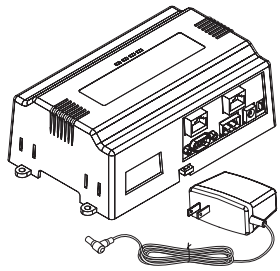

LMSM-201
LMSM-603

Digital Lighting Management
Digital Network Segment Manager

Operation Manual

ABOUT THIS MANUAL

Prior to logging into the Segment Manager user interface, it is necessary to complete all installation steps outlined in the Installation Instructions provided with your unit. This manual assumes that the Segment Manager (LMSM) has been completely installed and configured per the installation instructions that are provided with the unit. It also assumes that the LMSM is connected to a PC either directly or via a network.

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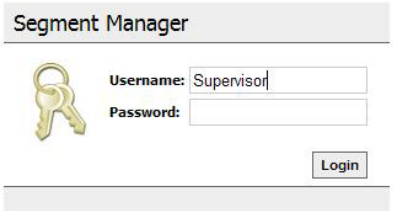
WattStopper®
800.879.8585
www.wattstopper.com

1. Logging into the Segment Manager

Open a web browser on the PC and enter the IP address of the SM as determined from the Installation Instructions. The default login is the Username: "Supervisor" with no password.



This login allows full operator privileges but restricts the user from accessing certain high level functions such as using the Discovery feature or setting up new users. These functions require an administrator level login. The segment manager is shipped with 3 logins installed. Depending on the level of security desired, you can use these as is. Or, you can log in as the administrator and change the user logins to suit your needs. See "User Management" for more information on setting up user logins.

The pre-installed logins are:

Username: Supervisor

Password: <blank> full operator privileges

Username: Observer

Password: <blank> view only, can not make changes

Username: SegMan

Password: wattstopper administrator, no restrictions

If the Segment Manager has previously been configured with a custom login, you will need to get this Login information from the administrator of your system.

1.1 The Home screen: The initial Login might take several seconds to complete. You should see a progress bar at the bottom of your web browser. The first screen to appear will be the Home screen. This screen is customizable to suit the needs of the user site. See "Customizing the Home Screen" later in this document.

1.1.1 Description

At the top left of the Home screen will be the navigation tabs:

The **Home** tab  will return the Segment Manager to this initial or home screen.

The **Device** tab  will be the primary user interface for navigating to the DLM devices in your system and for viewing and changing device parameters.

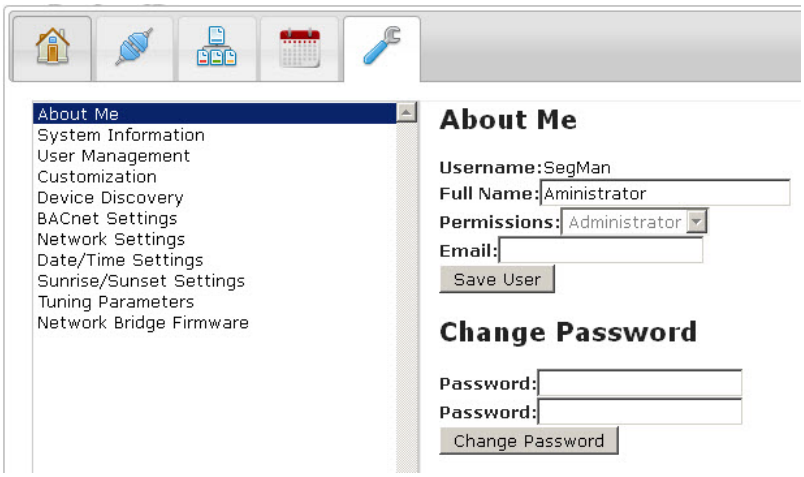
The **Groups** tab  opens the user interface where you will be able to associate loads or rooms together for common scheduled or other control actions.

The **Schedule** tab  opens the user interface screen where you will create schedules and associate the schedule(s) to the groups.

2. Configuring the Segment Manager

Prior to using the Segment Manager, there are a number of configuration settings that can be made. Most of these settings are optional. However, the Discovery process must be completed prior to using the Segment Manager with the DLM network.

Click the **Configuration** tab  to open the user interface screen where you will make and view system settings including customizing the Home screen and setting the time, date, and location for the installation.



2.1 About Me: Provides login information about the user that is currently logged into the Segment Manager. If the user has Administrator permissions, he may change his own login password here. Only an administrator will be able to make changes here.

2.2 System Information:

Displays technical information about this Segment Manager.

2.3 User Management: Allows the Administrator to set up new users or delete users and assign permissions for each based on their unique login. Permission selections include: Viewer (view only), Operator (normal operation, change parameters, etc.), and Administrator (no restrictions).

Username: is the name that will be used during login

Full Name: appears in the user list on this page and is displayed at the top of the screen on all pages

Email: the email address for this user

Password: passwords are case sensitive

Enabled: un-checking this box will prevent the user from logging in without deleting their login information

Click the **Save User** button to add this user to the database

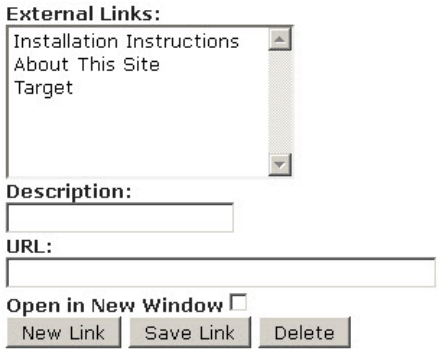
2.4 Customization: allows features on the Home page to be customized to job site requirements.

2.4.1 Customizing the Home Screen: The **Custom Site Options** page allows the Home screen to be customized for specific job requirements. Click on the Configuration Tab to display the menu.

Select Customization from the menu to display the **Custom Site Options** page.

Site Name: this is the text that will appear at the top center of the Home page

External Links: allows the entry of hyperlinks to other web sites. This feature requires that the segment manager be connected to the internet or intranet. These links will appear on the Home page. Click the New Link button to create a new hyperlink.



Description: this is the identifying text that will appear in the External Links frame on the Home page

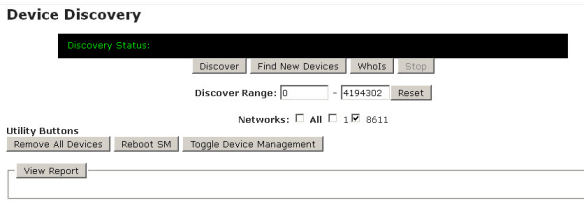
URL: enter the exact URL for the web site that is to be linked

Click the **Save Link** button to save the new URL hyperlink. Click the **Delete** button to delete a previously created link.

Upload New Home Page Image: loads an image file that will be displayed in the center of the Home page. The target image must be located on the PC that is currently logged into the Segment Manager. Navigate to the image file that is to be uploaded to the Segment Manager. Click the Send button to load the image on the Segment Manager.

2.5 Device Discovery: A necessary first step in using the Segment Manager with your DLM network is to perform a one-time operation that will automatically discover the DLM rooms and LILM lighting control panels that are on your segment network(s).

Open the Configuration Tab, then choose Device Discovery from the menu on the Left.



2.5.1 Notes on Discovery

Discover: Will run a BACnet discovery process to find new rooms and panels on the segment network(s) connected to this Segment Manager.

Find New Devices: Will discover new devices on the network without disturbing devices that have already been discovered.

Stop: If a discovery process is currently running, you can stop the process by clicking Stop.

For the initial discovery, choose the **Discover** button. This action will first delete any discovery information from the system, then perform a fresh discovery of the network. For larger networks with many devices, this process can take over 30 minutes. In most cases this should only be required one time. If you are adding rooms or panels to your network, you can choose the **Discover** button. This will perform a discovery without first deleting previously discovered rooms and panels. This process will require much less time than a Reset all Rooms.

During discovery, the progress will display in the black bar. When complete the buttons will return to their normal appearance. Once discovery is complete, you may click the Device tab to view the discovered devices. These will be displayed in a navigation tree format. See "Working with the Device Tree" for additional information.

WhoIs: The who is function will run a diagnostic discovery of the network. No devices will be saved into the database.

Note: All other features on this screen should be used by a qualified technician only.

Remove all Devices: Deletes all devices from the database that were previously discovered.

Reboot SM: Reboots the segment manager. Note that a reboot takes approximately four minutes.

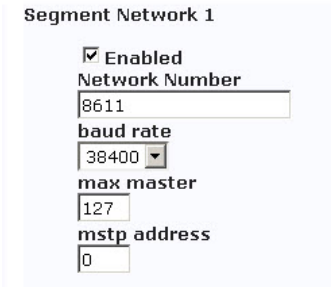
Toggle Device Management: Turns special diagnostic features on and off.

Networks: Selects on which networks the segment manager will discover devices.

2.6 BACnet Settings

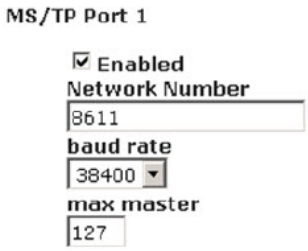
2.6.1 BACnet Routing

BACnet Routing should be enabled only as directed by SattStopper technical services or project management.



2.6.3 Segment Network Ports (MS/TP)

Each segment network port can be configured independently. Segment network port #1 is enabled by default. Ports #2 and #3 are for the LMSBM-603 model segment manager only. To conserve system resources, only ports that are actually used should be enabled. Check the box to enable the segment network port. Do not change any of the other settings unless directed by WattStopper technical services or your system integrator.



2.7 Network Settings:

The network settings allow the Segment Manager to connect and work with a local area network. When using the Segment Manager directly connected to a personal computer, it will not be necessary to change any of these settings. If using the Segment Manager on a LAN, these settings will be provided by the IT department or system administrator of the LAN. If these settings are changed from the defaults, carefully write them down here in the space provided.

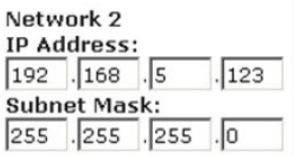
IP Address:_____

Subnet Mask:_____

Gateway:_____

DNS Server:_____

Do not change any setting for Network 2. This port is reserved for use by WattStopper technical services only.



2.8 Date/Time:

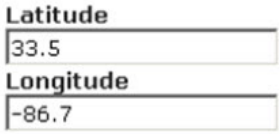
Click on the Calendar icon  to set the date for the Segment Manager.

Use the drop down arrows to set the local time for the Segment Manager. Click the Set System Time button to save the local time.

2.9 Sunrise/Sunset Settings:

These settings are required for the Segment Manager to calculate the sunrise and sunset times that will be used in schedules.

Enter the appropriate latitude and longitude of the Segment Manager installation in the appropriate fields.



Note: a tool is provided on the wattstopper.com web site at

http://www.wattstopper.com/products/tools/geolookup.html that will allow you to easily find this information for many cities. Choose the settings for the city closest to your actual location.

Use the pull down to select the proper time zone where the Segment Manager is installed. Click the Save Timezone and Reboot button

to save the time zone. Note that this will automatically reboot the Segment Manager. It can take up to 5 minutes for the Segment Manager to reboot and return to full on-line operation.

2.10 Tuning Parameters:

IMPORTANT - Consult the factory before adjusting these settings.

2.11 Network Bridge Firmware: This feature allows the Segment Manager to upgrade the firmware installed in the network bridges that are connected on the segment networks. The firmware version that is currently available for transfer to the network bridges is displayed on the screen.

Important: Do not use this function unless directed by WattStopper technical services.

3. Device Tree View

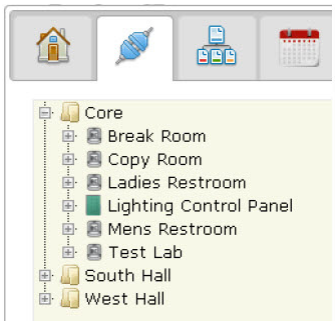
Once the discovery process is complete, the discovered rooms and panels will be displayed in the device tree

view. Click on the Device tab  to display the tree.

There are two tree views available for viewing the network devices in the tree. Expand the Devices by Location node to see the devices sorted by their Location property. Expand the Devices node to see a contiguous list of all devices.

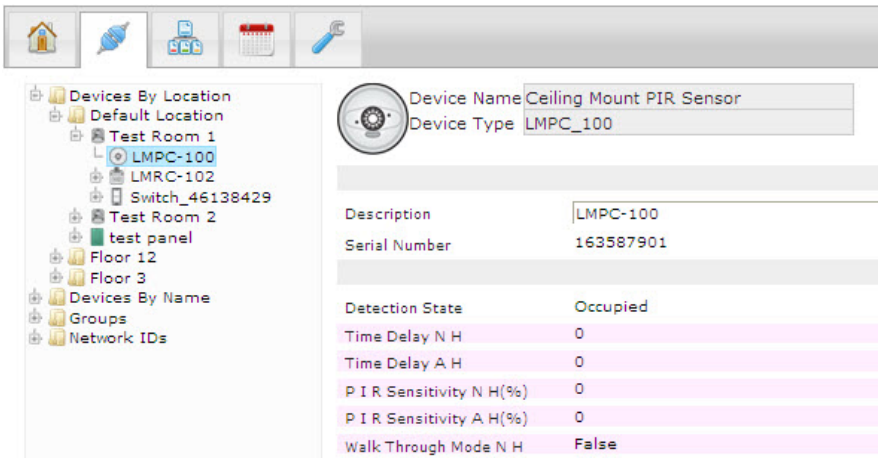
The tree has two additional node types, Groups and Network IDs. Expanding the Groups node will display a list of all Groups that have been created. See "Working with Groups." Expanding the Network ID's node will display a list of Network ID numbers. See "Working with Buttons."

There are three types of devices that can be discovered by the Segment Manager. There are 300 series Room Controllers, LMBC-300 Network Bridge Modules, and LILM lighting control panels. Each of these will show in the tree as an individual tree level node when the By Device selection is active.



To view the contents of a room, click on the **+** to the left of the room. This will expand the tree to show the devices that are being exposed to the network by the network bridge in that room. Room controllers can be expanded further to display the loads and switches can be expanded to show the buttons. Clicking the - beside a device will collapse the tree and hide the loads or buttons.

3.1 Viewing and Changing Device Parameters: To view and change the parameter settings for any device shown in the tree, you will "open" the device for editing in the device parameter frame on the right side of the screen. To open a device for viewing or editing, double click on the icon in the expanded tree.



Note that when changing the Description or Location properties, the new text will not appear in the tree view until the tree is refreshed.

3.2 Network Bridge Settings: Double click the network bridge icon to open the device settings screen for this bridge. Note that settings that are writable will appear in normal text font. Settings that are read-only appear greyed out.

3.2.1 Description: The description property of the network bridge is the actual name that will appear in the tree beside the icon. By default the description field will have the serial numbet of the network bridge. Use the keyboard to write a meaningful name that will appear in the navigation tree. Note that if the LMCS-100 software or the LMCT-100 was used during the room commissioning to enter a name for the room, that name will already be in the description field after discovery.

3.2.2 Location: The location property of the network bridge can be used to define a hierarchy in the tr5ee view. All rooms with an identical entry in the location field will appear grouped at a sub-level in the tree view under that heading. For example, all rooms with the location property "West Hall" will be grouped together under the sub-level heading West Hall.

3.2.3 Schedule: The schedule property has two modes, normal hours and after hours. The current schedule mode for the room will be indicated by the radio button that is selected. You can force the room into a schedule mode for testing or other purpose by selecting the appropriate radio button.

3.2.4 Switch Lock: This parameter allows all of the buttons in a room to be locked at their current status. Click the radio button to lock or unlock the buttons in the room. Note that the switch lock status is displayed individually for each switch when viewing switch properties. It is not settable on a per-switch basis. However, each switch can have the lock feature enabled or disabled locally using the LMCS-100 commissioning software.

3.2.5 Scene: Use the pull down to send a scene command to a room. It is important to note that this parameter is not updated when a scene is actuated locally by a button in the room. It does not necessarily reflect the current scene active in the room. Note: If the room has a scene switch installed, you can view the status of the scene button LEDs to determine which scene is currently active in the room.

3.3 Working with Room Controllers: To access room controller parameters, double click on a room controller icon in the expanded tree. This will display the settings for the room controller on the right side of the screen.

3.3.1 Description: The description property of the room controller is the actual name that will appear in the tree beside the icon. By default the description field will have the serial number of the model number of the room controller. You may use the keyboard to write a meaningful name that will appear in the navigation tree if desired. Note that it is necessary to refresh the tree view for the new text to appear in the tree.

3.3.2 Current, Voltage and Wattage: Room controller models capable of measuring current will report the current in Amps as a read-only value. Watts is a calculated value based on the measured current in Amps and the user entered Voltage in volts. The system does not measure the voltage so if the Voltage field is zero (0), the Wattage field will be zero (0). This calcuoation is based on the total current flowing through the room controller and is the aggregate of all the loads controlled by the room controller.

3.3.3 Load parameters: Double clicking on a Load icon under the room controller in the expanded tree view will open the setup page for the load on the right side of the screen. Note that some load parameter settings have both a **Normal Hours** and **After Hours** setting. These settings automatically change as the room is scheduled between Normal Hours and After Hours mode.

3.3.4 Description: The description property of the load is the actual name that will appear in the tree beside the icon. By default the description field will simply indicate Lod A, B, C. You may use the keyboard to write a meaningful name that will appear in the navigation tree if desired. Note that it is necessary to refresh the tree view for the new text to appear in the tree.

3.3.5 Load Level (%): This is the light level of the load expressed as a percentage (See additional notes about load level above under "Working with Room Controllers." Use the pull down to set the load to a level. As a convenience, the Off button and Full On button can be used to set the load quickly to off or full on. Note that if the load is set to dimming and has a fade time parameter set, it will fade to the commanded level.

3.3.6 Sensor Mode: Use the pull down to tell the load what to do when an associated occupancy sensor is activated. The choices are: Do Nothing, Manual On, On Only, and Auto On. Note there are independent settings for normal hours and after hours.

3.3.7 Transition State: Use the pull down to set a level for the load to go to upon a transition between schedule modes. The normal hours setting will take affect when the **Normal Hours** mode is in effect. The after hours setting will take affect when the **After Hours** mode is in effect. As a convenience, the three non level-specific settings; Do Nothing, Last Non-Zero, and Relinquish can be set without using the pull down menu. Note that the **Last Non-Zero** setting will return the load to the level it was at when it was last On. The **Relinquish** setting will cause the load to go Off unless another device in the room has it set to a non-zero level. The **Do Nothing** setting indicates that the load will not react to the transition.

3.3.8 Override Time Delay: A value between 0 and 240 minutes indicating the time that a load will remain on after being activated by a button. Note there are independent settings for normal hours and after hours. The default for Normal Hours is zero (0) and the default for After Hours is 120 minutes.

3.3.9 Blink Warn: A true or false setting indicating if the load should do a Blink Warn prior to going off due to a schedule (see "Transition State" above). Blink warn is ignored when the off is initiated by a button.

3.4 Working with Occupancy Sensors: Double click on an occupancy sensor in the expanded tree to open the occupancy sensor setup page on the right.

3.4.1 Description: The description property of the sensor is the actual name that will appear in the tree beside the icon. By default the description field will contain the model number of the sensor. You may use the keyboard to write a meaningful name that will appear in the navigation tree if desired. Note that it is necessary to refresh the tree view for the new text to appear in the tree.

3.4.2 Detection State: The detection state is a read-only property that indicates whether the occupancy sensor is currently detecting occupancy. An "occupied" state does not necessarily mean that the lights in the space are on since the loads might be set to Manual On. Note that if you are testing the operation of the sensor, you will need to periodically click on the sensor icon in the tree to refresh the display.

3.4.3 Time Delay: You can set the desired time delay for the occupancy sensor by selecting a valid time from the pull down menu. Note that there are independent Time Delay settings for both normal hours and after hours schedule modes.

3.4.4 PIR Sensitivity: This setting will only be present if the sensor model used has PIR technology. Use the pull down menu to set the desired sensitivity for the PIR detection. Setting the sensitivity to zero (0) will disable PIR detection in the sensor. Note that there are independent PIR Sensitivity settings for both normal hours and after hours schedule modes.

3.4.5 Ultrasonic Sensitivity: This setting will only be present if the sensor model used has ultrasonic technology. Use the pull down menu to set the desired sensitivity for the ultrasonic detection. Setting the sensitivity to zero (0) will disable ultrasonic detection in the sensor. Note that there are independent Ultrasonic Sensitivity settings for both normal hours and after hours schedule modes.

3.4.6 Walk-Through Mode: Click the approprete radio button to set walk-through mode to True (enable walk-through mode) or False (disable walk-through mode). Note that there are independent Walk-Through Mode settings for both normal hours and after hours schedule modes.

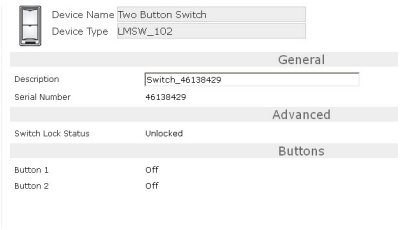
3.4.7 Detection Scheme Trigger: This setting will only be present if the sensor model is dual technology. Use the pull down menu to select which detection technology(s) to use for an initlal detection of occupancy.

3.4.8 Detection Scheme Retrigger: This setting will only be present if the sensor model is dual technology. Use the pull down menu to select which detection technology(s) to use to keep the lights on once the sensor has initially been triggered.

3.4.9 Preset Level On: Use the pull down menu to set the light level that will turn on when the sensor is triggered to the occupied mode. Note that this level will supersede the load's Preset On level setting. See Working With Room Controllers above. The default setting is Last Non Zero which will return the load to the level it was at when it was turned off.

3.4.10 Detection LEDs: Use the pull down to Enable or Disable the visible LED indicators on the face of the occupancy sensor. Note that disabling the LEDs will not affect the operation of the sensor.

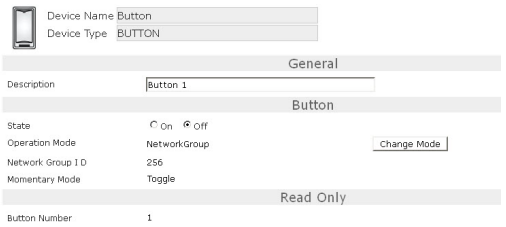
3.5 Working with Switches: Click on a switch in the tree to open the settings screen for the switch. Expand the switch in the tree so see the buttons on the switch.



3.5.1 Description: The description property of the switch is the actual name that will appear in the tree beside the icon. By default the description field will contain the model number of the switch. You may use the keyboard to write a meaningful name that will appear in the navigation tree if desired.

3.5.2 Switch Lock Status: This indicates if the switch is currently in a locked condition or unlocked. By default, all switches are Unlocked. This property is read only on this page. All switches in a room can be locked or unlocked from the top most tree level (Network Bridge) of the room. See "Network Bridge Settings."

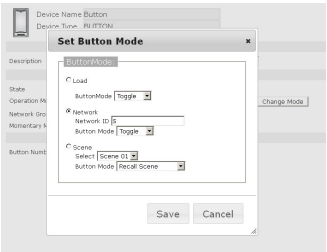
3.6 Working With Buttons: Clicking on a button in the expanded tree view will open the settings screen for the button. The Segment Manager supports three types of buttons; Load buttons control loads in the room. Scene buttons active a preset scene in the room. Network buttons control loads across the network.



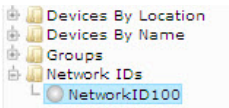
3.6.1 Description: The description property of the button is the actual name that will appear in the tree beside the icon. By default the description field will contain the current function of the button. You may use the keyboard to write a meaningful name that will appear in the navigation tree if desired.

3.6.2 State: The radio buttons indicate the current state of the button. Click on the On or Off radio button to toggle the state of the button. Changing the state of the Button will actually change the state of the load controlled by the button.

3.6.3 Operation Mode: This a read only field that indicates the current button type setting. Click the Change Mode button to change the button type. Note: you must be logged on as Administrator to access the Change Mode button.

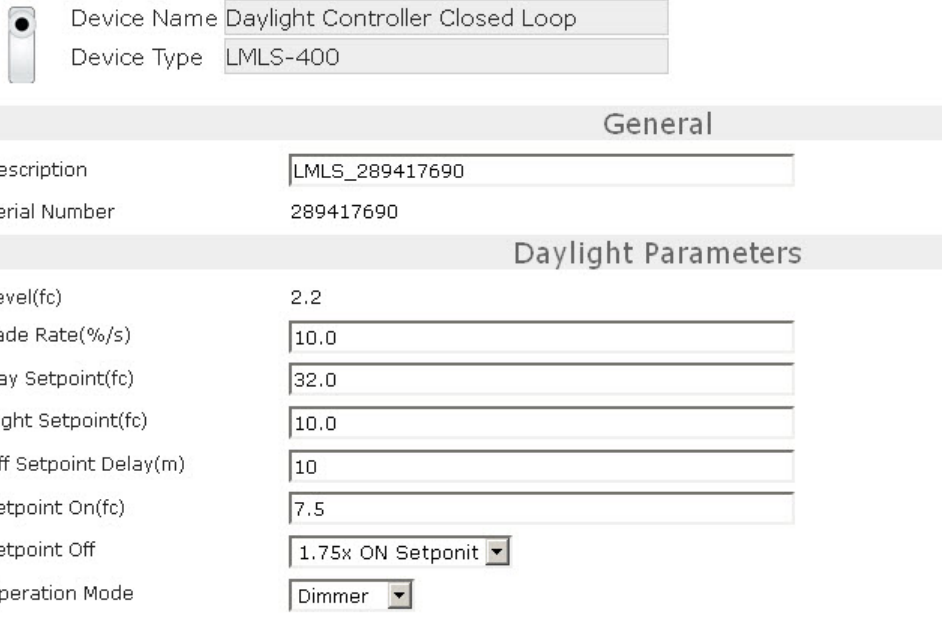


3.6.4 Network Group ID: Select the Network radio button if the button is to be designated for use as a network button. Note: you must be logged on as Administrator to access the Network Radio button. Enter a Network ID number for this button. The Network ID is used to associate this button with other buttons that will have the same function and the Group that will be controlled. Network ID numbers that are in use will appear at the bottom of the Navigation Tree. Select the Scene radio button if the button is to be designated as a scene button.



3.7 Working with Daylight Sensors

Click on a Daylight Sensor in the tree to open the settings screen. For the daylight sensor:



3.7.1 Level (fc) The level is the amount of light as measured by the daylight sensor expressed in foot candles.

3.7.2 Fade Rate (%/s) Fade rate is the speed at which dimmed loads will change brightness in response to the daylight sensor. The rate is expressed as a percentage of dimming range per each second of time.

3.7.3 Day Setpoint (fc) The day septoint setting expressed in foot candles.

3.7.4 Night Setpoint (fc) The night setpoint expressed in foot candles.

3.7.5. Off Setpoint Delay (m) The delay before the load turns off after reaching minimum level expressed in minutes.

3.7.6. Setpoint On (fc) The On setpoint expressed in foot candles.

3.7.7 Setpoint Off The Off setpoint expressed as a multiple of the On setpoint.

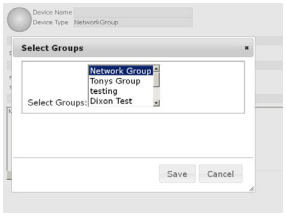
3.7.8 Operation Mode The operating mode of the daylight sensor.

3.8 Working With Network ID: Click the Network ID in the tree view to open the Network ID setup screen. On this screen you can select the lighting to be controlled by the button(s) associated with this ID number. The controlled lighting must be specified in a Group. See "Working with Groups."

3.8.1 Description: The description property of the Network ID is the actual name that will appear in the tree beside the icon. By default the description field will contain the current ID number of the button. You may use the keyboard to write a meaningful name that will appear in the navigation tree if desired.

3.8.2 State: The radio buttons indicate the current state of the Network ID. Click on the **On** or **Off** radio button to toggle the state. Changing the state of the Network ID will actually change the state of the **Loads** or **Relays** contained in the Group assigned to this ID.

Click on the **Edit Group** button to open the group selection dialog box. Select the **Group** that is to be associated to this **Network ID** number. Click **Save** to save the setting.



3.9 Working with Panels

Panels will appear in the tree view at the same level as room controllers. Expanding a panel will expose the Channels and the Relays in the tree below the panel.

3.9.1 Channels: Click on Channels to display a status screen for the 8 channels. Each channel will indicate if it is currently in the Normal Hours or After Hours schedule mode.

Expand Channels to display the 8 channels for this panel in the tree. Click on a channel to open the channel properties screen.

3.9.1.1 Description: Enter text in the description field to identify the channel. Entered text will appear in the tree view beside the channel after the tree view has been refreshed.

3.9.1.2 Schedule Mode: The radio buttons show the current schedule mode of the channel. Click on the radio button to force the channel into Normal Hours or After Hours mode. This override feature may be useful in verifying that the channel operates the relays as expected. Note that the panel can take up to 10 seconds for the channel to change modes.

3.9.1.3 Blink Warn: Use the drop down to select the Blink warn or AS-100 mode. Selecting blink will cause all relays assigned to the channel to blink off and on for .5 second five minutes prior to the relays turning off after a schedule off event. Selecting AS-100 will enables the use of AS-100 Automatic Wall Switches. With AS-100 selected, the relays will pulse off for 1 second upon a transition to After Hours mode. Consult the Installation Instructions with the AS-100 switch for a complete description of their operation.

3.9.1.4 Response: Use the radio buttons to select either Manual On or Auto On for the relays assigned to the channel. When set to Auto On, the relays will automatically turn on when the channel transitions from After hours to Normal Hours mode. When set to Manual On, the relays will wait for a manual button action or an occupancy sensor detection to turn on during Normal Hours mode.

3.10 Working with Relays

3.10.1 Relays: Click on Relays in the tree to open the relay status screen. Each relay will indicate its current state as On or Off.

Expand Relays to display a list of the relays in the panel. Click on a relay to open the relay properties screen.

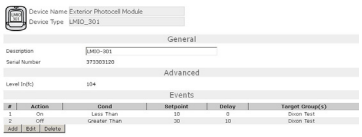
3.10.1.1 Description: Enter a meaningful text description for the relay in the Description field.

3.10.1.2 State: The current state of the relay will be shown by the radio buttons. Click On or Off to change the state of the relay.

3.10.1.3 Channel Program: Use the drop down to assign the relay to one of the eight available channels. This action has exactly the same result as assigning the relay to the channel using the Smartwire feature in the panel. See the LILM panel Installation Instructions for information on Smartwiring.

3.11 Working with Photocells

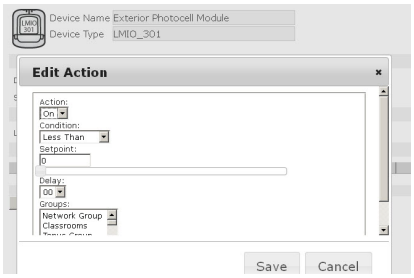
Navigate to the LMIO-301 Analog photocell Module that is to be programmed. Since the LMIO-301 will be connected to one of the Local Networks, it will appear in the tree under one of the Room Controllers. Click on the LMIO-301 to open the Photocell Setup screen.



3.11.1 Description: Enter a description for the LMIO-301 in the Description field. The description will appear in the tree view beside the LMIO-301.

The photocell setup screen allows control of lighting based on the exterior light level or atrium light level reported by the LMIO-301 photocell module.

3.11.2 Adding a new event: Click on the Add button to add a new trigger event for the photocell. The photocell edit box will open



Action: use the drop down to select On or Off as the action to be performed

Condition: Select **Less Than** or **Greater Than** as the logical condition under which this event will act in relation to a light level.

For typical outdoor lighting applications, the target group will be set to turn off when the light level is above the set point or turn on when the light level is below the set point. Note that it takes two trigger actions to create an on/off scenario. A dead band can be created by setting the On set point higher than the Off set point. This will prevent cycling of the lighting during periods when the light level is hovering near the set point.

3.11.3 Set Point: enter the target foot candle level for the set point that must be met before the control action will take place. This setting is helpful for preventing undesired cycling due to temporary conditions such as a cloud passing over the area.

3.11.4 Group(s): Use the drop down to select one or more groups for control by this event. Note that only valid Relay and Level group types will appear in the list. More than one group can be selected by holding down the Ctrl key while clicking on group names.

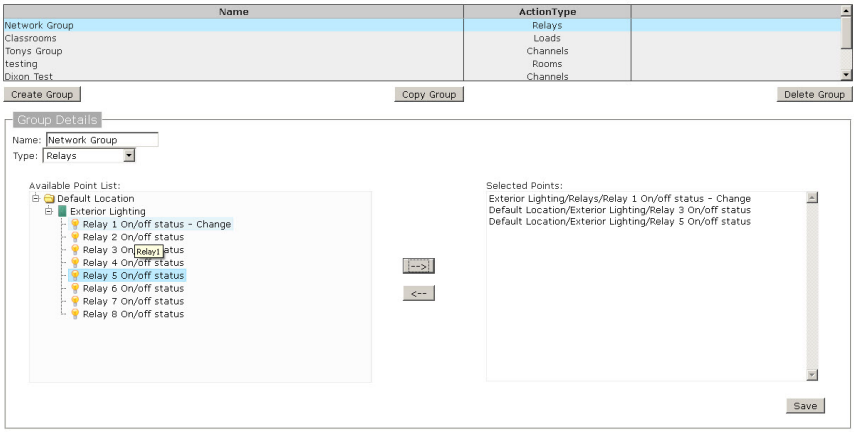
3.11.5 Delay: use the drop down to select a time delay in minutes for the event. This is the time that the logical condition must Click the **Save** button to save this event. Or, click the **Cancel** button to discard the event. After saving the event it will appear in the event list.

3.11.6 Edit an event: Highlight an event in the list then click the **Edit** button to open the event edit box. Make the necessary changes and click the **Save** button to save the event.

3.11.7 Deleting an event: Highlight the event to be deleted. Click the **Delete** button to delete the event. Confirm the action when prompted.

4. Group Tab

Click the Groups tab to open the Group page to view existing groups and configure new groups. Groups are used to associate building areas or unique loads together for common control.



The frame at the top of the page will display a listing of the groups that are currently saved in the system. Note that there are four types of groups that can be created. These are listed in the frame as Rooms, Loads, Channels or Relays. The current status of the groups is also shown.

Clicking on a group name will display the details of the group. These can now be edited.

4.1 Creating a New Group (Rooms):

Click the Create Group button to start the process of creating a new group. Groups will later be associated with a schedule for control.

4.1.1 Name: Enter a name to identify the group. This name will appear in the group list at the top of the page.

4.1.2 Type: use the pull down to select Rooms. This selection will set the purpose of this group as an area of the building that will be the target for a schedule (see "Working with Schedules").

4.1.3 Available Point List: Expand the tree as required to find the room or channel that is to be included in the group. Use the right arrow to include the room or channel in the group. You can also simply drag the icon into the group. To remove an entry, highlight the entry to b e removed and click the left arrow.

4.2 Creating a New Group (Loads):

Click the Create Group button to start the process of creating a new group.

4.2.1 Name: Enter a name to identify the group. This name will appear in the group list at the top of the page.

4.2.2 Type: Use the pull down to select Loads. This selection will set the purpose of this group as a load or list of loads that will be the target for a schedule (see "Working with Schedules") or bound to a button for manual control (see "Working with Network Buttons") or bound to a photocell for dark/light activated control (see "Working with Photocells").

4.2.3 Available Point List: Expand the tree as required to find the room or channel that is to be included in the group. Use the right arrow to include the room or channel in the group. You can also simply drag the icon into the group. To remove an entry, highlight the entry to be removed and click the left arrow.

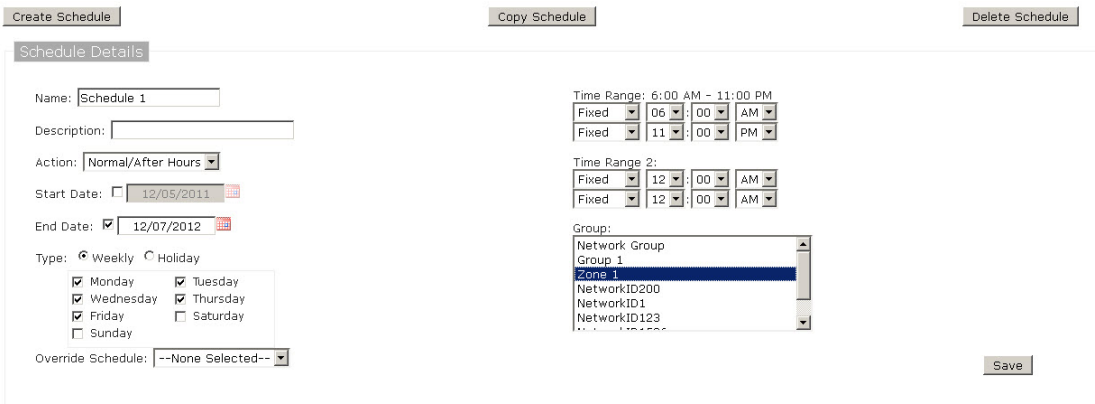
4.2.1 Copy Group:

Click on the group name to be copied to display the details. Click the Copy Group button. The Name: field will be blanked out. Enter the name for the new group and make the desired changes per the instructions above. Click the Save button to save the new group.

4.2.2 Delete Group: Click on the group name to be deleted. Click the Delete button. Confirm the action when prompted.

5. Schedule Tab

Click on the Schedules tab to open the Schedules page to view existing schedules and create new schedules. The frame at the top of the page will display a listing of the schedules that are currently saved in the system.



5.1 Creating a New Schedule: Click on the Create Schedule button to display the schedule details information.

5.1.1 Name: Enter a name to identify this schedule.

5.1.2 Description: Enter a description to help identify the purpose of this schedule (optional).

5.1.3 Action: Use the pull down to select the type of schedule. A Normal/After Hours schedule will affect the Normal Hours and After Hours operating mode for Rooms and/or channels in LILM panels. A set level schedule will directly affect the light level of Loads in the target group.

5.1.4 Set Level: Use the pull down to set the level for the loads.

5.1.5 Start Date/End Date: These fields allow a schedule to have a defined range of dates to affect. By default these are grayed out and the schedule will begin immediately and will be in effect for an indefinite period of time. Click the check box to activate the Start Date and/or the End Date fields. Enter the desired dates manually or select dates using the Calendar function.

5.1.6 Type: Use the radio buttons to choose schedule type as a Holiday schedule or a Weekly Schedule. If creating a Weekly schedule, select the days of the week that this schedule will affect. If creating a Holiday schedule, click the Add button to add holiday dates to the list.

5.1.7 Time Range: Each schedule allows for the definition of two separate time ranges during which the schedule will be active. For a Normal/After Hours schedule, these are the periods when the target group will be in Normal Hours mode. For a Set Level schedule, the load group will be at the set level during these periods.

5.1.8 Group: Select the group or groups to be affected by this schedule.

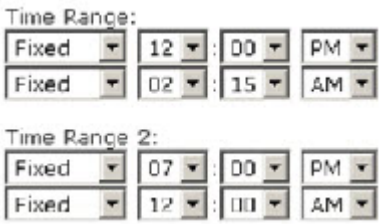
When all entries have been made, click the Save Button to save the schedule.

5.2 Schedule Examples

5.2.1 Astronomic Schedule: Each day that will use an astronomic schedule will require two events, one that continues the ON event from the previous day. And, one that starts the ON event for the current day. Note that the overlapping events at midnight will cancel each other out without affecting the lights. The schedule would be entered as follows:

In the above example, the lights were on from the previous day's schedule so nothing happens at midnight. The lights will turn off at Sunrise based on the astronomic settings. The lights will then turn on at Sunset and remain on through the night providing there is a contiguous ON event the next day that begins at midnight.

5.2.2 Day Spanning with a Schedule: An ON event that needs to span midnight into the next day requires two events in each day. One event will turn the lights on at the required time. The second event will start at midnight to continue the ON from the previous day and end at the required time. A schedule that turns the lights on at 7:00 PM and off at 2:15 AM the following morning would be entered as follows:



5.3 Copy a Schedule: To use an existing schedule as the basis for creating a new schedule, select a schedule from the list. Click the Copy Schedule button to display the schedule details. Enter a name for the new schedule and make the desired changes per the above instructions. Click the Save button to save the new schedule.

5.4 Delete a Schedule: To delete a schedule, select a schedule from the list. Click the Delete Schedule button and confirm the action when prompted.

NOTES

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WattStopper®

2800 De La Cruz Boulevard, Santa Clara, CA 95050
Technical Support: 800.879.8585 • www.wattstopper.com

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