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 pre-programming 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

**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
SPECIFICATIONS

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-and-drop 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 moving-light 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

SPECIFICATIONS

DESIGN AND SIMULATION
• 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

• 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)
**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® LonTalk® 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 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
- 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 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 triggering with Mosaic systems