Sequencing Pixels with **ShowTime 5**

Originally presented at Christmas Expo 2017
ShowTime 5: What Are Motion Effects?

• Motion effects are the new name for the type of effects that exist in the S4 Pixel Editor.
• Motion effects are most useful on pixel props, but can also be used on megatrees, segmented arches, and other multi-string props.
Requirements

• You must have a ShowTime 5 Pro level license from Light-O-Rama

• Motion effects must be played back on:
  – A DMX network (USB or E1.31)
  – An “enhanced” LOR (ELOR) network
ShowTime 5: Requirements

If playing back over enhanced LOR, then all controllers on the enhanced network must be G3 versions and running the latest firmware. A list of compatible controllers can be found on this page: http://www1.lightorama.com/network-speeds/
Upgrading a Sequence

• Demo: upgrading an S4 Pixel Editor sequence to ShowTime 5

• Motion effects that might need adjustment:
  – Text speed
  – Picture speed
ShowTime 5: Motion Effect Rows

- Motion row properties (see next slide)
- Adding and deleting motion effect rows
  - Can now have up to 20 motion effect rows per prop
- Add channel level
ShowTime 5: Motion Effect Row Properties

- Each motion effect row has a label that can be customized.
- Each motion effect row can be set to apply to the entire prop, or only to a rectangular subset of the pixels.

This motion row only applies to the last 6 rows of pixels in the prop.
ShowTime 5: Chase Tool

- The chase tool allows a chase across multiple motion effect rows within a single prop.
- One place where this is very useful is if you have divided your prop into subsections.
ShowTime 5: Just a Few Available Motion Effects

- Blended Bars
- Lightning
- Marquee
- Ripple
- Scanner
- Simple Shape
- Single Block
- Wave
ShowTime 5: Single Block Effect

• Always fit to duration

• Three sections to the block:
  – head
  – body
  – tail

• Head and tail fade off, the colors in the body are solid

• The length of each section is individually controlled. Any section length can be set to zero to eliminate that section. For example, if you just want solid colors, set head and tail to zero.
ShowTime 5: Single Block Effect

- Directions: left, right, up, and down cause the block to traverse the prop once in the specified direction. In horizontal and vertical modes, the location of the block is controlled by the position parameter. If the position parameter is locked, then the block is motion-less. However, if you unlock the position, then you can do all sorts of things - traverse just a portion of the prop, oscillate, etc. I particularly liked setting the position to "damped oscillation" on an arch using this effect. The new "triangle wave" function works nicely here also.

- Size and offset work together to position the block orthogonal to the direction of movement
ShowTime 5: Single Block Effect

• Colors Modes
  – In single color mode, head, body, and tail all use the first selected color on the palette
  – In the color blend mode, the selected colors of the palette are blended across the length of the block
  – In color block mode:
    • the first color is used for the head section IF head length is greater than zero
    • the last color is used for the tail section IF tail length is greater than zero
    • all other colors appear as bands in the body of the block
ShowTime 5: New Motion Effect: Simple Shapes
ShowTime 5: Picture and Text Effects

- Added a continuous (tiled) repeat mode to picture and text effects
- Whereas “repeat at speed” displays only one image at a time, “continuous at speed” will tile the image across a tree or matrix
ShowTime 5: New Motion Effects

• lineshorizontal and linesvertical effects from S4 Pixel Editor are combined into a single StraightLines effect
  – conversion is automatic
ShowTime 5: Effect Generator Slider Controls

• In S4 Pixel Editor an Effect Generator slider could be locked or unlocked. Now they are even more flexible in ShowTime 5.

• If the slider is unlocked, you can now choose how the value changes between the start value and the end value. Click the down arrow to the right of the lock icon to choose the transition type.

• Once you have selected the transition type, you can further customize it by clicking on the transition icon or choosing Customize the transition from the drop-down menu.
ShowTime 5: Effect Generator Slider Controls
ShowTime 5: Customizing the transition

- When you choose to customize the transition, the window at left will be displayed.
- The graph will reflect the actual transition.
- Note that you can choose to end the transition prior to the end of the effect. This is particularly important when you use the Step transition.
- If you choose the oscillation transition type, you can also set the oscillation frequency.
ShowTime 5: New Mixer Modes

- Vertical Center/Edges
- Horizontal Center/Edges
- Center/Edges
- Odd/Even columns
- Odd/Even rows
- Overlay from top
- Overlay from bottom
- Overlay from left
- Overlay from right
- Dissolve bottom/top
- Dissolve left/right
- Dissolve blocks
ShowTime 5: Overlay from top/bottom/left/right

- To see how this works, try these settings on a pixel tree (also try substituting spirals for twinkle):
ShowTime 5: Original Mix Overlay

- Mix Overlay now supports alpha blending
ShowTime 5: Motion Effects Window

• Can display favorites created in the Effect Generator
• Can also display a list of available effects
Resources

• Website: www.lightorama.com
• Tutorials: www1.lightorama.com/tutorials/
• Forums: forums.lightorama.com
• Help Desk: helpdesk.lightorama.com
Sequencing Pixels with ShowTime 5

Features:
- Synchronize lights, pixels and special effects to music
- Graphic editing for simple lights, dumb pixels, smart pixels, servos, etc.
- Visualizer to see your work on the computer
- Run the entire show from the computer or downloaded to a ShowTime Director

Requirements:
- Windows XP or higher

Totally control all the lights, music and motion

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