



Pathport Firmware 3.2.0.1 Release Note

For all 1-port, 2-port and 4-port nodes

June 1 2009

The firmware release 3.2.0.1 provides three new and unique features for Pathport DMX distribution systems. The release consists of seven files, including this one. The firmware files are: ppimage-3.2.0.1.bin for all two-port nodes; unoimage-3.2.0.1.bin for Unos and Pathport eDINs; teimage-3.2.0.1.bin for Touring Edition nodes; and merger-3.2.0.1.bin for DMX Manager Plus. Also included are pathway.meta.xml, which must replace a file of the same name in the \meta subdirectory of Pathport Manager 4, and two text files, one describing the upgrade process, and the other describing new features (this file).

Description of Features

Cross Fade between Data Streams: This feature enables a Pathport node to automatically and smoothly cross-fade between separate DMX streams on a user-set cross-fade time. It applies to merge patches as well as upon loss of signal or gain of higher priority signal.

The fade occurs immediately when a higher priority stream comes on-line or when an input goes off-line and the system falls back to a lower priority stream.


Streaming ACN Input Priority: On a distribution system using streaming ACN (E1.31), a priority level can be given to the input ports. Inputs set to the same priority will be HTP merged. This feature can be disabled.

Streaming ACN Input Priority Channel: On a distribution system using streaming ACN (E1.31) a 'magic' channel can be assigned to the input ports. The input port with the highest DMX decimal value for its 'magic' channel will be given priority by an output port. This feature allows a user to actively select which source will control end equipment. If inputs have the same DMX value for the magic channel, they will be merged. This feature overrides Input Priority. It can also be disabled.

The crossfade feature can be used together with the input priority schemes.

Crossfade Between Data Streams

This feature is set at the output port and is configurable on a port-by-port basis.



Node Parameters	
Port A	
Configuration	
Patch	
Property	
Port Name	Port A
Bi Directional	Enabled
DMX Port	Enabled
ESTA RDM	Enabled
Port Speed	Maximum
sACN Input Priority	100
sACN Input Priority Channel	0
Crossfade Enable	Disabled
Crossfade Time (ms)	0
Signal Loss Fade	Enabled
Signal Loss Fade Time (ms)	5000
Signal Loss Hold Forever	Disabled
Signal Loss Hold Time (ms)	5000
Signal Loss Port Shutdown	Enabled
DMX Status	Inactive

Configuration

Click on the cell next to “Crossfade Enable” and choose ‘enabled’ or ‘disabled’ from the drop down menu. Then click on the cell next to “Crossfade Time” and enter a numeric value. Time is in milliseconds. 5000 equals five seconds. Minimum fade is zero seconds. Maximum fade is approximately eight days. Default values are “Disabled” and zero seconds.

Description

In most DMX distribution systems, when a DMX source goes on or off-line, the DMX output will cut immediately to the new levels. With crossfade enabled, the DMX levels will fade at a user-selected rate between the old levels and the new ones.

This feature works on a channel-by-channel basis, in either merge or prioritization patches. It is ideal for a seamless transfer between consoles used to run shows and consoles used to run ‘background’ looks. It can also smoothly transfer control from main to backup consoles.

Streaming ACN Input Priority

This feature is set at the input port and is configurable on a port-by-port basis.



Node Parameters	
Port A	
Configuration	
Patch	
Property	
Port Name	Port A
Bi Directional	Enabled
DMX Port	Enabled
ESTA RDM	Enabled
Port Speed	Maximum
sACN Input Priority	100
sACN Input Priority Channel	0
Crossfade Enable	Disabled
Crossfade Time (ms)	0
Signal Loss Fade	Enabled
Signal Loss Fade Time (ms)	5000
Signal Loss Hold Forever	Disabled
Signal Loss Hold Time (ms)	5000
Signal Loss Port Shutdown	Enabled
DMX Status	Inactive

Configuration

Click on the cell next to sACN Input Priority and enter a new number. Valid numbers range from 1 to 200, with 200 being the highest priority level. Values from 201 to 255 are reserved. Default is 100.

Description

Pathport systems traditionally use an output channel patch. However the streaming ACN standard E1.31 includes an input patch mechanism.

The output port checks the priority level of each stream of incoming data. The stream with the highest value, as set above, will be converted into DMX output. If two or more streams have the same value, they will be HTP-merged together.


Although the effect can be duplicated using an output channel patch, this feature can be useful when multiple outputs must alternate between each listening to a different input source and then all ports listening to the same input source.

Our implementation of input priority does not support the double-D start code for channel-by-channel priority assignments.

Warning: Pathport nodes can receive more than one protocol at a time. Protocols other than streaming ACN are treated as having an input priority level of 100.

Streaming ACN Input Priority Channel

This feature is set at the input port and is configurable on a port-by-port basis.



Node Parameters	
Port A	
Configuration	
Patch	
Property	
Port Name	Port A
Bi Directional	Enabled
DMX Port	Enabled
ESTA RDM	Enabled
Port Speed	Maximum
sACN Input Priority	100
sACN Input Priority Channel	0
Crossfade Enable	Disabled
Crossfade Time (ms)	0
Signal Loss Fade	Enabled
Signal Loss Fade Time (ms)	5000
Signal Loss Hold Forever	Disabled
Signal Loss Hold Time (ms)	5000
Signal Loss Port Shutdown	Enabled
DMX Status	Inactive

Configuration

Click on the cell next to sACN Input Priority Channel and enter a number. Valid numbers range from zero to 512. A value of zero disables this feature. Values between 1 and 512 specify a DMX ‘magic’ channel. When enabled, this feature overrides ‘sACN Input Priority’.

Description

The input stream used by an output port to generate DXM is determined by comparing the decimal value of the DMX ‘magic’ channels. The input with the highest DMX value for its magic channel is given priority. Two or more inputs with the same DMX value for their magic channels are HTP-merged. Different inputs may use different DMX channels as their magic channel.

Because the level of the magic channel is controlled by the user, the user may change input sources at will on-the-fly. The DMX value of the magic channel is passed through, and will appear as part of the DMX output. Any equipment using that DMX channel will see a level.

Streaming ACN Priority Disable

This feature is set at the output node and applies to all ports of the output.

Node Parameters		Port A	Port B
Property			
Node Name		Not Set	
Backlight		Enabled	
Serial Number		168	
Boot Parameters		Bootp Timeout (Seconds) =3 Bootp	
Default Gateway		10.0.0.1	
IP Address		10.0.0.168	
Mac Address		00:04:a1:00:00:a8	
Netmask		255.0.0.0	
ETC Net2 Receive		Disabled	
Artnet Receive		Disabled	
Pathport Protocol Receive		Enabled	
Shownet Receive		Disabled	
Streaming ACN Receive		Disabled	
sACN Input Priority		Enabled	
Network DMX Transmit Protocol		Pathport	
Firmware Version		3.0.5.7	
Loader Version		2.0.2.0	
Factory Default		Click to Factory Default	
Node Identify		Disabled	
Reboot		Click to Reboot	
Version of Property Map		May 13 2009	
Keypad Lockout		Disabled	

Configuration

Click on the cell next to sACN Input Priority and choose 'enabled' or 'disabled' from the drop down menu. Disabling this feature disables both flavors of sACN input priority.

Version of Property Map

If your version of Pathport Manager 4 does not have this line, you will not be able to access or configure the features described in this note. The date may be used in future as a reference to determine which features PM4 is able to display and support.

Version 3.2.0.1 Factory Default Settings

Factory default settings have been rationalized across all models, so they are as similar to one another as possible. **Warning: Factory defaulting a node will result in the clearing of all channel patch information.**

<u>Device Parameter</u>	<u>On/Off/Notes</u>
Bootp	on
Bootp Timeout	4 sec
Force Dynamic IP	off
Do TFTP Upgrade	off
Identify	off
LCD Backlight	off
LED Brightness	dim/off
Name	<blank> (IP address will be shown by default)
IP Address	unchanged
Subnet mask	unchanged
Default Gateway	unchanged
Keypad Lockout	off
Artnet Receive	on
E1.31 sACN Receive	on
Shownet Receive	on
ETC Net2 Receive	on
Pathport Protocol Receive	on
Network DMX Transmit	Pathport

<u>Port Parameters</u>	<u>On/Off/Notes</u>
Port Name	Port <letter> as applicable
DMX Port Enable	on
E1.20 RDM	on
Port Speed	fast
Quick Patch Enable	no
Quick Patch Universe	<1, 2, 3 or 4> (dependent on port letter)
DMX Direction	<to match connector>
Patch Name	Univ <#>
xDMX Source Universe	<to match Quick Universe number>
Cross Fade enable	off
Cross fade time	0 (zero)
sACN Input Priority Level	100
sACN Input Priority Channel	0 (equals 'off')
Signal loss fade	on
Signal loss port shutdown	on
Signal loss hold time (ms)	5000 (ms)
Signal loss hold forever	off
Signal loss fade time	5000 (ms)

Quick Patch not supported by Touring Edition nodes

To access the new features of this software release, a pathway.meta.xml file with a date of June 2 2009 or newer must be placed in the \meta subdirectory of the Pathport Manager 4.