



MLsim v2.0.1 Release Notes

v2.0.1, 9/5/11

MLsim Core Engine v1.0.7

MLsim v2.0.1 now combines the MLsim Core Engine, Setup Utility and MIDI Bridge into a single application.

NEW FEATURES:

Control Panel



This floating window will appear above any other applications, providing access regardless of what other programs are running. If you close the control panel, you can re-open via the Extras menu.

The Link LED shows a connection to the MLsim Core Engine (more on that below).

The Bridge LED shows data activity coming from MIDI Bridge when controlling from Digital Performer.

The “Ext MIDI” LED shows data activity coming from an external MIDI device that is connected to the computer via a MIDI interface.

Presets – there are now 4 window presets (A, B, C & D) that can be stored and recalled. These store the window size & position of the 3D simulator, as well as the XYZ position and XYZ rotation of the Sim.

You can also access the Color Selector, MLsim Setup and Preferences windows via the Control Panel.

The Panic button will turn off all MLsim channels and cancel any fades or autoFX in progress.

Color Selector



Clicking on the icon to the left will open/close the Color Selector.

You can select colors to be displayed on MLsim by using the buttons provided.



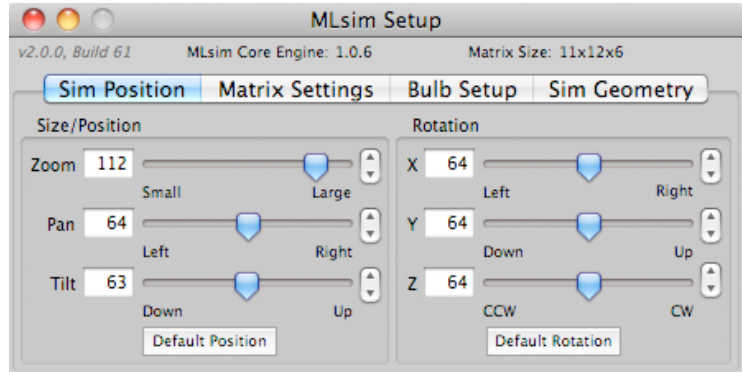
MLsim Setup



Clicking on the icon to the left will open/close the MLsim Setup window. This is used to set-up and configure the MLsim position, matrix size / type, bulb colors and other parameters. There are four tabs for configuring different aspects of the MLsim Core Engine.

Sim Position

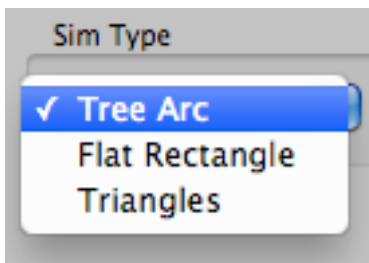
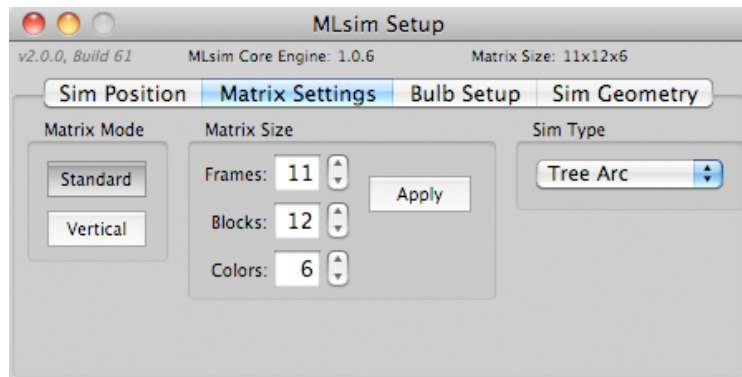
The Sim size/position and XYZ rotation parameters are set using these controls. Click on the Default buttons will restore values back to their defaults.



Matrix Settings

Matrix Mode – Standard or Vertical
In a standard matrix, MidiLite frames correlate to a row of the matrix. In a vertical matrix, MidiLite frames correlate to a column of the matrix.

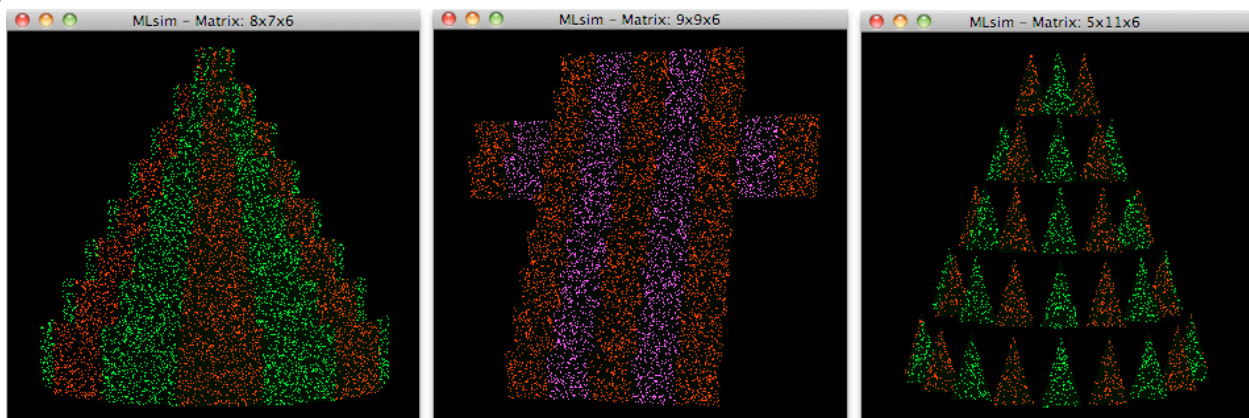
The Matrix Size is configured by setting the number of Frames, Blocks and Colors in your system.



The Sim Type should be set to Tree Arc for a normal Living Christmas Tree matrix.

Flat Rectangle would be selected for a Living Cross or other specialized application where the matrix is comprised of rectangular flat objects.

Triangles are for special applications where small triangles (trees) are used instead of panels.

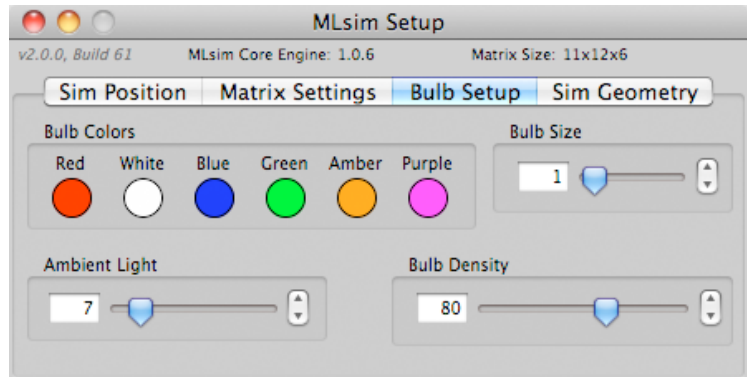


Bulb Setup

Bulb Colors – clicking on a color brings up the standard Mac color picker, where you can adjust the color of the 6 colors of bulbs.

Bulb Size – this sets the size of the pixels (bulbs) rendered.

Ambient Light – this adjusts the amount of ambient light that is on the simulator's panels. Typically you would set this to a low value in the 7-15 range.

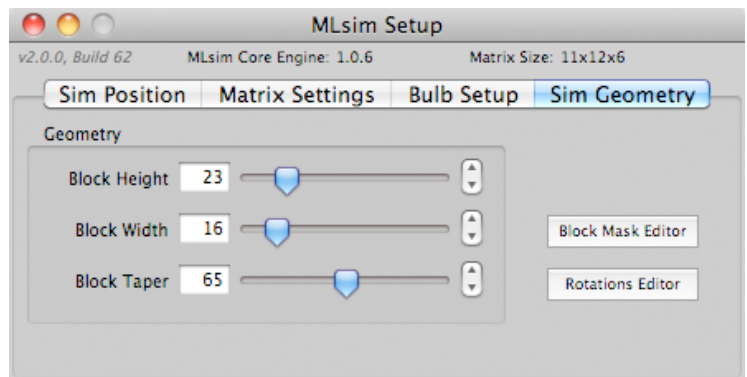


Bulb Density – this sets how many bulbs are rendered onto each panel. This is a relative number and you may want to adjust based on how large of a Sim window you use. A density of 80 is the default value. The higher the bulb density (and also the larger the matrix size), the more CPU power it will require to render.

Sim Geometry

Block Height – adjusts the height of the rows in the matrix. Increasing this value can create a taller bottom row, which is common with some tree structures.

Block Width – adjusts the width of the blocks, and you can create different overall shapes to more closely match your actual structure.



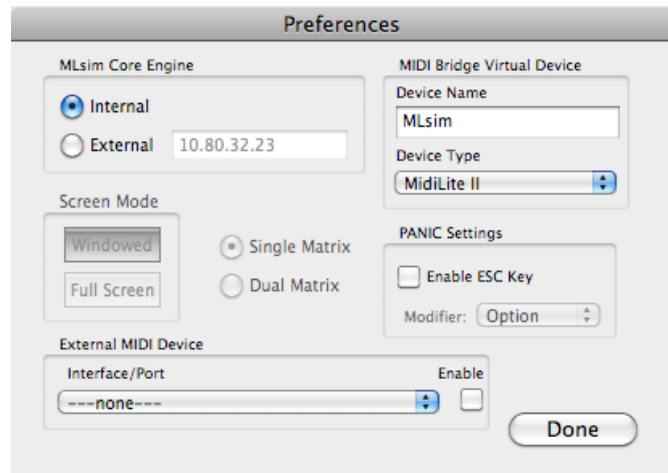
Block Taper – in Tree Arc mode, this adjusts how much smaller each row is as you go up the matrix. This control does not apply when in Flat Rectangle mode.

Block Mask Editor button – this opens up the block mask editor. See the detailed description later in this document.

Rotations Editor button – this opens up the rotations editor. This is only available when in "Triangles" mode. See the detailed description later in this document.

Preferences

MLsim Core Engine – select whether using the Internal (MLsim Core Engine running on the same computer), or External where MLsim Core Engine is running on a separate computer. If using external, put in the network address for the computer running MLsim Core Engine.



Device Name – this is the name that will appear in Digital Performer as the virtual device created via the internal MIDI Bridge.

Device Type – select the type of virtual MidiLite system you are creating. MidiLite II, MidiLite liv (for vertical systems), or if using an older original MidiLite system, select MidiLite or MidiLite v (for vertical).

Screen Mode – this is currently not implemented.

Single / Dual Matrix – this is currently not implemented.

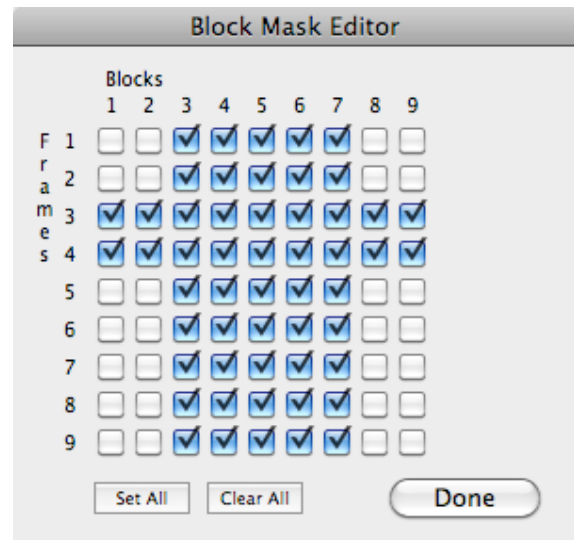
External MIDI Device – you can select an interface/port for an external MIDI controller that can control MLsim if the Enable checkbox is selected and a valid port is chosen.

Panic Settings – by checking the “Enable ESC Key” checkbox, the ESC key on your computer’s keyboard becomes a Panic button. You can also select a modifier key that would need to be held down while pressing the Esc key. Note that this function is enabled regardless of what program is foreground, so it essentially disables the Esc key for other programs, so a modifier key is usually recommended.

Block Mask Editor

The Block Mask Editor is used to mask (not display) certain blocks that are not used in a particular matrix configuration. This is used for specialized applications, or for situations where certain blocks may not be visible or even connected.

Simply uncheck any blocks which should not be visible in the matrix. The processing still occurs for these blocks (for matrix operations), but they are not visible on the actual simulation.



The example showed on the previous page was for a Living Cross matrix, where the unchecked blocks are not part of the visible matrix (and in the real MidiLite system, do not have any output cards).

	1	2	3	4	5	6	7	8	9
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Block masking can also be used for unique applications where non-standard matrix configurations are needed.

Rotations Editor

The Rotations Editor is only enabled when in Triangles mode. This is for adjusting the placement of individual triangles around the arc of the matrix.

0.000 is the front/center of the arc. The far left is -.5 and the far right is .5, and you can also have values past those points (up to -1.0 and 1.0), but anything beyond .5 is on the back side of the matrix.

		Rotations Editor								
		Blocks								
		1	2	3	4	5	6	7	8	9
F r a m e s	1	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500
	2	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500
	3	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500
	4	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500
	5	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500
	6	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500
	7	-0.500	-0.375	-0.250	-0.125	0.000	0.125	0.250	0.375	0.500

180° Defaults 360° Defaults Set to 0 Done

		Rotations Editor								
		Blocks								
		1	2	3	4	5	6	7	8	9
F r a m e s	1					0.000				
	2				-0.500		0.500			
	3			-0.500		0.000		0.500		
	4		-0.500		-0.122		0.122		0.500	
	5	-0.500		-0.177		0.000		0.177		0.500
	6		-0.500		-0.122		0.122		0.500	
	7	-0.500		-0.177		0.000		0.177		0.500

180° Defaults 360° Defaults Set to 0 Done

Any blocks which are masked (with the block mask editor) will not appear in the Rotations Editor.

With specialized applications, these values can be adjusted to position the triangles at the desired locations around the arc.

MLsim Core Engine

The window with the actual simulation is powered by the MLsim Core Engine. This is a hidden background application that launches automatically when MLsim is launched, and shuts down when MLsim is quit. MLsim Core Engine not only powers the 3D simulation, but also creates the virtual MidiLite racks.

If you close the MLsim simulation window, it will cause MLsim to quit.

Version 1.0.7 of MLsim Core Engine adds the same features as the MidiLite II Firmware v3.2.28 and are described below:

- * NEW - 16 banks of Color Pages (0-15)
- * NEW – individual user bank select for color pages, super pages and snapshots.
The old user bank select changes all 3 for backwards compatibility.
- * NEW – Next / Prev Color Page
Located in the Color EFX banks (for each color)
Will automatically wrap to the next bank after color page 127
(or likewise will wrap to prev bank after color page 0).
Each color can be managed independently.
- * NEW – Next / Prev Snapshot
Located in the Mode Control bank.
Will automatically wrap to the next bank after color page 127
(or likewise will wrap to prev bank after color page 0).
- * NEW - program change mode: Pop Fade
Works with any program change that affects dimmer channel levels.
Only levels 2 or above will pop fade
(any channel with a level of 0 or 1 will be ignored).
Any channels with levels 2 or higher will immediately take to that level,
and then will immediately begin fading out at each individual dimmer's
fade rate. The Pop Fade mode works great with a series of Color Pages
for doing animations.
- * NEW – note/controller mode: Pop Fade
Allows you to now do pop fade with controllers too!
- * CHANGE - Color autoFX engines now stop when a SuperPage has reached the end.

- * NEW – Recall Factory Defaults now sets all user banks to 0.

Any programming done with MLsim Core Engine 1.0.7 (MLsim 2.0.1) would need to be used with MidiLite II dimmer rack firmware v3.2.28 which has the same features.

Authorization

* MLdesign 2.2, MLsim 2.0, and MLcontrol 2.1 all now use a new authorization scheme, with a common user name and authorization code for all MidiLite applications.

The image shows a dialog box titled "MidiLite Authorization". On the left side, there is a logo for "MIDI LITE" with a small icon of a MIDI keyboard. To the right of the logo, the title "MidiLite Authorization" is written in a serif font. Below the title, there are two input fields. The first is labeled "User Name:" and has a blue border. The second is labeled "Authorization Code:" and has a grey border.

Once you enter your authorization into once, it applies to all MidiLite applications.

Using MLsim With Other Applications

When using MLsim with Digital Performer, select "MLsim" (or whatever you Device Name you may have set in Preferences).

MLdesign can communicate directly with MLsim. Set the MLnet address to "localhost" if MLsim is running on the same machine, or enter the network address if MLsim is running on a remote computer.

Note when installing on Mac OS 10.7 (Lion)

The first time you launch MLsim, it will tell you that you need to download and install the Java Runtime. Assuming you have an internet connection, this will happen automatically. You will only need to do this once, when first running MLsim.