

Version 3 9/04



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LIGHT InSite Master

# Section 1 Program Description





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## 1.0 Description

ILC LightMaster InSite is an object-based GUI (Graphical User Interface) software package that provides a customized interface to facility lighting control. You can create icons representing a facility's lighting fixtures, develop control buttons, attach sounds, and design lighting presets for real time control of a building's lighting loads. You can locate these icons on screens that graphically depict the floor plan of the facility. These screens are Windows compatible bitmap files normally developed at the ILC factory from CAD files furnished by the customer.

You can develop your own graphics screens. However, the creation and manipulation of graphic files is an advanced function requiring programs not supplied as part of the *Insite* software package. Please consult the factory for guidance with this task.

## 1.1 Manual Conventions

Keep in mind the following conventions when reading through manual procedures: **Click** = click the left mouse button once **point & click** = point on the indicated object and push the left mouse button. **right click** = use the right mouse button **double click** = click the button twice

**point & drag** = place the mouse left button arrow on an icon, click and hold button and move the icon to a different position; then release the button.

## 1.2 Installing ILC LightMaster Insite

Most customers have ILC LightMaster Insite installed on their computer at the factory or by an ILC field service technician during the system start-up. If you have elected to install the software yourself, follow these instructions. Call ILC tech support if you need help (1-952-829-1900 or 1-800-922-8004).

#### Minimum Computer Requirements

- IBM compatible PC
- Pentium III, 800 mHz
- 1 RS232 serial port
- CDROM or CDROM R/W drive
- Windows 2000 or XP
- 512 MB RAM
- SVGA monitor- 1024 x 768 pixels minimum
- Mouse & keyboard or Touch Screen

**Recommended Installation Procedure** Place the LightMaster InSite program CD into your computer's drive.

- Start LightMaster Insite installation by selecting RUN from the Windows Start menu and navigating to the ILC LightMaster InSite.exe file on the CD, then follow the on screen instructions.
- 2. Copy the bitmap files you will be using to the bitmaps directory in the ILC LightMaster Insite folder that has been created on your computers hard drive. NOTE: Bitmap files are normally on a separate disk.

## 1.3 Backing Up ILC LightMaster Insite

It is important that backup copies of all the ILC LightMaster InSite data be kept in the event of PC failure.

- 1. Copy all if the files in the ILC LightMaster InSite folder (located on the PC's hard drive) to the removable media of your choice.
- 2. Store backups, install discs, screen bitmap files and any documentation in a secure place.



#### **Configuration Settings**

You will need to check and perhaps alter some of the parameters in the LightMaster Insite installation files. Make changes carefully, as incorrect settings may give undesireable results.

 Open ILC LightMaster Insite.ini file located in the ILC LightMaster InSite folder on your hard drive. See default .ini file sample. Enter the name off the bitmap file that you want as the top level screen for LightMaster Insite. For example: Main Screen = 1<sup>st</sup> floor (1st floor.bmp).

ILC LightMaster InSite.ini [General] Main Screen=main Process Schedule=1 Blind Mode Flash=1

[Network] Host Connection=C:\ILC LightMaster InSite Schedule Dir=C:\ILC LightMaster InSite

[Screen Data] Bitmaps=C:\ILC LightMaster InSite\Bitmaps Objects=C:\ILC LightMaster InSite\Objects

[User Options] Verify Sweeps=0 On Sweep Enable=0 Off Sweep Enable=0 Toggle Loads=0 Extra Loads=1 ToolTip Select=0 Show Twips=0

[Passwords] Level 1=none Level 2=none Level 3=none Level 4=none Level 5=none

[Bridge] Connection Type=0 Com Port=1

ILC LightMaster InSite .ini Default Values

- 2. Enter any passwords needed to secure certain InSite operations. See Table 1 for levels. Level 1 is the lowest security level and Level 5 is the highest. Passwords must be set in the lower level to operate properly in higher levels.
- Enter the Bridge Connection type to the required setting for your system. See Table
  Type "0" is the default.
- 4. Enter the Com Port value of the com port on the computer used to communicate with controllers. Com 1 is the default.

Table 1. InSite Password Levels

Enabled Functions	Password Level				
	12345				
Monitor Status	ХХХХХ				
Sequence Status	ХХХХХ				
Toggle Status	ХХХХ				
Set Presets	ХХХ				
Blind Mode	ХХХ				
Set Activity	ХХХ				
Initiate Sequence	ХХХ				
ON/OFF Sweeps	ХХ				
Capture Scenes	Х				
Edit Schedules	Х				
Edit Menu	Х				
Options Menu	Х				
Edit Sequence	Х				

#### Table 2: InSite Connection Types

- 0 -Connection through a host computer. The bridge is not loaded.
- 1 -Direct connection to a single panel
- 2 -Direct connection to Node 01 of a Standard Network
- 3 -Connection to an InSite Gateway on a Standard Network.
- 4 -Direct Connection to the Master Controller on an Extended Network.
- 5 -Connection to an InSite Gateway on an Extended Network.
- 6 -Direct Connection to a single panel with a ILC Apprentice lighting controller.

## 1.4 Starting ILC LightMaster Insite

- 1. Double click on LightMaster Insite icon.
- 2. The *Insite* top level (MAIN) screen will appear. (See Figure 1-1)

## 1.5 ILC LightMaster Insite Menu Bar

The choices on the menu bar are:

- Home- returns you to the top level or Home Insite screen
- **Back** returns you to the previous Insite screen
- Sweeps permits you to sweep ON or OFF all the lighting loads on that screen
- **Presets** lets you develop groups of load status icons which will respond in a pre-determined ON or OFF pattern
- Sequence allows you to create a series of events to occur within a 12 hour period, including: Turn ON or OFF a single relay, activate a LightMaster or InSite presets.

- Schedule permits control of load status icons or presets via time based schedules or a defined sequence
- **Options** allows the program to implement ON and OFF sweeps. These four options may selected by checking them.
- Edit- this menu item provides for:
  - development of Navigation buttons which allow you to switch between different graphic screens
  - definition of Load Status icons
  - definition of Group Control buttons for the control of multiple relay status icons
  - the locking/unlocking of load status and control buttons
  - DMX control
  - adjust and apply the grid function
- **Blind-** permits you to manipulate the load status icons on the Insite screen without actually impacting the field lighting loads
- Quit- allows you to exit the program
- Help- On screen help (not yet developed)



Figure 1.1 – InSite Main Screen (typ.)



LIGHT InSite Master

# Section 2 Populating & Moving Through the Graphic Screens



LIGHT InSite Master

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## 2.1 Introduction

Before you can actually control building lighting loads using *Insite*, you must set the stage by accessing the graphics screens that represent the facility floor plans and populate these screens with the icons which provide the mechanisms for actual control of the building lighting loads.

## 2.2 Set up the Grid

Using a temporary grid over the workspace will assist you in placing icons. To set up a grid:

- 1. Select EDIT from the InSite menu bar
- 2. Scroll down and highlight Show Grid from the drop down menu.
- 3. To change the grid appearance, highlight Grid Size or Grid Color.
- 4. To align icons, select Snap to Grid.

## 2.3 Develop the Navigation Buttons

Navigation buttons allow you to access different screens representing different sections of the building (first floor, second floor, west wing etc.) These screens are bitmap files usually developed at the ILC factory from data furnished by the customer.

Selecting Add Navigation Button will create a button that will appear only on the screen where it is developed. You may also select Add Global Navigation Button to create one that will appear on every screen. For example, you could develop a global navigation button to access the main (top level) screen. This button would appear on all the other screens. On the main screen you could develop local navigation buttons to allow access to the projects other graphic screens.

#### To define a navigation button :

- 1. Point & click on Edit on the *Insite* menu bar.
- 2. Point & click on either the Add Navigation Button or Add Global Navigation Button
- 3. A new navigation button icon will appear in the upper left hand corner of the graphic screen. Point and drag it to the desired position on the screen.

- 4. Right click on the navigation button to begin defining it.
- 5. Point & click on either small, normal or large to select the size of the icon.
- 6. Point & click on the caption field and then type in the descriptive name of the navigation button.
- 7. Point & click on the screen field and then type in the name of the bitmap file you want the button to invoke (file extensions are not necessary).
- 8. Point & click on lock check box to lock in the control. Note: control buttons and other control icons are not operational until you lock them.
- 9. Point & click on close to leave the navigation button definition screen.
- Point & click on the navigation button, the graphic screen whose file you entered will appear. (You can return to the Main screen by pointing & clicking on Home on the menu bar.)

## 2.4 Develop the Load Status Icons

Load status icons graphically represent facility lighting loads. Each icon is controlled by an output in one of the lighting controllers. By defining and placing the load status icons on the screens you can simulate the actual lighting layout of the facility on your computer screen and issue ON/OFF commands to the actual loads.

#### To define a load status icon:

- 1. Point & click on Edit.
- 2. Point & click on Add Load Status and then New Load when the pull down menu appears.
- A load status icon will appear in the upper left hand corner of the screen as a green box (☑); point & drag it to the desired position.
- 4. Right click on the load status icon to access its definition parameters. (See Figure 2.2).

Populating & Moving Through the Graphic Screens



- 5. Point & click on the node (controller) containing the output represented by the icon.
- 6. Point & click on the output number represented by the icon.
- 7. Point & click on the Graphics folder to start defining the icon appearance.
- 8. Point & click on Change Icon.
- 9. Point & click on the desired icon style.
- 10. Point & click on Close to return to the top level of the Graphics folder.
- 11. Point & click on the lock check box to lock the control.

There are additional advanced user features that you can add to enhance the load status icons; consult the factory for details:

- Enable Flood permits you to fill in the backgrounds of enclosed areas on a graphics screen with colors in response to load status icons switching ON. (This simulates the area lighting up.)
- Blink-you can develop icons which blink when the load they represent is either On or OFF
- **Sound** you can define a particular WAV audio file to play when the load it represents goes ON and another sound when the load goes off. (Your computer must be equipped with an audio card and speakers to implement this.)
- **Extra Loads**-Lets you tie the additional loads to the current icon. This allows additional relays to be controlled from this single load.

## 2.5 Defining Presets

Presets are lighting patterns you define based on the requirements of a particular situation, for example: special events at the facility. LightMaster presets are resident in the controller(s) and may be invoked directly from the InSite software. InSite presets can be captured and activated from the InSite program. NOTE: InSite presets are designed per single screen.

#### To define an InSite preset:

- Point & click on the first load icon that is to be part of the preset and set it to the desired state. (See Section 3.1 for a description of how to set a load to a an ON/OFF state.) Note: If you don't want to actually impact the load state at this time, point and click on Blind
- 2. Repeat step 1 until you have set all the loads to the desired state.
- 3. Point & click on Presets on the menu bar.
- 4. When the pull down menu appears, point & click on Capture InSite Preset
- 5. Name the InSite preset.
- 6. Click on Save.





Step 2

O Small New Global O Large	O Small Name for New Global Octobel NAV Global NAV	O Small Normal O Large O Large
Caption New Global	Caption Name for New Global NAV	Caption Name for New Global NAV
Screen None	Screen	Screen Bitmap file Name
Tip Text Global Navigation Button	Tip Text Global Navigation Button	Tip Text Global Navigation Button
Lock Delete Control Close	Lock Delete Control Close	Lock Delete Control Close
Step 5	Step 6	Steps 7-9

Figure 2.1 Developing Navigation Buttons





#### Adding Load Status Icon

Home Rack Sweets Presels Sequence Schedule Options Edit Blind	Home Back Sweete Presete Sequence Schedule Untime Edit Blind
Load Information Graphics Sounds Load Information Graphics Sounds Node LightMaster Node: 01 Load Relay: 01 Tip Text Load Status Lock Delete Control Close	Load Information Graphics Sounds   Off Change Icons   Off Flash When Off   On Enable Flood   Lock Delete Control

Customizing a Load Status Icon

Figure 2.2 Developing Load Status Icons



## 2.6 Defining Group Control

You can develop group control buttons that can control multiple loads, LightMaster presets or control DMX outputs.

#### To develop a group control button:

- 1. Point & click on Edit.
- 2. Point & click on Add Group Control
- 3. When the new group control button appears in the upper left corner of the screen, point and drag it into the desired position.
- 4. Right click on the icon. (See Figure 2.4)
- 5. Point & click on the desired icon size.
- 6. Point & click on the Caption field then type in a descriptive title.
- 7. Point & click on Function; then point & click on the desired function. Note If you are changing from the default function a prompt will appear; point & click on OK.
- 8. Point & click on Edit Control; if you have selected the Control Load Status option point & click on the load status icons you want to be part of the group. If you have selected the Activate LM Preset option, point & click on the preset or presets (up to 4) you want the group control button to invoke.
- 9. When finished selecting loads, DMX outputs or presets, point & click on lock and point and click on close.

## 2.7 Setting Schedules

You may schedule an individual load to go ON/OFF or for a scene to be invoked at a particular time each day or at a certain time on a certain date.

For example, to set daily schedule for activating an LM Preset (See Figure 2.5)

- 1. Point & click on Schedule.
- 2. Point & click on Daily.
- 3. Point & double click on the desired time
- 4. Point & click on Activate an LM Preset

- 5. Point & click on Next.
- 6. Point & Click on the Preset field
- 7. Scroll to the desired preset and point & click to choose it.
- 8. Select the days of the week you want the scene to be invoked on. You do this by pointing & clicking on the day boxes until there is a check in the box of each day of the week you want the scene to happen on.
- 9. Point & click on Finish.
- 10. Point & click on Close

## 2.8 Setting Sequences

You can set up a sequence of actions to activate at a time you define: up to 16 actions per sequence, including 1. Turn OFF a single relay

- 2. Turn ON a single relay
- 3. Activate a LM Preset
- 4. Activate a InSite Preset

InSite sequences can span up to 12 hours, actions can be initiated at 5 minute intervals.

For example, to set a sequence to control a series of relays:

- 1. Point & click on Sequence.
- 2. Point & click on Edit Sequence.
- 3. Click on an unused Action and Select Turn Off a Single Relay from the drop down menu.
- 4. Point & pull down Time to 00:30 minutes.
- 5. Point & pull down Node to select Node 02.
- 6. Point & pull down Relay to select Relay 05.
- 7. Select another unused Action and select Activate An InSite Preset.
- 8. Point & pull down Time to 00:45 minutes.
- 9. Browse to a previously defined preset (see Section 2.3).
- 10. Open the preset.
- 11. Click Save As on the Sequence menu bar to name the sequence and save it to the Sequences folder.





Figure 2.3 Defining a InSite Preset





Figure 2.4 Defining a Control Group





Steps 1-2

	Daily Schedule			•••						
10.	12:00 AM	<u> </u>		:	Select A	Relay 1	Fo Turn (	Off At 1:	2:30 AM	1
12a- 1a-	12:05 AM			LightMaste	r Node: 01					-
2a-	12:10 AM			13						
4a-	12:15 AM			Relay: 01						•
5a-	12.20 AM			De Aster	On These	D				
6a- 7a-	12:23 AM			- Do Action	i Un These	Days				
8a-	12:35 AM			🔽 Sun	🗹 Mon	🔽 Tue	🔽 Wed	🔽 Thr	🔽 Fri	🗹 Sat
9a-	12:40 AM Double Click A Time Slot To Add An Action							·		
11a-	12:45 AM							Cance	el	Finish
12p-	12:50 AM		1.4							
2p-	12:55 AM					S	teps 7	-9		
3p-	01:00 AM									
4p- 5p-	01:05 AM			_						
6p-	01/15 AM	🖃 Select An Ac	ction	For						
7p- 8p-	01:15/AM	– 12:30 A	AM							
9p-	01:25 AM	-								
10p-	01:30 AM	- • Turn Off A Sin	ngle He	elay						
12a-	01:35 AM	🗌 🔿 Turn On A Sin	ngle Re	elay						
	01:40 AM	O Activate A LM	1 Prese	et						
Clev	ar Schedule	C Activate An In	nSite Pi	reset						
		O Initiate A Sequ	uence							
Si	tep 3	Canel		Next >>	Ste	eps 4-	-5			

Figure 2.5 Setting a Schedule

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## Section 3 Conducting Operations





## Section 3 Conducting Operations

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## Conducting Operations



## 3.1 Turn a Load On/OFF

- 1. If necessary, point & click on the navigation button for the screen containing the load.
- 2. Point & click on the selected load's Load Status Icon
- 3. Point & click on the desired action.
- 4. Point & click on Close.



Figure 3.1 - Turning a Load ON/OFF



## 3.2 Sweep All Lights ON/OFF

- 1. Point & click on Sweeps
- 2. Point & click on either All ON or All OFF



Figure 3.2 - ON/OFF Sweeps



#### 3.3 Activating an InSite Preset

- 1. Point & Click on Presets
- 2. Point & Click on Activate InSite Preset
- 3. Select a saved Preset



Figure 3.3 - Activating an InSite Preset



## 3-4 Activate A Group Control Button

- 1. If necessary, point & click on the navigation button to get to the desired screen.
- 2. Point & click on the desired group control button. If the button controls a preset scene, the scene will be invoked.
- 3. If the button controls loads, point & click on either Turn ON or Turn OFF.



Figure 3.4 - Activating a Group Control Button