

Installation Instructions

Control Station

**READ AND FOLLOW ALL SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION**

IMPORTANT SAFETY INSTRUCTIONS

▲WARNING

To reduce the risk of death, injury or property damage from fire, electric shock, cuts, abrasions, falling parts, and other hazards:

- Service of the equipment must be performed by qualified service personnel.
- Installation and maintenance must be performed by a person familiar with the construction and operation of this product and any hazards involved. All applicable codes and ordinances must be followed.
- Read this document before installing, servicing, or maintaining this equipment. These instructions do not cover all installation, service, and maintenance situations. If your situation is not covered, or if you do not understand these instructions or additional information is required, contact *Synergy Lighting Controls*.

▲WARNING

Before installing, servicing, or maintaining this equipment, follow these general precautions.

To reduce the risk of electrocution:

- Make sure the equipment is properly grounded.
- Always de-energize any equipment before connecting to, disconnecting from, or servicing the equipment.

To reduce the risk of fire:

- Use supply conductors with a minimum installation temperature rating as specified.

To reduce the risk of personal injury from cuts, abrasions:

- Wear gloves to prevent cuts or abrasions from sharp edges when removing from carton, handling and maintaining this equipment.
- Do not install a damaged equipment.

Synergy Lighting Controls, a division of *Acuity Brands Inc.*, assumes no responsibility for claims arising out of improper or careless installation or handling of this product.

SAVE THESE INSTRUCTIONS

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Before You Start

1. Always disconnect all power.
2. This device is supplied by a Class 2 low voltage transformer in the dimmer cabinet. Install in accordance with appropriate codes.
3. Excessive dust may damage the control station. Install during final finish work.
4. Use only as intended.
5. Use only accessories recommended by Lithonia Control Systems.

Back Box Selection Chart

Control Station Catalog Number	Required Backbox
SQCS 6P 4C SQCS 6P 8C	5 Gang Lithonia SQCS 5GB Raco #699 Steel City GW535C
SQCS 6P 12C SQCS 6P 16C	8 Gang Lithonia SQCS 8GB Steel City (2) GW435C Ganged Together

Step 1: Install frame to backbox using 6/32 screws.

Step 2: Seat alignment pins and mount station to frame using small black philips screws provided.

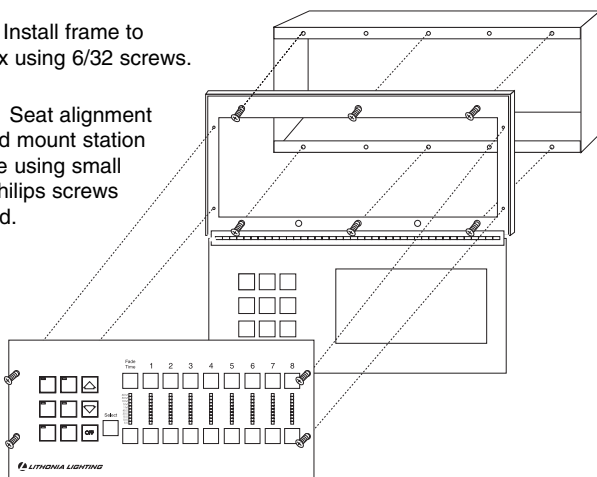


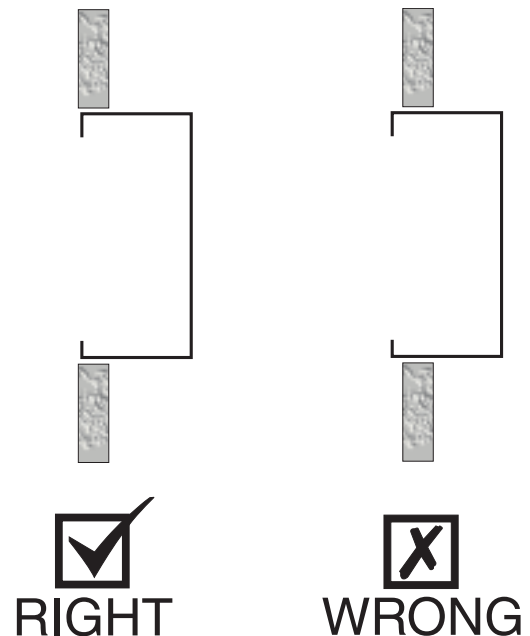
Figure 1 - Exploded View of Control Station

Important Control Station Mounting and Location Notes

1. Ambient Conditions:
Maximum Ambient Temperature: 104°F/40° C
Minimum Ambient Temperature: 32°F/0°C
Relative Humidity: 10-90% Non condensing
2. Control station door hinges down. Leave 6" space below the backbox for door to open properly.
3. Recommended mounting height for optimum operating ease is 52" to the bottom of the switch box.

Rough in Mounting Instructions For Wall Mounted Stations

Install the appropriate backbox at the required location. Consult factory for retrofit applications. See Backbox Selection Chart on left. Backbox should be slightly behind the face of the wall to finish off properly. See illustration below.



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Important Control Station Rough In Wiring

1. Station frame must be mounted to a grounded back box, or a separate ground conductor must be added.
2. Control station network must be wired in a daisy chain. Remote stations must home run to the control station. See *Figure 2*.
3. Verify the correct voltage is present on the A4 power conductors BEFORE connecting the control station pigtail. Maximum 28 VDC (nominal) should be present. See *Figure 3 or 4* for detailed interconnect wiring of control station network.
4. See SQRS remote station or accessory installation instructions for detailed interconnect wiring of remote stations or other accessories. See *Figure 7* for other functions that are available from remote input terminals.
5. See *Figure 6* for connection of momentary dry closures to the SQCS. See *Figure 7* for other functions that are available from remote input terminals.
6. Refer to the Operation and Maintenance Manual or As Built drawings for the switch settings on the back of the SQCS.
7. Do not mix control wiring in power wiring conduits.
8. Refer to Sequel User Guide for operating information.

One Line Wiring Symbols

A4 Control Station Network Cable. Class 2 low voltage; do not install in high voltage conduit or raceway. All devices connecting to network must be wired in a daisy chain (in and out); "T" taps or branches in the network are not permitted. The numerical order in which devices are connected is not important. The network wire shall be two #16 AWG wires for power plus one EIA-485 approved twisted and shielded pair for data. Synergy Lighting Controls SYA CABLE A4 (optional - contact Synergy if cable is needed and not included as a separate line item on the Bill of Material) or (1) Belden 3105A with (2) #16 AWG conductors. Contact Synergy if the total length of the network exceeds 2000 feet.

L# Quantity of Class 2 low voltage individual #18 AWG wires as indicated in the symbol. If multiconductor cable is desired, use Belden 83653, 83662 shielded, low capacitance, (**not twisted**) control cable or equal. A spare conductor is shown in each run below for applications with a total wire length of greater than 250 feet (80m).

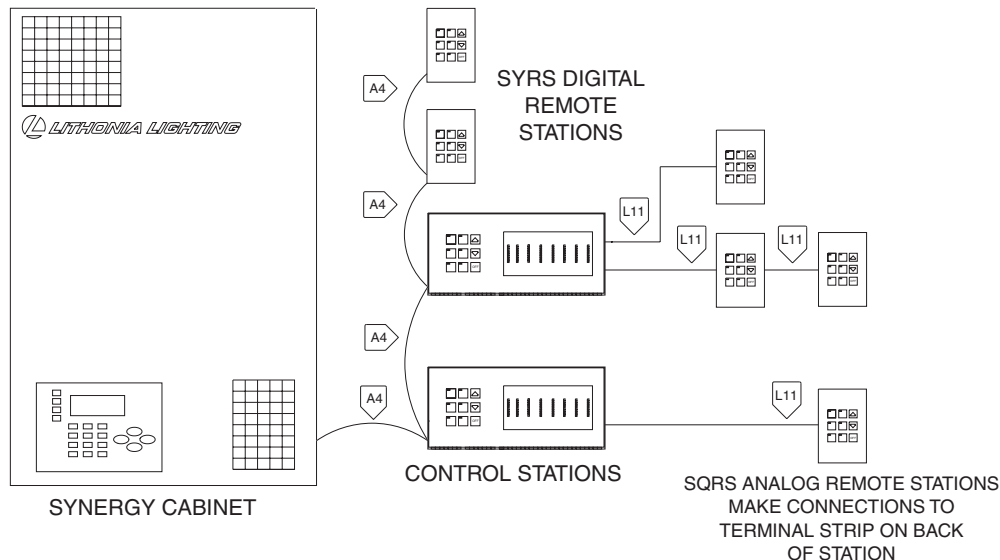
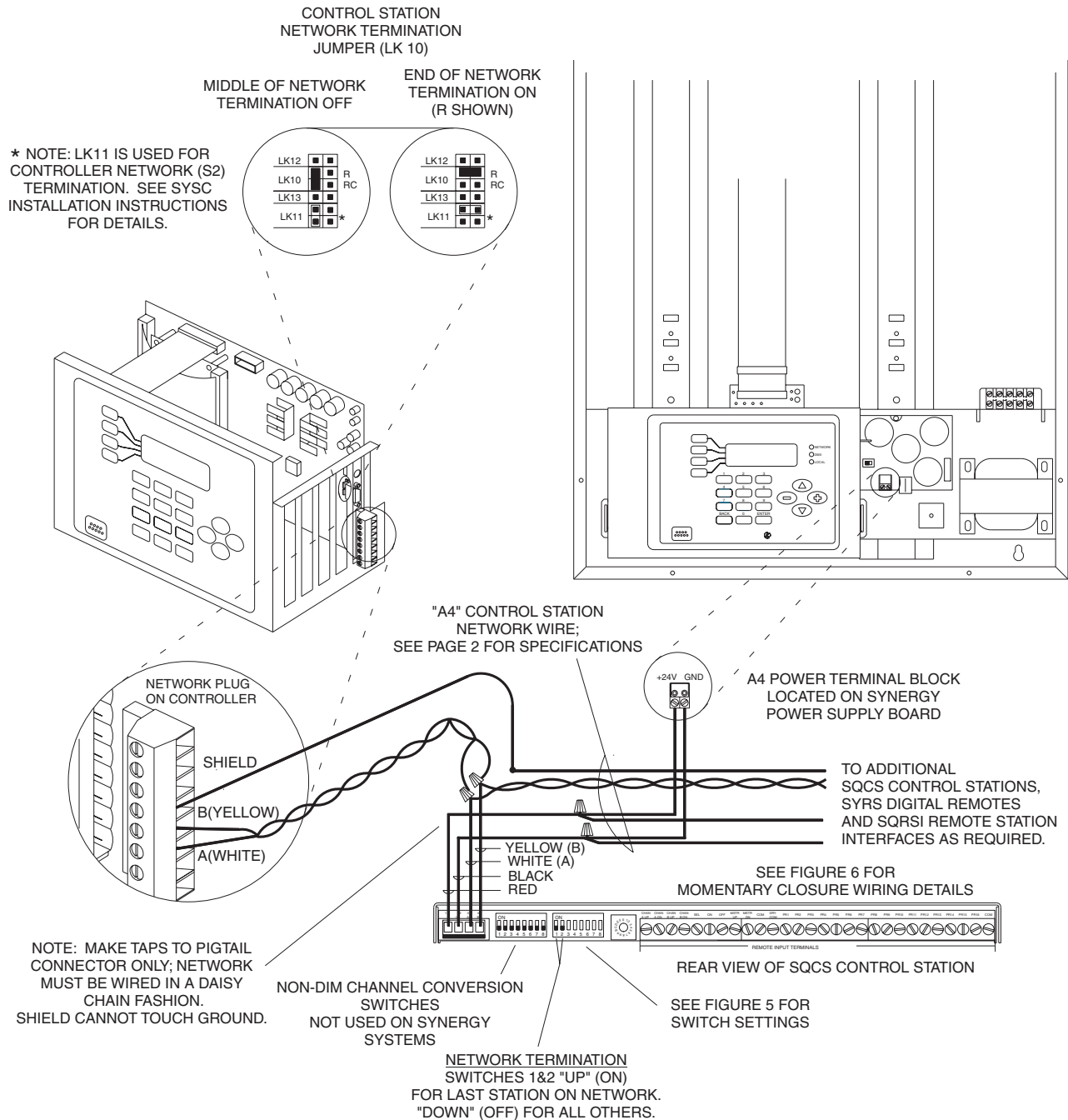


Figure 2 - Control Station One Line Drawing: Synergy System

Installation Instructions

Control Station



**Figure 3 - Synergy Control Station Network - Typical Wiring
Synergy Cabinet ONLY**

IMPORTANT: Control Station network miswires may cause damage and void warranty. Verify correct voltage is present before attaching pigtail connector to the back of the Control Station. Maximum 28 VDC (nominal) should be present on the A4 power conductors.

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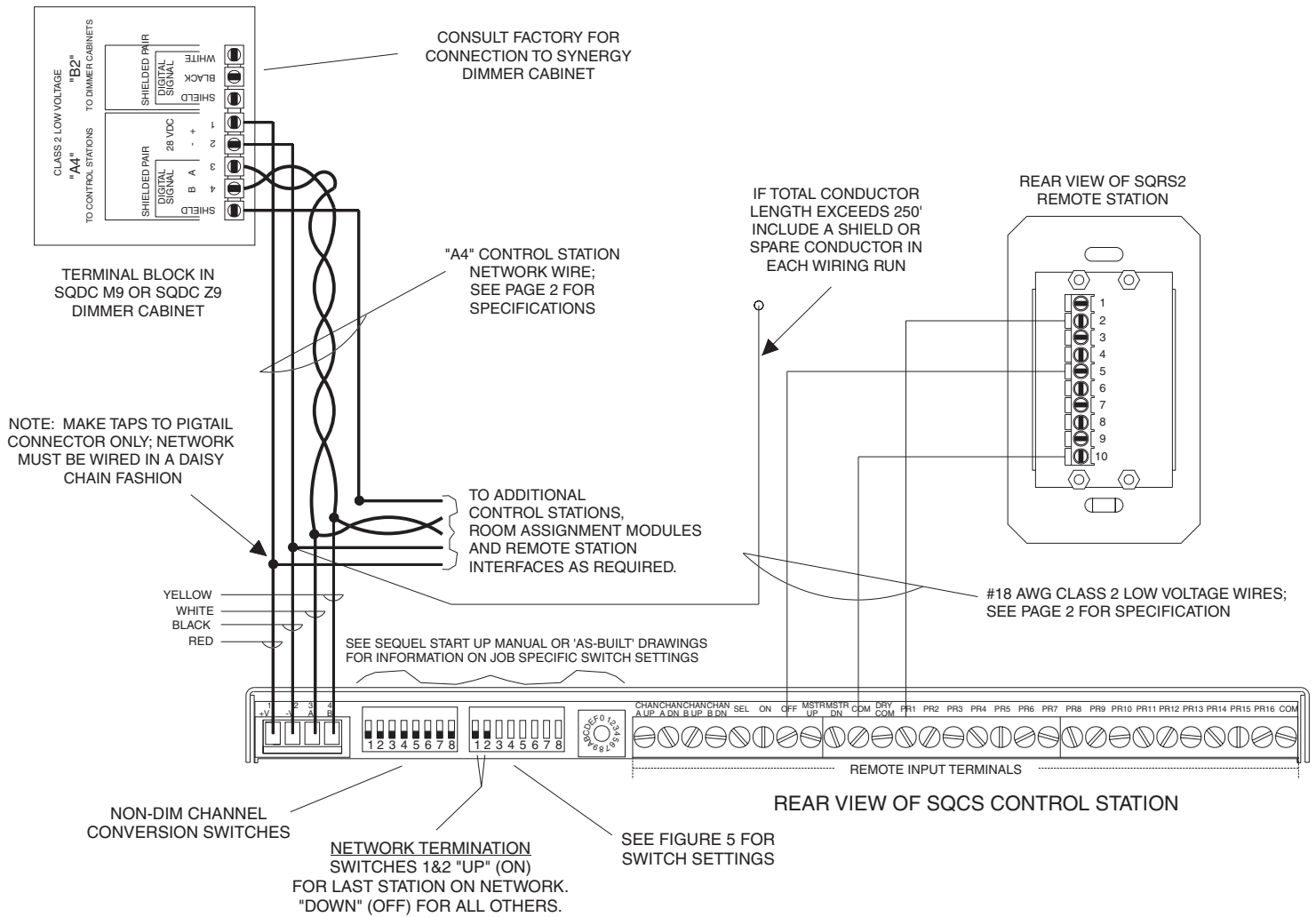


Figure 4 - Sequel Control Station Network - Typical Wiring Details
Sequel Cabinet ONLY

IMPORTANT: Control Station network miswires may cause damage and void warranty. Verify proper voltages are present before attaching pigtail connector to the back of the Control Station. See the Start Up section of the Sequel Operation and Maintenance manual for information.

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FOR REPLACEMENT STATIONS
 WHEN REPLACING A SERIES 10/11
 CONTROL STATION WITH A SERIES 12
 STATION, SWITCH 7 MUST BE "UP" (ON) FOR
 PROPER OPERATION WITH EXISTING
 SYSTEM PROGRAMMING

DATE CODE
 2 DIGITS AFTER "S"
 DESIGNATE SERIES

XXXXS10 - SERIES 10
 XXXXS11 - SERIES 11
 XXXXS12 - SERIES 12

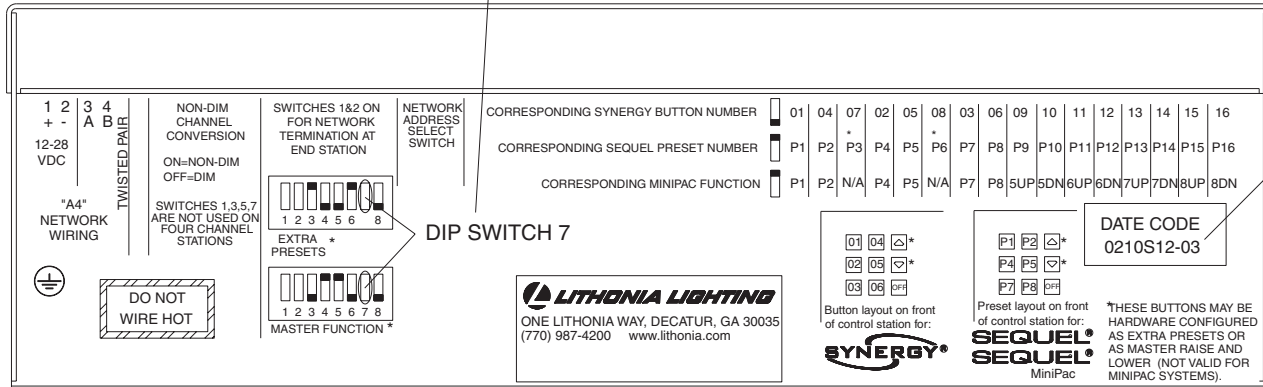


Figure 5 - Dip Switch Settings and Functional Information

MOMENTARY DRY CONTACT
 CLOSURES IN A/V SYSTEM
 PROVIDED BY OTHERS

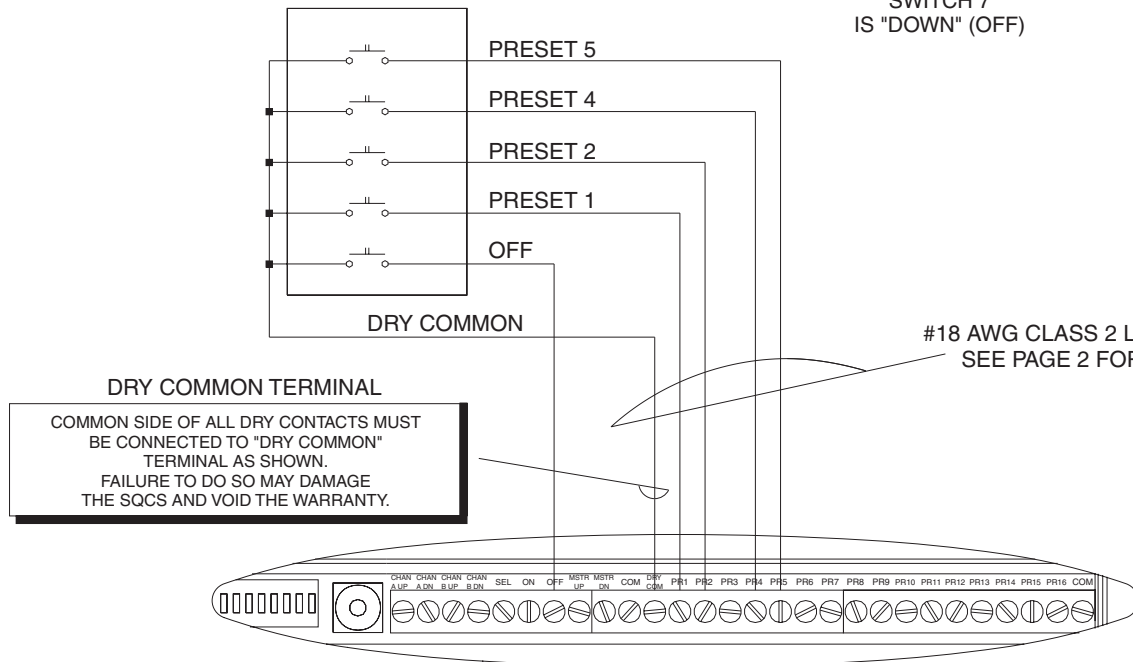
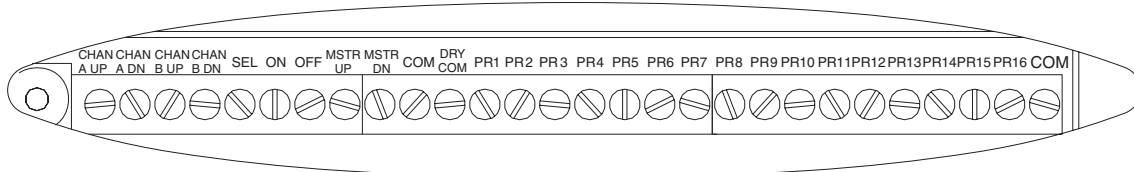


Figure 6 - Momentary Closure Wiring Detail

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TERMINAL FUNCTIONS		
TERMINAL LABEL	FUNCTION W/SWITCH 7 OFF (SYNERGY)	FUNCTION W/SWITCH 7 ON (SEQUEL)
CHAN A UP	4 Channel Station - First Channel Raise 8,12, or 16 Channel Station - Second Channel Raise	SAME
CHAN A DN	4 Channel Station - First Channel Lower 8,12, or 16 Channel Station - Second Channel Lower	SAME
CHAN B UP	4 Channel Station - Second Channel Raise 8,12, or 16 Channel Station - Fourth Channel Raise	SAME
CHAN B DN	4 Channel Station - Second Channel Lower 8,12, or 16 Channel Station - Fourth Channel Lower	SAME
SEL	Select function used when programming	SAME
ON	All channels FULL ON	Recalls previous light level (last state before off button was pressed)
OFF	All channels OFF	SAME
MSTR UP	All dimmed channels raise	SAME
MSTR DN	All dimmed channels lower	SAME
COM	Used only with SQRS remote station	SAME
DRY COM	Used with dry contact closures and accessory devices	SAME
PR1	Button 1	Preset 1
PR2	Button 4	Preset 2
PR3	Button 7	Preset 3
PR4	Button 2	Preset 4
PR5	Button 5	Preset 5
PR6	Button 8	Preset 6
PR7	Button 3	Preset 7
PR8	Button 6	Preset 8
PR9	Button 9	Preset 9
PR 10 through PR 16	Button 10 through Button 16	Preset 10 through Preset 16



INPUT TERMINAL LABELING
SEE CHART ABOVE FOR FUNCTIONS

Figure 7 - Input Terminal Functions

Visit Synergy Lighting Controls on the internet at <http://www.synergylightingcontrols.com> for further information on products, technical data or installation instructions.

Warranty

Synergy Lighting Controls warrants all equipment to be free from defect in manufacturing under normal and proper storage, installation, and operation for a period of one (1) year. Our guarantee liability extends only to the repair or replacement of the defective part and no labor charges for correction of the defect by repair or replacement will be honored by Synergy Lighting Controls unless prior written authorization has been granted by our Customer Service Department.