DOMOSAPIENS KEYPAD RGB TRACKER DRIVER

This driver enables you to approximately mirror the status of an RGB ribbon/light on a Control4 Keypad LED. Optionally, the driver may also be used to cycle the RGB ribbon/light through a sequence of colors. A separate White channel is also supported, if available.

NEW The driver now supports new Color drivers (Control4 OS 3.3.0+).

INSTRUCTIONS

- Use the free trial period or activate the driver at any time by assigning to this project the license you purchased from the driverCentral website (requires the driverCentral cloud driver). You may use multiple copies of this driver in your project.

- Connect the driver's BUTTON_LINK Output connection to the physical keypad button targeted to mirror the RGB channels.

- You may also take advantage of the Keypad Passthrough connection which will 'see' all presses done on the physical keypad button.

- When running on OS 3.3.0+, you would normally leave the Channel Type on its default value (New Color) and select the single-driver device supporting New Color. **NEW** Secondary devices may also be selected.

- Alternatively, select the three RGB channels and optionally the White channel using the appropriate properties. Although the channels should be from the same RGB device, they may be from different devices. If used, the White channel supersedes any reading on the other three channels. The White LED Saturation property may be used to compensate a greenish hue on the button LED.

- Alternatively, set the Target Device Channel Type to HSL and select the corresponding channels. In this case, the White processing is not available.

- Be aware that the RGB characteristics of Control4 Keypad LEDs are most likely different from the RGB ribbon/light you would like to mirror. Also, the ambient light intensity as measured by the Control4 keypad will influence the color displayed by the keypad button LED.

- If you wish to use the keypad button to also step the target light device through a series of color steps, define the number of steps as well as the color to be set by each step.

PROPERTIES

- **Cloud Status** displays the status of the DriverCentral Cloud driver.

- **Automatic Updates** turns the DriverCentral automatic update facility On or Off.

- **Driver Version** displays the version of this driver.

- **Debug Mode** turns Debug Mode Off or On (with output to the Lua Output window).

- **Debug Duration in Minutes** sets the duration of Debug On.

- **Driver Information** displays various status messages about the driver.

- ****NEW** Target Device Channel Type:** specifies if the target lighting device drivers use the new OS 3.3.0 Color scheme (one driver) or the legacy RGB or HSL (Hue, Saturation, Lightness) schemas. Even if HSL is selected, Custom Colors are still entered as RGB. If required, an Action is available to convert from an HSL-specified color to an RGB-specified color for a given Step.

- ****NEW** Select New Color Device:** (New Color Channel Type) allows you to select the target device supporting the new OS 3.3.0 Color scheme. This may be any type of device with color capabilities.

- ****NEW** Select Secondary Color Devices:** (New Color Channel Type) allows you to select additional color devices to be set along the New Color Device selected above. This may be any type of device with color capabilities. Only the New Color Device however will be used to set the keypad LED and the driver assumes the secondary devices are to be handled identically to the New Color Device (akin to a Group).

- **Select RED/GREEN/BLUE/WHITE Channel:** (RGB Channel Type) allows you to select the RGB-schema light driver to be monitored for the level of the corresponding light ribbon color. Use White only if the RGB ribbon/light has such a channel. Otherwise, leave White empty.

- **Select HUE/SATURATION/LIGHTNESS Channel:** (HSL Channel Type) allows you to select the HSL-schema light driver to be monitored for the level of the corresponding parameter. With some drivers, Hue may be called Color (or something equivalent), and Lightness may be called Brightness (or something equivalent). Please note that although Hue is normally expressed in degrees (0 to 359), the Control4 model uses 0-100 which the driver converts appropriately.

- **Channels Stabilization Delay:** (RGB and HSL Channel Types) specifies the delay the driver will wait for before updating the Keypad button LED after noticing a change in an RGB ribbon/light channel. This allows the channel intensity values to stabilize and avoid Keypad button LED colors changes during the stabilization period.

- **LED Intensity**: allows you to select how the driver will light up the Keypad button LED. Normally, you would select *'Full'* and let the Keypad's ambient light management do the rest. This will likely more closely match the actual color displayed by the RGB ribbon/light. If you select '*Mimic*', the driver will use the actual Red, Green and Blue (or White) values read from the RGB ribbon/light.

- **White LED Saturation**: allows you to specify how the color White is sent to the Keypad button LED. Typically, '*Full green'* (corresponding to Red: 255, Green: 255, Blue: 255) would appear too greenish instead of white. Specifying *'Adjusted green'* cuts the value for green in half and typically results in a more pleasing white being displayed by the Keypad button LED.

- **Current Levels and Step**: displays the current Control4 level (0-100) of each channel, as well as the current RGB level (0-255) used for the Keypad Button LED. If used, the current Sequence step is also shown.

- **Keypad Button Color Steps**: if the connected keypad button is also to be used to sequentially set the Channels to selected colors (in several steps), specify the number of steps to be defined. When the final step is reached, the sequence is reset to step 1. Up to 14 steps may be specified. Set to 0 to disable this use of the keypad button.

The following are available only when Color Steps are specified:

- ****NEW** Double Tap for OFF**: you may select to allow a double tap to turn the Channels OFF. Optionally, the step sequence may be left as is or reset to step 1. Please note that a small delay is introduced before each step is executed, while the driver waits to see if a double tap is used. If you select not to allow Double Tap for OFF, you should include one Black (R:0, G:0, B:0) step in your sequence to allow the user to turn the RGB ribbon/light OFF. Alternatively, you may select to include OFF automatically after the last step.

- **Sequence Reset Timeout in Seconds**: specifies a delay after which the step sequence is automatically reset to step 1 (does not apply after a double tap for OFF). Set to 0 to disable this function.

- **Color Selection**: selects between EASY Colors (a pre-defined selection) or Custom Colors (full RGB flexibility).

- **Select Device Color for Step x**: (EASY Colors) select the color to be used for each step. Normally, the selected color is used to set the RED, GREEN and BLUE channels. If a WHITE channel is selected and the step color is White, then only the WHITE channel will be used and the RED, GREEN and BLUE channels will be set to 0.

  The EASY Colors are defined as follows (Red, Green, Blue levels):
  - Red = 255, 0, 0
  - Green = 0, 255, 0
  - Blue = 0, 0, 255
  - White = 255, 255, 255
  - Orange = 255, 127, 0
  - Yellow = 255, 255, 0
  - Chartreuse = 127, 255, 0
  - Spring = 0, 255, 127
  - Cyan = 0, 255, 255
  - Azure = 0, 127, 255
  - Violet = 127, 0, 255
  - Magenta = 255, 0, 255
  - Rose = 255, 0, 127

- **Select Channel Colors for Step x**: (Custom Colors) select the color to be used for each step. Normally, the selected RGB intensities are used to set the RED, GREEN and BLUE channels. If a WHITE channel is selected and the step color is an intensity of white/grey (the three R, G and B

intensities are the same), then only the WHITE channel will be used and the RED, GREEN and BLUE channels will be set to 0.

SUPPORT

For support on this driver please go to https://help.drivercentral.io/. Give a detailed description of the problem and also include the version number of the driver and the version of Control4 OS that you are using.

AUTO UPDATE

This driver is updated with fixes and new features from time to time. To ensure your project uses the latest version, set the Automatic Updates property of the driver to On.

CHANGELOG

10.0.0	February 26, 2021	Initial Release
11.0.0	March 14, 2021	Added HSL control schema
12.0.1	February 19, 2024	Added support for OS 3.3.0+ Color drivers, option to add OFF after last step
12.1.0	April 23, 2024	Added Secondary Color Devices, Set Step Command and Action