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nexgentec ArtNet HSL driver (NGTSLC4ZARTNETHSL)

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2. What is the nexgentec ArtNet HSL driver? What is it used for?

This driver is designed to work with the *nexgentec ArtNet Network* (NGTSLC4ZARTNETNW) version 5.

It does add one device with 3 dimmer channels to the Control4 project.

3. What dimmer proxy features does the nexgentec ArtNet HSL driver support?

All features of the *Light V2* drivers are supported, including *Advanced Light Scenes*

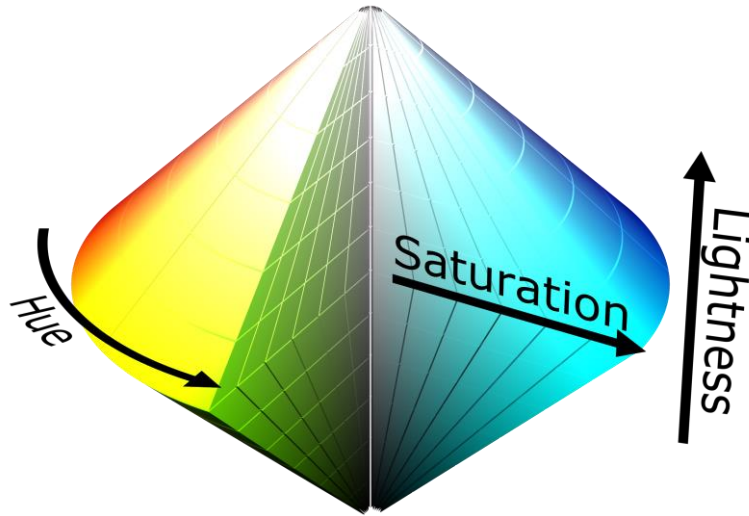
4. Theory of operation

This driver does bring the HSL color model to Control4 Navigators

Advantages of HSL:

- Only 2-3 sliders used instead of 4 with RGBW
- Simple color slider with all colors on one slider
- 2 slider operation possible
- Easy mixing of colors, no need to think of color mix theory, just slide.

The following graphic shows how HSL works:



There are 3 dimensions that can be adjusted, Hue, Saturation and Lightness. To simplify the operation, Saturation can be set to a fixed value.

With the resulting 2 sliders a complete color fade can be done:

- Hue slider: Moving from 0 to 100% will bring up red -> green ->blue ->red (the lightness slider has to be at least at 1%, otherwise you will change colors without Lightness = no light output)
- Lightness slider. Change the lightness of the color. (lightness can be also called intensity or brightness in this case)

5. Software installation Control4

Assuming that you have already downloaded the drivers and placed them in %USERPROFILE%\Control4\Drivers.

5.1. Start Composer, go to *System Design* and select the tab *Search* in the right top window. Search for *ArtNet Dimmer*

5.2. Drag and drop the *ArtNet Dimmer* driver into the wished room. Click on it and find the Properties page. (Hovering with the mouse over the Properties will show up hints)

5.3. Properties

- -> Info: Does show the driver health info. If no version and *running* is not shown the driver will not work
- Driver name: The product identification of the driver
- Red, green, blue address: Insert the addresses of the RGB channels
 - For a single channel, insert the number of the ArtNet channel that should be controlled.
 - For multiple channels use the separation by comma: 1,2,3
 - If multiple channels in a sequence should be controlled the format with a dash can be used: 2-9 will control channel 2, 3, 4, 5, 6, 7, 8, 9.
 - For special use is the format: 1-30s3. It means the range from 1 until 30 in series of 3. This example will result in the control of channel 1, 4, 7, 10, 13, 16, 19, 22, 25, 28.
 - Also combinations of all formats are allowed: 1,2,3,103-113,480-512s3
- Sending net/subnet/port on node: Select over which ArtNet node the dimmer should send.
- Refresh hue level: Select if the hue level on Navigators should be refreshed
- Refresh saturation level: Select if the saturation level on Navigators should be refreshed
- Refresh lightness level: Select if the lightness level on Navigators should be refreshed
- On unequal values: Select what level to display if the feedback from network driver contains unequal values
- Top/bottom/toggle link color: Each button binding can be refreshed with the mixed output color. LED(s) on the keypad can follow the color the RGB light have. Possible options are:
 - Off color follows output color / on color as preset: Instead of the off color set in the proxy properties the keypad LED will be feed with the output color
 - On color follows output color / off color as preset: Instead of the on color set in the proxy properties the keypad LED will be feed with the output color
 - On and off colors follow as preset. Normal operation, no color follow
- Hue min on: Range 1-765 (works like the min/max levels on standard C4 dimmers).
- Hue max on: Range 1-765 (works like the min/max levels on standard C4 dimmers).
- Lightness and Saturation min on: Range 1-255 (works like the min/max levels on standard C4 dimmers).
- Lightness and Saturation max on: Range 1-255 (works like the min/max levels on standard C4 dimmers).
- Hue/Saturation/ Lightness default level (%): For ease of operation each dimension of HSL can be fixed to a value and the correspondent dimmer channel can be hidden from Navigators. Most common would be to set Saturation to 50%
- Apply to... All settings (address excluded) can be sent to other dimmer drivers
- -> Log / Lua window: Selects the log level printed out in Lua window from Composer. Use the level *Debug* to see what the driver does
- -> Log / Online log server: If a persistent problem appears that cannot be solved from the installer support may ask you to activate a decent level. Do not use until support ask you to do so
- Log period (h): The time frame the log should output
- Log auth: Developer can give you a code to see more logs. Usually not really interesting, only for in deep debug

5.4. Connections

If the *nexgentec ArtNet Network* was installed before the dimmer driver, the connections for the ArtNet Network should be done automatically. The button connections connect to keypads etc.

6. Device variables

Similar to all Control4 dimmer drivers.

7. Programming actions/ commands

Similar to all Control4 dimmer drivers.

8. Programming Device specific commands

- Refresh hue/saturation/lightness level: The property *Refresh hue/saturation/lightness level* can be overwritten to disable the Navigator refreshes temporarily
- Ramp to level over minutes: Useful if you have a long ramp
- Ramp to level over hours: If you have a very long ramp

9. Known issues

See the manual for the *nexgentec ArtNet Network* driver for further information about issues that are known.

10. Updates / Support

Updates are available on: [<<https://technet.genesis-technologies.ch>>](https://technet.genesis-technologies.ch)

Bugs should be reported to: info@genesis-technologies.ch