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Subject: New software supporting Internal Effects on Macro Channels.

Dear valued HES customer,

High End Systems is proud to release software supporting the new Internal Effects system for the greater part of the HES product line up. This new patent pending feature available exclusively from High End Systems allows lighting programmers to instantly call up various positional movements that are centered on the last programmed position of the lighting fixture. These movement effects are referred to as Internal Effects. The Internal Effects can be varied by the operator in both size and speed of movement.

The new Internal Effects may also be used during operator programmed positional changes and also incorporated with Internal Effects Engines like those found on more advanced programming consoles. A complex combination of movements and ranges can quickly be called up by the operator to save time and add to flexibility.

High End Systems has made the new Internal Effects software available to the following list of products:

Studio Color M, S and 575 series versions.
Studio Spot 575 and Studio Spot 575 CMY
Studio Color 250
Studio Spot 250
Studio Beam
Technobeam all versions
Technobeam I

To operate the new Internal Effects with one of the above products the new software should be downloaded from the HES web or FTP site.

The Internal Effects system makes use of the existing Macro Channel on all products except Studio Color 575. Please consult the protocol on the HES web site for the product involved to locate the Macro channel. In Studio Color 575, the existing Checksum channel (channel 16) is replaced with the new Macro Channel that was previously not available in Studio Color.

For all fixtures types the Mspeed channel is used as an option to give variation to the rate of the Internal Effects. A default time for the macro (2.5 seconds) is provided for those users that want to use the Internal Effects without the use of Mspeed.

Cautions

Caution: Although the likely hood of affecting an existing show is low, HES discourages the uploading of new fixture software to existing shows as a precaution. Please read the statements below to understand the implementation in the product.

Caution: Existing shows that have incorporated an existing macro from the macros previously available in the existing software will be changed.

Caution: Shows that have programmed slow LAD speeds with DMX values below the value of DMX 200 will be changed.

Caution: You should make sure that the control system you are using is not programmed with a default value for the Macro Channel or the Checksum channel (Studio Color 575) that may command an internal effect to operate and change your show.

The Macro channel functions and DMX values are given below:

Macro Channel

0-5 Macro off

6-62 Pan Macros with 5 being the smallest angle

66- 122 Tilt Macros with 66 being the smallest angle

126-160 clockwise circles with 126 being the smallest angle

164-198 counterclockwise circles with 164 being the smallest angle

200-231 Lad modulate (no macro movement) (this is no change from the original macro channel)

232-255 Lad ON

Mspeed Usage with Macros

0-4 Default speed of 2.5 seconds.

5-255 Minimum speed of 1/2 second with a maximum of 25 seconds.

With the Mspeed set at the default value of DMX 0-4 all internal effects complete moves at approximately 2.5 seconds. This provides a pleasing look for those customers that do not want the additional variation given by using the Mspeed channel.

With the Mspeed set between DMX 5-255 all internal effects complete moves at the selected Mspeed time (up to 25 seconds).

Whole Hog II users:

The present Hog library uses a default value of DMX 124 for the Macro channel. This should not be a problem with the new Internal Effects feature as you can see by the protocol that the DMX value of 124 is not used by this feature.

A new hog library that supports the Internal Effects is available at the HES web site.

On Board Programming:

Those fixture types that support On Board Programming also support the Internal Effects as part of the On Board programming features. The Internal Effects will operate as an additional programming parameter labeled MACR.

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