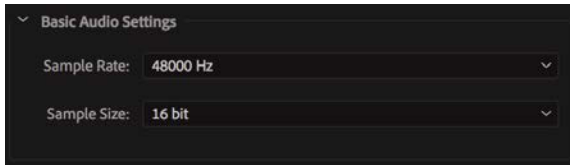**7** Click to select the Audio section. In the Basic Audio Settings section, choose 48000 Hz as the sample rate, and set the Sample Size to 16 bit. Just below that, set the Audio Channel Configuration Output Channels to output Stereo.

8 Click the Export button at the bottom of the dialog to export the sequence and transcode it to a new media file.

▶ **Tip:** HEVC/H.265 is a new compression system formulated by the same Motion Picture Experts Group that brought us H.264. It's more efficient, but fewer players support it. You may be asked to supply media using this codec when producing UHD content.

The most popular delivery format and codec is an MPEG4 (.mp4) file, using the H.264 codec. If you choose H.264 in the Format menu, you'll find presets for YouTube and Vimeo.
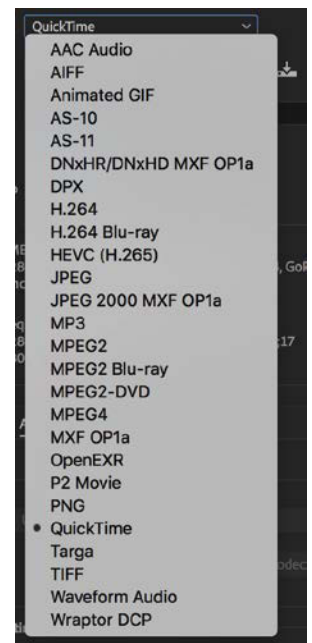
Working with Adobe Media Encoder CC

Adobe Media Encoder CC is a stand-alone application that can be run independently of or be launched from Premiere Pro. One advantage of using Media Encoder is that you can send an encoding job directly from Premiere Pro and then continue working on your edit as the encoding is processed. If your client asks to see your work before you finish editing, Media Encoder can produce the file in the background without interrupting your flow.

By default, Media Encoder pauses encoding when you play video in Premiere Pro to maximize playback performance. You can change this in the Premiere Pro Playback Preferences.

Choosing a file format for export

It can be a challenge to know how to deliver your finished work. Ultimately, choosing delivery formats is a process of planning backward; find out how the file will be presented, and it's usually straightforward to identify the best file type for the purpose. Often, clients will have a delivery specification you must follow, making it easy to select the right options for encoding.

Premiere Pro and Adobe Media Encoder can export to many formats.

Using the formats

Adobe Media Encoder supports many formats. Knowing which setting to use can seem a little overwhelming. Let's take a look at some common scenarios and review which formats are typically used. There are few absolutes, but these should get you close to the correct output. It's a good idea to test your output on a short section of your video before producing a full-length finished file.

- **Encoding for uploading to user-generated video sites:** The H.264 format includes presets for YouTube and Vimeo in widescreen, SD, HD, and 4K. Use these presets as a starting point.

- **Encoding for devices:** Use the H.264 format for current devices (Apple iOS devices, Apple TV, Kindle, Nook, Android, and TiVo), as well as for some generic 3GPP presets; use MPEG4 for older MPEG4-based devices. Be sure to check the manufacturer's specifications on its website.

- **Encoding for DVD/Blu-ray:** Generally, you'll use MPEG2 for shorter video projects—namely, the MPEG2-DVD preset for DVD and MPEG2 Blu-ray preset for Blu-ray Discs. The visual quality of MPEG2 is indistinguishable from H.264 in these high-bit-rate applications and encodes faster. However, the H.264 codec is more efficient, letting you fit more content into a smaller storage space.

In general, the Premiere Pro presets are proven and will work for your intended purpose. Avoid adjusting settings when using presets designed for devices or optical discs because changes that seem subtle might make the files unplayable; hardware players have stringent media requirements.

Most Premiere Pro presets are conservative and will deliver good results with the default settings, so you probably won't improve the quality by tinkering.

Configuring the export

To export from Premiere Pro to Adobe Media Encoder, you'll need to queue the export. The first step is to use the Export Settings dialog to make choices about the file you're going to export.

1 Continue working with the Review Copy sequence. Either select it in the Project panel or have it open in the Timeline panel, with that panel active.

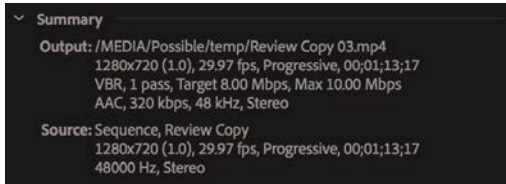2 Choose File > Export > Media, or press Ctrl+M (Windows) or Command+M (macOS).

   It's best to work through the Export Settings dialog from the top down. Choose your format and presets first, then pick the output, and finally decide whether you'd like to export audio, video, or both.

3 Choose H.264 from the Format menu. This is a popular choice for files you'll upload to online video websites.

4 In the Preset menu, choose Vimeo 720p HD.

These settings match the frame size and frame rate of the sequence. The codec and data rate match the requirements for the Vimeo.com website.

5 Click the output name (the blue text) and give the file a new name, **Review Copy 03.mp4**. Save it to the same destination you selected in the previous exercise.

6 Check the Summary information text to verify your choices.

> **Summary**
> **Output:** /MEDIA/Possible/temp/Review Copy 03.mp4
> 1280x720 (1.0), 29.97 fps, Progressive, 00;01;13;17
> VBR, 1 pass, Target 8.00 Mbps, Max 10.00 Mbps
> AAC, 320 kbps, 48 kHz, Stereo
>
> **Source:** Sequence, Review Copy
> 1280x720 (1.0), 29.97 fps, Progressive, 00;01;13;17
> 48000 Hz, Stereo

Here's an overview of the various tabs displayed on the Summary tab:

• **Effects:** You can add a number of useful effects and overlays as you output your media (see these options in the next section).

• **Video:** The Video tab allows you to set the frame size, frame rate, field order, and profile. The default settings are based on the preset you chose.

• **Audio:** The Audio tab allows you to adjust the bit rate of the audio and, for some formats, the codec. The default settings are based on the preset you chose.

• **Multiplexer:** These controls let you determine whether the encoding method is optimized for compatibility with a specific device. This can also control whether the video and audio are combined or delivered as separate files.

• **Captions:** If your sequence has captions, you can specify whether they are ignored or "burned in" (added to the visuals permanently).

• **Publish:** This tab lets you enter the details of several social media services for your file to be delivered to. You'll learn more about this later in this lesson.

Export effects

You have the option to apply several effects, add information overlays, and make automated adjustments to the output file.

Here's an overview:

• **Lumetri Look/LUT:** Choose from a list of built-in Lumetri looks or browse to your own, allowing you to quickly apply a nuanced adjustment to the appearance of your output file.

• **SDR Conform:** If your sequence is high dynamic range, you can produce a standard dynamic range version.

- **Image Overlay:** Add a graphic, like a company logo or network "bug," and position it on-screen. The graphic will be incorporated into the image.

- **Name Overlay:** Add a text overlay to the image. This is particularly useful as a simple watermark to protect your content or as a way of marking different versions.

- **Timecode Overlay:** Display timecode for your finished video file, making it easy for viewers without specialized editing software to note reference times for commenting purposes.

- **Time Tuner:** Specify a new duration or playback speed, up to + /–10%, achieved by applying subtle adjustments to periods of low action where the soundtrack is silent. Results vary depending on the media you are working with, so test different speeds to compare the end result. A music soundtrack is likely to interfere with the results.

- **Video Limiter:** While it's usually best to get your video levels right in the sequence, you can apply a limiter here too, just in case.

- **Loudness Normalization:** Use the Loudness scale to normalize audio levels in your output file. Like video levels, it's best to get this right in the sequence, but it can be a helpful extra security to know your levels will be limited during export.

Using the Source and Output panels

Entire Sequence
• Sequence In/Out
Work Area
Custom

Moving to the left side of the Export Settings dialog, you'll find the Source Range menu.

You can export the entire sequence, a range you set by placing an In mark and an Out mark, a range set by the Timeline Work Area bar (an additional option in the Timeline panel largely replaced by using In and Out marks), or a custom region selected now using the small triangular handles and navigator directly above the menu. By default, In and Out marks are used if they exist in your sequence or clip when exporting.

In the upper-left corner of the Export Settings dialog are the Output and Source panes. The Output pane shows a preview of the video to be encoded. It's useful to view the video on the Output tab to spot errors such as unwanted letterboxing or distortion caused by the irregularly shaped pixels used in some video formats.

The Source tab gives access to basic cropping controls. Always check the Output tab after making changes on the Source tab; it shows the final result.

Queuing the export

When you're ready to create your media file, you have a few more options to consider. These are found in the lower-right portion of the Export Settings dialog box.

- **Use Maximum Render Quality:** Consider enabling this setting when scaling from larger image sizes to smaller image sizes. This option requires more RAM and can slow down the output. This option is usually not needed except when working without GPU acceleration, scaling the image down, and seeking the highest quality possible.
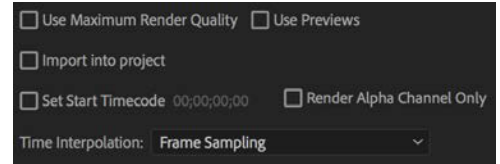
- **Use Previews:** When you render effects, preview files are produced that look like your original footage combined with the effects. If you enable this option, the preview files will be used as the source for the new export. This can save a significant amount of time that would otherwise be spent rendering the effects again. The result might be lower quality, depending on the sequence preview files format (see Lesson 2, "Setting Up a Project").

- **Import into project:** This option automatically imports the newly created media file into your current project.

- **Set Start Timecode:** This allows you to specify a new file start timecode. This is particularly useful if you are working in a broadcast environment where a specific timecode start may be a delivery requirement.

- **Render Alpha Channel Only:** Some post-production workflows require a separate grayscale file representing the alpha channel (the channel that defines opacity). This option produces just that file.

- **Time Interpolation:** If your exported file will have a different frame rate to your sequence, this menu lets you specify the way the frame-rate change is rendered. The options are the same as those that apply when changing clip playback speed in a sequence.
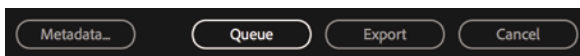
- **Metadata:** Click this button to open the Metadata Export panel. You can specify a wide range of settings, including information about copyright, creator, and rights management. You can even embed useful information such as markers, script, and speech transcription data for advanced delivery options. In some cases, you may prefer to set the Metadata Export Options setting to None, removing all metadata.

- **Queue:** Click the Queue button to send the file to Adobe Media Encoder, which will open automatically, allowing you to continue working in Premiere Pro while the export takes place.

- **Export:** Select this option to export directly from the Export Settings dialog rather than sending the file to the Adobe Media Encoder queue. This is a simpler workflow and usually a faster export, but you won't be able to edit in Premiere Pro until the export is complete.

● **Note:** On the Video tab, you'll also find the option Render At Maximum Depth. When working without GPU acceleration, this can improve the visual quality of your output by using greater precision to generate colors. However, this option can add to the render time.

Click the Queue button to send the file to Adobe Media Encoder, which starts up automatically.

Media Encoder will not begin encoding automatically. To begin encoding, click the Start Queue button ▶ in the top right corner.

## Looking at additional options in Adobe Media Encoder

Using Adobe Media Encoder brings a number of benefits. Although it involves a few extra steps beyond simply clicking the Export button in the Export Settings panel of Premiere Pro, the extra options are worth it.
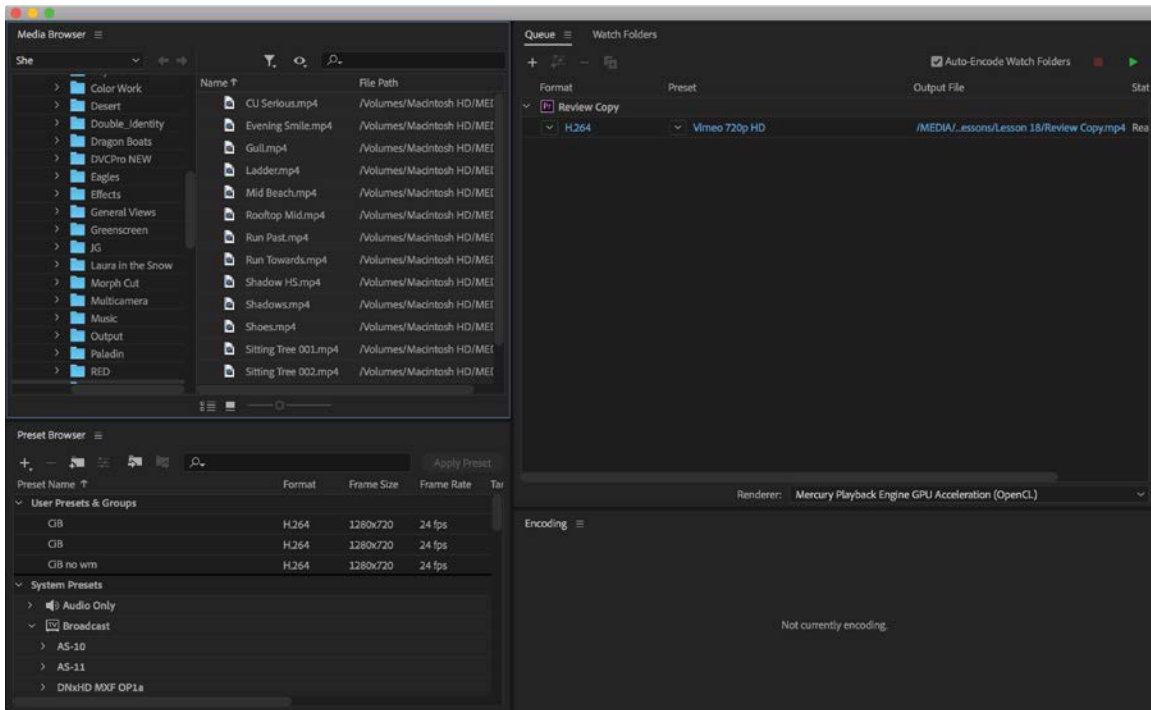

● **Note:** Adobe Media Encoder does not have to be used from Premiere Pro. You can launch Adobe Media Encoder on its own and browse Premiere Pro projects to choose items to transcode.

Here are some of the most useful features you'll find in Adobe Media Encoder:

- **Add files for encoding:** You can add files to Adobe Media Encoder by choosing File > Add Source. You can even drag and drop files into it from Windows Explorer (Windows) or Finder (macOS). There's a Media Browser panel too, which you can use to locate select items, just as you would in Premiere Pro.

- **Import Premiere Pro sequences directly:** You can choose File > Add Premiere Pro Sequence to select a Premiere Pro project file and choose sequences to encode (without ever launching Premiere Pro).

- **Render After Effects compositions directly:** You can import and encode compositions from Adobe After Effects by choosing File > Add After Effects Composition. Once again, you don't need to open Adobe After Effects.

- **Use a watch folder:** If you'd like to automate some encoding tasks, you can create watch folders by choosing File > Add Watch Folder and then assigning a preset to that watch folder. Media files placed into the folder are automatically encoded to the format specified in the preset.

- **Modify a queue:** You can add, duplicate, or remove any encoding tasks using buttons at the top of the list.

- **Start encoding:** You can set the queue to start automatically in the Media Encoder preferences. Alternatively, click the Start Queue button ▶ to start encoding. Files in the queue are encoded one after another. You can add files to the queue after encoding has begun. You can even add files to the queue directly from Premiere Pro while encoding is taking place.

- **Modify settings:** Once the encoding tasks are loaded into the queue, changing settings is easy; click the item's Format or Preset in blue, and the Export Settings dialog appears.
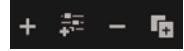
When encoding has completed, you can quit Media Encoder.

Uploading to social media

Return to Premiere Pro, make sure the Timeline panel is active, and go to File > Export > Media to display the Export dialog.

Select the Publish settings.

The Publish settings allow you to upload exported videos to your Creative Cloud Files folder, Adobe Behance, Facebook, an FTP server (FTP is a standard way to transmit files to a remote file server), Twitter, Vimeo, and YouTube when the encoding is complete.

Social media platforms are increasingly important media distribution outlets, and Adobe is closely involved in developing new technologies and workflows to make it easier to share your creative work and maximize audience engagement.
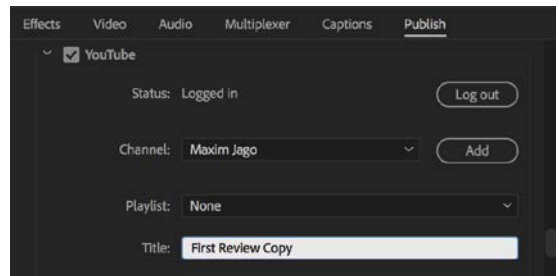
Exchanging with other editing applications

Collaboration is often essential in video post-production. Premiere Pro can both read and write project files that are compatible with many of the top editing and color-grading tools on the market. This makes it straightforward to share creative work, even if you and your collaborators are using different editing systems.

Premiere Pro supports EDLs, OMF, AAF, and XML import and export.

If you're collaborating with an Avid Media Composer editor, you can use AAF as an intermediary, allowing the exchange of clip information, edited sequences, and a limited number of effects.

If you're collaborating with an Apple Final Cut Pro editor, you can use XML as an intermediary in a similar way.

It's easy to export an AAF or XML file from Premiere Pro. Just select a sequence you want to export and either choose File > Export > AAF or choose File > Export > Final Cut Pro XML.

For more information about best practices when sharing creative work between applications, see the online help.

Exporting to OMF

Open Media Framework (OMF) has become a standard way of exchanging audio information between systems (typically for audio mixing). When you export an OMF file, the typical method is to create a single file with all your audio tracks inside. When the OMF file is opened by a compatible application, it will show all the tracks.

Here's how to create an OMF file:

1 With a sequence selected, choose File > Export > OMF.

2 In the OMF Export Settings dialog, enter a name for the file in the OMF Title field.

3 Check that the Sample Rate and Bits Per Sample settings match your footage; 48000 Hz and 16 bits are the most common settings.

4 From the Files menu, choose one of the following:

- **Embed Audio:** This option exports an OMF file that contains the project metadata and all the audio files for the selected sequence.

- **Separate Audio:** This option exports separate mono audio files into an omfiMediaFiles folder.

5 If you're using the Separate Audio option, choose between the AIFF and Broadcast Wave formats. Both are high quality, but check with the system you need to exchange with. AIFF files tend to be the most compatible.

6 Using the Render menu, choose either Copy Complete Audio Files or Trim Audio Files (to reduce the file size). You can specify that handles (extra frames) be added to give you some flexibility when modifying the clips.
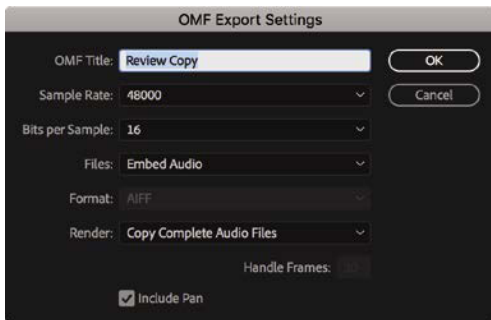
7 Click OK to generate the OMF file.

8 Choose a destination, and click Save. You can target your lesson folder for now.

Working with edit decision lists

An edit decision list (EDL) is a simple text document with a list of instructions for automating editing tasks. The formatting follows standards that allow the EDL to be read by a number of different systems.

It's rare for an EDL to be requested. Still, you can export a sequence to the most commonly used type, CMX3600.

To create a CMX3600 EDL, select a sequence in the Project panel or open it in the Timeline panel, and choose File > Export > EDL.

The requirements for EDLs are usually particular, so be sure to request the EDL specifications before creating one. Thankfully, EDL files are usually small, so if you are unsure of the settings you should choose, you can quickly produce several alternative versions to see which works best.

Final practice

Congratulations! You have now learned enough about Adobe Premiere Pro to import media; organize projects; create sequences; add, modify, and remove effects; mix audio; work with graphics and titles; and output to share your work with the world.

Now that you have completed this book, you may want to practice a little. To make this easier, the media files for a few productions have been combined in a single project file so you can explore the techniques you have learned.

These media files can be used only for personal practice and are not licensed for any form of distribution, including YouTube or any other online distribution, so please do not upload any of the clips or the results of any editing work you do with them. They are not for sharing with the public; they are just for you to practice with privately.

The Final Practice.prproj project file, in the Lessons folder, contains original clips for a few productions.

- **360 Media:** A short excerpt from an introduction to a 360 Video feature film. Use this media to experiment with the playback controls for 360 Video.

- **Andrea Sweeney NYC:** This is a short road-movie diary piece. Use the voice-over as a guide to practice combining 4K and HD footage in a single timeline. Experiment with panning and scanning in the 4K footage if you choose to use HD sequence settings.
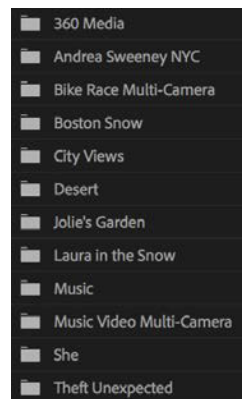
- **Bike Race Multi-Camera:** This is simple multicamera footage. Experiment with live editing on a multicamera project.

- **Boston Snow:** This is a mixture of shots of Boston Common filmed in three resolutions. Use this media to experiment with Scale To Frame Size, Set To Frame Size, and keyframe controls to scale shots. Try using the Warp Stabilizer effect to lock one of the high-resolution clips, and then scale up the clip and create a pan from one side to the other.

- **City Views:** This is a series of shots from the air and on land. Use these to experiment with image stabilization, color adjustment, and visual effects.

- **Desert:** Use the diverse colors to try color correction tools and combine the footage with music to produce a montage.

- **Jolie's Garden:** This consists of atmospheric tableaux shot at 96fps, set to play back at 24fps, filmed for a new feature film social media marketing campaign. Use these clips to experiment with the Lumetri Color panel looks and speed change effects.

- **Laura in the Snow:** This is a spec commercial shot at 96fps, set to play back at 24fps. Use this footage to practice color correction and grading adjustments. Experiment with ramping slow motion and masking both the video and the effects you apply.

- **Music:** Use these music clips to practice creating an audio mix and editing visuals to music.

- **Music Video Multi-Camera:** This is a music video shoot. Practice multicamera editing skills with this media.

- **She:** This is a series of stylized, mostly slow motion, clips that will be useful for experimenting with speed changes and visual effects.

- **Theft Unexpected:** This is an award-winning short film directed and edited by Maxim Jago. Use this footage to experiment with trimming and practice adjusting timing in simple dialogue.

Review questions

1 What's an easy way to export digital video if you want to create a self-contained file that closely matches the original quality of your sequence preview settings?

2 What Internet-ready export options are available in Adobe Media Encoder?

3 What encoding format should you use when exporting to most mobile devices?

4 Must you wait for Adobe Media Encoder to finish processing its queue before working on a new Premiere Pro project?

Review answers

1 Use the Match Sequence Settings option in the Export dialog.

2 This varies by platform, but both Windows and macOS include H.264 and QuickTime.

3 H.264 is the encoding format used when exporting to most mobile devices.

4 No. Adobe Media Encoder is a stand-alone application. You can work in other applications or even start a new Premiere Pro project while the render queue is processed.