

## Limited Warranty

**LEVITON LIGHTING CONTROL DIVISION** of Leviton Manufacturing Co Inc. warrants its Dimmer Systems and Controls to be free of material and workmanship defects for a period of two years after system acceptance or 26 months after shipment, whichever comes first. This Warranty is limited to repair or replacement of defective equipment returned Freight Pre-Paid to Leviton Lighting Control Division at 20497 SW Teton Ave., Tualatin, Oregon 97062, USA. User shall call 1-800-959-6004 and request a return authorization number to mark on the outside of the returning carton, to assure that the returned material will be properly received at Leviton. All equipment shipped back to Leviton must be carefully and properly packed to avoid shipping damage. Replacements or repaired equipment will be returned to sender freight prepaid, F.O.B. factory. Leviton is not responsible for removing or replacing equipment on the job site, and will not honor charges for such work. Leviton will not be responsible for any loss of use time or subsequent damages should any of the equipment fail during the warranty period, but agrees only to repair or replace defective equipment returned to its plant in Tualatin, Oregon. This Warranty is void on any product that has been improperly installed, overloaded, short circuited, abused, or altered in any manner. Neither the seller nor Leviton shall be liable for any injury, loss or damage, direct or consequential arising out of the use of or inability to use the equipment. This Warranty does not cover lamps, ballasts, and other equipment which is supplied or warranted directly to the user by their manufacturer. Leviton makes no warranty as to the Fitness for Purpose or other implied Warranties.

For Technical Assistance Call:  
1-800-959-6004  
www.nsicorp.com  
www.leviton.com



## D4200 Remote Entry Stations



LIT-D42ES-000

## Terminating the Wiring

### Luma-Net® III

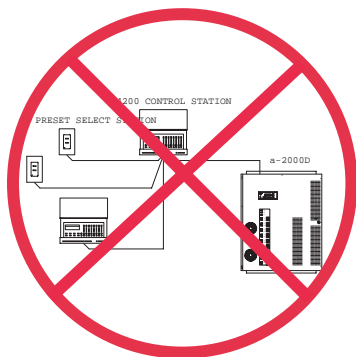
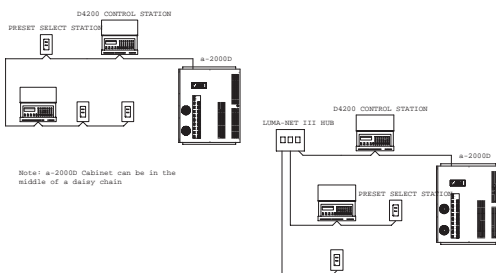
Control Stations can be located up to 2000 ft. from the dimming cabinet. **Luma-Net®** is wired Daisy Chained, station to station. For applications where runs become too long a Hub can be used.

The cable should not pass near any source of electrical noise such as fluorescent circuits or motor wiring. Avoid close proximity to any AC wiring. All control/power wiring must be in conduit.

#### Luma-Net® Wire Recommendations

1. Use RS485 compatible cable for communications. It is recommended that a cable with 2 Twisted Pair, 24 AWG (min.), stranded conductors be used. The spare pair is for future uses.
2. Capacitance of wire shall be 15pF/ft. or less.
3. Normal Impedance of wire shall be between 100-120 ohms.
4. A second pair of stranded wire is required for the power.
5. Drain/Shields to be tied together, insulated and grounded at one point only.

We strongly recommend the use of either Belden 9829 or Belden 9729 for the Luma-Net® wire runs.



## Warnings

1. To be installed and/or used in accordance with appropriate electrical codes and regulations.
2. To be installed by a qualified Electrician.
3. DO NOT CONNECT line voltage wires to low voltage terminals.
4. For the best lamp life, lamp manufacturers recommend their fluorescent lamps should be operated at full brightness for a minimum of 100 hours before dimming is permitted. For best results, lamp brands and types should not be intermixed on a circuit.
5. Disconnect power when servicing the dimmer, fixture or when changing lamps.
6. Indoor use only.
7. **TO AVOID FIRE, SHOCK OR DEATH: TURN OFF POWER AT MAIN CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING!**

## Introduction

For best results using the Dimensions 4200 Architectural Lighting Controller, Follow these recommendations:

1. Plan the system before beginning the installation
2. Terminate the wiring
3. Test the wiring
4. Connect dimmer cabinets
5. Power up the Stations
6. Program each Station  
Assign unique network ID numbers to stations. Connect one master station, and then one remote control station at a time. Verify that the first D4200 can properly control the dimmers assigned to it. Check the proper operation of each station as it is installed when multiple stations are involved.
7. Install all Stations

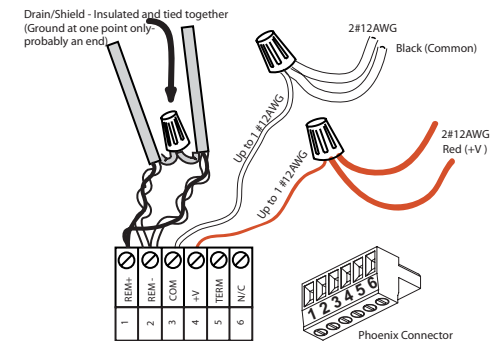
Note: If the lighting control fails or becomes sporadic, first check the wiring or network ID.

If a remote DC power supply is used and you have multiple **Luma-Net®** runs, all DC common wires must be joined at the power supply.

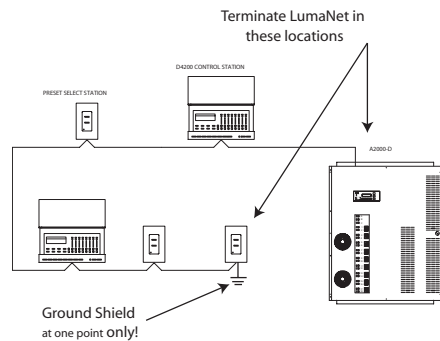
At the last control station or dimmer cabinet on both ends of a run, a small jumper wire must be run from the terminal labeled "Rem-" to the terminal marked "Term" on that last station. This jumper wire properly terminates the digital communications lines at both ends of the line.

#### Wire the Phoenix Connector

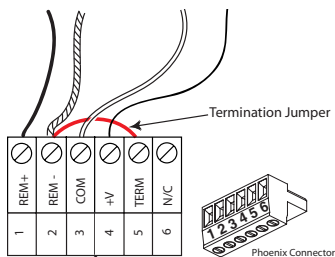
1. Connect leads per wiring diagram as illustrated on page 6.
2. Twist strands of each lead tightly (making sure that there are no stray strands) and push firmly into appropriate plug connector location.
3. Tighten the screws on the plug connector-making sure that no bare conductor is showing.
4. Tie the Drain/Shield wires together and insulate using a small piece of heat shrink tubing.
5. Install termination jumpers as required. Remember a termination jumper is required at the two ends of the **Luma-Net®** run.



### Luma-Net® Wire Connections



## Luma-Net® Termination Jumper Locations



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## Testing the Wiring

To assure problem-free start-up, it is important to check the system wiring, prior to hooking up any control stations, for proper connections, shorts and opens.

The following procedure is recommended:

Step 1: Test the following wire pairs for shorts at each station location, using an ohmmeter or other continuity tester.

- 1-2 Open
- 2-3 Open
- 3-4 Open

Step 2: Repair any short circuits before continuing.

Step 3: Install wire jumpers to the Phoenix Connector (not supplied) on either end of the cable run between pins 3-4.

Step 4: Retest each of the following wire pairs at each connector:

- 1-2 Open
- 2-3 Open
- 3-4 Short

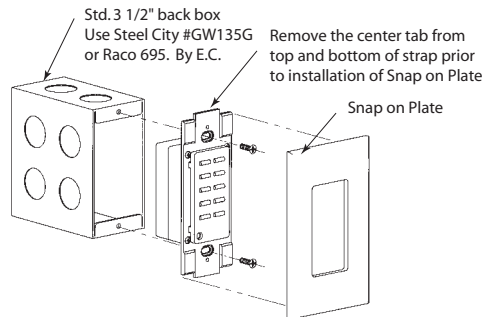
Step 5: Make any necessary repairs and remove wire jumpers before continuing.

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## Installation

Securely mount the entry station using the screws provided.

If you are using a screwless snap on plate, remove the center tabs of the strap as shown in the figure.

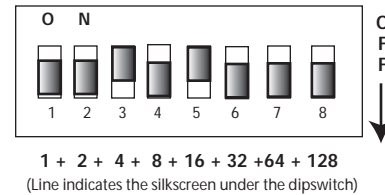


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## Programming

Address Entry Station between **1 and 127**. If a station address is set to **Zero** it will not participate on the network.

The switch is set to the binary representation of the ID number. The binary 1's column is left-most (lever labeled "1").



Net ID

The switch levers are numbered 1-8, these represent the following:

Lever=Value

1=1      2=2

3=4      4=8

5=16     6=32

7=64     8=Selects code V1.x (ON) or V2.x (OFF)

Add the value of each lever in the "ON" position to determine the ID number (decimal form).

For example:

To set the address to 39, the following switches need to be in the "ON" position:

$$1, 2, 3, 6 = 1+2+4+32=39$$

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## Operation

### Operation of D42SQ-00W - Sequencer

This station can be slaved to multiple LCD stations. Once addressed and assigned to one or more LCD Master Station(s), you must program a sequence in the LCD Station(s). Pressing the button toggles the sequencer between "ON" and "OFF". The LED lights when the sequencer is "ON".

### Operation of D42ET-00W - Event Timer

This station can be slaved to multiple LCD stations. Once addressed and assigned to one or more LCD Master Station(s), you must program a timed event in the LCD Station(s). Pressing the button toggles the Event Timer ON or OFF. The LED lights when the Event Timer is active or ON.

As an example, it is 4:55PM and there is an event scheduled for 5:00PM. If you press the button on the Event Timer station and the LED turns off, you have paused the Event Timer and the 5:00 PM event will not run. If at 5:05PM, you press the button and the LED lights up, the Event Timer is active again. There will be no changes in the light levels.

### Operation of D42LI-NKW - Link

This station can be slaved to multiple LCD stations. Once addressed and assigned to one or more LCD Master Station(s), you must program Personality 1 and 2 in the LCD Station(s). Pressing the button toggles the LCD stations between Personality 1 and 2. The LED lights when the station(s) are in Personality 2.

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Note: Multiple remote entry stations of various types can be slaved to a single master station.

### To set the remote identification number, and slave it to a master D4200 station:

1. With the station unplugged, set the remote slave station's DIP switches to the address of the master station that it is to be slaved with.

2. With the station unplugged, **press and hold** the UPPER (LEFT) button. This "Init Button" must be continuously held during the next few steps. Note: The ceiling mounted IR stations use an "Init Jumper" located on the back between the Red LED and the Luma-Net connector. Install this jumper when programming (simulates a button press).

3. While holding the button down, **power up** the station by plugging it back in.

4. The Green front panel LED's remain dark (Off), while the Red LED on the back turns On. The Red LED remains On while the unit waits for 10 seconds.

5. The station will indicate that the ID has been saved/recorded by the Green front panel LED's blinking twice and the back Red LED turning Off, then On, then Off again.

6. Take your finger off of the "Init Button" (or remove the "Init Jumper" for Ceiling mounted IR stations).

7. The station can store multiple Slave IDs if the address DIP switches are changed and the "Init Button" is pressed again; in this case, the back Red LED and the front panel Green LED's blink twice to indicate the 2<sup>nd</sup> or 3<sup>rd</sup> or 4<sup>th</sup> ...etc Slave IDs have been saved.

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### Operation of D42LO-CKW - Lock

This station can be slaved to multiple LCD stations. Pressing the button either Locks or Unlocks the Master Stations (and the LCD's remote stations) assigned to the Lock station. The LED lights when the stations are locked. The IR port on the LCD station is still active when the station is locked.

### Operation of D42P1-00W, D42P1-M0W, D42RL-00W, D42MO-00W, D42MO-RLW, D42P1-RLW, D42P4-00W, D42P4-RLW, D42P9-16W, D42P8-00W and D42P9-RLW - Preset Stations

The buttons on these stations, except for the 9-16 scene buttons, correspond to a button on the LCD station they are assigned to. The "Raise and Lower" buttons correspond to the Master Raise/Lower on the LCD station. Scene 1-16 and "Max" and "Off" can be programmed from the entry station.

To program one of the buttons from the entry station:

1. Adjust the lighting to the desired level,
2. Press and hold the appropriate scene button until the buttons LED flashes. The new levels are being recorded into the Master LCD Station.

Note: If the station is locked, you can not operate or remotely program the buttons.

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