Integration Note

Manufacturer:	Lutron
Model Number(s):	**Caseta Lighting Control**
Minimum Core Module Version:	**g! 7.3**
Comments:	Driver Version 0.0.9
Document Revision Date:	12/28/2015

OVERVIEW AND SUPPORTED FEATURES

The Lutron Caseta system is a wireless, RF based communicating lighting system. Caseta supports Ethernet control, enabling reliable feedback and control in the **g!** system.

Installing a Lutron lighting system can be broken down into the following basic steps:

1. Work with the client to determine what lights will be controlled, where switches will be installed, and where keypads will be installed. Follow Lutron guidelines and the **Lutron Programming Overview** below.

2. Install and test the Lutron system, again according to Lutron standard procedures with the additional requirement of a communication connection to the **g!** system. Refer to the connection diagrams below for details on wiring the Lutron hardware to the **g!** system.

3. Program the Lutron system: refer to **Lutron Programming Overview** below. Also see the **Connection Diagrams** for additional notes and details on communication setup.

4. Integrate the lighting system into the **g!** system and test proper operation. See **g! Configuration Details** below.

LUTRON LIGHTING SYSTEMS SUPPORT THE FOLLOWING FEATURES:

Lighting Load Control: Control and feedback of lighting load devices in the Caseta system are supported.

Schedule Control: Multiple schedules can be set using the Viewer software, and are automatically tied to the System Mode. It is recommended than any schedules configured in the Caseta system are disabled.

Pico wireless controls: The configurator will automatically add pre-designed templates to emulate real Lutron remotes to the system. These keypads are available for use in building custom control pages or for adding directly to the **g!** user interface.

Phantom Buttons: Control of up to 50 Phantom Buttons from the **g!** user interface is supported.

Devices Supported: The devices in the table below are supported for control and feedback in the **g!** system. See the Lutron Programming Overview section below for important information and limitations for each device type.

LUTRON LIGHTING SYSTEMS DO NOT SUPPORT THE FOLLOWING FEATURES:

Any feature not specifically noted as "supported" is not supported.

Auto-Detection: Auto detection of devices is not supported at this time.

Devices not listed below: Caseta Devices that are not listed in the table below are not compatible with control from the **g!** System. See the Lutron Programming Overview section below for important information and limitations for each device type that is supported.

Supported Caseta Devices	
SmartBridge	L-BDGPRO
Dimmers & Switches	PD-5WS, PD-6WCL, PD-10NXD
Plug-in Modules	PD-3PCL
Pico Remotes	PJ2-3BRL, PJ2-4B
Shades	Compatible Triathlon or Serena motorized shade
Devices not present in this table are not supported	

CONNECTION DIAGRAM: ETHERNET CONTROL

Refer to the **Bill of Materials** and **Wiring Diagram** that follow.
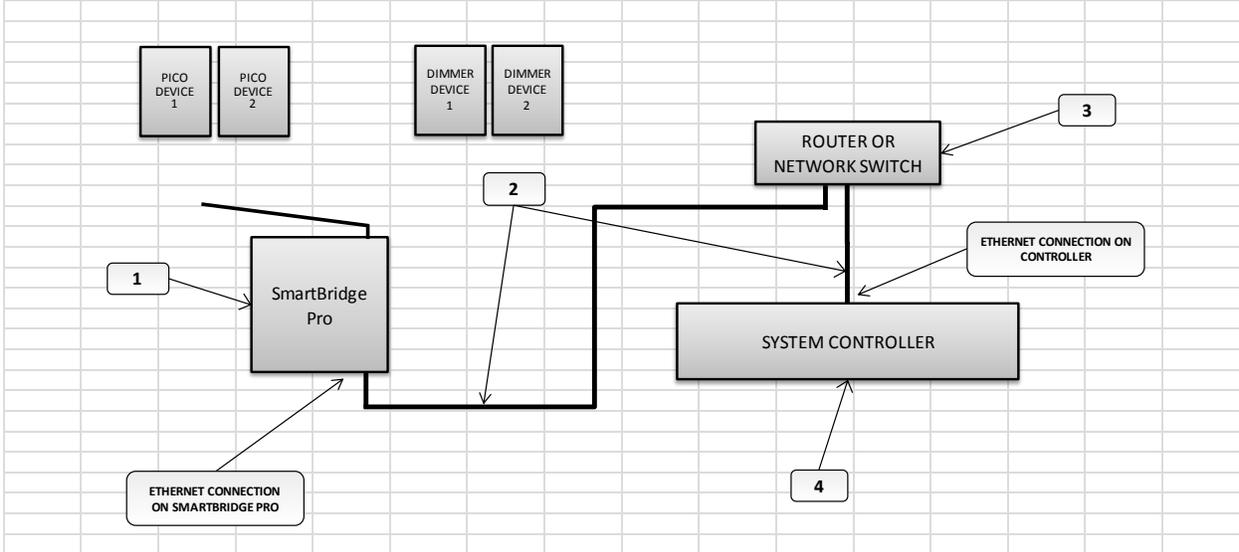
BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	SmartBridge Pro	Lutron	L-BDGPRO	Ethernet	RJ45 Female	
2	Cat5 Cable Assy.	Installer	N/A	Ethernet	RJ-45 Male X RJ-45 Male	Must terminate all 8 conductors
3	Network Assembly	Elan	NWA 18	Ethernet	RJ-45 Female	
4	g! Controller	Elan	Various (e.g. SC10)	Ethernet	RJ-45 Female	

LUTRON PROGRAMMING OVERVIEW

The Lutron Caseta system must be fully programmed using **Lutron Caseta** app for Android/iOS prior to integration with **g!**. Program the Caseta system according to standard Lutron programming procedures, with the following additional considerations:

For reliable control, assign the Smart Bridge a static IP address on the same network as the **g!** Controller and enable the Telnet option. ELAN recommends assigning the first Ethernet Lighting Device to 192.168.0.50, the second to 192.168.0.51, and so on. As always, you should have your lighting system fully programmed and functioning as a standalone system prior to integration with the g! system.

Assign the static IP by as follows:

- Enter the Setup menu behind the "gear" icon from the main screen of the Caseta app.
- Click "Advanced".
- Click "Integration".
- Enable "Telnet Support". This will allow g! to communicate with the Caseta system.
- Click "Network Settings".
- Set DHCP to Disabled.
- Set the 1st lighting controller IP Address to 192.168.050, the second to 192.168.0.51 etc.
- Set gateway to your router IP address, typically 192.168.0.1.
- Subnet mask is typically 255.255.255.0, but set as desired for your install.
- Set DNS to your router IP address, typically 192.168.0.1. Additional DNS may be set as desired.
- Exit network settings when done.
- While in the Advanced menu, it is recommended to send yourself the "Integration Report" email to obtain the Caseta system ID's for each device. These will be needed when adding devices to g! Configurator for appropriate control and feedback.

Lutron Devices: Review the following notes about the various Caseta devices prior to programming your system to understand how the **g!** driver handles them.

- **Switches**: All programmed Lutron switches are added to the configurator as a **Lua On/Off Device**. The **g!** system will control and track the state of the load. To control a load individually from the UI it will need to be connected to a virtual keypad button or a custom control on a custom viewer tab.
- **Dimmers**: All programmed Lutron switches are added to the configurator as a **Lua Dimmer Device**. The **g!** system will control and track the dim level of the load. To control a load individually from the UI it will need to be connected to a virtual keypad button or a custom control on a custom viewer tab.
- **Phantom Buttons**: All programmed Lutron Phantom Buttons may be added to the configurator as a **Lua Virtual Keypad Press/Release Button**.   To control a Phantom Button individually from the UI it will need to be connected to a virtual keypad button. Note the Caseta app refers to Phantom Buttons as "Scenes".
  - If desired, all 50 Phantom Buttons may be added by pressing the "Add Phantom Buttons" button on the Caseta Lighting Interface. Note that you should ensure to update the SmartBridge Integration ID number if needed, as this is used when populating Phantom Buttons.
- **Shades**: All programmed Lutron shades are added to the configurator as a **Lua Dimmer Device**. The **g!** system will control and track the dim level of the load. To control a load individually from

the UI it will need to be connected to a virtual keypad button or a custom control on a custom viewer tab.

- **Pico Remotes:** Pico remotes function as Caseta's keypads. Pico remotes should be added as Keypad devices to the Caseta Lighting Interface, and under Keypad Interfaces. This is most easily accomplished by adding them from the Keypad Interfaces "Add New Lighting Keypad" menu. Choose Lutron Caseta from the Interface Device menu, choose the desired template, and then pick "Add New Device" under Lighting Devices. The interface and keypad device are thus added as one step.
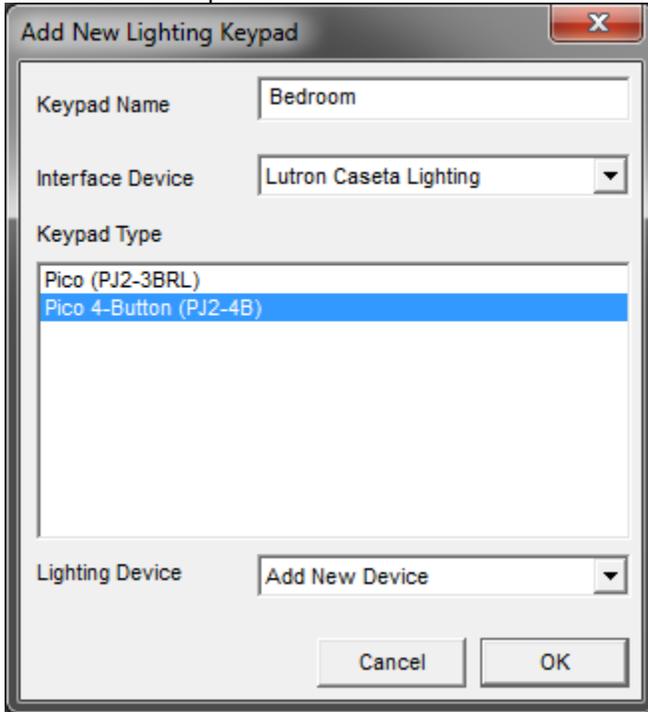
- **Note that all devices must have the correct integration ID set after addition for proper function.**

Notes about Lutron Caseta behavior:

The following unique behavior of the Caseta system should be noted:

- Caseta Phantom Buttons or Pico Remotes act as scenes, but have limited customizability. They simply act as a way to combine multiple loads into a single group button. As such, Pico Remote Keypad Interface, and Virtual Keypads used with Phantom Buttons will not show any state information, but any load controls such as dimmers or switches will.

- Pico remotes automatically configure the attached loads to range from On at top to Off at the bottom, with fixed dim levels in between. In addition, press and hold behavior is available on predefined buttons (up/down arrows on 3 button, 2nd and 3rd buttons on 4-button).

g! CONFIGURATION DETAILS

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

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

Refer to the **g! System Programming Details** below for additional information.

Devices	Variable Name	Settings (Ethernet)	
Communication Devices	Name	**NOT NEEDED**	
Lighting Interface	Name	<User Defined> (Default: **Lutron Caseta Lighting**)	
	Device Type	**Lutron Caseta Lighting**	
	IP Address	<User Defined>	Enter unit IP address
	SmartBridge IntID	<User Defined> (Default: 1)	Edit if needed prior to using Add Phantom Buttons
	<<Click Add Phantom Buttons to populate all 50 Phantom Buttons with the given SmartBridge Integrration ID>>		
Lighting Devices	Name	<User Defined>	Name appropriately
	System #	<Auto Detect>	
	Device Type	<Select from list>	Add all appropriate devices using the correct types
	Hide Device from Scheduler	<User Defined> (Default: No)	
	Integration ID	<User Defined>	Enter correct Integration ID
Keypad Interfaces	Name	<User Defined>	
	Interface Device	<Select from list>	Use Lutron Caseta Lighting for Pico templates, or Virtual Keypad for custom creations
	Keypad Type	<Select from list>	
	Lighting Device	<Select from list>	Connect to desired Keypad Device or Add New to create one
And / Or:			
Custom Tab	Create Custom Lighting Interfaces using the availble custom lighting controls, see the Online Help or Training Guide for details.		

COMMON MISTAKES

1. Failure to enter correct Integration ID. Each device must have the correct ID entered to control appropriately. See the Lutron Integration Report email for details. Note that Phantom Buttons have two ID fields – the SmartBridge Integration ID (typically 1) and the number of the button (1-50).

2. Adding the wrong type of device for the given Integration ID. Check the Lutron Devices section for the appropriate device type to use for each lighting device.