

## CANDÉO® LED OPERATIONS MANUAL

This Candéo® LED operations manual provides instructions for setting up and programming this product. Please contact Gotham Technical Support at [productsupport@gothamlighting.com](mailto:productsupport@gothamlighting.com) or 1-800-315-4982 with any additional questions.

### ETHERNET CABLE INSTRUCTIONS

#### NETWORKING INSTRUCTIONS (MULTIPLE UNITS CONNECTED/CONTROLLED TOGETHER)

The 11 feet of Ethernet cable provided with the housing may be used to network multiple LED drivers together. If longer lengths of cable are required, it may be purchased at most electronics stores. (Ethernet cable type: CAT5, RJ45).

The first driver in the network will act as the master. If you are using an external LED driver control, the Ethernet cable from the control will be plugged into the “Network DMX512 In” port on the master unit only (see Figure 1). If you are not using an external LED driver control, the master driver can be manually programmed by setting the dials located on the top of the driver. It is recommended that the driver is set prior to installing the housing (see manual programming instructions on page 3). The Ethernet cable on the master driver should be plugged into the “ Network DMX512 Out” port (see Figure 1). The next driver in the network will behave as a satellite. Plug the cord from the master into the “Network DMX 512 In” port of the satellite. Continue this process until you have reached the last driver in the network (MAX 128 drivers per network).

### ETHERNET CABLE INSTRUCTIONS

#### NON-NETWORKING INSTRUCTIONS (SINGLE UNIT/INDIVIDUALLY CONTROLLED UNITS)

If you are installing one unit and do not intend to use an external driver control, you will not need the Ethernet cable provided with the housing. The LED driver can be manually programmed by setting the dials located on the top of the driver housing. It is recommended that the driver is set prior to installing the housing (see manual programming instructions on page 3). If you are installing multiple units and the LED drivers are individually controlled by an external control, the Ethernet cable will run out of the control and into the “Network DMX512 In” port for each unit (see Figure 1). If you should require longer lengths of cable than the 11 feet provided, it may be purchased at most electronics stores (Ethernet cable type: CAT5, RJ45).

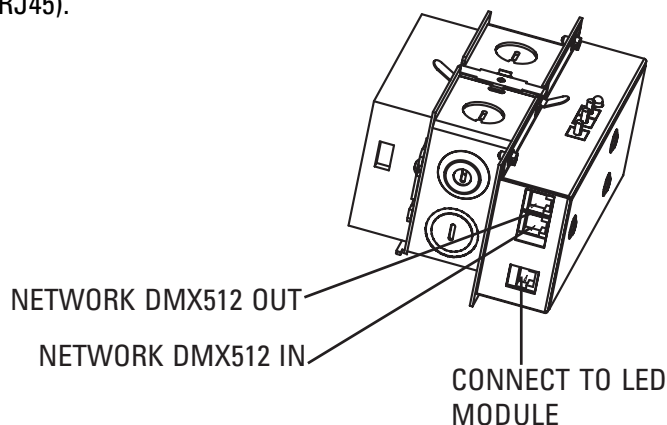


Figure 1

**ACCESSING THE LED DRIVER AFTER INSTALLATION FOR PROGRAMMING AND TROUBLE SHOOTING**

**(NON ACCESSIBLE CEILING) - BEFORE PROCEEDING, TURN OFF POWER.**

If you plan to change the programming of the LED driver often, it is recommended that you purchase an external control.

If you wish to change the programming of multiple LED drivers that are networked together and are not controlled by an external control, identify the first (master) driver in the network and make changes to it alone. In order to access the LED driver to make programming changes after the product has been installed, you will need to remove the trim. Grip the edge of the cone flange and pull down, releasing it from the outer reflector and exposing the LED ring (see Figure 2). The outer reflector is held in the housing with two screws located in the slots of the LED ring (see Figure 3). Slightly loosen the screws (**do not remove**), disengaging them from the keyhole slots (see Figure 3) and twist the outer reflector counter clockwise to free it from the housing. Unplug the phone line connecting the trim to the LED driver. Leave the compact fluorescent socket cup attached to the top of the outer reflector and allow it to hang below the ceiling plane. You will now be able to see the programming label on the front of the driver (see Figure 4). The LED driver is attached to the housing's junction box with a steel spring clip. Release the driver by raising the clip (see Figure 4). Lay the driver label side down so that the dials are visible (see Figure 5), and using the programming guide (**see manual programming instructions on page 3**), program new settings. Replace driver and trim in reverse order and restore power.

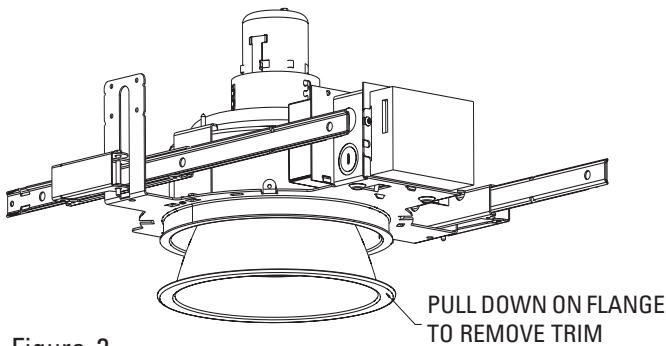


Figure 2

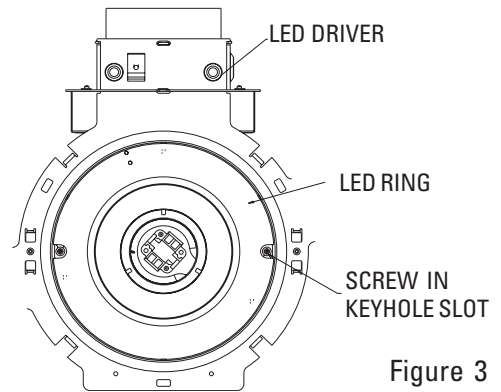


Figure 3

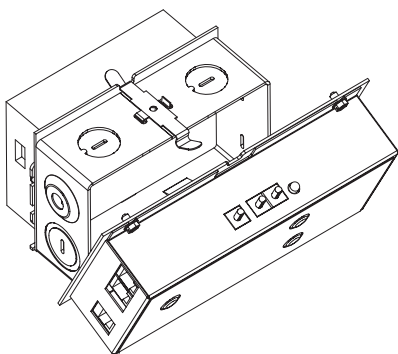


Figure 4

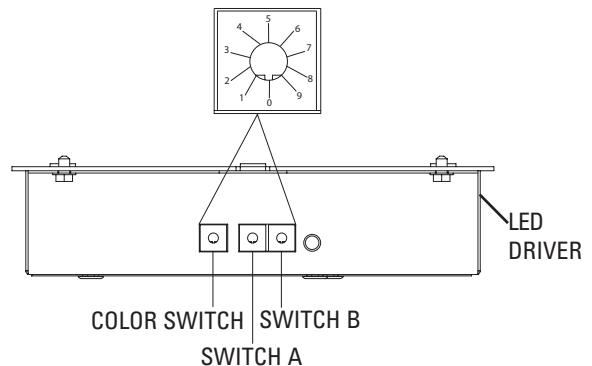


Figure 5

**MANUALLY PROGRAMMING THE LED DRIVER**

The dials to program the LED driver are located on top of the driver assembly (see Figure 6). To choose the appropriate setting, set both the color cycle and color cycle timing (see Figure 7). If you wish to change the programming of multiple LED drivers that are networked together, identify the first (master) driver in the network and make changes to it alone.

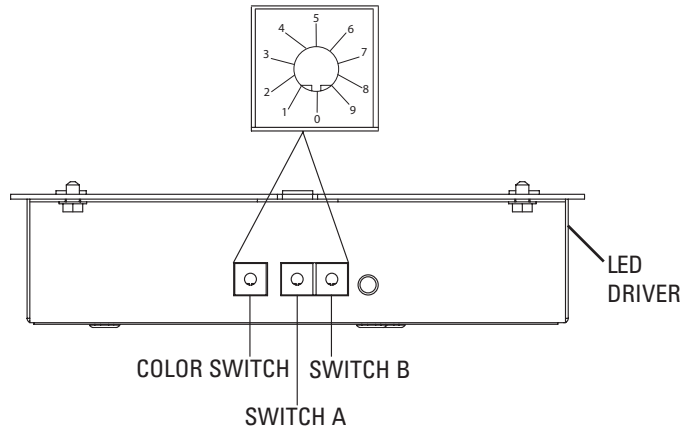


Figure 6

Color Cycle				Color Cycle Timing		
COLOR SWITCH POSITION	FUNCTION	TIMER SET TO "00" FOR FIXED COLOR	TIMER NOT SET TO "00"		SWITCH A	SWITCH B
0	RED GREEN BLUE	WARM WHITE		FIXED COLOR	0	0
1	COLORS CHANGE FROM WHITE	WHITE		5 SECONDS	0	1
2	COLORS CHANGE FROM BLACK	WHITE COOL		10 SECONDS	0	2
3	RED YELLOW GREEN			15 SECONDS	0	3
4	RED MAGENTA BLUE			30 SECONDS	0	5
5	GREEN CYAN BLUE			35 SECONDS	0	6
6	RED			45 SECONDS	0	8
7	GREEN			1 MINUTE	1	0
8	BLUE			5 MINUTES	1	8
9	SELF TEST	SEE MANUAL	SEE MANUAL	10 MINUTES	2	4
				15 MINUTES	2	5
				30 MINUTES	2	8
				45 MINUTES	3	1
				60 MINUTES	3	4
				2 HOURS	4	6
				4 HOURS	5	4
				8 HOURS	6	6
				12 HOURS	7	4
				16 HOURS	8	2
				20 HOURS	9	0
				24 HOURS	9	8

Figure 7

**LFVRS 9-BUTTON CONTROL INSTRUCTIONS (Sold separately)**

A 9-button external driver control can be purchased from Acuity Brands Lighting Controls Group (Part: LFVRS). The Ethernet cable from the LFVRS will be plugged into the "Network DMX512 In" port of the LED driver(s) you wish to control.

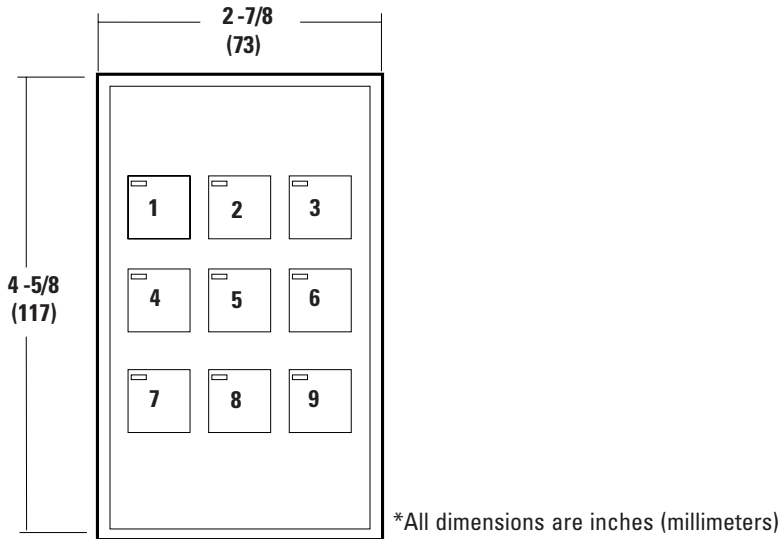


Figure 8

**LFVRS 9-BUTTON CONTROL COLOR CYCLE**

Depress buttons 1-3-7-9 simultaneously (see Figure 8) until the indicator lights on the buttons flash, then select a color cycle by pressing:

1. **Red-Green-Blue Triangle**
2. **Red-White-Green-White-Blue-White**
3. **Red-Off-Green-Off-Blue-Off**
4. **Red-Green Oscillate**
5. **Red-Blue Oscillate**
6. **Green-Blue Oscillate**
7. **Red Oscillate**
8. **Green Oscillate**
9. **Blue Oscillate**

**LFVRS 9-BUTTON CONTROL CYCLE TIMING**

1. Hold button of color cycle (1-9 above) down for 3 seconds to bring the driver into timing mode.
2. After 3 seconds, tap the button until desired timing is achieved. (Cycle timing starts at the fastest rate and slows down as the button is tapped).
3. To save the timing, hold button down for three seconds.

### LFVRS 9-BUTTON CONTROL STATIC COLOR MODE

Depress buttons 2-4-6-8 (see Figure 8) simultaneously until the indicator lights on the buttons flash, then select a color by pressing:

1. **Cool White**
2. **White**
3. **Warm White**
4. **Yellow**
5. **Magenta**
6. **Cyan**
7. **Red**
8. **Green**
9. **Blue**

### DMX512 CONTROLS

Candéo® LED is compatible with DMX512 theatrical control systems. Some sophisticated DMX 512 systems will allow for LED drivers to be individually controlled when networked together. For this to happen, a unique address must be established for each driver (up to 99 different addresses in each network). Switch A and B, located on the top of the driver assembly, need to be set so that each driver can be identified by the DMX512 control (00, 01, 02, 03 etc... see Figure 9). Drivers set to the same address will behave the same. Candéo LED is designed for compatibility with DMX512 theatrical control systems with the following pin out configuration of the RJ45 connector (see Figure 10).

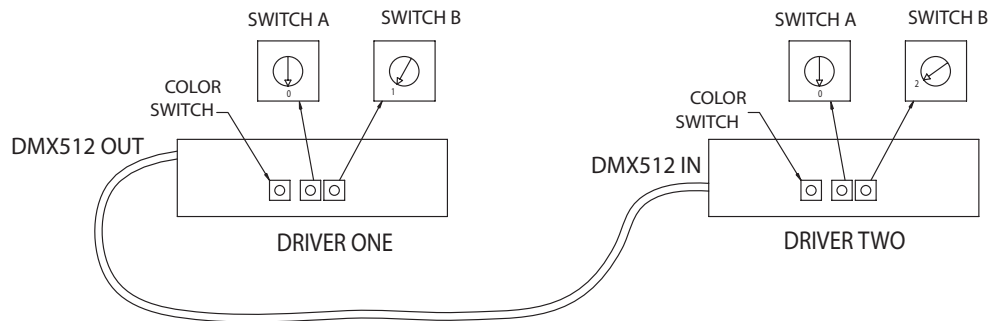


Figure 9

**Wiring configuration for T-568A on both ends:**

<b>PIN1</b>	<b>(white/green)</b>	<b>PIN1</b>
<b>PIN2</b>	<b>(green)</b>	<b>PIN2</b>
<b>PIN3</b>	<b>(white/orange)</b>	<b>PIN3</b>
<b>PIN4</b>	<b>(blue)</b>	<b>PIN4</b>
<b>PIN5</b>	<b>white/blue)</b>	<b>PIN5</b>
<b>PIN6</b>	<b>(orange)</b>	<b>PIN6</b>
<b>PIN7</b>	<b>(white/brown)</b>	<b>PIN7</b>
<b>PIN8</b>	<b>(brown)</b>	<b>PIN8</b>

Figure 10

**LED DRIVER SELF-TEST MODE** (see Figure 11)

1. Set switches A and B to 7.
2. Set the color switch to 9.  
The LEDs will emit the following sequence of light in two-second intervals: white-red-green-blue. The LEDs will then begin to flash yellow for 10 seconds.
3. While flashing yellow, set switches A and B to 0.  
If LEDs begin to flash green, the system is normal. If the LEDs flash red, document the number of flashes and contact Gotham Technical Support at 1-800-315-4982.

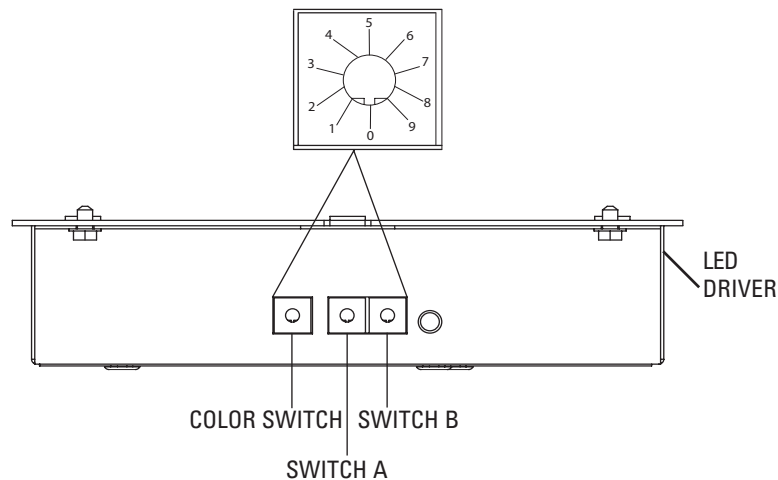


Figure 11

This document may also be accessed at [www.gothamlighting.com](http://www.gothamlighting.com).