

Creating Music with Garageband 3

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Garageband 3 is the audio application included with iLife 06. With Garageband, you can record vocals using a microphone, or your own music using a keyboard or any instrument that can be connected to the computer. Garageband also includes an eclectic collection of music loops for use in your projects, and you can import a number of file types as well. When you are finished arranging your project, you can export it to iTunes and it will be converted into a file you can share with others.

Hardware Setup

You can connect a microphone directly into your computer's audio in port if it has one. Once you connect the microphone to the audio in port, you may have to change your audio preferences to make the microphone available to Garageband:

1. Select Apple > Preferences to open up the System Preferences window.
2. Click on Audio and select the Input tab.
3. Select the microphone from the list at the top of the window.


Many professional microphones and musical instruments connect to the computer using a USB or Firewire audio interface.

To enable the audio interface in Garageband:

1. Select Garageband > Preferences.
2. Click on the Audio/Midi button at the top of the window.
3. Select the audio interface using the Audio Input pull-down menu.

Creating a New Project

To create a new music project:

1. Select File > New or click on the New Music Project button on the Garageband splash screen. 
2. Enter a name for your project file.
3. Choose a save location using the pull-down menu. If you do not see the location you need, click on the down arrow next to the Save As field to display more locations.
4. Set the tempo, time signature and key. The defaults should work for most recordings.
5. Click on Create.



6. Garageband will display an on-screen keyboard you can use to record your audio if you do not have a physical keyboard. If you do not need the on-screen keyboard, close it by clicking on the red button in the upper left corner of the window.
7. As you work on your project, make sure to save by selecting File > Save.

Working with Tracks

A Garageband project is created by adding a track for each instrument you want to use in your recording. Garageband supports two types of instruments: real instruments are those that can be recorded with a microphone, while software instruments are those that are created by the computer.

The Track menu allows you to perform the following track-related actions:

Add a Track:


1. Select Track > New Track.
2. Select Real Instrument (if you're using a microphone or audio interface) or Software Instrument (if you want to use computer generated instruments) and click on Create.
3. Garageband will add a track with the default instrument and the Track Info pane will display to the right. To change the instrument, choose an instrument category on the left side of the pane, then select an instrument on the right side.
4. Click on the arrow next to Details if you want to set instrument options. You can add effects and more in this area.

5. If you want to use the same instrument settings in the future, click on Save Instrument.

Duplicate a Track:

To create a new track with the same settings as an existing track, select Track > Duplicate Track or hold down the Command key and press the letter D.

Create a Basic Track:


Select Track > New Basic Track to create a track that does not have an instrument assigned to it. You can assign an instrument of your choice by clicking on the Track Info button and selecting it from one of the categories. 

Delete a Track:

Select the track (the icon for the instrument will have a glow around it) and choose Track > Delete Track or hold down the Command key while you press Delete on your keyboard.

Recording

Once you have created a new track, you're ready to record:

1. Click the Record button in the controls area that appears below the timeline or press the letter R on your keyboard. 
2. When you're done recording, click the Record button again, or press the letter R on your keyboard.
3. To preview your recording, move the playhead to the beginning by using the button in the controls area or press the letter Z on your keyboard.
4. Press the Space Bar on your keyboard to begin playing your recording.

Press the Space Bar to stop the playhead.

Working with Regions

Each time you press the Record button, Garageband creates a new region in the track you have selected. You can edit these regions in a number of ways:

Move:

Click on it and drag it to another location in the timeline (either on the same track or on different track.).

Trim:

Place your pointer over the lower half of one of the edges until it turns into a bar with an arrow on it. Drag in to trim the region. On software instrument regions, drag out to add silence at the beginning or end of the region.

Loop:

Place your pointer over the upper part of one of the edges until it turns into a bar with a curved arrow on it, then drag out.

Duplicate:

Hold down the Option key as you drag the region and it will be duplicated.

Delete:

Select the region and press the Delete key on your keyboard.

Split:


Place the playhead where you want to split the region and select Edit > Split.

The Track Editor

The Track Editor allows you to edit the contents of a region. The display on the Track Editor will depend on what type of region you have selected. For


real instrument regions, the Track Editor will display a waveform of the recording.

To remove a section of the waveform in the Track Editor:

1. Select the region you want to edit.
2. Click on the Track Editor button. 
3. When the Track Editor opens, position your pointer somewhere in the lower part of the waveform (until it turns into cross-hairs) and make a selection.
4. Select Edit > Cut or hold down the Command key and press X on your keyboard.

Notation View


When you open up the Track Editor with a software instrument region selected, you can edit the individual notes in that region in notation view:

1. Select the region you want to edit and click on the Track Editor button.
2. Switch to notation view by clicking on the button with the musical note on it. 
3. To change a note, select it and drag it to another spot.
4. To add a note, hold down the Command key and click in the notation area.
5. To delete a note, select it and press Delete on your keyboard.

Adding Loops

Garageband includes loops of prerecorded music that can be used to add drum beats, rhythm line and other repeating patterns.

To add a loop to a project:


1. Click on the Loop Browser button. 
2. Select a category by clicking on one of the buttons.
3. The loops in that category will be listed to the right. Double-click on a loop to preview it.
4. When you find one you like, drag it into the main window. Garageband will create a new track with a loop region in it.

Importing Music

Garageband supports the MP3, MIDI, WAV, and ACC file formats.

There are two ways to import an audio file: using the Media Browser or from a Finder window.

To import a file using the Media Browser:

1. Click on the Media Browser button. 
2. Select the Audio tab at the top of the Media Browser.
3. Click on iTunes and select a file from the list. Click on the Play button to hear a preview.
4. Drag the file into the gray area in the Garageband window. Garageband will create a new track when you release the mouse.

To import a file using the Finder:

1. Resize the Garageband window so you can see the file you want to import.
2. Drag the file from the Finder window until the pointer has a plus sign on it.
3. Release the mouse to create a new track with the

audio from your file.

Mixing

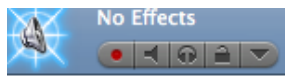
To adjust the volume level of a track:

1. Display the Track Mixer by selecting Track > Show Track Mixer.
2. Use the slider in the Track Mixer to adjust the volume

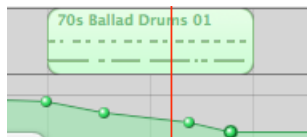


- level.
3. You can view the volume curve by clicking on the down arrow in the track controls.

Click on the curve to add



points you can use to change the shape of the curve. These points can be used to create fade in and fade out effects.



The pan wheel in the Track Mixer allows to place instruments in the stereo field. Drag the wheel to either side to have instruments play out of either the left or right channels. To view a pan curve, select Track Pan from the pulldown menu below the track controls. As with the volume curve, you can set points on the pan curve to create gradual pan effects.

When you're finished editing a track, you can lock it to prevent it from being accidentally changed. To lock a track, se-

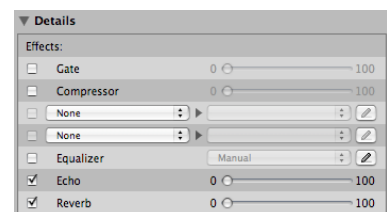
lect the lock icon in the track controls.

Effects

Garageband includes studio-quality effects you can use to enhance your audio:

To add an effect to a track:

1. Select the track, then click the Track Info button.
2. Click on Details to show the track's effects settings.



3. Click the checkbox next to an effect to turn the effect on or off.
4. Adjust the compressor, echo, and reverb effects by using the sliders until you get the sound you want.
5. To adjust the equalizer effect, choose a preset from the Equalizer pop-up menu.

Exporting

To share your audio, you have to export it into a format that can be played outside Garageband.

To export a recording:

1. Select Share > Export Song to Disk.
2. Enter a name for your exported song and choose a save location.
3. Click on Save.

Garageband will save your song as an AAC file you can play on iTunes and other programs that support that format.

If you select Share > Send Song to iTunes, your song will be exported as an AIFF file and iTunes will open and automatically play it. If you plan to share your song with others, you should export it to either AAC or MP3, as these formats are more commonly supported.

To convert your song to AAC or MP3:

1. Choose the format used to convert the song file. Select iTunes > Preferences > Advanced.
2. In the Importing tab, choose MP3 Encoder or AAC Encoder from the Import Using pulldown menu.
3. Click OK to close the iTunes preferences window.
4. Right-click on your song file and select Convert Selection to AAC (or MP3).

Keyboard Shortcuts

- R - Start/Stop recording
- Z - Move playhead to beginning of the timeline
- Space Bar - Play audio
- Command + Option + N - Create a new track
- Command + Delete - Delete a track
- Command + K - Show on-screen keyboard
- Command + T - Split a region