

# GENERAL INFORMATION

ETC's software for Paradigm lighting and building control systems, LightDesigner allows a designer and a technician to use real-world terms and information as they collaborate on effective lighting control scenarios, including energy management, day-to-day operations, user interfaces, special events, and special effects. LightDesigner works the way you want it to, with effective preprogramming and simulation capabilities that allow you to visualize and test out changes to the lighting design, as well as access powerful, real-time live control and live editing of your Unison Paradigm Control System. LightDesigner has built-in tools for managing the data of a project, freeing the design team to create lighting environments.

### APPLICATIONS

- Churches
- Schools
- Restaurants
- Hotels
- Museums
- Casinos
- Ballrooms

#### MINIMUM COMPUTER REQUIREMENTS

- Windows 7 (Home Premium) or XP (Pro SP2) or better
- 2 GHz Pentium 4 processor or better (Dual or Quad core recommended)
- 1 GB of available hard drive space
- 1 GB of RAM or better (2GB recommended)
- Video Card capable of 1024x768 resolution (1280x1024 recommended)
- Open GL Graphics Acceleration
- Ethernet Port
- USB Port or SD card slot
- Keyboard and Mouse

## GENERAL INFORMATION

#### FEATURES

- EnergyManager a suite of features, including DaylightManager, OccupancyManager, and TimeManager to harness maximum energy savings from a lighting control system
- DaylightManager use open- or closed-loop sensing systems to balance natural light with artificial light
- OccupancyManager use sensing systems to detect when someone is in the space, and turn lights off accordingly
- TimeManager work in a familiar calendar-style scheduler, create recurring events and holidays
- FlickWarn flash the lights briefly before an automatic event occurs
- SpaceManager import your building's plan, and then use drawing tools to create the layout of the control areas
- FixtureManager built-in library of fixtures (LEDs, moving lights, zones)
- LiveControl output control and commands from a computer running LightDesigner
- LiveEdit make changes to the system, while in control of it from a computer running LightDesigner
- SpeedMacro create a set of actions (triggers) based on conditional logic in the system
- EasyNet a suite of features to help make it easy to work with network protocols
- Station Manager built-in library of ETC stations, and the ability to add LonMARK stations
- SmartAssign Simple control assignment for buttons and faders based on configuration of the included space
- SmartPaste Simple control assignment from one station to another



### SPECIFIC ATIONS

#### ENVIRONMENT

- Shall be possible to work with multiple System configurations simultaneously
- There shall be clipboard functionality for entire objects, settings and text
- There shall be undo and redo functionality
- There shall be an auto-backup feature
- The application interface shall be based around a tree-view, a workspace area, a property editor and item selector
- It shall be possible to represent data about the workspace area graphically (plan) or in tabular form
- Plan views shall support zoom
- Plan views shall support a layout grid with user-defined spacing and color with associated snap-to-grid functionality
- The properties inspector shall be used to view and modify the properties of one or multiple objects

#### SYSTEM CONFIGURATION

- It shall be possible to create Spaces
- It shall be possible to add Zones and Fixtures by selecting a Zone or Fixture Template from the provided library and create custom Zones or Fixtures
- It shall be possible to add Stations by selecting a Station Definition from the provided library and create custom Stations
- It shall be possible to create a System based on data imported from a defined documentation format
- There shall be a wizard to assist with the initial setup of a System including Project data entry, Space creation, and network configuration
- There shall be a 2-dimensional plan view that displays the layout of Spaces
- A Space shall be displayed as a user-configurable polygon with straight edges
- The plan shall display Zones, Fixtures and Stations located within Spaces
- The plan shall display Walls between Spaces and their current state
- Items displayed on the plan may be arranged using drag-anddrop interaction
- It shall be possible to import images as a background image to the plan view
- It shall be possible to create Walls for Room Combine between Spaces

#### CHANNEL CONFIGURATION

- There shall be functionality to patch Channels to DMX and Streaming ACN
- There shall be support for Channels with split patches
- There shall be support for multiply-patching a Channel
- It shall be possible to swap pan and tilt axes for a movinglight Fixture
- It shall be possible to specify a minimum and maximum value for an Attribute
- It shall be possible to specify a minimum fade time for an Attribute
- It shall be possible to invert the range of values for an Attribute

### SPECIFIC ATIONS

- It shall be possible to specify a default value for an Attribute
- It shall be possible to specify a dimmer curve for an intensity Attribute

#### **DESIGN AND SIMULATION**

- There shall be a tabular view of Channel Attributes within Spaces
- There shall be control of Zones
- There shall be control of LED arrays
- There shall be control of moving lights
- There shall be independent control of every Attribute of a Channel
- Graphical controls shall be provided for non-intensity Attributes
- It shall be possible to create Groups as a selection shortcut
- The plan shall show the current status of Room Combine
- The plan shall show simulation feedback for Channels in a graphical form
- Feedback values for Attributes shall be displayed in terms of real-world units
- Control events may be simulated by clicking on a representation of the Station
- The simulation may be linked to the actual online System to synchronize playback and inject control events

#### PRESETS

- There shall be provision to record a Preset based on current Attribute settings
- There shall be a display of Presets that affect Channels in the Space being worked with and their activation status
- A Preset may store a reference to a Palette as an Attribute setting
- Presets may be displayed and modified in tabular form
- Timing in Presets may be set on an individual Attribute basis
- Timing settings shall include a fade time, a delay time and a fade profile
- All Presets may include split timing
- Presets may be applied in an Latest Takes Precedence (LTP) or Highest Takes Precedence (HTP) manner
- It shall be possible for all Presets to include Effects
- Each Effect shall have a Curve and parameters
- There shall be a provision to create Sequences from Presets
- It shall be possible for a Sequence to be displayed and modified as a timeline display
- It shall be possible for any step of a Sequence to trigger a defined Action
- The end state of a Sequence shall be user configurable (e.g. release, loop, hold at end)

## SPECIFIC ATIONS

#### STATIONS AND EVENTS

- Can assign functionality to Controls and Indicators on a Page for a particular Station
- Stations may have multiple Pages that can be switched between at runtime
- A Control may be configured so that the Actions it triggers behave as if initiated from a specified Space anywhere in the System
- Controls shall have a priority that is used when performing operations
- It shall be possible to import .ics files for display of holidays or other notable dates
- It shall be possible to specify timed events, including repeat intervals daily, weekly, etc.
- It shall be possible to specify astronomical timed events
- Serial input data shall be treated as a Control event and shall be handled as a standard or custom action
- There shall be support for Occupancy functions using proximity sensors connected via Echelon<sup>®</sup> LonTalk<sup>®</sup> or a Contact Interface
- There shall be support for Daylight Harvesting functions using photo sensors connected via Echelon LonTalk or a Fader Interface
- There shall be Override functionality that can be applied to any Control or Event
- There shall be Lock Out functionality for Controls
- Direct control of Attributes can be assigned to Controls
- Mastering of Channel Intensity and can be assigned to Controls
- There shall be extensible support for third-party LonMark devices
- There shall be an option to assign default functionality to Controls and Indicators of a Station automatically when it is added to the configuration and update it as the configuration changes
- There shall be an option to generate a graphic for a Touchscreen automatically based on the current configuration and update it as the configuration changes

#### ACTIONS

- There shall be a standard Action for toggling the Intensity Attribute of a Channel or Group
- There shall be standard Actions for recalling Presets
- There shall be a standard Action for recording a Preset
- There shall be standard Actions for controlling Sequences
- There shall be standard Actions for changing Wall state
- There shall be a standard Action for raising or lowering the intensity setting of a Channel or Group
- There shall be a standard Action for raising or lowering the intensity setting of a Preset
- There shall be a standard Action that activates Faders within its scope
- There shall be a standard Action that activates Faders on a target station and locks out other Stations within its scope
- There shall be a standard Action for setting lock out variables for a Station, within a Space or System-wide
- There shall be a standard Action for enabling and disabling Overrides

## SPECIFIC ATIONS

- There shall be a standard Action for recalling a Macro
- There shall be a standard Action for turning Off a particular Channel, Group or Channel within a Space
- There shall be a standard Action for controlling Channel or Group Intensity levels from a Fader
- There shall be a standard Action for controlling Preset Intensity levels from a Fader
- There shall be a standard Action for mastering Channel or Group Intensity levels from a Fader
- There shall be a standard Action for modifying Preset fade times from a Fader
- There shall be a standard Action for modifying Preset rate from a Fader Actions

#### MACROS

- Users can create, store and recall Macros that are sequences of Actions
- Macros may define separate sequences to occur when turned on and off
- Macros may incorporate conditional statements based on current status of the System
- Conditional statements may be combinations of several simpler statements using logical operators in a visual drag and drop arrangement

#### NETWORK

- Can associate a particular Station with a Paradigm Processor
- Shall report online status of Paradigm Processors and Stations
- Shall allow for configuration of network properties (IP) of Paradigm Processors
- Shall allow for download of configuration data from Paradigm Processors
- Shall allow for download of logging data from Paradigm Processors
- Shall allow for transfer of configuration to and from Touchscreen Stations using Paradigm Processors as proxies
- Shall allow for discovery and binding of Stations
- There shall be a mode in which configuration changes are propagated to Processors as they occur without interrupting operation

#### REPORTS

- It shall be possible to generate tabular reports and customize their layout and appearance
- It shall be possible to print reports

#### MOSAIC

• It shall be possible to configure interaction and trigging with Mosaic systems



Corporate Headquarters • 3031 Pleasant View Rd, PO Box 620979, Middleton WI 53562 0979 USA • Tel +1 608 831 4116 • Fax +1 608 836 1736 London, UK • Unit 26-28, Victoria Industrial Estate, Victoria Road, London W3 6UU, UK • Tel +44 (0)20 8896 1000 • Fax +44 (0)20 8896 2000 Rome, IT • Via Ennio Quirino Visconti, 11, 00193 Rome, Italy • Tel +39 (06) 32 111 683 • Fax +44 (0) 20 8752 8486 Holzkirchen, DE • Ohmstrasse 3, 83607 Holzkirchen, Germany • Tel +49 (80 24) 47 00-0 • Fax +49 (80 24) 47 00-3 00 Hong Kong • Room 1801, 18/F, Tower 1 Phase 1, Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong • Tel +852 2799 1220 • Fax +852 2799 9325 Web • www.etcconnect.com • Copyright©2010 ETC. All Rights Reserved. All product information and specifications subject to change. 7180L1007 Rev. C Printed in USA 06/10 Unison<sup>®</sup> products protected by one or more of the following: U.S. Patent No. 5,323,088, 6;49,943, and 5,352,958, European Patent No. 603333, German Patent No. 6023369; US and International patents pending