



What's New in Logic Express 7.1

This document contains information about the improvements and changes found in the Logic Express 7.1 Update.

The descriptions in this document supersede the relevant sections of the Logic Express 7 manuals (including the Late-Breaking News.pdf). For the latest information about product updates, tips, and techniques, visit the Logic Express website at <http://www.apple.com/logicexpress>.

General Improvements

The Logic Express 7.1 Update introduces the following general enhancements.

Plug and Play of Audio Interfaces

Logic Express 7.1 supports plug and play for audio interfaces: it's possible to connect and switch on a new/additional audio interface while Logic Express 7.1 is running. An alert appears when you connect a new device, and will prompt you to select and confirm the audio interface/driver that you would like to use.

Changes to Dialogs

A number of enhancements have been made to the following Logic dialogs:

- Sample Editor: Audio File > Save Selection As, Audio File > Save a Copy As. Both dialogs now allow you to set the desired sample rate, stereo conversion and dither type for the destination file. The dialogs also feature an additional “Add resulting files to Audio window” option.



Some file dialogs now feature additional file conversion settings.

- Audio window: Audio File > Save Region As, Audio File > Copy/Convert File As: Both dialogs offer the file conversion menus outlined above for the Sample Editor, enabling one or multiple selected Regions/files to be converted or copied. The Copy/Convert File As dialog provides an additional “Add resulting files to Audio window” option.
- Arrange window: The Audio > Convert Regions to New Audio Files dialog provides the file conversion menus outlined above for the Sample Editor.
- The global File > Export > Region as Audio File dialog offers an additional “Add resulting files to Audio window” option.

Arrange Region Handling

The handling of Regions in the Arrange window has been improved: selected Regions that overlap with unselected Regions are now shown “on top.”

Additional Key Commands

Logic Express 7.1 offers several key commands for functions previously only accessible as menu items.

Global Menu Functions

The following global menu functions are now also available as key commands:

Application (Logic) menu:

- Opening all preferences windows, the Logic Setup Assistant, and the AU Manager
- Initialize All except Key Commands function

File menu

- Project functions: Project Settings, Clean Up Project, Consolidate Project, Rename Project, Save as Project
- Opening all panes of the Song Settings window
- Save functions: Save a Copy As, Save a Template As
- Bounce function

Audio menu

- Import Audio File
- Opening Loop Browser and Hardware and Drivers pane

Options menu

- Track Automation: Toggle Automation Quick Access, Delete Orphan Automation Data of Current Track
- Movie: Open Movie as Float

Windows menu

The Step Input Keyboard can now be accessed via a key command.

Arrange Menu

The following local Arrange menu functions (Arrange window) are now also available as key commands:

- Track: Create Multiple, Delete Redundant Audio Tracks
- Region: Demix by Note Pitch
- MIDI: Select all Orphan Aliases, Delete all Orphan Aliases
- Audio: Open in Apple Loops Utility, Copy ReCycle Loop, Paste ReCycle Loop, Search Zero Crossings

Hyper Editor

The following local Hyper Editor functions are now also available as key commands:

- Create Hyper Set
- Create GM Drum Set
- Create Hyper Set For Current Events
- Clear Hyper Set

Track Mixer

All Filter buttons can now be switched on and off via key commands.

Channel Strip Settings Menu

The following key commands have been added:

- Next/Previous Channel Strip setting
- Save/Copy/Paste Channel Strip setting

Note: Logic Express 7.1 also features the new, more general “Next/Previous Channel Strip Setting or Plug-in setting or EXS Instrument” key commands.

Drag Menu

All Drag menu entries can now be chosen via key commands.

New Key Command Warning

In circumstances where an existing local key command combination is used when assigning a new global key command, the following warning message will appear: "This shortcut is already assigned to *key command xxx* in *key command class yyy*, which has higher priority than *key command class zzz*." You have three options: Cancel, Replace, or OK. Cancel does not alter existing assignments. Replace will replace the existing shortcut assigned to the chosen key command combination with the selected function. OK will assign the key command combination to the selected function while retaining the existing key command/function.

Important: There is a hierarchy of key command classes, which are not merely separated into global and local key commands. As an example, there is a key command class that applies to all windows that display Regions. This class has higher priority than global key commands, but a lower priority than local (Arrange, Score, Matrix, and so on) window key commands.

Marker Functionality

The Marker facilities of Logic Express 6 have been reinstated in Logic Express 7.1.

Markers are very useful for tagging particular time positions or sections in a song. They appear as text strings in the Bar Rulers of all Logic windows that contain Bar Rulers.

To create a marker:

- 1 Position the mouse cursor at the desired location in the lower third of the Bar Ruler.
- 2 Press Option-Command and click.



- 3 Type the marker name into the Marker field.

The length of the marker is set automatically: the marker extends to the start point of the next marker, or to the end of the song or folder, if there are no ensuing markers.

To delete a marker:

- Grab it with the mouse in the Bar Ruler, and drag it down, out of the Bar Ruler. Release the mouse button when the cursor turns into a hand containing two arrows (see screenshot below).



Newly created markers are automatically named "Marker ##". The "##" value indicates their order of appearance in the timeline, which will be displayed in the Bar Ruler as "Marker 1," "Marker 2," and so on. The number always refers to the actual order of all markers in the song, including renamed markers.

To edit a marker name:

- 1 Double-click on the marker while holding down Control-Command.
- 2 A text entry field opens, allowing you to edit the marker's name.

To change a marker's position in the Bar Ruler:

- 1 Press Command and click-hold the marker in the Bar Ruler.
- 2 Drag the marker to the left or right.

To set the SPL to a marker:

- Press Command and click the marker in the Bar Ruler. The SPL is set to the start point of the clicked marker. Double-clicking starts playback at the marker start point.

Note: You can drag a marker up into the top third of the Bar Ruler. This will set a Cycle area that matches the position and length of the marker (and thus the locator positions). If the sequencer is stopped when performing this action, the SPL will be moved to the Cycle area start point.

Automation Tool

The Arrange Toolbox in Logic Express 7.1 features the Automation tool.



This tool performs a number of automation tasks. When track automation is activated via the View > Track Automation menu option, a pull-down menu below the Toolbox allows you to define the functionality of the tool

Curve

If you choose this option, you can use the Automation tool to bend the line between two nodes or any selection. There are four different curve types available: convex, concave, and two different types of S-curves.

Note: This function is also available when using the standard Pointer tool, by pressing Option-Control.

Select

If you choose this option, you can use the Automation tool to rubber band any selection (of nodes) in the automation data. A click on a Region selects all currently visible automation events within the Region borders. Once an area of (or the entire) Region is selected, you can freely move the selection to the left or right. With Option pressed, you can copy the selection to a different location. Please note that both operations will delete all nodes in the destination area.

Shift-clicking with the Automation tool selects other areas, in addition to an existing selection. This enables you to simultaneously edit non-contiguous selections.

Shift-clicking on a node with the Automation tool—in front, or following a selection—extends the current selection.

Removing Movie Function

The Options > Movies menu now features a Remove Movie function, which allows you to completely remove a movie from a song or project. All references to the movie in the project or song are deleted.

Hidden Menu Bars in Screensets

Logic Express 7 allows you to hide local menu bars and scroll bars by Option-Command-clicking the title bar.



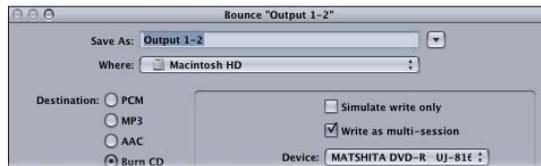
The Logic Express 7.1 Update enhances this function. It now also works when using Screensets: You can save the state of hidden menu bars and scroll bars in Screensets. Hidden menu bars and scroll bars are also saved when you close a window. As an example: Hide the menu bar and scroll bars of the Arrange window and close it. When you reopen the Arrange window, the menu bar and scroll bars remain hidden.

This function is handy in situations where you would like to configure small floating Environment windows containing Fader Objects, used as switches, for example.

Bounce Dialog

Choosing the CD burner

The Bounce dialog in Logic Express 7.1 offers a new Device menu in the Burn options, which allows you to choose between any recognized CD burners connected to your system.



Start and End Position default values

The default values for the Start and End Position fields in the Bounce dialog now also take selections made in the Arrange window into account.

This means that the default values are now set in the following way:

- If the Cycle function is engaged, they will be set to the locator positions.
- If a selection is made in the Arrange window, they will be set to the selected area.
- If neither of the above is valid, they are set to encompass the entire Logic song.

Faster Overview Creation

The Overview Creation dialog features an additional option which accelerates overview creation. This option makes the overview creation as fast as the “foreground” overview creation of Logic 6 (at the cost of slowing down other operations, but not blocking user interaction completely).

Follow Tempo Function

Audio files created in Logic Express 7.1 can now follow the song tempo (including tempo changes) and the first key signature set in the Global tracks.

As an example: If you record a bass solo at 100 bpm, you can change the song tempo to 120 bpm and the bass solo will automatically be played back at the new tempo.

The function works with all audio files that were recorded in, or bounced/exported from, Logic Express 7.1. The function only works in the parent song (the song the audio files were created in). If you drag a file recorded in a given song to another song with the Finder, the file can not follow the song tempo. Bounced/exported files can only follow the song tempo, if the “Add resulting files to Audio window” option was enabled in the Export/Bounce window prior to the bounce/export. Files copied between two songs retain the ability to follow the song tempo.

The song's tempo information is used to tag the beats in the recording. The function works best if your audio files match the song tempo as precisely as possible. The longer your audio files are, the more RAM is required for this functionality to work properly.

If you want your audio files to follow the song tempo and key, you will need to select the appropriate Audio Region in the Arrange window and enable the Follow Tempo option in the Region Parameter box. The Follow Tempo option is synchronized for all Regions that make use of the same audio file.

All audio files that follow the song tempo and first key signature are indicated by the following symbols in Logic:



Note: The Follow Tempo option does not create an Apple Loop! Remember: Apple Loops follow chord changes—should you record a solo over an arrangement consisting of Apple Loops with transposition changes over time, you might want to enable Follow Tempo for your solo, but you won't be happy with the double transpositions that will occur...

To create an Apple Loop, please use either of the following options:

- Choose Region > Add to Apple Loops Library in the Arrange window (also see the ensuing section). This method sets transients that are based on the song's tempo information.
- Choose Audio > Open in Apple Loops Utility in the Arrange window (more information can be found in the *Logic Express 7 Reference Manual*). This functionality allows you to set the transients manually—independent of the song tempo.

Apple Loops

The following changes have been made to Apple Loops handling.

Creating Your Own Apple Loops

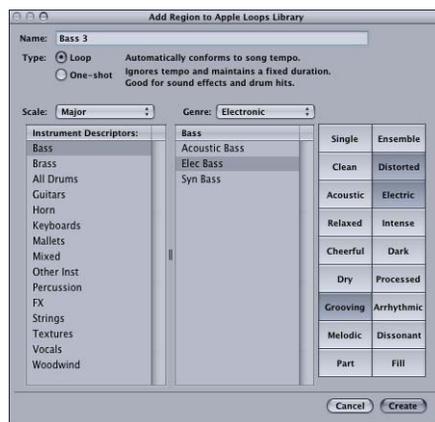
You can now directly save both Audio and Audio Instrument Regions as Apple Loops in Logic Express 7.1. When you save a Region as an Apple Loop, it is added to the loop library and appears in the Loop Browser, allowing its use in other songs.

Note: The tempo information from the song is used to tag the transients in the Apple Loop. This function works best if your audio files match the song tempo as precisely as possible.

User-created Apple Loops behave exactly like the Apple Loops that ship with Logic, GarageBand, or Jam Packs: They follow the tempo of your song and match the song key (as defined by the initial key signature).

To create an Apple Loop:

- 1 Select the Region in the Arrange window.
- 2 Choose Region > Add to Apple Loops Library in the local Arrange menu.
- 3 In the Add Loop dialog:
 - Type in a name for the loop, choose the scale, genre, instrument category, instrument name, and the appropriate mood descriptions—to simplify searches.
 - Set the file type, which can be One-shot or Looped. If the length of your Region does not match the beats, One-shot is selected automatically, and the file type buttons are dimmed.



Note: One-shots do not follow the song tempo and key. This is useful if you want to add discrete, non-musical sounds (such as sound effects) to the loop library, which should not be altered by the tempo and key properties.

- 4 Click Create.

The loop is added to the Loop Browser. You can find it by using the keyword buttons, menus, or by typing the name in the Search field. If you drag the loop into the Arrange window, the Apple Loops symbol is shown beside the file name. As one-shots are handled like normal audio files, the usual stereo or mono Region symbol is shown alongside the file name (rather than the Apple Loops symbol).



Importing ReCycle Files as Apple Loops

You can import ReCycle files into the Arrange window as Apple Loops. To do so, simply choose the “Render to Apple Loop” option in the Fix menu of the ReCycle File Import dialog.

Sample Rate Conversion of Apple Loops

Apple Loops can now also be sample rate converted, including correction of transient positions.

Usage example: If you change the sample rate of your song by choosing Audio > Sample Rate > ... from the main menu bar, all Apple Loops currently used by your song will automatically be converted to the newly selected sample rate.

Advanced Loops Management

The Loop Browser in Logic Express 7.1 allows you to limit the display to loops from a specific Jam Pack, if you have one or more Jam Packs installed on your computer.



Simply select the desired option from the Jam Pack Management menu. You can choose between:

- *Show All*: Choose this default option to display all Apple Loops on your system.
- *My Loops*: Choose to display all Apple Loops in the `~/Library/Audio/Apple Loops` and `~/Library/Application Support/GarageBand` folders (~ denotes the User name).
- *Shared Loops on my Mac*: Choose to display all Apple Loops in the `/Library/Audio/Apple Loops` and `/Library/Application Support/GarageBand` folders.
- *GarageBand*: Choose to display all Apple Loops installed with GarageBand.
- *Jam Pack x*: Choose to display all Apple Loops from a specific Jam Pack.
- *Vendor x*: Choose to display all Apple Loops from a specific third-party vendor.
- *Other*: Choose to display all loops that you added to the loop library by dragging them into the Loop Browser.

Updated File Path for Apple Loops

Logic Express 7.1 uses a new location for any associated Apple Loops installations.

/Library/Audio/Apple Loops

Used for any Apple Loops libraries that ship with Logic Express 7.1. This folder is also used for GarageBand versions higher than 2.0 and any additional Jam Pack libraries (higher than volume 4).

~/Library/Audio/Apple Loops/User Loops

Used for user-created Apple Loops.

Note: All Apple Loops libraries that were released before Logic Express 7.1 (including the libraries that ship with Logic Express 7 and GarageBand 1, as well as Jam Pack libraries volumes 1 to 3) will use the following installation folder: /Library/Application Support/GarageBand. All Apple Loops that are already on your system, will remain in their original locations. For more information, please refer to the *Logic Express 7 Late-Breaking News*.

Control Surface Support

In order to keep the Control Surface support current, the following control surfaces have been added:

- Tascam US-2400
- Tascam FW-1082
- Frontier TranzPort
- JL Cooper CS-32
- JL Cooper FaderMaster 4/100
- Korg microKONTROL
- Korg KONTROL49

Note: For further information about the individual control surfaces, please refer to the Control Surfaces Support document—found in the Documentation folder on the Logic Express 7 Installation DVD.

Modal Dialogs Display

All modal dialogs (except file selector boxes) are now shown on control surfaces that feature text displays.

All text fields are shown in the display's upper row. If the dialog text does not fit into the LCD's upper row, it will start scrolling after three seconds. You can scroll the dialog text manually with the appropriate control (see assignment tables in the Control Surfaces Support document). Once you start doing so, automatic scrolling is disabled.

- If there is an Enter or OK button on the control surface, it triggers the dialog's default button, where applicable.

- If there is a Cancel or Exit button on the control surface, it triggers the button labeled Cancel or Abort, where applicable.
- All buttons (push buttons, including Enter/default and Cancel, as well as checkboxes and radio buttons, but not pop-up buttons) are shown in the display's lower row. Pressing a control surface button below the display triggers the appropriate button/function in the dialog, if applicable.

Following use of the Enter/Cancel button on the control surface or with the mouse, the dialog will disappear, and all controls and displays will return to their previous state.

Mackie Control Mode Support

Logic Control, Logic Control XT, Mackie Control Universal and Mackie Control Extender (all with firmware version 1.02 or higher) no longer need to be switched to Logic Control mode, to be recognized by Logic.

If you use software that requires Mackie Control mode:

- 1 Switch to Mackie Control mode. (Details can be found in your control surface documentation).
- 2 Delete the Logic Control control surface in the Control Surfaces Setup window.
- 3 Turn on the power for your control surface. It will automatically be installed as a Mackie Control. The functionality of both modes (Mackie Control/Logic) is identical.

Note: If you do not use software that requires Mackie Control mode, you shouldn't change anything.

Mixer Windows

The following enhancements have been made to the Mixer windows.

Multiple Selection of Channel Strips

The Multiple Selection function of channel strips in the Mixer windows has been enhanced: Clicking a channel background (without Shift held) now also allows you to select further channels by dragging over them (in the background).

Hand Tool in Track Mixer and Arrange Channel Strip

The Track Mixer now offers a Hand tool, which can be used to move and copy plug-ins between channel strips.

To move a plug-in between two Insert slots:

- 1 Select the Hand tool in the Track Mixer's Toolbox by clicking it.
- 2 Select the plug-in label and drag it to the desired target slot.



During the drag and drop operation, the potential destination is displayed as an orange rectangle (empty slot) or line (when placing an effect between two Insert slots, see below). Pressing Option during dragging copies the plug-in.

You can also use the Hand tool in the Arrange window's channel strip by pressing Command (or right-clicking) when the cursor hovers over the Instrument or Insert slot.

Note: The Hand tool is the second default tool in the Track Mixer. Pressing Command while clicking enables you to switch from the Pointer tool to the Hand tool. This allows you to move plug-ins by Command-dragging them, and to copy them by Option-Command-dragging them.

If you drag a plug-in label onto a used plug-in slot in the same channel strip, the plug-ins are swapped. When dragged between different channel strips, the existing plug-in is replaced.

Placing Effects Between Insert Slots

If you drop an effect between two used Insert slots, the effect is inserted into a new slot between the two used slots. The effects below are shifted down by one slot.

If the effect's source location is above the destination location, all plug-ins between the source and destination locations are shifted up one position. If the plug-in's source location is below the destination location, all plug-ins between the source and destination locations will be shifted down one position.

Note: If all 5 Insert slots are used, you can not place effects between Insert slots.

Plug-ins

The following plug-in enhancements have been made in Logic Express 7.1.

Garage Band Instruments

Two additional GarageBand 2 instruments have been included in Logic Express 7.1. These are the sample-based Hybrid Basic and Hybrid Morph synthesizers.

Both synthesizers are limited to a few powerful, but easy to use parameters, outside of the common ADSR, cutoff and resonance options. Experiment with these controls to discover how simple it is to create spectacular sounds.

Of note are the Wave pop-up menus, which allow you to choose the sample set used to generate the basic synthesizer sound.

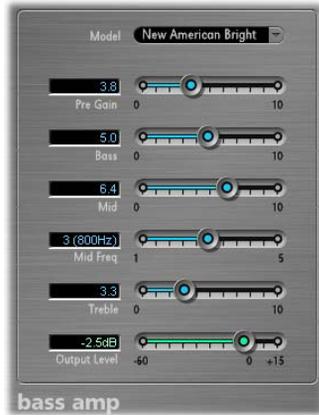
Each “Wave” in the Hybrid Morph synthesizer is based on two sample layers. The Morph control crossfades between the two sample layers. The Morph Envelope allows you to control the morph over time. As an example, setting the Morph parameter to B and the Morph Envelope to From A To B, morphs the Wave from A to B in accordance with the ADSR envelope settings.

Note: If you set the Morph parameter to A and the Morph Envelope to From A to B, certain ADSR settings will result in no sound.

In this context, you can achieve interesting results by using the modulation wheel to offset the Morph parameter during live performances.

In the Hybrid Basic synthesizer, you can use the Wheel to Vibrato and Wheel to Cutoff sliders to determine the parameters controlled by the modulation wheel.

New Bass Amp



The Bass Amp plug-in simulates the sound of several famous bass amplifiers. You can process bass guitar signals directly within Logic and reproduce the sound of high-quality bass guitar amplification systems.

You can also use the Bass Amp for experimental sound design. You may freely use the plug-in on other instruments, as desired—applying the sonic character of a bass amp to a vocal or drum part, for example.

Nine different amplifier models can be accessed via the Model pop-up menu at the top of the Bass Amp interface:

- American Basic: American bass amp model from the 1970's, equipped with eight 10" speakers. Well suited for blues and rock recordings.
- American Deep: Based on American Basic amp model, with strong lower mid frequency (from 500 Hz on) emphasis. Well suited for reggae and pop recordings.
- American Bright: Based on the American Basic setting, this setting massively emphasizes the upper mids (from 4.5 kHz).
- American Scoop: Based on American Basic amp model, the American Scoop setting combines the frequency characteristics of the American Deep and American Bright, with both low mid (from 500 Hz) and upper mid (from 4.5 kHz) frequencies emphasized. Well suited for funk and fusion recordings.
- New American Basic: American bass amp model from the 1980's, well suited for blues and rock recordings.
- New American Bright: Based on the New American Basic model, this setting strongly emphasizes the frequency range above 2 kHz. Well suited for rock and heavy metal.
- Top Class DI Warm: Famous DI box simulation, well suited for reggae and pop recordings. Mids, in the broad frequency range between 500 and 5000 Hz, are de-emphasized.

- Top Class DI Deep: Based on the Top Class DI Warm model, this setting is well suited for funk and fusion: its mid frequency range is strongest around 700 Hz.
- Top Class DI Mid: Based on the Top Class DI Warm model, this setting does not emphasize any frequencies, but features a more or less linear frequency range. It is suitable for blues, rock, and jazz recordings.

At the top of the slider section, you will find the Pre Gain control, used to set the pre-amplification level of the input signal.

Directly below this slider, you will find the Low, Mid, and High controls. Use these sliders to adjust the bass, mid, and treble levels as desired. The additional Mid Frequency control allows you to adjust the center frequency of the mid band between 200 Hz and 3000 Hz.

The Output Level slider serves as a final level control for the Bass Amp output.

New Enhance Timing Effect

The GarageBand 2 audio track editor (Real Instrument tracks) includes a new Enhance Timing slider that non-destructively enhances the timing of audio recordings. This capability is now available to Logic Express 7.1 users in the form of the Enhance Timing plug-in.

The Enhance Timing plug-in offers two parameters: The Intensity control determines the amount of timing enhancement. Audio transients that don't fall on the grid divisions (determined by the value chosen in the Grid menu) are corrected.

The Grid pop-up menu allows you to choose between several grid divisions. As described above, the grid divisions serve as reference points for the timing correction process.

The Enhance Timing plug-in is designed to "tighten up" loose playing (of recorded audio) in a production. It can be used on a variety of material, and works in realtime.

Obviously, this type of real-time quantization has some limitations. It will not work well on recordings of performances that have been played too far off the beat. The same is true for very complex, layered drum tracks. It will provide noticeable timing improvements on reasonably tight percussive and melodic material played in an eighth and quarter note feel. If a large amount of timing correction is needed and transients are shifted too far, you may notice a number of audio artefacts, so try to strike the balance between sound quality and timing enhancement.

Important: For technical reasons, the Enhance Timing plug-in only works on audio tracks and must be inserted in the top Insert slot.

As a tip for triplets, try the 1/12 note setting for played 8th note triplets.

New Vocal Transformer Effect

The Vocal Transformer plug-in allows you to manipulate vocal tracks in many different ways. If you want to transpose the pitch of a vocal line, or turn a vocal track into a “Mickey Mouse” voice—the Vocal Transformer will be your plug-in of choice.

In the pop-up menu at the top of the Vocal Transformer interface you can choose between presets.

With the two sliders below the menu you can modify the presets and create your own settings.

The Pitch slider transposes the pitch (up to) two octaves upwards or downwards. Adjustments are made in semitone steps.

The Formant parameter shifts the formants, while maintaining the pitch or while independently altering the pitch. If you set this parameter to positive values, the singer sounds like Mickey Mouse. By altering the parameter downwards, you can achieve sound effects reminiscent of Darth Vader from Star Wars.

New Enhance Tuning Effect

The Logic Express 7.1 Update includes the new Enhance Tuning effect, that non-destructively corrects the tuning of audio recordings.

The amount of enhancement is determined by the Enhance Tuning slider. It moves notes to the closest pitch on the chromatic (12 note) scale. You can limit the tuning by activating the Limit to Key checkbox, which restricts pitch to the song key (as defined in the Global Key Signature track).

Important: The Enhance Tuning plug-in can only produce accurate results on monophonic (single note) audio recordings.

Mix Slider of Platinum Verb and Tape Delay

The user interface of the Platinum Verb and Tape Delay have been enhanced: The Dry and Wet sliders were moved from the 001/011 view to the Editor view, replacing the Mix slider (which is still available in the 001/011 view).

Conversion of EVP73, EXSP24, and ET1 Audio Units Plug-ins

Loading existing songs that contain an EVP73 (AU) plug-in instance will be converted to use the GarageBand Electric Piano (if the Audio Unit is unavailable).

Loading existing songs that contain an EXSP24 (AU) plug-in instance will be converted to use the internal EXS24 player (if the Audio Unit is unavailable).

Loading existing songs that contain an ET1 (AU) plug-in instance will be converted to use the internal Tuner plug-in (if the Audio Unit is unavailable).

Support of New Audio Units Type: Generators

Logic Express 7.1 supports a new Audio Units plug-in type: Generators. As the name suggests, these Audio Units plug-ins generate audio signals. In contrast to Audio Units Instruments, however, they do not require a MIDI signal. All Audio Units Generator plug-ins installed on your system can be found in the respective AU Instrument menu's Mono/Stereo/Multichannel > Generators sub menu.

This means that you can now choose between three different types of Audio Units plug-ins (provided you have suitable plug-ins installed on your system) in the Instrument menu:

- AU Generators
- AU MIDI Controlled Effects: As these effects can be controlled via MIDI, they are inserted into the Instrument slot of Audio Instrument Objects. The audio signal that you would like to process is then selected via the plug-in's Side Chain menu.
- AU Instruments

Adjusting Plug-in Parameters With the Mouse Wheel

You can use the mouse wheel to adjust Logic plug-in parameters in Logic Express 7.1.

To adjust plug-in parameters with the mouse wheel:

- 1 Position the mouse cursor over the desired Logic plug-in parameter.
- 2 Click and move the mouse wheel.