GL-IPAC-SW8
STAND ALONE SUBMITTAL

SUBMITTALS FOR APPROVAL

NOTE:
SUBMITTALS GENERATED FROM THE FOLLOWING PROJECT DOCUMENTATION:

PROJECT SPECIFICATIONS:
PROJECT DRAWINGS:
PROJECT FIXTURE SCHEDULE:

ENGINEER: **REVISION:** **DATE:**
IF THIS DOCUMENTATION IS NOT CURRENT IT IS THE RESPONSIBILITY OF THE APPROVER TO PROVIDE THE LATEST REVISION OF THE PROJECT DRAWINGS TO CRESTRON LIGHTING PROJECTS.

☐ Accepted
☐ Accepted with Notations
☐ Revise & Resubmit
☐ Rejected

SIGNATURE DATE

TYPED / PRINTED NAME

COMPANY

Crestron Commercial Lighting Contacts

In most situations, the contacts shown on the cover page of this submittal will be the best resources for information over the course of this project. If you have any problems getting in touch with them, or for questions that don't seem best directed to those staff members, below are some additional resources for contacting Crestron.

CLCQuotes@Crestron.com	All quote requests, revisions, or general sales questions
CLCSubs@Crestron.com	Engineering questions or questions & comments about submittal documents
CLCOrders@Crestron.com	All NEW orders
CLCLighting@Crestron.com	General lighting, customer service or order status question, & RMA requests
CLCService@Crestron.com	Post-install service issues, tech support, programming, & start-up requests

Business Address:
6 Volvo Drive
Rockleigh, NJ 07647

Corporate Offices:
15 Volvo Drive
Rockleigh, NJ 07647

Telephone: Commercial Lighting: 855.644.7643
Fax: 201.767.3049

Crestron Main Switchboard: 800.237.2041

DRAWING SET REVISION HISTORY

REV	DATE	ENG	REVISION DESCRIPTION
00			

THE DRAWINGS CONTAINED WITHIN THIS SET ARE NOT TO SCALE.

CRESTRON
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Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

PROJECT:
LOCATION:
QUOTE #: PO #: ORDER #:
SALES REP:
DISTRIBUTOR:

Scan QR code for latest Crestron documentation

TITLE: COVER PAGE
DRAWING: 01.1
REV:
DATE:
DRAWN BY:

Click here or enter URL for most current documents: http://www.crestron.com/products/green_light_commercial_lighting_control/resources.asp

DRAWING INDEX

DRAWING #	REV	TITLE
01.01	00	COVER PAGE
01.02	00	DRAWING INDEX
02.01		GENERAL SYSTEM NOTES
02.06		CRESNET WIRING INSTRUCTIONS
02.07		CRESNET POWER CALCULATIONS
03.01	00	BILL OF MATERIALS
04.01 SERIES	00	SCHEMATIC ONE-LINE DIAGRAMS
C2N-CBD-P		C2N-CBD-P DETAIL DRAWING
GLA-EPC-PM		GL-EPC-PM 2-WIRE DETAIL
GL-IPAC-SW8		GL-IPAC-SW8 DETAIL DRAWING
GLS-LOL		GLS-LOL DETAIL DRAWING
GLS-ODT-C-NS		GLS-ODT-C-NS DETAIL DRAWING
GLS-SIM WITH GLA-KS		GLS-SIM WITH GLA-KS DETAIL DRAWING
CUTSHEETS		CUTSHEETS

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TITLE:
DRAWING INDEX

DRAWING:
01.2
REV:
DATE:
DRAWN BY:

Crestron General System Notes

Not all notes will be pertinent to all projects. The installing contractor should review these notes and determine their applicability to the project.

Fluorescent Lamps

- If fluorescent lamps are being dimmed, we recommend that all lamps, including a stock of spares, should be burned in at full intensity for 100 hours prior to dimming. This will improve lamp life and dimming performance. Please also review any manufacturer recommendations.

Color Choices

- Please carefully examine these submittals for notations regarding the color or finish of devices and confirm that all choices are correct. Restocking fees will apply for changing device colors after shipment.

System Programming

- Programming charges include 'Standard' & 'Modified' default keypad and touch screen templates. Additional design fees are required for certain custom graphics. Contact your Crestron Project MANAGER for details and charges.

Control System Power

- It is recommended that the system processor and all control signal distribution equipment be supplied by a dedicated, backed up, clean power source with surge & spike protection, furnished by others unless specifically noted otherwise in this submittal.

System Wiring & Electrical

- All installation and termination labor is furnished by the project electrical contractor.
- All Ethernet wiring must be terminated to the appropriate ANSI/EIA wiring specification. All other control wiring must be terminated per the Crestron wiring specification shown in this document.
- All line voltage conductors of the same circuit shall be contained in the same conduit, raceway, auxiliary gutter, cable tray, or cable.
- All low voltage control wire shall be separated appropriately to eliminate any possibility of secondary induced voltage due to line voltage wires in close proximity.
- Load circuit wiring shall have individual neutrals for any circuit with line-voltage dimming.
- Line feeds are to be determined by others.
- Phase-balancing of loads is to be determined by others. If this requires modification of Crestron panels, Crestron must be notified immediately and submittals shall be revised to ensure accurate programming of system.
- Replacement hardware shall be re-installed by licensed Electrical Contractor only.
- All Crestron control devices have an associated serial number. The Electrical Contractor must identify each SN for each device, and their location of installation on the plans. This information is required to program the system.

NOTICE:
THIS DRAWING PACKAGE IS THE PROPERTY OF AND CONTAINS INTELLECTUAL PROPERTY BELONGING TO CRESTRON ELECTRONICS, INC. THIS PACKAGE SHALL NOT BE REPRODUCED, USED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT. NO PORTION MAY BE INCORPORATED INTO ANY OTHER DESIGN OR SYSTEM LAYOUT.

WARNING
THIS DOCUMENT SET DOES NOT DESCRIBE AN INSTALLABLE SYSTEM UNTIL IT HAS BEEN REVIEWED FOR CODE COMPLIANCE BY THE PROJECT ELECTRICAL ENGINEER OR OTHER CODE-COMPLIANCE AUTHORITY. ALTHOUGH EVERY EFFORT HAS BEEN MADE TO PRODUCE A COMPLETE AND CODE-COMPLIANT DESIGN, CRESTRON INC. SPECIFICALLY DISCLAIMS ANY RESPONSIBILITY FOR CODE COMPLIANCE, WHICH IS THE RESPONSIBILITY OF THE PROJECT ELECTRICAL ENGINEER OR CODE AUTHORITY.

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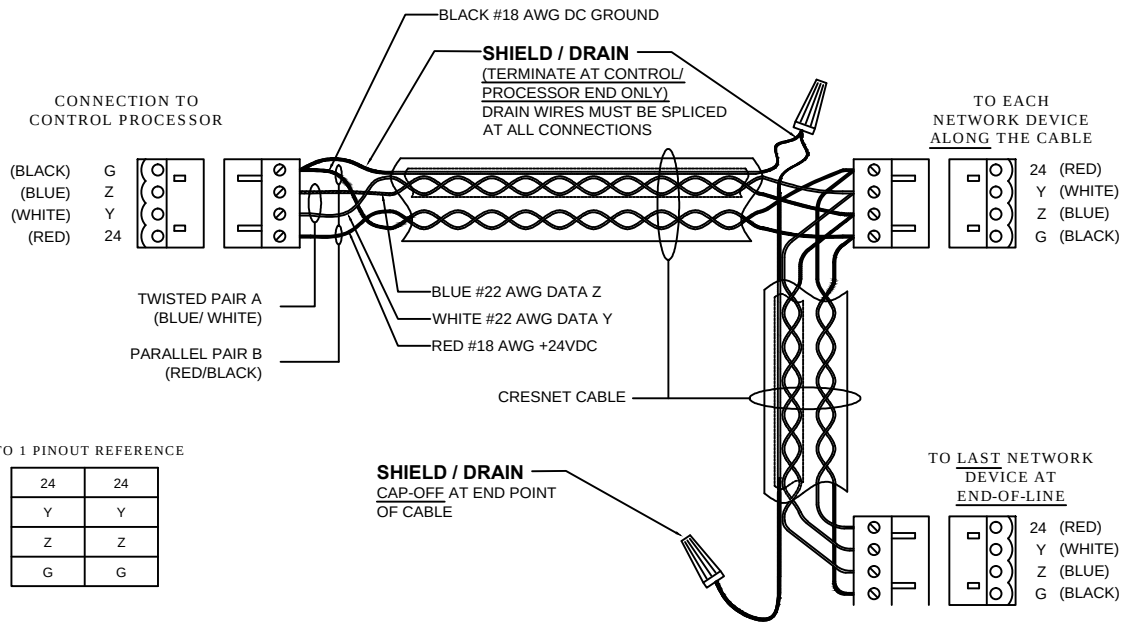
TITLE:
GENERAL SYSTEM NOTES

DRAWING:
02.1

CRESNET WIRING DETAILS

CAUTION: POSSIBLE EQUIPMENT DAMAGE IF MISWIRED



1 TO 1 PINOUT REFERENCE

24	24
Y	Y
Z	Z
G	G

COLOR CODE - CRESNET CABLE

GND	=	BLACK
Z	=	BLUE
Y	=	WHITE
24	=	RED

DATA PAIR (#22 AWG TWISTED) — POWER PAIR (#18 AWG PARALLEL-STANDARD CABLE) (#12 AWG PARALLEL-HIGH POWER CABLE)

WIRING NOTES

DO THIS:

GENUINE CRESNET CONTROL CABLE IS RECOMMENDED FOR CONNECTION OF CRESTRON COMMERCIAL LIGHTING SYSTEMS.

STRIP ONLY THE MINIMUM AMOUNT OF JACKETING FROM THE WIRES, AND **INSULATE ANY EXPOSED CONDUCTORS/ DRAIN WIRES** WITH HEAT SHRINK TUBING, OR AT A MINIMUM PVC ELECTRICAL TAPE.

GROUND SHIELD/DRAIN AT CONTROL PROCESSOR END **ONLY**.

SHIELD/DRAIN MUST BE SPLICED TOGETHER AT EVERY CONNECTION AND CAPPED-OFF AT END OF CONTROL RUN.

SHIELD/DRAIN SHOULD NOT CONNECT TO ANY DISTRIBUTION DEVICES (DIN-HUB, DIN-BLOCK, CNTBLOCK) BUT SHOULD BYPASS THE DISTRIBUTION DEVICE, SPLICING ALL REQUIRED DRAINS TOGETHER AS DONE AT ALL CONNECTIONS ALONG CONTROL CABLE RUNS.

WHEN DAISY CHAINING NETWORK UNITS, ALWAYS TWIST THE ENDS OF THE INCOMING WIRE AND THE OUTGOING WIRE THAT SHARE A PIN ON THE NETWORK CONNECTOR. IF NECESSARY USE A PIGTAIL SPLICE WHEN LANDING MORE THAN TWO CONDUCTORS ON A SMALL GREEN PHOENIX CONNECTOR. A PIGTAIL WILL ALWAYS BE REQUIRED WHEN TERMINATING MULTIPLE "HP" (HIGH-POWER) CABLES INTO ONE CONNECTOR DUE TO THE LARGER POWER CONDUCTORS.

MODEL "CNTBLOCK" NETWORK DISTRIBUTION/ TERMINAL BLOCKS ARE RECOMMENDED FOR TESTING PURPOSES AND CONVENIENCE OF WIRING.

DO NOT DO THIS:

DO NOT POWER UP SYSTEM UNTIL ALL WIRING IS VERIFIED. CARE SHOULD BE TAKEN TO ENSURE DATA (Y,Z) AND POWER (24,G) CONNECTIONS ARE NOT CROSSED.

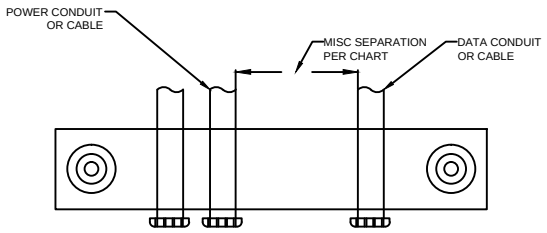
DO NOT CONNECT THE SHIELD/DRAIN WIRE OF ANY CRESNET CABLE TO GROUND AT ANY CONNECTION POINT EXCEPT THE CONTROL PROCESSOR.

DO NOT ALLOW ANY EXPOSED SHIELD/DRAIN WIRE TO MAKE CONTACT WITH ANY ELECTRICAL GROUND. IF ANY WIRE IS EXPOSED, IT MUST BE INSULATED- HEAT SHRINK TUBE IS RECOMMENDED, BUT AT A MINIMUM PVC ELECTRICAL TAPE CAN BE USED.

DO NOT EXCEED THE "MAXIMUM LENGTH" SHOWN IN THE CABLE IDENTIFICATION BLOCK OF ANY CABLE. 1000' IS THE NORMAL MAXIMUM LENGTH THAT WILL BE INDICATED. IN MOST SITUATIONS 1500' WILL BE POSSIBLE, BUT IS NOT RECOMMENDED DUE TO POSSIBLE INTERFERENCE & INDUCED VOLTAGE. LONGER CABLE RUNS WILL REQUIRE SIGNAL HUBS OR REPEATERS TO ENSURE SIGNAL RELIABILITY. (SEE NEXT SHEET FOR MORE INFO ON CRESNET POWER.)

DO NOT EXCEED 20 CRESNET "DEVICES" ON ANY ONE NETWORK SEGMENT WITHOUT DISCUSSING THE POSSIBLE IMPLICATIONS WITH YOUR CRESTRON PROJECT ENGINEER. (SEE NEXT SHEET FOR MORE INFO ON CRESNET DEVICES.)

PROPER SEPARATION OF POWER & DATA



SEPARATION OF POWER & DATA CABLING

TAKEN FROM ANSI/NECA/BICSI 568-2001

PROTECTION	POWER <2KVA	POWER 2-5KVA	POWER >5KVA
NONE- POWER & DATA CABLE OPEN AIR	5" (127MM)	10" (305MM)	24" (610MM)
DATA IN CONDUIT, POWER OPEN AIR	2.5" (64MM)	6" (152MM)	12" (305MM)
BOTH POWER & DATA IN CONDUIT	0	0	6" (152MM)
SPECIAL CASE: MOTORS OR TRANSFORMERS NEAR DATA CABLE IN CONDUIT	0	0	48" (1220MM)

SEPARATION SHOWN IS THE **MINIMUM** ALLOWABLE BY THIS STANDARD. GREATER SEPARATION IS PREFERABLE

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TITLE:
CRESNET WIRING INSTRUCTIONS

DRAWING:
02.6

CALCULATING POWER USED AND MAXIMUM CABLE LENGTH

THESE NOTES ONLY RELATE TO SYSTEMS WITH DEVICES INTERCONNECTED VIA CRESNET OR ETHERNET
(SPACES INDICATED WITH "NET" IN THE SPACE LEXICON)

IN MOST CASES, CRESTRON WILL CALCULATE THE CABLE REQUIREMENTS OF THE CRESTRON SYSTEM AS A PART OF THE SUBMITTAL PACKAGE. IN CASES WHERE CRESTRON HAS NOT BEEN PROVIDED WITH COMPLETE INFORMATION TO GENERATE THE SUBMITTAL THE INSTALLING CONTRACTOR MUST REVIEW & UNDERSTAND THE INFORMATION ON THIS PAGE IN ORDER TO PROPERLY INSTALL THE LIGHTING SYSTEM.

CABLE IDENTIFICATION BLOCK

CRESNET CABLE 1	
DEVICES	12
WATTS USED	14
MAX LENGTH	476
MIN VOLTS	22V

EACH CONTROL CABLE RUN ON THE CRESTRON RISER DRAWINGS SHOULD INCLUDE A BLOCK LIKE THE ONE SHOWN TO THE LEFT. THIS SHOWS THE NUMBER OF CRESNET DEVICES ATTACHED TO THE CABLE, THE MAXIMUM LENGTH THAT WILL ALLOW CORRECT FUNCTION, AND THE MINIMUM VOLTAGE THAT SHOULD BE MEASURED AT THE END OF THE CABLE MOST DISTANT FROM THE PROCESSOR OR MID-POINT POWER SUPPLY/DISTRIBUTION HUB. MAXIMUM LENGTH IS SHOWN FOR STANDARD CRESNET CABLE; USING CRESNET-HP (HIGH-POWER) CABLE ALLOWS YOU TO MULTIPLY THE LENGTH BY APPROXIMATELY 3.5 TIMES.

THE CONTRACTOR SHOULD LABEL THE PROCESSOR END OF THE CABLE WITH THE APPROPRIATE CRESNET CABLE NUMBER. WHILE NOT STRICTLY REQUIRED, IS IS RECOMMENDED THAT THE CABLE BE LABELED AT EACH SPLICE POINT, IN THE EVENT TROUBLESHOOTING IS REQUIRED DURING SYSTEM COMMISSIONING.

THIS CABLE ID BLOCK MAY BE OMITTED ON SMALLER PROJECTS, OR PROJECTS WITH LIMITED POWER REQUIREMENTS.

CRESNET DEVICES:

"DEVICES" INDICATES THE NUMBER OF LOGICAL CRESNET DEVICES ON THE CABLE. THIS NUMBER MAY NOT BE OBVIOUS WHEN EXAMINING THE RISER. FOR EXAMPLE, IN SOME DIMMING/SWITCHING PANELS EACH INTERNAL MODULE MAY COUNT AS A SEPARATE DEVICE. ALTERNATELY, IF TWO SENSORS ARE CONNECTED TO ONE GLS-SIM INTERFACE, ONLY THE INTERFACE COUNTS AS A CRESNET DEVICE. IN MOST CASES THE MAXIMUM NUMBER OF CRESNET DEVICES ON ANY ONE WIRING SEGMENT IS (20). A "SEGMENT" IS A GROUPING OF PORTS AS SHOWN ON THE PROCESSOR WIRING DETAIL SHEETS, AND OFTEN INCLUDES MORE THAN ONE CRESNET CABLE. CRESNET "HUBS" (i.e. DIN-HUB) MAY BE USED TO INCREASE THE NUMBER OF DEVICES ON ONE SEGMENT, BUT SHOULD NOT BE ADDED WITHOUT CONSULTING THE CRESTON PROJECT ENGINEER.

CRESTRON STRONGLY RECOMMENDS THAT THE EQUIPMENT IN THIS SYSTEM BE INSTALLED AS SHOWN ON THE RISERS. MINOR CHANGES ARE ACCEPTABLE- FOR EXAMPLE, ALTERING THE ORDER OF DEVICES ALONG A CABLE. HOWEVER, ADDING OR REMOVING DEVICES WILL HAVE AN IMPACT ON THE DEVICE COUNT AND POWER REQUIREMENTS.

FURTHER, THE INFORMATION AS PROVIDED IN THE CABLE IDENTIFICATION BLOCKS IS ALSO USED FOR THE PREPARATION OF THE PROCESSOR WIRING DETAIL SHEETS IN THIS PACKAGE. ALTERING THE DEVICE QUANTITY MAY HAVE SIGNIFICANT IMPACT ON THESE DRAWINGS.

IF THE WIRING AS SHOWN ON THE CRESTRON RISERS IS NOT POSSIBLE, THE INFORMATION BELOW MAY BE USED TO CALCULATE THE MAXIMUM POSSIBLE LENGTH OF A CABLE. NO CABLE SHOULD EXCEED 1000' WITHOUT DISCUSSION WITH YOUR PROJECT ENGINEER. MUCH LONGER DISTANCES ARE POSSIBLE, BUT MUST BE DISCUSSED WITH CRESTRON. USING CRESNET-HP HIGH POWER CABLE DOES NOT EXTEND THIS LIMIT. IF A LONGER CABLE IS REQUIRED A SIGNAL HUB OR REPEATER MAY BE ADDED ALONG THE CABLE.

PLEASE CONTACT YOUR CRESTRON PROJECT ENGINEER IF YOU HAVE ANY QUESTIONS REGARDING THE WIRING REQUIREMENTS OF THE SYSTEM, OR IF YOU NEED ASSISTANCE IN ALTERING THE RISERS. YOUR PROJECT ENGINEER IS AVAILABLE AS A RESOURCE TO HELP.

ANY CHANGES MADE TO THE WIRING AS SHOWN ON CRESTRON RISERS MUST BE COMMUNICATED TO CRESTRON NO LATER THAN WHEN YOU REQUEST SYSTEM COMMISSIONING.

ANY CHANGES MADE TO THE RISERS THAT ARE NOT COMMUNICATED TO CRESTRON THAT REQUIRE ALTERING SYSTEM PROGRAMMING AT THE TIME OF COMMISSIONING MAY RESULT IN ADDITIONAL CHARGES FOR REPROGRAMMING OR ADDITIONAL SERVICE VISITS.

POWER DRAW OF COMMON CRESTRON DEVICES

CATEGORY	DEVICE	DESCRIPTION	POWER DRAW	NOTES
PROCESSORS	PAC2	PAC2 PROCESSOR	25W	CONTAINS 75W POWER SUPPLY; CAN POWER 50W OF EXTERNAL DEVICES
	PAC2M	PAC2M PROCESSOR	5W	
	DIN-AP3	DIN RAIL MOUNT PROCESSOR	8W	
	IPAC-GL1	INTEGRATED PROCESSOR	10W	
	GLPAC-DIMFLV	INTEGRATED DIMMING/SWITCHING PANEL	0W	DOES NOT DRAW ANY CRESNET POWER; SUPPLIES 10W TO LOCAL DEVICES
	GLPP (SWCN OR DIMFLV)	POWER PACK WITH INTEGRATED DIMMING OR SWITCHING	0W	DOES NOT DRAW ANY CRESNET POWER; SUPPLIES 2.5W TO LOCAL DEVICES
KEYPADS	C2N-CBD-P	CAMEO KEYPAD	1W	
	C2N-CBD-E	CAMEO EXPRESS KEYPAD	1W	
	CNX-B	DESIGNER KEYPAD	3W	
SENSORS & ACCESSORIES	GLS-SIM	SENSOR INTEGRATION MODULE	1W	
	GLS-ODT-x	DUAL TECHNOLOGY OCCUPANCY SENSORS	1W	
	GLS-ODT-C-CN	CRESNET DUAL TECH OCCUPANCY SENSOR	1W	
	GLS-OIR	INFRARED OCCUPANCY SENSORS	1W	
	GLS-LOL, LCL	PHOTOCELLS	1W	
	GLS-LEXT	EXTERIOR PHOTOCELL	1W	
	GLS-PART	PARTITION SENSOR	1W	
	C2N-SDC	SHADE/DRAPE CONTROLLER	3W	
	C2N-SDC-DC	DC SHADE/DRAPE CONTROLLER	33W	REQUIRES DEDICATED GLA-PWS50 OR GREATER POWER SUPPLY
	C2N-IO	PORT EXPANDER, RS232 & RELAY OUTPUTS	3W	
DIN RAIL UNITS	DIN-DALI-2	DALI CONTROLLER	9W	MAY USE POWER OVER ETHERNET; DEFAULTS TO CRESNET POWER IF BOTH ARE PRESENT
	DIN-HUB	CRESNET DISTRIBUTION HUB	.6W	
	DIN-1DIM4	DIMMER MODULES	.6W	SAME FOR DIN-1DIMU4
	DIN-8SW8	SWITCH MODULE	5.4W	SAME FOR DIN-8SW8-I
TOUCHPANELS	TPS-6L	6" TOUCHPANEL	15W	
	TPMC-8L	8" TOUCHPANEL	33W	
	TPMC-V12	12" TOUCHPANEL	43W	

"TSW-" AND "TPMC" TOUCHSCREENS NOT LISTED HERE ARE POWER-OVER-ETHERNET DEVICES THAT DO NOT DRAW CRESNET POWER.
FOR DEVICES NOT LISTED HERE, SEE THE APPROPRIATE SPECIFICATION SHEET OR VISIT WWW.CRESTRON.COM .
YOU MAY ALSO USE THE CRESNET POWER CALCULATOR, FOUND AT:
http://www.crestron.com/resources/system_design_resources/calculators/cresnet_power_calculator/

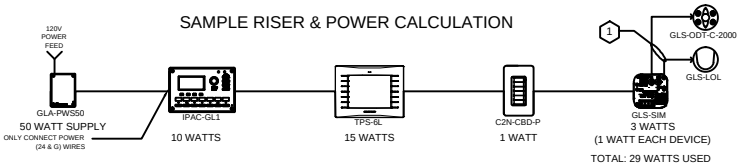
THE CRESNET POWER CALCULATION:

MAXIMUM CRESNET CABLE LENGTH

$$L < \frac{40{,}000}{R \times P}$$

Where L = Maximum Length of run in feet from power source
R = 6 Ohms for Cresnet Certified wire or
1.6 Ohms for Cresnet High Power Certified wire
P = Cresnet Power usage of entire run

SAMPLE RISER & POWER CALCULATION



TOTAL: 29 WATTS USED
21 WATTS STILL AVAILABLE

TO CALCULATE THE MAXIMUM LENGTH CABLE FOR THE ABOVE EXAMPLE TAKE THE TOTAL POWER USED (28 WATTS) AND MULTIPLY IT BY THE RESISTANCE OF THE WIRE, THEN DIVIDE 40,000 BY THAT NUMBER.

CRESNET STANDARD CABLE (CRESNET-NP OR CRESNET-P) HAS A RESISTANCE OF 6 OHMS.

29 WATTS X 6 OHMS = 174
40,000 DIVIDED BY 174 GIVES YOU A RESULT OF A MAXIMUM CABLE RUN OF 230 FEET.

CRESNET HIGH-POWER (CRESNET-HP-NP) CABLE HAS A LOWER RESISTANCE OF 1.6 OHMS.

29 WATTS x 1.6 OHMS = 46.4
40,0000 DIVIDED BY 46.4 GIVES YOU A MAXIMUM LENGTH OF 862 FEET.

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TITLE:
CRESNET POWER CALCULATIONS

DRAWING:
02.7

Bill of Materials

GLIPAC CONTROLLER

QTY	PART #	DESCRIPTION
1	GL-IPAC-SW8	GREENILIGHT INTEGRATED SWITCHING SYSTEM (INCLUDES 8 RELAYS)

ADDITIONAL RELAY CABINET

QTY	PART #	DESCRIPTION
0	GLPX-SW-FT-#	"#" CHANNEL RELAY CABINET, 120V - 277V

KEYPADS

QTY	PART #	DESCRIPTION	COLOR
0	C2N-CBD-P	CAMEO STYLE KEYPAD, 2-8 BUTTON FIELD CONFIGURABLE, WITH 2 VERSIPORTS	WHITE
0	GLA-KEYSW-MAINTAINED	KEYED SWITCH (ADD 1 GLS-SIM FOR EACH)	

SENSORS

QTY	PART #	DESCRIPTION
0	GLS-ODT-C-CN	DUAL TECHNOLOGY OCCUPANCY SENSOR, CEILING MOUNT, 2000 Sq. Ft., ADJ. SENSITIVITY, CRESNET CONNECTOR
0	GLA-OIR-HB-NS	HIGH-BAY OCCUPANCY SENSOR (ADD 1 GLS-SIM FOR EACH ZONE)
0	GLA-OIR-EXT-NS	EXTERIOR OCCUPANCY SENSOR (ADD 1 GLS-SIM FOR EACH ZONE)
0	GLS-LEXT	EXTERIOR OPEN LOOP PHOTOCELL (ADD 1 GLS-SIM FOR EACH ZONE)
0	GLS-LOL	INTERIOR OPEN LOOP PHOTOCELL

MISCELANEOUS

QTY	PART #	DESCRIPTION
0	GLA-EPC-PM	UL924 AUTOMATIC LOAD CONTROL RELAY FOR SWITCHING LOADS
0	GLS-SIM	SENSOR INTEGRATION MODULE
0	GLA-PWS50	50 WATT POWER SUPPLY, 120V (INCLUDE 1 WHEN MORE THAN 10 CRESNET DEVICES)
0	GLS-PLS-120/277	UL924 PHASE LOSS SENSOR

Notes:

1. Please ensure all colors shown on this bill of materials are correct prior to releasing the order for shipment.
2. The addition of hardware to this order may result in additional programming charges.
3. If there are any corrections please make sure to notify your Crestron Project Engineer, listed on the cover page of this submittal.

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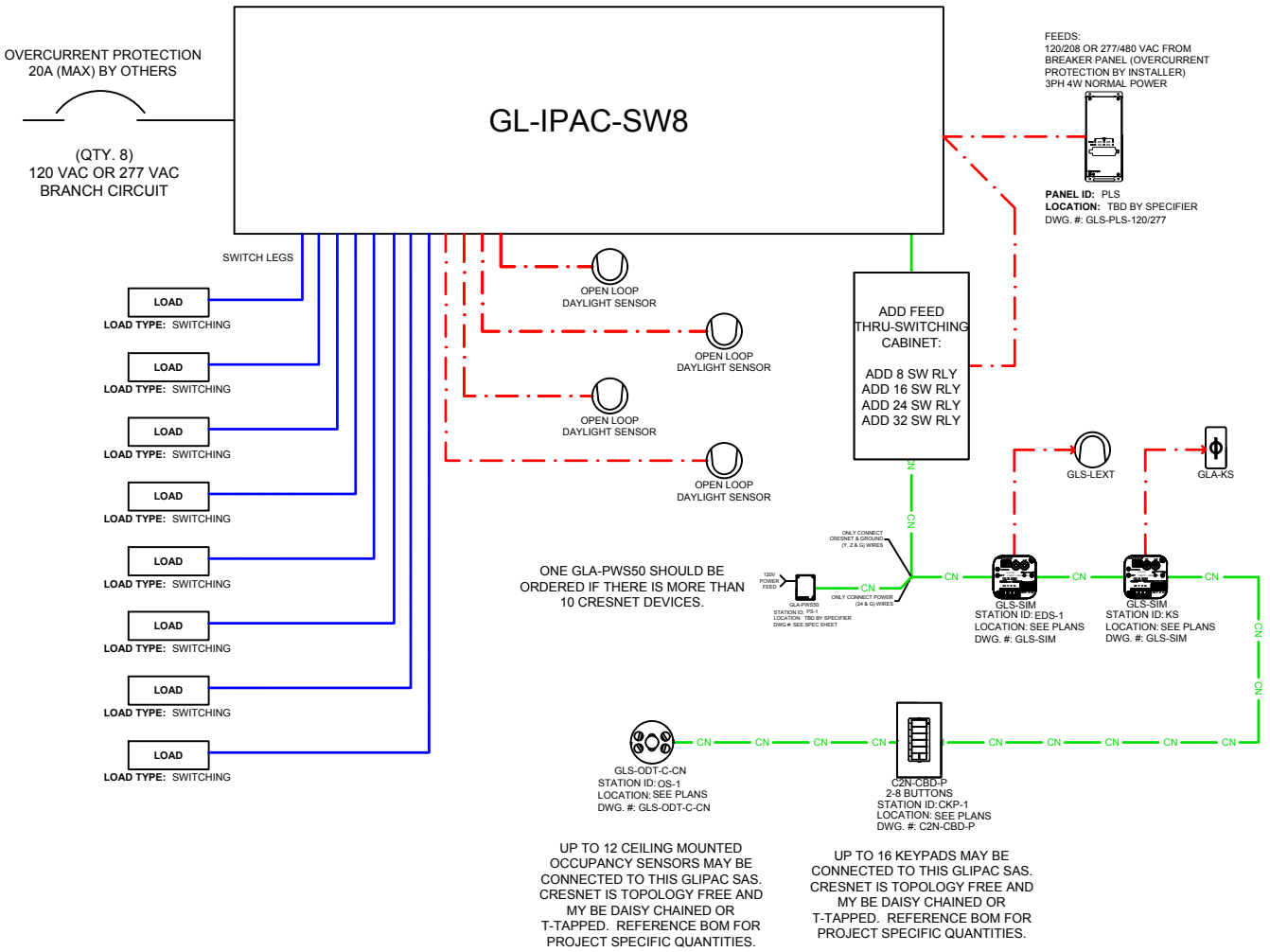
TITLE:
BILL OF MATERIALS

DRAWING:
03.1
REV:
DATE:
DRAWN BY:

ZONE #	ZONE DESCRIPTION	FIXTURE TAG	CIRCUIT #	VOLTAGE	LOAD TYPE	EMERGENCY / LIFE SAFETY	DIM (Y/N)	OCCUPANCY SENSING ZONE	FIXTURE WATTS	QUANTITY	TOTAL WATTS
EXAMPLE	DOWNLIGHTS	A	H2-1	277 V	SWITCHED	PARTIAL ZONE	NO	1	8	4	32
1				277V	SWITCHED	N/A	NO				
2				277V	SWITCHED	N/A	NO				
3				277V	SWITCHED	N/A	NO				
4				277V	SWITCHED	N/A	NO				
5				277V	SWITCHED	N/A	NO				
6				277V	SWITCHED	N/A	NO				
7				277V	SWITCHED	N/A	NO				
8				277V	SWITCHED	N/A	NO				
				277 V		N/A		1-4			
				120 V		PARTIAL ZONE					
						COMPLETE ZONE					



CABLE TYPES:

(NOT ALL TYPES ARE USED ON ALL PROJECTS)

- CN — CN — CN — CRESNET (1 PAIR #18 AWG, 1 TWISTED PAIR #22 AWG SHIELDED
- 0-10V, CONTACTS (1 PAIR, SIZE BASED ON VOLTAGE DROP)
- DALI (1 PAIR, TWISTED/SHEILDED RECOMMENDED)
- ENET — ENET — ENET — ETHERNET (CAT5e OR BETTER ETHERNET)
- SENSOR (CRESNET OR 3-#18)

ALL LOW-VOLTAGE CABLE RUNS ARE CRESNET UNLESS OTHERWISE NOTED.
THE ORDER OF DEVICES ALONG A CRESNET CABLE MAY BE ALTERED AS REQUIRED FOR EASE OF INSTALLATION.

NETWORKED SYSTEMS

IF "NET" IS SHOWN IN THE SPACE LEXICON, INDICATING A NETWORKED CONTROL SYSTEM, PLEASE SEE SHEET 02.7 FOR DETAILED INFORMATION REGARDING CRESNET POWER AND CRESNET CABLE ID BLOCKS. STANDALONE SYSTEMS DO NOT NEED TO REVIEW THIS INFORMATION.

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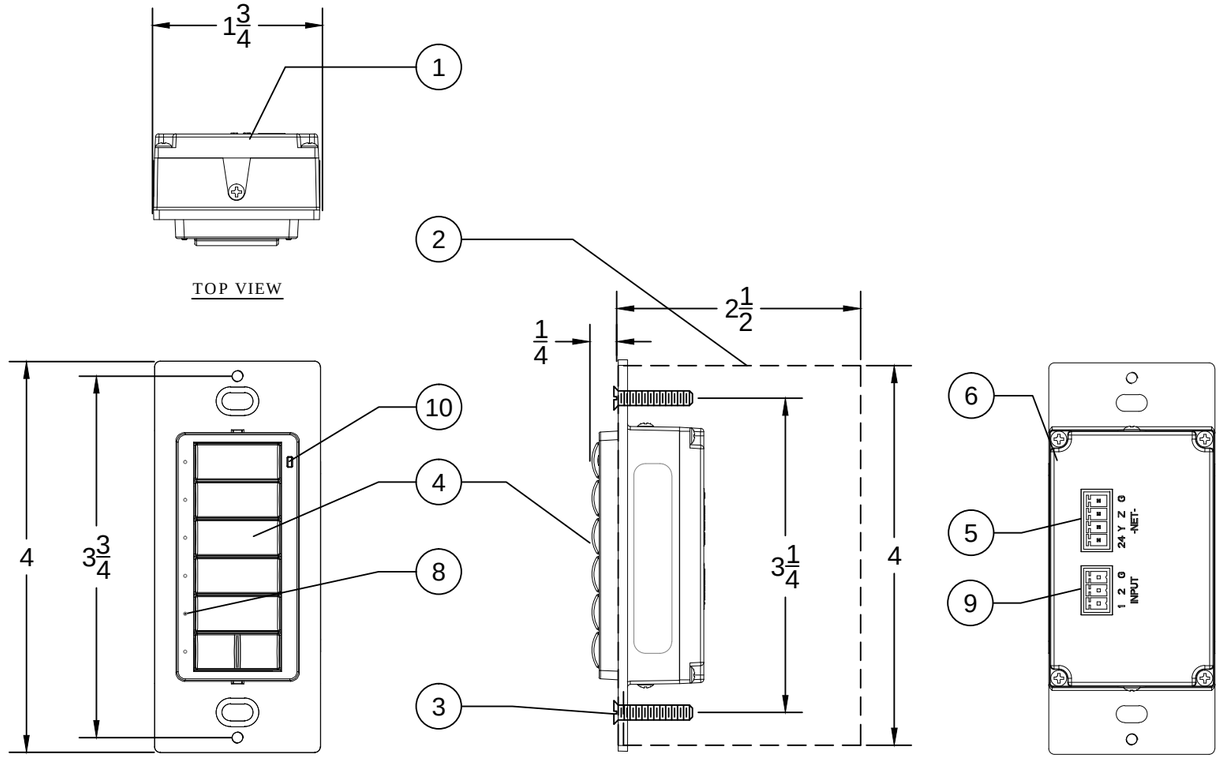
www.crestron.com

TITLE:
SCHEMATIC
ONE-LINE DIAGRAM

DRAWING: 04.01
REV:
DATE:
DRAWN BY:



TOP VIEW

FRONT VIEW

SIDE VIEW

BACK VIEW

IMPORTANT:
SEE INSTALLATION AND OPERATION MANUAL FOR KEYPAD ASSEMBLY INSTRUCTIONS AND BUTTON CONFIGURATION INSTRUCTIONS.

IMPORTANT:
KEYPADS WILL SHIP FROM THE FACTORY WITH NO BUTTONS INSTALLED. ALL KEYPADS SHIP WITH A COMPLETE SET OF BUTTONS TO FORM ANY OF THE LAYOUTS SHOWN ON THE "MODIFIED" DETAIL PAGE. ANY INFORMATION PROVIDED FOR ENGRAVING OR PROGRAMMING INFORMATION WILL NOT BE IMPLEMENTED UNTIL AFTER SYSTEM COMMISSIONING IS COMPLETE, AT WHICH TIME REPLACEMENT BUTTONS WITH THE SPECIFIED ENGRAVING WILL BE PROVIDED.

C2N-CBD-P KEYPAD

NOTES KEY

1. #C2N-CBD-P CAMEO SERIES CONTROL STATION WITH LED INDICATORS.
2. SINGLE GANG ELECTRICAL BOX WITH NECESSARY ACCESSORIES, 2.5" DEEP MINIMUM (NOT BY CRESTRON).
3. 0.1 IN PAN HEAD SCREW (TYP OF (2) PER STATION). PROVIDED WITH CONTROL STATION BY CRESTRON.
4. CUSTOM ENGRAVEABLE AND CONFIGURABLE KEYPAD BUTTONS. SEE MANUAL FOR ASSEMBLY INSTRUCTIONS.
5. CRESNET CONNECTION PORT FOR CONTROL VIA 2-SERIES CONTROL SYSTEM.
6. GROUNDING WIRE FOR KEYPAD TO ELECTRICAL ENCLOSURE.
7. NOT SHOWN: TO BE USED WITH ANY DECORA STYLE FACEPLATE. FURNISHED BY OTHERS.
8. LED INDICATORS - INDICATE SELECTED SCENE
9. 3-PIN 3.5MM DETACHABLE TERMINAL BLOCK. COMPRISES OF (2) VERSIPORT INPUTS.
10. PHOTOSENSOR FOR CONTROL OF AUTO-DIMMING FUNCTION. CAN BE CONFIGURED TO REPORT AMBIENT LIGHT LEVEL TO CONTROL SYSTEM.

NOTE:
KEYPAD IS COMPATIBLE WITH STANDARD DECORA-STYLE FACEPLATE, **NOT** PROVIDED BY CRESTRON.

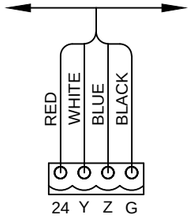
WIRING NOTES:

CAUTION: POSSIBLE EQUIPMENT DAMAGE IF MISWIRED

1. DO NOT POWER UP SYSTEM UNTIL ALL WIRING IS VERIFIED. CARE SHOULD BE TAKEN TO ENSURE DATA (Y,Z) AND POWER (24,G) CONNECTIONS ARE NOT CROSSED.
2. GROUND SHIELD AT CONTROL SYSTEM END **ONLY**.
3. STRIP ONLY THE MINIMUM AMOUNT OF JACKETING FROM THE WIRES, AND INSULATE EXPOSED CONDUCTORS/ DRAIN WIRES WITH HEAT SHRINK TUBING.
4. GENUINE CRESNET CONTROL CABLE IS RECOMMENDED FOR CONNECTION OF CRESTRON COMMERCIAL LIGHTING SYSTEMS.
5. WHEN DAISY CHAINING NETWORK UNITS, ALWAYS TWIST THE ENDS OF THE INCOMING WIRE AND THE OUTGOING WIRE THAT SHARE A PIN ON THE NETWORK CONNECTOR. IF NECESSARY USE A PIGTAIL WHEN LANDING MORE THAN TWO CONDUCTORS ON A SMALL CONNECTOR.

CRESNET CONTROL WIRING

TO LAST CONTROL STATION, PROCESSOR, OR CRESNET DEVICE. (SEE CONTROL RISER)



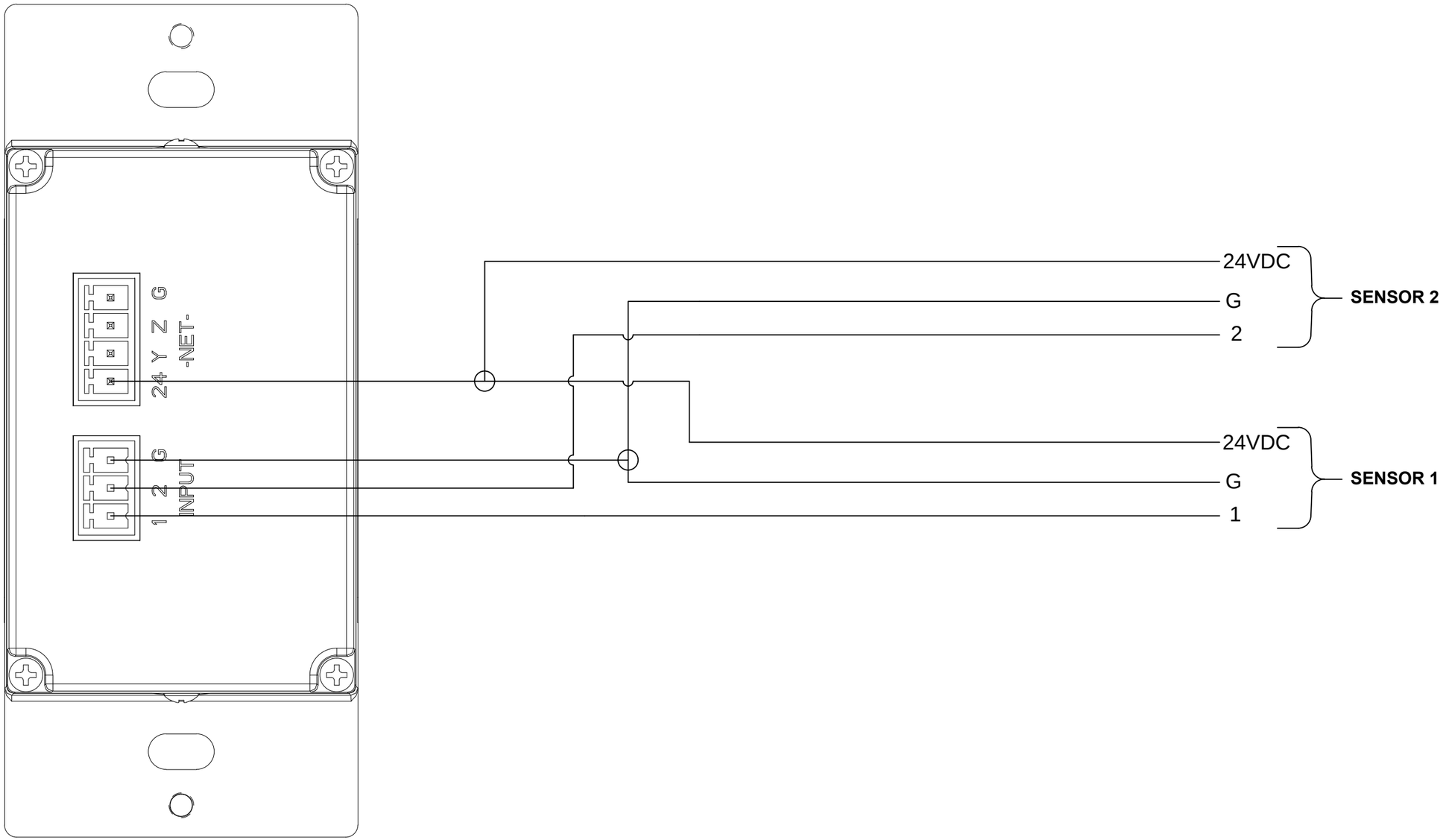
TO NEXT CONTROL STATION, PROCESSOR, OR CRESNET DEVICE. (SEE CONTROL RISER)

PART #: C2N-CBD-P
DESCRIPTION: C2N-CBD-P KEYPAD
REVISION: 006
DATE: 7/22/2013
NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

DEVICE:
C2N-CBD-P CAMEO KEYPAD
PHYSICAL DETAILS

DRAWING:
1 OF 5



WIRING FOR OPTIONAL VERSIPORT SENSOR INPUTS

WHERE CONVENIENT AND APPROPRIATE, VERSIPORT INPUTS MAY BE USED TO CONNECT OCCUPANCY SENSORS OR PHOTOCELLS TO CRESNET NETWORK RATHER THAN USING GLS-SIM INTERFACE MODULE.

PART #: C2N-CBD-P

DESCRIPTION: C2N-CBD-P VERSIPORT WIRING

REVISION: 003

DATE: 3/6/12

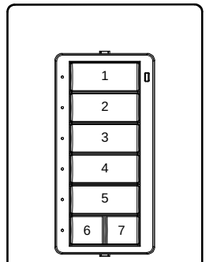
NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

DEVICE:
C2N-CBD-P CAMEO KEYPAD
VERSIPORT WIRING

DRAWING:
2 OF 5

C2N-CBD-P KEYPAD ENGRAVING & CONTROL DETAIL SHEET.
STANDARD KEYPAD LAYOUTS



7 BUTTON CONFIGURATION

ENGRAVING SCHEDULE	
BUTTON ID	**ENGRAVING**
1	ON
2	SCENE 1
3	SCENE 2
4	SCENE 3
5	OFF
6	▲
7	▼

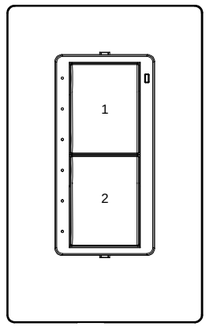
CONTROL
ZONES TO BE CONTROLLED
RAISE
LOWER

STATION ID(s): _____

LOCATION(s): _____

COLOR: _____

TEXTURE OR SMOOTH (CIRCLE ONE)



2 BUTTON CONFIGURATION

ENGRAVING SCHEDULE	
BUTTON ID	**ENGRAVING**
1	ON
2	OFF

CONTROL
ZONES TO BE CONTROLLED

STATION ID(s): _____

LOCATION(s): _____

COLOR: _____

TEXTURE OR SMOOTH (CIRCLE ONE)

PLEASE NOTE:
THIS SHEET AND THE SHEETS FOR "MODIFIED" LAYOUTS THAT FOLLOW DO NOT NEED TO BE RETURNED COMPLETED WITH THE SUBMITTAL PACKAGE FOR THIS PROJECT. THESE SHEETS MUST BE RETURNED NOT LATER THAN YOUR REQUEST FOR SYSTEM COMMISSIONING.

KEYPADS SHIP WITH NO BUTTONS INSTALLED. SEE NOTE ON C2N-CBD-P SHEET 1 OF 5 FOR DETAILS.

INSTRUCTIONS

IF THESE STANDARD LAYOUTS ARE ACCEPTABLE FOR YOUR PROJECT, PLEASE FOLLOW THE INSTRUCTIONS BELOW. IF YOU NEED TO MODIFY THESE LAYOUTS, PLEASE GO TO THE NEXT SHEET "MODIFIED KEYPAD LAYOUTS"

1. MAKE AS MANY COPIES AS YOU NEED OF THIS SHEET TO BE ABLE TO CREATE AS MANY DIFFERENT CONTROL TYPES AS YOU REQUIRE. NOTE THAT IF YOU HAVE SEVERAL STATIONS THAT ARE THE SAME, YOU MAY LIST MULTIPLE STATION ID NUMBERS IN THE APPROPRIATE SPACE, YOU DON'T NEED A SEPARATE SHEET FOR EACH STATION.
2. LOOK AT THE SINGLE-LINE RISER DIAGRAMS EARLIER IN THIS SUBMITTAL PACKAGE. EACH KEYPAD WILL HAVE A "STATION ID". NOTE THAT STATION ID IN THE APPROPRIATE SPACE, AS WELL AS THE DEVICE LOCATION. IF THE DEVICE LOCATION ISN'T SPECIFIED, PLEASE TRY TO UPDATE IT.
3. ON THIS SUBMITTAL'S BILL OF MATERIALS PAGE YOU WILL SEE A LISTING OF ALL KEYPADS, AS WELL AS THEIR COLOR AND FINISH.
4. IF THE KEYPADS HAVE NOT YET BEEN SHIPPED, YOU MAY CHANGE TO COLOR/FINISH FOR NO ADDITIONAL FEE. NOTE THE COLOR YOU WOULD LIKE THE KEYPAD TO BE ON THE "COLOR" LINE, WITH EITHER "SMOOTH" (GLOSS) OR "TEXTURED" (MATTE) ON THE LINE BELOW COLOR.
5. BE AWARE THAT IF THE KEYPADS HAVE SHIPPED AND THE COLOR NEEDS TO CHANGE, RESTOCKING FEES WILL BE APPLIED.
6. IN THE CONTROL TABLE, ENTER THE INFORMATION REQUIRED FOR ZONES TO BE CONTROLLED BY THE BUTTONS.
7. ONCE YOU ARE FINISHED WITH ALL DETAILS, PLEASE SEND THE SHEET(S) TO LIGHTINGCOMMISSIONING@CRESTRON.COM

AVAILABLE COLORS & FINISHES

WHITE	SMOOTH OR TEXTURED
BLACK	SMOOTH OR TEXTURED
ALMOND	SMOOTH OR TEXTURED
GRAY	SMOOTH
IVORY	SMOOTH
DARK ALMOND	SMOOTH
BROWN	SMOOTH
LATTE	TEXTURED
DUSK	TEXTURED

PLEASE GO TO WWW.CRESTRON.COM FOR PHOTOS OF THESE COLORS, OR CONTACT YOUR CRESTRON PROJECT COORDINATOR FOR SAMPLES

PART #: C2N-CBD-P

DESCRIPTION: C2N-CBD-P KEYPAD STANDARD LAYOUT & ENGRAVING

REVISION: 003

DATE: 3/6/12

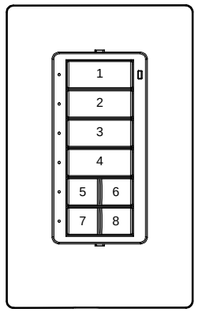
NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

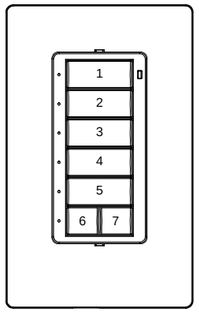
DEVICE:
C2N-CBD-P CAMEO KEYPAD
"STANDARD" LAYOUTS

DRAWING:
3 OF 5

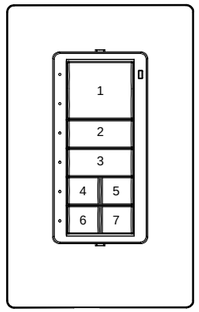
C2N-CBD-P KEYPAD ENGRAVING SHEET
MODIFIED KEYPAD LAYOUTS



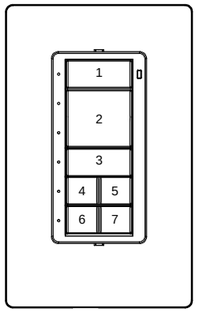
8 BUTTON
STYLE 1



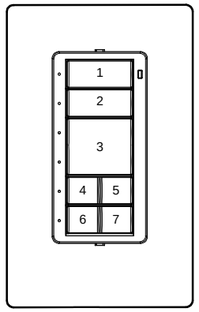
7 BUTTON
STYLE 2



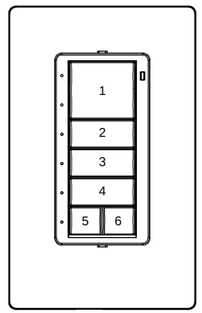
7 BUTTON
STYLE 4



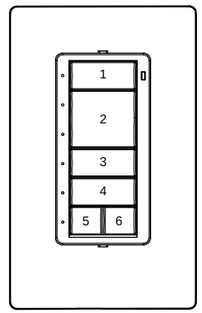
7 BUTTON
STYLE 5



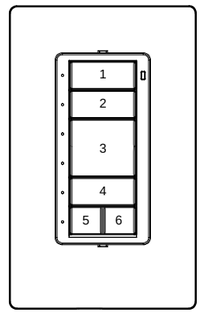
7 BUTTON
STYLE 6



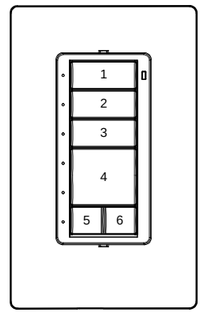
6 BUTTON
STYLE 8



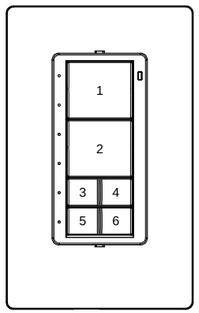
6 BUTTON
STYLE 9



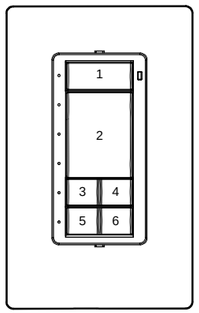
6 BUTTON
STYLE 10



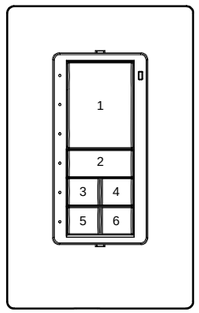
6 BUTTON
STYLE 11



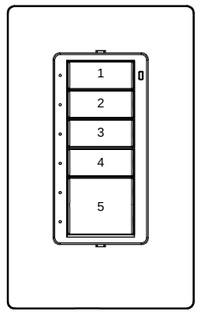
6 BUTTON
STYLE 15



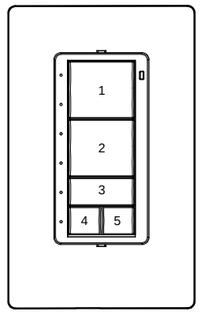
6 BUTTON
STYLE 16



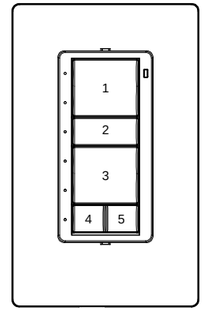
6 BUTTON
STYLE 17



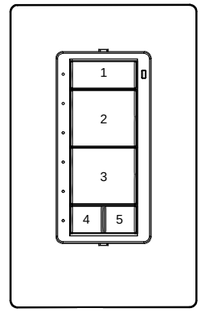
5 BUTTON
STYLE 22



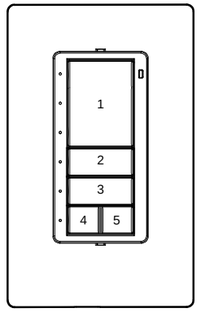
5 BUTTON
STYLE 23



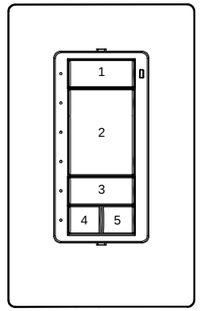
5 BUTTON
STYLE 24



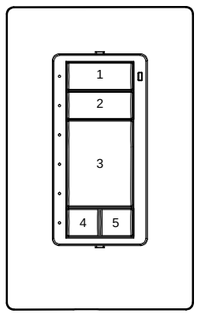
5 BUTTON
STYLE 25



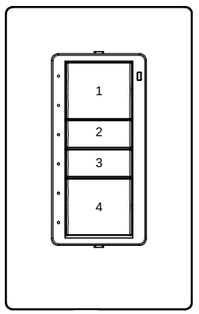
5 BUTTON
STYLE 29



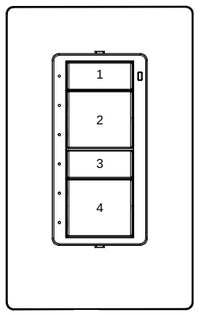
5 BUTTON
STYLE 30



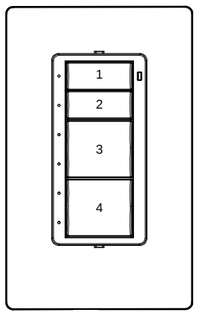
5 BUTTON
STYLE 31



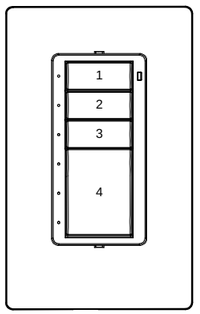
4 BUTTON
STYLE 32



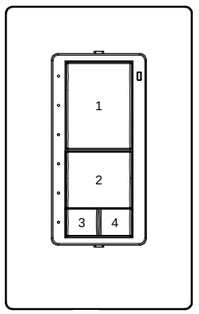
4 BUTTON
STYLE 35



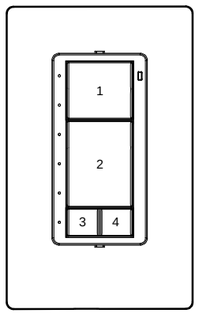
4 BUTTON
STYLE 38



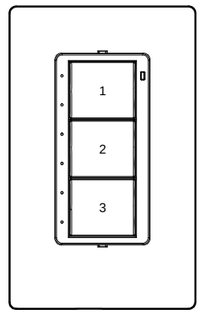
4 BUTTON
STYLE 41



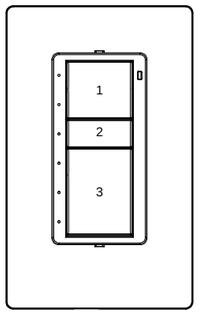
4 BUTTON
STYLE 42



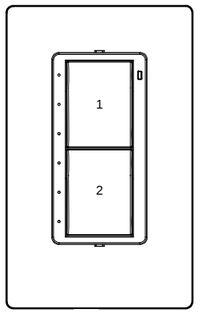
4 BUTTON
STYLE 43



3 BUTTON
STYLE 44



3 BUTTON
STYLE 46



2 BUTTON
STYLE 48

PLEASE USE THESE STYLES AS A GUIDE TO FILL OUT THE MODIFIED KEYPAD LAYOUT & ENGRAVING FORMS ON THE NEXT PAGE

NOTE THAT SEVERAL STYLES HAVE BEEN REMOVED FROM THIS SHEET, BUT STYLE NUMBERS ARE UNCHAINED TO MAINTAIN COMPATIBILITY WITH OLDER SHEETS.

PART #: C2N-CBD-P
DESCRIPTION: C2N-CBD-P MODIFIED LAYOUT & ENGRAVING
REVISION: 008
DATE: 1/5/2015
NOTES: UPDATE AVAILABLE STYLES- OTHER STYLES NOT RENUMBERED

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

DEVICE:
C2N-CBD-P CAMEO KEYPAD
"MODIFIED" LAYOUT

DRAWING:
4 OF 5

C2N-CBD-P KEYPAD ENGRAVING & CONTROL DETAIL SHEET.
MODIFIED KEYPAD LAYOUTS

KEYPAD STYLE: _____

STATION ID: _____

LOCATION: _____

COLOR: _____

TEXTURE OR SMOOTH (CIRCLE ONE)

SEE PREVIOUS SHEET FOR STYLE NUMBERS

BUTTONS ARE CLASSED AS HALF, SINGLE, DOUBLE, OR TRIPLE SPACE. DOUBLE AND TRIPLE SPACE BUTTONS CAN HAVE 2 LINES OF TEXT AND EACH LINE CAN HAVE A MAXIMUM OF 7 CHARACTERS. (SEPARATE LINES WITH /)

STANDARD RAISE ▲ AND LOWER ▼ BUTTONS ARE SHIPPED WITH EACH KEYPAD FOR USE IN THE SPLIT BUTTONS (HALF-WIDTH BUTTONS AT THE BOTTOM). IF YOU WISH ENGRAVING ON THESE BUTTONS ONLY 3-4 CHARACTERS, DEPENDING ON CHARACTER WIDTH, WILL FIT ON THESE BUTTONS.

ENGRAVING SCHEDULE		CONTROL
BUTTON ID	ENGRAVING	ZONES TO BE CONTROLLED
1		
2		
3		
4		
5		
6		
7		
8		

KEYPAD STYLE: _____

STATION ID: _____

LOCATION: _____

COLOR: _____

TEXTURE OR SMOOTH (CIRCLE ONE)

SEE PREVIOUS SHEET FOR STYLE NUMBERS

BUTTONS ARE CLASSED AS HALF, SINGLE, DOUBLE, OR TRIPLE SPACE. DOUBLE AND TRIPLE SPACE BUTTONS CAN HAVE 2 LINES OF TEXT AND EACH LINE CAN HAVE A MAXIMUM OF 7 CHARACTERS. (SEPARATE LINES WITH /)

STANDARD RAISE ▲ AND LOWER ▼ BUTTONS ARE SHIPPED WITH EACH KEYPAD FOR USE IN THE SPLIT BUTTONS (HALF-WIDTH BUTTONS AT THE BOTTOM). IF YOU WISH ENGRAVING ON THESE BUTTONS ONLY 3-4 CHARACTERS, DEPENDING ON CHARACTER WIDTH, WILL FIT ON THESE BUTTONS.

ENGRAVING SCHEDULE		CONTROL
BUTTON ID	ENGRAVING	ZONES TO BE CONTROLLED
1		
2		
3		
4		
5		
6		
7		
8		

KEYPAD STYLE: _____

STATION ID: _____

LOCATION: _____

COLOR: _____

TEXTURE OR SMOOTH (CIRCLE ONE)

SEE PREVIOUS SHEET FOR STYLE NUMBERS

BUTTONS ARE CLASSED AS HALF, SINGLE, DOUBLE, OR TRIPLE SPACE. DOUBLE AND TRIPLE SPACE BUTTONS CAN HAVE 2 LINES OF TEXT AND EACH LINE CAN HAVE A MAXIMUM OF 7 CHARACTERS. (SEPARATE LINES WITH /)

STANDARD RAISE ▲ AND LOWER ▼ BUTTONS ARE SHIPPED WITH EACH KEYPAD FOR USE IN THE SPLIT BUTTONS (HALF-WIDTH BUTTONS AT THE BOTTOM). IF YOU WISH ENGRAVING ON THESE BUTTONS ONLY 3-4 CHARACTERS, DEPENDING ON CHARACTER WIDTH, WILL FIT ON THESE BUTTONS.

ENGRAVING SCHEDULE		CONTROL
BUTTON ID	ENGRAVING	ZONES TO BE CONTROLLED
1		
2		
3		
4		
5		
6		
7		
8		

PLEASE NOTE:
THIS SHEET AND THE SHEETS FOR "STANDARD" LAYOUTS THAT PRECEDE IT DO NOT NEED TO BE RETURNED COMPLETED WITH THE SUBMITTAL PACKAGE FOR THIS PROJECT. THESE SHEETS MUST BE RETURNED NOT LATER THAN YOUR REQUEST FOR SYSTEM COMMISSIONING.

KEYPADS SHIP WITH NO BUTTONS INSTALLED. SEE NOTE ON C2N-CBD-P SHEET 1 OF 5 FOR DETAILS.

INSTRUCTIONS

IF YOU WISH TO USE ANY MODIFIED LAYOUTS FOR YOUR PROJECT, PLEASE FOLLOW THE INSTRUCTIONS BELOW. IF YOU WISH STANDARD LAYOUTS ONLY, PLEASE GO TO THE PRIOR SHEET "STANDARD KEYPAD LAYOUTS"

1. MAKE AS MANY COPIES AS YOU NEED OF THIS SHEET TO BE ABLE TO CREATE AS MANY DIFFERENT STATION ENGRAVINGS AS YOU REQUIRE. NOTE THAT IF YOU HAVE SEVERAL STATIONS THAT ARE THE SAME, YOU MAY LIST MULTIPLE STATION ID NUMBERS IN THE APPROPRIATE SPACE, YOU DON'T NEED A SEPARATE SHEET FOR EACH STATION.
2. ENTER THE STYLE NUMBER (SEE PREVIOUS SHEET FOR STYLES) THAT YOU WOULD LIKE FOR A STATION OR TYPE OF STATION.
3. LOOK AT THE SINGLE-LINE RISER DIAGRAMS EARLIER IN THIS SUBMITTAL PACKAGE. EACH KEYPAD WILL HAVE A "STATION ID". NOTE THAT STATION ID IN THE APPROPRIATE SPACE, AS WELL AS THE DEVICE LOCATION. IF THE DEVICE LOCATION ISN'T SPECIFIED, PLEASE TRY TO UPDATE IT.
4. ON THIS SUBMITTAL'S BILL OF MATERIALS PAGE YOU WILL SEE A LISTING OF ALL KEYPADS, AS WELL AS THEIR COLOR AND FINISH.
5. IF THE KEYPADS HAVE NOT YET BEEN SHIPPED, YOU MAY CHANGE TO COLOR/FINISH FOR NO ADDITIONAL FEE. NOTE THE COLOR YOU WOULD LIKE THE KEYPAD TO BE ON THE "COLOR" LINE, WITH EITHER "SMOOTH" (GLOSS) OR "TEXTURED" (MATTE) ON THE LINE BELOW COLOR.
6. BE AWARE THAT IF THE KEYPADS HAVE SHIPPED AND THE COLOR NEEDS TO CHANGE, RESTOCKING FEES WILL BE APPLIED.
7. 5. IN THE ENGRAVING TABLE, ENTER THE TEXT YOU WOULD LIKE TO HAVE ENGRAVED ON THE BUTTONS.
8. ONCE YOU ARE FINISHED WITH ALL ENGRAVING DETAILS, PLEASE SEND THE SHEET(S) TO LIGHTINGCOMMISSIONING@CRESTRON.COM
9. PLEASE ENTER PROGRAMMING INFORMATION FOR EACH STATION- ZONES TO BE CONTROLLED BY EACH BUTTON. CONTROLS LIKE "PROJECTION SCREEN UP" OR OTHER NON-ZONE RELATED ACTIONS MAY ALSO BE NOTED.

AVAILABLE COLORS & FINISHES

WHITE	SMOOTH OR TEXTURED
BLACK	SMOOTH OR TEXTURED
ALMOND	SMOOTH OR TEXTURED
GRAY	SMOOTH
IVORY	SMOOTH
DARK ALMOND	SMOOTH
BROWN	SMOOTH
LATTE	TEXTURED
DUSK	TEXTURED

PLEASE GO TO WWW.CRESTRON.COM FOR PHOTOS OF THESE COLORS, OR CONTACT YOUR CRESTRON PROJECT COORDINATOR FOR SAMPLES

Crestron Green Light System

PART #: C2N-CBD-P

DESCRIPTION: C2N-CBD-P MODIFIED LAYOUT & ENGRAVING

REVISION: 005

DATE: 1/2/13

NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

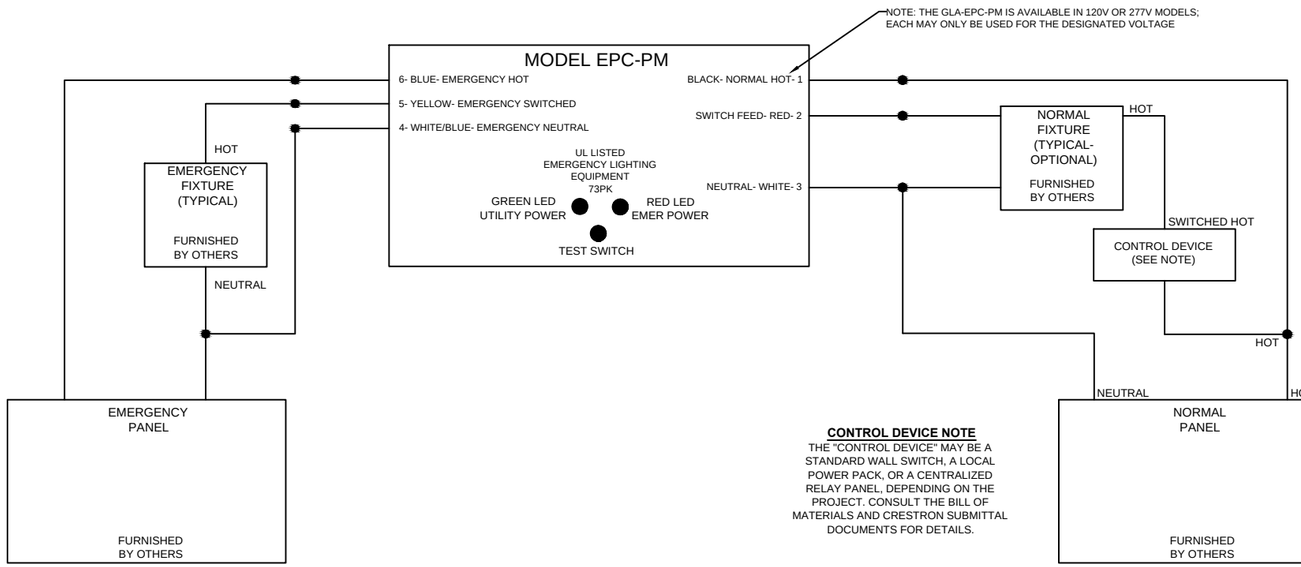
DEVICE:
C2N-CBD-P CAMEO KEYPAD
"MODIFIED" LAYOUT INSTRUCTIONS

DRAWING:
5 OF 5

GLA-EPC-PM

EMERGENCY LIGHTING CONTROL DEVICE
WIRING DETAILS & OPERATIONAL NOTES

MODEL EPC-PM



CONTROL DEVICE NOTE

THE "CONTROL DEVICE" MAY BE A STANDARD WALL SWITCH, A LOCAL POWER PACK, OR A CENTRALIZED RELAY PANEL, DEPENDING ON THE PROJECT. CONSULT THE BILL OF MATERIALS AND CRESTRON SUBMITTAL DOCUMENTS FOR DETAILS.

OPERATIONAL & INSTALLATION INFORMATION

GLA-EPC-PM

THE GLA-EPC-PM IS AN EMERGENCY LIGHTING CONTROL DEVICES WITH UL924 RATING AS EMERGENCY LIGHTING CONTROL RELAY. THIS SHEET WILL EXPLAIN ITS USE, AND BASICS OF INSTALLATION- PLEASE SEE THE INSTALLATION DOCUMENTATION THAT SHIPS WITH EACH DEVICE FOR MORE COMPLETE INSTALLATION INFORMATION. SHOULD FURTHER INFORMATION BE REQUIRED, PLEASE CONTACT YOUR CRESTRON PROJECT ENGINEER.

FOR THE BALANCE OF THIS SHEET, THE GLA-EPC-PM WILL BE REFERRED TO SIMPLY AS THE "PM."

OPERATION INFORMATION

THE DEVICE IS INSTALLED WITH CONNECTIONS TO TWO NORMAL-POWER FEEDS: ONE FEED IS A "SENSE" FEED, MONITORING THE OVERALL STATUS OF NORMAL POWER. THE OTHER IS A "SWITCH" FEED- THE SWITCH FEED IS THE OUTPUT OF ANY CONTROL DEVICE SUCH AS A LOCAL WALL SWITCH OR POWER PACK, OR A CENTRALIZED RELAY PANEL. THIS SAME SWITCH FEED WILL USUALLY ALSO FEED NORMAL-POWER FIXTURES.

EMERGENCY POWER IS CONNECTED TO THE DEVICE. IT IS FED THROUGH AN INTERNAL RELAY AND OUT TO ANY EMERGENCY LIGHTING FIXTURES.

SO LONG AS THE NORMAL-SENSE FEED IS ENERGIZED, THE EMERGENCY LIGHTING RELAY WILL BE UNDER THE CONTROL OF THE NORMAL-SWITCH POWER FEED. IF THE SWITCH FEED IS OFF, THE RELAY WILL BE HELD OPEN AND THE EMERGENCY LIGHTS WILL BE OFF. IF THE SWITCH FEED IS ENERGIZED, THE RELAY WILL BE CLOSED AND THE EMERGENCY LIGHTS WILL BE ON, MIMICKING THE NORMAL LIGHTS.

IF THE NORMAL-SENSE FEED IS DE-ENERGIZED, THE STATUS OF THE NORMAL-SWITCH FEED WILL BE IGNORED AND THE RELAY WILL BE CLOSED, ENERGIZING THE EMERGENCY LIGHTS UNTIL SUCH TIME AS THE NORMAL-SENSE FEED IS ENERGIZED AGAIN.

AT NO TIME IS NORMAL POWER DELIVERED TO EMERGENCY FIXTURES- THE EMERGENCY CONTROL RELAY SIMPLY MIMICS THE STATE OF THE NORMAL-SWITCH FEED, SWITCHING ON AND OFF EMERGENCY POWER TO THE EMERGENCY LIGHTS.

OPERATIONALLY, THE PM DEVICE MUST BE PLACED WHERE ITS TESTING BUTTON MAY BE ACCESSED IN ORDER TO REGULARLY TEST THE DEVICE. PRESSING THE TEST BUTTON WILL ENERGIZE THE EMERGENCY LIGHTS CONNECTED TO THE DEVICE SO THAT PROPER FUNCTION MAY BE SEEN.

NOTE THAT IF THE DEVICE MUST BE LOCATED IN A LOCATION THAT IS GENERALLY INACCESSIBLE, A VARIANT KNOWN AS THE GLA-EPC-A-1 MAY BE USED. THIS DEVICE HAS AN AUTOMATIC TEST FUNCTION WHICH DOES NOT REQUIRE MANUAL TESTING, HOWEVER THE AUTOMATIC TEST FUNCTION MAY BE OBJECTIONABLE IN SOME AREAS. CONTACT YOUR CRESTRON PROJECT ENGINEER FOR MORE INFORMATION.

INSTALLATION

PLEASE SEE THE INSTRUCTION SHEET THAT SHIPS WITH EACH DEVICE FOR COMPLETE INSTALLATION INSTRUCTIONS.

THE DEVICES MOUNTS IN A STANDARD 4-11/16TH" SQUARE BOX. THE PM DEVICE INCLUDES A FACEPLATE AND IS REQUIRED TO BE MOUNTED IN AN ACCESSIBLE LOCATION TO ALLOW FOR REGULAR TESTING AS REQUIRED BY CODE.

THE PM DEVICE IS AVAILABLE IN EITHER 120 OR 277 VOLT MODELS, AND MUST ONLY BE INSTALLED ON A CIRCUIT OF MATCHING VOLTAGE.

ENSURE THAT ALL TERMINATIONS ARE CORRECT BEFORE ENERGIZING THE UNIT. IMPROPER WIRING MAY RESULT IN INJURY, DEATH, OR IN DAMAGE TO DEVICES THAT WILL NOT BE COVERED UNDER WARRANTY.

CRESTRON Green Light SYSTEM

PART #: GLA-EPC-PM

DESCRIPTION: WIRING DETAIL FOR EMER LIGHTING CONTROL DEVICE

REVISION: 000

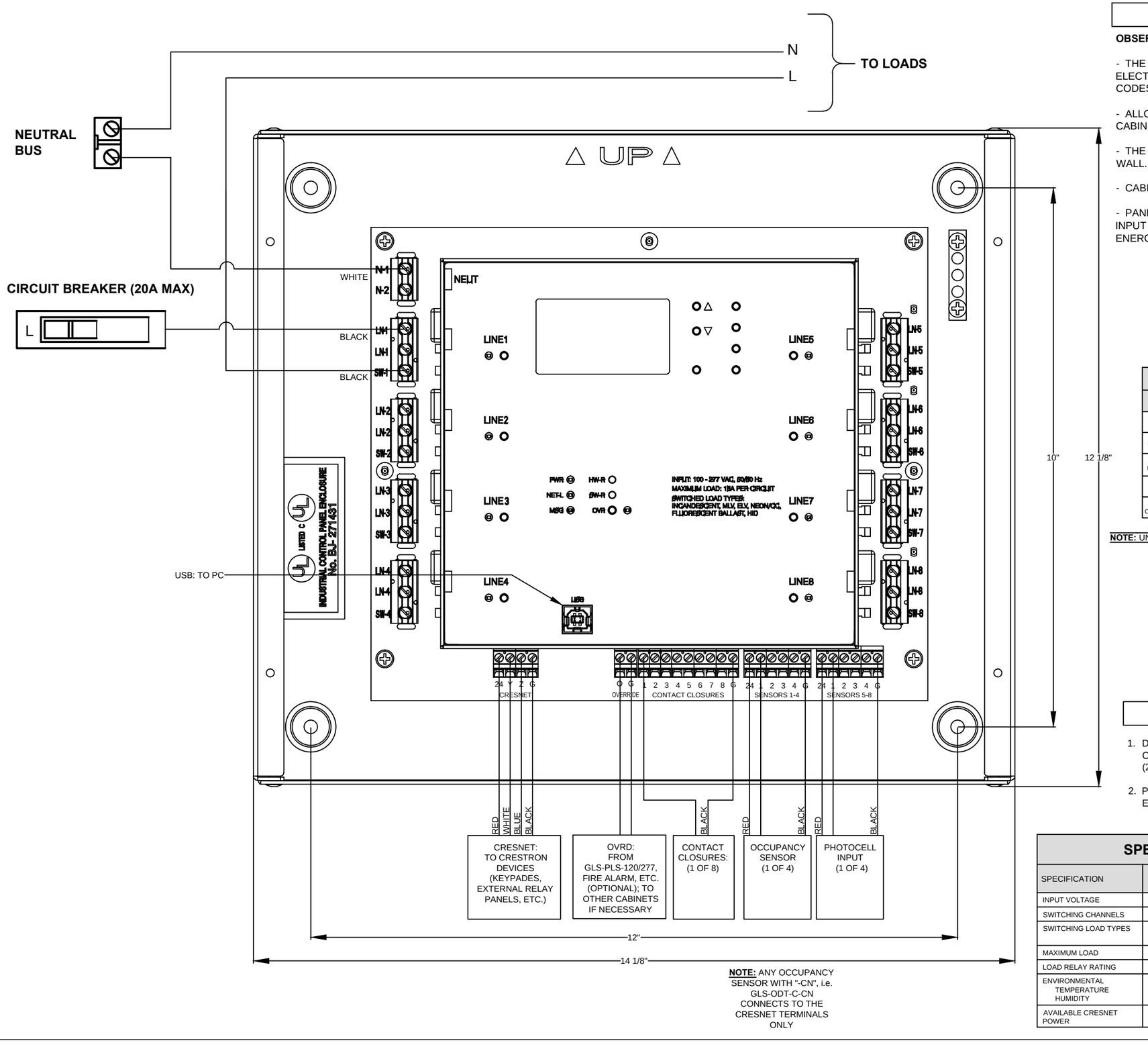
DATE: 1/29/2014

NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

PART #:
GLA-EPC-PM
EMERGENCY
LIGHTING
CONTROL DEVICE

DRAWING:
1 OF 1



NOTE: ANY OCCUPANCY SENSOR WITH "-CN", i.e. GLS-ODT-C-CN CONNECTS TO THE CRESNET TERMINALS ONLY

INSTALLATION

OBSERVE THE FOLLOWING WHEN INSTALLING THE CABINET:

- THE CABINET MUST BE MOUNTED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH ALL NATIONAL AND LOCAL CODES.
- ALLOW ADEQUATE CLEARANCE (3' MINIMUM) IN FRONT OF CABINET FOR SERVICING.
- THE CABINET IS DESIGNED FOR SURFACE MOUNTING ON A WALL.
- CABINETS ARE INTENDED FOR INDOOR USE ONLY.
- PANEL DRAWS A SMALL AMOUNT OF CURRENT FROM SWITCH INPUT #1 FOR SYSTEM OPERATION. INPUT #1 MUST BE ENERGIZED FOR PANEL TO OPERATE.

TORQUE			
TERMINAL	CONN. WIRE RANGE	TORQUE	STRIP LENGTH
LN INPUTS	14-10 AWG	4.42 LB-IN (0.5Nm)	5/16" (8MM)
SW INPUTS	14-10 AWG	4.42 LB-IN (0.5Nm)	5/16" (8MM)
N1, N1 NEUTRAL BUS	14-10 AWG	4.42 LB-IN (0.5Nm)	5/16" (8MM)
GROUND LUG	14-4 AWG	25-45 LB-IN (2.8-5.1Nm)	3/4" (19MM)
LV CONNECTORS *	26-12 AWG	4.42 LB-IN (0.5Nm)	1/4" (6MM)

* MAY BE WIRED AS CLASS 1 OR CLASS 2

NOTE: UNIT REQUIRES 'LINE1' AND NEUTRAL TO BE CONNECTED TO POWER UP

GENERAL NOTES

1. DO NOT POWER UP SYSTEM UNTIL ALL WIRING IS VERIFIED. CARE SHOULD BE TAKEN TO ENSURE DATA (Y,Z) AND POWER (24,G) CONNECTIONS ARE NOT CROSSED.
2. PANEL REQUIRES OVERCURRENT PROTECTION FROM AN EXTERNAL BREAKER PANEL (F.B.O.).

SPECIFICATIONS

SPECIFICATION	DETAILS
INPUT VOLTAGE	100-277 VAC 50/60 Hz
SWITCHING CHANNELS	8
SWITCHING LOAD TYPES	INCANDESCENT, MAGNETIC LOW VOLTAGE, ELECTRONIC LOW VOLTAGE, NEON/COLD CATHODE, HIGH-INTENSITY DISCHARGE, MOTOR
MAXIMUM LOAD	16A PER OUTPUT
LOAD RELAY RATING	277 VAC, 50A
ENVIRONMENTAL TEMPERATURE HUMIDITY	 32° TO 104°F (0° TO 40°C) 10% TO 90% RH, NON-CONDENSING
AVAILABLE CRESNET POWER	15 WATTS AT 24V DC, SHARED WITH OCCUPANCY AND PHOTOCELL SENSOR PORTS

Green Light SYSTEM

PART #: GL-IPAC-SW8

DESCRIPTION: GL-IPAC-SW8 INTEGRATED RELAY PANEL & CONTROL

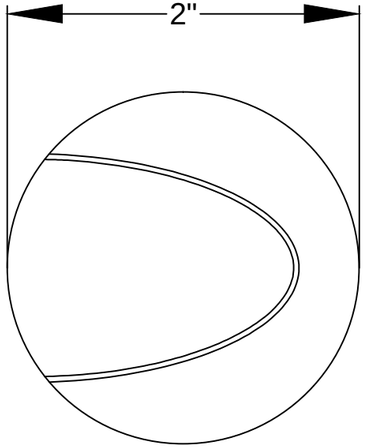
REVISION: 001 DATE: 1/21/2014

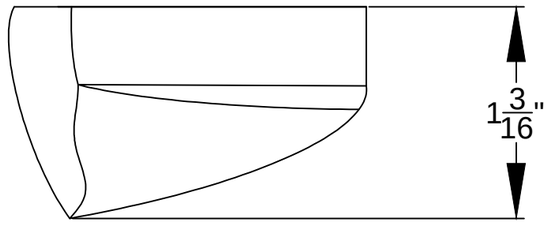
NOTES: PRELIMINARY

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

PART #:
GL-IPAC-SW8

DRAWING:
1 OF 1





PHYSICAL DETAILS

FEATURES & INSTALLATION BASICS

AN INSTALLATION GUIDE SHIPS WITH EACH SENSOR. PLEASE SEE THAT DOCUMENT FOR FULL INSTRUCTIONS. THIS SHEET IS INTENDED AS AN OVERVIEW OF CAPABILITIES ONLY.

DESCRIPTIONS:

THE **GLS-LOL** IS A PHOTOCELL SENSOR DESIGNED FOR DAYLIGHT HARVESTING APPLICATIONS TO PROVIDE CONTROL OF ROOM LIGHTING BASED ON THE PRESENCE OF NATURAL DAYLIGHT. INTENDED FOR USE WITH AN OPEN-LOOP TYPE SYSTEM, THE **GLS-LOL** CONTINUALLY MONITORS THE AMOUNT OF DAYLIGHT COMING THROUGH A WINDOW OR SKYLIGHT, ALLOWING ROOM LIGHTING TO BE DIMMED OR SWITCHED OFF WHEN THERE IS SUFFICIENT DAYLIGHT AVAILABLE.

THE **GLS-LOL** CAN BE MOUNTED TO A DRYWALL OR DROP-TILE SURFACE. ITS SIMPLE 3-WIRE INTERFACE ALLOWS FOR CONNECTION TO A CRESTRON CONTROL SYSTEM VIA A SINGLE VERSIPORT I/O (AVAILABLE ON **GLS-SIM** INTERFACES, **C2N-CBD-P** "CAMEO" KEYPADS, AS WELL AS CERTAIN PROCESSORS AND OTHER INTERFACE MODULES) OR DIRECT CONNECTION TO **GLPAC-DIMFLV** OR **GLPP** INTEGRATED CONTROL DEVICES.

GENERAL NOTES & SPECIFICATIONS

1. SENSING:
   - FIELD OF VIEW: 60 DEGREE CONE
   - CENTER OF AXIS: 45 DEGREES FROM MOUNTING SURFACE
   - LIGHT SENSITIVITY: 3 TO 6000 FOOT-CANDLES

2. CONNECTIONS:
   - PLUS: (1) CAPTIVE SCREW TERMINAL, +24VDC INPUT
   - MINUS: (1) CAPTIVE SCREW TERMINAL, POWER & CONTROL COMMON
   - ARROW: (1) CAPTIVE SCREW TERMINAL, 0-10VDC CONTROL OUTPUT

3. CONTROLS: (BEHIND COVER)
   LIGHT LEVEL RANGE: JUMPER-SELECTABLE 3-300M 30-3000, OR 60-6000 FC

4. POWER:
   - CURRENT CONSUMPTION: 4mA @ 24 VOLTS DC
   - CRESNET POWER USAGE: 1 WATT

   (CRESNET BUS MAY BE USED REGARDLESS OF INTERFACE METHOD)

5. HOUSING:
   - CONSTRUCTION: HIGH-IMPACT INJECTION-MOLDED PLASTIC, WHITE
   - MOUNTING: SURFACE MOUNT TO DRYWALL OR DROP-TILE

6. DIMENSIONS:
   - HEIGHT: 1.20 IN. (3.05 cm)
   - DIAMTETER: 2.0 IN, (5.08cm)

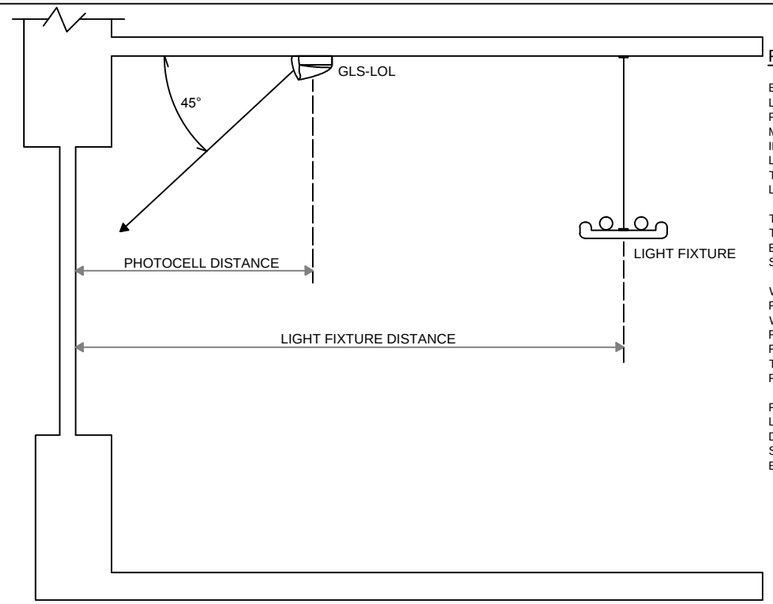
Green Light SYSTEM

PART #: GLS-LOL
DESCRIPTION: OPEN LOOP PHOTOCELL
REVISION: 000
DATE: 7/20/2012
NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

PART #:
GLS-LOL
OPEN-LOOP
PHOTOCELL

DRAWING:
1 of 2



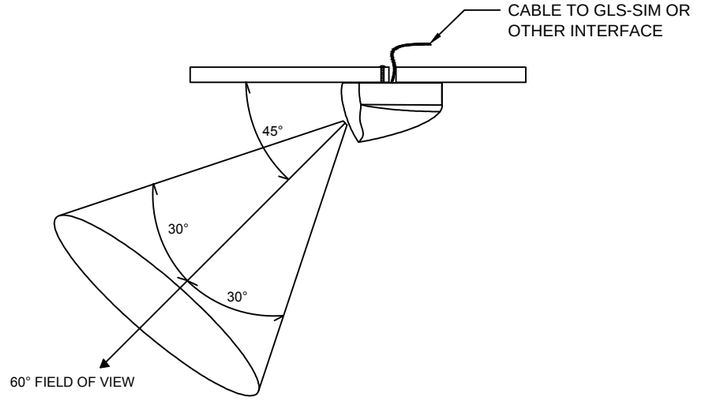
PHOTOCELL PLACEMENT

BEFORE INSTALLING THE PHOTOCELL, VERIFY THE DAYLIGHT LEVELS ON A SUNNY DAY AT THE PROPOSED LOCATION OF THE PHOTOCELL. WITH THE LIGHTS SWITCHED OFF, USE A LIGHT METER TO READ THE DAYLIGHT LEVEL. ORIENT THE LIGHT METER IN THE SAME DIRECTION THE PHOTOCELL WILL VIEW. THE LIGHT LEVELS UNDER SUNNY CONDITIONS MUST BE AT LEAST 35FC. IF THE LIGHT LEVELS ARE LESS, YOU SHOULD SELECT ANOTHER LOCATION OR REORIENT THE PHOTOCELL.

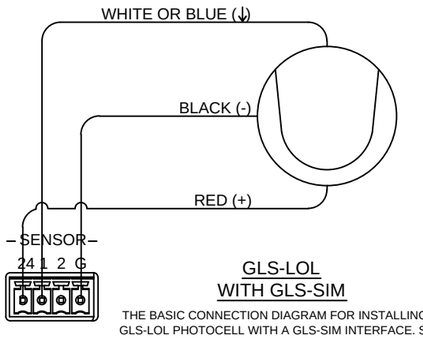
THE PHOTOCELL IS DESIGNED FOR MOUNTING IN A DRY LOCATION THAT IS EXPOSED TO DAYLIGHT. THE PHOTOCELL SHOULD NOT BE EXPOSED TO DIRECT ILLUMINATION FROM AN ELECTRIC LIGHT SOURCE.

WHERE WINDOWS ARE THE PRIMARY SOURCE OF DAYLIGHT, THE PHOTOCELL TYPICALLY MOUNTS ON THE CEILING BETWEEN THE WINDOW AND THE FIRST ROW OF FIXTURES. THE PHOTOCELL POINTS TOWARD THE WINDOW AT APPROXIMATELY A 45° ANGLE. FOR THE BEST RESULTS, THE DISTANCE FROM THE PHOTOCELL TO THE WINDOW SHOULD BE ABOUT 1/3 TO 1/2 OF THE DISTANCE FROM THE FIRST LIGHT FIXTURES TO THE WINDOW.

FOR SKYLIGHT APPLICATIONS, THE PHOTOCELL MOUNTS IN THE LIGHTWELL OF THE SKYLIGHT, ORIENTED TOWARD THE INCOMING DAYLIGHT. TYPICALLY, THE PHOTOCELL IS AIMED TOWARD THE SKYLIGHT. THE LIGHT LEVEL RANGE ADJUSTMENT MAY NEED TO BE CHANGED TO 60-6000 FC FOR SKYLIGHT APPLICATIONS.

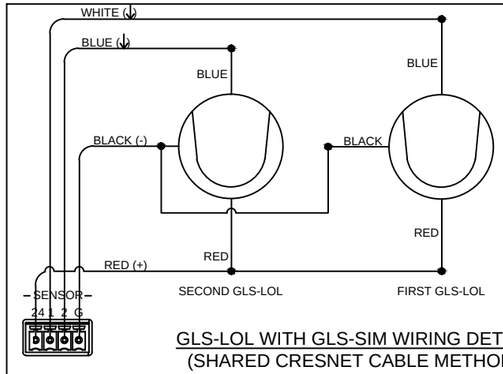


GLS-LOL PLACEMENT



GLS-LOL WITH GLS-SIM

THE BASIC CONNECTION DIAGRAM FOR INSTALLING A GLS-LOL PHOTOCELL WITH A GLS-SIM INTERFACE. SET THE FIRST DIP SWITCH (1 OR 3) FOR THE INPUT "ON" AND THE SECOND DIP SWITCH (2 OR 4) "OFF".

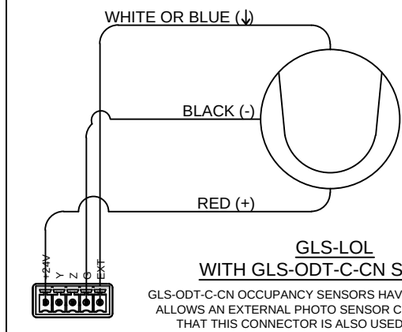


GLS-LOL WITH GLS-SIM WIRING DETAIL (SHARED CRESNET CABLE METHOD)

IN THIS EXAMPLE, BOTH GLS-LOL SENSORS ARE CONNECTED TO THE SIM WITH THE SAME CRESNET CABLE, WHICH CONTAINS 4 WIRES. SINCE EACH SENSOR ONLY REQUIRES 3 WIRES THEY MAY USE THE SAME CONDUCTORS FOR POWER (BLACK & RED) WHILE STILL ALLOWING EACH A SEPARATE CONDUCTOR (BLUE OR WHITE) FOR SIGNAL. EACH SENSOR DETECTS DAYLIGHT AND TURNS ON OR OFF ONLY ITS SPECIFIC LIGHTS INDEPENDENT OF THE OTHER SENSOR.

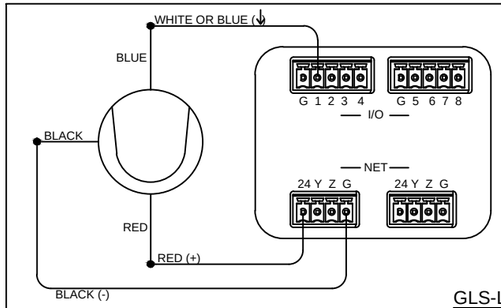
THIS ALLOWS FEWER CABLE RUNS TO SENSORS WITHIN THE SAME PROXIMITY. SPECIAL CARE MUST BE TAKEN WITH THIS METHOD TO INSURE THAT THE TERMINATIONS ARE MADE CORRECTLY OR THE SYSTEM MAY NOT FUNCTION AS DESIRED.

DO NOT CONNECT TWO GLS-LOL SENSORS TO THE SAME INPUT. TWO SENSORS CONNECTED TOGETHER MAY PROVIDE CONFLICTING DATA AND RESULT IN THE SYSTEM NOT OPERATING CORRECTLY.



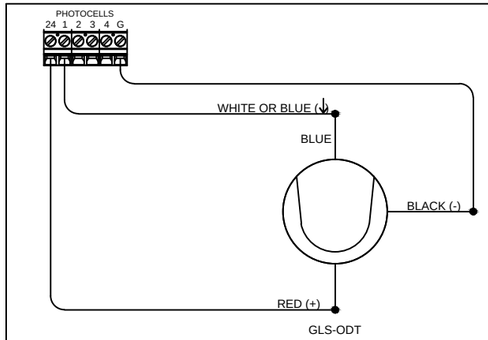
GLS-LOL WITH GLS-ODT-C-CN SENSOR

GLS-ODT-C-CN OCCUPANCY SENSORS HAVE A TERMINAL THAT ALLOWS AN EXTERNAL PHOTO SENSOR CONNECTION. NOTE THAT THIS CONNECTOR IS ALSO USED FOR CRESNET CONNECTIONS BETWEEN THE SENSOR AND OTHER DEVICES- A PIGTAIL MAY NEED TO BE FASHIONED TO ALLOW SPACE FOR WIRE TERMINATIONS- ONLY 2 WIRES FIT IN EACH TERMINAL



GLS-LOL WITH OTHER INTERFACES TYPES

OTHER INTERFACE TYPES ARE AVAILABLE ON PAC2, DIN-I08, DIN-AP2 AND OTHER DEVICES. ALL FEATURE CONNECTIONS SIMILAR TO THE ONES SHOWN HERE.



GLS-LOL WITH GLPAC WIRING DETAIL

GLPAC PANELS INCLUDE DEDICATED TERMINALS FOR PHOTCELLS AND OTHER SENSORS. FOUR INDEPENDENT TERMINALS ARE PROVIDED.

ALL 24V AND GROUND TERMINALS ARE CONNECTED IN PARALLEL WITH SIMILAR TERMINALS. SHOULD THERE BE INSUFFICIENT OCCUPANCY SENSOR TERMINALS FOR 24V IT IS ACCEPTABLE TO USE OTHER 24V TERMINALS WITHIN THE SAME GLPAC.

GLS-LOL WIRING DETAILS

GRESTRON Green Light SYSTEM

PART #: GLS-LOL

DESCRIPTION: OPEN LOOP PHOTOCELL

REVISION: 002

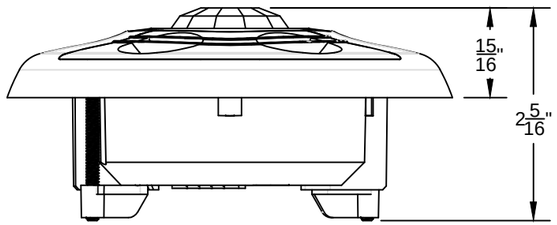
DATE: 8/28/2014

NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

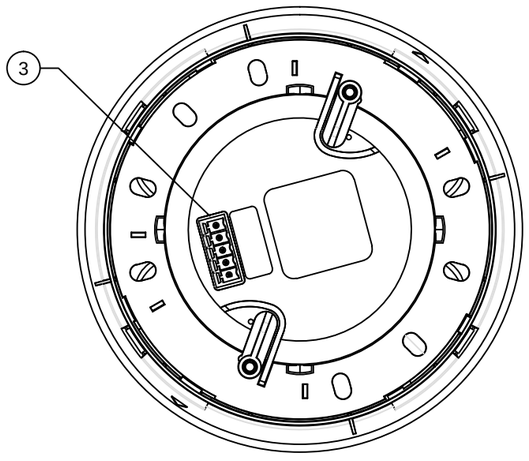
PART #:
GLS-LOL
OPEN-LOOP
PHOTOCELL

DRAWING:
2 of 2



SIDE VIEW

TOP VIEW



BOTTOW VIEW
(BOTTOM COVER REMOVED)

PHYSICAL DETAILS

FEATURES & INSTALLATION BASICS

AN INSTALLATION GUIDE SHIPS WITH EACH SENSOR. PLEASE SEE THAT DOCUMENT FOR FULL INSTRUCTIONS. THIS SHEET IS INTENDED AS AN OVERVIEW OF CAPABILITIES ONLY.

MOUNTING OPTIONS:

1. DROP CEILING MOUNT USING SCREWS (INCLUDED- PREINSTALLED).
2. BACK BOX OR SURFACE MOUNT RACEWAY MOUNTING (BOX/RACEWAY & SCREWS FBO).

CRESTRON RECOMMENDS USING AN OCTAGONAL 4" X 1-1/2" DEEP BACK BOX FOR THESE SENSORS. A GLS-SIM, IF REQUIRED, MAY MOUNT INSIDE THE SAME BACKBOX GIVEN SUFFICIENT DEPTH.

ALL GLS-ODT-C SENSORS ARE DESIGNED FOR OPTIMAL MOUNTING AT 8'. HEIGHTS OF 8'-12' ARE ACCEPTABLE. SPECIAL-ORDER SENSORS MAY BE ADDED TO AN ORDER FOR AN ADDITIONAL CHARGE ALLOWING MOUNTING HEIGHTS OF UP TO 20'.

SEE INSTALLATION INSTRUCTIONS FOR FULL INFORMATION.

NOTE: BEFORE SECURING SENSOR TO THE CEILING, ROTATE THE DEVICE TO ENSURE THAT IT FACES THE DESIRED DIRECTION. REFER TO THE "DETECTION RANGE" SECTION TO CHOOSE THE BEST ORIENTATION. AVOID AREAS WHERE FALSE TRIPPING MAY OCCUR DUE TO OUTSIDE MOTION SUCH AS AN OPEN DOOR. IDENTIFY AND AVOID AREA OF POSSIBLE VIBRATIONS AND AIR CURRENTS (i.e. PROJECTORS, FANS, VENTS" AND MOUNT THE SENSOR AT LEAST 5 FEET AWAY FROM THESE ITEMS.

NOTE: DEPENDING ON INSTALLATION REQUIREMENTS, THE ULTRASONIC SENSORS CAN BE ENABLED OR DISABLED THROUGH THE IR REMOTE. THE ULTRASONIC SENSORS ARE SPLIT INTO TWO BANKS- A & B- WHICH ARE LABELED UNDER THE COVER OF THE SENSOR. IF THE SENSOR IS ALREADY INSTALLED AND THE ORIENTATION OF THE SENSORS IS UNKNOWN, BANK A IS LOCATED ON THE RED LED SIDE OF THE SENSOR AND BANK B IS LOCATED ON THE GREEN LED SIDE OF THE SENSOR.

MODEL/FEATURE BASICS						
MODEL	DESCRIPTION	CURRENT CONSUMPTION	CRESNET POWER	COVERAGE	IR SENSOR	SUGGESTED LOCATION
GLS-ODT-C-NS	2-WAY DUAL TECH	45mA	1.08w	2000 FT² (185.8m²)	IR SENSOR FOR GLPP CONTROL	MOUNT IN CENTER OF ROOM/AREA OR MOUNT IN CORNER*

NOTES KEY

1. IR SENSOR
2. ULTRASONIC SENSORS
3. 5-PIN CONNECTOR
   - 1: +24VDC — 24 VDC POWER FROM CONTROLLER (GLPP, GLPAC, GL-IPAC, GLS-SIM)
   - 2: OCC — CONNECTS TO OCUPANCY SENSOR PORT OF GLPP, GLPAC, GL-IPAC or #1 OR #2 INPUT OF GLS-SIM
   - 3: N/C — NO CONNECTION
   - 4: GND — CONNECT TO CONTROLER GROUND
   - 5: IR — CONNECT TO IR PORT ON GLPP FOR PROGRAMMING WITHOUT SEPARATE IR SENSOR

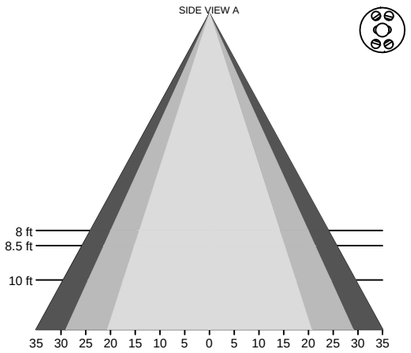
GLS-ODT-C-NS DETAILS

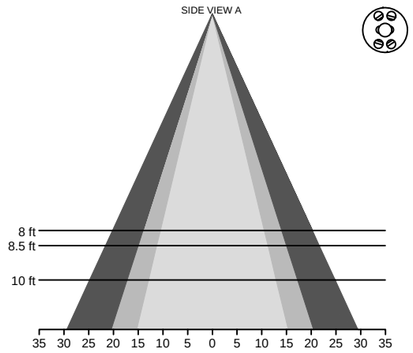
PART #: GLS-ODT-C-NS
DESCRIPTION: DUAL TECHNOLOGY OCCUPANCY SENSOR
REVISION: 000
DATE: 7/17/2014
NOTES:

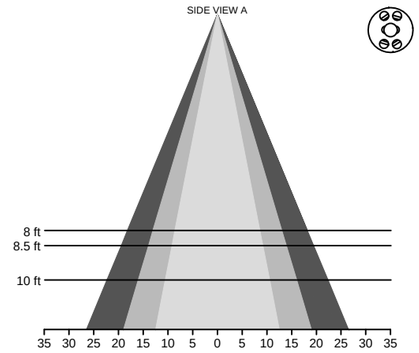
CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

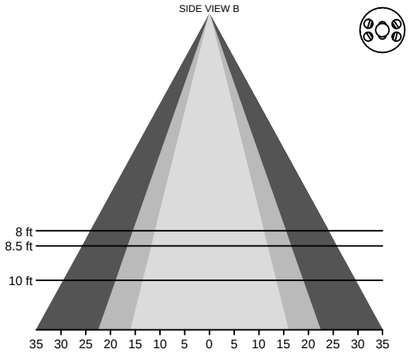
PART #:
GLS-ODT-C-NS
OCCUPANCY SENSOR

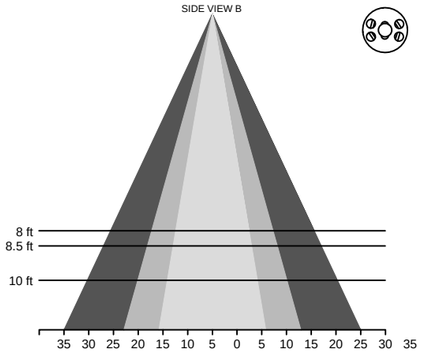
DRAWING:
1 of 2

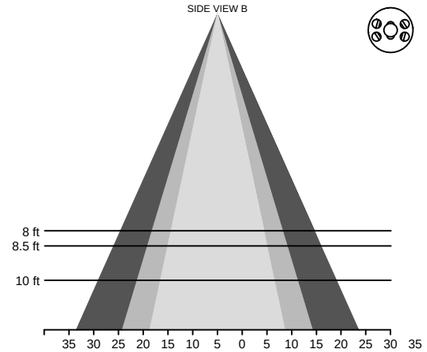


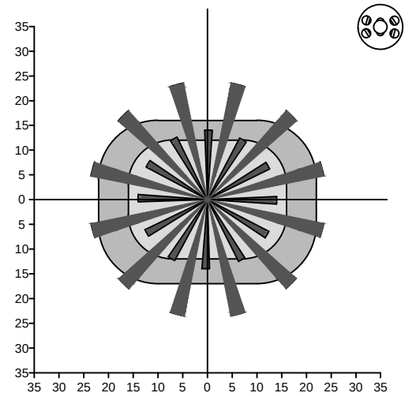




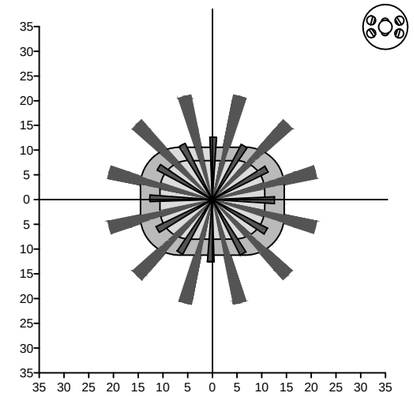




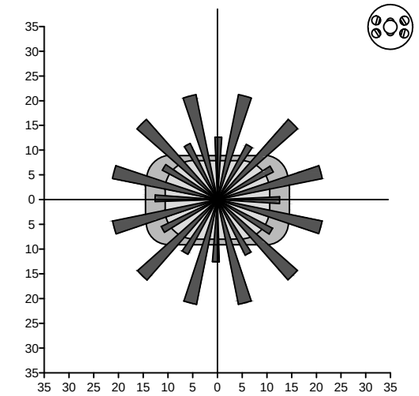




APPROXIMATE COVERAGE
HIGH SENSITIVITY SETTING



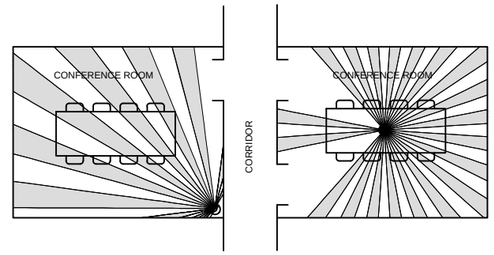
APPROXIMATE COVERAGE
MEDIUM SENSITIVITY SETTING



APPROXIMATE COVERAGE
LOW SENSITIVITY SETTING

NOT TO SCALE

ULTRASONIC MAJOR MOTION
ULTRASONIC MINOR MOTION
PIR MAJOR MOTION



TWO POSSIBLE MOUNTING & MASKING OPTIONS:

IN THE EXAMPLE ABOVE TWO CONFERENCE ROOMS ARE ALONG A CORRIDOR. IT IS UNDESIRABLE FOR CORRIDOR TRAFFIC TO TURN ON THE LIGHTS IN THE CONFERENCE ROOMS. IN THE ROOM ON THE LEFT, AN OCCUPANCY SENSOR IS MOUNTED IN A CORNER WITH ONE ULTRASONIC SENSOR BANK TURNED OFF, COVERING THE ROOM BUT NOT THE CORRIDOR. IN THE ROOM ON THE RIGHT, A SENSOR IS LOCATED OVER THE CENTER OF THE ROOM. THIS SENSOR HAS A MASK INSTALLED WHICH PREVENTS THE SENSOR FROM SEEING CORRIDOR TRAFFIC WHILE STILL COVERING MOST OF THE ROOM.

EACH SENSOR IS SUPPLIED WITH ONE MASK, PERFORATED IN 32° INCREMENTS THAT MAY BE LEFT IN PLACE OR REMOVED TO MASK OR REVEAL CERTAIN AREAS, AND ONE SOLID HALF-MASK.

GLS-ODT-C-NS FIELD OF VIEW RANGES

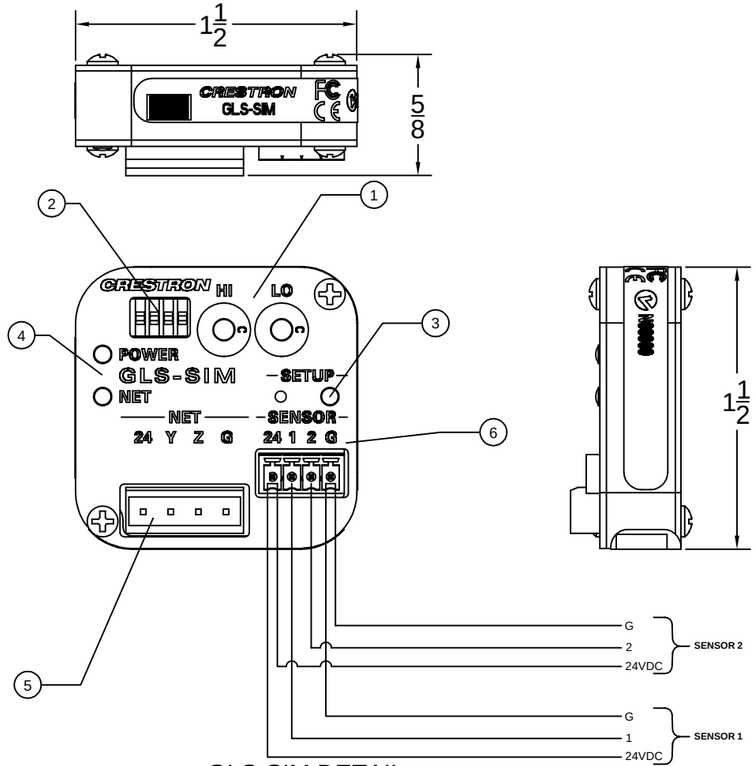
CRESTRON Green Light SYSTEM

PART #: GLS-ODT-C-NS
DESCRIPTION: DUAL TECH OCCUPANCY SENSOR
REVISION: 000
DATE: 7/17/2014
NOTES:

CRESTRON
15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

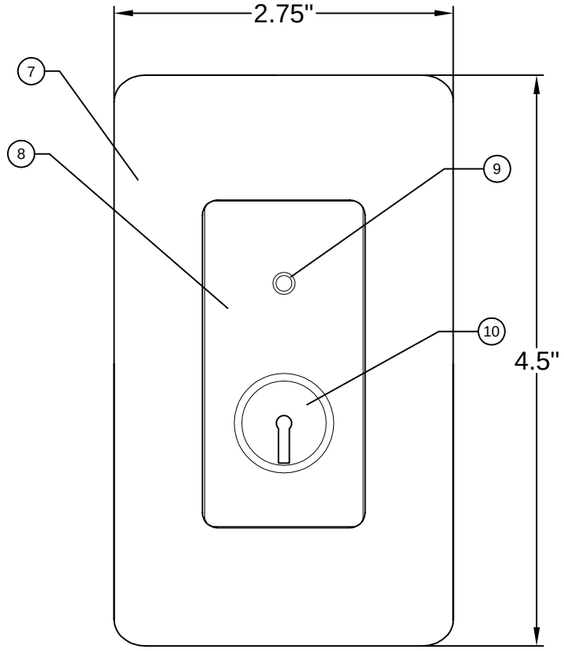
PART #:
GLS-ODT-C-NS
OCCUPANCY SENSOR

DRAWING:
2 of 2



GLS-SIM DETAIL

NOT TO SCALE



GLA-KS DETAIL

NOT TO SCALE

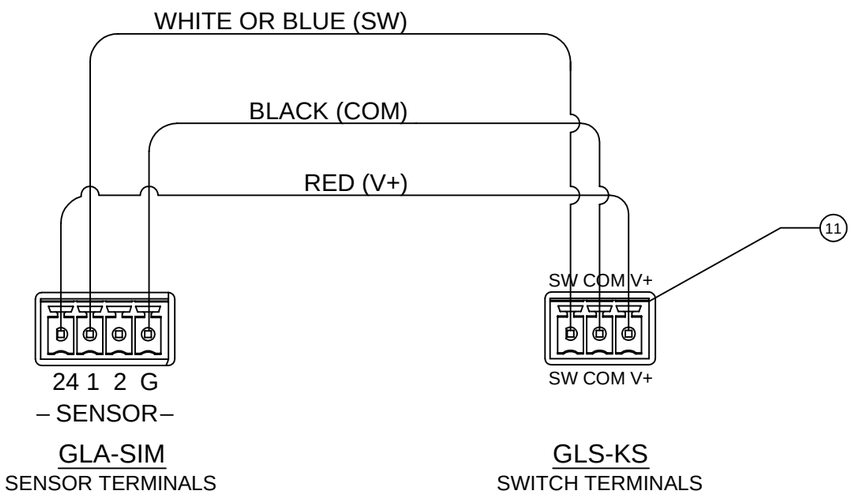
NOTES KEY

1. (2) ROTARY DIP SWITCHES; USED FOR MANUALLY SETTING THE CRESNET ID; '00' SETTING ENABLES TOUCH-SETTABLE ID.
2. (1) 4-POSITION DIP SWITCH; SETS SENSOR TYPE AND OPERATING MODE. SEE CHART BELOW FOR SETTINGS.
3. (1) MINIATURE PUSHBUTTON, USED FOR TOUCH SETTABLE ID.
4. **PWR:** (1) GREEN LED, ILLUMINATES WHEN DC POWER IS APPLIED TO THE NET PORT
   NET: (1) YELLOW LED, INDICATES COMMUNICATION WITH CONTROL PROCESSOR
5. CRESNET NETWORK CONNECTOR TO CONTROL PROCESSOR OR ADDITIONAL MODULES. FACTORY BUILT CABINETS WILL HAVE CRESNET CONNECTIONS WIRED IN FACTORY.
6. (1) 4-PIN 3.5MM DETACHABLE TERMINAL BLOCK;
   SENSOR INPUT COMPRISED OF 24VDC POWER OUTPUT AND

   (2) DIGITAL OR ANALOG INPUT PORTS;

   DIGITAL INPUT: RATED FOR 0-24 VOLTS DC, INPUT IMPEDANCE 20k OHMS, LOGIC THRESHOLD 1.25 VOLTS DC;

   ANALOG INPUT: RATED FOR 0-10 VOLTS DC, PROTECTED TO 24 VOLTS DC MAXIMUM, INPUT IMPEDANCE 20k OHMS; PROGRAMMABLE 5 VOLTS, 2k OHMS PULL-UP RESISTOR PER PIN;
   MAXIMUM POWER LOAD: 1 AMP @ 24 VOLTS DC.
7. DECORA-STYLE FACEPLATE (F.B.O)
8. KEYSWITCH SUB-ASSEMBLY. UNIT IS PROVIDED WHITE BY DEFAULT. UNIT IS AVAILABLE IN BLACK WITH ADDITIONAL LEAD TIME- CONTACT CRESTRON FOR AVAILABILITY.
9. INDICATOR LED. LED WILL GLOW DIMLY AS A "FINDER" AT ALL TIMES, AND ILLUMINATE AT FULL INTENSITY WHEN KEYSWITCH IS SET TO "ON"
10. MAINTAINED KEYSWITCH.
11. KEYSWITCH TERMINALS (ON REAR OF KEYSWITCH ASSEMBLY). ACCEPT WIRES 18-24 AWG.



GLA-SIM

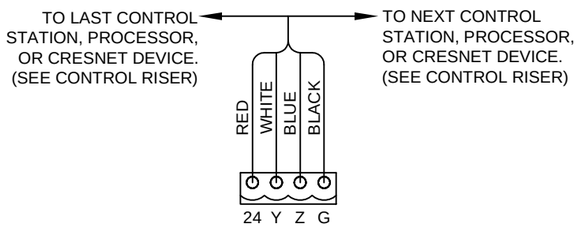
SENSOR TERMINALS

GLS-KS

SWITCH TERMINALS

DIP SWITCH SETTINGS		
SENSOR INPUT	DIP SWITCH	WITH GLA-KS
1	1	OFF
	2	OFF
2	3	OFF
	4	OFF

CRESNET CONTROL WIRING



GLA-KS WIRING DETAIL

PART #: GLS-SIM

DESCRIPTION: GLS-SIM WITH GLA-KS KEYSWITCH WIRING DETAL

REVISION: 000

DATE: 3/8/12

NOTES:

CRESTRON

15 Volvo Drive
Rockleigh NJ 07647
Tel: 888-273-7876
Fax: 201-767-6011
www.crestron.com

PART #:
GLS-SIM WITH
GLA-KS KEYSWITCH

DRAWING:

1 of 1

GLS-LOL

Crestron Green Light® Photosensor, Open-Loop

- *Ceiling- or wall-mount photosensor*
- *Measures the light level from a natural daylight source*
- *Vertical or horizontal surface mounting*
- *60 degree field of view*
- *0 to 10 Volts DC analog control output*
- *Control system interface via Cresnet®[1] or analog input*

The GLS-LOL is a photosensor that measures light in order to achieve the optimal balance of natural and artificial lighting in an indoor space in daylight harvesting applications. Intended for use with an open-loop type system, the GLS-LOL continually monitors the amount of daylight coming through a window or skylight, enabling the control system to dim or switch off room lighting when there is sufficient daylight available to light the space.

Open-loop photosensors provide a cost-effective solution for daylight harvesting, allowing multiple lighting zones to be controlled by a single sensor. In a typical office, classroom, or similar space, the GLS-LOL is installed on the ceiling near a window or in the light well of a skylight, directed toward the incoming daylight and away from any electrical lighting fixtures. The system estimates the total amount of ambient lighting in the room according to the light level measured by the photocell.

The GLS-LOL can be mounted to drywall or to a drop-tile surface. Its simple 3-wire interface allows for direct connection to a Crestron® control system via a single Versiport I/O or analog input port, with 24 Volt power taken from the Cresnet® control bus.[1] Using the optional GLS-SIM Sensor Integration Module, the GLS-LOL becomes a full-featured Cresnet device, streamlining the total lighting system.

Cresnet provides a simpler solution for configuring and wiring sensors as part of any complete Crestron system. The Cresnet bus is the communications backbone for many Crestron keypads, lighting controllers, shade motors, sensors, and other devices. Cresnet is a simple, yet flexible 4-wire network that provides bidirectional communication and 24VDC power for Cresnet devices.

SPECIFICATIONS

Sensing

Field of View: 60 degree cone
Center Axis: 45 degrees from mounting surface
Light Sensitivity: 3 to 6000 foot-candles

Connections[2,3]

Plus: (1) Captive screw terminal, +24 Volt DC power input
Minus: (1) Captive screw terminal, power and control signal common
Arrow: (1) Captive screw terminal, light level control signal output, 0-10 Volts DC

Controls (Behind Cover)

Light Level Range: Jumper-selectable 3-300, 30-3000, or 60-6000 fc

Power Requirements

Current Consumption: 4 mA at 24 Volts DC
Cresnet Power Usage: 1 Watt[4]

Housing

Construction: Plastic, white
Mounting: Surface mounts directly to drywall or drop-tile

Dimensions

Height: 1.20 in (31 mm)
Diameter: 2.00 in (51 mm)

MODELS & ACCESSORIES

Available Models

GLS-LOL: Crestron Green Light® Photosensor, Open-Loop

Available Accessories

GLS-SIM: Crestron Green Light® Sensor Integration Module

GLS-LOL Crestron Green Light® Photosensor, Open-Loop

Notes:

1. Cresnet communications requires GLS-SIM Sensor Integration Module (sold separately).
2. Recommended Wire Size: 22 AWG.
3. Connects to a GLS-SIM Integration Module or to a Versiport I/O or Analog Input control port on any Crestron control system.
4. Power may be taken from Cresnet bus regardless of interface method.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Some Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

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www.crestron.com

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Specifications subject to change without notice. Revised 07/13/15

GLS-PLS-120/277

Power Loss Sensor

The GLS-PLS-120/277 is a 3-Phase Power Loss Sensor designed for use with Crestron Green Light™ systems to activate Override mode during a power failure. In response to a signal from the GLS-PLS-120/277, the lighting system program can be temporarily overridden while designated emergency lighting circuits are changed to their override preset levels and unnecessary lighting and other devices are shut down to minimize the demand on emergency power equipment.

The GLS-PLS-120/277 senses each leg of a 120 or 277 Volt 3-phase feed, providing LED indication of the status of each phase on its front panel. When power is lost on any phase, the corresponding status LED turns off and a contact closure is activated on each of two control outputs. Two isolated control outputs are provided to allow for interfacing with third-party equipment in addition to the Crestron lighting system. Each contact closure output is rated for 1A @ 24VDC.

Testing the GLS-PLS-120/277 is facilitated using three Test Switches located behind a small cover plate on the front of the unit. Setting any switch to the TEST position simulates a loss of power on the corresponding phase leg, providing a test of the unit's internal circuitry and any connected equipment.

The steel enclosure is designed for mounting to a vertical surface. Conduit knockouts are provided on the bottom, top, and both sides. All electrical connections are made via screw terminals accessed by removing the front panel.

> Senses loss of power on each leg of a 3-phase feed

> Used to satisfy UL 924 (Emergency Power Equipment) requirements

> Works with 120 or 277 Volt feeds

> Designed to activate the Override mode on Crestron lighting modules

> Provides two isolated contact closure outputs

> Each output rated 1A @ 24VDC

> Includes built-in test function for each phase input

> Surface mount enclosure includes conduit knockouts

SPECIFICATIONS

Input Voltages

277V Voltage Range: 235 to 305 Volts AC, 50/60 Hz
120V Voltage Range: 102 to 132 Volts AC, 50/60 Hz

Connections

Ground: (1) #6-32 Ground stud
PHASE A: (2) captive screw terminals;
Main feed Phase A sensing input, 277 or 120 Volts;
Wire Size: 30 to 10 AWG (0.05 to 6.0 mm2)

PHASE B: (2) captive screw terminals;
Main feed Phase B sensing input, 277 or 120 Volts;
Wire Size: 30 to 10 AWG (0.05 to 6.0 mm2)

OUTPUT 1 - 2: (2) sets of (2) captive screw terminals comprising (2) Form 'A' contact closures, electrically isolated;
Both outputs close when main feed power is removed from any phase sensing input;
Contact Closure Rating: 1 Amp @ 24 Volts DC;
Wire Size: 30 to 12 AWG (0.05 to 4.0 mm2)

Indicators & Controls

NORMAL A - C: (3) Green LEDs, each illuminates when corresponding test switch is set to NORMAL and power is present at corresponding phase sensing input
TEST A - C: (3) Red LEDs, each illuminates when corresponding test switch is set to TEST and power is present at corresponding phase sensing input
Test Switches: (3) Slide switches behind cover plate, used to set each corresponding phase sensing input to TEST mode

Enclosure

Galvanized steel with polycarbonate label overlay; surface mount with integral mounting flanges top and bottom; 3/4" & 1/2" conduit knockouts top, bottom, and both sides

Environmental

Temperature : 32° to 104°F (0° to 40°C)
Humidity : 0% to 95% RH (non-condensing)
Heat Dissipation : 51 BTU/Hr

Dimensions

Height : 12.69 in (32.23 cm)
Width : 5.19 in (12.75 cm)
Depth: 2.82 in (7.14 cm)

Weight

3.7 lb (1.7 kg)

Available Models

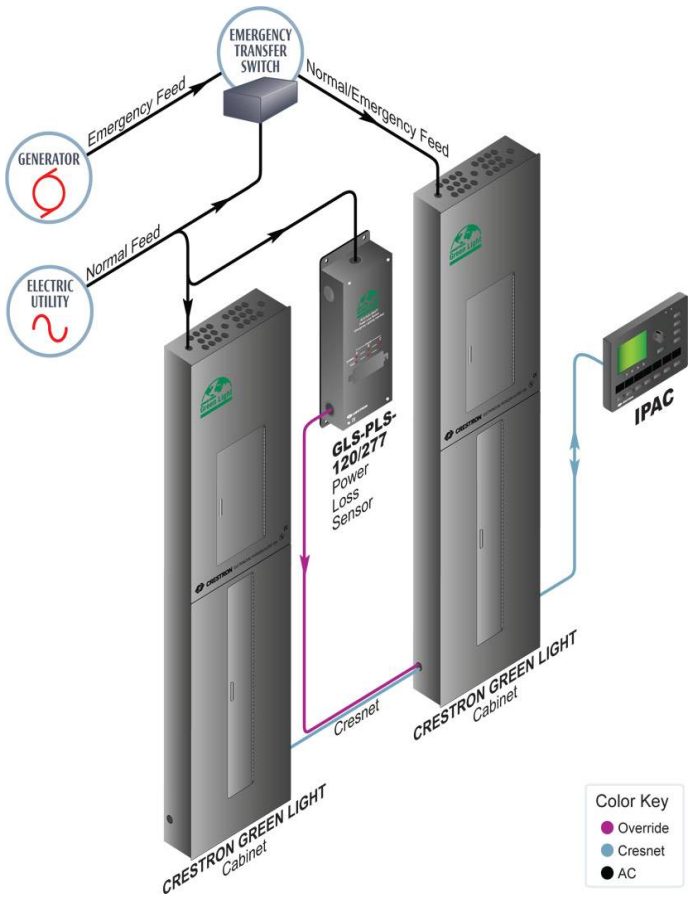
GLS-PLS-120/277: Power Loss Sensor, 3-Phase, 120 or 277 Volts

GLS-PLS-120/277 Power Loss Sensor

Available Accessories

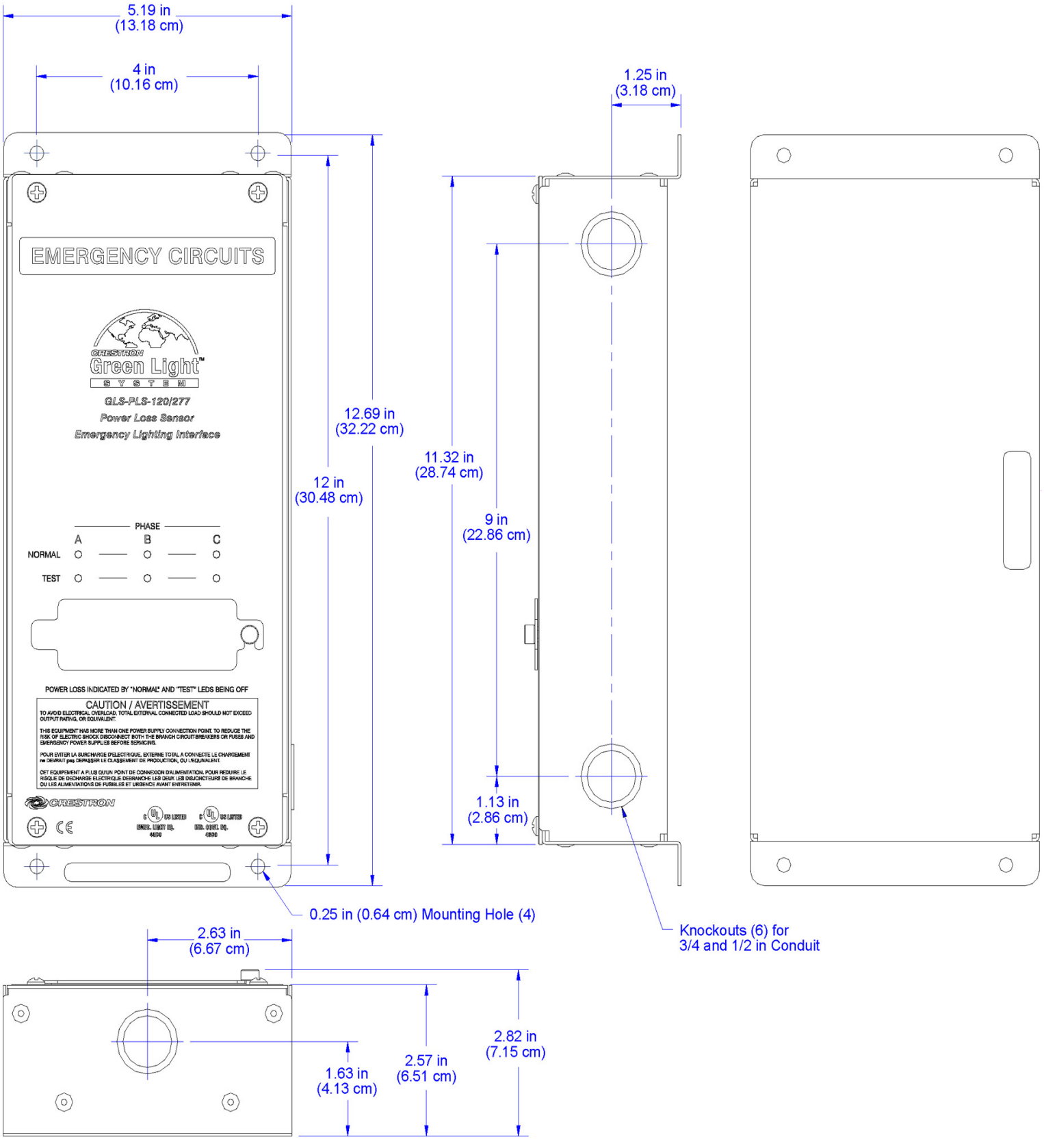
GLS-SIM: Crestron Green Light® Sensor Integration Module

Typical GLS-PLS-120/277 Connections



Crestron Electronics, Inc. 15 Volvo Drive I Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 I Fax: 201.767.1905
www.crestron.com

GLS-PLS-120/277 Power Loss Sensor



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Tel: 800.237.2041 / 201.767.3400 I Fax: 201.767.1905
www.crestron.com

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GLS-LEXT

Crestron Green Light® Photosensor, Outdoor

- *Wall-mount photosensor*
- *Measures the outdoor light levels*
- *Weatherproof with visor for protecting the lens*
- *0 to 10 Volts DC analog control output*
- *Control system interface via Cresnet®[1] or analog input*
- *CEC Title 24 2013 Compliant*

The GLS-LEXT is a photosensor for use in outdoor spaces such as in parking lots, playgrounds, and storage areas. The sensor measures daylight and signals the control system to turn on the exterior lights when the light level falls below a certain threshold. Unlike with a timer, a sensor can account for daytime storms and doesn't need to be programmed for sunset and sunrise.

The GLS-LEXT continually monitors the total ambient light level and can adjust the lighting as necessary to reach the desired light level. The sensor's sensitivity is adjustable so that a 10 Volt signal matches full daylight and a 0 Volt signal matches total darkness. A built-in visor provides more consistent readings by blocking direct sunlight and also protects the lens from the elements.

The GLS-LEXT has a simple three-wire interface that allows for direct connection to a Crestron® control system via a single Versiport I/O or analog input port. The sensor can use 24 Volts of power straight from the Cresnet® control bus.[1]

Using the optional GLS-SIM Sensor Integration Module, the GLS-LEXT becomes a full-featured Cresnet device, streamlining the total lighting system. Cresnet provides a simple solution for configuring and wiring sensors as part of any complete Crestron system. The Cresnet bus is the communications backbone for many Crestron keypads, lighting controllers, shade motors, sensors, and other devices. Cresnet is a simple, yet flexible 4-wire network that provides bidirectional communication and 24VDC power for Cresnet devices.

SPECIFICATIONS

Sensing

Light Sensitivity: 5 to 750 foot-candles
Accuracy: ±1% at 70° F (21° C), ±5% at 0° to 120° F (-18° to 49° C)

Connections

Power: +24 Volts DC input, 18 AWG conductor
Common: DC common, 18 AWG conductor
Sensor: 0-10 Volts DC output, 18 AWG conductor

Power Requirements

Current Consumption: 4 mA at 24 Volts DC
Cresnet® Power Usage: <1 Watt[2]

Housing

Construction: Plastic, white
Mounting: Surface mount

Standards & Certifications

CEC Title 24 2013 Compliant

MODELS & ACCESSORIES

Available Models

GLS-LEXT: Crestron Green Light® Photosensor, Outdoor

Available Accessories

GLS-SIM: Crestron Green Light® Sensor Integration Module

Notes:

1. Cresnet communications requires GLS-SIM Sensor Integration Module (sold separately).
2. Power may be taken from Cresnet bus regardless of interface method.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

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GL-IPAC-SW8

Crestron Green Light® Integrated Switching System

- > *8 internal circuits for switched loads*
- > *Expandable to control up to 64 circuits of switched load*
- > *Supports 100 to 277 Volt applications*
- > *16 Amp load rating per channel*
- > *Built-in astronomical time clock*
- > *Positive air gap at each output*
- > *Phase-independent channels*
- > *Local controls for setup, testing, and verification*
- > *Local and remote override capability*
- > *Non-volatile power failure memory*
- > *Easy access is facilitated from the hinged front cover*
- > *CEC Title 24 2013 Compliant*

The GL-IPAC-SW8 switching panel provides internal controls for 8 circuits of switched load and is expandable to support up to 64 circuits of switched load by adding external panels and switching modules. It features local inputs for sensors and keypads, along with a LCD user interface where installers or users can set up the system without having to connect to a computer.

The GL-IPAC-SW8 is perfect for smaller-sized installations, such as retail stores, small office spaces, parking garages, and service stations, which typically require only on/off switching—eliminating the need for a larger, more expensive panel. In addition, the GL-IPAC-SW8 can be easily integrated with Crestron automation solutions, for centralized monitoring and remote control of multiple locations.

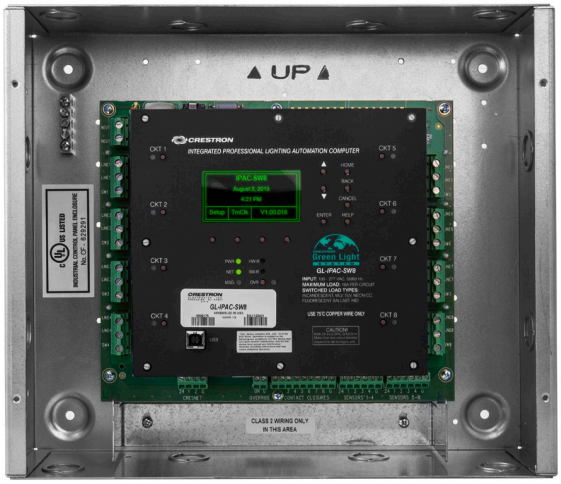
Out-of-the-Box Lighting Control

The GL-IPAC-SW8 comes preconfigured for use as the central control processor for a Crestron Green Light® Power Switching system. Right out of the box, the GL-IPAC-SW8 affords easy setup and programming for a complete switching system consisting of up to 64 switched loads, 16 local and two remote keypads, 24 occupancy and photo sensors, and 100 time clock events.

Keypads with as many as 12 buttons each can be programmed easily to control lighting loads and other functions. Lights can be programmed to turn on and off automatically using the built-in astronomical time clock feature. Lighting events may be programmed to occur at specific times or at an offset from sunrise or sunset. Occupancy sensors and photo sensors may also be implemented to enable automatic on/off lighting control based on room occupancy and ambient light levels.

Save Energy

Built-in support for occupancy and photo sensors helps to strike a perfect balance between daylight harvesting and comfort, reducing energy costs. Automatically turn off lights in unoccupied areas and maintain balanced bulb brightness with the natural light level in the room. Crestron® GLS sensors can be placed strategically in each space to maximize the benefits of energy management.



Easy Deployment

Packaged in one metal enclosure, the GL-IPAC-SW8 can be deployed in small spaces, including plenum ceilings. The surface-mount GL-IPAC-SW8 can be affixed to a wall or ceiling rafter, cleanly out of sight. Standard wire-entry knockouts are provided.

SPECIFICATIONS

Load Rating

Switched Channels: 8 internal; expandable up to 64 by adding external panels and modules
Per Channel: 16 Amps @ 120 to 277 Volts AC, 50/60 Hz
Switched Load Types: Flourescent Ballast, Incandescent, Magnetic Low-Voltage, Electronic Low-Voltage, Neon/Cold Cathode, High-Intensity Discharge, LED, Motor
Relay Lifetime: Resistive rating: 100,000 on/off operations, 50A @ 277 VAC; General rating: 50,000 on/off operations, 16A @ 120/277 VAC

Power Requirements

Main Power: 100-277 Volts AC, 50/60 Hz, via channel 1 (LINE 1, NEUT)
Available Cresnet Power: 15 Watts at 24 Volts DC

Connectors (Class 1)

NEUT: (2) terminal blocks, paralleled, line input neutral
LINE 1 - LINE 8: (16) terminal blocks; 2 connections per channel, paralleled, allows for easy daisy-chaining; line power inputs
SW1 - SW8: (8) terminal blocks, switch channels outputs

Connectors (Class 2)

CRESNET: (1) 4-pin 3.5mm terminal block; a maximum of 10 GLS-SIMs may be connected via the Cresnet® terminal block for occupancy sensors and a maximum of 10 GLS-SIMs for photo sensors; up to 20 occupancy

sensors may be supported (10 external Cresnet sensors and 10 external, non-system sensors connected to Cresnet via GLS-SIM); up to 20 photo sensors may be supported (10 external, non-system sensors wired directly to a Cresnet occupancy sensor and 10 external, non-system sensors wired to a GLS-SIM using Cresnet);
OVR: (1) 2-pin 3.5mm terminal block, comprising (2) inputs for external contact closures to trigger the preset Override state
CONTACT CLOSURES: (1) 9-pin 3.5mm terminal block comprising (8) contact closure inputs and (1) GND port
SENSOR INPUT 1-4: (1) 6-pin 3.5mm terminal block comprising (4) sensor inputs for internal, non-system occupancy sensors, (1) +24VDC, and (1) GND port (provides sensors with power)
SENSOR INPUT 5-8: (1) 6-pin 3.5mm terminal block comprising (4) sensor inputs for internal, non-system photo sensors, (1) +24VDC, and (1) GND port (provides sensors with power)
USB: (1) USB Type B console port, for communication with Crestron Toolbox™
LAN: (1) 8-wire RJ45 with 2 LED indicators; 10/100BaseT Ethernet port; Green LED indicates link status; Yellow LED indicates Ethernet activity

LED Display

Green LCD dot matrix, 128x64 resolution, adjustable LED backlight

Controls & Indicators

SELECTION BUTTONS: (2) push-button, adjust menu parameters
ENTER: (1) push-button, selects underlined item and stores settings
HOME: (1) push-button, returns to the home page
BACK: (1) push-button, returns to the previous page
CANCEL: (1) push-button, cancels current action without saving
HELP: (1) push-button, opens context-sensitive help screen
Soft Keys: (4) push-buttons for activation of LCD driven functions
PWR: (1) Green LED; solid illumination indicates line power is applied to NEUT and LINE1
HW-R: (1) Recessed miniature push-button for hardware reset (reboots the processor)
SW-R: (1) Recessed miniature push-button for software reset (restarts the program)
OVR: (1) Red LED and (1) miniature push-button for enabling override mode
ON/OFF: (8) Red LEDs and (8) miniature push-buttons for individual manual channel activation

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)

Dimensions

Height: 12.13 in (308 mm)
Width: 14.13 in (359 mm)
Depth: 4.06 in (104 mm)

Standards & Certifications

UL Listed Enclosure
CEC Title 24 2013 Compliant

MODELS & ACCESSORIES

Available Models

GL-IPAC-SW8: Crestron Green Light® Integrated Switching System

Available Accessories

CNX-B2B Series: Designer Keypads
C2N-CBD-E Series: Cameo® Express Keypads, Standard Mount
C2N-CBD-P Series: Cameo® Keypads, Standard Mount
C2N-CBF-P Series: Cameo® Keypads, Flush Mount
C2N-DB Series: Decorator Keypads
GLS-SIM: Crestron Green Light® Sensor Integration Module
GLS-LEXT: Crestron Green Light® Photocell, Outdoor
GLS-LOL: Crestron Green Light® Photocell, Open-Loop
GLS-ODT-C-CN: Dual-Technology Occupancy Sensor with Cresnet®, 2000 Sq. Ft.
GLS-OIR-C-CN: Passive Infrared Occupancy Sensor with Cresnet®
GLS-ODT-C-500: Crestron Green Light® Dual-Technology Ceiling Mount Occupancy Sensor, 500 Sq. Ft
GLS-ODT-C-1000: Crestron Green Light® Dual-Technology Ceiling Mount Occupancy Sensor, 1000 Sq. Ft.
GLS-ODT-C-2000: Crestron Green Light® Dual-Technology Ceiling Mount Occupancy Sensor, 2000 Sq. Ft.
GLS-ODT-W-1200: Crestron Green Light® Dual-Technology Wall Mount Occupancy Sensor, 1200 Sq. Ft.
GLS-OIR-C-450: Crestron Green Light® Passive Infrared Ceiling Mount Occupancy Sensor, 450 Sq. Ft.
GLS-OIR-C-1500: Crestron Green Light® Passive Infrared Ceiling Mount Occupancy Sensor, 1500 Sq. Ft.
GLS-OIR-W-2500: Crestron Green Light® Passive Infrared Wall Mount Occupancy Sensor, 2500 Sq. Ft.
GLS-PLS-120/277: Power Loss Sensor, 3-Phase, 120 or 277 Volts
DIN-PWS50: DIN Rail 50 Watt Cresnet Power Supply

Notes:

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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GLS-ODT-C-NS

Dual-Technology Ceiling Mount Occupancy Sensor

- > *Ceiling-mount occupancy sensor for standalone lighting systems*
- > *Dual-technology motion detection*
- > *360 degree, 2000 square feet coverage*
- > *Works with GLPP, GLPAC, and GL-IPAC-SW8*
- > *Connect via a Versiport or digital input port*
- > *Discreet, low-profile appearance*
- > *Extremely accurate and reliable sensing*
- > *Fully digital circuitry for low cost and high reliability*
- > *Connect to a GLS-SIM for control system interface via Cresnet®*

The GLS-ODT-C-NS is a low-profile, ceiling-mount occupancy sensor that delivers a powerful and cost-effective solution for reducing energy costs and enhancing the functionality of standalone lighting systems. It is designed for large areas up to 2000 square feet to detect when the room is occupied, making it great for use in large spaces such as auditoriums, warehouses, and building lobbies. Dual-technology motion sensing, available with the GLS-ODT-C-NS, affords extreme reliability for control of lighting, climate control, and other devices in the room. For power and control, the GLS-ODT-C-NS can connect directly to a GLPP, GLPAC, or GL-IPAC-SW8. The GLS-SIM Sensor Integration Module gives the option to interface with a control system via Cresnet®.

Dual-Technology Occupancy Sensing

Achieving consistent and dependable occupancy sensing is accomplished using a combination of ultrasonic and passive infrared technologies. Ultrasonic motion detection achieves high sensitivity to small movements over a large area, while passive infrared ensures superior immunity to false triggering from vibrations, inanimate objects, or movement in an adjacent corridor. Ultrasonic motion detection can be turned on for Side A, Side B or Both sides of the occupancy sensor to avoid false occupancies facing a hallway or doorway. The GLS-ODT-C-NS allows independent sensitivity adjustment of each sensor type for optimum performance in any space.

Walk-Through Mode

The GLS-ODT-C-NS features a walk-through mode that provides specialized behavior in instances of brief occupancy, turning lights off quickly when a person enters and exits the room within a period of 90 seconds.

Versatile Installation

The GLS-ODT-C-NS was designed to achieve a discreet, nearly hidden appearance when installed on a typical drywall or droptile ceiling. Hardware is included for fast and simple mounting in a hole created by the provided cutout template or to a standard 4-inch octagon box.

Cresnet Option[1]

Cresnet provides a simpler solution for configuring and wiring sensors as part of any complete Crestron® system. Cresnet is the communications backbone for Crestron lighting dimmers, keypads, touch screens, shades, thermostats, and many other devices. This flexible 4-wire bus provides data communications and 24 Volts DC power for all of the devices on the Cresnet network. Using the optional GLS-SIM Sensor Integration Module, the GLS-ODT-C-NS becomes a full-featured Cresnet device, streamlining the total lighting system.

IR Remote

A variety of parameters can be set for the GLS-ODT-C-NS by using the GLS-REMOTE-ODT/OIR remote (sold separately). This IR remote eliminates the need for a ladder to commission or set up any system. The installer can simply stand underneath the sensor and use the remote to complete setup functions and fine tune sensor settings after installation.

SPECIFICATIONS

Sensing

Sensor Technology: Passive Infrared and Ultrasonic (40 kHz)
Coverage Area: 2000 sq. ft.
Coverage Pattern: 360 degrees

LED Indicators

IR: (1) Red LED, PIR detection
Ultrasonic: (1) Green LED, Ultra Sonic detection

IR Remote (sold separately)

Parameters and settings available through IR remote:
Separate Occupancy and Vacancy sensitivity settings;
Timeout (30s, 2m, 5m, 10m, 15m, 30m);
Walk-Through mode “Short Timeout” (Enable/Disable);
LEDs (Enable/Disable);
PIR Sensitivity (High, Med, Low, OFF), with the option to set separate occupancy and vacancy settings;
US Sensitivity (High, Med, Low, OFF), with the option to set separate occupancy and vacancy settings;
US detection (Side A only, Side B only, Both);
Factory Reset;
Force Vacancy;
4 Custom buttons (for future additional features)

GLS-ODT-C-NS Dual-Technology Ceiling Mount Occupancy Sensor

Connections

(1) 5-pin 3.5mm detachable terminal block; 16 AWG maximum wire width supported, includes the following terminals:
+24V: DC power input
OCC: Occupancy sensor control signal output; provides 24 Volts DC high logic signal when occupancy is detected (both PIR and US must sense occupancy to provide 24 V signal, if room is transitioning from a vacant to occupied state; after initial occupancy is detected, either PIR or US detection will trigger the 24 V signal to maintain the occupied state);
Short circuit protected;
Connects to a GLS-SIM Integration Module (sold separately) on any Crestron® control system
NC: Unused
G: Ground
IR: IR single direction, transmits information read from remote by IR receiver on sensor

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)

Power Requirements

Current Consumption: 45 mA @ 24 Volts DC
Cresnet® Power Usage: 1 Watt

Enclosure

Housing: Plastic, white
Mounting: Mounts to a 4" (102 mm) octagon box or ~3-1/2" (88 mm) diameter hole created by provided cutout template. Includes mounting screws and integral toggle clamps. A 1-1/2" (38 mm) minimum mounting depth is recommended.

Dimensions

Diameter: 4.80 in (122 mm)
Depth: 2.30 in (59 mm) overall, 0.97 in (25 mm) exposed

Weight

5.1 oz (144 g)

Standards & Certifications

UL60730-1, FCC, CE, C-Tick, IC, Plenum Rated, California Title 24 Code

MODELS & ACCESSORIES

Available Models

GLS-ODT-C-NS: Dual-Technology Ceiling Mount Occupancy Sensor

Available Accessories

GLS-REMOTE-ODT/OIR: IR Remote for GLS Occupancy Sensors
GLS-SIM: Sensor Integration Module

Notes:

1. The GLS-ODT-C-NS requires a GLS-SIM for Cresnet.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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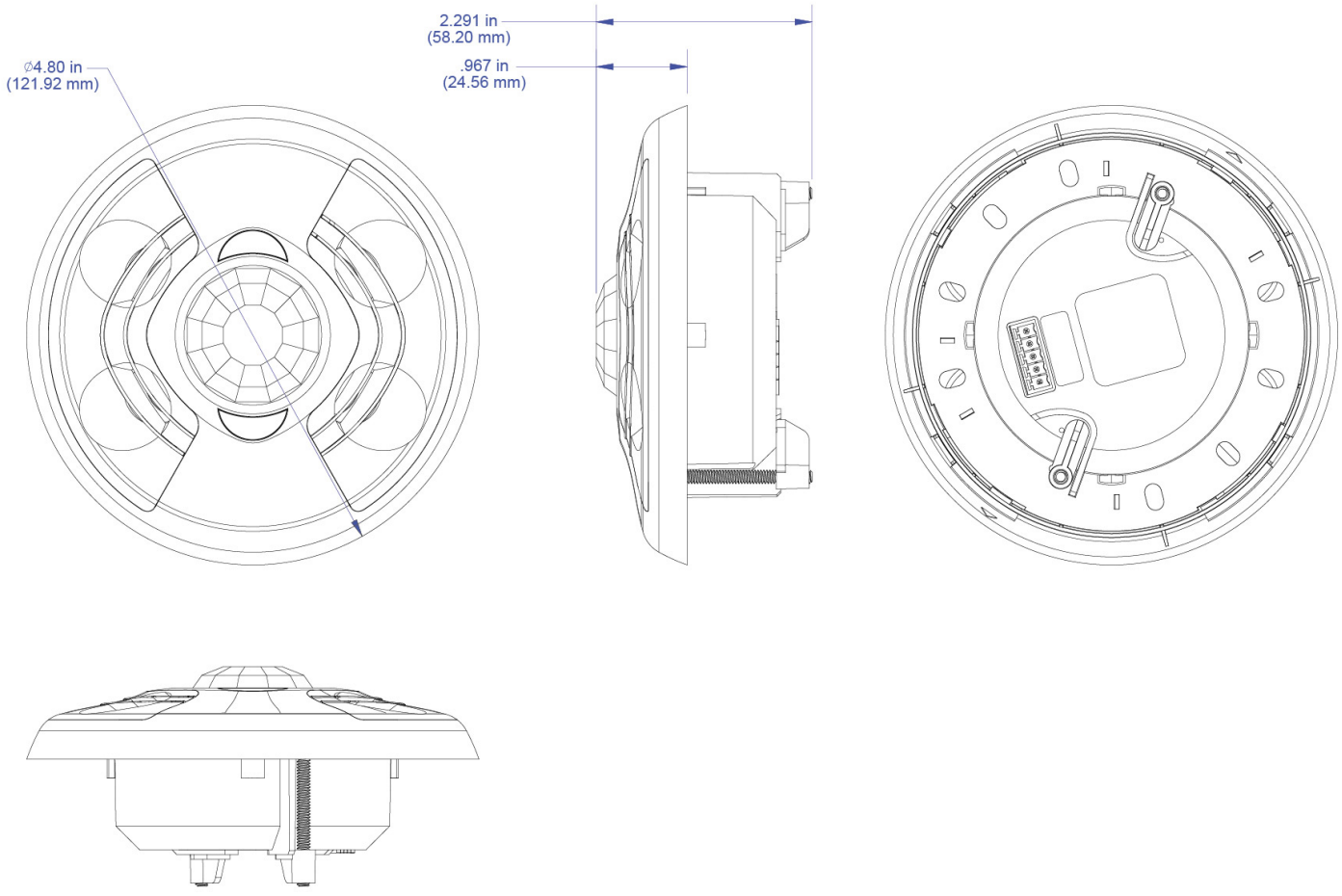
GLS-ODT-C-NS Dual-Technology Ceiling Mount Occupancy Sensor

CAD DRAWING



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