

**LUMINA**

## DESCRIPTION

The Lumina is a lighting and automation controller for homes and small businesses. The system provides elegance, convenience, safety and energy savings to any new or existing home. Lumina is primarily intended for lighting control with easy installation and set up. However, its unrivaled feature set and option list make it upgradeable to a comprehensive smart house system.

Lumina provides HLC Configuration, a set-up feature that configures HLC Dimmers, Switches, Room and House controllers (devices). Lumina makes initial installation easy by configuring the addresses and links in each HLC device automatically. Once configured by Lumina, adjustments to room scenes are very simple: just tap a scene button five times to memorize the settings of the lights.

At the heart of Lumina are six standard modes: Home, Sleep, Away, Vacation, Party and Special. These modes can be activated at the touch of a button or by time schedule or event. The system includes HAI's Advanced Control Programming (ACP) logic that allows installers and homeowners to set schedules and actions performed by the system, and add new macros or modes as desired. Lumina has an astronomical clock and automatic daylight savings for accurate dusk to dawn lighting control year round. Optional wireless door contacts and motion detectors add occupancy based lighting control.

All of Lumina's features can be programmed on-site, without a computer, using the included LCD Keypad. A new "quick-set" feature simplifies naming light switches on the keypad. If desired, programs can also be created and stored on a personal computer with Lumina set-up software.

Lumina supports HAI Lighting Control (HLC) devices using UPB, a new digital communications technology that sends lighting control signals over your existing house wiring. It is ideal for new or existing homes and easy to install. Lumina can also operate lighting devices by other manufacturers, including X-10 based, ALC hardwire, RF, custom hardwire and others.

For additional elegance and ease of use, an OmniTouch touchscreen is available. An optional telephone interface allows you to call in and remotely control your home using a cellular phone. It is UL-Listed for Energy Management, and supports numerous Omni Family Accessories for future expansion. Lumina - lighting control from the company that's been the price/performance leader since 1985.

## LIGHTING CONTROL FEATURES:

- HLC configuration
  - 8 rooms with Room Controller and up to 64 loads
  - up to 8 House Controllers
- Configurable in groups of 16 loads for:
  - HAI Lighting Control (HLC) 64 loads max
  - Standard UPB 64 loads max
  - Two-way X10 (optional) 64 loads max
  - ALC hardwire (optional) 64 loads max
- 8 voltage outputs for triggering hard-wire relays
- Real-time clock with battery backup
- Sunrise/sunset calculation
- Automatic daylight savings time adjustment
- Lumina automatically configures HLC devices
- Time, Sunrise, Sunset, optional outdoor temperature display
- Status display (on, off, level, mode etc.)
- Lights can be set to scenes of varying brightness, with Level, Ramp and Scene Support for architectural quality lighting
- Lights, control outputs and modes can be scheduled by time, sunrise, sunset, and date or day of week, as well as various system events
- 500 lines of non-volatile ACP control program storage
- Commands (immediate and scheduled) include:
  - on, off, dim, brighten, level, scene and ramp rate
  - timed on, off, dim, bright
  - activate a button (macro)
  - Change system modes, zone status, flags, counters, and timers.
  - With options: change settings, mode, fan for one or all thermostats, Say, display or place a call with a message
- Supports HAI Pro-Link, allowing two-way serial communications w/ other controllers using ASCII messages
- Event button capability ("Scenes" or "Macros") allows a series of commands to be executed at once: create lighting scenes, occupancy modes, adjust temps, etc. Initiated by:
  - switches, dimmers, room and house controllers
  - keypad, touchscreen, computer, web-browser, or telephone command
  - a door open or closed, motion detected, a mode change (i.e. day, away, vacation)
  - a time schedule, sunrise, sunset
  - incoming contact closure signals or other internal and external events



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- Enhanced ACP includes new commands for “real time pricing” of energy costs, and allows two conditionals per line for easier programming
- Optional Two-Way X-10 allows Lumina to receive signals for status tracking, use as program triggers, features collision detection and retry for reliability
- Expansion port for future SCP, UPnP, LonWorks or other interface
- Ethernet port supports 3 sessions simultaneously
- 8 Hardwire Outputs, fully configurable:
  - control output for automation
  - temperature control
  - indicators
- Lumina LCD Keypads
  - surface with flush mount kits available
  - 4 wire connection, independent operation, 8 max
  - configurable beeper, viewing angle, backlighting
- Six Modes: home, sleep, party, away, vacation, special
- 16 (expandable to 48) inputs for
  - indoor, outdoor or water temperature
  - humidity sensors
  - door, window, motion detectors for energy management and occupancy detection
- Connect to existing security system for
  - lights on for alarm and safe exit
  - flash outdoor light to signal responding officers
  - shut off air and heat to stop spread of smoke
- Optional Wireless Receiver allows lighting control by motion detection and door openings and closings

#### **OPTIONAL TELEPHONE CONTROL FEATURES**

- Works with Touch-Tone phones inside or away from the premises with access code
- Compatible with answering machines, answering services
- From a cell phone you can:
  - change modes, adjust temperatures with optional thermostat control, turn lights on for unexpected guests
  - hear complete status of system, outdoor temperature
- Can call pagers, and be programmed to make a voice call based on events (example: call if motion during “away” mode; flood sensor activated, “no activity” for elderly care)



38A00-1      35A00-1      38A00-2  
Room      600W      House  
Controller      Dimmer      Controller

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#### **RELIABILITY FEATURES**

- Designed for continuous, trouble free operation
- Backup battery included
- Fuse-less design, short circuit proof power supply and outputs, reset button for shorted outputs, short circuit indicator light
- All inputs protected against static, RFI, surges and lightning
- Watchdog timer, non-volatile EEPROM storage for all programs, self-diagnostic software, low voltage cut out for system integrity

#### **EASE OF USE FEATURES**

- Text and voice descriptions for all inputs, loads, macros, temperatures, messages
- Keypad display shows menus to guide users during use
- Minimum keystrokes for common functions
- Optional wireless keyfob for lighting control available
- 500+ word speech vocabulary (with opt. Telephone control)

#### **COMPUTER INTERFACE**

- Ethernet Port built-in for connection to network
- Two built-in serial ports support Omni-Link and Pro-Link, with jumper selectable RS-232 or RS-485. Can be used for programming, monitoring, connection to HAI Web-Link II, personal computers, Connectivity Partner options such as touch screens, voice recognition, infra-red controls
- Built in high-speed modem (V32.bis) for local or remote (with security code) access to system using personal computer and Lumina set-up software
- Everything in Lumina can be programmed using Lumina set-up software for personal computers

#### **PART NUMBERS**

- 44A00-1 Lumina includes:
  - Power Supply: Plug-in transformer, 110 VAC, 50/60 Hz, LCD keypad, UPB phase coupler, set-up software, serial cable
  - Battery: 12V, 5 Ah sealed rechargeable
  - UPB Powerline Interface Module (PIM)

#### **OPTIONS:**

- 45A00-1: Supervised Wireless Receiver
- 10A11-1: Two-Way Voice Module
- 10A06: 16 Zone Hardwire Expansion Module
- 1108: HAIWeb Link II Software
- 1109: Home Control for Windows Media Center Software
- 25A00-2: ALC Lighting Control Interface (4 branch)
- 44A01-1: Telephone Control Kit
- 10A09-7: Two-way X-10 Transceiver Kit

#### **APPROVALS**

- UL Energy Management
- FCC (USA)      • ICCS-03 (Canada)
- CE (Europe): EN50081-1, EN50082-1, EN50130-4, EN55022 Electromagnetic Compatibility, Emissions & Immunity