

2 Audition Basics

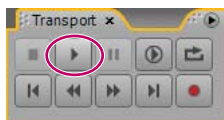
Audition's editing tools allow you to quickly and easily manipulate audio clips. You can select portions of audio clips for editing, and preview files before placing them into a session. You can take advantage of Audition's customizable working environment, and use three separate views to efficiently navigate through sessions and files.

In this lesson, you'll learn how to do the following:

- Use the Multitrack and Edit Views.
- Work with the Selection/View controls.
- Use the Transport controls.
- Use the Zoom controls.
- Work with toolbars, panels, and workspaces.

Adobe Audition displays your work using three views: the Edit View, the Multitrack View, and the CD View. This lesson is focused on the common features among the three views. When you open an Audition session, the Multitrack View is displayed. Adobe Audition sessions are project files which, in turn, point to sound or music files. The session files do not contain any sound or music files—rather, the files used by Audition are referenced by the session file.

- 1 Start Adobe Audition and select the Multitrack View button (📊).
- 2 To review the finished session file, choose File > Open Session. Navigate to the AA_CIB folder you created on your hard disk, and open the file 02_end.ses in the AA_02 folder.
- 3 Click the Play from Cursor to End of File button (▶) in the Transport panel. The complete file is played for you.



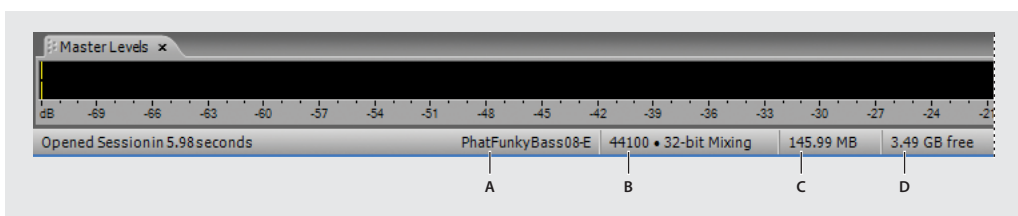
The Play from Cursor to End of File button in the Transport panel.

4 Close the 02_end.ses file by choosing File > Close All after you have reviewed the completed session.

5 Choose File > Open Session, and open the 02_start.ses file in the AA_02 folder, which is also located in the AA_CIB folder on your hard disk.

When you open an existing session in Audition, the program takes a few moments to load the existing sound files into the session window.

At the bottom of the application window is a status bar, displaying useful information about the session. Move your cursor over the various clips in the multitrack session. The names of the loops used in the session are displayed in the status bar. The sample rate is 44,100 Hz, which is the sample rate for compact discs, and the size of the complete file is approximately 145 megabytes. The last number displays the amount of free space available for storage in your hard disk. While this is the default layout for the status bar, right-clicking the status bar lets you add or remove information about the session, therefore your status bar may look different.



A. Clip name. B. Sample rate. C. Size of file. D. Free space on your hard disk.

Audition session files

It is important to remember that Adobe Audition's session files, which are identified by their .ses file extension, contain no audio data themselves. Each session file 'points' to other audio files on your computer or network. The Audition session file keeps track of where the audio files are stored on your computer, each file's duration and location within the session, and the envelopes and effects that are applied to the tracks.

A session file is dependent upon the audio files to which it points, so it's important to keep your files organized. As you are getting started with Audition, it is a good idea to keep all files related to a session in the same folder. Adobe Audition provides an option to save a copy of all files used in a session, including the session file, into the same folder. To access this option, choose File > Save Session As and select the Save copies of all associated files option.

Sample rates

Sample rate indicates the number of digital snapshots taken of an audio signal each second. This rate determines the frequency range of an audio file. The higher the sample rate, the closer the shape of the digital waveform will be to that of the original analog waveform. Low sample rates limit the range of frequencies that can be recorded, which can result in a recording that poorly represents the original sound.

To reproduce a given frequency, the sample rate must be at least twice that frequency. For example, CDs have a sample rate of 44,100 samples per second, so they can reproduce frequencies up to 22,050 Hz, which is beyond the limit of human hearing, 20,000 Hz.

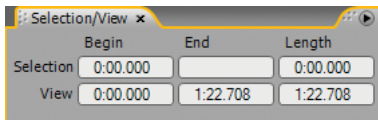
The most common sample rates for digital audio are as follows:

- 11,025 Hz—Poor AM Radio Quality/Speech (low-end multimedia)—0-5,512 Hz frequency range.
- 22,050 Hz—Near FM Radio Quality (high-end multimedia)—0-11,025 Hz frequency range.
- 32,000 Hz—Better than FM Radio Quality (standard broadcast rate)—0-16,000 Hz frequency range.
- 44,100 Hz—CD Quality—0-22,050 Hz frequency range.
- 48,000 Hz—DAT Quality—0-24,000 Hz frequency range.
- 96,000 Hz—DVD Quality—0-48,000 Hz frequency range.

—From Adobe Audition Help

6 To view the entire session from beginning to end, click the Zoom Out Full Both Axes button (⏏) located in the Zoom panel controls, along the bottom of the window. This is a convenient way to view all the tracks in your session.

7 If your Selection/View panel is not currently open, choose Window > Selection/View Controls. The View fields in this window display the beginning, ending, and length of the viewable part of the session. The length of your view should now be 1:22:708, which is also the duration of the session.



8 Choose View > Display Time Format > Bars and Beats. The units in the timeline ruler at the bottom of the screen are now bars and beats, as are the units in the Selection/View panel. The length of the session in bars and beats should be 32:2.15.

Audition can be used for different types of projects, which require different time displays. This session opened with a time display of minutes, seconds, and milliseconds, and you changed it to bars and beats. Working with loops is often easier with a time display in bars and beats.

9 Choose the Move/Copy Clip tool (⏏) and click the last clip in Track 1, which is the drum track. Drag the clip to the right to move it, then choose Ctrl+Z to undo the move, thereby returning the clip to its original position. This tool allows you to change the location of clips in a session.

Note: There are three tools in Audition for moving and selecting clips: the Move/Copy Clip tool (⏏), the Time Selection tool (⏏), and the Hybrid tool (⏏).

10 Click the Time Selection tool (⏏) and place your cursor approximately halfway into the first clip located in the first track. Click and drag to the left, selecting the first half of the clip.



Notice the selection covers all five tracks of the session, not just the first track. Adobe Audition's Multitrack View allows you to add audio files to different tracks of a session in order to create a multi-layered sound composition. For example, while playing a session, you can adjust the volume of any track in real time. Final sessions are then mixed down for use in a CD or as a sound file such as a .wav or .mp3.

Note: *The Hybrid tool combines the functionality of both the Move/Copy Clip tool and the Time Selection tool. When using this tool, the left-click on a two-button mouse functions as the Time Selection tool, while the right-click functions as the Move/Copy Clip tool.*

11 Click the Zoom to Selection button (🔍) in the Zoom panel. Click the Play from Cursor to End of View button (▶) and only the view within the display window is played. When the playback cursor reaches the end of the display window, it stops. Use this method to preview certain sections of your tracks. Click once in the multitrack to deselect the current selection.

12 Click the Play from Cursor to End of File button (▶) and the entire session plays. When the playback cursor reaches the end of the display window, it continues playing until it reaches the end of the session.

13 Click the Stop button (■) at any point.


14 Place your cursor over the green horizontal scroll bar, directly above Track 1. The hand icon (☞) appears; click and drag to the right or left, scrolling through the session.


15 Place your cursor on the right edge of the green horizontal scroll bar. The cursor changes to a magnifying glass with arrows (🔍). Click and drag to the right to zoom out horizontally. Click and drag to the left to zoom in horizontally. Do this three times to get a sense of how this tool works.


Note: *This method of zooming also works for vertical zooming by using the green vertical scroll bar found at the right edge of the Main panel.*



16 Click the Zoom Out Vertically button (🔍) to expand the view and see all the tracks in the session.

 Audition also makes use of a mouse with a scroll wheel. Place your cursor over the horizontal scroll bar and scroll the mouse wheel down to zoom out. Place your cursor over the time display and scroll the mouse wheel up to zoom in. Place your cursor over a track name and scroll the mouse wheel down to zoom out vertically.

While Audition can use an unlimited number of tracks per session, the number of concurrently visible tracks is dependent upon the display resolution of your monitor. Changing your view allows you to see more tracks or to focus on a portion of a specific track. Click the Zoom Out Full Both Axes button () to see all your tracks fit into one screen vertically and horizontally.

17 Click to select the Hybrid tool (). Left-click at the start of the multitrack session and drag to the right, selecting the first eight bars of the session. Press either Play button to play these eight bars.

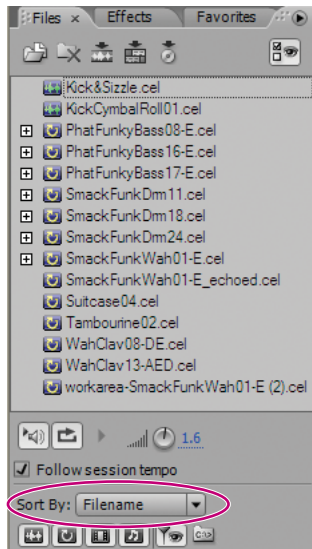
18 Click the right range indicator, which is the yellow flag at the top and bottom of the selection end, and drag it to Bar 11 beat 1. Then click and drag the left range indicator, which is also a yellow flag, to the Bar 7 beat 1 position. All 4 bars in this region are selected. Press the Play button to play the selection. If necessary, use the Selection/View panel controls, located in the bottom right corner of the window, to help you make the selection.

Note: You can expand or reduce the range of your selection by moving either of the yellow range indicators to the left or the right. When you drag, the session is automatically scrubbed to help you find a new location easily. If the scrubbing distracts you, you can disable it by choosing *Edit > Preferences > Multitrack > Play audio while scrubbing with the Start Time Indicator*. Disabling scrubbing also makes it easier to snap the start-time indicator to a specific location.

Using the Files panel

The loops and files used in the current session are listed in the Files panel. By default, Audition lists the current samples by their file name.

- 1 If not already selected, click the Show Options icon (⚙️) in the upper right of the Files panel and ensure that you can see various options below the file names.
- 2 If your sort order is not already set to Filename, select it now by clicking on the Sort By drop-down menu at the bottom of the Files panel, and choosing Filename.



Your files are now in alphabetical order. The first two files are Kick&Sizzle.cel and KickCymbalRoll01.cel. Notice the audio icon (🔊) next to the file names. This marks files as audio file types that do not contain looping information.

- 3 If it is not already selected, select the Loop Play button (🔁) at the bottom of the Files panel and then select the PhatFunkyBass08-E.cel loop by clicking on it once. Press the Play button (▶️) next to the Loop Play button at the bottom of the Files panel. The sound loops continuously from beginning to end until you press the Stop button (⏏️). Notice that these buttons and the volume control are in the Files panel, not the Transport panel.

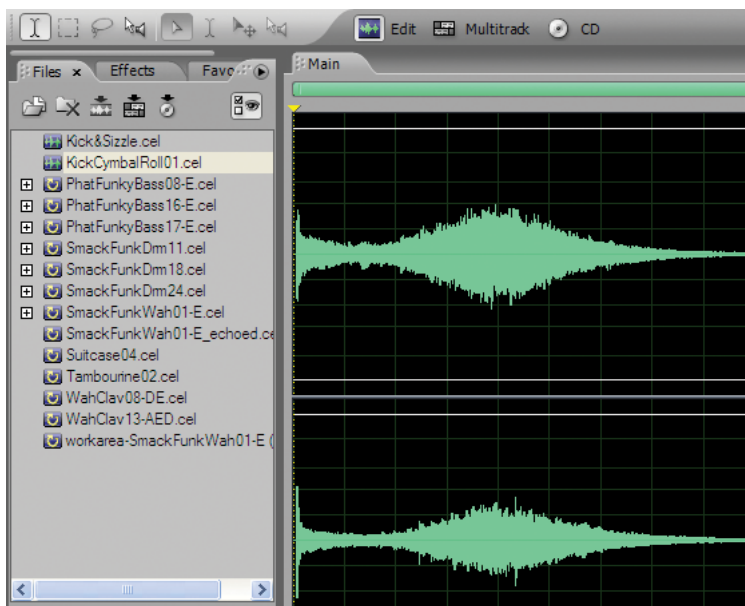
Note: If you accidentally double-click on the files in the Files panel, they open in the Edit View for editing. Return to the Multitrack View by clicking the Multitrack View button (📊) at the top of the window, or choose View > Multitrack View.

4 If it is not already selected, click the AutoPlay button (🔊) at the bottom of the Files panel, and then click on each file to play it automatically. You do not have to wait for a file to end before previewing the next file. Use the Down Arrow key on your keyboard to navigate through your list of files one at a time. You can also adjust the Preview Volume knob to raise or lower the volume of the files. Press the Stop button when you are done previewing the files.

Working with views and toolbars

Much of your work in Audition will involve switching between the Edit View and the Multitrack View.

1 Click on the Edit View button (🎧) in the View Toggle toolbar. The workspace changes from the Multitrack View to the Edit View.



The Edit View is used to modify a single audio waveform; examples might include adding an effect or deleting part of a clip. Changes made to files in the Edit View are destructive—adding an effect or trimming a loop changes the original file once it is saved. Edits made in the Multitrack View are non-destructive, meaning the original files remain untouched.

- 2 Click on the Multitrack View button (🎵) to return to the multitrack.
- 3 Click on the CD View button (📀) to display this view. The Files panel stays consistent between the three views, but the menu commands are different in each of the views.
- 4 Click on the Multitrack View button.
- 5 Double-click on the first clip in Track 1, SmackFunkDrm18.cel, to enter the Edit View. The waveform of the selected clip is displayed. Click the Multitrack View button to return to Multitrack View.
- 6 In the Files panel, right-click the loop file Suitcase04.cel and choose Edit File. This is another method to enter the Edit View. Return to the Multitrack View by pressing the number 9 on your keyboard.

Note: Audition uses a variety of keyboard commands, including numbers, letters, and function keys. You can customize keyboard shortcuts, MIDI Triggers, and assigning or modifying keys to access specific commands or effects by choosing Edit > Keyboard Shortcuts and MIDI Triggers.

- 7 Choose View > Shortcut Bar > Show. Choose View > Shortcut Bar > View Toggles. Toolbars which are currently open have a check mark beside them. If View Toggles does not have a check mark, select it now, adding the View Toggles shortcut to your Shortcut Bar.
- 8 Right-click anywhere on the Shortcut Bar, which you made visible in the last step, revealing a context menu with a list of shortcut groups that can be displayed. As with the list displayed under the View menu, shortcuts with a check mark beside them are currently open, while unchecked shortcuts are hidden. Select the View Toggles option to remove the shortcut.

Note: You can right-click on a shortcut in the Shortcut Bar to access its context menu, and then select View Toggles to display this shortcut within the Shortcut Bar.

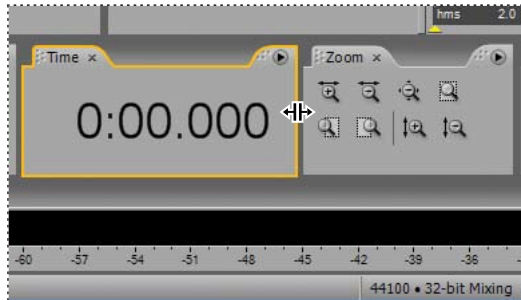
- 9 Place your cursor over the CD button in the toolbar. A tooltip appears, describing the function of the button. Tooltips also display the keyboard shortcut in brackets. Close the Shortcut Bar by choosing View > Shortcut Bar > Show and unchecking the option.



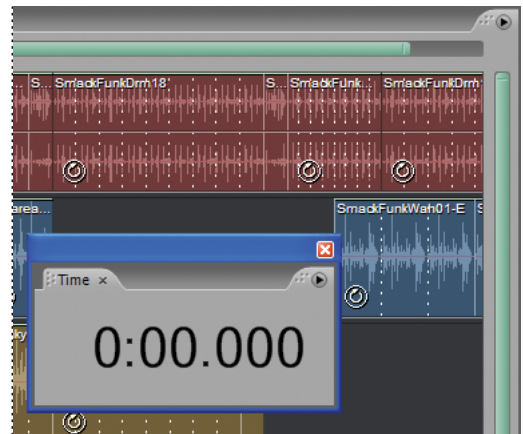
Working with panels and workspaces

Panels in Adobe Audition can be viewed either as docked panels or as independent floating windows. You can customize how you want to view different panels and windows to suit your working style and requirements. This is especially useful if you are working with multiple monitors. Your custom screen layouts can be saved as workspaces and can be recalled later at the click of a button.

- 1 If necessary, switch to the Multitrack View by choosing Window > Workspace > Multitrack View (Default).
- 2 Below the Main panel, find the docked Time panel, and increase its length by clicking and dragging its right edge to the right when the cursor shape has changed to two vertical lines with arrows (⇄). The neighboring Zoom panel is adjusted automatically to make room.



The Time panel as a docked panel.

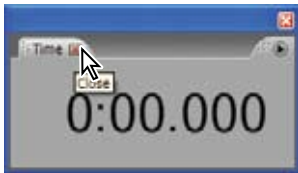


The Time panel as a floating window.

- 3 Click on the Palette menu button (☰) on the top right of the docked Time panel and choose Undock Panel.
- 4 Resize the floating Time window by clicking and dragging the lower right corner when the shape of the cursor changes to a double sided arrow (↖). You can resize a floating window by clicking any side or corner.
- 5 Choose > Window > Workspace > New Workspace. In the dialog box that appears, type **Centered Floating Time** as the name, and press OK.

The current arrangement of panels and windows on your screen has been saved as a new workspace. This workspace will remember the location and sizes of all your docked panels.

- 6** Click on the (X) icon in the tab of the floating Time window to close it.



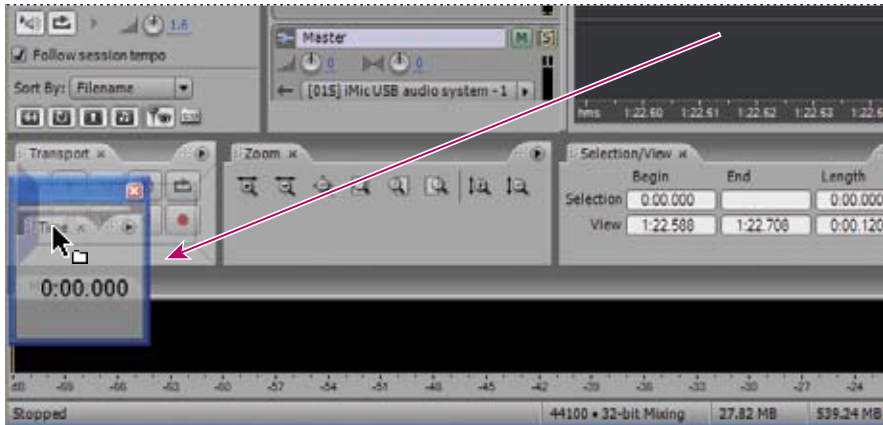
- 7** Choose Window > Time to make the floating Time window reappear in the last place you put it. In general, docked panels are preferable to floating windows because they do not interfere with your view of the tracks and track controls. You will now learn to dock the Time panel.

- 8** Bring your cursor over the tab of the floating Time window and when this area becomes brighter, click and drag toward the bottom left.



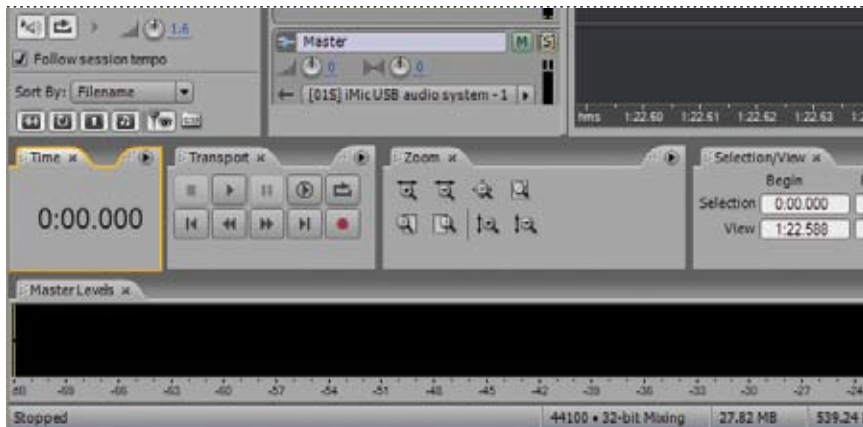
The shape of your cursor changes to (⏏) to signify that you are trying to find a new place to dock this window. As you drag your cursor to various areas of the screen, Audition prompts you about available docking targets by highlighting blue drop zones near your cursor.

9 With the mouse button still pressed, drag toward the bottom left of the screen until you reach the left edge of Transport panel. When its left drop zone becomes highlighted, release your mouse.



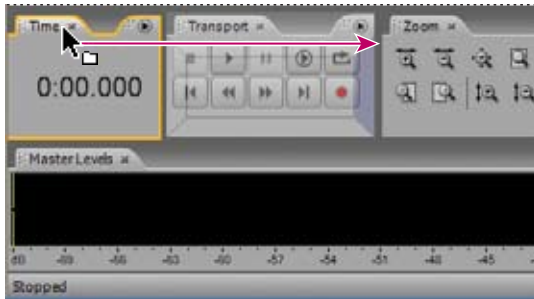
The drop zone of the Transport panel gets highlighted when you drag near it.

The Time panel docks to the left of Transport panel.



Note: If you accidentally dock the Time panel somewhere else, click the Palette menu button (☰) for the Time panel and choose Undock panel, just as you did in step 3.

10 Grab the docked Time panel by its tab, and drag it toward the right of the Transport panel. When the right drop zone for the Transport panel gets highlighted, release your mouse button. The Time panel moves to the right of the Transport panel.



Right drop zone for the Transport panel gets highlighted when you drag a panel near it.

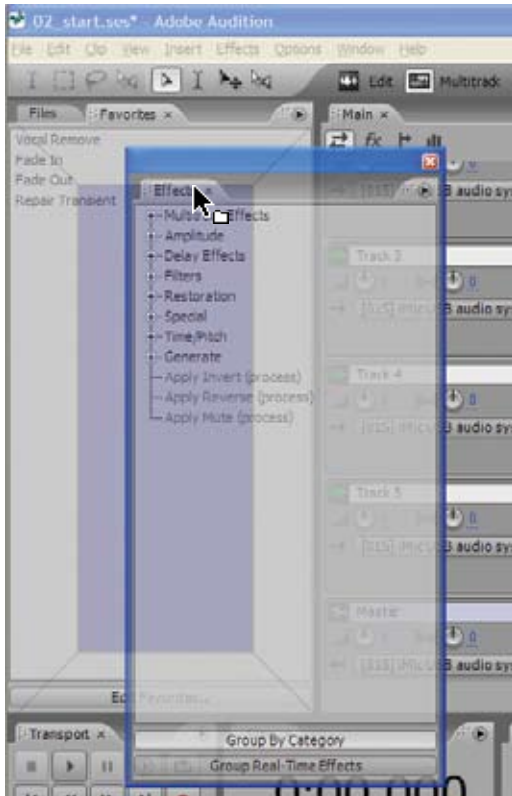
You can dock a panel on the left, right, top, or bottom of a target panel, depending on which drop zone is highlighted when you release the mouse. If you release when the target's middle drop zone is highlighted, the two panels get grouped together. To the left of the Main panel are two such grouped panels: Files and Effects. You will undock the Effects panel from the group and then dock it so that it becomes grouped with the Files panel again.

11 Hold down the Ctrl key and click on the Effects tab of the grouped panels. Drag toward the center of your screen. The Effects panel breaks loose from the group and becomes an independent floating window. Drag this floating window near the center of your screen. Release the mouse button.

As you drag, Audition does not prompt you about the available docking spaces because you are holding down the Ctrl key. This is the second method to create a floating window from a docked panel.

12 Grab the floating Effects window by its tab and drag it back to the Files panel. When the middle drop zone of the grouped panels gets highlighted, release the mouse button. The Effects panel is re-grouped with the Files panel.

***Note:** If you don't see the Favorites panel grouped with the Files panel as shown in this screenshot, choose Window > Favorites to make the Favorites panel visible.*



Middle drop zone highlighted.

13 Choose Window > Mixer to open the Mixer panel, if it is not already open.

14 Grab the tab for the Mixer panel and drag it to the right. At the right edge of your screen, a light green highlight appears. Release the mouse at this point. The Mixer gets docked along the right edge of the screen.



The Mixer docked at the right edge of the work area.

15 Choose > Window > Workspace > New Workspace. In the dialog box that follows, type **Right Docked Mixer** as the name and press OK to save the workspace.

16 Click on the Workspace drop-down menu located in the top right of the Main panel and choose Centered Floating Time to switch to the screen layout you had saved in step 5.

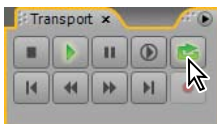
The panels on the screen instantly change to the way you had saved them while saving this workspace. Creating such workspaces is a great time-saving feature. As you become more familiar with Audition, you'll find that you like to have your panels arranged in different ways for different tasks. Saving a workspace for each task can boost your efficiency and speed.

17 Switch back to the Right Docked Mixer workspace by choosing it from the Workspace menu. Reduce the size of the Mixer panel so that you only see the Master track in the mixer, as demonstrated in the screenshot above.

18 If your timeline is not set to display bars and beats, choose View > Display Time Format > Bars and Beats. Using the Hybrid tool (▢) in the upper left of the Main panel, click and drag in Track 5, making a selection starting at Bar 8 beat 1 and ending at the Bar 12 beat 1 mark. You may have to adjust the range boundaries, represented by the yellow flags at the corners of the selected area, to make the selection. Use your Selection/View panel below the multitrack to confirm the length of the selection. You should have a total selection of 4 bars.



19 Click the Play Looped button (🔁) in the Transport panel. This loops the selection continuously, until you click the Stop button. Playing a looped selection is a useful way to preview changes to your session in real time.



20 As the session is playing, move the master volume fader in the Mixer panel toward the top to increase the overall volume and then toward the bottom to decrease it. Keep an eye on the Master Levels panel at the bottom, and notice how it changes as you move the slider. Press the spacebar to stop playing the session.



Level meters

To monitor the amplitude of incoming and outgoing signals during recording and playback, you use level meters. Edit View provides these meters in the Levels panel. Multitrack View provides them in the Master Levels panel, which shows the amplitude of an entire session, and track meters, which show the amplitude of individual tracks.


You can dock the Levels and Master Levels panels horizontally or vertically. When a panel is docked horizontally, the upper meter represents the left channel, and the lower meter represents the right channel.

—From Adobe Audition Help

Note: As you begin to add more tracks to a session, you will generally need to lower your master mixer volume to prevent clipping. If your clip indicators are red, click on them to clear them.

Naming your tracks

Audition is capable of handling an unlimited number of audio tracks per session. Currently, there are five tracks in this session.

- 1 To make sure you are seeing all the tracks in your session, click the Zoom Out Full Both Axes button ().
- 2 In the track controls for Track 1, click once on the name Track 1 and enter **Drums** in the name text box.



In the track controls for Track 2, click once on the name Track 2 and enter **Guitar** in the name text box. Repeat these steps for Tracks 3, 4, and 5, entering **Bass**, **Percussion**, and **Clav** respectively. It is useful to rename your tracks based on their content.

- 3 Change the color of the first SmackFunkDRm18 clip in the drum track by right-clicking it and choosing Clip Color from the context menu. In the Clip Color window, choose the first red shade in the upper left and click OK.

Modifying the color of individual sound clips in Audition is useful for visually identifying different instruments or loops. We have color-coded the session for you but have left the first clip as the default green.

- 4 Choose File > Save Session to update the 02_start.ses file.
- 5 Choose File > Close All.

Exploring on your own

- 1 Become more familiar with Audition's extended right-click functionality. Right-click on an empty portion of the multitrack, and experiment with using the Mute and Solo commands from the context menu, rather than the Main panel controls.
- 2 Grab the Mixer panel, which you docked on the right edge of the screen. If the Mixer panel is not currently open, choose Window > Mixer. Practice docking the Mixer panel into different sections of the interface.
- 3 Use the Time Selection tool to make a selection in your multitrack session. Use the Zoom to Selection tool, the Zoom In to Left Edge of Selection tool, and the Zoom In to Right Edge of Selection tool to view the results of each tool.

Review

▶ Review questions

- 1 What is the difference between the Edit View and Multitrack View?
- 2 What is the quickest way to view all the tracks from beginning to end in your Multitrack View?
- 3 Where are the Move/Copy Clip tool, the Time Selection tool, and the Hybrid tool located, and how are these tools different?
- 4 What is the advantage of using workspaces?

▶ Review answers

- 1 Edit View uses a destructive method of editing, which permanently alters a waveform when the file is saved. Permanent changes are preferable when converting sample rate and bit depth, mastering, or batch processing. Multitrack View uses a non-destructive method, which is not permanent, but requires more processing power. The flexibility of the Multitrack View is preferable when working with multi-layered musical compositions or video soundtracks.
- 2 The Zoom Out Full Both Axes button automatically scales your timeline to show every track in your session, as well as all clips within each track.
- 3 The Move/Copy Clip tool, the Time Selection tool, and the Hybrid tool are all located in the Shortcut Bar. Left-clicking with the Move/Copy Clip tool moves a clip from one area of the multitrack to another; right-clicking reveals a menu allowing you to create a copy of the clip. Left-clicking with the Time Selection tool selects a portion or all of a waveform; right-clicking displays a context menu but does not allow for making selections. Left-clicking with the Hybrid tool makes a selection for editing, while right-clicking moves a clip from one area of the multitrack to another.
- 4 Workspaces allow you to store and recall your favorite arrangements of windows and panels on the screen. Once you have your screen arranged the way you like it, you can save the arrangement as a custom workspace. You can create different workspaces for different tasks, and quickly switch between them.