

TECHNICAL UPDATES

"OmniLT Version 2.1 Firmware Release"

ADD THIS DOCUMENT TO YOUR OMNILT OWNER'S MANUAL

Description

The Version 2.1 firmware adds the following new features and modifications to OmniLT automation controllers:

- Support for Lightolier Compose
- Support for Automatic Daylight Savings and Global Sunrise/Sunset calculations
- Support for X-10 tracking
- Support for Broadcast Thermostat command
- Support for the Pro-Link (ASCII) Protocol
- Support for Energy Cost commands

Lightolier® Compose™ Support

The OmniLT controller fully supports Lightolier's Compose power line carrier (PLC) lighting system. The OmniLT can send on/off/brighten/dim and preset scene commands to Compose devices. Furthermore, OmniLT can respond to scene changes initiated at Compose devices.

To enable support of Compose devices, the X-10 house code must be set to enable Compose mode transmissions. This is done by setting the X-10 format to "Compose".

Controlling Compose Devices

To control a Compose device, select the desired device from the list of units and specify the desired command.

```
Entry Lights (Unit Name)
0=OFF 1=ON 2=DIM 3=BRT ↓
```

```
Entry Lights (Unit Name)
4=SCN 9=TIM      #=STA
```

To turn the selected Compose unit on or off, or to brighten or dim the unit, simply select the desired command from the control menu. Selecting "4=SCN" allows one to set the Compose unit to a preset lighting scene.

Scene Command (Compose)

If Compose lighting switches are part of your installation, the Scene (SCN) command is used to set a group of lights to predefined lighting levels. There is an Off command, an On command, and 12 lighting scenes for each group of Compose lighting switches.

```
SCENE:
0=OFF 1=ON 2-13=A-L
```

Enter 0, followed by the ' #' key, to turn the lights that are part of the selected group off. Enter 1, followed by the ' #' key, to set the lights that are part of the selected group to predefined lighting levels.

To set the lights in the selected group to a predefined scene, enter the Scene number 2-13 (which corresponds to Scene A-L, respectively), followed by the ' #' key. All lights that are part of the selected group are set to the predefined lighting levels for the selected Scene.

Event Button Activation

The OmniLT can also respond to scene changes initiated at Compose keypads and dimmers. When a scene change is initiated, OmniLT can activate an event button program.

When specifying X-10 event buttons when programming, one may specify an event button activation upon receipt of an X-10 command from a source external to OmniLT.

You are first prompted to enter the X-10 house code:

```
X-10 HOUSE CODE:  
1-16=A-P
```

You are then prompted to enter the X-10 unit code:

```
X-10 UNIT CODE:  
1-16 0=ALL
```

You are then prompted to enter the command:

```
WHEN X-10 A1:  
0=OFF 1=ON 2=SCENE
```

After specifying the X-10 House Code and X-10 Unit Code, select 0 for Off, 1 for On, or 2 for Scene.

Off events will be activated whenever the selected device is turned Off. On events will be activated whenever the selected device is turned On. Scene events will be activated whenever the selected device is set to the specified scene. On events will also be activated whenever the selected device is set to a scene other than off.

Automatic Daylight Savings and Global Sunrise/Sunset

OmniLT now automatically calculates the day of daylight savings time each year. It also adjusts the "time of day" each time daylight savings time begins and ends. Additionally, OmniLT automatically calculates the time of sunrise and sunset each day. OmniLT can now calculate time of sunrise and sunset for location north or south of the equator and location east or west of the Prime Meridian.

Set Up Time

```
TIME:  
HHMM =AM ↓=PM
```

```
DAYLIGHT SAVINGS TIME?  
0=NO 1=YES
```

If Daylight Savings Time is currently being observed (between spring and fall), set this item to "Yes". If Daylight Savings Time is not currently being observed (between fall and spring) or is not observed in your geographic location, set this item to "No". This item is used to correctly calculate the times for sunrise and sunset.

You are only asked this question when you set the time. Once the time is set, OmniLT will automatically adjust the "time of day" each time daylight savings time begins and ends.

Set Up Latitude, Longitude, and Time Zone

The system automatically calculates the time of sunrise and sunset each day. Sunrise/sunset can be specified as the time a scheduling command is executed, as an enable/disable time, or as a darkness condition on a scheduling command or event button.

To enable the system to properly calculate sunrise and sunset times, you must enter your latitude, location north or south

DST START MONTH: 4
1-12 0=DISABLE x

DST START WEEKEND:
FIRST SUNDAY #=CHNG x

DST END MONTH: 10
1-12 0=DISABLE x

DST END WEEKEND:
LAST SUNDAY #=CHNG

Set the value for DST Start and End Months to "0" if Daylight Savings Time does not apply to your region, or to disable this automatic time update feature.

The DST Start and End Weekend takes place on the specified Sunday (1-7) at 2:00 AM.

To change the DST Start or End Weekend, press the ' #' key, then use the arrow keys to scroll through the list. Press the ' #' key to make the new selection.

Number Description

- | | |
|---|------------------------|
| 1 | First Sunday |
| 2 | Second Sunday |
| 3 | Third Sunday |
| 4 | Fourth Sunday |
| 5 | Last Sunday |
| 6 | Next to Last Sunday |
| 7 | Third from Last Sunday |

X-10 Tracking

If an X-10 signal is received over the powerline, OmniLT will automatically update the status of the corresponding unit. You can see the status of unit from the control or status menu.

Broadcast Thermostat Command

OmniLT can now control all thermostats with one command. To enter the temperature menu, from the top-level display or from the main menu, press the 5 (TEMP) key on the console keypad.

TEMPERATURE:
ENTER TEMP ZONE 0=ALL ↓

Press the ' 0 ' key to select all HAI Thermostats. This is a simple way to broadcast the new Heat or Cool setting or change the system mode, fan mode, or hold mode of all HAI thermostats in your system.

Pro-Link (ASCII) Protocol

Pro-Link is a programmable protocol whose messages can be programmed into the controller. Using Pro-Link, an HAI controller can send commands to and interpret commands from systems that are not programmable, such as lighting controls and infrared controls.

The Pro-Link protocol allows you to send and receive predefined text messages through an HAI Serial Interface. You can store up to 16 messages that can be sent and received. Each message can be up to 15 ASCII characters long. Several messages can be strung together and sent as one long message. Messages can be sent using any system trigger (timed, event, or macro) just like any other item in the controller. Incoming ASCII strings that match stored messages in the

controller can be used to activate macros.

Send Message (Pro-Link)

The 6 (SEND) key allows you to send any of the text messages through the Pro-Link serial port. You are first prompted to specify the desired serial port.

```
SERIAL PORT:
1-2          ↓
```

The built-in serial port (J5) on the controller is assigned to Serial Port 1. Serial port 2 is a Serial Interface Module connected to the Expansion port on the controller.

Next, select the message to be sent. You may enter the message number followed by the '#' key to send that message, or simply press the down arrow key to scroll through a list of messages. Press the '#' key to send the selected message:

```
MSGNAME:
ENTER MESSAGE      ↓
```

The message is sent out through the specified Pro-Link port exactly as the message was entered in Setup | Names | Message.

Carriage returns and line feed characters are not automatically appended to the end. To send ASCII control as part of the message, use the caret "^" character in the message. This character specifies that the next character is to be interpreted as an ASCII control character, such as "^M" to represent a carriage return.

Other useful sequences would be "^J" for a line feed character and "^G" for a bell character. To include an actual "^" character in the message, enter it twice as in "^ ^".

Each message can be up to 15 characters long. To send a longer message, simply program two messages to be sent one after the other.

Pro-Link also has the capability to monitor the serial port for incoming text messages. When a text message is received, Pro-Link searches through all 16 messages for a matching message. If one is found, the Program Command (macro) corresponding to the matching message is activated.

When receiving an ASCII message that is over 15 characters, OmniLT only processes the last 15 characters of the message.

Pro-Link determines that a message has been received when:

- One or more characters have been received followed by 100 ms of silence
- One or more characters followed by a carriage return character are received
- One or more characters followed by a line feed character are received

It is not necessary to enter the terminating carriage return or line feed character as part of the message name.

Energy Cost Commands

Energy Cost commands allow you to see the current energy cost, use the energy cost as a program trigger, change the energy cost, and use the energy cost as a program condition.

The Energy Cost Status menu allows you to view the current energy rate in use.

```
ENERGY COST: MID
```

The energy cost will display Lo, Mid, Hi or Crit (for critical) energy rates.

Program Energy Cost When

Program Energy Cost When allows you to select a event button that executes when the energy cost changes:

- WHEN ENERGY LO
- WHEN ENERGY MID
- WHEN ENERGY HI
- WHEN ENERGY CRIT

Program Energy Cost Command

The Program Energy Cost Command allows you to change the energy cost rate. Specify the desired energy cost rate:

ENERGY COST:
0=LO 1=MID 2=HI 3=CRIT

Program Energy Cost Condition

The Program Energy Cost Condition allows you to execute a program only if the current energy cost is set to the specified rate:

- IF ENERGY LO
- IF ENERGY MID
- IF ENERGY HI

IF ENERGY CRIT