SpaceBuilder® Specification Worksheet

GLPAC System

The GLPAC SpaceBuilder system is ideal for medium-sized spaces that require additional options such as expansion modules for more load types, touch screens, additional sensors, and shade and AV integration.

SpaceBuilder allows you to specify all the necessary features and operations for an autonomous lighting control system specifically designed for the needs of your space. Start by selecting the load types and accessories and finish by defining how each interface should function to control lighting levels, vacancy sensing, daylight harvesting, shades, and AV.

System Components

GLPAC

Available in 4 or 8 zone versions to control both switching and 0-10V dimming loads. Options include regular and emergency versions as well as a split 4 regular and 4 emergency zone panel. All GLPAC systems can be expanded to easily add more zones of lighting.

Keypads

Up to 4 keypads can be added to a GLPAC space. Refer to page 4 for standard sequence of operations to specify the button operations and standard engravings.

Occupancy Sensors

Up to 4 dual technology occupancy sensors can be added to each GLPAC space for either occupancy or vacancy sensing. Each sensor offers coverage for spaces up to 2,000 square feet. Sensor coverage varies based on type, see detail at end of this worksheet. Sensor defaults to vacancy operation unless noted as occupancy operation in the space part number.

Daylight Sensors

Up to 4 daylight sensors can be added to each GLPAC space for daylight harvesting control. Open-loop and closed-loop options are available.

Options

Touch Screens

An optional 7″ color touch screen can be added to each to provide the user with full scene control, dynamic load control, and schedule adjustments.

Loads

Any GLPAC system can be expanded to include additional loads for 2-wire phase, DMX, or switched plug loads.

AV Integration

The GLPAC system can easily integrate with AV systems by adding a serial control module. If this option is selected, Crestron will also supply prepackaged code for the AV contractor to connect the systems.

Shade Integration

Integrate with Crestron and other shading solution systems. Control for up to 4 local shade motors can be included with each GLPAC system.

Networking

Any Crestron SpaceBuilder system can be networked to provide centralized monitoring, management, and master control. This includes direct integration with BMS and reporting, alerts, global time clock management, maintenance, and automation via Crestron Fusion®.

GLPAC_4_____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____

Quantity:_____ Space Name:_____

Space Number(s): _____

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GLPAC SpaceBuilder Load Schedule

Zone #	Zone Description	Fixture Tag	Circuit #	Voltage	Load Type	Emergency / Life Safety	Dim (Y/N)	Fixture Watts	Quantity	Total Watts
Example	Pendants	a	HZ-1	277 VAC	0-10V	None	Yes	50W	4	200W
1						NONE				
2						NONE				
3						NONE				
4						NONE				
5						NONE				
6						NONE				
7						NONE				
8						NONE				
9						NONE				
10						NONE				
11						NONE				
12						NONE				
13						NONE				
14						NONE				
15						NONE				
16						NONE				
Add a Zone 1						NONE				
Add a Zone 2						NONE				
Add a Zone 3						NONE				
Add a Zone 4										

	277 VAC 120 VAC	Switched 0-10V 4-Wire Dimmed Universal Phase Dimmed DMX	None Partial Zone Complete Zone	Yes No

GLPAC_4_____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____

Quantity:_____ Space Name:_____

Space Number(s): _____

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PACKAGE

GLPAC 4 -

- **4** . . . . (4) 0-10V DIM/SW ZONES
- **8** . . . . (8) 0-10V DIM/SW ZONES
- **12** . . . . (12) 0-10V DIM/SW ZONES
- **16** . . . . (16) 0-10V DIM/SW ZONES
- **4X4EM** . . . . (4 NORM. + 4 EMER.) 0-10V DIM/SW ZONES
- **8X4EM** . . . . (8 NORM. + 4 EMER.) 0-10V DIM/SW ZONES
- **12X4EM** . . . . (12 NORM. + 4 EMER.) 0-10V DIM/SW ZONES

KEYPADS

KP - KP - KP - KP -

- **BLANK** . . . . NO KEYPADS
- **A** . . . . KEYPAD STYLE A
- **B** . . . . KEYPAD STYLE B
- **C** . . . . KEYPAD STYLE C
- **D** . . . . KEYPAD STYLE D
- **E** . . . . KEYPAD STYLE E
- **F** . . . . KEYPAD STYLE F
- **G** . . . . KEYPAD STYLE G
- **H** . . . . KEYPAD STYLE H
- **N** . . . . KEYPAD STYLE N
- **P** . . . . LCD KEYPAD
- **X** . . . . CUSTOM KEYPAD SOO

Contact us to add more than 4 keypads

MOTION SENSORS

-

- **BLANK** . . NO SENSORS
- **1** . . . . .1 SENSOR
- **2** . . . . .2 SENSORS
- **3** . . . . .3 SENSORS
- **4** . . . . .4 SENSORS

-

- **BLANK** . . . . NO SENSORS
- **OS** . . . . 2000SQ-FT DT CEILING
- **QUAD** . . . . 4000SQ-FT PIR CEILING
- **WOS** . . . . DT WALL/CORNER
- **HALL_US1** . . . . 33FT US HALL
- **HALL_US2** . . . . 65FT US HALL
- **EOS** . . . . EXTERIOR
- **HOS** . . . . PIR HIGH BAY

OCC SENSOR TYPE

-

- **BLANK** . . . . VACANCY
- **OCC** . . . . OCCUPANCY

DAYLIGHT SENSORS

-

- **BLANK** . . . . NO SENSORS
- **1** . . . . 1 SENSOR
- **2** . . . . 2 SENSORS
- **3** . . . . 3 SENSORS
- **4** . . . . 4 SENSORS

-

- **BLANK** . . . . NO SENSORS
- **LOL** . . . . OPEN LOOP DAYLIGHT SEN.
- **LCL** . . . . CLOSED LOOP DAYLIGHT SEN.

PARTITION SENSORS

-

- **BLANK** . . . . NO SENSOR
- **1PART** . . . . 1 PARTITION SENSOR
- **2PART** . . . . 2 PARTITION SENSORS
- **3PART** . . . . 3 PARTITION SENSORS
- **4PART** . . . . 4 PARTITION SENSORS

TOUCH SCREEN

-

- **BLANK** . . . . NO TOUCH SCREEN
- **TS5P** . . . . 5" PORTRAIT TOUCH SCREEN
- **TS5P+DMX** . . . 5" PORTRAIT TOUCH SCREEN W/DMX
- **TS7** . . . . 7" TOUCH SCREEN
- **TS7+DMX** . . . . 7" TOUCH SCREEN W/DMX

SHADE GROUPS / SHADE MOTOR TYPE

-

- **BLANK** . . . NO SHADES
- **1** . . . . .1 SHADE
- **2** . . . . .2 SHADES
- **3** . . . . .3 SHADES
- **4** . . . . . 4 SHADES

-

- **BLANK** . . . . NO SHADES
- **RS232** RS-232/CONTACT
- **CN** . . CRESTRON QMT MOTOR
- **RLY** . . . . 120V MOTOR

AV

-

- **BLANK** . . . . NO AV
- **AV-NC** . . . . NON-CRESTRON (RS-232)
- **AV-C** . . . . CRESTRON (ETHERNET)

KEY SWITCH

-

- **BLANK** . . . . NO KEY SWITCH
- **KEY** . . . . ADD KEY SWITCH

INTERFACE COLOR

-

- **BLANK** . . . . WHITE
- **BLK** . . . . BLACK
- **ALMD** . . . . ALMOND
- **GRY** . . . . GREY
- **RED** . . . . RED

POWER MONITORING

-

- **BLANK** . . . . NO POWER MONITORING
- **PM** . . . . ADD POWER MONITORING

CHICAGO PLENUM

-

- **BLANK** . . . . STANDARD ENCLOSURE
- **CP** . . . . CHICAGO PLENUM ENCLOSURE

NETWORKING

-

- **BLANK** . . . . STAND-ALONE SPACE
- **NET** . . . . NETWORKED SPACE

ADD A ZONE

-

- **BLANK** . . . . NONE
- **1DIMU** . . . . 1 UNIVERSAL PHASE DIM
- **2DIMU** . . . . 2 UNIVERSAL PHASE DIM
- **3DIMU** . . . . 3 UNIVERSAL PHASE DIM
- **4DIMU** . . . . 4 UNIVERSAL PHASE DIM

PLUG LOAD

- **BLANK** . . . . NONE
- **1PL** . . . . 1 PLUG LOAD ZONE
- **2PL** . . . . 2 PLUG LOAD ZONES
- **3PL** . . . . 3 PLUG LOAD ZONES

Example: GLPAC4 - AKP - PKP - 2QUAD - 1LOL - 2PART - TS5P - NET - 2PL

GLPAC4 _____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-
_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____

Quantity:_____ Space Name:_____

Space Number(s): _____

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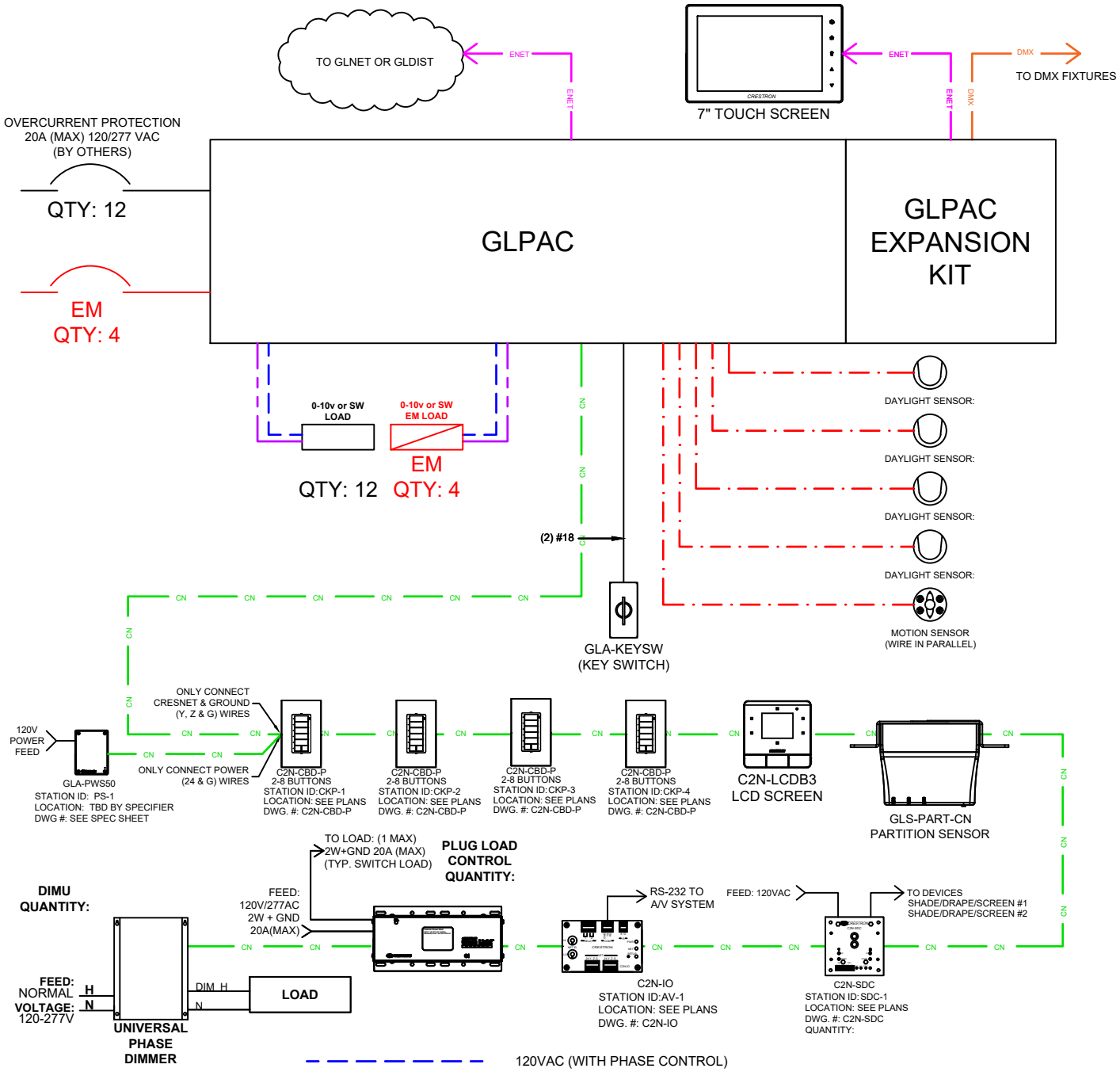
GLPAC SpaceBuilder Schematic Riser



CABLE TYPES:

(NOT ALL TYPES ARE USED ON ALL PROJECTS)

ALL LOW-VOLTAGE CABLE RUNS ARE CRESNET UNLESS OTHERWISE NOTED.

- 120VAC (WITH PHASE CONTROL)
- CRESNET
- 0-10V
- DALI
- ETHERNET
- SENSOR (CRESNET OR 3-#18)
- DMX (100-ohm CAT or BELDEN 9841)

GLPAC_4 _____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____

Quantity:_____ Space Name:_____

Space Number(s): _____

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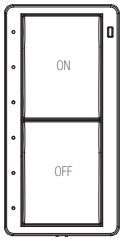
GLPAC SpaceBuilder Sequence of Operations

KEYPAD TYPE A

Typical Applications
Office, Restroom, Storage/Utility Room, Corridor, Basic Classroom

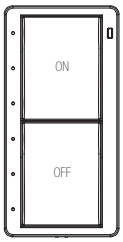


Button 1 Functionality: ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%

Button 2 Functionality: OFF
- Turn all lights off to 0% and disable daylight harvesting

KEYPAD TYPE B

Typical Applications
Office, Conference Room, Classroom, Library

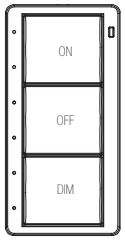


Button 1 Functionality: ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%
- Press and hold will raise all dimmable lighting

Button 2 Functionality: OFF
- Turn all lights off to 0% and disable daylight harvesting
- Press and hold will lower all dimmable lighting

KEYPAD TYPE C

Typical Applications
Office, Conference Room, Classroom, Library



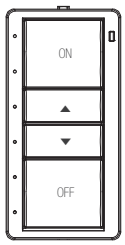
Button 1 Functionality: ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%

Button 2 Functionality: OFF
- Turn all lights off to 0% and disable daylight harvesting

Button 3 Functionality: DIM
- Toggle to dim load up and down

KEYPAD TYPE D

Typical Applications
Office, Conference Room, Classroom, Library



Button 1 Functionality: ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%

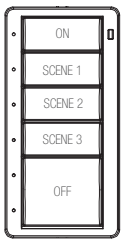
Button 2 Functionality: ▲
- Dim lights up

Button 3 Functionality: ▼
- Dim lights down

Button 4 Functionality: OFF
- Turn all lights off to 0% and disable daylight harvesting

KEYPAD TYPE E

Typical Applications
Office, Conference Room, Cafeteria, Library, Multipurpose Room, Lobby, Ballroom



Button 1 Functionality: ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%

Button 2 Functionality: SCENE 1
- Recalls scene 1 settings with feedback

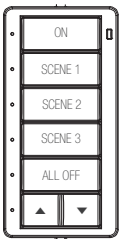
Button 3 Functionality: SCENE 2
- Recalls scene 2 settings with feedback

Button 4 Functionality: SCENE 3
- Recalls scene 3 settings with feedback

Button 5 Functionality: OFF
- Turn all lights off to 0% and disable daylight harvesting

KEYPAD TYPE F

Typical Applications
Office, Conference Room, Classroom, Library



Button 1 Functionality: ALL ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%

Button 2 Functionality: SCENE 1
- Recalls scene 1 settings with feedback

Button 3 Functionality: SCENE 2
- Recalls scene 2 settings with feedback

Button 4 Functionality: SCENE 3
- Recalls scene 3 settings with feedback

Button 5 Functionality: ALL OFF
- Turn all lights off to 0% and disable daylight harvesting

Button 6 Functionality: ▲
- Dim lights up

Button 7 Functionality: ▼
- Dim lights down

Continued on page 6

GLPAC_4_____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____

Quantity:_____ Space Name:_____

Space Number(s): _____

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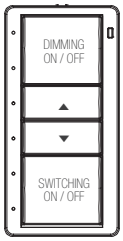
GLPAC SpaceBuilder Sequence of Operations, Continued

KEYPAD TYPE G

Typical Applications: Office, Conference Room, Classroom, Library, Applications where dimming and switching both exist and need separate control



Button 1 Functionality: DIMMING ON/OFF
- Toggle dimmable zones on or off with feedback if any lights are on
- Toggle to turn daylight harvesting on or off
- If daylight sensor is not present, lights will turn on to 100%

Button 2 Functionality: ▲
- Dim lights up

Button 3 Functionality: ▼
- Dim lights down

Button 4 Functionality: SWITCHING ON/OFF
- Toggle dimmable zones on or off with feedback if any lights are on

KEYPAD TYPE H

Typical Applications: Office, Conference Room, Classroom, Library, Applications where shades control is needed

Button 1 Functionality: ALL ON
- Turn all lights on and enable daylight harvesting
- If daylight sensor is not present, lights will turn on to 100%

Button 2 Functionality: SCENE 1
- Recalls scene 1 settings with feedback

Button 3 Functionality: SCENE 2
- Recalls scene 2 settings with feedback

Button 4 Functionality: ALL OFF
- Turn all lights off to 0% and disable daylight harvesting

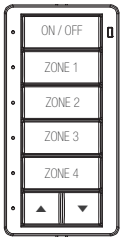
Button 5 Functionality: SHADES
- Activates up and down arrows to control shades. After 5 seconds of inactivity, up and down arrows revert back to dimming lights up and down.

Button 6 Functionality: ▲
- Dim lights up (shades up when SHADES button is active)

Button 7 Functionality: ▼
- Dim lights down (shades down when SHADES button is active)

KEYPAD TYPE N

Typical Applications: Office, Conference Room, Classroom, Library, Applications where shades control is needed



Button 1 Functionality: ALL ON / OFF
- Toggle all lights on and off

Button 2 Functionality: ZONE 1
- Zone 1 on, press and hold for off

Button 3 Functionality: ZONE 2
- Zone 2 on, press and hold for off

Button 4 Functionality: ZONE 3
- Zone 3 on, press and hold for off

Button 5 Functionality: ZONE 4
- Zone 4 on, press and hold for off

Button 6 Functionality: ▲
- Dim last touched zone up

Button 7 Functionality: ▼
- Dim last touched zone down

LCD KEYPAD TYPE P

Typical Applications: Conference Room, Cafeteria, Library, Multipurpose Room, Lobby, Ballroom

Color LCD keypad gives control of lighting scenes 1, 2 and OFF.

KEYPAD TYPE X

Typical Applications
All applications needing a custom keypad button configuration and functionality

Custom Keypad S00

Note

By selecting keypad types, the SpaceBuilder system will be programmed, packaged, and shipped from the factory as an operable turnkey lighting control solution. Additional on-site support may be required for scene or sensor calibration.

GLPAC_4_____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____

Quantity:_____ Space Name:_____

Space Number(s): _____

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GLPAC Specifications

LOAD RATINGS

Dimmer Channels
GLPAC-DIMFLV4(-PM): 4
GLPAC-DIMFLV8(-PM): 8

Per Channel
16 Amps @ 100 to 277 Volts AC, 50/60 Hz

Dim Load Types
0-10 Volt fluorescent ballast (4-wire); 0-10V LED drivers; 60 mA max current sink

Switch Load Types
Fluorescent 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

ENCLOSURE

Surface mount metal box enclosure, suitable for mounting in plenum airspace

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 (103 mm)

ELECTRICAL REGULATORY CERTIFICATIONS

Relays tested and certified for Electronic Ballasts according to UL508, Section 41 (Endurance Test) and Section 61C (Electronic Ballasts)

IEC60669-2-1, Section 19.102 (Contact mechanisms incorporated in electronic switches, intended for fluorescent lamp circuits or other capacitive loads)

CEC Title 24 2013 Compliant

- Up to 8 channels of 0-10 Volt fluorescent and LED dimming or switching
- Works in 100 to 277 VAC systems
- 16-Amp load rating per channel
- Built-in Control System with Cresnet® and Ethernet port
- Programmable astronomical time clock for scheduled events
- Preloaded program for quick setup
- Optional real-time power monitoring per channel
- Supports keypad control, occupancy sensing, and daylight harvesting
- 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
- High-speed Ethernet LAN port

Products in this system can include:

GLS-ODT-C-NS: 2000 Square Foot Dual Technology Ceiling Mount Occupancy Sensor
GLA-IR-QUATTRO-HD-COM1-24: 4000 sq-ft interior ceiling motion sensor
GLA-DT-CM-COM1-24: Dual technology corner mount motion sensor
GLA-US-ONEWAY-COM1-24: Ultrasonic 35ft corridor motion sensor
GLA-US-HALLWAY-COM1-24: Ultrasonic 65ft corridor motion sensor
GLA-IS-360: High bay motion sensor
GLA-HBS-300: Exterior motion sensor
GLS-LCL: Closed loop daylight sensor
GLS-LOL: Open Loop Daylight Sensor
C2N-IO: Serial RS-232 interface
TSW-760: 7” Touch Screen
C2N-CBD-P: Keypad
C2N-LCDB3: LCD Keypad
TSW-560P: 5” Portrait Touch Screen
GLA-KEYSW-MAINTAIN: Keyed switch

For technical specifications on all other products in this system, please visit www.crestronlighting.com

For more information or to access digital specification forms for all Crestron SpaceBuilder systems, visit www.crestronspacebuilder.com or call 855-644-7643

Notes:

GLPAC_4 _____-____KP-____KP-____KP-____KP-_____-____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____

Date:_____ Project:_____
Quantity:_____ Space Name:_____
Space Number(s): _____

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