MCS3 USB Software for OSX

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Installation

Double-click the file **Install_MCS3_USB_3.0b1** to open a disk image. From the window that opens, run the application **Install MCS3 USB 3.0b1** and follow the onscreen instructions.

The following files will be installed on your main hard drive:

The folder **MCS3 USB Software** will be placed in the `/Applications/` folder. This folder contains the **MCS3 USB** application, keysets, and documentation.

MCS3USBMIDIDriver.plugin will be placed in `/Library/Audio/MIDI Drivers/`.

MCS3_USB_StartupItem will be placed in `/Library/StartupItems/`.

The folder **JLCooper** will be placed in `/Library/Application Support`.

The **MCS3_USB_Uninstaller** application will be placed on the `Desktop`.

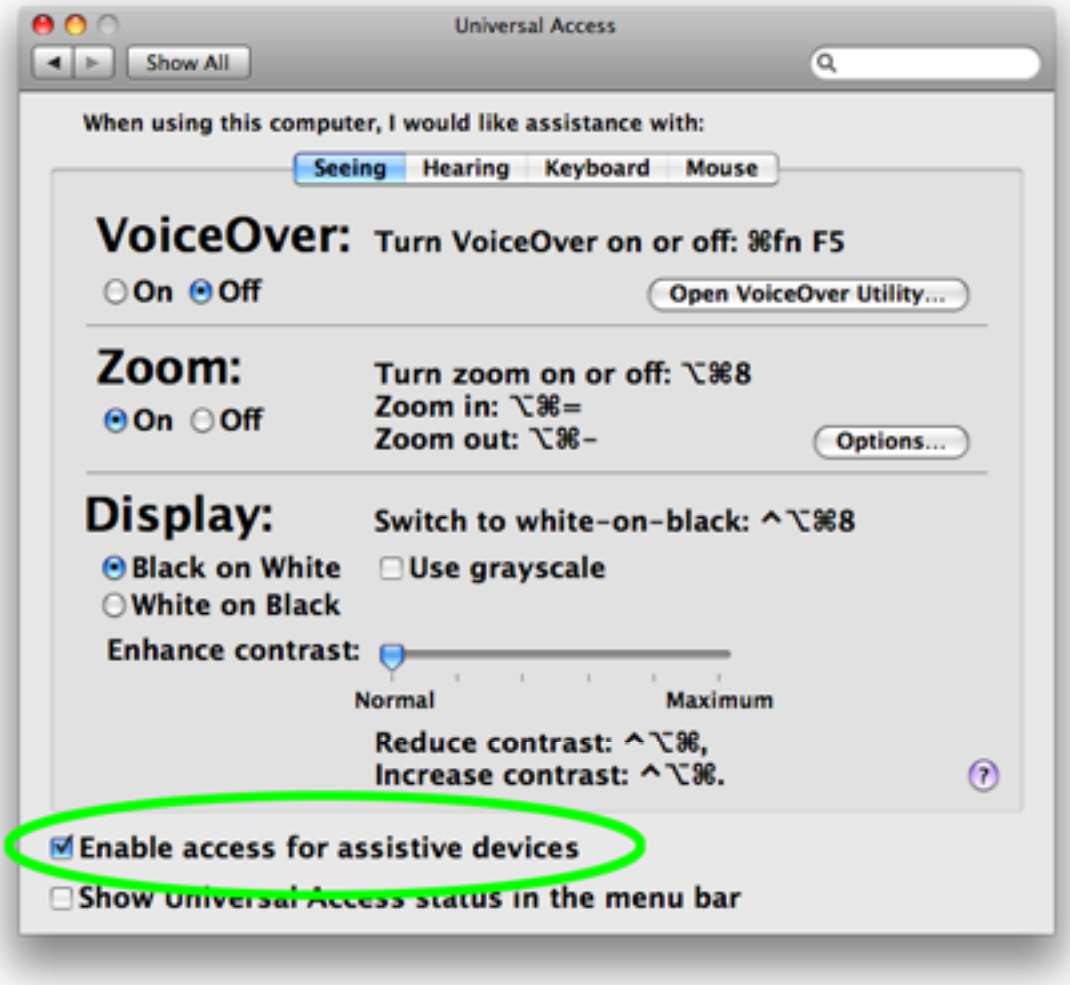
After the installation is complete, you will be directed to restart your computer.

Uninstalling

Launch the **MCS3_USB_Uninstaller** application which is located on the `Desktop`. Select the items you wish to uninstall (or click on the Select All checkbox) then click on the Uninstall button.

System and Software Setup

The MCS3 software relies on Apple's Universal Access to perform mouse emulation. In order for the MCS3 software to work correctly, you **must** open **System Preferences** and go to the **Universal Access** pane. Make sure "**Enable access for assistive devices**" is checked then quit **System Preferences**.



Introduction to the MCS3 USB Software

The MCS3 Software extends the MCS3 hardware's ability to control various applications running on your Macintosh™. It does this by communicating with applications via MIDI, USB and other messaging protocols built into the Mac OS. It can also simulate mouse clicking and dragging, keystrokes and can even emulate other control surfaces if necessary.

Keysets

The MCS3 software uses "keysets" which are sets of various actions that are taken when MCS3 controls are pressed or turned. Different keysets can be applied to different applications, and the MCS3 software will choose the correct keyset for whichever application is in the foreground. If no keyset has been created for the current foreground application, the MCS3 will use a built in keyset called the "Default" keyset.

To create or edit MCS3 keysets, open the application, **MCS3 USB** (`/Applications/MCS3 USB Software/`). To create a new keyset, choose **New Keyset** in the **File** menu and navigate to the application that will use the new keyset. You can also use **Import Keyset** from the File Menu to get an existing keyset. Keysets that ship with the MCS3 are located at `/Applications/MCS3 USB Software/keysets/`. You only need to use **New Keyset** or **Import Keyset** once for a given application. After that, keysets are stored with the MCS3 software's preferences.

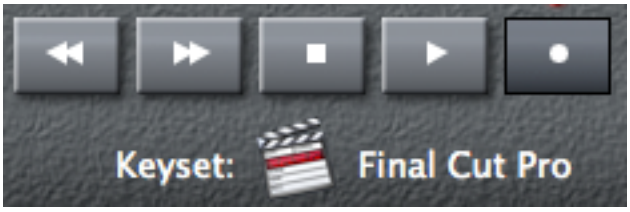
You can use **Export Keyset** from the **File** Menu to save a copy of a keyset so it can be transported to another Mac or archived for safekeeping. You don't need to use Export in your daily use of the MCS3. As previously pointed out, your changes are added to the MCS3 software's preferences file automatically.

There are several sample keysets included in this package, including ones for Final Cut Pro™ and Soundtrack Pro™.

Editing Keysets

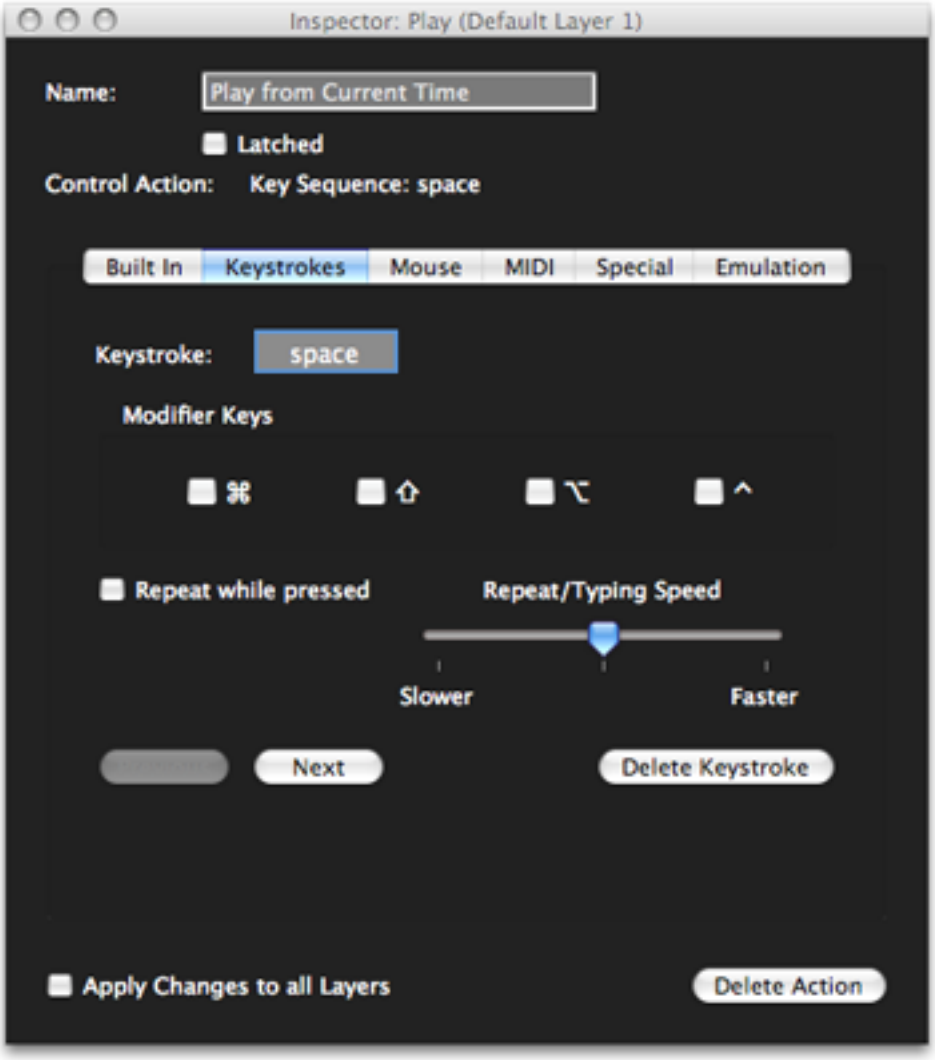
The application presents a graphical representation of the MCS3 front panel. When you click on an on-screen control (or move a control on the MCS3 itself), that control is selected and information about it appears in the floating **Inspector** window.

You can choose which keyset to edit within the **MCS3 USB** application using the **Keysets** menu. The menu lists all keysets that you have created or imported. The name of the currently selected keyset will be displayed at the bottom of the main window.



The Inspector Window

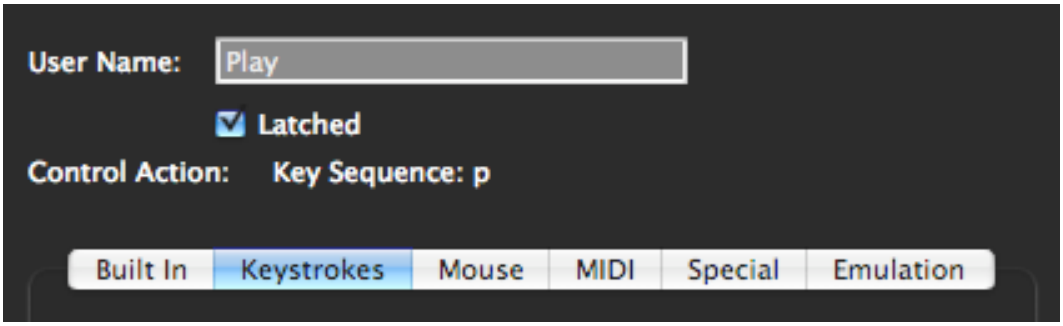
The **Inspector** window is where all your work takes place. It displays information about the currently selected control and contains the facilities for editing that information.



The **Name** text box allows you to give a control a more descriptive name that describes its precise function. In the example above, the “Play” button has been assigned an action that starts playback from the current time indicator, so naming the button “Play From Current Time” conveys more information than “Play”.

If the selected control is a button, then immediately below the Name you will see a “Latched” checkbox that lets you choose between a momentary (pressing the button turns it “on”, releasing it turns it “off”) or latched (pressing and releasing it turns it “on” and pressing and releasing it a second time turns it “off”) behavior.

Next is a description of the action that is to take place when the selected MCS3 control is pressed or turned while the target application is active. Below that is the area where this action can be edited. There are a series of tabs representing the different kinds of actions that can be performed. Clicking on one of these tabs will display controls for editing its kind of action. The available actions are **Built In**, **Keystrokes**, **Mouse**, **MIDI**, **Special** and **Emulation**.



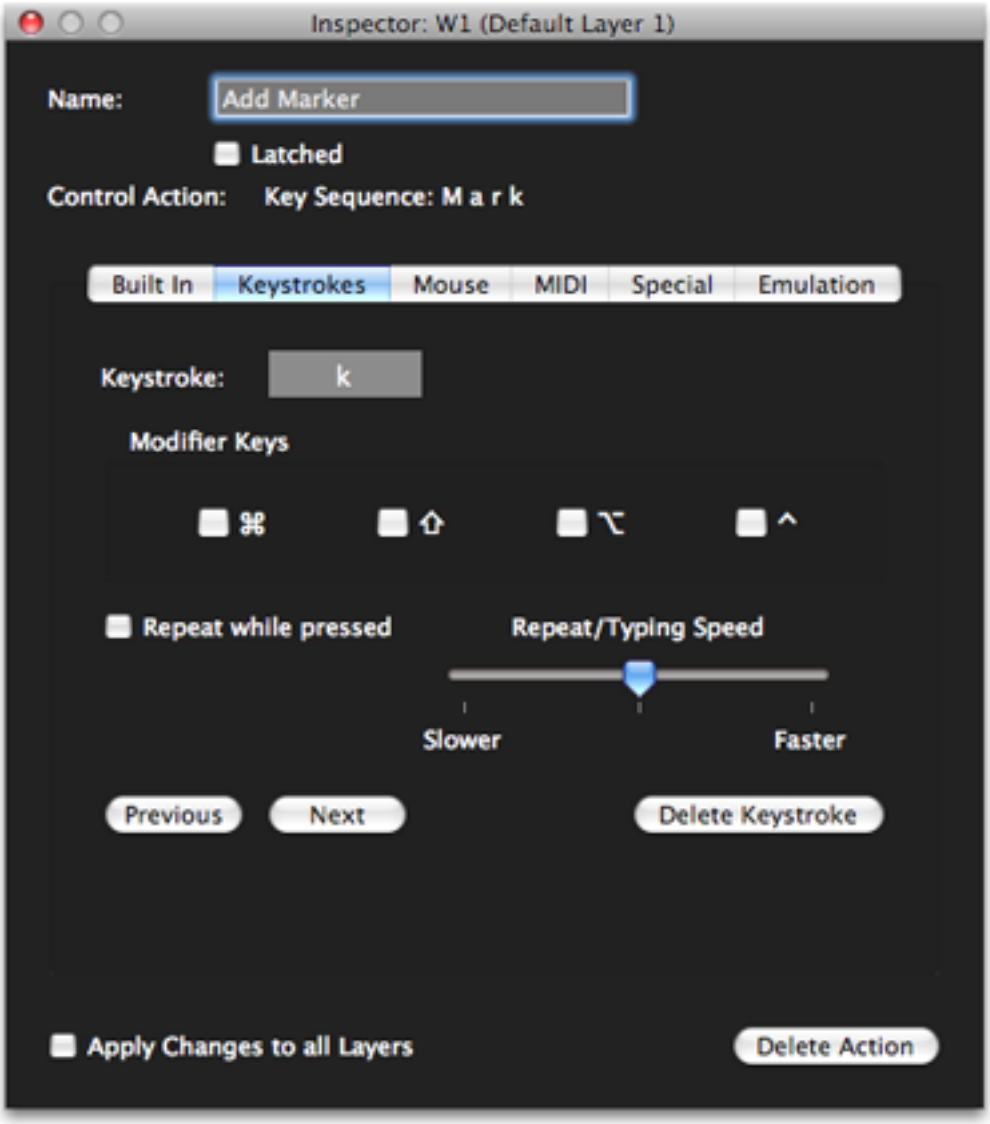
Any changes made in one of these tabs are immediately applied to the selected control. The MCS3 software allows multiple levels of Undo, so you can easily get back to any starting point.

Also at the bottom of the **Inspector** window is the **Delete Action** button. When pressed it will delete the action currently assigned to the selected control. This is also undoable.

Action Tabs

Keystrokes Tab

The MCS3 controls can be assigned to send a sequence of keystrokes to an application just as if they were keys on the Mac keyboard. These assignments are set up in the **Keystrokes Tab**.



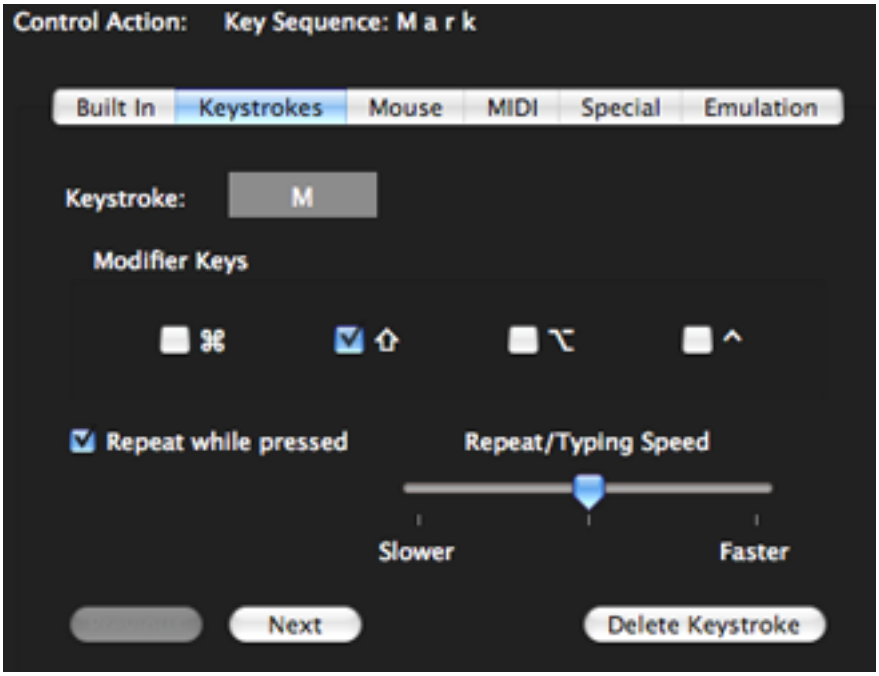
Select a control to edit, place the cursor in the **Keystroke** field and type a key. If you hold down any modifier keys (command, shift, option or control) while typing this key, the modifier checkboxes will be set up accordingly. You can also manually change the modifier checkboxes by clicking on them.

Some key/modifier combinations may be intercepted by the operating system before they reach the **Inspector** window. If this happens, just type the key without any modifiers, then click on the appropriate checkboxes to add the desired modifiers.

To add more keystrokes to the sequence, click on the **Next** button and repeat the above procedure. You can move forwards or backwards in the sequence with the **Next** and **Previous** buttons. The **Delete Keystroke** button will remove the currently displayed keystroke from the sequence.

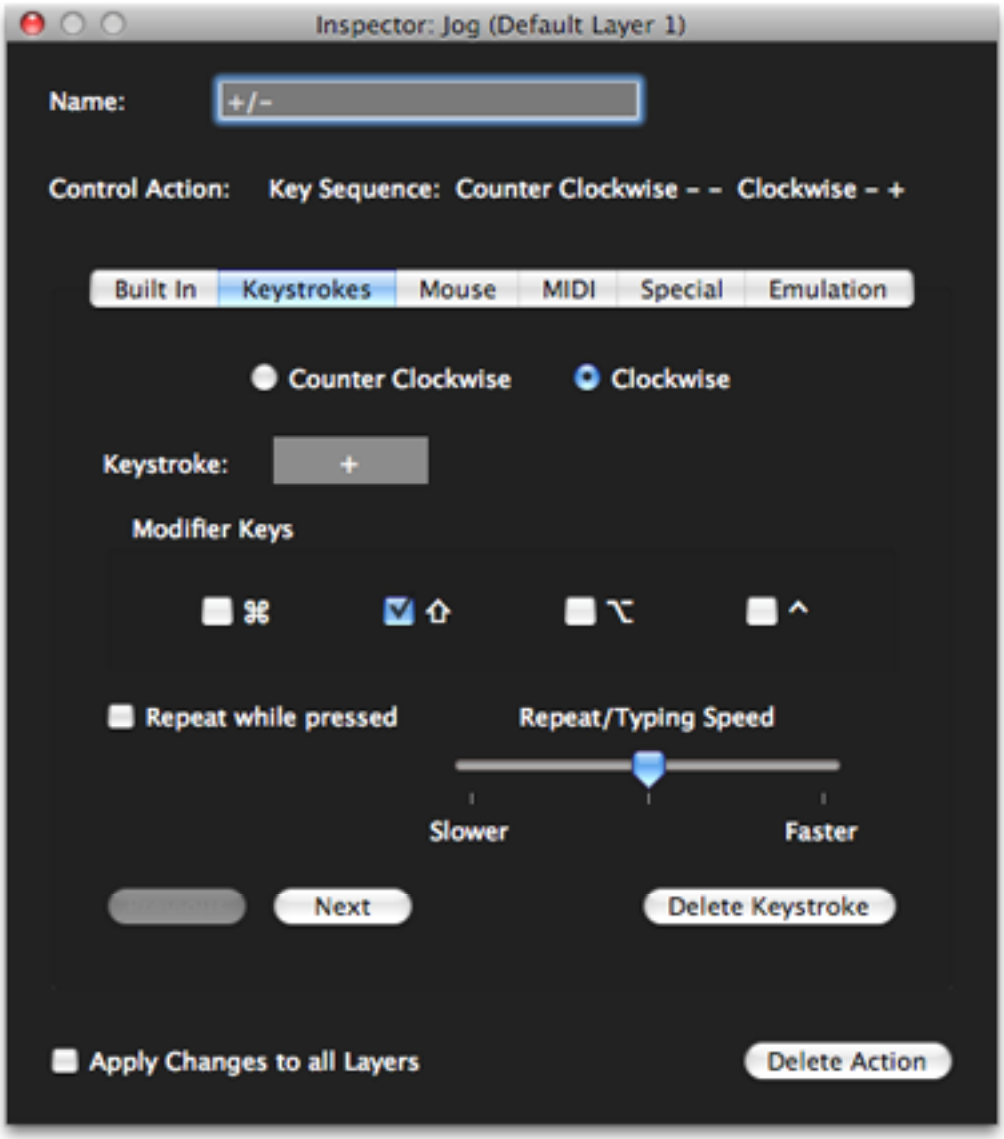
If **Repeat while pressed** is checked, the keystroke (or sequence) will repeat as long as the MCS3 control is held down. The speed of the repeat is controlled by the **Repeat/ Typing Speed** slider. This slider also determines how much time there is between keystrokes if the sequence is more than one keystroke.

If the key sequence in the example below was assigned to the **STOP** button, pressing and holding **STOP** would be the equivalent of repeatedly typing the word “mark” until **STOP** was released.

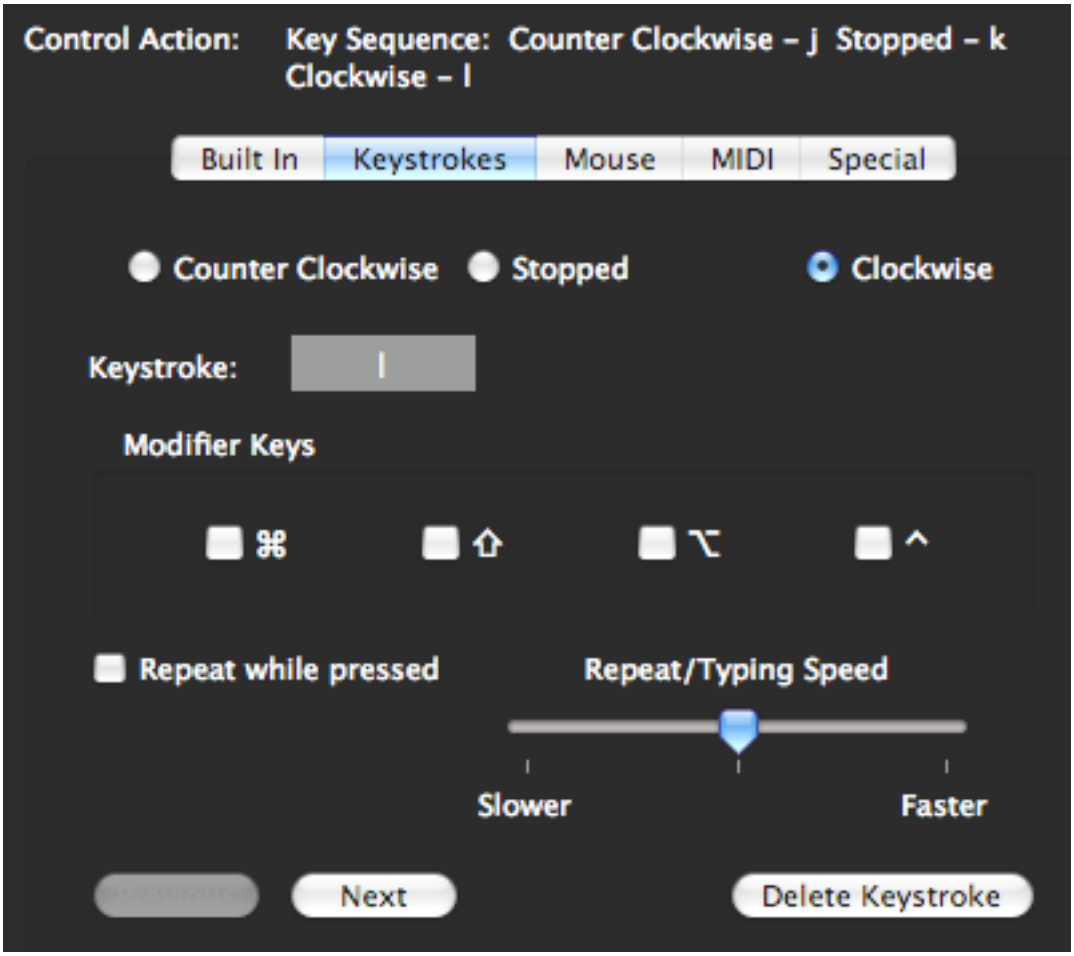


The **Keystrokes** tab can vary depending on the type of MCS3 control selected. For the **Jog Wheel**, different key sequences can be assigned to each direction. Click on the **Counter Clockwise** or **Clockwise** radio button to choose which direction's sequence to edit.

In the example below, a counter clockwise turn would send a "-" and a clockwise turn would send a "+".

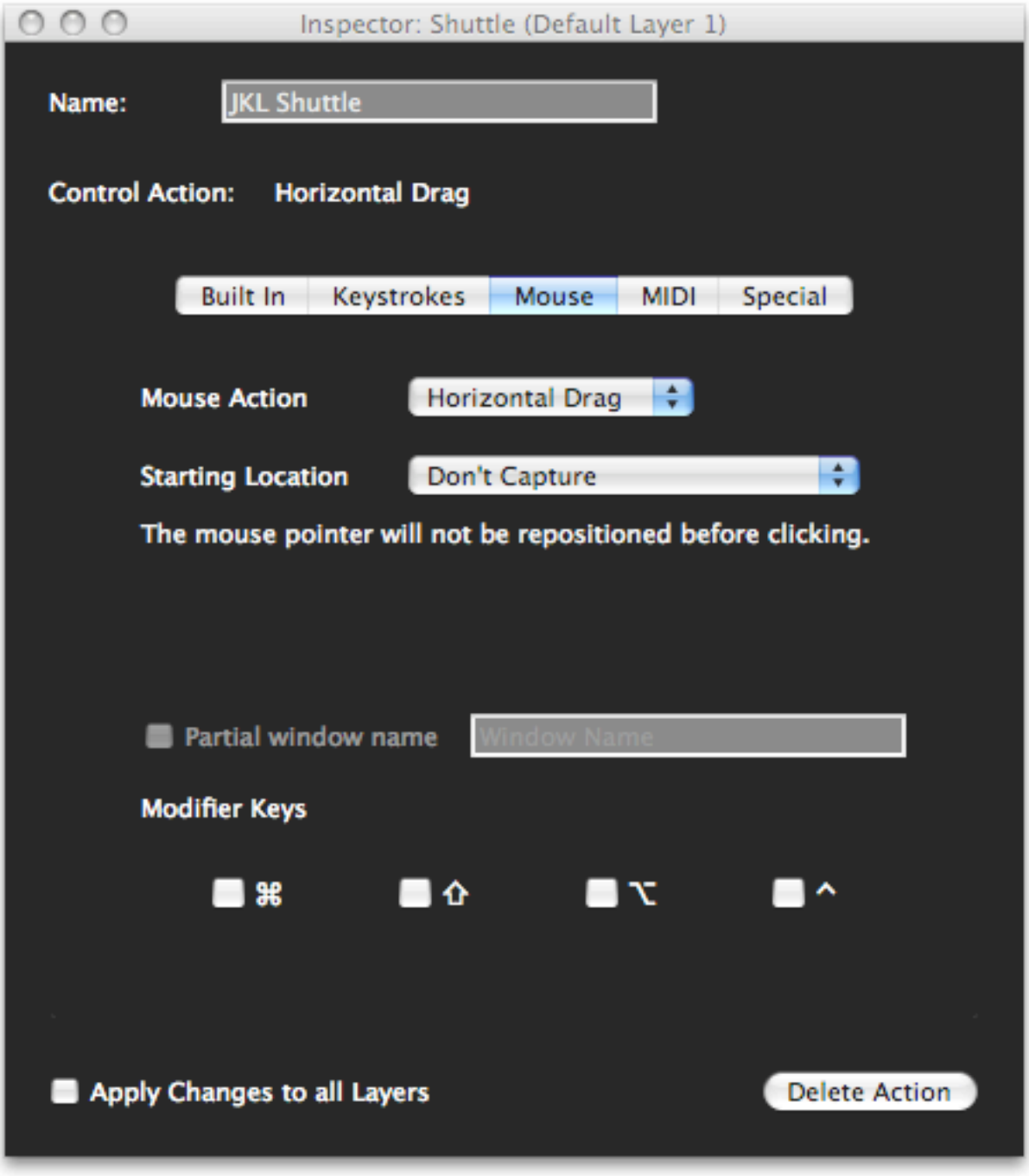


The Shuttle Control can have a key sequence assigned not only to its counter clockwise and clockwise directions, but also to it's center detent. The example below implements JKL shuttling which is used by several nonlinear video editors. In other words, the shuttle will send a "j" when being turned counter clockwise, an "l" when being turned clockwise and a "k" when it is returned to the center position.

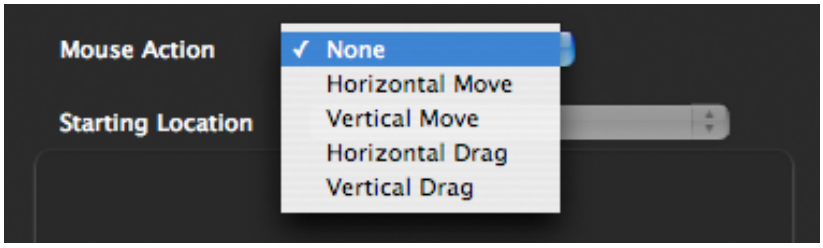


Mouse Tab

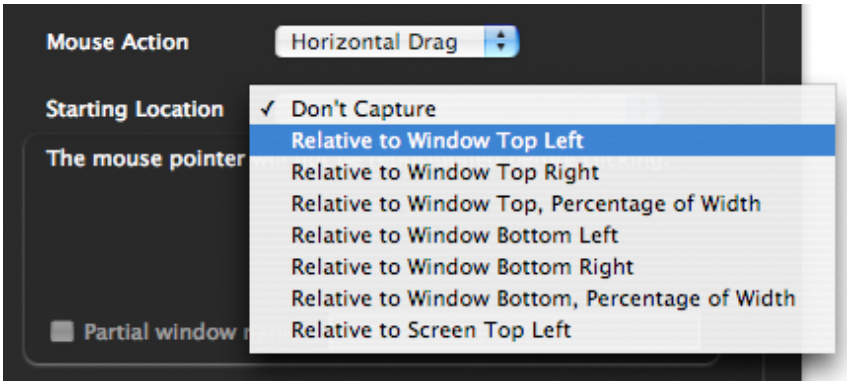
The controls on the MCS3 can be made to emulate the Macintosh mouse. Buttons can perform clicks and the **Jog Wheel** and **Shuttle Control** can perform horizontal and vertical moves and drags.



The **Mouse Action** popup lists the actions available for the selected control. For example, if the **Jog Wheel** is selected the popup would look like this:



The **Starting Location** popup lets you choose where the click, move or drag will originate.



If you choose **Don't Capture**, the mouse action will always begin at the current location of the Mouse pointer. If you choose any other option, you will be prompted to pick a point in one of the target application's windows. The options in this menu determine how the MCS3 will find that point in the event that the destination window has been resized or moved.

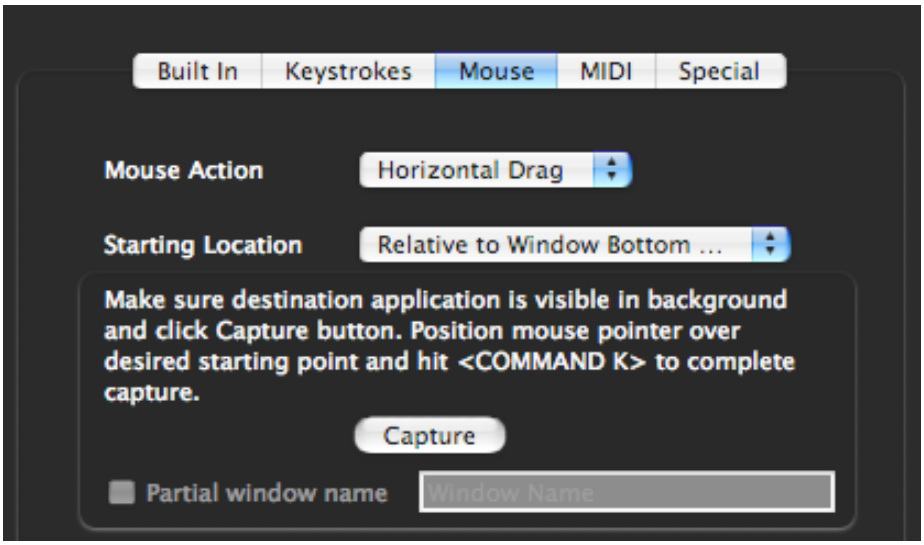
Option	When Destination Window is Resized or Moved
Relative to Window Top Left	The start point will stay the same distance from the top left corner of the window.
Relative to Window Top Right	The start point will stay the same distance from the top right corner of the window.
Relative to Window Top Percentage of Width	The start point will stay the same distance from the top of the window, but it's horizontal position will be a percentage of the window's width..

Option	When Destination Window is Resized or Moved
Relative to Window Bottom Left	The start point will stay the same distance from the bottom left corner of the window.
Relative to Window Bottom Right	The start point will stay the same distance from the bottom right corner of the window.
Relative to Window Bottom Percentage of Width	The start point will stay the same distance from the bottom of the window, but it's horizontal position will be a percentage of the window's width..
Relative to Screen Top Left	The start point will stay the same distance from the top left corner of the screen, no matter what the size or position of the window.

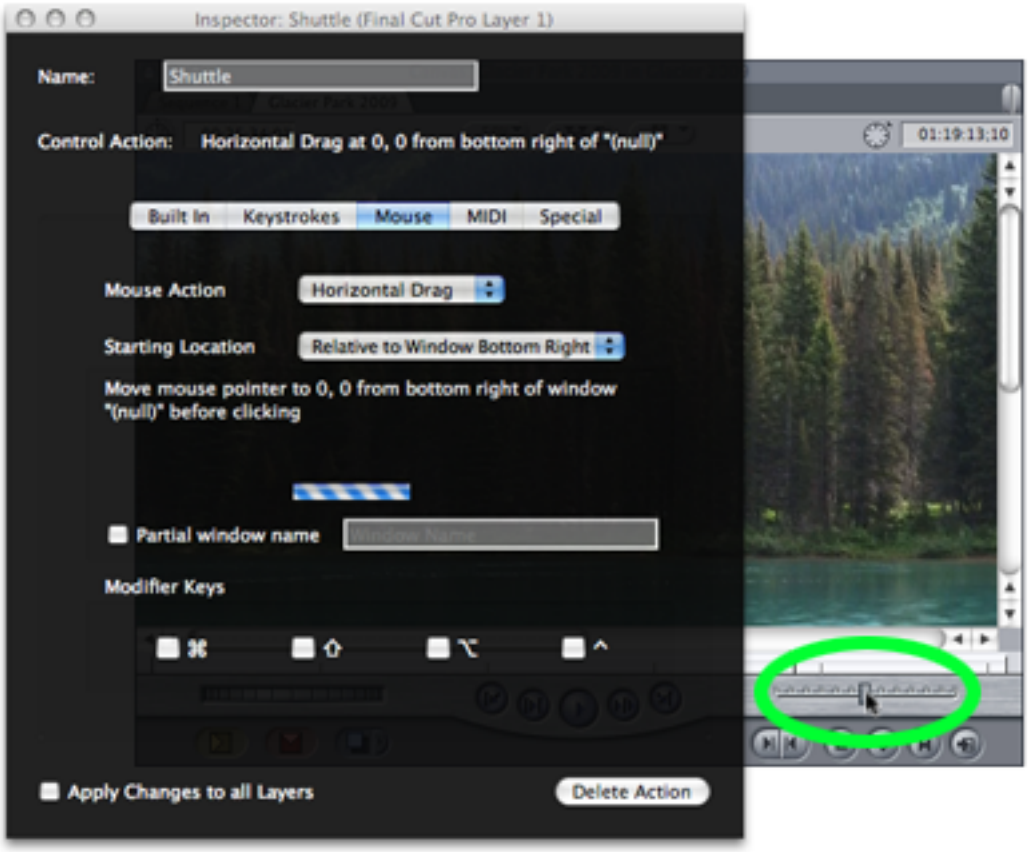
For example, let's say that a particular application has an onscreen shuttle slider in the lower right hand corner of it's Timeline window, and the center of that slider is 100 pixels from the right of the window and 20 pixels from the bottom of the window. When the window is resized, the slider stays at 100 pixels from the right and 20 pixels from the bottom of the window.

Suppose the only way to access this program's shuttle function is by dragging this slider left or right. You could program the MCS3 **Shuttle Control** to do a horizontal drag starting at 100, 20 **Relative to Window Bottom Right**.

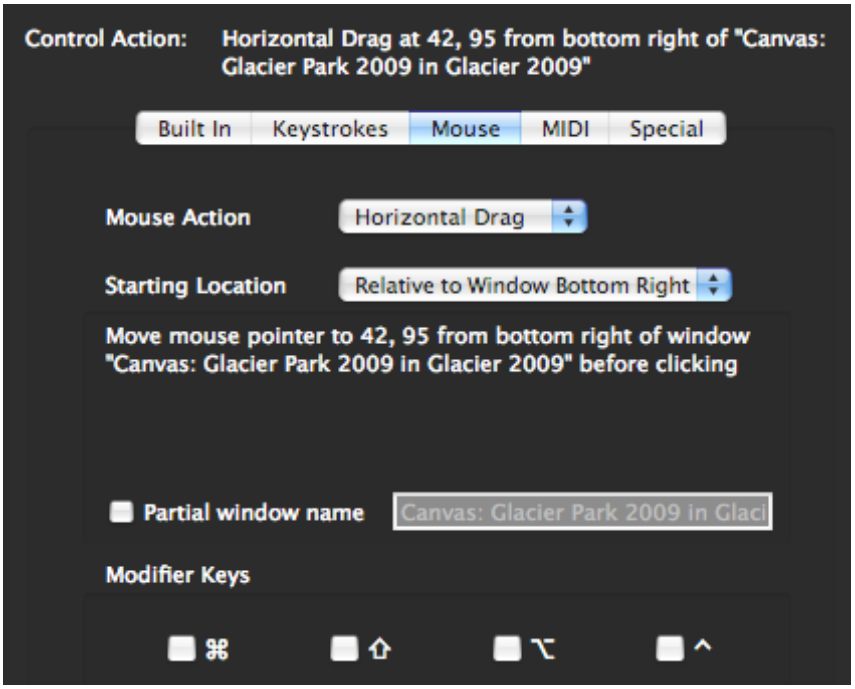
Once you have chosen from the **Starting Location** popup, you will be prompted to actually pick the starting point.



Make Sure the target application is open in the background, and that the destination window is visible. Hit the **Capture** button then position the mouse pointer over the desired starting point and type <COMMAND K>.



The **Inspector** window will be updated to show the window name and coordinates where the click, drag or move should take place.



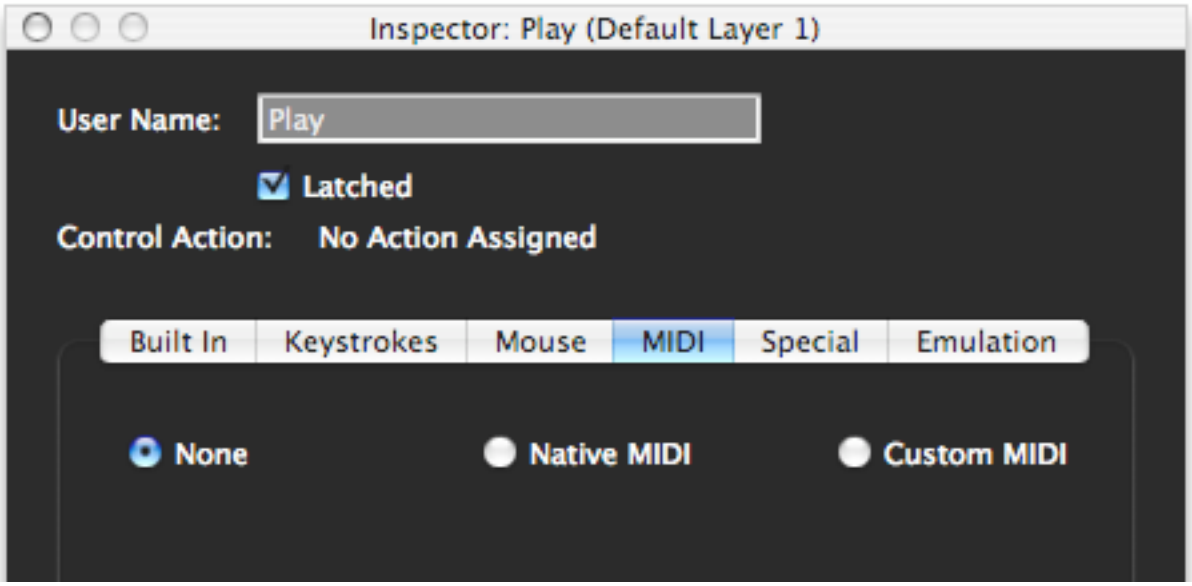
From now on, whenever you are in the target application and use the assigned control, it will move the destination window to the front, then click, move or drag at the selected location.

Once a window name and mouse location has been captured, you have the option of using a partial window name. This is useful in applications like Final Cut Pro, where the Canvas Window's title always starts with the word "Canvas" but the rest of the window title changes depending on what you're editing. Normally, the MCS3 tries to find a window with the exact name as the window where the click was first captured, but if the window name has changed, it will fail. If you choose to have the MCS3 just look for the word Canvas in Final Cut Pro it will always find the Canvas Window, even if the exact name of the Canvas Window changed since the click was captured.

To use the partial name feature, click on the **Partial Window Name** checkbox. In the text box on the right, change the full window name to the partial name you want the MCS3 to use.

MIDI Tab

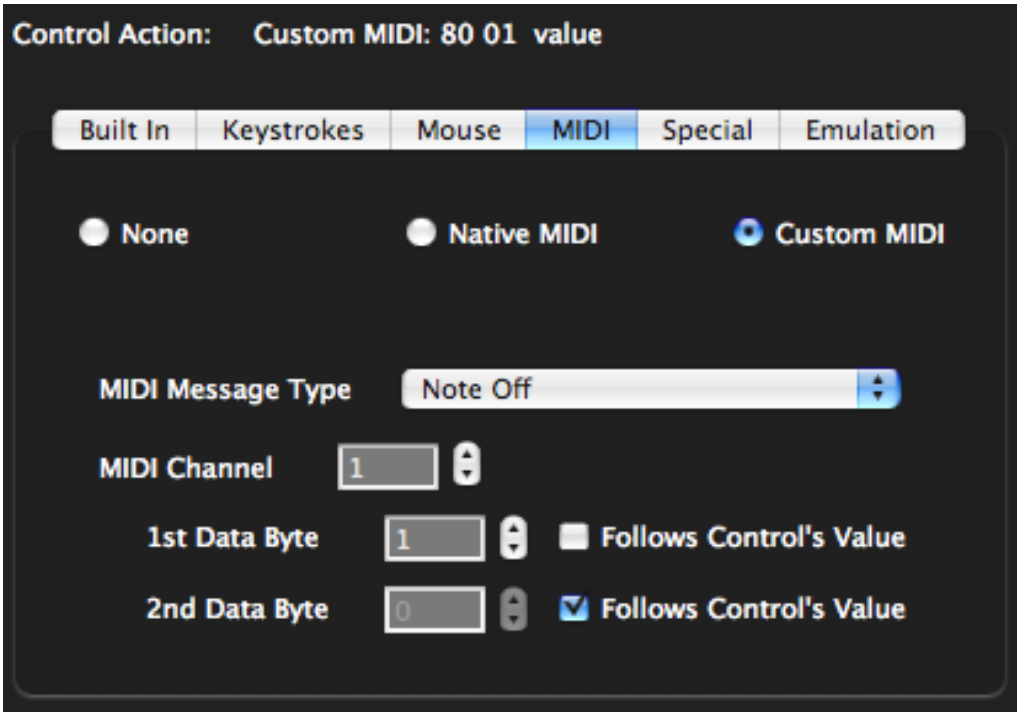
An MCS3 can be made to appear as a MIDI device to MIDI applications. Any MCS3 control can be programmed to send and respond to a MIDI message.



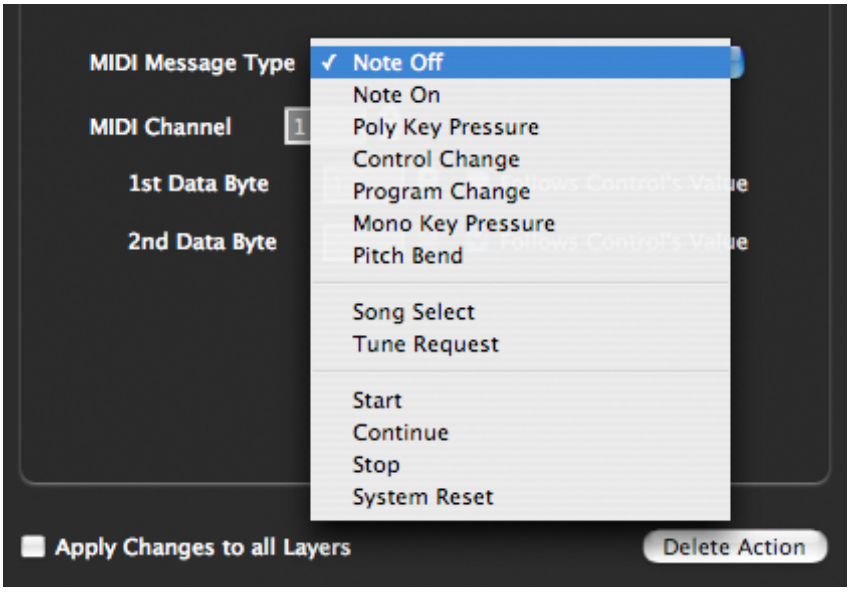
There are three radio buttons for choosing the type of MIDI message to assign.

None	No MIDI message for the selected control. If some other type of action has already been assigned, the None button will be selected. Clicking on the None button will delete the currently assigned action.
Native MIDI	Native MIDI actions send and respond to the same messages as the MIDI version of the MCS3. You would typically use this setting with an application which directly supports the MCS3 protocol. It could also be used with an application that has a MIDI "Learn" feature. For convenience, choosing **Set all Controls to Native MIDI** in the **Actions** menu will assign Native MIDI actions to all of the MCS3 controls on all layers in the current keyset.
Custom MIDI	Custom MIDI actions send and respond to user defined MIDI messages.

When **Custom MIDI** is chosen, more controls will become visible for editing the custom messages.



The **MIDI Message Type** popup lets you choose any of the basic MIDI messages except for system exclusive and MIDI Time Code.



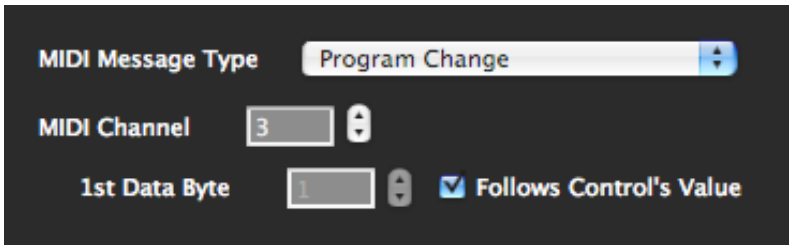
The first group of messages in the popup include a MIDI channel. If you choose one of these message types, a channel editor appears. You can either type or use the up and down arrows to set the channel. This editor accepts values from 1 through 16.

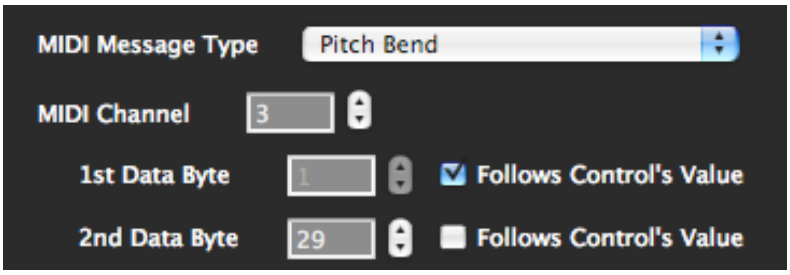
All MIDI messages except for system exclusive are either one, two or three bytes long. The first byte always is the message type, called the *status byte*. If there is a MIDI channel, it is embedded in the status byte. The bytes following the status byte, if any, are referred to as data bytes and contain additional information such as note numbers, velocities, control values, etc...

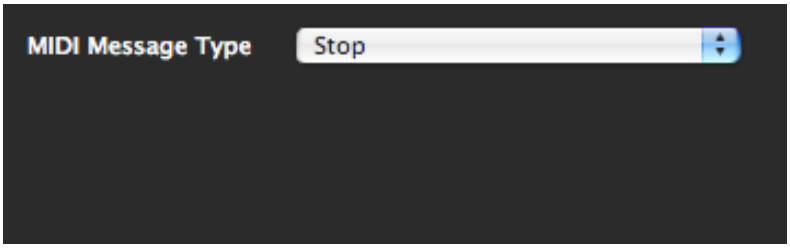
If you choose a message type that is more than one byte long the **1st Data Byte** (and possibly the **2nd Data Byte**) editor appears. You can set the data byte's value by typing or using the up/down arrows. The editor accepts values from 0 through 127.

Instead of setting an absolute value for a data byte, you can check the **Follows Control's Value** box. In this case, the value of that data byte is determined by the state of the MCS3 hardware control this message is assigned to. In other words, if you assigned a Custom MIDI Message to the **Jog Wheel** and the 2nd data byte was set to **Follows Control's Value**, a number representing the movement of the **Jog Wheel** would be inserted as the 2nd data byte of the custom message. For MCS3 buttons, a value of 127 will be inserted for button presses, and 0 for button releases.

Following are some samples of the **MIDI Tab's** appearance for various message types.







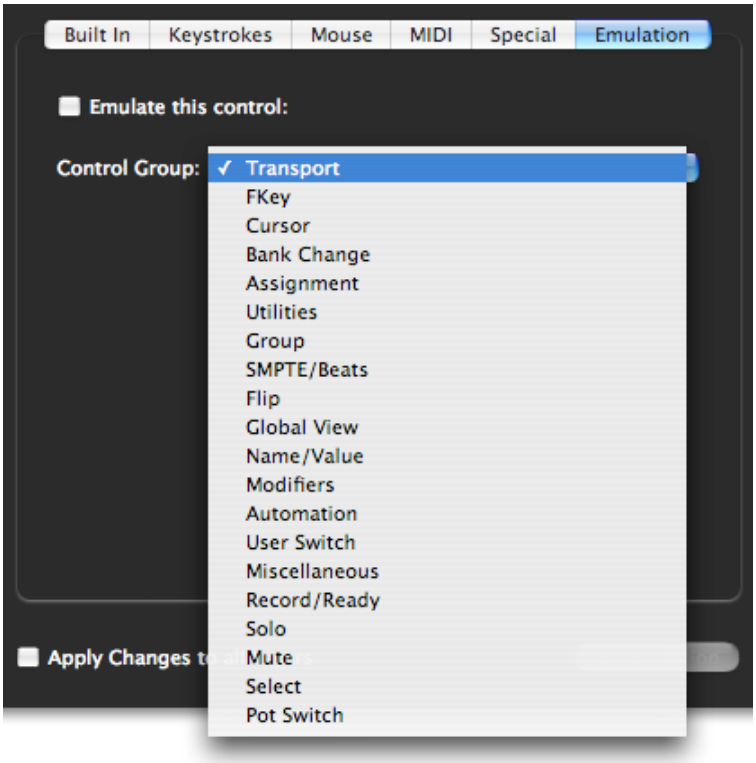
To access the MCS3's MIDI messages in your MIDI application, connect your application's MIDI input and output ports to the ports labeled "MCS3". Depending on the application, the ports may be labeled "MCS3 USB". The exact method for connecting to MIDI ports varies from application to application. Consult the manuals of the MIDI applications you are using to learn how to do this.

Emulation Tab

The MCS3 software has the ability to emulate other MIDI based control surfaces. This feature is useful if you are using the MCS3 with an application which doesn't directly support the MCS3, but which supports one of these other control surfaces.

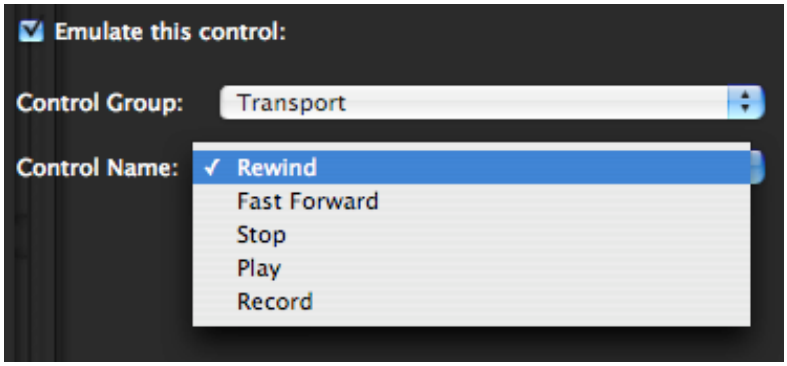
You can set any control on the MCS3 to emulate a control on one of these control surfaces using the Emulation Tab. The Emulation Tab is not available until you turn on Emulation in the **Emulation** Menu. Here you can choose **None**, **Mode A**, or **Mode B**. **Mode A** and **B** represent two different control surfaces. Which one you choose depends on the application you are using with the MCS3. More on this later.

The contents of the **Emulation Tab** varies depending on the type of MCS3 control that is selected. This is what you will see at first if you select a button.

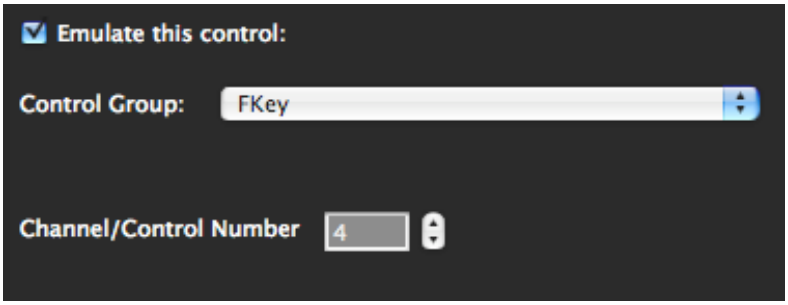


The **Control Group** popup lists the basic categories of controls that can be emulated by the selected MCS3 control. Checking **Emulate this control:** or choosing from the **Control Group** popup will assign an Emulation action to the selected control. It will also display either a second popup or a numerical editor for choosing which control in the group to emulate.

For some control categories, such as **Transport**, the individual controls in that category have names, such as **Rewind**, **Fast Forward**, **Stop**, **Play** and **Record**. For these categories a second popup will list the control names.



For other categories, such as **F-Keys**, the controls are just numbered. For these categories a numerical editor will appear. This allows you to either type or use up/down arrows to set the control number.



The Jog Wheel only has one choice, **Emulate Jog Wheel**.

You cannot assign Emulation actions to the **Shuttle Control** because none of the emulated control surfaces have this function.

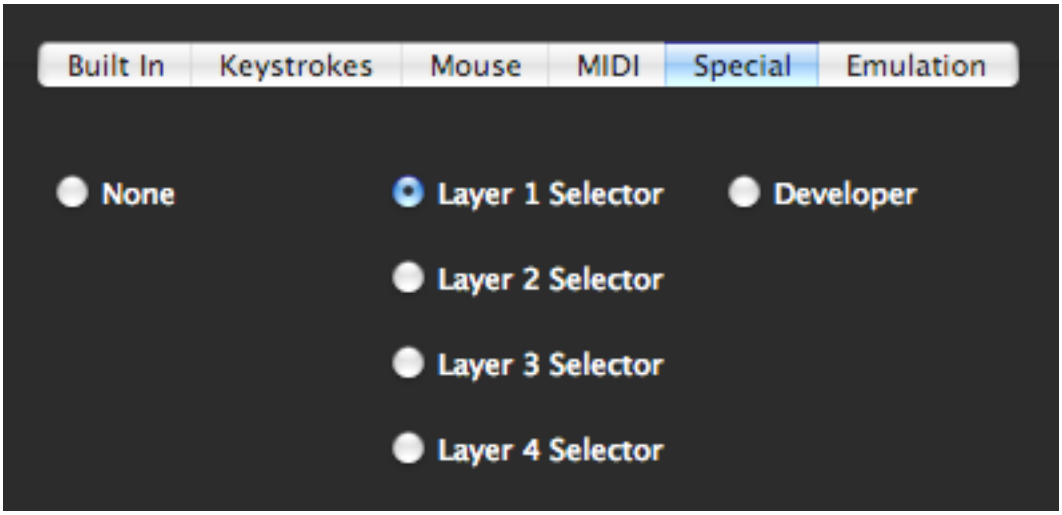
For convenience, choosing **Set all Controls to Emulation** in the **Actions** menu will assign **Emulation Actions** to many of the MCS3 controls on all banks in the current keyset. Some MCS3 controls do not correspond to any controls on the emulated control surfaces, so those controls are left unassigned.

The following assignments are made when **Set all Controls to Emulation** is chosen. The same assignments are made to all four layers

MCS3 Control	Assignment
Rewind	Emulation- transport: rewind
Fast Forward	Emulation- transport: fast forward
Stop	Emulation- transport: stop
Play	Emulation- transport: play
Record	Emulation- transport: record
Jog	Emulation- jog
W1	Emulation- automation: read/off
W2	Emulation- automation: write
W3	Emulation- automation: trim
W4	Emulation- automation: touch
W5	Emulation- automation: latch
F1	Emulation- fkey: 1
F2	Emulation- fkey: 2
F3	Emulation- fkey: 3
F4	Emulation- fkey: 4
F5	Emulation- fkey: 5
F6	Emulation- fkey: 6
Up	Emulation- cursor: up
Right	Emulation- cursor: right
Down	Emulation- cursor: down
Left	Emulation- cursor: left

Special Tab

The **Special Tab** is a collection of actions that don't easily fit into other categories.



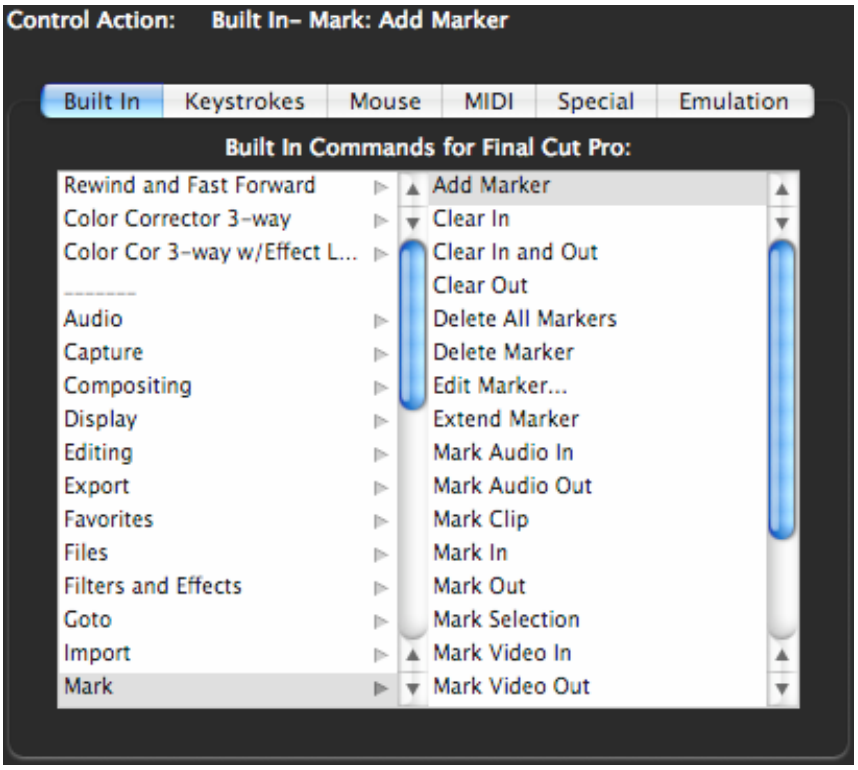
The choices are:

None	No Special Action for the selected control. If some other type of action has already been assigned, the None button will be selected. Clicking on the None button will delete the currently assigned action.
Layer Selectors	When assigned to an MCS3 button, that button can be used to switch between layers. When a Layer Selector Special Action is assigned to an MCS3 button, that assignment is automatically copied to that button on all layers. These options will not appear when the Jog Wheel or Shuttle Ring are selected.
Developer Mode	This is intended for use with applications which directly support the MCS3. This action uses messaging protocols built into Mac OS X to communicate with these applications. You normally wouldn't use this mode unless you knew that an application you were using supported it. 3rd party developers who support this mode would typically ship MCS3 keysets along with their applications. For convenience, choosing **Set all Controls to Developer Mode** in the **Actions** menu will assign **Developer Mode Special Actions** to all of the MCS3 controls on all layers in the current keyset.

Built In Actions Tab

The built in actions are actions that are predefined for specific applications. When you choose a keyset, the built in actions appropriate to that keyset's application are displayed. If no built in actions have been defined for the current application, the display will be blank.

The built in actions are presented in two columns. The left hand column lists basic categories and the right hand column lists the actual actions. Clicking on a category in the left hand column will change the list of actions displayed on the right. Double-click an action name to assign it to the selected MCS3 control.



Most of the categories and actions correspond to the keyboard shortcuts listed in the target application's manual. However, there are also actions defined by JLCooper that are not simple keyboard shortcuts. These actions will always appear at the beginning of the list, and there will be a separator line between them and other built in actions.

Final Cut Pro™ Support

Final Cut Pro™ and Control Surfaces

With FCP version 5 some support for MIDI control surfaces was added. Unfortunately, only audio parameters and transport functions are controllable via MIDI. Fortunately, the MCS3 software not only emulates the supported control surfaces, it also can control many other parameters in FCP.

The MCS3 has a large advantage over other control surfaces when used with Final Cut Pro because it is not limited to just the functions included in Final Cut's MIDI control surface support. With its built in functions and the ability to emulate the mouse and keyboard coupled with FCP's control surface support, virtually every function in Final Cut Pro can be controlled with the MCS3.

Final Cut Pro™ Shuttle

The FCP Built In Shuttle command works equally well in the Timeline, Canvas, Viewer and Log and Capture windows.

Using the MCS3 with Final Cut Pro™

To use the MCS3 with FCP, first run the **MCS3 USB** application and import the Final Cut keyset provided by JLCooper. Now run Final Cut and open the **Control Surfaces** dialog from the **Tools** menu. Click on the "**+**" button to add a control surface and choose Mackie Control. Then choose **MCS3 USB - MCS3** for the input connection and output connections. Click OK to exit the dialog.

Final Cut requires the **Audio Mixer** (**Tools Menu**) to be open in order for control surface support to be active. You might want to save a window layout that has the Audio Mixer open.

As mentioned earlier, in order for Mouse Emulation to work, the Accessibility System Preferences most be set correctly. This is important to the FCP keyset since some of the FCP Built In Commands use Mouse Emulation. Please see the section of this manual entitled **System and Software Setup** if you are unsure about these settings.

The MCS3 Final Cut Pro Keyset

The MCS3 Final Cut Pro keyset uses a combination of emulated controls, mouse emulation, keystrokes and built-in commands. It is fully customizable using the techniques presented in this manual, so you can easily adapt it to your working style.

The keyset uses three of the four layers, with some duplication in each layer where it makes sense. The layers are selected with **F1**, **F2** and **F3**.

Here are the control assignments in the current version of the FCP keyset:

Layer 1	MCS3 Control	Assignment
	Rewind	Emulation- transport: rewind
	Fast Forward	Emulation- transport: fast forward
	Stop	Emulation- transport: stop
	Play	Emulation- transport: play
	Record	Built In- Capture: Batch Capture...
	Jog	Emulation- jog
	Shuttle	Built In- Jog and Shuttle: Shuttle
	W1	Built In- Mark: Mark In
	W2	Built In- Mark: Mark Out
	W3	Built In- Goto: Go to In Point
	W4	Built In- Goto: Go to Out Point
	W5	Built In- Mark: Add Marker
	W6	Built In- Goto: Go to Previous Marker
	W7	Built In- Goto: Go to Next Marker
	F1	Layer 1 Selector
	F2	Layer 2 Selector
	F3	Layer 3 Selector
	F4	Built In- Windows: Show Timeline

	F5	Built In- Windows: Show Canvas
	F6	Built In- Windows: Show Viewer
	Up	Key Sequence: Home
	Right	Built In- Other: Right
	Down	Key Sequence: End
	Left	Built In- Other: Left

Layer 2	MCS3 Control	Assignment
	Rewind	Emulation- transport: rewind
	Fast Forward	Emulation- transport: fast forward
	Stop	Key Sequence: Esc
	Play	Emulation- transport: play
	Record	Built In- Capture: Capture Now
	Jog	Emulation- jog
	Shuttle	Built In- Jog and Shuttle: Shuttle
	W1	Built In- Mark: Mark In
	W2	Built In- Mark: Mark Out
	W3	Built In- Goto: Go to In Point
	W4	Built In- Goto: Go to Out Point
	W5	Built In- Mark: Add Marker
	W6	Built In- Goto: Go to Previous Marker
	W7	Built In- Goto: Go to Next Marker
	F1	Layer 1 Selector
	F2	Layer 2 Selector
	F3	Layer 3 Selector
	F4	Built In- Windows: Show Browser

	F5	Built In- Windows: Show Favorites
	F6	Built In- Windows: Show Effects
	Up	Built In- View Menu: Zoom Out
	Right	Built In- Goto: Go to Next Edit
	Down	Built In- View Menu: Zoom In
	Left	Built In- Goto: Go to Previous Edit

Layer 3	MCS3 Control	Assignment
	Rewind	Emulation- transport: rewind
	Fast Forward	Emulation- transport: fast forward
	Stop	Emulation- transport: stop
	Play	Emulation- transport: play
	Record	Built In- Capture: Batch Capture...
	Jog	Emulation- jog
	Shuttle	Built In- Jog and Shuttle: Shuttle
	W1	Built In- Mark: Mark In
	W2	Built In- Mark: Mark Out
	W3	Built In- Goto: Go to In Point
	W4	Built In- Goto: Go to Out Point
	W5	Built In- Mark: Add Marker
	W6	Built In- Goto: Go to Previous Marker
	W7	Built In- Goto: Go to Next Marker
	F1	Layer 1 Selector
	F2	Layer 2 Selector
	F3	Layer 3 Selector
	F4	Built In- Capture: Log and Capture...

	F5	Built In- Windows: Show Tool Bench
	F6	Built In- Windows: Show Audio Meters
	Up	Emulation- cursor: up
	Right	Emulation- cursor: right
	Down	Emulation- cursor: down
	Left	Emulation- cursor: left

Soundtrack Pro™ Support

Setting up the MCS3 for use with Soundtrack Pro is almost identical to setting up for Final Cut Pro.

Open the MCS3 USB application and Import the Soundtrack Pro keyset or create a keyset of your own. If you create your own, start by setting the Emulation Mode to A then choosing Set All Controls to Emulation from the Actions menu. Later on you can customize this keyset with built-in commands, key sequences and mouse actions.

The next time you run Soundtrack Pro, open the Preferences dialog from the Soundtrack Pro menu then go to the Control Surfaces panel. Click on the “+” button to add a control surface and choose Mackie Control. Choose **MCS3 USB - MCS3** for the input connection and output connections. Click OK to exit the dialog.

The Soundtrack Pro Keyset

The Soundtrack Pro keyset is a combination of emulated actions, keystrokes and built in commands. It uses three layers with some duplication between layers. As with all other MCS3 keysets, it is fully customizable.

F1 - F3 function as layer selectors. In Layer 1, F4 - F6 are used to toggle various panes on and off. In Layer 2, F4 - F6 toggle different HUD displays and in Layer 3, F4 - F6 Tabs in various panes. Activating a Tab also activates the pane it is in. Once a pane is activated in this fashion, the left and right VStick in Layer 3 can be used to move between Tabs in the currently active pane.

In Layer 1 the VStick is used for zooming and in Layer 2 it is used for navigating the timeline.

Layer 1	MCS3 Control	Assignment
	Rewind	Move Back
	Fast Forward	Move Forward
	Stop	Stop
	Play	Play
	Record	Record
	Jog	Jog
	W1	Insert Time Marker
	W2	Add Region Marker for Selection
	W3	Add Time Markers at Beg. & End
	W4	Insert Beat Marker
	W5	Goto Previous Marker
	W6	Goto Next Marker

Layer 1	MCS3 Control	Assignment
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Toggle Left Pane
	F5	Toggle Lower Pane
	F6	Toggle Right Pane
	Up	Zoom Out Vertical
	Right	Zoom In Horizontal
	Down	Zoom In Vertical
	Left	Zoom Out Horizontal

Layer 2	MCS3 Control	Assignment
	Rewind	Move Back
	Fast Forward	Move Forward
	Stop	Stop
	Play	Play
	Record	Record
	Jog	Jog
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Toggle Multipoint Video HUD
	F5	Toggle Sound Palette
	F6	Toggle Timecode HUD
	Up	Goto Beginning
	Right	Forward One Frame
	Down	Goto End of Cycle Region
	Left	Back One Frame

Layer 3	MCS3 Control	Assignment
	Rewind	Move Back
	Fast Forward	Move Forward
	Stop	Stop
	Play	Play
	Record	Record
	Jog	Jog
	F1	Layer 1
	F2	Layer 2

Layer 3	MCS3 Control	Assignment
	F3	Layer 3
	F4	Video Tab
	F5	Mixer Tab
	F6	Details Tab
	Right	Next Tab
	Left	Previous Tab

GarageBand™ Support

Open the MCS3 USB application and Import the GarageBand Keyset. Later on you can customize this keyset with built-in commands, key sequences and mouse actions.

The GarageBand Keyset

The GarageBand keyset is a combination of keystrokes and built in commands. It uses two layers with some duplication between layers. As with all other MCS3 keysets, it is fully customizable.

F1 - F3 function as layer selectors. In Layers 1 and 2, F4 - F6 are used to show and hide various panes and windows. In Layer 2, F4 - F6 toggle different HUD displays and in Layer 3, F4 - F6 Tabs in various panes.

In Layer 1 the VStick is used for navigating the timeline, and in Layer 2, the VStick Up and Down are used for zooming.

In Layer 1, the Jog Wheel is used for jogging, and in Layer 2 it is used to adjust the Master Volume.

Layer 1	MCS3 Control	Assignment
	Rewind	Rewind
	Fast Forward	Fast Forward
	Stop	Stop
	Play	Play
	Record	Start / Stop Recording
	Jog	Jog
	W1	Show Chord / Tuner Mode
	W2	Show Time Mode
	W3	Show Measures Mode
	W4	Show Tempo Mode
	W5	Cycle Region on/Off
	W6	Metronome On/Off
	W7	Count in On/Off
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Track Info
	F5	Editor
	F6	Loop Browser
	Up	Goto Beginning

Layer 1	MCS3 Control	Assignment
	Right	Forward
	Down	Goto End
	Left	Back

Layer 2	MCS3 Control	Assignment
	Rewind	Rewind
	Fast Forward	Fast Forward
	Stop	Stop
	Play	Play
	Jog	Master Volume
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Media Browser
	F5	Onscreen Keyboard
	F6	Musical Typing Window
	Up	Zoom Out
	Down	Zoom In

iMovie™ Support

Open the MCS3 USB application and Import the iMovie Keyset. Later on you can customize this keyset with built-in commands, key sequences and mouse actions.

The iMovie Keyset

The iMovie keyset is a combination of keystrokes and built in commands. It uses two layers with some duplication between layers. As with all other MCS3 keysets, it is fully customizable.

F1 - F3 function as layer selectors. In all Layers, F4 - F6 are used to show and hide various panes and windows. In each layer the Play button is assigned a different variation of the Play command.

W1 - W7 are assigned various editing tasks in Layer 1.

Layer 1	MCS3 Control	Assignment
	Rewind	Reverse
	Fast Forward	Forward
	Stop	Stop
	Play	Play
	Jog	Jog
	W1	Select All
	W2	Mute Clip
	W3	Split Clip
	W4	Undo
	W5	Redo
	W6	Enter / OK / Done
	W7	Cancel
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Clip Adjustments Panel
	F5	Video Panel
	F6	Audio Panel
	Right	Forward 1 Frame
	Left	Back 1 Frame

Layer 2	MCS3 Control	Assignment
	Rewind	Reverse
	Fast Forward	Forward
	Stop	Stop Full Screen
	Play	Play Full Screen
	Jog	Extend Selection
	W6	Enter / OK / Done
	W7	Cancel
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Clip Trimmer
	F5	Edit Trimmer
	F6	Crop / Rotate / Ken Burns

Layer 3	MCS3 Control	Assignment
	Rewind	Reverse
	Fast Forward	Forward
	Stop	Stop
	Play	Play from Beginning
	W6	Enter / OK / Done
	W7	Cancel
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Keywords Window
	F5	Titles Pane
	F6	Transitions Pane

Logic™ Support

Open the **MCS3 USB** application and Import the Logic Pro keyset or create a keyset of your own. If you create your own, start by setting the **Emulation Mode to B** then choosing **Set All Controls to Emulation** from the **Actions** menu. Later on you can customize this keyset with built-in commands, key sequences and mouse actions.

The next time you run Logic Pro, open the Preferences dialog from the Logic Pro menu then go to **Control Surfaces > Setup**. Click on **Install** in the **New** menu at the top of left of the window. Choose **Logic Control** from the list of control surfaces and click on **Add**.

Choose **MCS3** for the Out Port and Input. Close the Setup Dialog dialog.

The Logic Keyset

The Logic keyset is a combination of emulation, keystrokes and built in commands. It uses one layer.

W1 - W7 are used to set the automation mode and to create and locate to markers. **F1 - F6** are used to select Screensets 1 - 6.

The VStick is used for track selection and zooming.

Layer 1	MCS3 Control	Assignment
	Rewind	Rewind
	Fast Forward	Fast Forward
	Stop	Stop
	Play	Play
	Record	Record
	Jog	Jog
	W1	Selected Track - Read / Off (Emulation- autc
	W2	Selected Track - Touch
	W3	Selected Track - Latch
	W4	Selected Track - Write
	W5	Create Marker
	W6	Previous Marker
	W7	Next Marker
	F1	Screenset 1
	F2	Screenset 2
	F3	Screenset 3
	F4	Screenset 4
	F5	Screenset 5

Layer 1	MCS3 Control	Assignment
	F6	Screenset 6
	Up	Select Previous Track
	Down	Select Next Track
	Right	Zoom In/Out

Nuendo™ Support

Open the **MCS3 USB** application and Import the Nuendo keyset or create a keyset of your own. If you create your own, start by setting the **Emulation Mode to A** then choosing **Set All Controls to Emulation** from the **Actions** menu. Later on you can customize this keyset with key sequences and mouse actions.

The next time you run Nuendo, open the **Device Setup** dialog from the **Devices** menu then go click on Mackie Control under **Remote Devices**. Choose **MCS3 USB MCS3** for the **MIDI Output** and **MIDI Input**. Hit OK to accept your settings and close the Setup Dialog.

The Nuendo Keyset

The Nuendo keyset is a combination of emulation and keystrokes. It uses three layers with some duplication between layers.

F1 - F3 are layer selectors. **F4 - F6** are used to open and close various windows and dialog boxes in all three layers.

W1 - W6 control automation modes, markers, locating events, OK'ing, Canceling, and Closing windows, with slight differences between layers.

The VStick is used for track selection and zooming with some differences between layers.

Layer 1	MCS3 Control	Assignment
	Rewind	Rewind
	Fast Forward	Fast Forward
	Stop	Stop
	Play	Play
	Record	Record
	Jog	Jog
	W1	Read
	W2	Write
	W3	Markers
	W4	Previous Marker
	W5	Next Marker
	W6	OK/Enter
	W7	Cancel
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3

Layer 1	MCS3 Control	Assignment
	F4	Transport Panel
	F5	Mixer Window
	F6	Video
	Up	Select Previous Track
	Right	Zoom Timeline In
	Down	Select Next Track
	Left	Zoom Timeline Out

Layer 2	MCS3 Control	Assignment
	Rewind	Rewind
	Fast Forward	Fast Forward
	Stop	Stop
	Play	Play
	Record	Record
	Jog	Jog
	W1	Read
	W2	Write
	W3	Markers
	W4	Previous Event
	W5	Next Event
	W6	OK/Enter
	W7	Cancel
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Project Setup
	F5	VST Connections
	F6	Tempo Track
	Up	Select Previous Track
	Right	Zoom Track In
	Down	Select Next Track
	Left	Zoom Track Out

Layer 3	MCS3 Control	Assignment
	Rewind	Rewind
	Fast Forward	Fast Forward
	Stop	Stop
	Play	Play

Layer 3	MCS3 Control	Assignment
	Record	Record
	Jog	Jog
	W1	Read
	W2	Write
	W3	Markers
	W4	Previous Marker
	W5	Next Marker
	W6	OK/Enter
	W7	Close
	F1	Layer 1
	F2	Layer 2
	F3	Layer 3
	F4	Organize Workspaces
	F5	Browser
	F6	Pool
	Up	Select Previous Track
	Down	Select Next Track