Integration Note

Manufacturer:	Philips
Model Number(s):	**Hue Bridge 2nd & 3rd Generation (Square)**
g! Core Module Version:	**8.2.509**
Driver Developer:	**Intrinsic Group Limited**
Document Revision Date:	20/12/2017

Overview & Supported Features

This driver allows a g! system to communicate with a Philips Hue bridge via Ethernet for lighting control.

THE FOLLOWING OPTIONS ARE SUPPORTED BY THIS DRIVER:

Auto Discovery: Once paired the driver can auto discover all Philips Hue Lighting devices and install them automatically in ELAN with the user assigned names.

Switch, Dimming & RGB: Where supported this driver allows for switch, dimming and RGB control. Colour temperature controls are enabled on supported lamps as well as saturation control on RGB lamps.

Groups & Scenes: Auto populates groups and scenes that are setup on your Hue app.

Any feature not specifically noted as supported should be assumed to be unsupported.

Disclaimer

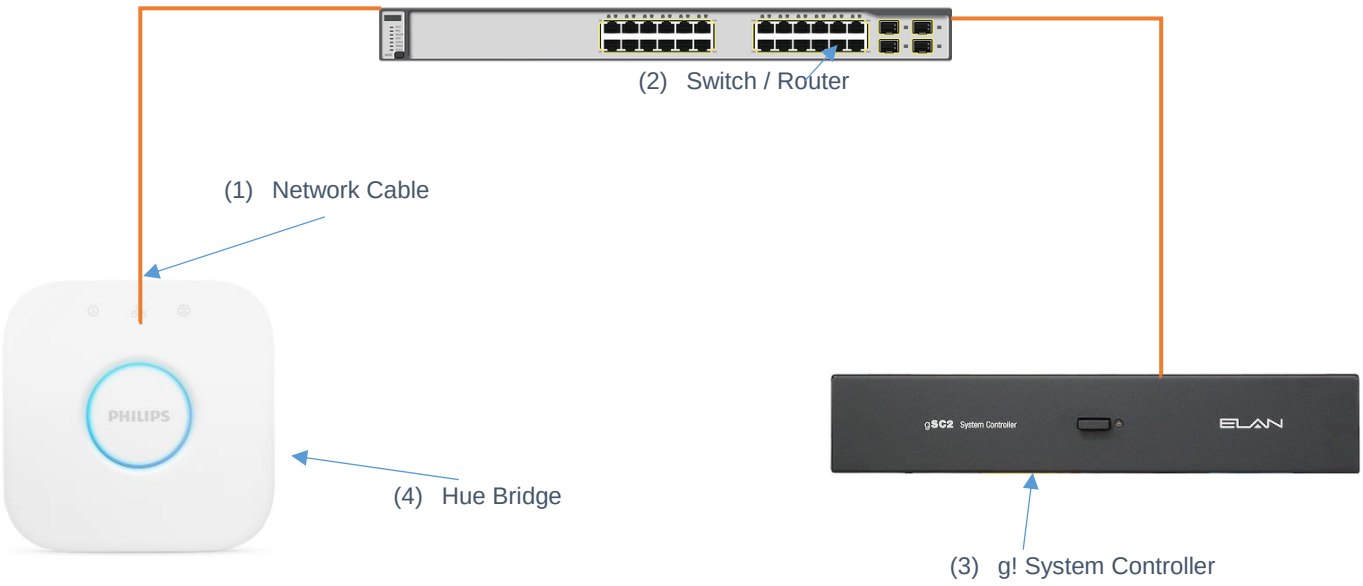
Intrinsic Group's drivers are created to the highest standard, developed with industry leading practices, including bench and real world field testing.

Intrinsic Group advise that dealers take advantage of our free show room driver to thoroughly test and familiarize themselves with our drivers and their capabilities before installing on a customer site.

Intrinsic Group offer dedicated support to help dealers, though Intrinsic Group Limited accept no liability for any loss, delays, damage or otherwise, whether resulting from the use of their drivers or otherwise. Drivers are provided without warranty with respect to the product they are controlling. Intrinsic Group do not guarantee the continuous functionality should the product manufacture implement a change to their product. We constantly update our drivers to improve functionality and remove any bugs that may arise, with updates being provided at no costs for the listed, supported models in this integration note. Major updates of product may lead to the need to purchase versions of drivers.

Connection Diagram: Ethernet Control

Refer to the Bill of Materials and Wiring Diagram that follow.



Bill Of Materials

#	Device	Manufacturer	Part Number	Protocol	Connector Type
1	Bridge	Philips	2nd / 3rd Gen	Ethernet	RJ-45 Female
2	g! Controller	ELAN	Various (e.g. SC2)	Ethernet	RJ-45 Female
3	Network Switch	Various	Various	Ethernet	RJ-45 Female
4	Network Cable	Various	Various	Ethernet	RJ-45 Male

PHILIPS HUE SETUP

Add and setup devices as described in the Philips Hue app. The Philips Hue system should be fully functional and tested before pairing to ELAN g!.

A static IP address is required. Please use your router to set a reserved DHCP address for the Phillips Hue bridge.

We highly recommend using a 3rd party app like iConnectHue to setup the Philips Hue system.

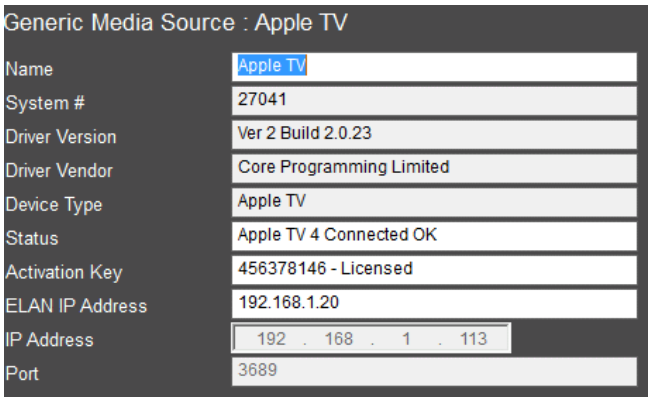
DRIVER LICENSE

This driver requires a license key to function. Pricing and license keys can be obtained by visiting www.intrinsicdev.co.uk

The controller MAC address is needed to generate a license key.

INSTALLATION:

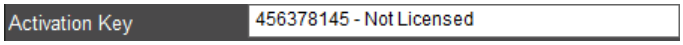
The license key is entered on the main properties page of the driver.



*Example Image

Once you enter the product license key as shown above click “Apply” to save it and then within 20 seconds the driver will process the key.

After 20 seconds the driver will update the Activation Key window with the status of the license key. To see this update, you must refresh the screen by selecting another tab or device and then going back to this driver. You will either see, as above, that the driver is activated correctly or, as below, the driver is not activated.



Please check the status of the driver activation before logging a support ticket.

g! CONFIGURATION

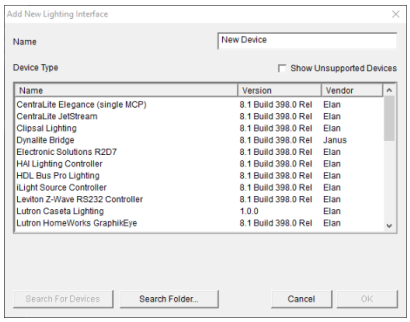
The installation process will involve loading a Lighting Interface driver from a downloaded file.

Note: No communication device is needed for this IP driver.

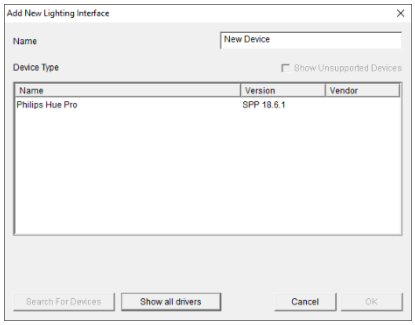
INSTALLATION PROCESS

It is recommended that you follow the below installation process in order to ensure you are running the latest version of the driver.

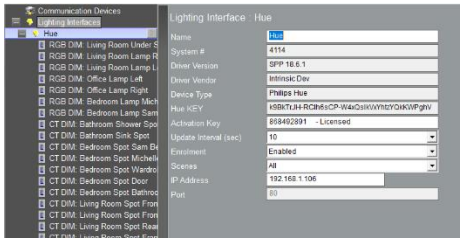
1. Download the latest version of the driver from the ELAN dealer support site.
2. Under the Lighting tab in configurator, add a new lighting interface.



3. On the next window use the Search Folder button to point Configurator to the location you saved the driver.

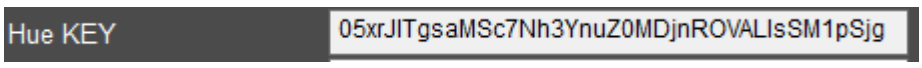


4. Select the driver and click OK.



5. Enter your license key and bridge IP address then click apply.

6. Press the pairing button on your Philips Hue bridge then press “Start Pairing” in the ELAN configurator and wait 20 seconds.

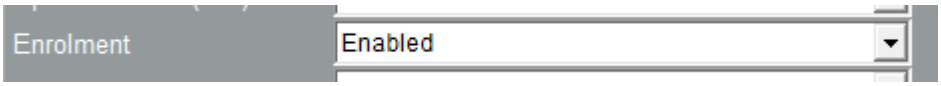


7. When pairing is complete a key will appear in the “Hue KEY” line in configurator.

8. Once paired the driver will auto discover all supported devices.

Auto Discovery:

Once your system is fully setup you may wish to turn off the auto discovery feature. Simply set the Enrolment dropdown to Disabled.



Update Interval:

The Hue bridge is polled to get the current status of every lighting circuit, this is done periodically by the driver. To change this time please use the Update Interval drop down menu. In testing we found 5 seconds worked very well.

Devices:

When discovery is complete gTools will have a number of different devices depending on your system setup. The possibilities are:

Basic Dimmable lamp

DIM: Sample Circuit Name 1

Dimmable with colour temperpature control

CT DIM: Sample Circuit Name 2

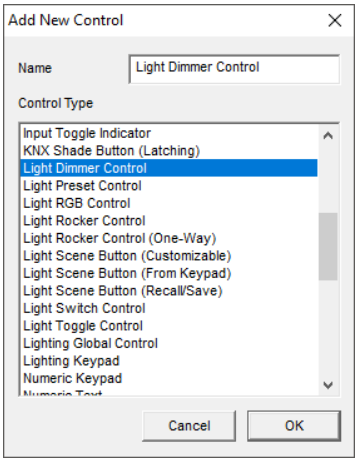
Full colour lamp Hue/RGB

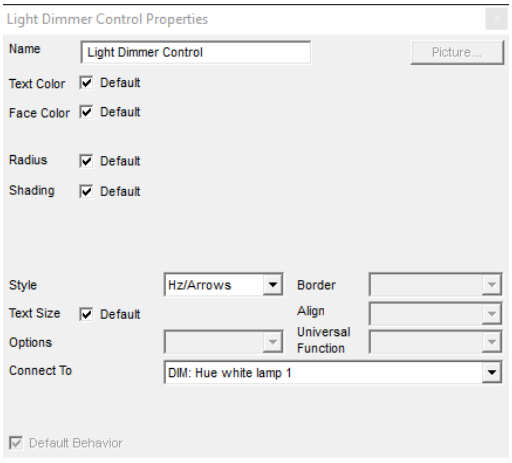
RGB DIM: Sample Circuit Name 3

Groups – All of the above control options are available for groups and the device will start with GROUP in the name. It is not advisable to give the end user control of a group as well as individual control of the circuits in it. This is because the Hue API only samples one of the lamps in the group and gives that lamps info as the group status. This may lead to a confused customer.

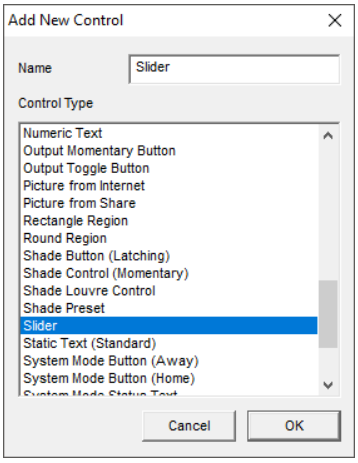
Controls:

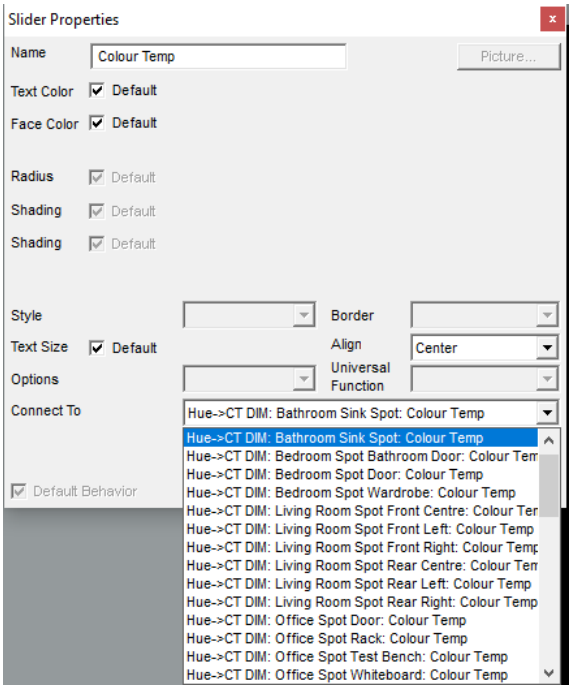
DIM – This is a standard dimmer control and should be connected to an ELAN dimmer control.



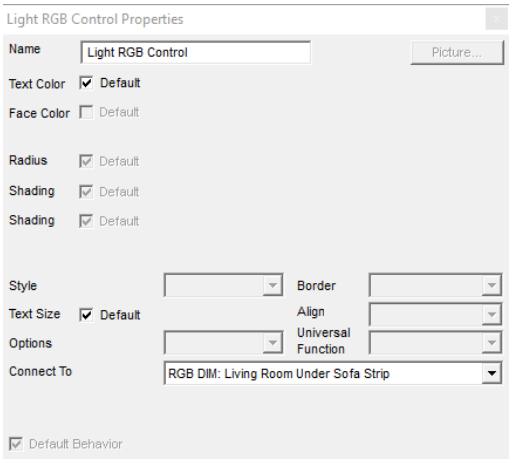


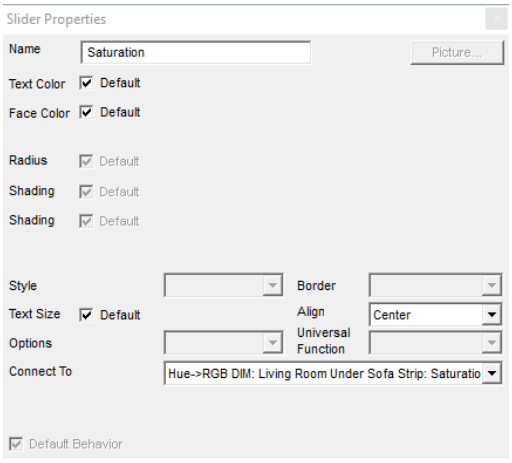
CT DIM – This also uses an ELAN dimmer control but can also be assiged a “slider” to control colour temperature.





RGB DIM – As well as all of the above controls the RGB circuits also support “Light RGB Control” and you can use a second “Slider” control to control the colour saturation.

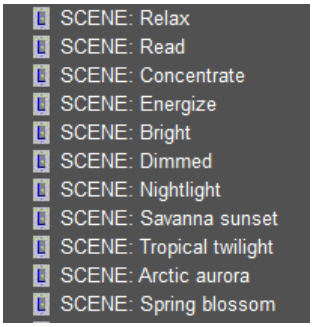




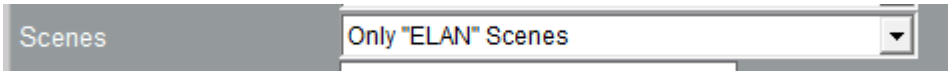
Scenes:

This driver does support Scenes and there are two ways it can import them.

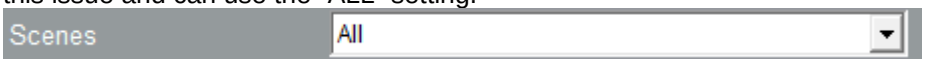
If you have used the original Philips Hue app to setup your system, then you will have many preset scenes all with no circuit or room label.



The Scene dropdown menu comes defaulted to “ELAN” scenes. What this does is only import scenes that have ELAN at the start of their name.



If you used a 3rd party app like iConnectHue and opted not to have the default scenes created, then you will not have this issue and can use the “ALL” setting.



g! CONFIGURATION DETAILS

The following table provides settings used in Configurator …Please refer to the Configurator Reference Guide for more details.

In the table below:

- "<Select from list>" Select the appropriate item from drop down.
- "<User Defined>", etc. Type in the desired name for the item.
- "<Auto Detect>", etc. The system will auto detect this variable.

Devices	Variable Name	Settings (Ethernet)
Lighting Interface	**Name**	<User Defined> (Default <Auto Detect>)
	System #	<Auto Detect>
	Driver Version	<Auto Detect>
	Driver Vendor	Intrinsic Dev
	Device Type	Philips Hue
	Hue KEY	<Auto Detect> (Hue pairing key – it not present then pairing was not successful)
	Activation Key	<User Defined> (Enter key supplied by Intrinsic Dev)
	IP Address	<User Defined> (Enter static IP address of matrix)
	Port	<Auto Detect>

Common Mistakes

1. Only compatible with second and third generation Hue bridges (Square type)
2. No communication device is needed.

ELAN Developer Partner Information

This ELAN driver was written and supported by:

Intrinsic(DEV)

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