



ENTOUCH ONE LIGHTING CONTROL USER GUIDE

V1.0

ENTOUCH
CONTROLS

TOTAL FACILITIES INTELLIGENCE

Contents

EnTouch One lighting control is a simple and elegant way to take control of interior and exterior lighting. Manage your lighting schedules remotely, track and change settings, and ensure proper performance.

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The EnTouch One Lighting Control Platform
The EnTouch lighting control platform is designed to work with our EnTouch One EMS family. Manage your facilities through our cloud based system using your computer, tablet, or mobile device.

Schedule and control interior lights, exterior signage, parking lot lights, and other critical facility loads.

EnTouch One Lighting Control Features

Multiple Facility Lighting Control

Our lighting control platform is designed for commercial applications. It provides consistent scheduling, local override features, and supports external inputs from photosensors, motion detectors, or alarm system inputs. Update your existing controls and improve facility performance.

Remote Control

The system communicates wirelessly to the EnTouch Cloud Service, allowing you to quickly make changes to settings and schedules through our remote management tools, wherever you happen to be. Our security features prevent unauthorized user changes and ensure consistent guest experience.

Configurable Features

The system is flexible, allowing it to control the most complex applications. Drive loads directly or through external contactors. Set default powerup and drive states for each circuit. Adapt and expand as your facility needs grow.

Flexible Scheduling

Schedules can be set for each circuit, allowing flexibility to meet your needs for interior lighting, exterior lighting, signage, parking lot lights, and security lighting. Schedules will adjust for daylight savings time changes, you can rest easy knowing your lighting is operating properly.

Support for External Inputs

The system can accept inputs from static switches, motion detectors, and photo sensors. Use these inputs to facilitate daylighting and emergency override features. Comply with new building efficiency standards while optimizing performance and reducing operating cost.

Designed For Retrofit Applications

Unlike traditional wired systems, EnTouch lighting controls are easy to install and don't require extensive communication wiring or programming. In fact there is no programming required. Schedules and configurations are set through our cloud services and can be managed through your mobile devices. Easy to use, quick to get started, and cost effective for your business.

EnTouch One Lighting Control

Technical Specifications



Technical Specifications

Power	115VAC, 15 watts maximum
Enclosure	Metal indoor rated
Dimensions	12" x 12" x 4"
Local Interface	Illuminated push-button override
Operating Temperature	0 to 45C (32 to 113F)
Wiring	#10 to #14 AWG
Number of Outputs	4

Contact Ratings

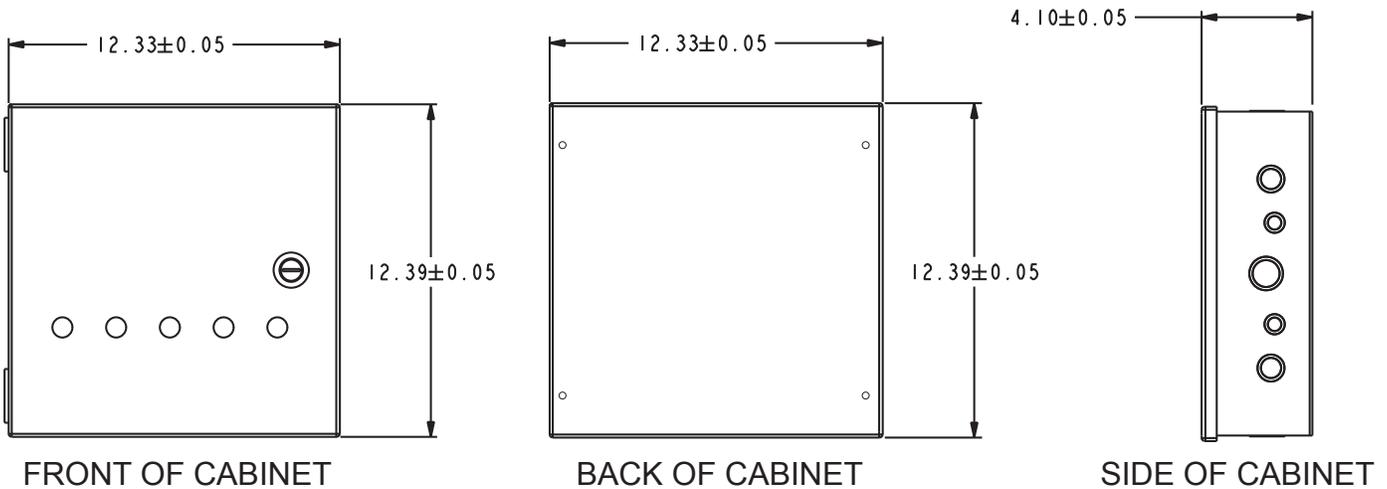
General	24VAC, 244-277VAC, 20A
Ballast	120-277VAC, 10A
Tungsten	120VAC, 6A
Pilot Duty	120-277VAC, B300

Model

EnTouch One Lighting Control

Dimensional Drawing

DIMENSIONS ARE IN INCHES



LCM-4 Contactor Cabinet

Technical Specifications



Technical Specifications

Enclosure	Metal indoor rated
Dimensions	12" x 12" x 4"
Operating Temperature	0 to 45C (32 to 113F)
Wiring	#10 to #14 AWG
Number of Contactors	4
Number of Outputs Per Contactor	4

Contact Ratings

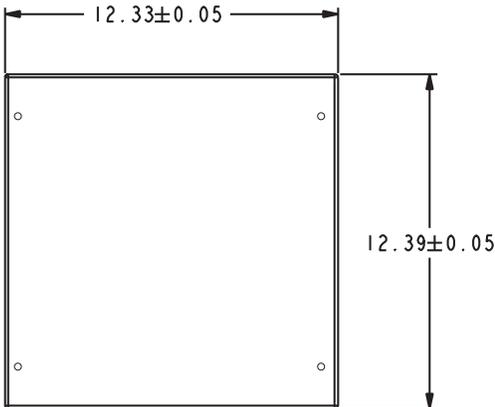
Ballast	600VAC 50/60 Hz, 25A MAX
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Model

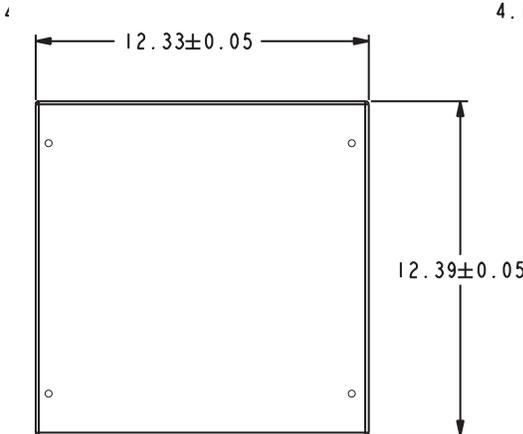
LCM-4 Contactor Cabinet

Dimensional Drawing

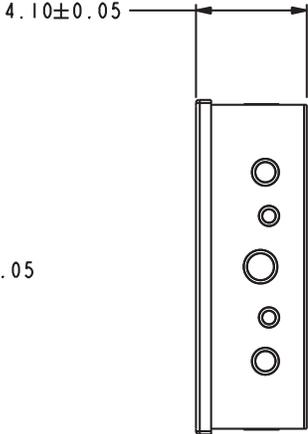
DIMENSIONS ARE IN INCHES



FRONT OF CABINET

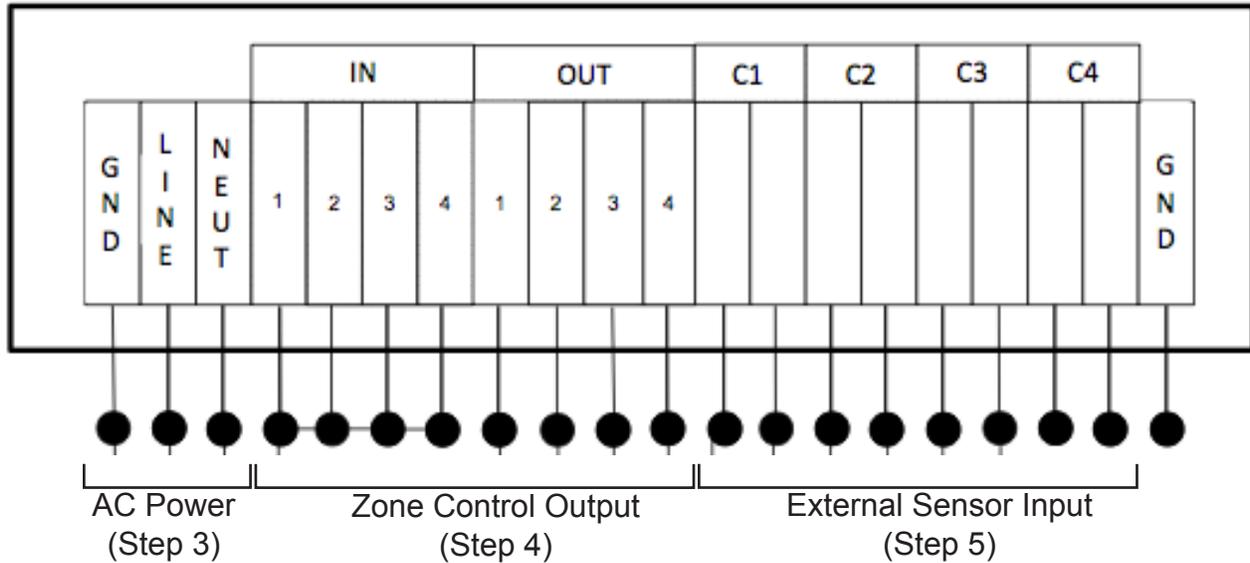


BACK OF CABINET



SIDE OF CABINET

EnTouch One Lighting Control Installation Instructions



Installation Steps Overview

1. Mount the lighting control cabinet.
2. Mount the LCM-4 cabinet(s) as needed

Note: Identify breaker used for power of lighting control panel and power off.

3. Connect power to lighting control cabinet via independent single pole breaker
4. Connect controlled zones to LCM-4 cabinet if used (see exhibit A)
5. Connect external override sensors (motion, photo cell, etc.) (see exhibit B)
6. Energize Lighting Control Cabinet
7. Connect to the EnTouch One Control (Gateway)
8. Program the Lighting Control settings via the Web Management Portal

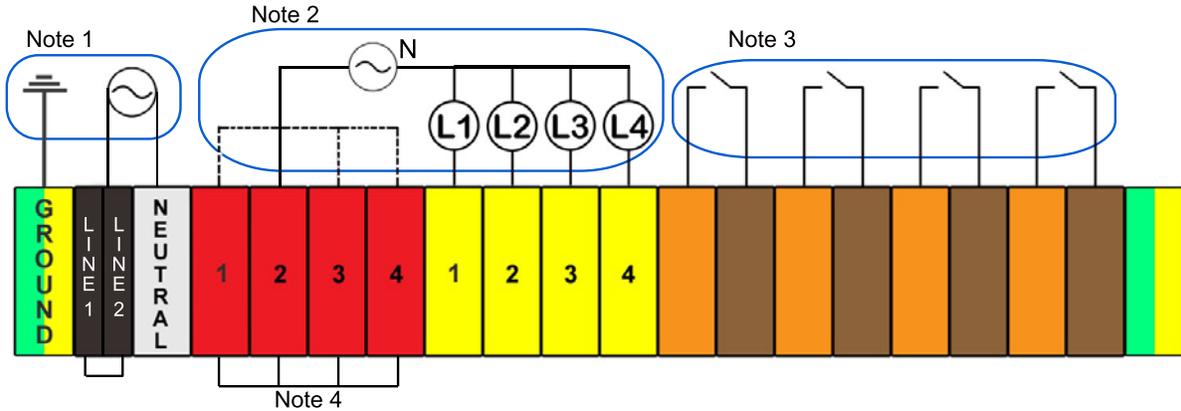
EnTouch One Lighting Control Installation Instructions



Mounting the cabinet:

1. Mark where the screws will go.
 - a. The Lighting Control cabinet is attached to the wall by 4 screws.
 - b. Note that 120V power must be run to the cabinet once secured to the wall.
2. Drill holes for anchors
 - c. Use proper hardware for mounting to specific structure. (up to a #10 size screw is accepted)
3. Attach Cabinet to wall
 - a. After holes are drilled, insert anchors into the wall and insure they are flush. Attach the cabinet to the wall.

EnTouch One Lighting Control Installation Instructions



Note 1

CAUTION! The unit must be properly grounded at the GROUND terminal to comply with national and local electrical codes.
Required Power Supply: 115V AC, 60 Hz, 0.5 W maximum from a properly protected branch feed.

Note 2

WARNING! Do not combine low power isolated load with line powered hazardous voltage loads for the control wiring. Combining such loads at these terminals could potentially cause serious risk of electrocution and/or equipment damage.

Type	Voltage	Rating
General	24- 277VAC	20A
Ballast	120-277VAC	10A
Tungsten	120VAC	6A
Pilot Duty	120-277VAC	B300

Note 3

WARNING! Isolated dry contact only! Risk of electrocution and damage to the equipment will occur if these terminals are wired with an energized source.

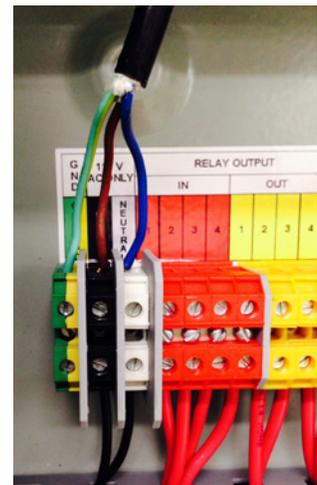
Note 4

Factory installed jumper may be removed if wiring of individual loads are required (dashed lines).



Wiring the cabinet:

1. Run 120V power to the cabinet from electrical panel
2. Attach 120V to GND/LINE/NEUT



EnTouch One Lighting Control Installation Instructions

3. Connect Relay Input

These are the terminal blocks that connect your load.

The activation mechanism of this relays are selectable as following via web interface:

Option 1: Zone ON = De energized relay coil . This is the default configuration.

Option 2: Zone ON = Energized relay coil.

For a failsafe lighting control operation option 1 is recommended. Option 2 is more suitable for non-lighting loads.

Note: Factory wiring for the output relay is NO output in a power on state. This relay is Form C and a field configuration to a NC output is possible. Contact factory for NC configuration

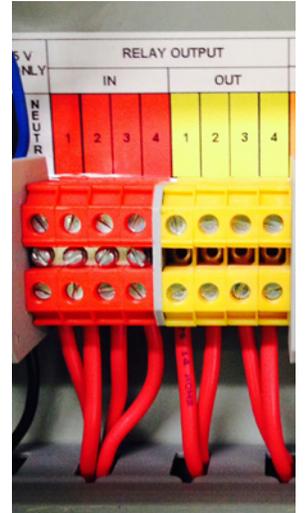
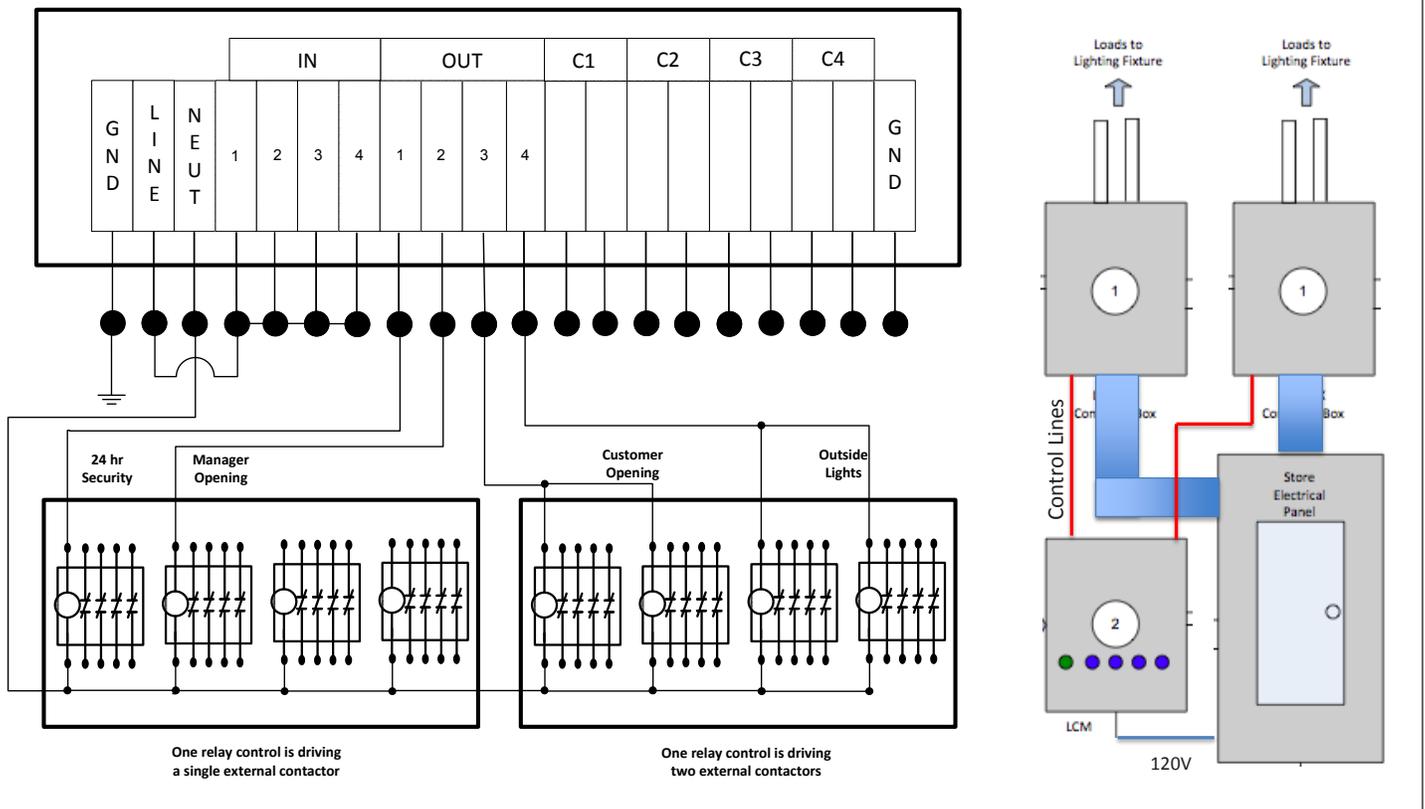


Exhibit A

Application 1

Wiring of a bank of contactors - This is an example of a multiple external contactor bank control for lighting. You need to provide 120V to power this application from a properly protected and clearly marked source.

Note: Multiple banks of contactors can be controlled provided the electrical rating of the control is not exceeded.



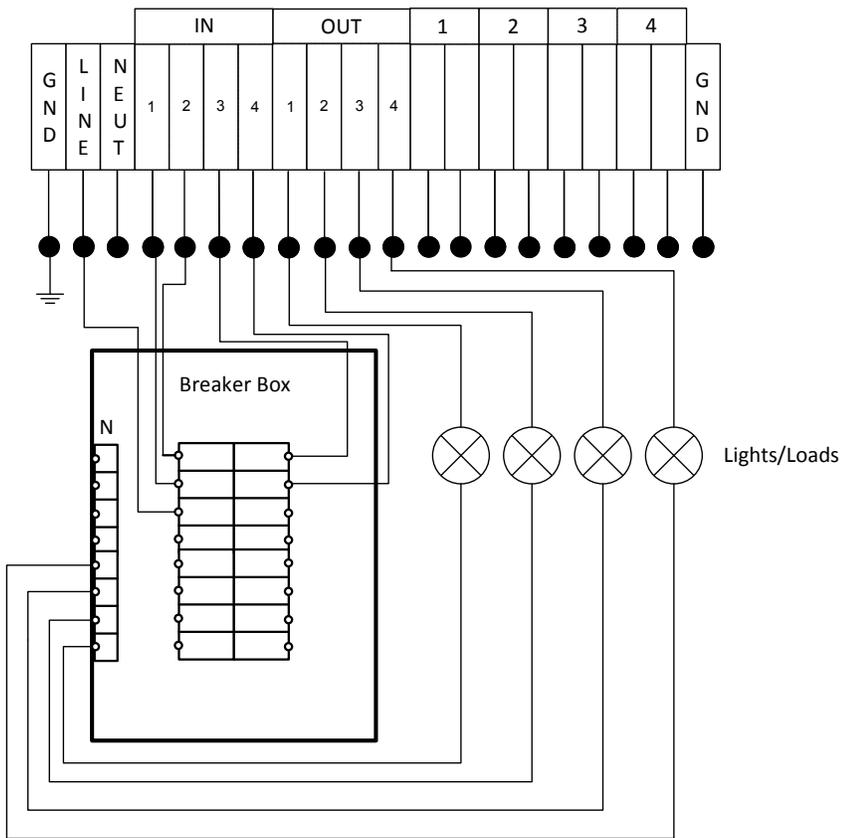
EnTouch One Lighting Control Installation Instructions

Exhibit A Cont.

Application 2

120V independent wired breakers - This is an example of individual direct control of branch circuits.

Note: For this application jumper bar must be removed on red terminal block in LCM cabinet.



EnTouch One Lighting Control Installation Instructions

4. Connect External Control Inputs

The four external inputs can be used control the output. These inputs must come from a potential free contact (dry contact). These inputs can be configured via the web portal.

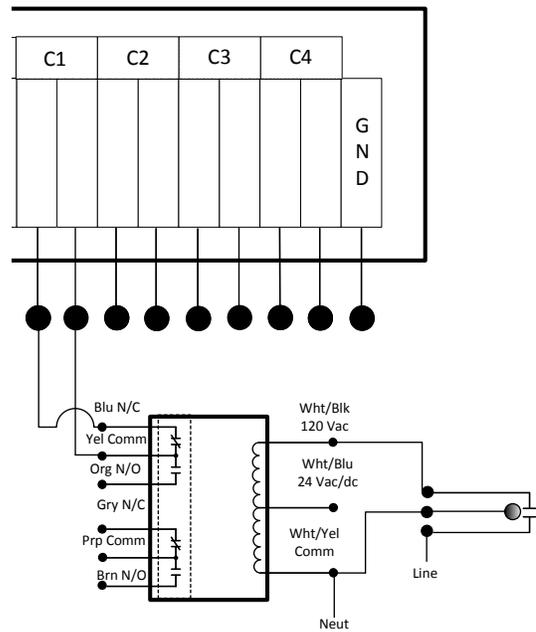
Typical inputs that are supported: (**Note:** must be a dry contact input!)

- Photo cell
- Motion Sensors
- Fire System Input
- Standard on/off wall switches

Exhibit B

Application 1

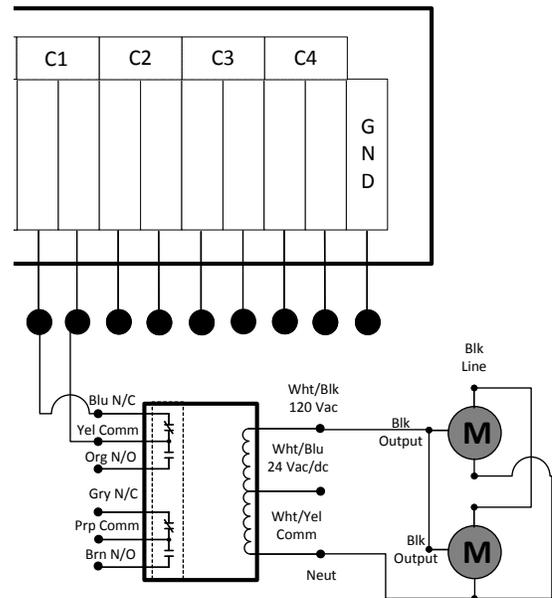
Photo cell, Fire System Input



Application 2

Motion Sensor

Note: LCM has its own delay sequence, set from the user portal. Third party external inputs motion delay should be set to minimum.



Connecting the EnTouch One Lighting Control to the HVAC Controller (Gateway)

Your EnTouch One Lighting Control connects to the web management portal through your EnTouch One Master Controller.

To connect the lighting control:

1. Select the menu icon on the Master Controller
2. Select Setup and Troubleshoot
3. Select Connect Devices
4. Select Lighting Control
5. Your lighting control should appear on this list. Connect the device to the controller by selecting the device (Eg. LC-00XXXX).
6. Once the lighting control is connected to the master controller, The device status will show a green box with the word "Connected". The RSSI and LQI will also show up in a green box if a connection was successful.



Setting Up Your EnTouchGo User Portal

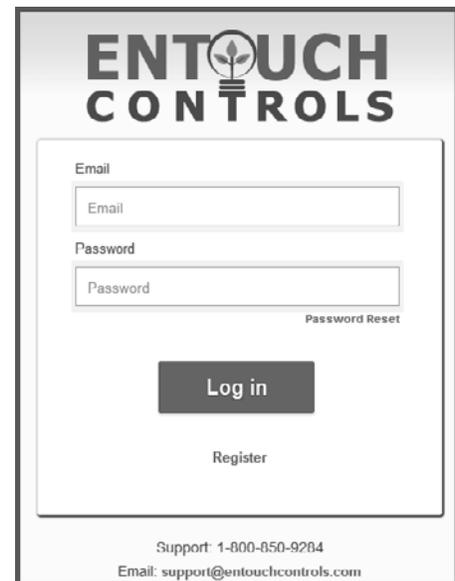
Using The Web Management Portal

The EnTouch One Lighting Control can be managed remotely through the EnTouchGo web portal. This is where you will name your device, name individual relays, and set lighting schedules and events.

Step 1. Getting Online

Using a computer or tablet device connect to www.entouchgo.com

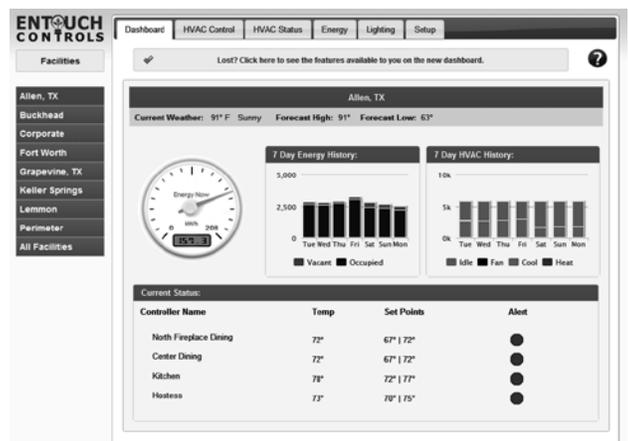
If you are a first time user, click on the **REGISTER** link to set up your account.



Step 2. Create A Facility And Add Your Devices

Adding A Facility

- Go to the **SETUP** tab.
- Click on **ADD A FACILITY**.
- Enter a facility and assign it a name.
- Enter location information – zip code and time zone – for proper time and weather information.
- Enter contacts for the facility and set them up to receive **SMS** or **EMAIL** alerts.
- Enter optional data on facility size, energy rate, type of facility, and energy categories for custom energy mapping.



Setting Up Your EnTouchGo User Portal

Adding Controllers To Your Facilities

- Go to the **SETUP** tab.
- Click on **ADD A CONTROLLER**.
- Enter the online passcode for the controller. This five-character code is found in the **SYSTEM INFO** menu.
- Set alert preferences for the controller.

The screenshot shows the 'Setup' tab in the EnTouchGo user portal. The navigation bar includes 'Admin', 'Enterprise', 'Dashboard', 'Control', 'Graphs', 'Reports', 'Setup', and 'Alerts'. The 'Setup' tab is active, and the 'Lighting Setup' section is expanded to show 'Info', 'Basic', 'Advanced', and 'Alerts' sub-tabs. The 'Basic' sub-tab is selected. The form contains the following fields:

Lighting Group Name: <input type="text" value="Facility Lights"/>	External Input 1 Name: <input type="text" value="Hall Sensor"/>
Load 1 Name: <input type="text" value="Office Lights"/>	External Input 2 Name: <input type="text" value="Office Sensor"/>
Load 2 Name: <input type="text" value="Lab Lights"/>	External Input 3 Name: <input type="text" value="Lab Sensor"/>
Load 3 Name: <input type="text" value="Training Room"/>	External Input 4 Name: <input type="text" value="Storage Sensor"/>
Load 4 Name: <input type="text" value="Conference Room"/>	

A 'Cancel' button is located at the bottom right of the form.

Step 2. Configuring The Lighting Control

- Go to the **SETUP** tab.
- Click on **LIGHTING AND LOAD CONTROL**.

Info Tab

This is for referencing settings for your lighting control.

Basic Tab

This is where you can assign names to the lighting control, individual loads (zones) as well as external inputs.

Setting Up Your EnTouchGo User Portal

WARNING When any changes are made to the advanced tab, the LCM will reboot and lighting may be temporarily affected.

Advanced Tab

This is where advance settings for local overrides, external inputs, and relays can be set.

Load Settings - Set preferences for relays and remote management.

- **Schedule AND/OR External Input Control** (default is unchecked) - When checked, both the external input and schedule are required to be activated to activate the lights. When unchecked, either the external input or the schedule can activate the load.
- **Relay Open When Active** (default is checked) - When checked, the relay will remain open when asserted.

Override Settings - Set preferences for local and remote overrides.

- **Remote On/Off Enable** (default is unchecked) - When checked, website users with permissions to update the facility will be able to turn the lights/load on and off remotely from the control tab.
- **Local Override Enable** (default is checked) - When checked, the push buttons will toggle on/off of individual relays.
- **Duration** (default is "Next Schedule")
 - Set the duration to hold changes when the local manual override is pushed or the remote override is activated. (Local override has priority over remote override)

Load Name	Schedule AND External Input Control?	Relay Open When Active?	Remote On/Off Enable?
Office Lights	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lab Lights	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Training Room	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Conference Room	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Load Name	Enable?	Duration
Office Lights	<input checked="" type="checkbox"/>	Next Schedule
Lab Lights	<input checked="" type="checkbox"/>	Next Schedule
Training Room	<input checked="" type="checkbox"/>	Next Schedule
Conference Room	<input checked="" type="checkbox"/>	Next Schedule

Input	Activate When Open?	Map to Relays	Duration			
		1	2	3	4	
Hall Sensor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Next Toggle
Office Sensor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Next Toggle
Lab Sensor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Next Toggle
Storage Sensor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Next Toggle

External Input Settings - Set preferences for external inputs.

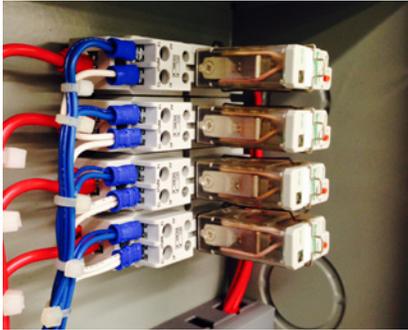
- Activate When Open (default is checked) - When checked, an open status at the input will activate the output.
- Map to Relays (default is unchecked) - Select the loads that should be controlled by an external input.
- Duration (default is "Next Toggle") - Set the duration to hold changes when the external input is activated. **Note: external inputs can still be monitored if left unmapped via the graphs tab.**

Note: When no external inputs are mapped and no schedules are set, load will automatically default to "ON".

EnTouch One Lighting Control Additional Features

Field Replacable Relays

The EnTouch One Lighting Control has four independent zone control relay outputs.



Recommended replacement contactors:

Brand: Schneider Electric

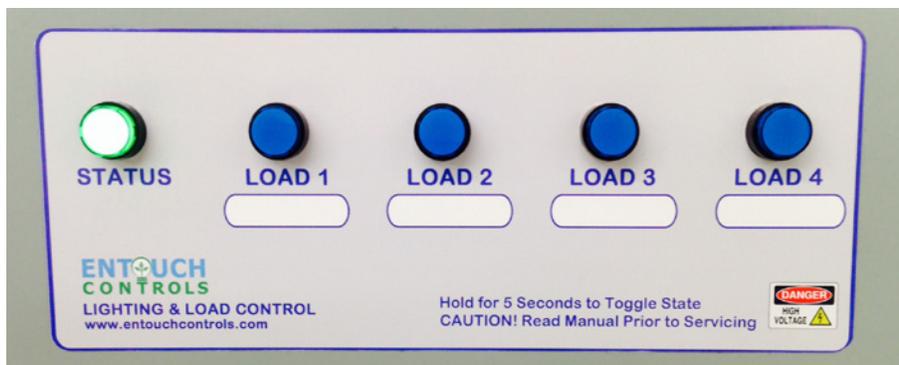
Part Number: 781XAXM4L-24A

On Unit Switches

On unit toggle switches to turn on or off any zone for a duration specified in the override settings on the management portal (Setup tab > Advanced > Override Settings). Built in LED light in the switch shows the status of the zone. When a blue LED is ON, load is “ON”. When green LED is ON, LCM is connected to the master controller. When green LED is blinking, LCM is not connected to the Master Controller.

Pressing any of these switches for five seconds will cause the corresponding output to toggle from its present state.

For example if the override duration setting is set to “Next Schedule”, and the present schedule is keeping a zone ON, holding the corresponding push button on the unit will turn that zone OFF. The zone will revert to schedule at the next transition time of the schedule.



Note: Local manual override has priority over remote override. Local and remote override have priority over external inputs.

EnTouch One Lighting Control Limited Warranty

No need to worry when purchasing the EnTouch system. EnTouch Controls stands by the system with a 1-year limited warranty.

EnTouch Controls warrants this product to be free from defects in the workmanship or materials, under normal use and service, for a period of one (1) year from the date of purchase. If at any time during the warranty period, the product is determined to be defective or malfunctions, EnTouch Controls shall repair or replace it at EnTouch Controls' option.

If the product is defective;(i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it; or (ii) call EnTouch Controls customer care at 800-850-9284. Customer care will make the determination whether the product should be returned or whether a replacement should be sent to you.

This warranty does not cover removal or reinstallation costs. The warranty shall not apply if it is determined by EnTouch Controls that the defect or malfunction was caused by improper usage while the product was in possession of the user.

EnTouch Controls' sole responsibility shall be to repair or replace this product within the terms stated above. EnTouch Controls shall not be liable for any loss or damage of any kind, including any incidental or consequential damages resulting, directly or indirectly, from any breach of any warranty, express or implied, or any other failure of this product.

This warranty is the only express warranty EnTouch Controls makes on this product. The duration of any implied warranties, including the warranties of merchantability and fitness for a particular purpose, is hereby limited to the duration of this warranty.

If you have any questions concerning this warranty, please write EnTouch Controls Customer Relations, 661 N. Plano Rd. Suite 323, Richardson, Texas 75081.

Information From Your EnTouch One Lighting Control

We recommend you capture the following information at time of installation and retain for your records.

LCM Position	Area Description	Light Sections
Load 1		
Load 2		
Load 3		
Load 4		

Light Control MAC Address: _____

Master Controller MAC Address: _____

Installer Name: _____

Installer Phone: _____

Notes: