

LYTE[™]mode

ARCHITECTURAL
LIGHTING
CONTROL
SYSTEM

6-BUTTON REMOTE



6-BUTTON REMOTE STATION
ILS-CL-6RES

USER'S GUIDE

LIGHTOLIER[®]
CONTROLS

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Version as of: December 2005

Document: 85-1463

Lytemode™ 6-Button Remote Station User's Guide

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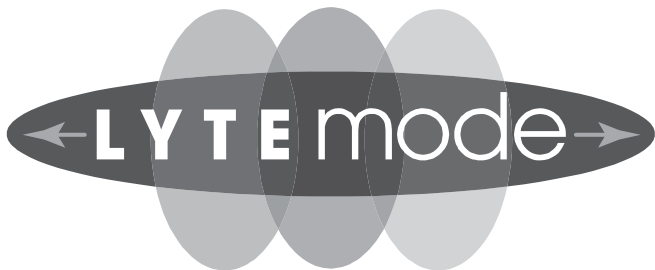
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Customer Service

Technical and Sales assistance for Lytemode™ products are available worldwide.

Phone: +1-800-526-2731 (In the United States and Canada)
+1-214-647-7880 (Worldwide)



Lytemode™ System Overview

The Lytemode™ System is designed to control architectural lighting by distributing both power and intelligence. The system provides processing power and control at each respective Master or Remote Station, eliminating the need for a central processor.

Lytemode Master Stations provide individual control for up to 16 channels, 13 scenes plus “Off”, and adjustable fade times. Multiple Master Stations may be linked together for control of up to 128 Channels and 13 preset scenes. By combining Lytemode Master Stations with Lytemode Remote Stations, the system provides remote access to scenes, Master Raise/Lower control, Multi-room partition control, or Master Station Lockout. Lytemode Master Stations are easily programmed using the front panel buttons, without removing the Master Station from the wall, and without the need for a computer. Lytemode Master Stations are compatible with both Lightolier® Controls Insulated Gate Bipolar Transistor (IGBT) Dimming Cabinets as well as Silicon Controlled Rectifier (SCR) Dimming Panels.

Lytemode products are controlled by the Intelligent Lytemode System (ILS) protocol. All Lytemode control devices must be connected to the ILS system and given a unique ID (or address) in order to interact properly. The ID identifies the device on the network and allows the device to avoid network collisions when transmitting data.

Quick Start

To get the 6-Button Remote Station up and running quickly, use the following checklist:

- Step 1. Install unit (refer to [“Installation” on page 6](#)).
- Step 2. Connect to Lytemode ILS Network (refer to [“Setting ILS Network ID” on page 7](#)).
- Step 3. Set the mode (refer to [“Mode” on page 9](#)).

The unit should now be ready for operation.

Notes:

- If the unit was set up as a Remote, then a Lytemode Master must be set to the same ID for the unit to function properly.
- If the unit was set up as a Global Remote, then a Lytemode Master must be set up to allow Global Remotes - matching the unit's ID - in order function properly.

6-Button Remote Station Overview

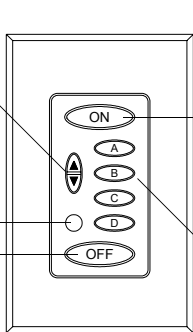
The Lytemode™ 6-Button Remote Station (ILS-CL-6RES) can be used to trigger Scenes and perform Master Raise/Lower, or act as a remote keypad for any specified ILS Master Station. It can be programmed to control multiple Master Stations, if required.

The following diagram provides an overview of the 6-Button Remote Station controls:

All Raise/Lower Buttons - Pressing will increase or decrease all channel levels, respectively. This can be done at any time and will not affect the stored levels.

InfraRed Receiver - Allows control by handheld remote.*

OFF Button - Pressing OFF fades lights out.



ON Button - Pressing ON will fade lights to the stored preset level.

A, B, C and D Scenes - Pressing any Scene button will fade lights to the stored preset level.

Note: Channel levels and fade rates for ON, OFF and Scenes A-D are stored at the corresponding ILS Master Station.

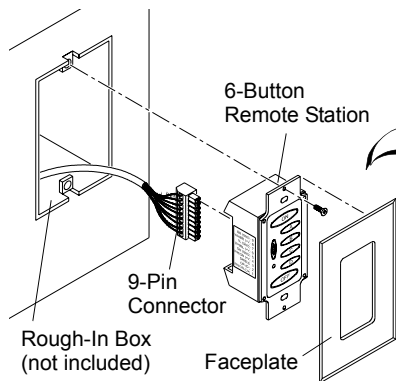
* Optional CLMIRTES Infra-Red Handheld Remote sold separately.

Installation

The Lytemode™ ILS Network consists of a single CAT5e cable connecting all ILS modules in a daisy chain manner. All units connect to the network using a 9-pin connector (included).

To install:

- Step 1. Unpack unit and inspect for any signs of shipping damage. Ensure that two mounting screws are included.
- Step 2. Connect ILS Network Cable to 9-pin connector at back of 6-Button Remote Station.



9-Pin Connector Wiring

PIN	SIGNAL
1	WH/OR (+ Data)
2	OR (- Data)
3	SHIELD
4	WH/GN (+ Volts)
5	GN (Ground)
6	WH/BL (+ Volts)
7	BL (Ground)
8	WH/BR (+ Volts)
9	BR (Ground)

- Step 3. Insert 6-Button Station into standard deep rough-in box (not included). Secure with two supplied mounting screws.
- Step 4. Snap faceplate into place.

Setting ILS Network ID

Lytemode™ products are controlled by the Intelligent Lytemode System (ILS) protocol. All Lytemode ILS devices must be given an ID (or address), which identifies the device on the network and allows it to avoid network collisions when transmitting data. Standard IDs are in the range of 1 to 255. An ID of 0 will disable the unit and prevent it from transmitting on the network.

IDs are typically unique. For example, an ILS Master will require a unique ID to allow dimmers to track its channel levels. However, ILS Remotes should be given the same ID as the ILS Master it controls. ILS Remotes rely on the fact that they are manually triggered to avoid network collisions with other ILS Remotes having the same ID.

The table on the following page provides guidelines for addressing.

ILS Network Addressing:

Device	ID	Sub-ID	Devices / ID	Remotely Polled?	Notes *
Remote	1-255	0	Multiple	No	1
Two Button Remote	Auto	0	n/a	No	4
Global Remote	1-255	0	Multiple	No	2
Remote Keypad	1-255	0-7	1	Yes	3
Remote I/O	1-255	0-7	1	Yes	3
Room Combine	1-255	0	1	Yes	3
Mini-Master	1-255	0-7	1	Yes	3
Master	1-255	0-7	1	Yes	3
RS-232 Port	Auto	0	n/a	No	4
Smart Matrix Dimmer Rack	1-255	n/a	1	Yes	3
Capio Dimmer Rack	1 -255	n/a	1	Yes	3

* Notes:

- 1 – Matches ILS Master ID.
- 2 – ILS Masters must be programmed to accept.
- 3 – Will respond to Remote Polls, Status Requests and Commands.
- 4 – Unit uses a self generated ID.

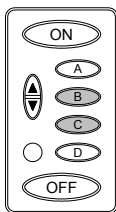
Note: Refer to the instructions included with your particular device(s) in order to set corresponding control IDs.

Basic Setup

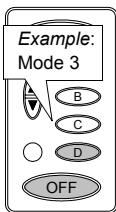
This section describes how to program the unit's Mode, Address, IR Address, LED Brightness, and display the unit's Software Version.

Mode

The unit can be set to function in one of several Modes as follows:

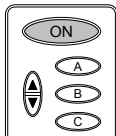


- Step 1. Press and hold **B** and **C** for 3 or more seconds. (**ON** LED will blink rapidly.)
- Step 2. Enter Mode by setting **C**, **D** and **OFF** buttons as either Off or On as shown in the following table. (LEDs will blink for any Mode not supported.)



Mode	C	D	OFF
0 – Remote	Off	Off	Off
1 – Global Remote	Off	Off	On
2 – Remote Keypad	Off	On	Off
3 – Remote I/O	Off	On	On

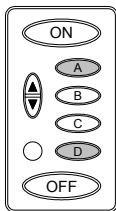
- Step 3. Press **ON** to save and exit.



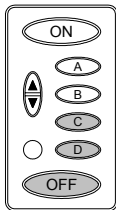
Mode	Function
0 – Remote	Used to trigger Scenes and perform Master Raise/Lower on ILS Masters.
1 – Global Remote	Same as Remote, but transmits a Global command used to link several ILS Masters. ILS Masters must be programmed to respond to the Global ID.
2 – Remote Keypad	Transmits key presses and releases. LEDs are controlled by Remote Commands.
3 – Remote I/O	Controls a connected I/O module.

ID Address

Because there are not enough buttons/LEDs to address the full 0-255 ID range, the ID must be entered in two stages. The three most significant ID bits are entered first, followed by the five least significant ID bits.

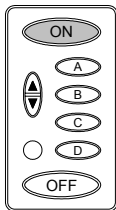


Step 1. Press and hold **A** and **D** for 3 or more seconds. (**ON** LED will blink On 75% and Off 25%.)



Step 2. Enter three most significant ID bits in **C-D-OFF**. Use **Raise/Lower** to increment/decrement value.

Step 3. Press **ON**. (**ON** LED will blink On 25% and Off 75%.)



Step 4. Enter five least significant ID bits in **A-B-C-D-OFF**. Use **Raise/Lower** to increment/decrement value.

Step 5. Press **ON** to save and exit.

ID Values:

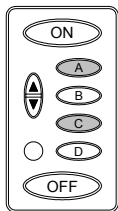
C = 128 (most significant ID)
D = 64 (most significant ID)
OFF = 32 (most significant ID)
A = 16 (least significant ID)
B = 8 (least significant ID)
C = 4 (least significant ID)
D = 2 (least significant ID)
OFF = 1 (least significant ID)

While in the Addressing Mode, the device will transmit a Network Test Command every 2 seconds (**ON** will blink). All devices on the network will blink an LED to indicate their reception of this command. If a receiving device matches the transmitted ID, it will blink all of its LEDs. Those devices that are capable of being polled will return a Network Test Response if the transmitted ID matches their own ID. If the transmitting device sees a Network Test Response, it will double blink its **ON** LED. This is useful for network testing and to determine if the ID is unique.

Note: When programming the ID of a unit set to Remote (Mode 0), tapping the Raise or Lower button on a Master, Mini-Master, or another Remote unit will capture the ID and exit the Set ID mode.

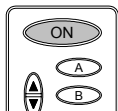
IR Address

The IR Room select can be set as follows:



Step 1. Press and hold **A** and **C** for 3 or more seconds. **A-B-C-D-OFF** LEDs will turn On. (Blinking LED shows presently selected room.)

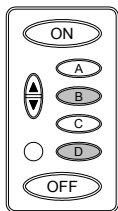
Step 2. Set IR Room as follows:
A = Room 1, **B** = Room 2
C = Room 3, **D** = Room 4
OFF = Disable IR



Step 3. Press **ON** to save and exit.

LED Intensity

The intensity (brightness) of the LEDs can be set as follows:



Step 1. Press and hold **B** and **D** for 3 or more seconds. **A-B-C-D** LEDs will display four intensity choices. (Current intensity setting button will blink.)

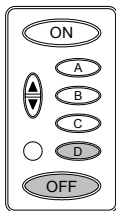
Step 2. Press desired intensity button.

Step 3. Press **ON** to save and exit.



Display Version

The software version can be displayed as follows:



Step 1. Press and hold **D** and **OFF** for 3 or more seconds.

The Version is displayed in binary format on **A-OFF**.

Step 2. Add up values for each illuminated LED and then add 1.00.

6-Button LED	Value
A	.16
B	.08
C	.04
D	.02
OFF	.01

Example:

LEDs **C** and **OFF** are On, therefore $.04 + .01 + 1.00 =$
Version 1.05

Operation

Selecting a Scene

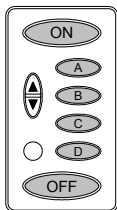
A 6-button keypad can select all 14 Scenes (**OFF**, **ON**, **A-L**) by pressing a single button or a button combination as follows:

- To select Scenes **OFF**, **ON**, or **A-D**, press desired button.
- To select Scenes **E-F-G-H**, press **ON** and **A-B-C-D**.
- To select Scenes **I-J-K-L**, press **OFF** and **A-B-C-D**.

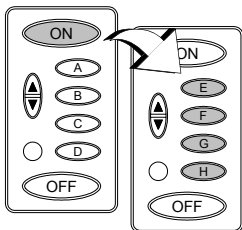
For Scenes **E-L**, two LEDs will illuminate dimly for the patterns.

OFF, ON, A-D Scenes:

press desired button.

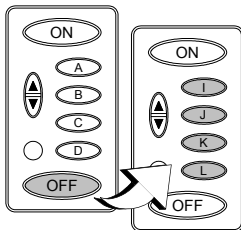


E-F-G-H Scenes: press ON, plus desired button.



I-J-K-L Scenes: press

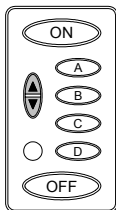
OFF, plus desired button.



Changing Channel Levels

The 6-Button Remote Station can perform Master Raise/Lower functions. Pressing Raise or Lower will increase or decrease all channel levels, respectively. This can be done at any time and will not affect the stored levels.

To change channel levels:



- Step 1. Select any Scene (**ON**, **A-L**). Refer to [“Selecting a Scene” on page 15](#).
- Step 2. Press **Raise** to increase channel levels or **Lower** to decrease channel levels.

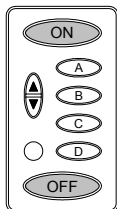
Remote Keypad Functions

When set in Mode 2 (see [“Mode” on page 9](#)), the 6-Button Remote Station will transmit key presses and releases to an ILS Master Station. In this configuration, the LEDs are controlled by Remote Commands. For key press instructions, refer to the User’s Guide which came with your Master Station unit.

Factory Defaults and Troubleshooting

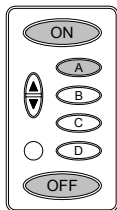
Resetting Factory Defaults

To set the unit back to its Factory Defaults, do the following:



Step 1. Press and hold **ON** and **OFF** for 3 or more seconds. (All LEDs will start to blink.)

Step 2. While still holding **ON/OFF** buttons, also press and hold **A**. (After another 3 seconds, unit will reset back to its Factory Defaults.)

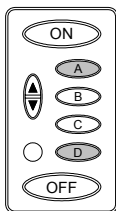


Factory Defaults are as follows:

- Unit Mode = 0 (Remote)
- Unit ID = 0 (Disabled)
- LED intensity = 75%
- IR = Disabled

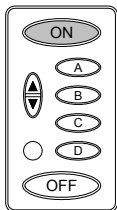
Troubleshooting

In order to determine if all Lytemode ILS Network devices are communicating, a network test signal can be sent by placing the device in the Addressing Mode. While in this mode, the device will transmit a Network Test Command every 2 seconds (**ON** will blink). All devices on the network will blink an LED to indicate their reception of this command. If a receiving device matches the transmitted ID, it will blink all of its LEDs. Those devices that are capable of being polled will return a Network Test Response if the transmitted ID matches their own ID. If the transmitting device sees a Network Test Response, it will double blink its **ON** LED.



To send Network Test Command:

- Step 1. Press and hold **A** and **D** for 3 or more seconds. Network will send out test signal.
- Step 2. Press **ON** to return to normal operation.

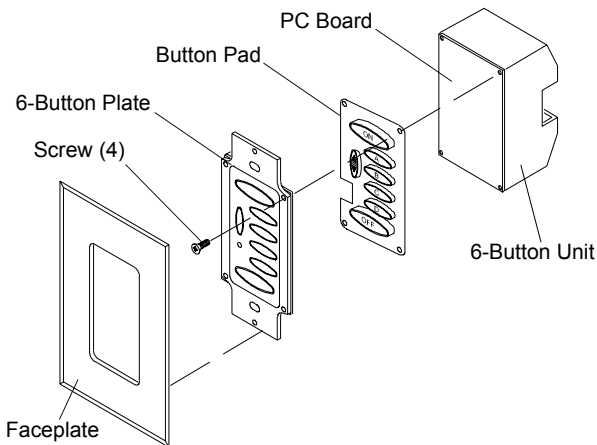


Installing Custom Buttons

Custom engraved buttons* are available for Lytemode™ products. If you received custom buttons with your unit or obtain them in the future, use the following procedure for installation.

To install custom buttons:

- Step 1. At 6-button unit, remove faceplate.
- Step 2. Remove 6-button plate by removing two screws.
- Step 3. Remove existing button pad.
- Step 4. Insert custom button pad and re-assemble components.



* Available from Lightolier Controls: www.lolcontrols.com

Specifications

Electrical:

- Input Power: +18-26 VDC (powered from Lytemode ILS network)
- Current: 20mA
- Temperature
 - Storage: -25° to 85° C
 - Operating: 0° to 40° C
 - Relative Humidity: 30-90% (non-condensing)

Accessories

Part Number	Description
ILSCK6B__*	Color Kit for 6-Button Remote Station
CE6BES***	Custom Engraved 6-Button Keypad Membrane
COMFP1__**	Compli Screwless Faceplate, 1-Gang
COMFP1CE__***	Custom Engraved, Compli Screwless Faceplate, 1-Gang
LB-1G	1-Gang Locking Security Cover
CLMIRTES	Infra-Red Handheld Remote

* Color Kits available in: AL=Almond, LA=Light Almond, I=Ivory, BR=Brown, GR=Gray, and BL=Black

** Faceplates available in: W=White, AL=Almond, LA=Light Almond, I=Ivory, BR=Brown, GR=Gray, and BL=Black

*** To order custom engraved keypads and faceplates, please visit our website at: www.lolcontrols.com

3 YEAR LIMITED WARRANTY

Lightolier® Controls warrants that this product will be free from defects in workmanship or materials. This warranty is void on any electronic controls which have been overloaded, abused, improperly installed or altered in any manner.

Lightolier Controls' sole obligation will be at its option to repair or replace any electronic controls product proven defective if it is returned, postage prepaid, to Lightolier Controls, 10911 Petal St. Dallas, Texas 75238. Lightolier Controls will not pay for any charge-back or charge for labor or material that does not have its prior written approval.

This warranty shall be in lieu of any other warranty, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts and do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

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We reserve the right to change details of design, materials and finish in any way that will not alter the installed appearance or reduce function performance. Specifications are subject to change without notice.



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