hand part of the file list and click on it to open a list of available subtitles.
- **2.** Choose the subtitle track that you want to keep.

Learn more about subtitles



#### **Step 4: Convert**

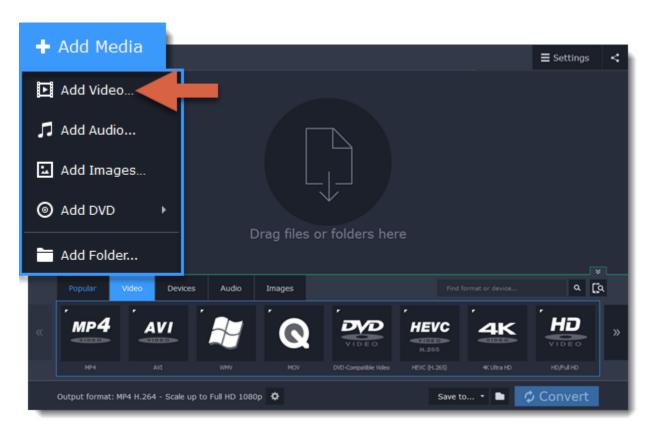
The **Save to** box at the bottom shows where the DVD movies will be saved after conversion. To save the files to a different location, click the folder icon and choose the new destination folder. When you're ready, click **Convert to** start processing the videos.



# **Creating GIFs from videos**

#### Step 1: Open a video

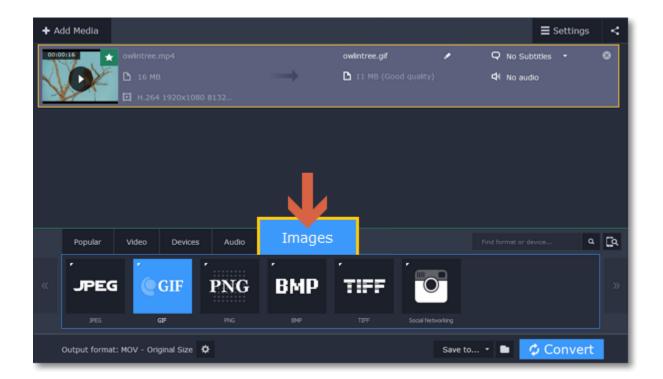
- 1. Click Add Media in the upper left-hand corner of the window and choose Add Video from the pop-up menu.
- 2. Find the video you want to turn into a GIF and click Open.



## **Step 2: Choose GIF format**

- 1. In the lower half of the window, click the **Images** tab to see image formats.
- **2.** Click **GIF** to see GIF conversion options.
- **3.** Choose a size for your animated GIF. For example, "Medium GIF".

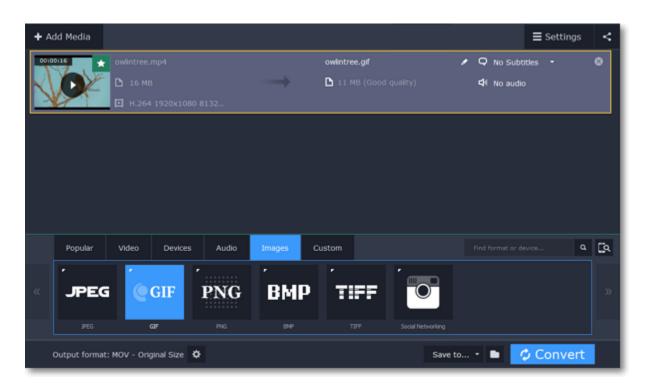
**4.** (**Advanced**) To change the frame rate, click the **Customize** button next to the output format at the bottom to customize the selected preset. In the settings window, choose the **frame rate** you need and click **OK**. Higher frame rates will make the movements seem smoother, but will increase the GIF's file size.





#### Step 3: Save the GIF

Take a look at the **Save to** box at the bottom of the window: this is where the finished file will be created. To choose a different location, click the folder icon and select the new output folder. Click **Convert** to save your animated GIF.



## **Convert for devices**

## How to convert video for devices

Each device has specific requirements to the type of video it can play, with some older devices supporting only a handful of video formats. To make sure you'll be able to watch the videos on your device, convert them using the output preset created specifically for your device, and all the necessary output settings will be selected automatically. This way, you don't have to look for what formats your phone supports, as it's all selected for you.

# Find your device automatically

If you're converting for a smartphone or tablet, connect the device via USB, and the converter will automatically detect it and recommend the best output format.

#### Learn more

#### Step 1: Add files

Open the files you want to convert.

## **Step 2: Open the Devices tab**

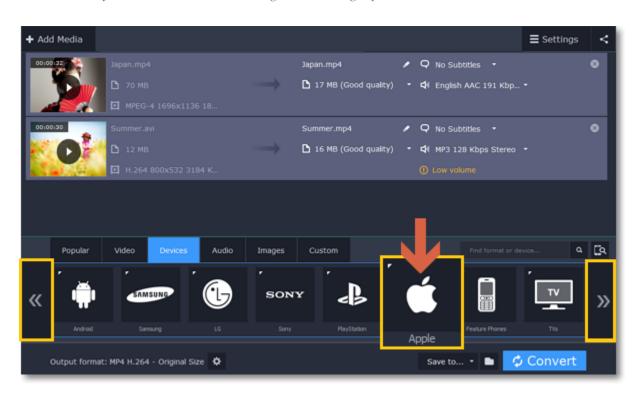
In the lower half of the window, click the **Devices** tab so see a list of device presets.



## **Step 3: Find your brand**

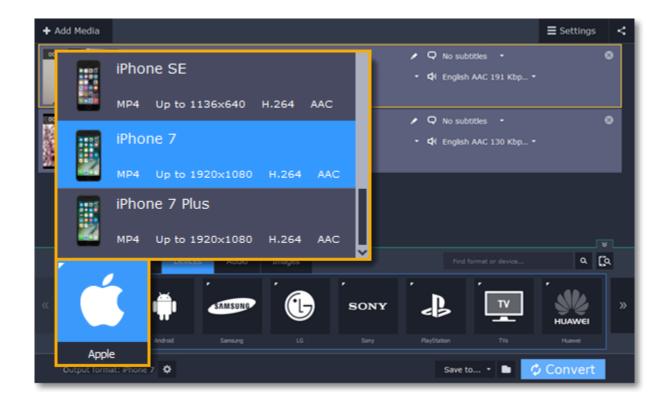
In the **Devices** list, use the arrows on the left and right to scroll through the list and find your device's manufacturer and click on it to see a list of device models.

If you don't see the device's brand in the list, try the search bar, or use a general category, such as Android, TVs, or Tablets.



# **Step 4: Find your device**

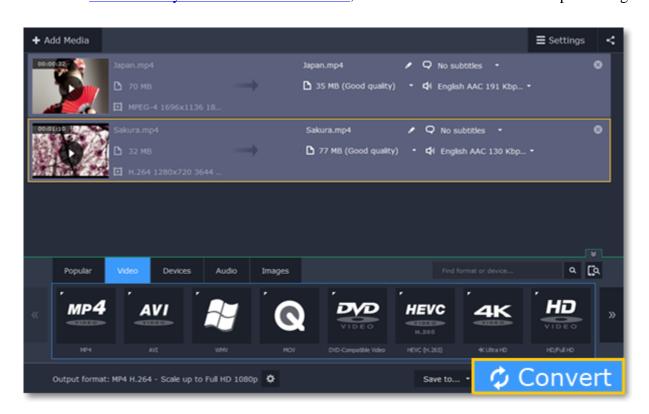
Choose your device from the selected brand's list and click on it to select it as the output format. Now, the format, codec, and resolution is automatically selected to be optimal for your device.



For example, to convert videos for the iPhone 6s, find Apple in the list, and then choose the iPhone 6s preset.

# **Step 5: Convert**

Click the folder icon next to Save to to select where you want to save the videos, and then click Convert to start processing the files.



After the videos are ready, all you need is to upload them to the device.

# **Device recognition**

Converting videos for devices such as smartphones and tablets is quick and easy: all you need to do is connect the device and the program will suggest the recommended format and resolution for it.

#### Step 1: Add files

Drag the files you want to convert onto the converter window.

How to open files

## **Step 2: Connect the device**

Connect the smartphone or tablet to your computer using a USB cord.

# **Step 3: Confirm the device**

- **1.** Once the device is recognized, a dialog box will appear with the device name and the recommended preset. Check that the device name matches your device. If the dialog box doesn't appear, click the **Device Detection** button to the right of the search bar.
- **2.** If the device is correct, click **Use These Settings** to use the recommended output format, resolution, and other parameters.

<sup>\*</sup> A preset is a pre-made configuration for a specific device that contains all necessary media properties required by this device.



#### Several devices are listed

Sometimes, the device detection box shows a list of several devices. This can happen if you have more than one connected device, or with some devices that are very similar and can't be identified precisely. In this case, open the **Choose your device** list and select the device model that you want to convert for. Then, click **Use These Settings** to use the recommended format, resolution, and other settings.

#### **Device** was not detected

- If the dialog box does not appear, try clicking the **Device Detection** button to the right of the search bar.
- Try reconnecting the device and wait for the system to detect it.
- If that doesn't help, you can still find a preset for your device manually on the **Devices** tab. <u>Detailed instructions</u>

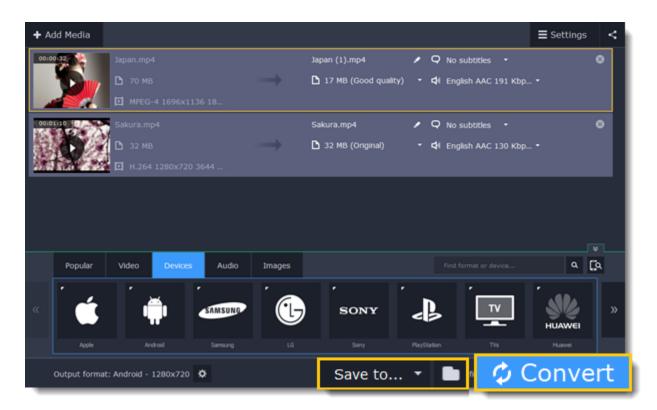
#### The wrong device was detected

If the dialog box shows the wrong device, and that device isn't also connected to your computer, you can still find it manually on the **Devices** tab of the preset list. If you want to report this mistake, write to us at <a href="mailto:support@movavi.com">support@movavi.com</a> and tell us your device model, and which device was shown instead.

Detailed instructions

#### Step 4: Convert!

- 1. Click the folder icon next to the **Save to** box and choose where to store the files after converting.
- 2. Click Convert to start converting the videos for your device.
- 3. After conversion has finished, upload the videos to your device and enjoy.



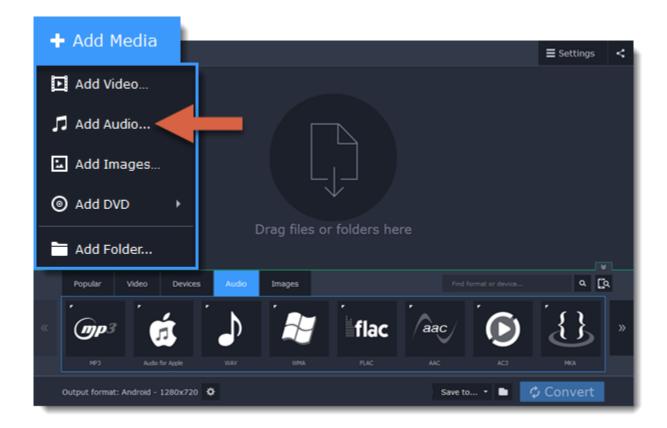
# **Converting audio**

Even though MP3 is the most commonly used format, you may also encounter other formats, such as AAC or FLAC, which can preserve audio quality better, but aren't supported by all devices. Converting audio will not only let you play music on any device or player, but also organize and compress your media library.

#### **Step 1: Open music**

- 1. Click Add Media in the upper left-hand corner.
- 2. Click Add Audio in the pop-up list.
- 3. A Finder dialog box will appear. Choose the audio files you want to convert.

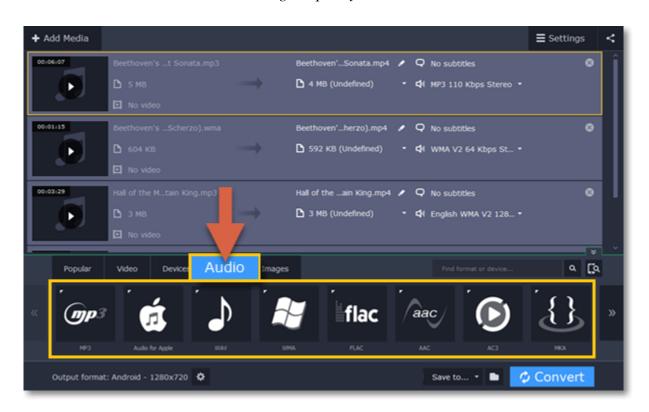
Or simply drag the audio files onto the converter window.

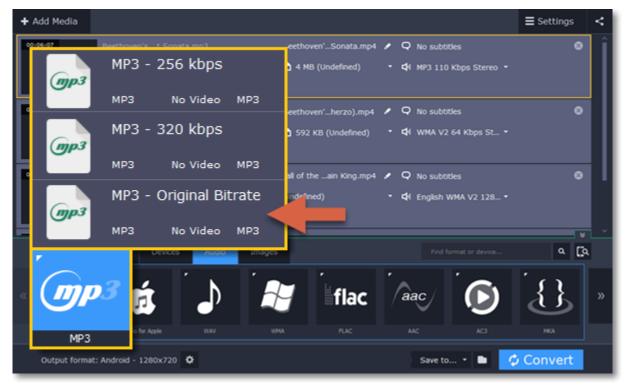


## Step 2: Choose audio format

- 1. In the lower part of the window, click the **Audio** tab to see the list of audio formats.
- 2. Click the format you want to convert the audio to.
- 3. Choose the bitrate that you want to use. To convert without changing the bitrate, choose the preset marked with "Original bitrate".

**Bitrate** – the bitrate reflects the amount of data in kilobits that is played back each second (measured in kbps). Higher bitrate usually means higher audio quality as well as larger file size, as extra data needs to be stored within the file. For audio presets, the bitrate is listed next to the format. When you convert a file to lower bitrate, the extra bits of data are irretrievably lost, meaning that you cannot increase quality by converting audio to a higher bitrate, because the file no longer contains the data that can be used to restore higher quality.





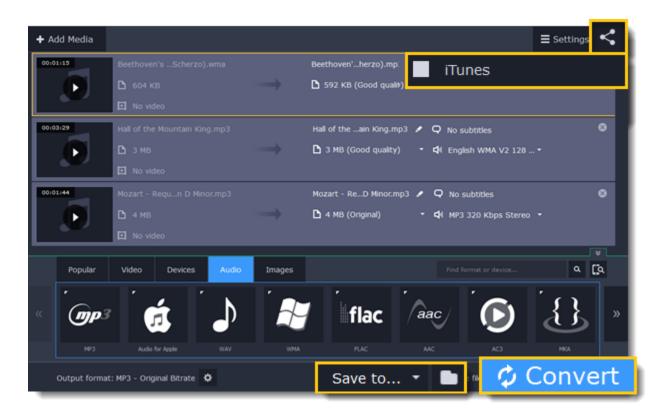
Renaming media files helps keep the music library in order.

- **1.** Click the pencil icon **2** next to the file you want to rename.
- 2. Enter the file's new name.
- 3. Click OK.

Renaming files

# Step 4: Convert and upload

- **1.** To change where the files are stored, click the folder icon next to the **Save to** box and choose the output folder.
- 2. If you want to upload the music to iTunes after converting, click the upload button at the top of the window and select iTunes from the pop-up window.
- **3.** When you're ready, click **Convert** to start the audio processing. Your files will be ready in a few minutes at most.

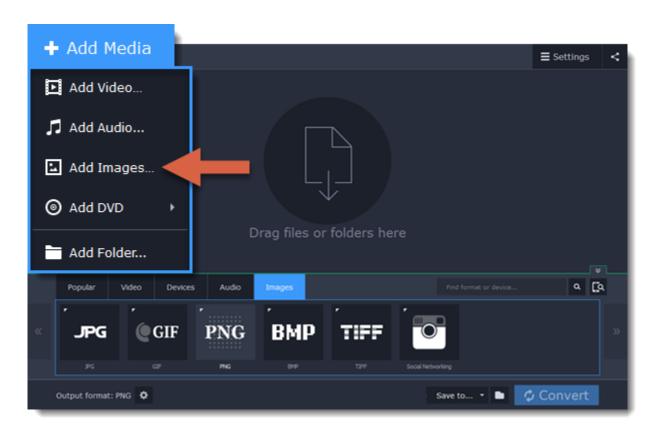


## **Converting images**

Most applications and web services are limited to just a few image formats, and working with rare formats usually requires expensive software. Convert images to be able to use them wherever you like!

# **Step 1: Open images**

- 1. Click Add Media in the upper left-hand corner of the window.
- 2. Click **Add Images** in the pop-up menu.
- **3.** Choose the images you want to convert and click **Open**.



## **Step 2: Choose format**

1. In the lower half of the window, click the **Images** tab to see a list of image formats.



#### **2.** Click the format you want to use.

*Hint:* not all formats support transparency. If the images have transparent areas, choose the PNG or BMP format.



#### **Step 3: Resize images (optional)**

To batch resize the images:

- **1.** At the bottom of the window, click the cogwheel icon next to **Output format**.
- 2. Click the box under **Frame size** and choose a size that you want to use for all images, or choose any of the following and enter the size into the width and height boxes on the right:

**Custom**: scales the images to exactly the size you specify.

**Smart fit**: scales the images up or down as close as possible to the specified size without changing the proportions.

**Up to size**: scales the images down as close as possible to the specified size without changing the proportions. Images smaller than this size will remain unchanged.

To allow changing the image proportions, click the link icon next to the width and height boxes: 🖥 – locked, 覺 – unlocked.

**3.** If the new size is different from the original image proportions, choose a resize method for your images:

**Letter box** – unused space will be filled with black.

**Stretch** – the image will stretch to fill the entire area.

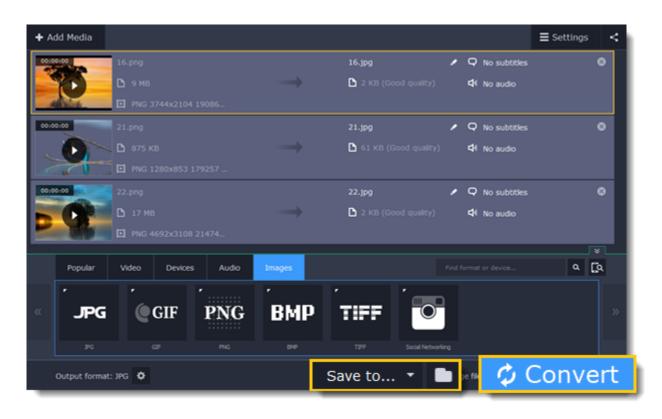
**Crop** – the image will be resized to fill the entire area, and overflowing edges will be cut off.

**4.** Click **OK** to accept the changes. If you want to preview the result, click the **Edit** button next to an image.



## **Step 4: Convert**

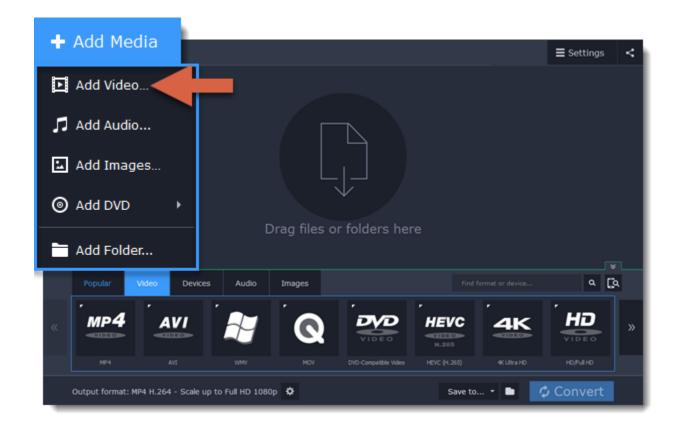
- 1. Check the output folder in the **Save to** box. To change where the files are saved, click the folder icon next to it.
- **2.** Click **Convert** to start processing the images.



## **Opening media**

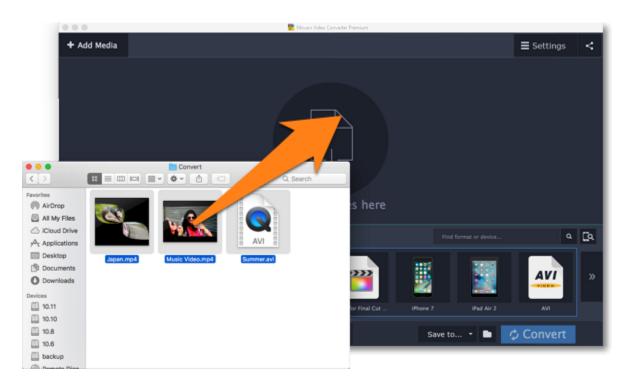
To begin converting media files, you will first need to open them in **Movavi Video Converter**.

- 1. Click Add Media at the top of the window.
- **2.** Click one of the buttons to open files of that media type.
- 3. A Finder window will open. Find the files you want to convert and click Open to add them to the queue.



#### Drag and drop from Finder

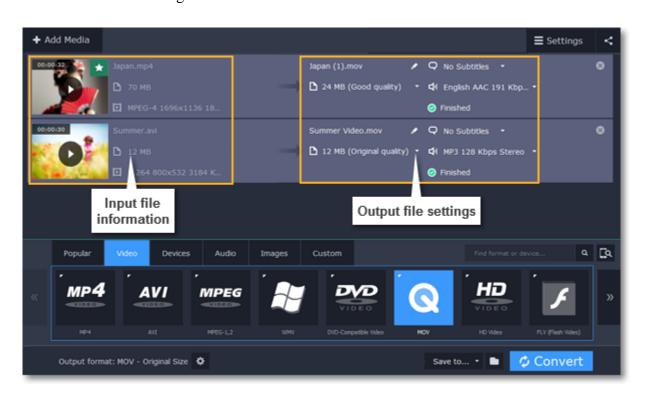
Or simply drag the files from any Finder window onto Movavi Video Converter to add them to the queue.



#### File list

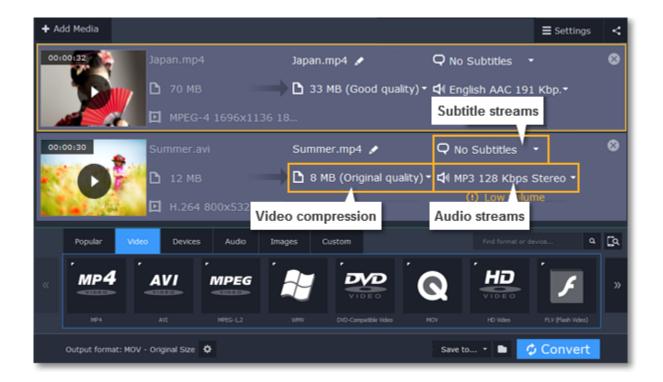
After you have opened the files, they will all appear in the file list. Here, you can view information about the files, choose audio and subtitle tracks, and manage the output file.

On the left, you can see the file's media information, and on the right you can manage the output file's name, media streams, and edit the file. To remove a file from the list, click the X button on the right:



Media streams

Every media file is made up of streams for each data type. A video can contain a video stream, a couple of audio streams, and several subtitle streams. When converting files, you can find the information about these streams in two columns on the right. Here, you can manage the streams that end up in the output file.



#### **Compress video**

You can compress a video to reduce its output file size by sacrificing some of the quality. To do that, click the output file size and move the slider to the necessary file size while keeping an eye on the quality.

Compressing videos

### **Choose audio tracks**

If a file comes with a number of audio tracks for different languages, you can keep just the ones you need. To do that, click the audio stream and deselect the audio tracks that you don't want to keep.

Choosing audio tracks

#### Choose a subtitle track

When you convert videos, you can permanently overlay subtitles on top of the video. To do that, click the subtitle stream and choose or add the subtitle track that you want to use.

Choosing a subtitle track

#### Information about the original file

To find detailed information about the video and audio streams of the original file, right-click anywhere on the file and choose **File Information** from the pop-up menu.

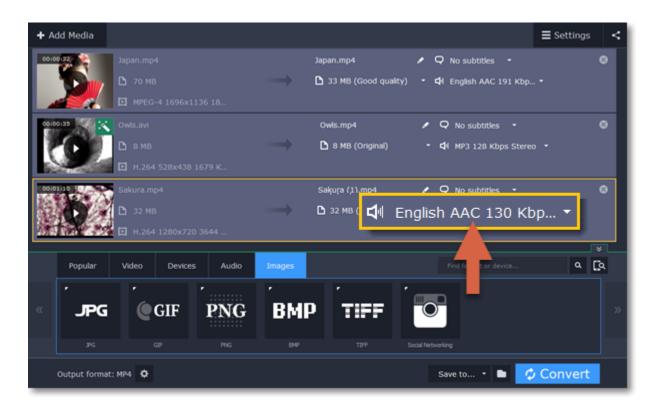
Media information

#### **Choosing audio tracks**

It isn't uncommon to find videos with several audio tracks, whether it's a different language or a director's commentary. Removing tracks you don't need will reduce the output file size.

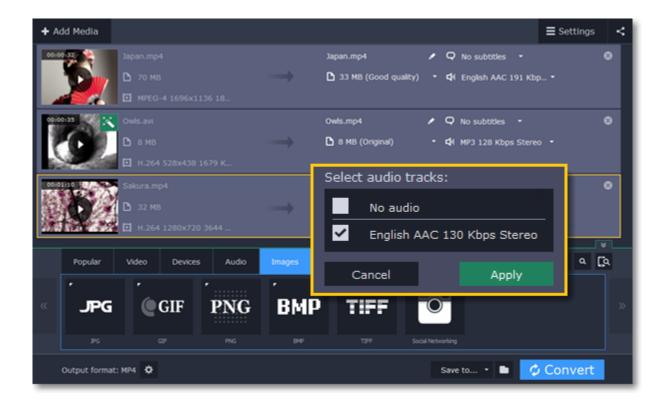
## Step 1: Open audio track list

In the rightmost column of the file list, click the audio track information box. The audio track list will appear.



#### **Step 2: Choose audio tracks**

In the box with the audio tracks, deselect the audio tracks that you don't want to appear in the output video. If you want to completely remove audio from the file, select the **No Audio** option.



**Step 3: Apply changes** 

Click **Apply** in the audio track box to accept the changes. Now, when you convert the videos, the output file will contain just the tracks you've selected.

**Note:** not all formats support multiple audio tracks. The table below shows the maximum number of audio tracks for each format:

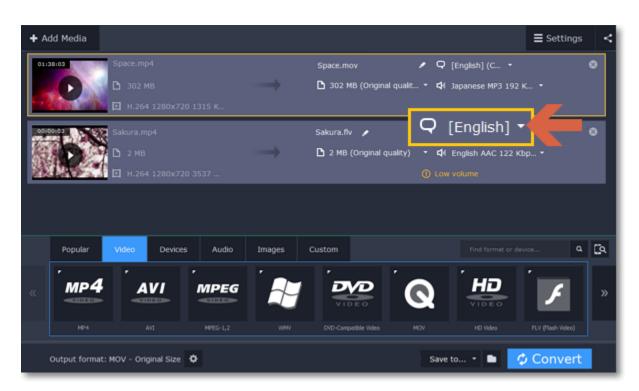
Format	Number of audio tracks supported
3GP	1
AVI	16
DVD	8
FLV, SWF	1
MKV	16
MOV	16
MP4	16
MPEG-1, MPEG-2	16
OGV	1
WebM	16
WMV	16

# Choosing a subtitle track

When you convert videos, you can permanently overlay any subtitle track onto the original video. This can be useful if you're watching videos on a device, or your player doesn't support subtitles.

#### **Step 1: Open the subtitle list**

In the rightmost column of the file list, you can see the subtitle and audio track information for each file. Click the information next to the subtitle balloon to open the list of subtitles.

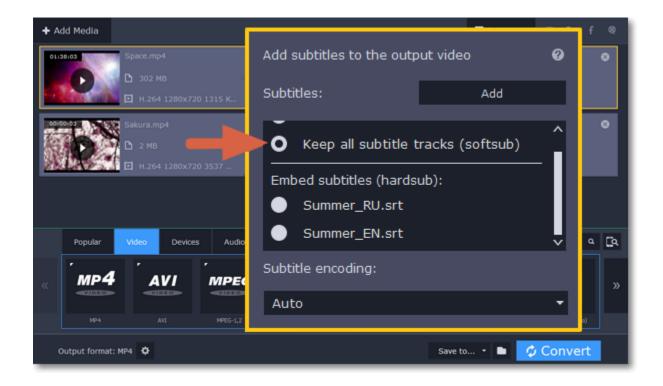


# Step 2: Choose a subtitle track

In the subtitle list, click the subtitle track that you want to use. You can choose soft or hard subtitles.

**Softsubs** are stored as a separate track and you can add several subtitle tracks to one file. All the subtitle tracks will be saved if you choose this option.

**Hardsubs** are permanently drawn on top of the video and cannot be turned off, but they are guaranteed to be visible in any player.



#### Adding subtitles from file

To add your own subtitles that aren't stored inside the original file, click the **Add** button above the subtitle list and then open the subtitle file that you want to add. You can use \*.srt, \*.ass, or \*.ssa subtitle files.

## **Subtitle encoding**

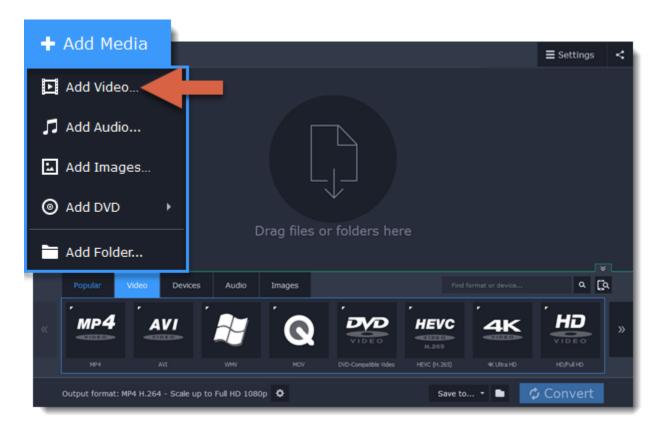
If the subtitle text looks scrambled, open the **Subtitle encoding** box and try setting the encoding with the right language.

#### **Extract audio from video**

You can quickly save your favorite song from any movie by converting the video to an audio format.

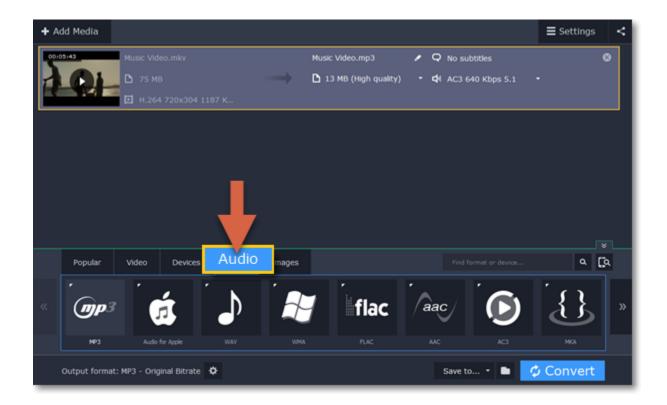
#### **Step 1: Open the video**

Open the video file that you want to extract the soundtrack from.

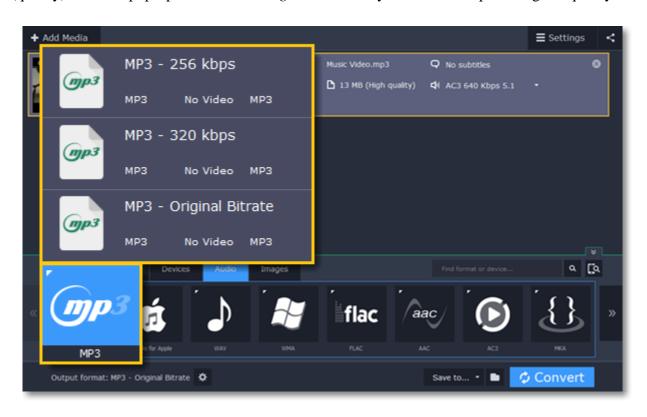


# Step 2: Choose an audio format

 $\boldsymbol{1.}$  Click the  $\boldsymbol{Audio}$  tab in the lower half of the window.



- **2.** Click the audio format you want to use.
- If you're not sure, use the MP3 format: it is supported by most players and allows for a decent quality.
- If you want to convert audio with **multichannel** sound, you can use WAV, OGG, or FLAC formats.
- **3.** Choose the necessary bitrate (quality) from the pop-up list. Choose *Original bitrate* if you want to keep the original quality.



#### **Step 3: Convert**

Click **Convert** to save the selected audio fragment.

## **Compressing videos**

Compressing videos can help reduce the size of the output file by reducing their bitrate. When you compress a video, it loses some of its original quality, but even a small bitrate reduction can make the file significantly smaller.

#### Step 1: Add files

Open the files you want to compress.

# **Step 2: Choose the output format**

The video's format and resolution play a very important role in the output file size.

- **1.** Click the **Video** tab to see a list of video formats.
- 2. Click the format you want to convert the videos to.

*Hint:* Some formats and codecs compress video better than others. If you're not sure which format to choose, use the MP4 format with the H.264 codec for the best size to quality ratio.

**3.** From the format list, choose the resolution that you want to use.



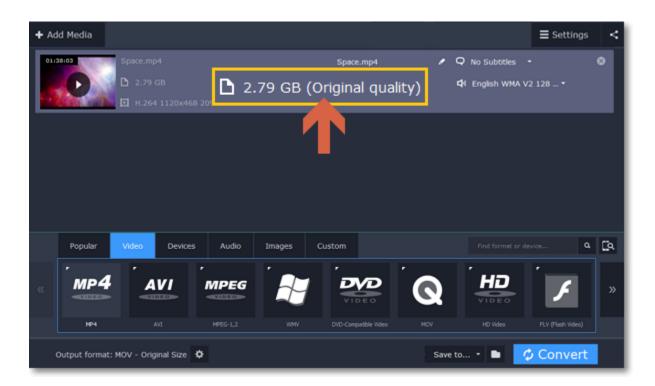
#### **Choosing the resolution**

A video's resolution is the number of pixels in every frame. A higher resolution can preserve more information and quality, but it also requires more disk space. Select a slightly lower resolution if the video is very large. For example, you can convert 1080p videos to 720p.

Learn more

# **Step 3: Compress video**

1. In the file list, check the file's output size in the second column from the left.

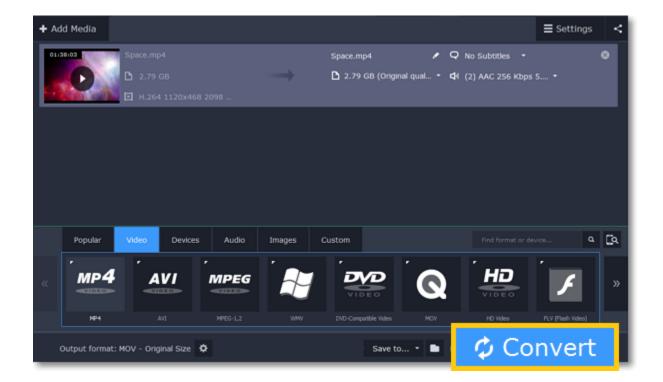


- **2.** Click the file size information to show compression options. There, drag the **file size** slider to the necessary file size while keeping an eye on the quality below.
- 3. Click **Apply** in the compression box to accept the changes.



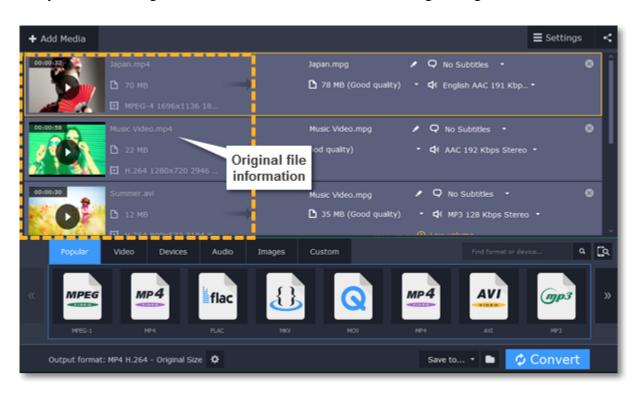
### **Step 4: Convert**

Click **Convert** to start processing the compressed file.

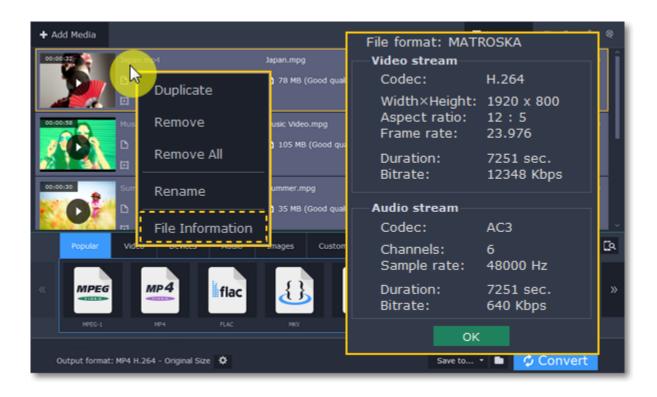


#### **Media information**

In the leftmost column of the file list, you can see the general information about the file, including its original size, video codec, resolution, and bitrate.



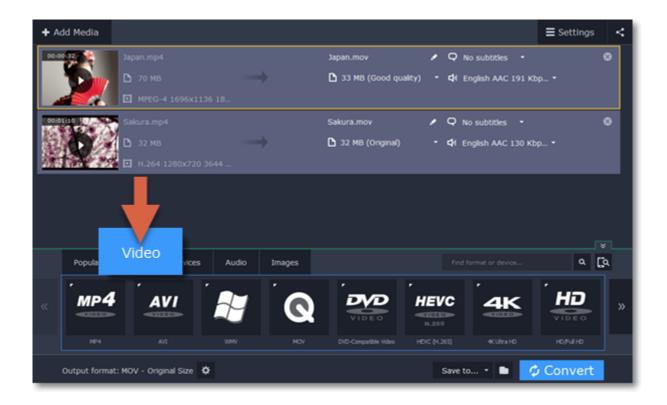
To get more details, right-click the file and choose **File Information** from the pop-up menu. Here, you can see all the information about the original file's video and audio streams.



# **Choosing output format**

After you've <u>added media files</u>, it's time to choose the output format for converting all of the files in the list. Follow the steps below to choose a video output format.

Step 1: In the lower half of the window, click the Video tab to see a list of video formats.



**Step 2:** Click the video format that you want to convert the files to. A list of presets for this format will appear.

#### **Step 3:** Choose the video codec and resolution that you want to use.

To convert without changing the resolution, choose the preset marked with "Original size" or "Same as input".



Each preset displays information about the video, audio, and other output parameters that can help you choose the right one.



#### **Choosing the right resolution**

A video's resolution is its size in pixels, horizontally and vertically. It is usually listed as the width times height: 1920x1080, or just the height: 1080p. This means that the video is 1920 pixels long and 1080 pixels tall. The higher a video's resolution, and the more pixels it has, the more detail it can preserve.

First of all, you need to know the original file's resolution. To do that, check the video information next to the file's preview. When you choose the output resolution, select the same resolution to preserve the original quality, or choose a lower resolution to reduce the file size.

#### **Advanced settings**

If you can't find a suitable preset, you can select the necessary properties manually. Click the **Customize** button next to the '*Output format* box to modify the video and audio properties of the currently selected preset.

Learn more

# **Choosing a format for devices**

If you are planning to watch some videos on your device, convert them first to save space and make sure that they can be opened with the built-in player.

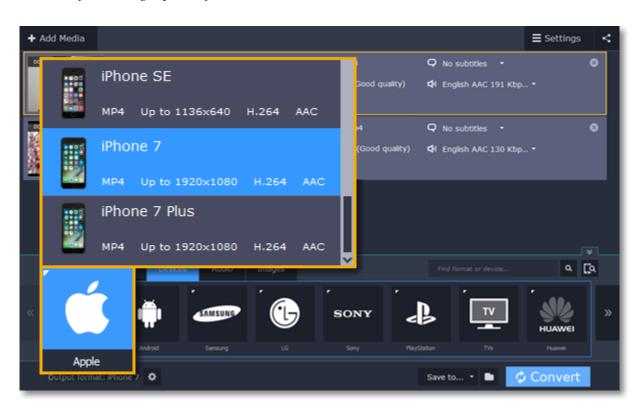
**Step 1:** Click the **Devices** tab in the lower half of the window.



**Step 2:** Use the arrows to scroll through the list and find your device's manufacturer.

**Step 3:** Click on the manufacturer to open the list of devices. Choose your device model from the list. Now, the output format, resolution and other parameters have been set to what's best for this device.

If you cannot find your device in the list, try choosing a preset for a similar model.



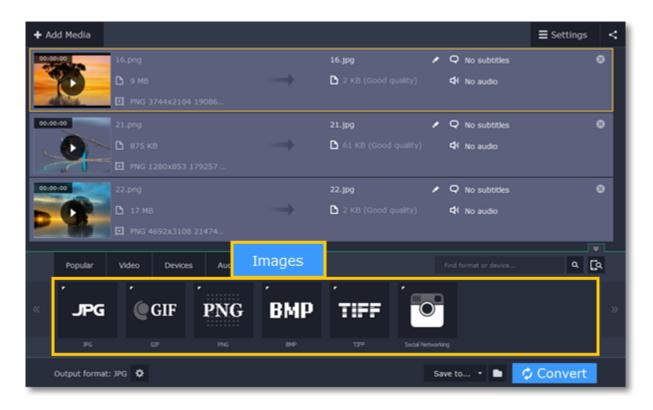
## See also:

Automatic device recognition

# **Choosing an image format**

If you come across a rare image format, you can batch convert images to a more popular format.

**Step 1:** Click the **Images** tab to see a list of image formats.



Step 2: Click the format you want to use and then click the preset for that format.

#### **Social networking**

Websites often have limits on the maximum image size you can upload. If you're planning to upload the photos to a social network or make an avatar, click the **Social Networking** group and select where you want to upload the files. The image size and format will be set to those accepted by the selected website.

## **GIF** images

Using the image presets in the GIF format group, you can create both static and animated GIFs. Simply choose the GIF size that you want: smaller GIFs will load much faster, but larger GIFs let you see all the detail.

How to create animated GIFs

#### See also:

How to convert images

#### Choosing an audio format

Follow the steps below to set an audio format for the output files. You can convert files with the original bitrate, or save space by converting FLAC to MP3.

**Step 1:** In the lower part of the window, click the **Audio** tab to see the list of audio formats.



**Step 2:** Click the format you want to convert the audio to.

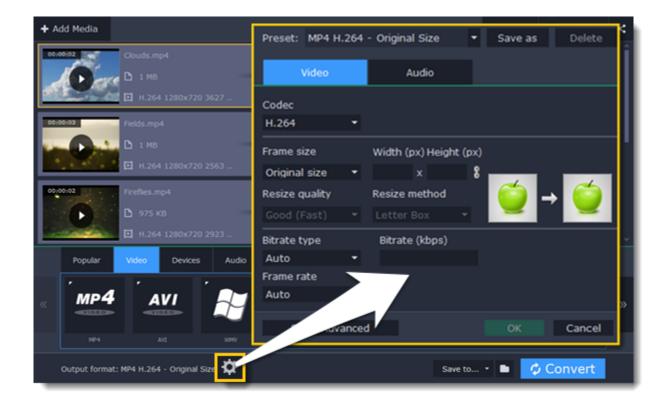
Step 3: Choose the bitrate that you want to use. To convert without changing the bitrate, choose the preset marked with "Original bitrate".



**Bitrate** – the bitrate reflects the amount of data in kilobits that is played back each second (measured in kbps). Higher bitrate usually means higher audio quality as well as larger file size, as extra data needs to be stored within the file. For audio presets, the bitrate is listed next to the format. When you convert a file to lower bitrate, the extra bits of data are irretrievably lost, meaning that you cannot increase quality by converting audio to a higher bitrate, because the file no longer contains the data that can be used to restore higher quality.

#### **Customizing presets**

After selecting a preset, you can manually modify it to change any output properties. To do that, click the cogwheel button next to the **Output format** box to open the settings for the selected preset.



To see more settings, click **Show Advanced** at the bottom of the settings window.

#### **Two Pass Encoding**

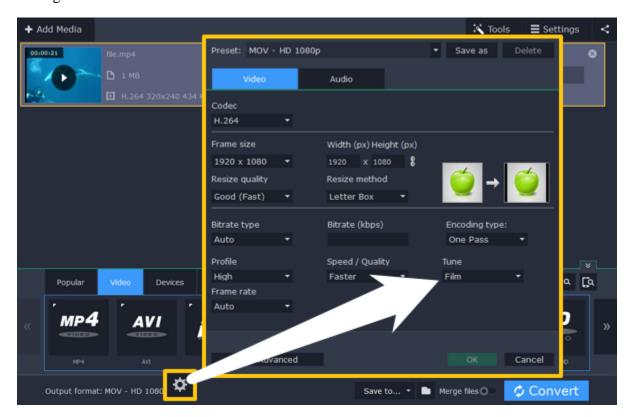
Encoding videos in two passes means that the encoder will go over the media file twice: first, to analyze the file and then to convert it using the collected data. This takes extra conversion time, however it allows for a higher output quality and possibly a slight reduction in file size.

To enable two pass encoding:

- 1. Inside the Settings window, click Show Advanced to show the encoding settings.
- 2. Under Encoding type, choose Two Pass.
- **3.** Click **OK** to accept the changes.

## **Tune settings**

You can use **Tune** for advanced settings of H.264 videos.



**Tune** optimizes the preset settings for the best quality depending on the type of the input video:

- Film for action movie content
- **Animation** for animated cartoons
- Grain for grainy, detailed video material
- $\bullet \ Stillimage for \ still \ image \ footage \\$
- **PSNR** for achieving high peak signal to noise ratio
- $\bullet \, \mathbf{SSIM} optimization \,\, for \,\, structural \,\, similarity \,\,$
- $\bullet \ Fast \ Decode for \ faster \ decoding \\$
- Zero Latency for streaming video.

# **Renaming files**

Before you convert files, you can change the name of each output file.

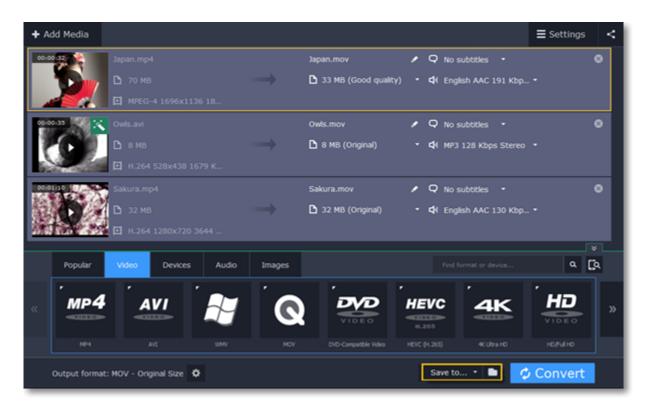
- **Step 1:** Click the pencil icon next to the output file name in the second column of the file list.
- Step 2: Enter the new name into the Output file name box.
- **Step 3:** Click **OK** to accept the changes.



Now, the output file will be converted with this name.

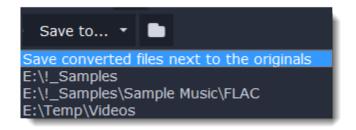
# Changing output folder

When your files are converted, the new files will be created in the folder listed in the **Save to** box at the bottom of the window:



To change where new files are stored, click the folder icon next to the Save to box and choose the folder you want to use.

If you want to save the new files in the same folder as the original files, click the arrow on the **Save to** box and choose **Save converted files next to the originals**.



# **Uploading files to iTunes**

Adding converted videos and music to your iTunes library will allow you to play them on any of your devices connected to the same iTunes account.

# Before you start

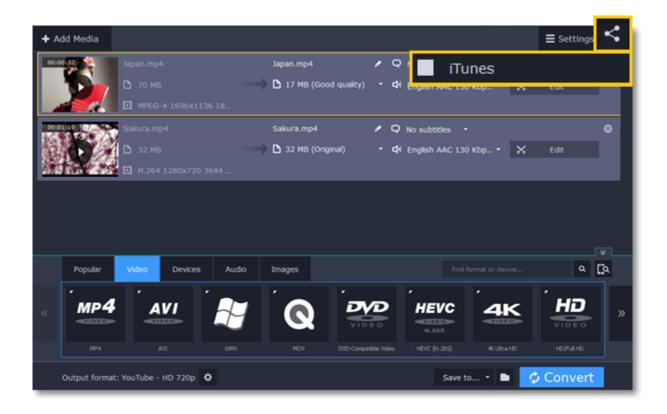
To upload files to iTunes, you will need iTunes 6.0 or higher installed on your computer. <u>Download iTunes</u>

# **Step 1: Prepare the files**

- 1. Open the files you want to convert. Opening media
- 2. Choose an output format. Choosing output format

## **Step 2: Choose iTunes uploading**

- **1.** Click the upload button at the top of the window.
- **2.** Select **iTunes** from the pop-up list.



**Step 3: Convert files** 

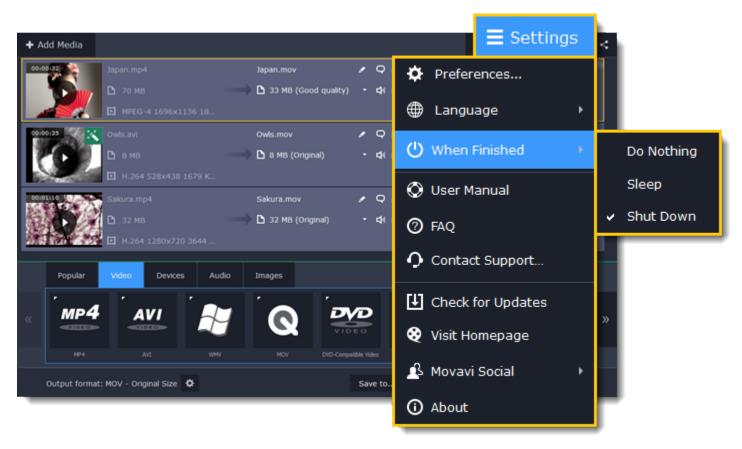
Click **Convert** to start processing your files. After conversion is completed, the files will be uploaded to your iTunes cloud storage.

iTunes® is a trademark of Apple Inc.

### **Energy-saving options**

If you are running a batch conversion for very large files, the process may take a while even on fast computers. The energy-saving options allow you to shut down or hibernate your computer after it is done converting the files.

- 1. Click the **Settings** button in the upper right-hand corner of the window.
- **2.** Click the **When finished** menu to see the energy-saving options.
- **3.** Select one of the following:
- **Do nothing** the conversion will run as usual, and your computer will stay on.
- **Hibernate** your computer will hibernate after conversion is completed.
- **Shut down** your computer will turn off after conversion is completed. We recommend that you close any other applications that may prevent your computer from shutting down.



If you change your mind, you will be able to disable shutdown or hibernation during conversion. Please note that if you use any of the energy-saving options, iTunes and web uploading will be temporarily disabled. The next time you start the converter, the energy-saving options will be automatically turned off.

# **SuperSpeed acceleration**

SuperSpeed mode allows you to convert video files much faster than usual without losing any quality. When you convert videos, encoding the video from one codec to another takes the most time. If you don't need to change the video codec or resolution, the video data can simply be copied to the new file, without having to convert it. This is also sometimes called *remultiplexing* or *remuxing*.

#### When can it be used?

SuperSpeed mode can be used any time when the video stream in the output file is the same as the original:

- The output codec is the same as the video codec in the original file (e.g. when converting MKV files with the H.264 codec to MP4 files with the H.264 codec)
- The output resolution is the same as the original

- No video adjustments are used. This includes stabilization, video adjustments, denoising, subtitles, watermark, crop, and rotation.
- No video compression is used.
- You can still enjoy SuperSpeed conversion when trimming files.

#### How to use SuperSpeed conversion

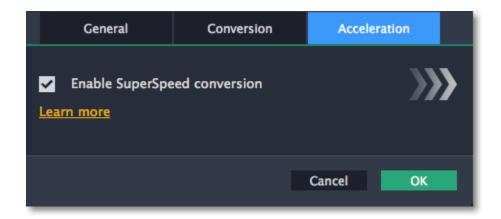
To use SuperSpeed conversion mode, choose output presets marked with the SuperSpeed badge:



This can be a video format or a device preset that has the same codec and resolution as your original files.

#### **Enabling SuperSpeed**

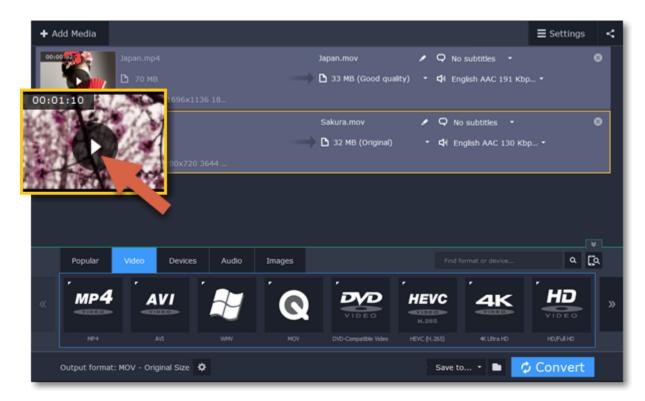
To enable these acceleration options, click the **Settings** button in the converter window, and choose **Preferences** from the pop-up menu. In the preferences, switch to the **Acceleration** tab and select the available acceleration options.



## Saving a snapshot

To save a single frame from the video:

**Step 1:** Click the **Play** button on the video's thumbnail in the list to view the original file.



Step 2: In the player window, move to the frame you want to save and click the **Take a Snapshot** button.

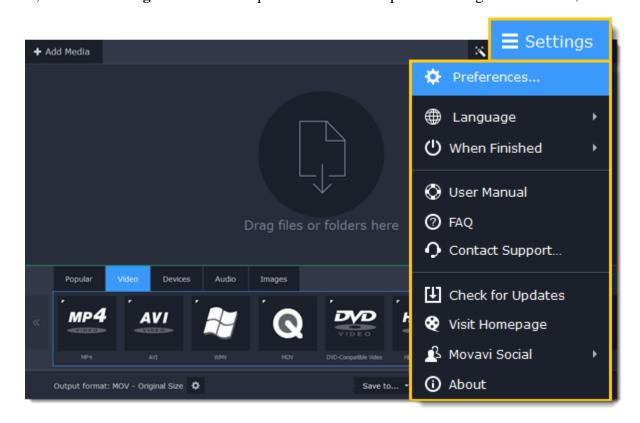


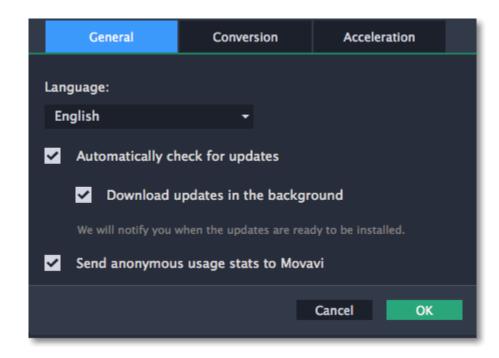
**Step 3:** A **Finder** window will open. Choose where you want to save the snapshot and click **Save**.

The snapshot will be saved with the original video's size and quality.

## **Movavi Video Converter Settings and Preferences**

To open the converter preferences, click the **Settings** button at the top of the window to open the settings menu. There, click **Preferences**.





The preferences are organized into tabs at the top: General, Conversion, and Acceleration. Click the related tab to find the preferences you need. General preferences

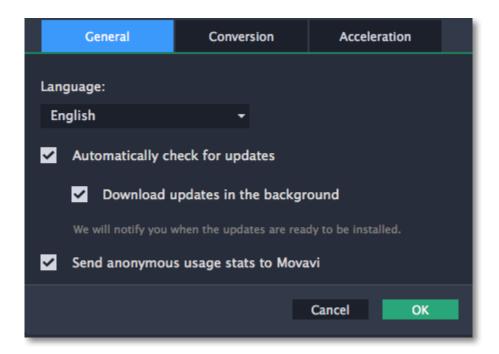
Conversion preferences
Acceleration preferences

# **General preferences**

On the General tab of the preferences, you can choose the interface language and control how the application behaves.

**Automatically check for updates** – select this option and you'll be notified whenever a new version is available. Updates within your version are absolutely free (e.g. 1.0 to 1.1), while new releases are offered with a hefty discount to registered users.

**Send anonymous usage stats to Movavi** – checking this box will allow the program to send usage statistics to our development team, enabling us to fix any bugs you may encounter much faster, as well as add new features that you might be missing. The data contains no personal information, will not be disclosed to third parties and will be used for software improvement purposes only.



## **Conversion preferences**

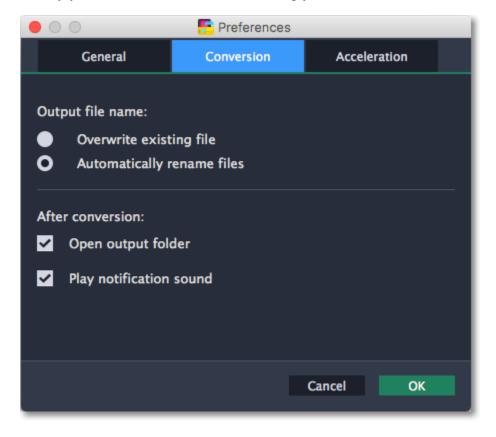
On the **Conversion** tab of the preferences, you can manage how files are converted.

Under *Output file name*, you can choose what happens if a file with the same name already exists in the output folder:

- Overwrite existing file: the old file will be permanently replaced with the newly converted file.
- Automatically rename files: new files will be automatically renamed, and both files will be preserved.

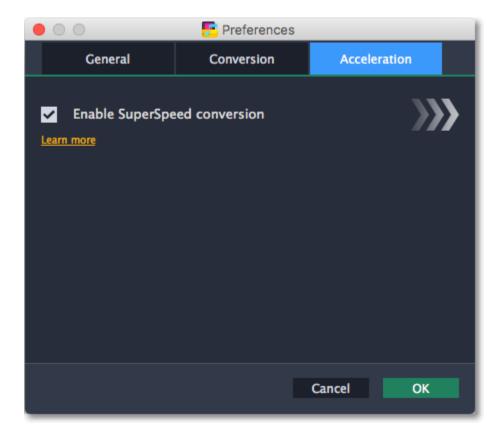
Under After conversion, you can choose what happens when conversion is finished:

- Open output folder: shows the converted files in the output folder.
- Play notification sound: the program will notify you when it has finished converting your files.



## **Acceleration preferences**

On the **Acceleration** tab of the Preferences, you can accelerate conversion using the latest technologies.



#### **Enable SuperSpeed conversion**

- SuperSpeed is an express conversion mode that converts compatible formats over 50x faster than regular conversion.
- SuperSpeed works if the output codec is the same as the original codec, and no effects have been applied to the video.
- When choosing an output format, look for presets with the **SuperSPEED** badge. This means that converting to this format will be much faster than others.

Learn more about superspeed



#### Help and support

If you have any questions or concerns regarding Movavi software, you are welcome to contact our support team.

#### You can contact us using:

E-mail: <a href="mailto:support@movavi.com">support@movavi.com</a> – guaranteed response in 3 business days <a href="mailto:Live Chat">Live Chat</a> – available 12 A.M. — 6 P.M. GMT \ 4 P.M. — 10 A.M. PST Or use the contact form

Please describe your problem in as much detail as possible; any screenshots, log files, or information about your system will allow us to help you faster.

#### Frequently asked questions:

Why is "Trial Version" written on my videos?

The watermark is only placed on videos in the trial version. Buy an activation key and use it to activate the program. After that, you can convert files without the watermark.

Removing trial restrictions

## My file does not open

- Check the list of supported formats to see if this file format is supported by the converter.
- If the format and codec are supported, the file may be damaged.
- Some DVDs and files can be protected with DRM against copying. The converter is not intended to make illegal copies of such files.

**Supported formats** 

## **System requirements**

System requirements			
	Minimum system requirements	Recommended configuration	
Operating system	Mac C	OS #® 10.7 or higher	
Processor	64-b	64-bit Intel® processor	
Resolution	1280x768 screen resolution, 32-bit color	1280x1024 or higher	
RAM	128 MB RAM	2 GB	
Available disk space	120 MB available hard disk space for	2 GB	
-	installation,	Video conversion may require several GB of	
	750 MB for ongoing operations	additional space.	
Additional features		Sound card for audio playback	

Administrator permissions are required for installation

Movavi Video Converter may also run on slower machines, however, we cannot guarantee stable performance if the minimum requirements are not met.

# **Supported formats**

Video Formats	Supported Codecs	Input	Output
3GP, 3G2	H.263, H.264, MPEG-4	~	~
ASF	MPEG-4, VC-1, WMV V7	<b>~</b>	
AVCHD	H.264	<b>~</b>	
AVI	H.264, MPEG-4, MJPEG	~	~

H.V.   H.V.   L1264   V		VWD		
FLV				
FLV				
H.V				_
FLV				
PLV				
HLV				
FLV				+ -
FI.V				~
FI.V			~	
FLV	Netpbm formats	(.pam, .pbm, .pgm, .ppm)	~	
FLV	J	PEG (.jpg)	~	~
FLV	JPEG	(.jpg, .jp2, .jls)	~	
FLV			~	~
FLV				
FLV				~
FLV				
FLV	Im			Out
FLV				<b>~</b>
FI.V	WMA			
FI.V				<b>~</b>
FLV				
FLV				<b>~</b>
FLV				~
FLV				
FLV				
FLV				<b>\</b>
FLV FLV1, H.264				
FLV   FLV1, H.264				
FLV				
FLV				<b>\</b>
FLV   FLV1, H.264				
FLV   FLV1, H.264	Audio Formats	Supported Codecs	Input	Out
FLV   FLV1, H.264	WTV		~	
FLV   FLV1, H.264			<b>'</b>	
FLV	WMV			<b> </b>
FLV   FLV1, H.264	XX7% #X7			_
FLV FLV1, H.264	AA COTAT			<b></b>
FLV   FLV1, H.264	WehM			
FLV   FLV1, H.264   W   H.263, VP6, Flash Screen Video   W   H.263, VP6, Flash Screen Video   W   H.263, VP6, Flash Screen Video   W   MPEG-2, H.264   W   MPEG-2, H.264   W   MEG-2, H.264   W   MEG-2, MJPEG, Theora, VP9   W   MEG-2, MJPEG, Theora, VP9   W   MIPEG-4, MJPEG, Theora, VP9   W   MIPEG-4, MJPEG   W   MIPEG-4, MJPEG   W   MIPEG-4, MJPEG   W   MIPEG-4, MJPEG, AIC, ProRes, Sorenson 1/3, PNG   MIPEG-4, H.264   W   MIPEG-4, H.264   W   MIPEG-4, H.264   W   MIPEG-4, H.264   W   MIPEG-4, MJPEG, ProRes   W   MIPEG-1, MIPEG-2   W   MIPEG-1, MIPEG-2   W   MIPEG-1, MIPEG-2, DV   MIPEG-4, MI	~		-	
FLV FLV1, H.264				_
FLV   FLV1, H.264	RM. RMVB			
FLV FLV1, H.264  H.263, VP6, Flash Screen Video  M2TS MPEG-2, H.264  M2TS, TS, MTS, M2T MPEG-2, H.264  MKV H.264, MPEG-4, MJPEG, Theora, VP9  DV, Uncompressed  MOV H.264, MPEG-4, MJPEG  MOV, QT H.264, MPEG-4, MJPEG, AIC, ProRes, Sorenson 1/3, PNG  MP4 MP4 MPEG-4, H.264  MP4, M4V MPEG-4, H.264, MJPEG, ProRes  MPG, VOB MPEG-1, MPEG-2  IPG, MPEG, MPE, MIV, VOB, DAT, MOD, TOD, VRO  MYEG-1, MPEG-2, DV				"
FLV FLV1, H.264  H.263, VP6, Flash Screen Video  M2TS MPEG-2, H.264  M2TS, TS, MTS, M2T MPEG-2, H.264  MKV H.264, MPEG-4, MJPEG, Theora, VP9  DV, Uncompressed  MOV H.264, MPEG-4, MJPEG  MOV, QT H.264, MPEG-4, MJPEG, AIC, ProRes, Sorenson 1/3, PNG  MP4 MPEG-4, H.264  MP4, M4V MPEG-4, H.264, MJPEG, ProRes  MPG, VOB MPEG-1, MPEG-2  IPG, MPEG, MPE, MIV, VOB, DAT, MOD, TOD, VRO  M2TS  MPEG-1, MPEG-2, H.264  MPA, M4V MPEG-1, MPEG-2  MPEG-1, MPEG-2, H.264  MPEG-1, MPEG-2, H.264				-
FLV       FLV1, H.264         H.263, VP6, Flash Screen Video       MEG-2, H.264         M2TS, TS, MTS, M2T       MPEG-2, H.264         MKV       H.264, MPEG-4, MJPEG, Theora, VP9         DV, Uncompressed       DV, Uncompressed         MOV       H.264, MPEG-4, MJPEG         MOV, QT       H.264, MPEG-4, MJPEG, AIC, ProRes, Sorenson 1/3, PNG         MP4       MPEG-4, H.264         MP4, M4V       MPEG-4, H.263, H.264, MJPEG, ProRes         MPG, VOB       MPEG-1, MPEG-2				
FLV       FLV1, H.264	IPG, MPEG, MPE, M1V, VOB, DAT, MOD, TOD, VRO	MPEG-1, MPEG-2, H.264	~	
FLV       FLV1, H.264         H.263, VP6, Flash Screen Video         M2TS       MPEG-2, H.264         M2TS, TS, MTS, M2T       MPEG-2, H.264         MKV       H.264, MPEG-4, MJPEG, Theora, VP9         DV, Uncompressed       DV, Uncompressed         MOV       H.264, MPEG-4, MJPEG         MOV, QT       H.264, MPEG-4, MJPEG, AIC, ProRes, Sorenson 1/3, PNG         MP4       MPEG-4, H.264	MPG, VOB	MPEG-1, MPEG-2	~	<b>~</b>
FLV         FLV1, H.264       Image: Control of the control of	MP4, M4V	MPEG-4, H.263, H.264, MJPEG, ProRes	~	
FLV         FLV1, H.264       V         H.263, VP6, Flash Screen Video       V         M2TS       MPEG-2, H.264       V         M2TS, TS, MTS, M2T       MPEG-2, H.264       V         MKV       H.264, MPEG-4, MJPEG, Theora, VP9       V         DV, Uncompressed       V         MOV       H.264, MPEG-4, MJPEG       V	MP4	MPEG-4, H.264	~	~
FLV       FLV1, H.264       Image: FLV1, H.264       <	MOV, QT	H.264, MPEG-4, MJPEG, AIC, ProRes, Sorenson 1/3, PNG	~	
FLV       FLV1, H.264       V         H.263, VP6, Flash Screen Video       V         M2TS       MPEG-2, H.264       V         M2TS, TS, MTS, M2T       MPEG-2, H.264       V         MKV       H.264, MPEG-4, MJPEG, Theora, VP9       V	MOV		~	\ \
FLV       FLV1, H.264       V         H.263, VP6, Flash Screen Video       V         M2TS       MPEG-2, H.264       V         M2TS, TS, MTS, M2T       MPEG-2, H.264       V		DV, Uncompressed	~	
FLV       FLV1, H.264       V         H.263, VP6, Flash Screen Video       V         M2TS       MPEG-2, H.264       V	MKV	H.264, MPEG-4, MJPEG, Theora, VP9	~	~
FLV FLV1, H.264	M2TS, TS, MTS, M2T	MPEG-2, H.264	~	
FLV FLV1, H.264 •	M2TS	MPEG-2, H.264	~	~
		H.263, VP6, Flash Screen Video	~	
DVD MPEG-1, MPEG-2	FLV	FLV1, H.264	~	~
DVD	DVD	MPEG-1, MPEG-2	~	
DivX DivX	DivX	DivX	~	

#### **Codec activation**

Some video and audio codecs are patented by other companies, and it is required that new users activate the codecs they use to comply with patent law.

- 1. When you open a media file or export your project with one of these codecs, you may see a Codec Activation message.
- 2. Select the Activate other codecs without asking box to activate all codecs automatically in the future. The codecs will be activated automatically, but an Internet connection is still necessary.
- **3**. Click **Activate** to complete the codec activation.

#### Codec could not be activated

If you see a codec activation error, make sure that you have a working Internet connection. Without Internet, the codecs cannot be activated even if you've chosen to activate them automatically. After you've restored the network connection, please restart the application.

#### What kind of data is being sent?

The data we send does not contain any information that can personally identify you. We only receive information about which codecs were used.

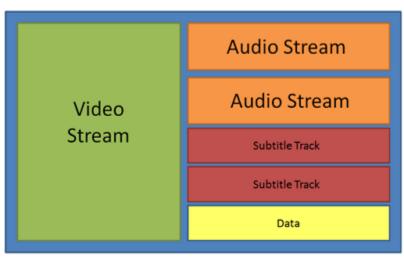
#### Glossary

#### General

#### **Container Format (Video Format)**

A container format is a file format for storing video or audio files that *contains* video and audio data in separate streams, as well as any other associated data, such as subtitle tracks and additional data about the file. You can think of a container format as a box that holds together all the parts that make up a video file, as illustrated below. The container format is what you usually see when you work with video files: you can judge which format your video is in by the file extension: \*.mp4 corresponds to MP4 format, \*.mkv to Matroska format, etc.

#### Video File



### Codec

While a video file contains video and audio streams, these streams are in turn *encoded* using a video or audio codec that compresses the data. You can think of a codec as a language: to play a video encoded with a certain codec, your player needs to be able to 'understand' how it was encoded, so that it can *decode* or decipher the file. If your computer does not know how to decode a new codec, you can fix this by converting the file to a different format or by installing a codec pack. However, please keep in mind that a lot of malware programs disguise themselves as codec packs; you should only download codec packs directly from codec manufacturers or from trusted sources.

#### **Bitrate**

When referring to media, bitrate is the number of bits that is played back each second. The higher the bitrate, the more details that can be conveyed with each second of the video or audio stream, and therefore, the higher the quality. There are two types of bitrate: constant bitrate (CBR) and variable bitrate (VBR). Videos with **constant bitrate**, as you can probably guess from the name, have the same bitrate for each and every frame of the video, no matter the complexity of the frame: simple frames, for example, those completely filled with black, have the same number of bits as complex, colorful frames. This has a number of limitations, since the simple frames take up more bits than needed to convey them, while complex frames are limited in quality. With **variable bitrate**, however, each frame is allotted only as many bits as it needs, without limiting quality or wasting data. In most cases, we recommend that you use variable bitrate, however, CBR is sometimes useful for streaming media.

## Frame Rate

The frame rate, or frames per second (FPS) is the number of video frames that is contained in a second of video. At low frame rates, you may notice that the video is 'jittery', while higher frame rates produce a smooth high-quality video. Shooting videos at high frame rates (48 or 60 FPS) requires more resources and disc space, but you can easily slow down a high-FPS video to produce a slow-motion effect without producing visual stutter. The industry standard for cinema frame rate is 24 or 25 frames per second, which is perceived as comfortable to the human eye.

## **Resolution (Frame Size)**

Resolution is the number of pixels that can fit inside the video frame. It is usually presented as "width x height" of the frame, for example, 1280x720 or 1920x1080. Sometimes, resolutions may also be referred to as "720p" or "1080p", by the number of pixels in a frame vertically. At high resolutions, each frame is conveyed using more pixels, therefore allowing for more detail and higher quality, though taking up more disc space. Whenever you convert a video to a lower resolution, you irretrievably lose some data, but if you convert a low-resolution video to HD, the quality will stay the same. If you need to do so, however, we recommend that you use *Upscale SD*, *DVD to HD* presets in Movavi Video Converter, as they use an algorythm that slightly improves video quality when converting to larger resolutions.

#### **Aspect Ratio**

A video's aspect ratio is the ratio of a video's width to its height in pixels. The two most frequently used aspect ratios are 4:3 and 16:9. The former is used by most analog television broadcasts, while the latter, also referred to as widescreen – in films, DVDs, and modern HD video. When the aspect ratios of your screen and a video do not match, you may notice black bars on two sides of the video.

#### **Sample Rate**

Sample rate, measured in Hertz, determines how many samples of digital audio are recorded each second. Higher sample rates allow to record higher quality audio, although the files will take up slightly more space. The recommended sample rate is 44100 Hz, which is the standard for audio CDs, delivering sound that covers the full range of human hearing. To reduce file size, you can convert audio with lower sample rates, as low as 22 kHz, but keep in mind the quality deterioration.

#### **Video Formats**

#### Audio Video Interleaved – AVI (\*.avi)

AVI is a multimedia container format created by Microsoft in the early 1990s. AVI supports multiple video and audio codecs and can contain up to 16 audio and 16 subtitle tracks. While support for AVI is widespread on all operating systems, it is steadily being replaced by more efficient formats.

#### DivX (\*.divx)

DivX is a proprietary video format developed by DivX, Inc. Using its own codec, DivX allows for high compression rates while retaining high quality. Sometimes the DivX codec is also used to encode video in AVI files. DivX is not supported by many media players, and requires a codec pack to play, but you can convert DivX files into AVI or other formats using Movavi Video Converter.

## QuickTime - MOV (\*.mov)

Developed by Apple, QuickTime is natively supported on Macs and iOS devices, so if you need to be sure that your video can be played on a Mac, converting it to MOV would be a good idea. To play MOV files on Windows, you can either <u>download</u> and install the QuickTime player from Apple's official website, or view it using <u>Movavi 3D Media Player</u>.

#### Other

#### **Interlaced Video, Deinterlacing Video**

Video interlacing is a method used in traditional analogue video broadcasting that arose due to the limitations of early television. Each frame of the video is split into half-frames, each frame containing even and odd rows consecutively. This allows to broadcast at double the frame rate, producing a seemingly smoother video stream, while the eye does not notice the missing rows. However, on digital displays, interlaced video may produce visible defects in the form of horizontal lines. Deinterlacing helps remove these defects using algorythms by merging the two half-frames into one. Movavi Video Converter automatically deinterlaces output videos, and you can use the Deinterlace effect if you are editing analogue video in Movavi Video Editor.

#### **Preset**

A preset is a pre-made configuration that contains all the necessary properties to convert a video file, including format, codec, resolution, etc.