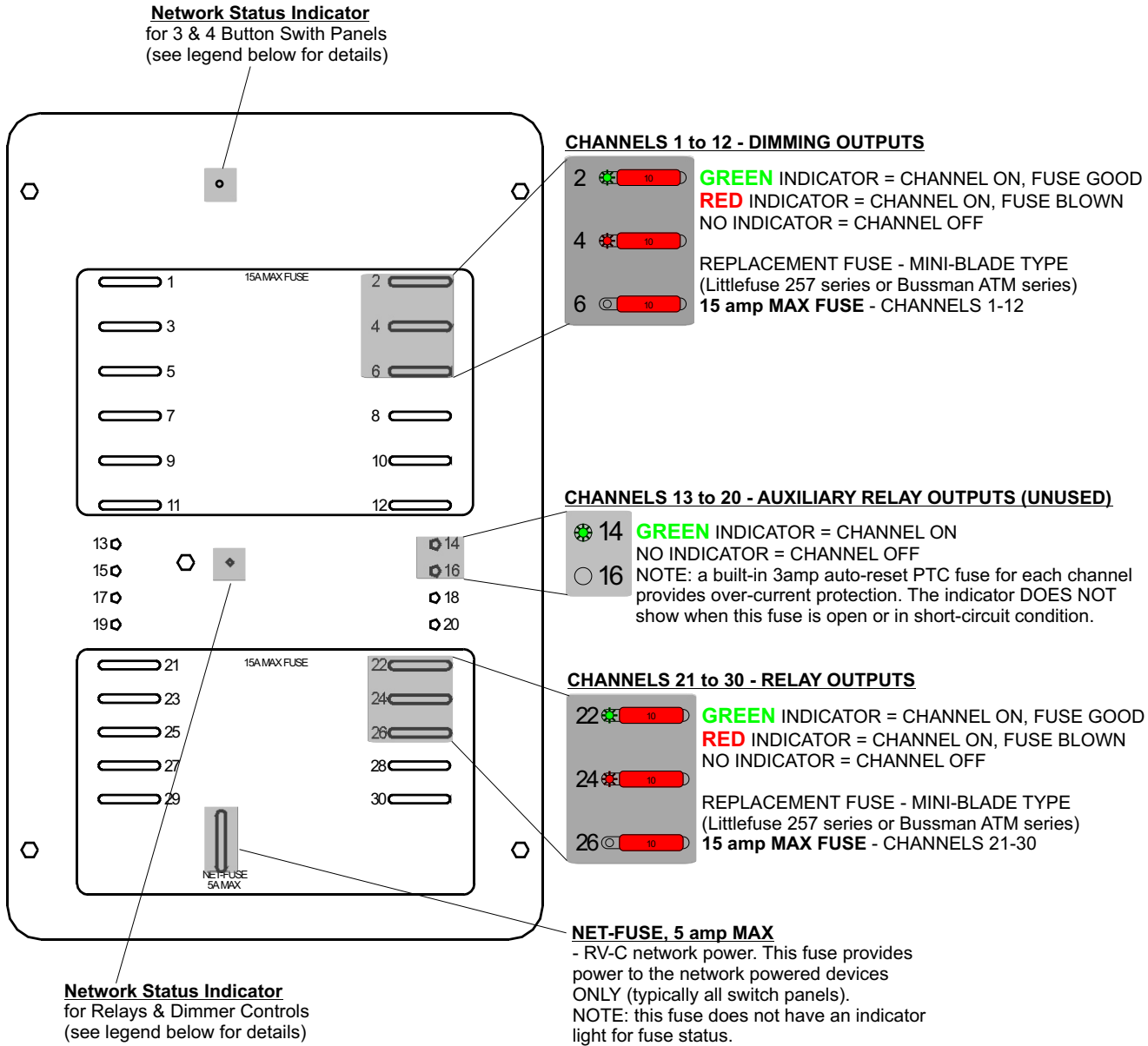




## Allegro Bus G5B Load Center

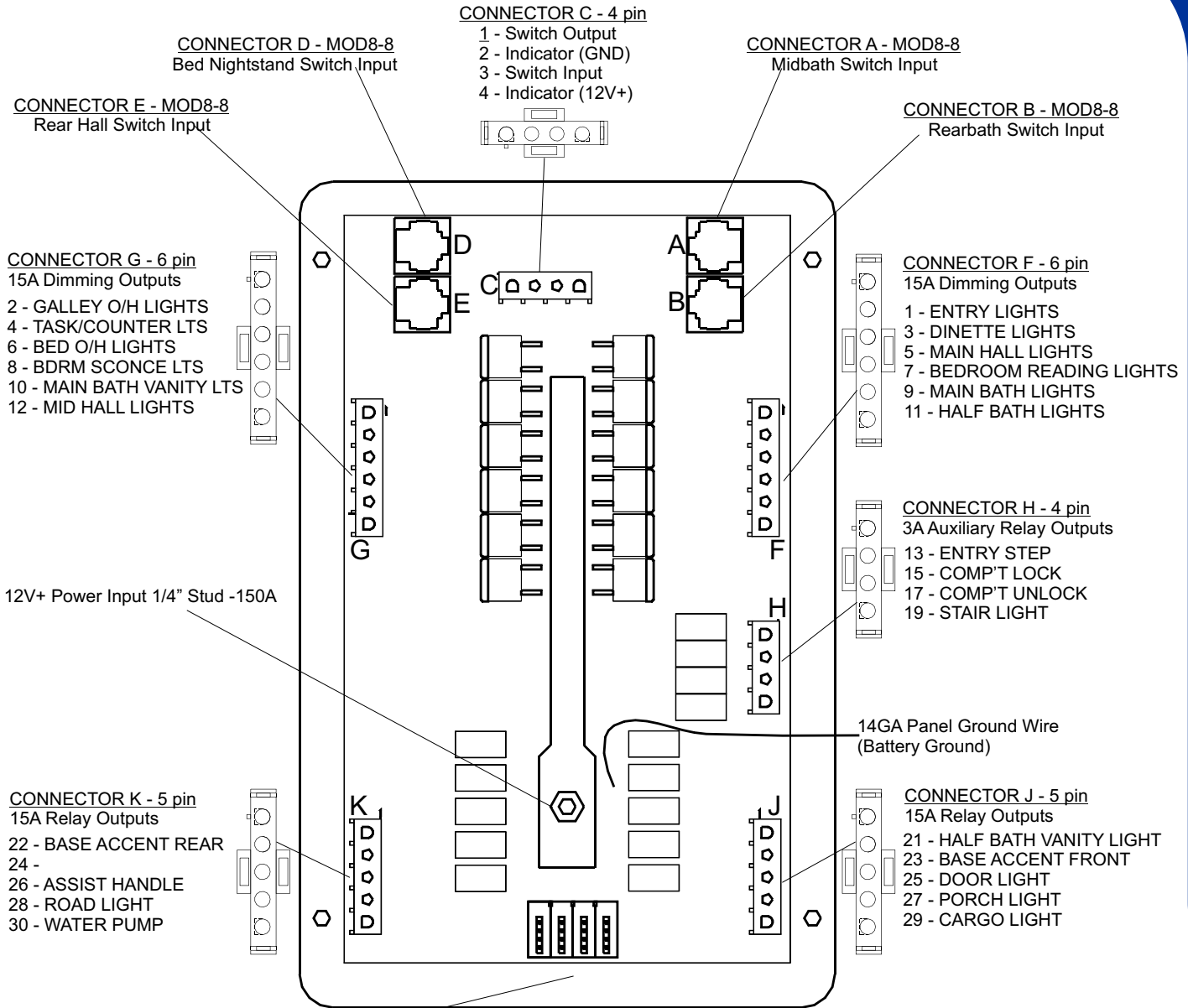


### PANEL NETWORK STATUS INDICATOR

- / - FAST FLASHING GREEN (4 times / sec.) - device is attempting to make initial connection and claim a network address
- / - SLOW FLASHING GREEN (1 time / sec.) - device was online but has not seen a valid network address for 5 seconds
- SOLID GREEN - device is connected to network and communicating properly
- SOLID RED - device has gone offline and is not connected to network
- ALTERNATING RED & ORANGE - device has gone offline and is attempting to re-connect (within 30 seconds)
- ALTERNATING GREEN & ORANGE - device is currently online but has gone offline 2 or more times



## Allegro Bus G5B Load Center



### 4-PORT DROP CABLE CONNECTOR

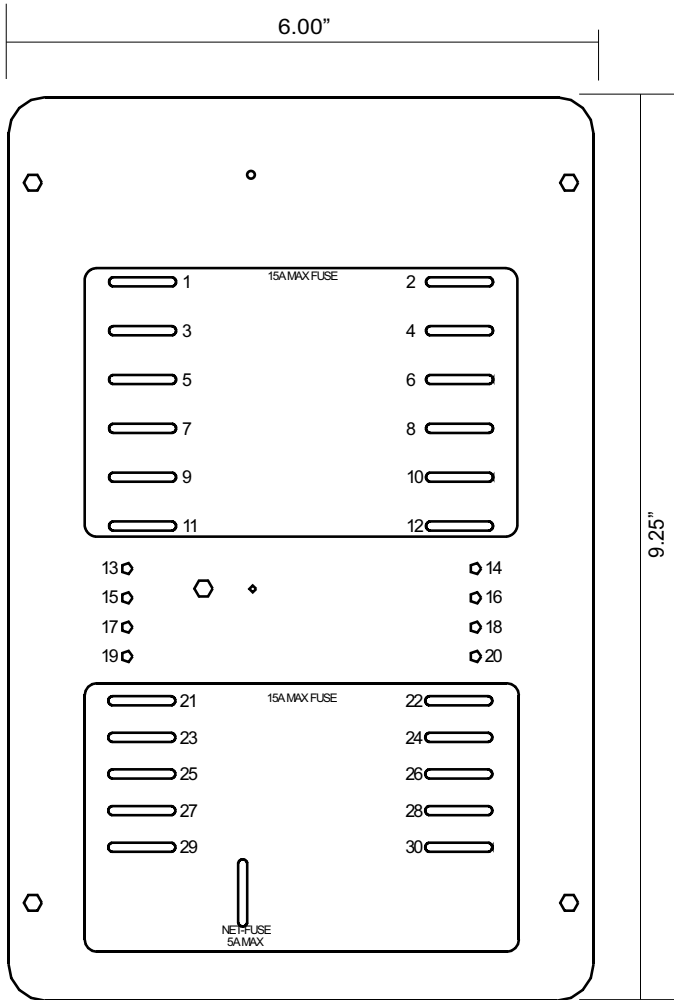
- 1 - RED 16GA - NET 12V+
- 2 - WHITE 20GA - CAN H
- 3 - BLUE 20GA - CAN L
- 4 - BLACK 16GA - NET GROUND

### ALLEGRO BUS / SPYDER BILL OF MATERIALS - 1v0

QTY:	MANU. P/N:	DESCRIPTION:	MANUFACTURER/SUPPLIER:
<b>G5B DC Load Panel Components</b>			
1	BENCZC400 A	G5B DC LOAD CENTER	SPYDER
2	640585-1	6 POS INLINE MATE-N-LOK PLUG HOUSING	TYCO ELECTRONICS
2	1-480763-0	5 POS INLINE MATE-N-LOK PLUG HOUSING	TYCO ELECTRONICS
2	1-480702-0	4 POS INLINE MATE-N-LOK PLUG HOUSING	TYCO ELECTRONICS
30	350550-1	MATE-N-LOK SOCKET CONTACT 20-14AWG	TYCO ELECTRONICS
1	37304-A165-00E	Mini Clamp W/M SKT 4P Blue for EU	3M

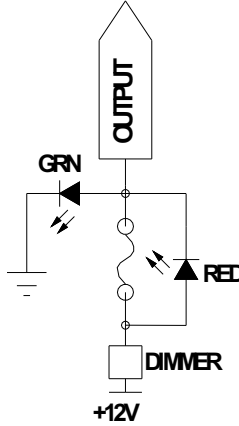


## Allegro Bus G5B Load Center

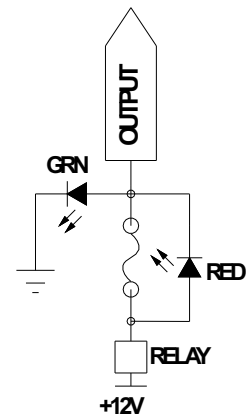


### LOAD CENTER OUTPUT SCHEMATICS

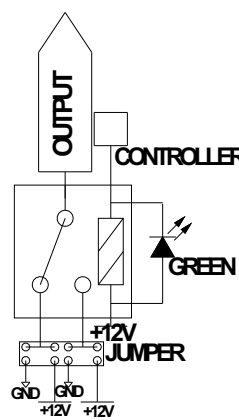
**SWITCHED DIMMER**



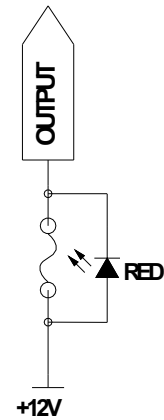
**SWITCHED RELAY**



**SWITCHED AUXILIARY RELAY**



**UNSWITCHED FUSED OUTPUT**



Product Overview

SPECIFICATION		G5B LOAD CENTER - SPYDER CONTROLS P/N	
<b>General</b>			
Dimensions (H x W x D)	9.25 x 6.0 x 2.0 in. (23.5 x 15.24 x 5.08 cm.)		
Cutout Dimensions (H x W)	8.25 x 5.0 in. (20.96 x 12.7 cm.)		
Mount Depth (from mounting surface)	2.0 in. minimum with MATE-N-LOK connectors in place (5.08 cm.)		
Operating Temperature	-4 F to 140 F (-20 C to +60 C)		
<b>Electrical</b>			
Input Voltage	9V+ to 16V+ dc		
Minimum Current (No Outputs On)	102 mA @ 12V+ dc		
Dimmer connection channels (Max)	12 @ 10A/Channel		
Auxiliary Relay channels (Max)	8 @ 3A/Channel		
High Current Relay channels (Max)	10 @ 10A/Channel		
Module Maximum Current Rating	150A		



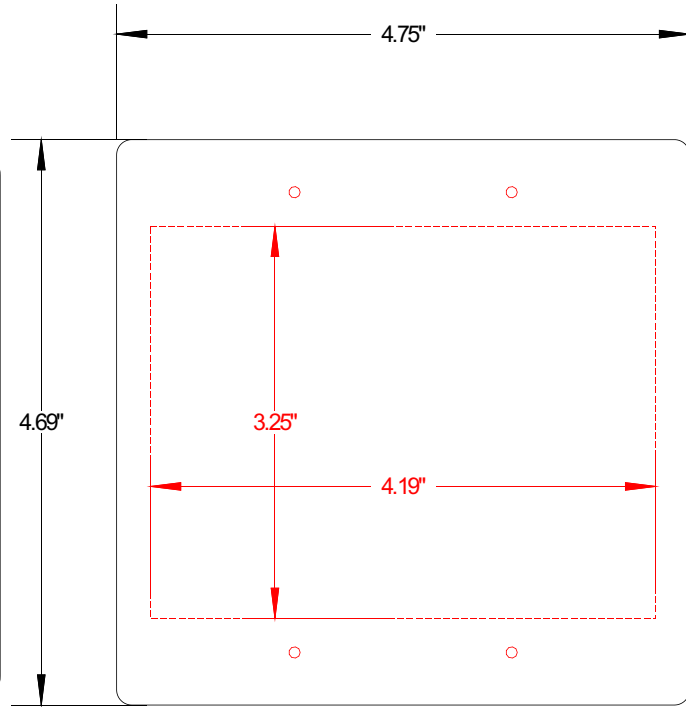
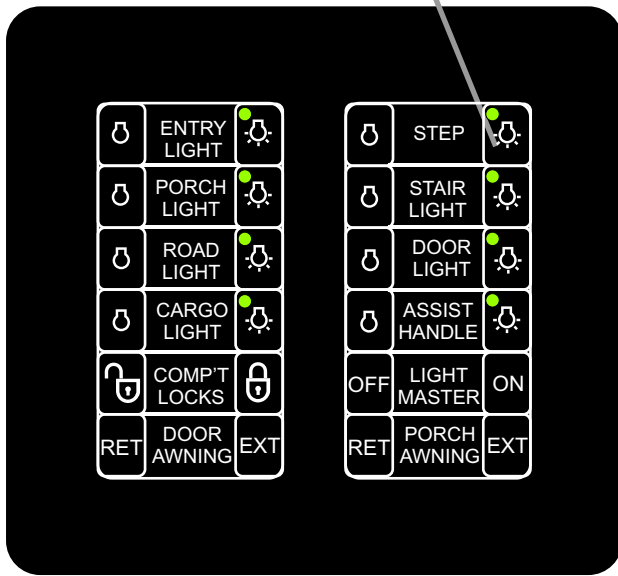
## SSP13 - 12POS Switch Panel

### INTRODUCTION:

This material provides the technical details for the SSP13 switch series. The clear and brightly backlit labels and raised buttons with symbols make operation very intuitive. Built-in LED indicators for each switch provide real-time status feedback for each switch group based on load function. The SSP13 series provides solutions for applications that require elegance and high-end features.

### STATUS INDICATOR

**NOTE:** The green status indicators found on each switch will indicate if a load or output is on. In the case of pumps, steps, doors, light master or panel lights function, this status will not activate. This is normal.



### FRONT VIEW SAMPLE

**NOTE:** The cover for each switch panel is removed through inserting a small screw driver or using a finger to gently pry off.

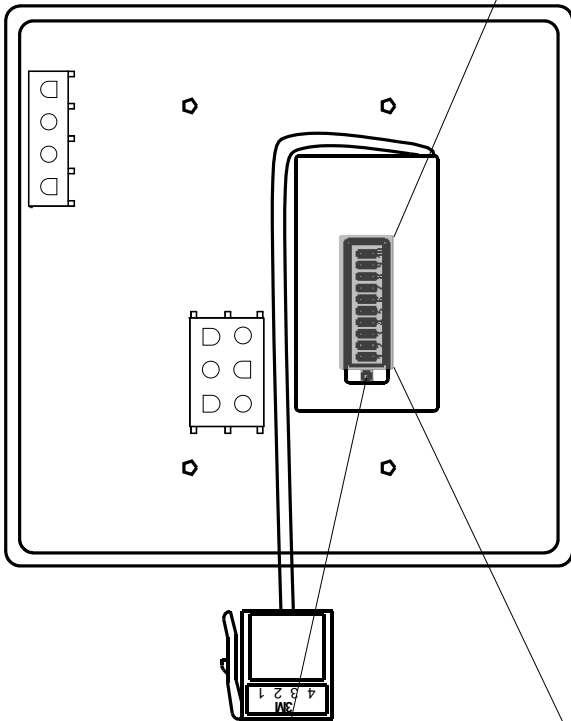
### DIMENSIONS/CUTOUT VIEW



## SSP13 - 12POS Switch Panel

### DIP SWITCH SETTING 1-10

DIP SWITCHES CAN BE SET AS PER THE CHART BELOW FOR ALL ADDRESSES AND GROUP FUNCTIONS OF THE MODULE.



SWITCH PANEL DIP		SWITCH GUIDE	
NODE ADDRESS (DIP SW 1-6 respectively)		RESERVED (DIP SW 7-8 respectively)	
NA (NODE ADDRESS)	DIP SWITCH SETTING	FUNCTION	DIP SWITCH SETTING
1	100000	RESERVED	00
2	010000		
3	110000		
4	001000		
5	101000		
6	011000		
7	111000		
8	000100		
9	100100		
10	010100		
11	110100		
12	001100		
13	101100		
14	011100		
15	111100		
16	000010		
17	100010		
18	010010		
19	110010		
20	001010		
21	101010		
22	011010		
23	111010		
24	000110		
25	100110		
		GROUP SETTINGS (DIP SW 9-10 respectively)	
		GROUP # (MEMBER OF...)	DIP SWITCH SETTING
		NON-GROUP	11
		GROUP 1	00
		GROUP 2	01
		GROUP 3	10
		DIP SWITCH POSITION	
		0 = OFF	
		1 = ON	

### MODULE NETWORK STATUS INDICATOR

- 🟢 / ○ - FAST FLASHING GREEN (4 times / sec.) - device is attempting to make initial connection and claim a network address
- 🟢 / ○ - SLOW FLASHING GREEN (1 time / sec.) - device was online but has not seen a valid network address for 5 seconds
- 🟢 - SOLID GREEN - device is connected to network and communicating properly
- 🔴 - SOLID RED - device has gone offline and is not connected to network
- 🔴 / 🟡 - ALTERNATING RED & ORANGE - device has gone offline and is attempting to re-connect (within 30 seconds)
- 🟢 / 🟡 - ALTERNATING GREEN & ORANGE - device is currently online but has gone offline 2 or more times



## SSP13 - 12POS Switch Panel

### ENTRY STEP CONNECTOR - 4POS PINOUT

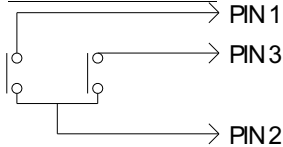
NOTE: THE ENTRY STEP FUNCTION REQUIRES AN INDEPENDENT 12V+ CONSTANT TO OPERATE.

- PIN 1 - 12V+ CONSTANT
- PIN 2 - GROUND
- PIN 3 - COMMON FROM STEP
- PIN 4 - OUTPUT TO STEP

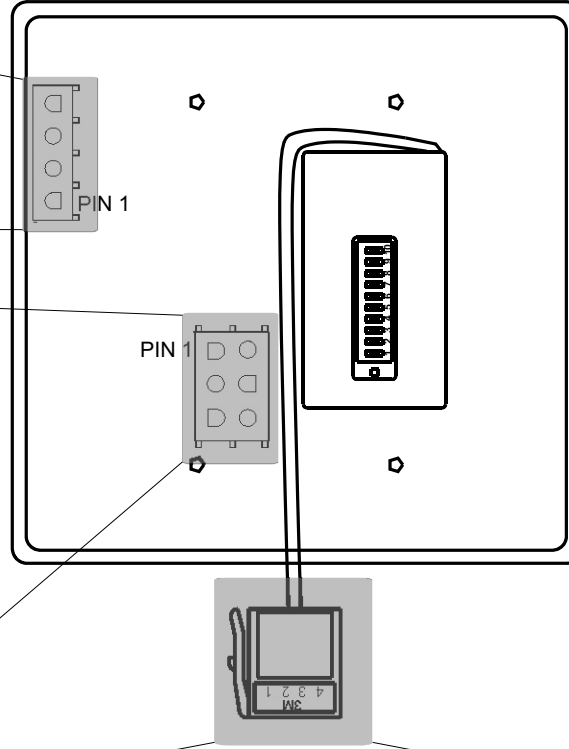
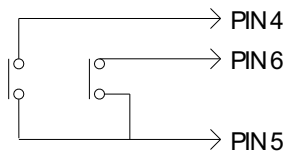
### PORCH/DOOR CONNECTOR - 6POS PINOUT

- PIN 1 - PORCH AWNING RETRACT
- PIN 2 - PORCH AWNING COMMON
- PIN 3 - PORCH AWNING EXTEND
- PIN 4 - DOOR AWNING RETRACT
- PIN 5 - DOOR AWNING COMMON
- PIN 6 - DOOR AWNING EXTEND

#### PORCH SCHEMATIC



#### DOOR SCHEMATIC



### NETWORK CONNECTOR TO DROP CABLE CONNECTION

RV-C Mini-Clamp connector plug-in used for communication and diagnostic purposes.

### NETWORK PINOUT

- 1 - RED 16GA - NET 12V+
- 2 - WHITE 20GA - CAN H
- 3 - BLUE 20GA - CAN L
- 4 - BLACK 16GA - NET GROUND

### PART COMPONENTS:

#### ALLEGRO BUS / SPYDER BILL OF MATERIALS - 1v0

QTY:	MANU. P/N:	DESCRIPTION:	MANUFACTURER
<b>12 Position Switch Panel Components</b>			
1	BSSPZV4C4	SSP13 - 12 SWITCH PANEL	SPYDER
1	1-480702-0	4 POS INLINE MATE-N-LOK PLUG HOUSING	TYCO ELECTRONICS
1	640585-1	6 POS INLINE MATE-N-LOK PLUG HOUSING	TYCO ELECTRONICS
10	350550-1	MATE-N-LOK SOCKET CONTACT 20-14AWG	TYCO ELECTRONICS
1	37304-A165-00E	Mini Clamp W/M SKT 4P Blue for EU	3M

### PRODUCT SPECIFICATIONS:

SPECIFICATION		SSP13-12 SWITCH PANEL - SPYDER CONTROLS	
<i>General</i>			
Dimensions (H x W x D)	4.75 x 4.69 x 0.77 in. (12.07 x 11.91 x 1.94 cm.)		
Cutout Dimensions (H x W)	4.19 x 3.25 in. (10.64 x 8.26 cm.)		
Mount Depth (from mounting surface)	0.77 in. (1.94 cm.)		
Operating Temperature	-4 F to 140 F (-20 C to +60 C)		
<i>Electrical</i>			
Input Voltage (Network Bus Supplied)	9V+ to 16V+ dc		
Minimum Current (No Outputs On)	102 mA @ 12V+ dc		



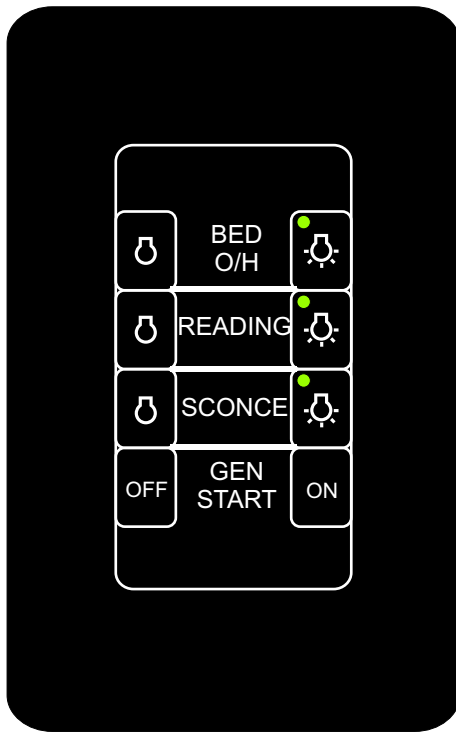
## SSP13 - 4POS Switch Panel

### INTRODUCTION:

This material provides the technical details for the SSP13 switch series. The clear and brightly backlit labels and raised buttons with symbols make operation very intuitive. Built-in LED indicators for each switch provide real-time status feedback for each switch group based on load function. The SSP13 series provides solutions for applications that require elegance and high-end features.

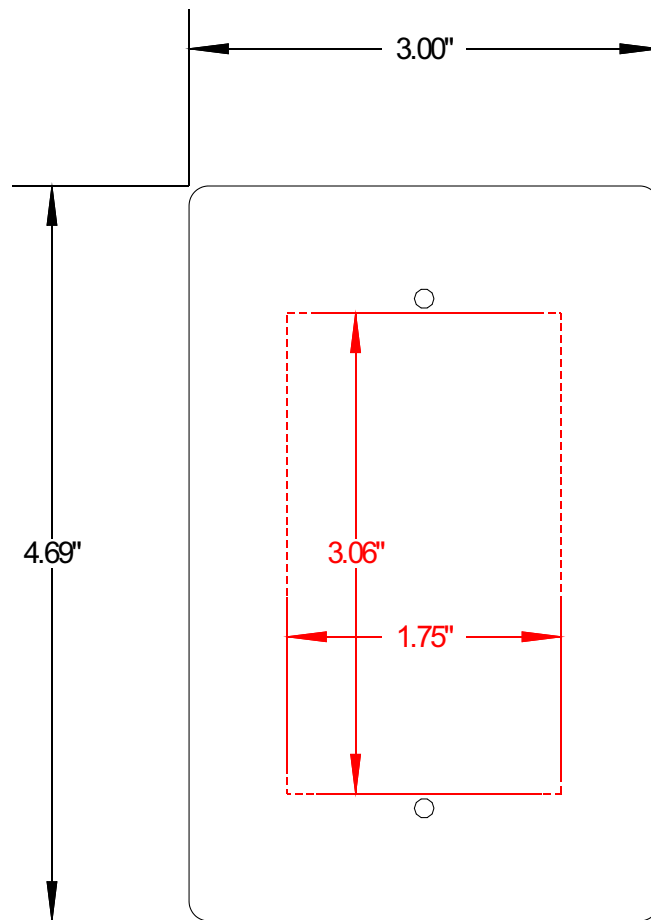
### STATUS INDICATOR

*NOTE:* The green status indicators found on each switch will indicate if a load or output is on. In the case of pump, generators, light master or panel lights function, this status will not activate. This is normal.



### FRONT VIEW SAMPLE

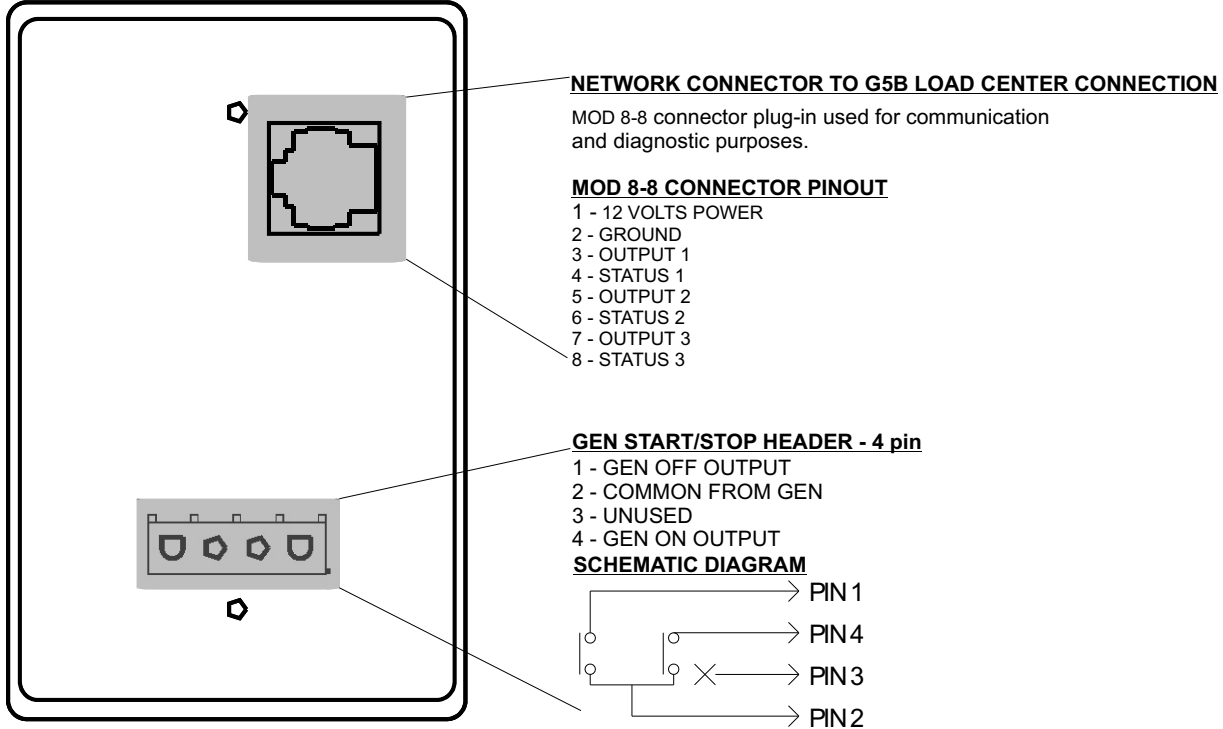
*NOTE:* The cover for each switch panel is removed through inserting a small screw driver or using a finger to gently pry off.



### DIMENSIONS/CUTOUT VIEW



## SSP13 - 4POS Switch Panel



**PART COMPONENTS:**

ALLEGRO BUS / SPYDER BILL OF MATERIALS - 1v0			
QTY:	MANU. P/N:	DESCRIPTION:	MANUFACTURER
<b>6 Position Switch Panel Components</b>			
1	BSSPZT4C4	SSP13 - 04 SWITCH PANEL	SPYDER
1	1-480702-0	4 POS INLINE MATE-N-LOK PLUG HOUSING	TYCO ELECTRONICS
4	350550-1	MATE-N-LOK SOCKET CONTACT 20-14AWG	TYCO ELECTRONICS
1	5-554739-3	CONN MOD PLUG 8-8 FLAT OVAL AU	TE CONNECTIVITY

**PRODUCT SPECIFICATIONS:**

SPECIFICATION		SSP13-04 SWITCH PANEL - SPYDER CONTROLS
<b>General</b>		
Dimensions (H x W x D)	3.0 x 4.69 x 0.77 in. (7.62 x 11.91 x 1.94 cm.)	
Cutout Dimensions (H x W)	1.75 x 3.06 in. (4.45 x 7.77 cm.)	
Mount Depth (from mounting surface)	0.77 or 1.5 in. with optional MATE-N-LOK connector (1.94 or 3.81 cm.)	
Operating Temperature	-4 F to 140 F (-20 C to +60 C)	
<b>Electrical</b>		
Input Voltage (Network Bus Supplied)	9V+ to 16V+ dc	
Minimum Current (No Outputs On)	102 mA @ 12V+ dc	



## Switch Panel Backlight Issues (white backlighting that illuminates the label text)

Notes: the backlighting is controlled by a 'PANEL LIGHTS' button at the Galley 8-button switch panel)

### Backlighting is OFF on ALL switch panels and cannot be turned ON

1. Verify the voltage at the G5B control panel in the passenger side bay #3
2. Verify that the 5 amp network fuse on the G5B panel is good

### Backlighting on the Entry and Galley switch panels is always out of sync with the other switch panels

1. Cycle the 12V power by turning OFF / ON the 12V MASTER rocker switch at the passenger console.
2. When the 12V power is turned back on, check if the backlighting is now in sync. You can turn the backlighting ON and OFF using the PANEL LIGHTS button on the Galley switch panel.
3. If the backlighting on the front area switch panels (Entry and Galley) are still out of sync with the rear area switch panels (Mid-Bath, Bed Hall, Bedside, and Rear Bath), replace the G5B control panel in the passenger side bay #3.

### Backlighting is always ON on specific switch panels and cannot be turned OFF

1. Cycle the 12V power by turning OFF / ON the 12V MASTER rocker switch at the passenger console.
2. When the 12V power is turned back on, check if the backlighting is now in turning OFF (you can turn the backlighting ON and OFF using the PANEL LIGHTS button on the Galley switch panel).
3. If backlighting still remains ON constantly of specific switch panels, here are the next steps:
  - A. FRONT AREA SWITCH PANELS constantly ON (Entry or Galley locations):**
    - i. Remove the switch panel and check the network status LED on the back side:
      - a. If the status LED is RED or RED/ORANGE, proceed to NETWORK TROUBLESHOOTING page.
      - b. If the status LED of GREEN or GREEN/ORANGE, verify whether or not the various other buttons on the switch panel function:
        - If all other buttons work properly and backlight still remains on constantly, replace the switch panel
        - If no other buttons work properly, verify the correct DIP switch setting on the rear of the switch panel
  - B. REAR AREA SWITCH PANELS constantly ON (Mid-Bath, Bed Hall, Bedside, or Rear Bath):**
    - i. If the backlighting on the Rear Area Switch panels stays on constantly (even after a 12V reset), replace the G5B panel.

### Backlighting is always OFF on a specific switch panel and cannot be turned ON

1. Cycle the 12V power by turning OFF / ON the 12V MASTER rocker switch at the passenger console
2. When the 12V power is turned back on, check if the backlighting can now be turned ON (you can turn the backlighting ON and OFF using the PANEL LIGHTS button on the Galley switch panel).
3. If backlighting still remains OFF constantly of specific switch panels, here are the next steps:
  - A. FRONT AREA SWITCH PANELS are constantly OFF (Entry or Galley locations):**
    - i. Verify the voltage at the G5B panel is 11V or higher and that the 5 amp Network fuse is good.
    - ii. Remove the switch panel and check the network status LED on the back side:
      - a. If the status LED is OFF, unplug the switch panel and plug it into a spare network port on the rear of the G5B panel:
        - Network status LED comes on GREEN and the backlighting now functions properly, proceed to the NETWORK WIRING TROUBLESHOOTING to resolve cable problem and then re-install the switch panel.
        - Network status LED still does not come on, check the connector termination on the 'pigtail'. If this does not fix problem, replace the switch panel.
      - b. If the status LED is RED or RED/ORANGE, proceed to NETWORK TROUBLESHOOTING page.
    - iii. If the status LED of GREEN or GREEN/ORANGE, verify whether or not the various other buttons on the switch panel function:
      - If all other buttons work properly and backlight still remains OFF, replace the switch panel
      - If no other buttons work properly, replace the switch panel
  - B. ALL REAR AREA SWITCH PANELS are constantly OFF (Mid-Bath, Bed Hall, Bedside, or Rear Bath):**
    - i. On the backside of the G5B panel, unplug the (4) flat RJ-45 (MOD8) cables (after carefully noting their location) and leave them unplugged for 1 minute.
    - ii. Plug in one of the RJ45 cables into its assigned jack on the rear of the G5B panel and verify if the backlight for that specific switch panel is now on and then unplug that cable again.
    - iii. Go through this process of elimination procedure for each of the cables until you find one that does not light up.
      - a. If none of the switch panels light up, replace the G5B panel
      - b. If there is one cable that does not light up the switch panel, it is likely that there is a short on that cable that is tripping the auto-reset fuse that powers the backlight for all of the REAR switch panels. Verify the RJ45 cables and re-test.
  - C. ONLY 1 or 2 REAR AREA SWITCH PANELS are constantly OFF (Mid-Bath, Bed Hall, Bedside, or Rear Bath):**
    - i. To test the switch panel, borrow a REAR AREA switch panel within the coach that's backlit and temporarily use it to replace the one that isn't backlit
      - a. If the 'test' switch panel lights up, replace the original 'unlit' switch panel with a new one.
      - b. If the 'test' switch panel does NOT work, go the G5B panel and unplug the RJ45 cable for the switch panel that isn't working and plug it into the RJ45 jack that is working.
        - If the 'test' switch panel still does NOT light up, the problem is in the RJ45 cable or connection between the G5B panel and the switch panel. Repair and re-test.
        - If the 'test' switch panel still DOES light up, replace the G5B control panel.