



DOMOSAPIENS IP DRIVER SET FOR LEVITON/HAI OMNI-BUS LIGHTING

This driver set enables you to control a Leviton/HAI Omni-Bus lighting setup directly from Control4. Using the Leviton/HAI Omni-Bus Interface Translator Rev. 2 (117A00-1), which is required, this driver set allows a functional transition to Control4 while safeguarding the investment in Omni-Bus devices, especially dimmers and switches.

OVERALL DESCRIPTION AND CAPABILITIES

Many Omni-Bus installations have been controlled via a Leviton/HAI Omni security panel and our Leviton/HAI IP driver facilitates the connection of such a setup to Control4 for full control. If the Leviton/HAI Omni is to be removed or replaced, or if the Omni-Bus setup was stand-alone, there is a need to connect it directly to the Control4 system. This is where this driver set comes into play.

This driver set is made up of three specific drivers: an Interface driver which communicates with the Omni-Bus Interface Translator Rev. 2 (117A00-1), a Lighting driver which controls one Omni-Bus output device (Dimmer, Switch, Relay) and a Keypad driver which receives key presses from one Omni-Bus input device (Wall Switch, Remote Control). You would typically install one Interface driver per Omni-Bus Interface Translator (a one-to-one relationship), one Lighting driver for each Omni-Bus output device and one Keypad driver for each Omni-Bus input device (regardless of the number of buttons on the specific input device). You may install more than one Interface driver in a project if your setup includes more than one Omni-Bus Interface Translator. As you install individual Lighting and Keypad drivers, you will be able to select which Interface driver they should be associated with.

Omni-Bus Lighting devices may be directly controlled from Control4, including from Control4 keypads, and may also be part of Control4 Advanced Lighting Scenes. Omni-Bus Input devices will set variables and trigger events in Control4 whenever a button is pressed on an Omni-Bus Wall Switch or Remote Control. With this driver set, it is entirely possible to mix-and-match Omni-Bus devices and Control4 devices in your scenarios. As existing Omni-Bus setups may have complex internal links, it is recommended to sever as many of these as possible and to use Control4 facilities instead. Please refer to the Section **MANAGING THE OMNI-BUS CONFIGURATION** below. Use of the Leviton Omni-Bus Installation Software is required.

INSTRUCTIONS

- Use the free trial period or **activate the Interface 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 Interface driver as well as any number of Lighting and Keypad drivers in your project.

COMMUNICATION PORT SETUP

INTERFACE

☐ USB: 116A00-1 USB Programming Interface

☐ USB: 117A00-1 Interface Translator Rev 2

☒ TCP/IP: 117A00-1 Interface Translator Rev 2

Interface 1

TCP/IP

DESCRIPTION: Interface 1

INTERFACE IP ADDRESS / DOMAIN NAME: 192.168.7.42

PORT NO: (1025 - 65535) 43690

PASSCODE: (0000-9999) 0000

☒ Auto Connect at startup

☒ Auto Re-connect after disconnect

☒ Keep Connection alive when connected

SAVE

- Many of the following steps require the use of the Leviton Omni-Bus Installation Software.
- Set the Omni-Bus Interface Translator to a static IP address or ensure it always receives the same IP address from the DHCP server via a MAC-based reservation.

Network Settings *

☒ Ethernet Port Enabled

☒ Obtain an IP Address Automatically

☐ Use the following IP Address

IP Address: 192.168.0.50

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

Network Information

MAC: 00:15:00:00:00:00

TCP/IP Bus Gateway *

TCP Port Number: (1025 - 65535) 43690

Password

☐ Enabled

Code: (0000 - 9999) 1234

- It is recommended to leave the Port at the default 43690. The port to be used by the Interface driver itself will be set later (default is 43694).
- In the Omni-Bus Installation Software, run 'LIST DEVICES'. You should see the Translator as one of the devices. Double click on it to show its Device Setup window:

DEVICE SETUP

TRANSLATOR STATUS: OK

Leviton Omni-Bus Interface Translator Rev 2

Code: 117A00-1 ADDR: 50

SN: 45300804 Translator Passive

MODE: -

FIND DEVICE CANCEL

PROG MODE CANCEL

CLOSE

Info Setup Network Setup CBIT Profile

Device Alias: Translator Device no.: Device Address: 50

Local Programming: Enabled

CLEAR SET TEST

Notes: SET

NETWORK SETUP MANAGE PROFILE UPGRADE APPLICATION FIRMWARE REBOOT

Onboard RF Receiver Send Received Packets to Bus network

Beep Volume

Apply to all devices of this type Apply to all channels on this device

SET SET DEFAULTS

- In the Network Setup tab, set the options as the follows, press 'SET', then 'REBOOT'.
- In the CBIT Profile, Setup tab, press 'UPLOAD FROM CBIT' and modify the options as follows:

Info Setup Network Setup CBIT Profile

Setup ASCII Protocol BUS Devices RF Devices

MODE(S) *

☒ TCPIP Bus Gateway

☐ Control4 TCPIP

☐ Leviton Omni-Link RS232

☐ Leviton Omni-Link TCPIP

☐ ASCII Protocol RS232

☒ ASCII Protocol TCPIP

TCPIP CONNECTION

☒ Beep on Connect/Disconnect

- Still in the CBIT Profile, ASCII Protocol tab, modify the options as follows (notice the 43694 port number). Hit 'DOWNLOAD TO CBIT' to save your changes.

Info Setup Network Setup CBIT Profile

Setup ASCII Protocol BUS Devices RF Devices

Settings

RS232 Baud Rate: 9600

TCP Port Number: * 43694 (1025 - 65535)

TCPIP Timeout: 24hour

First Unit Address: 1 (1 - 512)

Last Unit Address: 512 (1 - 512)

☒ Report Received RF Packets

☒ Report Received BUS Commands

☒ Report Status Changes

Remote Control

POS	TYPE
1	
2	
3	
4	
5	
6	
7	

- Once the Omni-Bus Interface Translator is set up as described above, install the Interface Driver and connect it in Composer (Connections, Network) to the Interface Translator using the fixed IP address assigned previously. The Interface Translator will immediately attempt to communicate with the Interface Translator and if successful, you should see it in the Properties area (if not please verify all the steps above). Also, turning Debug On, you should see the Interface driver interrogate (poll) the Interface Translator every 60 second and receive a reply:

```
03/30/22 16:34:14 : Queuing poll command (OmniBus)
03/30/22 16:34:14 : ProcessMessage from OmniBus: 'OK'
```

Properties	
Properties	
Properties	Actions Documentation Lua
Cloud Status	License Activated
Automatic Updates	Off
Driver Version	10.0.0 - Build 100 (JIT)
Driver Information	Communicating with the Omni-Bus Interface normally since 03/30/22 at 14:27:14
Debug Mode	Off
Debug Duration in Minutes	60
Interface TCP Port (0 for default)	43694
Interface Available via IP	Yes
Firmware Revision	V2.34

- Once this is done, you may install one Lighting driver for each Omni-Bus output (Lighting) device. Select the Omni-Bus Interface (if you have only one in the project, this is done automatically) and enter the Device Type as well as its Omni-Bus address (1 to 512). Once this is done, you should be able to immediately turn a light On and Off using Composer's Ctrl-Ctrl interface. These lights may be controlled by Control4 keypads and switches, Control4 programming and included in Control4 Advanced Lighting Scenes.
- Similarly, if you wish to have Omni-Bus input devices notify Control4 when a button is pressed, install one Keypad Driver for each such device. Select the Omni-Bus Interface as well as the Device Type. Then, for wired (Bus-connected) input devices, simply enter the Bus address for each button (up to six, depending on the type). For RF input devices, simply enter the Serial Number of the device itself.
- The Interface Driver has an Action to 'Print Status Report'. This lists all the information the driver is aware of and may help in troubleshooting issues.
- When you are done, refresh Navigators.

PROPERTIES

COMMON

- **Driver Version** displays the version of this driver.
- **Debug Mode** turns Debug Mode Off or On (with output to the Lua Output window). For the Lighting and Keypad drivers, this may also be set to Forward which causes the Debug messages to be sent to the Interface driver, this allowing for easier troubleshooting.
- **Debug Duration in Minutes** sets the duration of Debug On.
- **Driver Information** displays various status messages about the driver.

INTERFACE DRIVER

- **Cloud Status** displays the status of the DriverCentral Cloud driver.
- **Automatic Updates** turns the DriverCentral automatic update facility On or Off.
- **Interface TCP Port (0 for default)** specifies the port to be used for ASCII communications. It is best to use the default 43694.
- **Interface Available via IP** indicates the state of the TCP connection with the Interface Translator.
- **Firmware Revision** is a read-only field which shows the current firmware level of the Interface Translator.

LIGHT DRIVER

- **Select Omni-Bus Interface** allows you to select which Interface Driver this specific Light driver will use. If only one Interface Driver is installed in your project (meaning you are using only one Omni-Bud Interface Translator), this field should be filled automatically.
- **Enter Device Type** allows you to specify the type of lighting (output) device this driver will control.
- **Enter Device Omni-Bus Address** allows you to specify the Omni-Bus address associated with the specific output device. Please note that Relay channels are handled individually, each with its own address.
- **Selector for Keypad ON Color** and **Selector for Keypad OFF Color** allow you to change the LED colors of connected keypad buttons. Some experimentation may be necessary to get the exact color.

KEYPAD DRIVER

- **Select Omni-Bus Interface** allows you to select which Interface Driver this specific Keypad driver will use. If only one Interface Driver is installed in your project (meaning you are using only one Omni-Bud Interface Translator), this field should be filled automatically.
- **Enter Device Type** allows you to specify the type of keypad/remote control (input) device this driver will receive information from (button presses).

- **Enter Device Omni-Bus Addresses** appears for Bus-connected input devices and allows you to specify up to 6 Bus addresses, one for each button on the device. Separate the addresses with commas and spaces may be used as they are ignored.
- **Enter Device 8-digit Serial Number** appears for RF (Wireless) input devices and allows you to specify the 8-digit Serial Number of the device itself. There is no need to identify individual buttons as this is handled by the communications protocol.

MANAGING THE OMNI-BUS CONFIGURATION

As described previously, the Omni-Bus configuration may be managed using Leviton's Omni-Bus Installation Software. The following steps are recommended:

1. De-couple the Omni-Bus output devices from the Omni-Bus input devices. As you are moving to Control4, it is better to have Control4 manage the lights using its own facilities via this driver set. The Keypad driver will notify Control4 when one Omni-Bus button is pressed and via Control4 programming and Connections, you may control Omni-Bus lights (as well as Control4 lights).
2. For Omni-Bus dimmers, it is recommended to set the minimum level at 1% and the maximum level at 100%. Instead, you can control these values from the Control4 Lighting driver. Otherwise, if the maximum level is 80%, for example, Control4 Advanced Lighting Scenes requesting 100% for that specific light will never show as Active. It is better to have 100% in the Omni-Bus configuration and specify the 80% either in the Lighting driver's Properties or in the Advanced Lighting Scene itself.
3. The Omni-Bus protocol does not allow Control4 to specify Soft On and Soft Off rates for Dimmers. You should therefore leave those in the Omni-Bus configuration, but try to keep the relatively short and consistent.
4. A certain amount of experimentation will be required before you (and your users) are comfortable with the new interaction between Omni-Bus and Control4. Do not be afraid to experiment.

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 Interface driver to On.

CHANGELOG

10.0.0 April 7, 2022 Initial release

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