



LEVITON

**Applications Cookbook
National Accounts: Restaurant**

Version 1.0

FOR REFERENCE ONLY

NATIONAL ACCOUNTS: RESTAURANT COOKBOOK NOTES



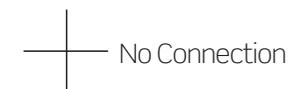
1. Refer to manufacturer's data sheets and installation instructions prior to installation
2. Line feed 120/230/277 VAC, 60 Hz
3. Ground not shown, ground devices per applicable national and local codes are best practices
4. For emergency power situations, illustrations assume transfer switch by others upstream of shown devices
5. Line voltage load not to exceed contact rating per device specifications
6. Power packs receiving separate feeds for switched loads and self power must have both feeds on the same phase
7. All low voltage devices consume current. Device power budget is estimated for these details—additional power sources may be required. See product literature for power specifications
8. Maximum run length for analog wiring is 1000' @ #18 AWC
9. Sensors wired in parallel will cause line voltage relay closure when occupancy is detected by any unit
10. Devices in series requiring contact closure from a single device (clock input, demand response, emergency, etc.) must follow these wiring conventions:
 - First device in sequence provides the +V to the triggering relay
 - Signal from closure attached to all devices in sequence input
 - Com from first device in sequence attached to com on all devices in sequence
11. Ultrasonic ceiling mount sensors should be located a minimum of six (6) feet from HVAC supply/return vents
12. Trough-mounted and pendant-mounted indirect lighting sources affect the operation of locally mounted sensors. Contractor is responsible for adjusting sensor locations to allow for proper operation

13. Contractor is responsible for proper sensitivity and time delay settings for non-adaptive products, following the manufacturer's recommended placement, and field verification of circuits with respect to power pack placement
14. Contractor is responsible for coordinating the operational options of sensors and power packs with the specific work requirements
 - Work relevant energy code requirements affect circuits to be controlled and their control characteristics
 - One power pack is required for each controlled circuit
 - Refer to power pack data sheet for power output and installation guide for maximum number of sensors connected to a power pack
 - If multiple circuits are to be controlled by a sensor, auxiliary relays may be used in conjunction with a power pack
15. Ceiling sensors mounted over doorways should be placed one (1) foot inside the threshold
16. Up to 100 Mark VII style ballasts may be controlled per daylighting zone by IRC
17. All relays shown in de-energized state
18. Individually cap off unused leads
19. One-line parenthesis use:
 - (X) Function
 - [#] Terminal
20. Plug load control—commercial receptacle P/Ns:
 - STANDARD DUPLEX:
 - Split control (1 outlet) CR015-1Px, CR020-1Px
 - Full control (2 outlets) CR015-2Px, CR020-2Px
 - DECORA®:
 - Split control (1 outlet) 16252-1Px, 16352-1Px
 - Full control (2 outlets) 16252-2Px, 16352-2Px

ABBREVIATIONS:

LC	LumaCAN
LV	Low voltage
HV	High voltage switch (maintained)
LVM	Low voltage switch (momentary) Equal to Leviton 1081 (toggle) OR Leviton 56081 (Decora)
LVT	Low voltage switch (maintained) Equal to Leviton 12021-2 (toggle) or Leviton 56021-2 (Decora)
LV2	IRC low voltage switch
UON	Unless otherwise noted
BLK	Black
WHT	White
BLU	Blue
YEL	Yellow
ORG	Orange
VIO	Violet
BRN	Brown

SYMBOLS:



No Connection



Connection



Devices wired in parallel

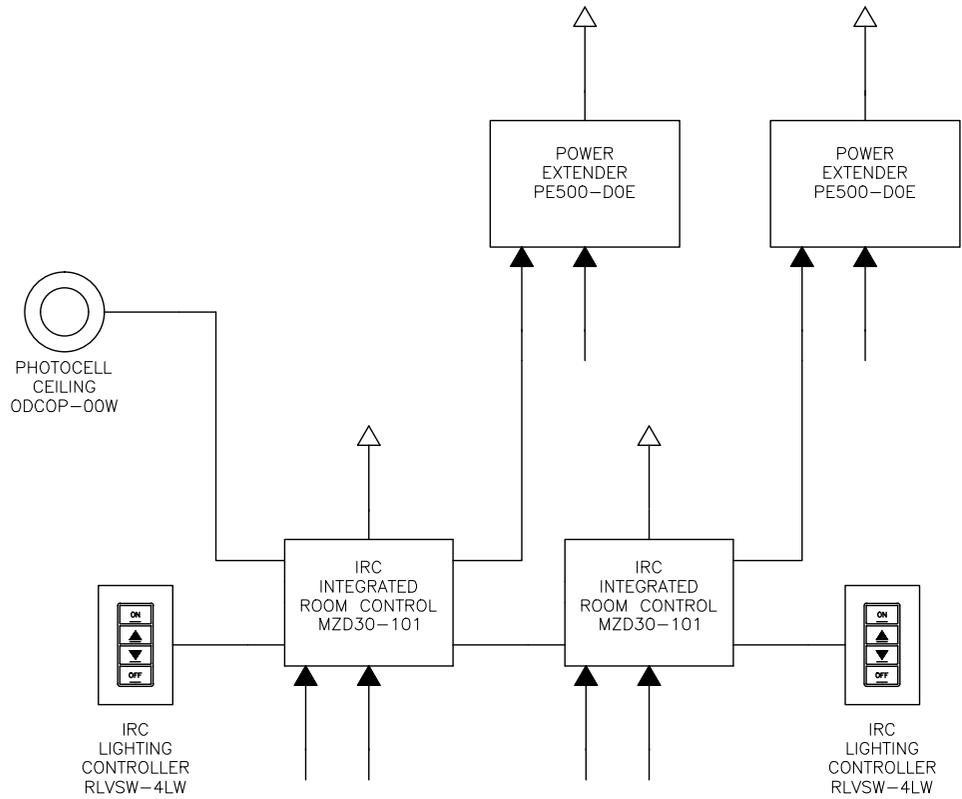
TABLE OF CONTENTS



PAGE	DESCRIPTION
4	IRC, Photocells, 4 Button Stations, Power Extenders
5	EZ-MAX, 2 Button Station
6	EZ-MAX, Photocell, 2 Button Station
7	EZ-MAX, IRC, Photocells
8	EZ-MAX, IRC, Photocells, 2 and 4 Button Stations
9	a2000, D4200
10	a2000, D4200, Power Extender
11	a2000, D4200, Combine Station, Photocells, Occupancy Sensors
12	a2000, Sapphire, Gateway, NPDLR, Power Supply
13	a2000, D4200, Photocell, 5 Button Stations, Power Extender
14	a2000, D4200, D4006, Photocells, Power Extenders
15	a2000, IRC, Sapphire, Gateway, D4106
16	a2000, D4200, Signal Processing Rack, Room Combine Station, Photocells, Occupancy Sensors, Power Extenders
17	GreenMAX, 2 and 4 Button Stations, Photocells
18	GreenMAX, DDS 6000 Satellite Dimmer Pack, Photocells, 2 and 4 Button Stations, Occupancy Sensors
19	GreenMAX, DDS 6000 Satellite Dimmer Pack, 2 and 4 Button Stations, Photocells
20	GreenMAX, Sapphire, Photocells, Occupancy Sensors, 1 Button Station, Power Supply
21	GreenMAX, DDS 6000 Satellite Dimmer Pack, Photocell, Power Pack, Power Extender
22	D4206, DDS 6000 Satellite Dimmer Pack, Photocell, Power Pack, Power Extender
23	DDS 6000 Satellite Dimmer Pack, Photocell, Dimmer, Power Pack
24	GreenMAX, Multi-Gang Station, Photocells
25	GreenMAX, Sapphire, DDS 6000 Satellite Dimmer Pack, Photocells, Power Supply, Power Extender
26	Lumina Gateway, Omnitouch, Structured Media Enclosure

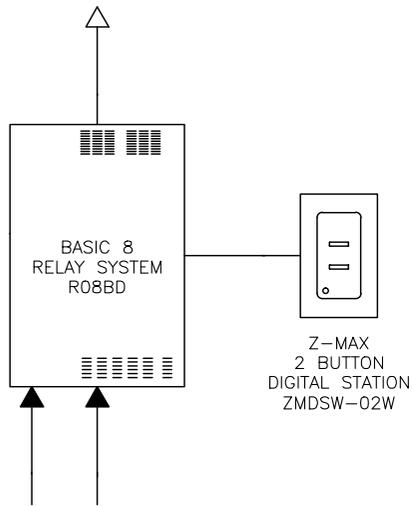
IRC, PHOTOCELLS, 4 BUTTON STATIONS, POWER EXTENDERS

Daylighting Control for Reverse Phase Lighting



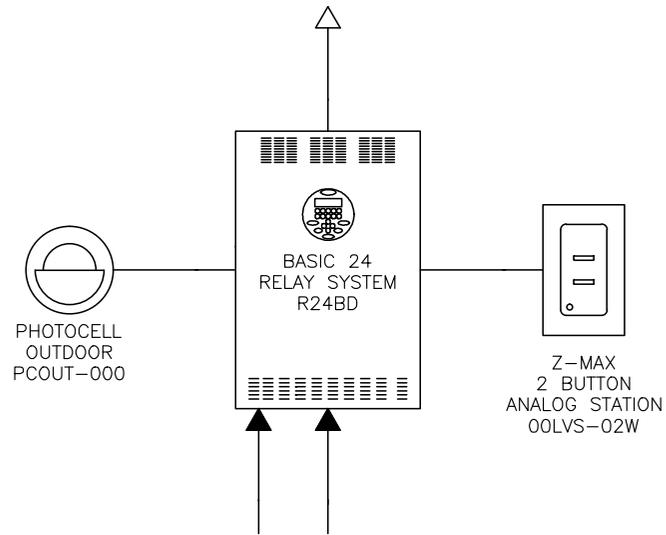
EZ-MAX, 2 BUTTON STATION

Time-Based Lighting Control



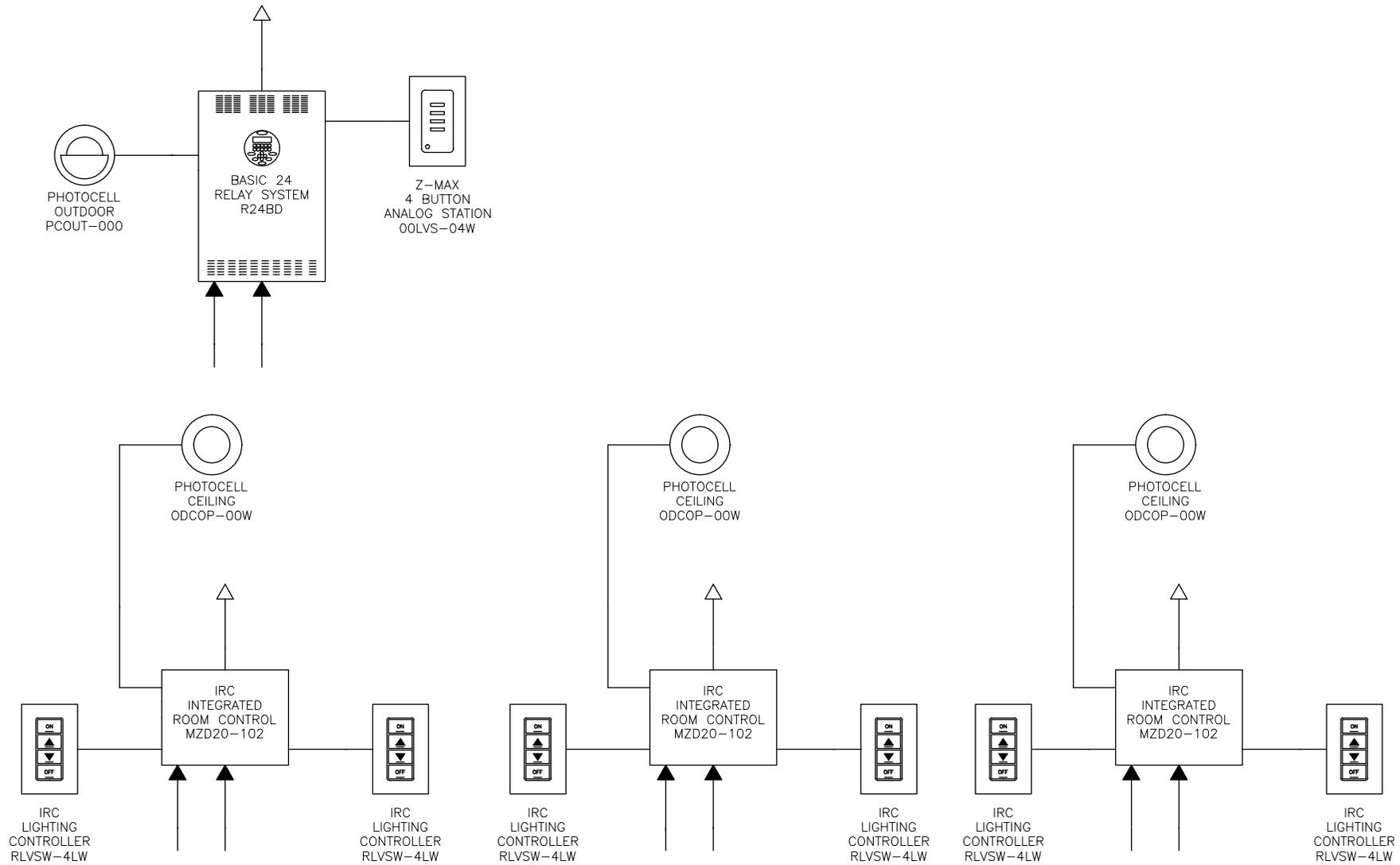
EZ-MAX, PHOTOCELL, 2 BUTTON STATION

Exterior Time-Based and Light Sensing Lighting Control



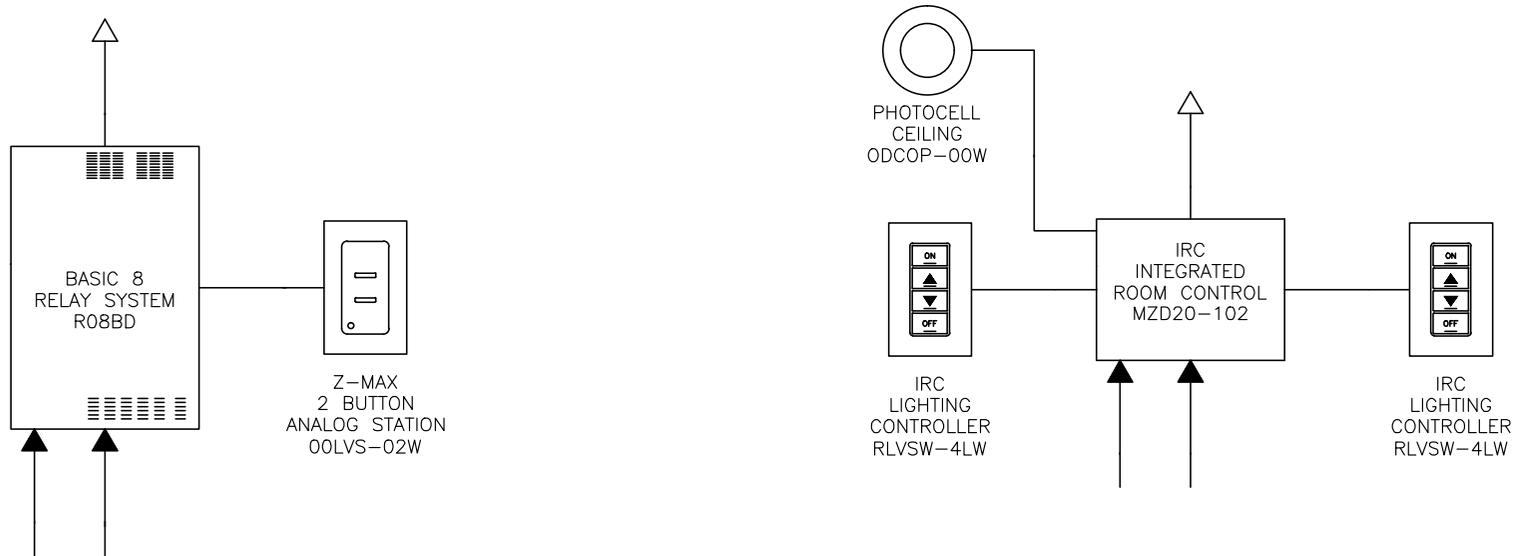
EZ-MAX, IRC, PHOTOCELLS

Time-Based Lighting Controls Plus Daylighting Zones



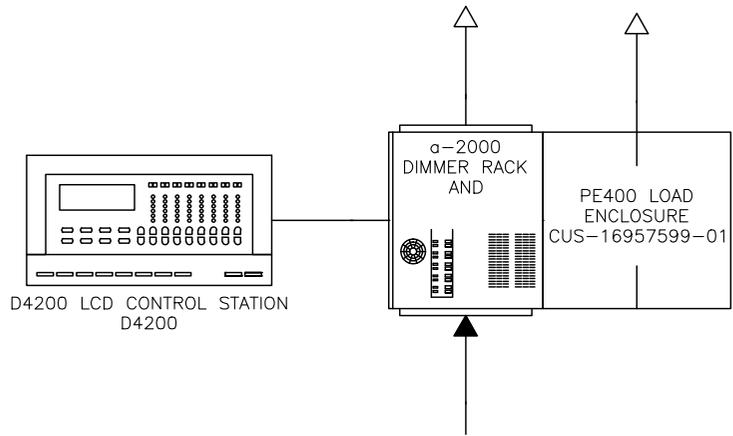
EZ-MAX, IRC, PHOTOCELLS, 2 AND 4 BUTTON STATIONS

Time-Based Lighting Control Plus Daylighting Zones



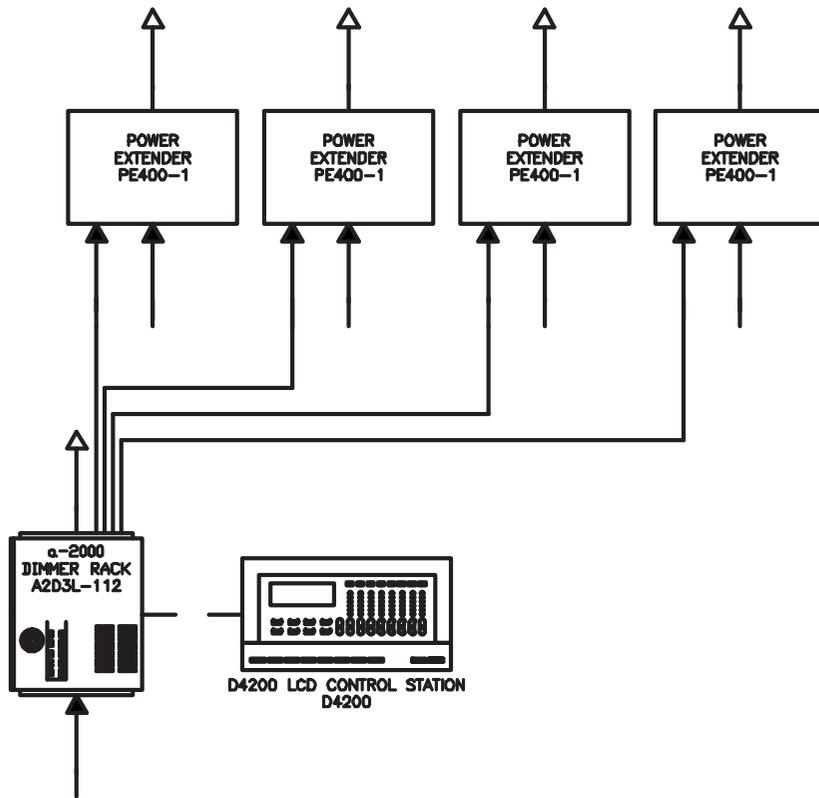
a2000, D4200

Preset and Timer-Based Lighting Control



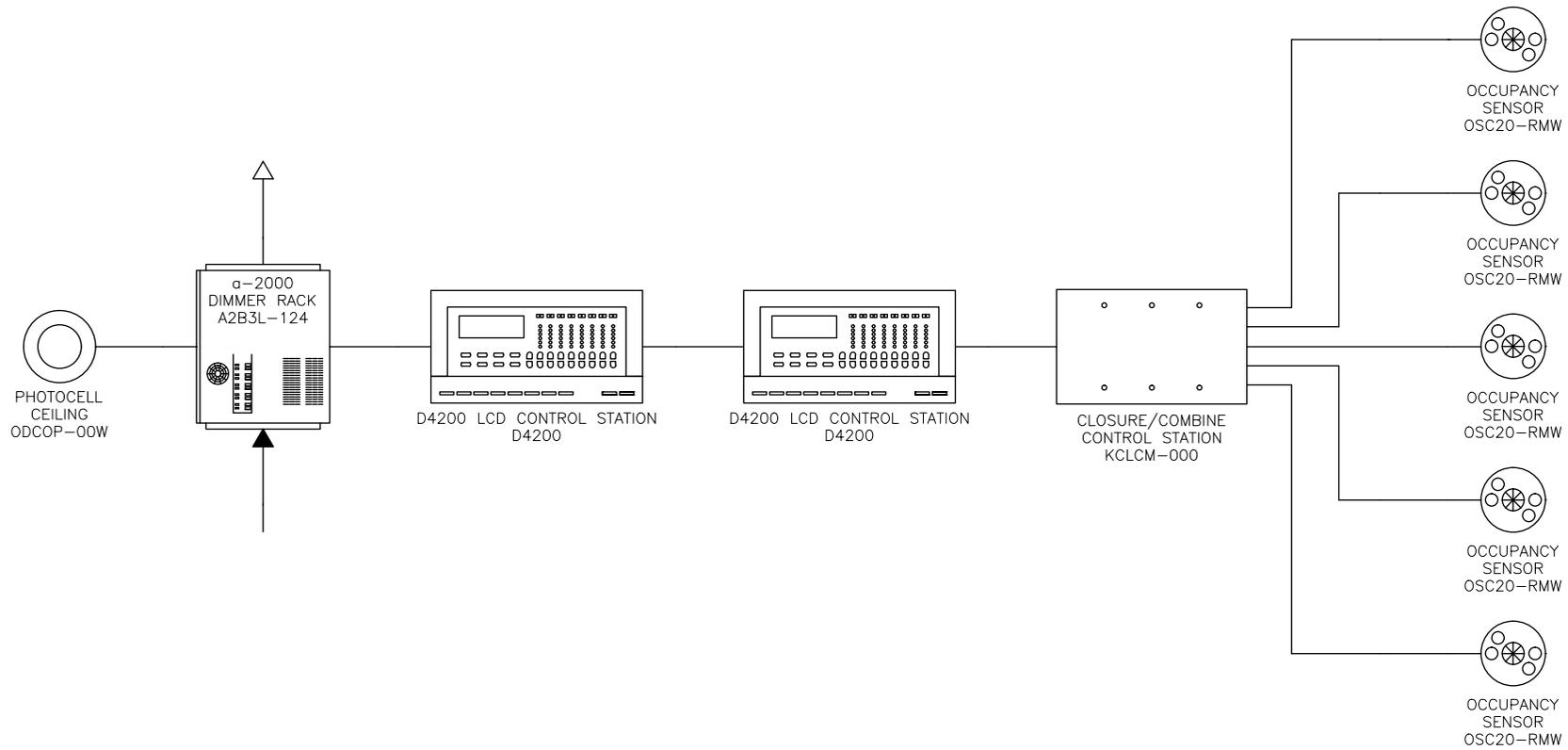
a2000, D4200, POWER EXTENDER

Preset and Timer-Based Lighting Control



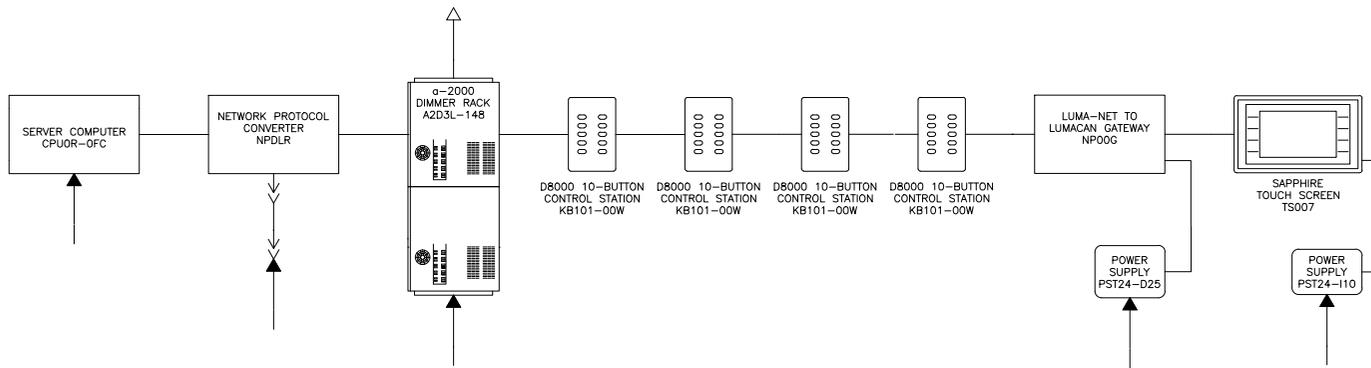
a2000, D4200, COMBINE STATION, PHOTOCELLS, OCCUPANCY SENSORS

Preset, Timer and Occupancy Based Lighting Control



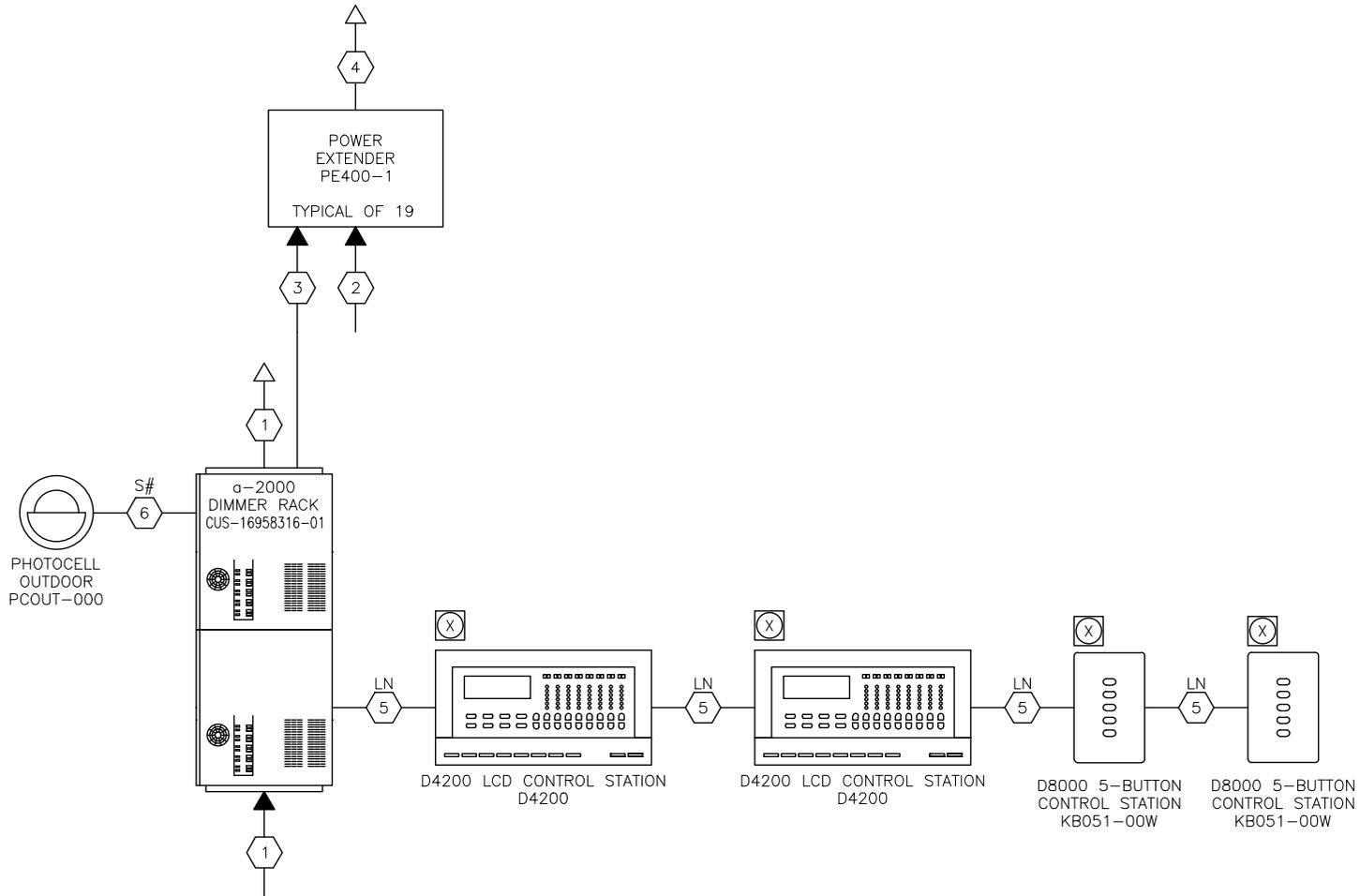
a2000, SAPPHIRE, GATEWAY, NPDLR, POWER SUPPLY

Preset and Timer-Based Lighting Control



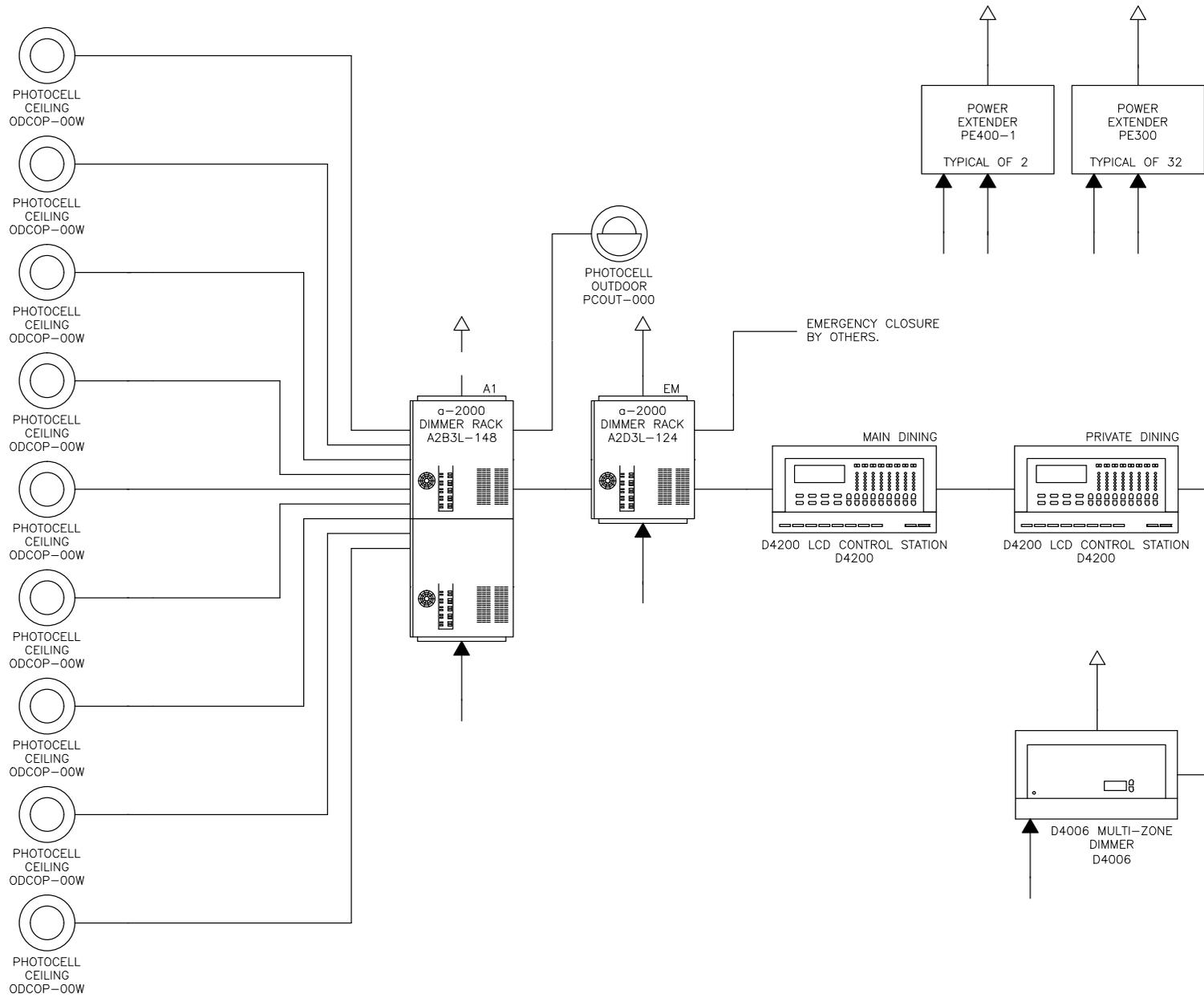
a2000, D4200, PHOTOCELL, 5 BUTTON STATIONS, POWER EXTENDER

Preset and Timer-Based Lighting Control



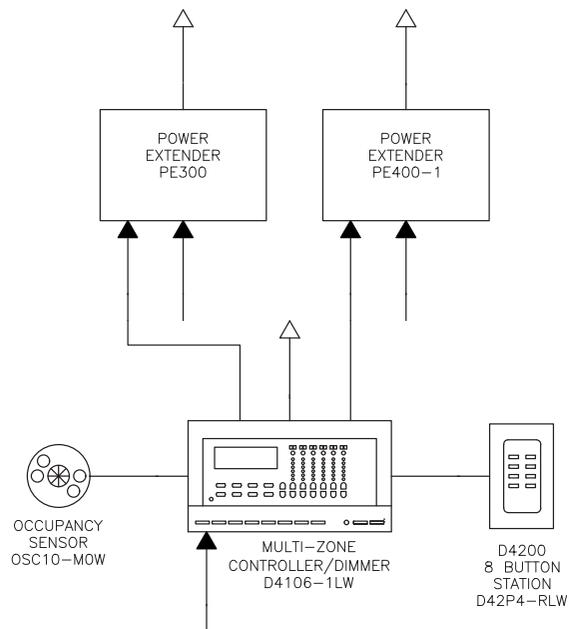
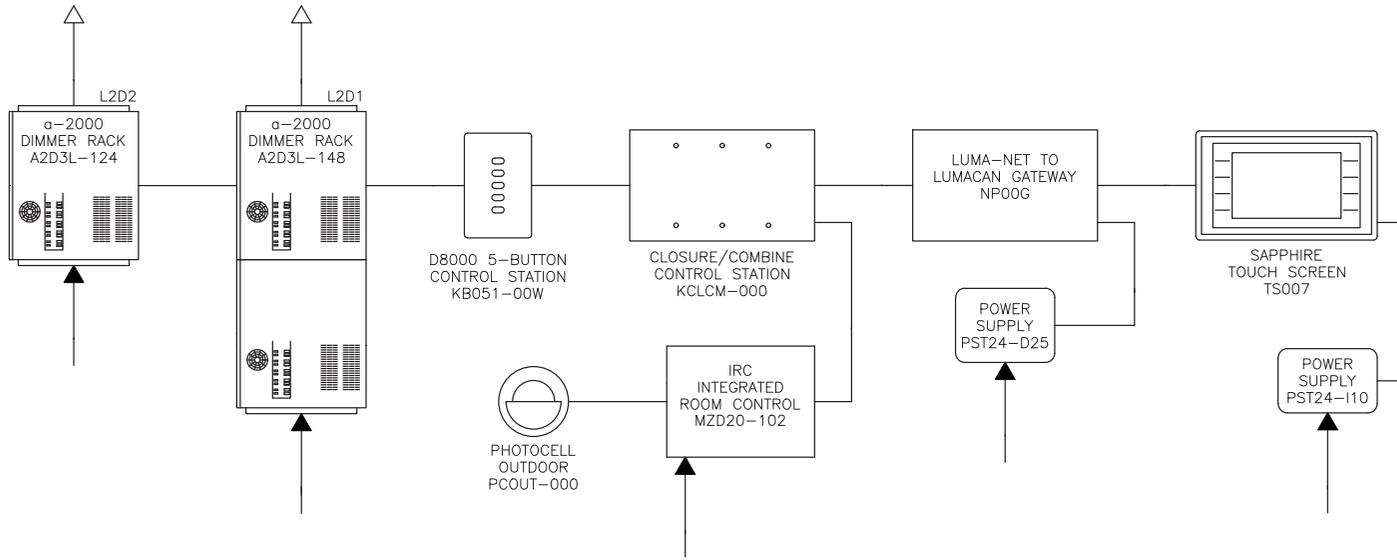
a2000, D4200, D4006, PHOTOCELLS, POWER EXTENDERS

Preset and Timer-Based Lighting Control with Daylighting Zones



a2000, IRC, SAPPHIRE, GATEWAY, D4106

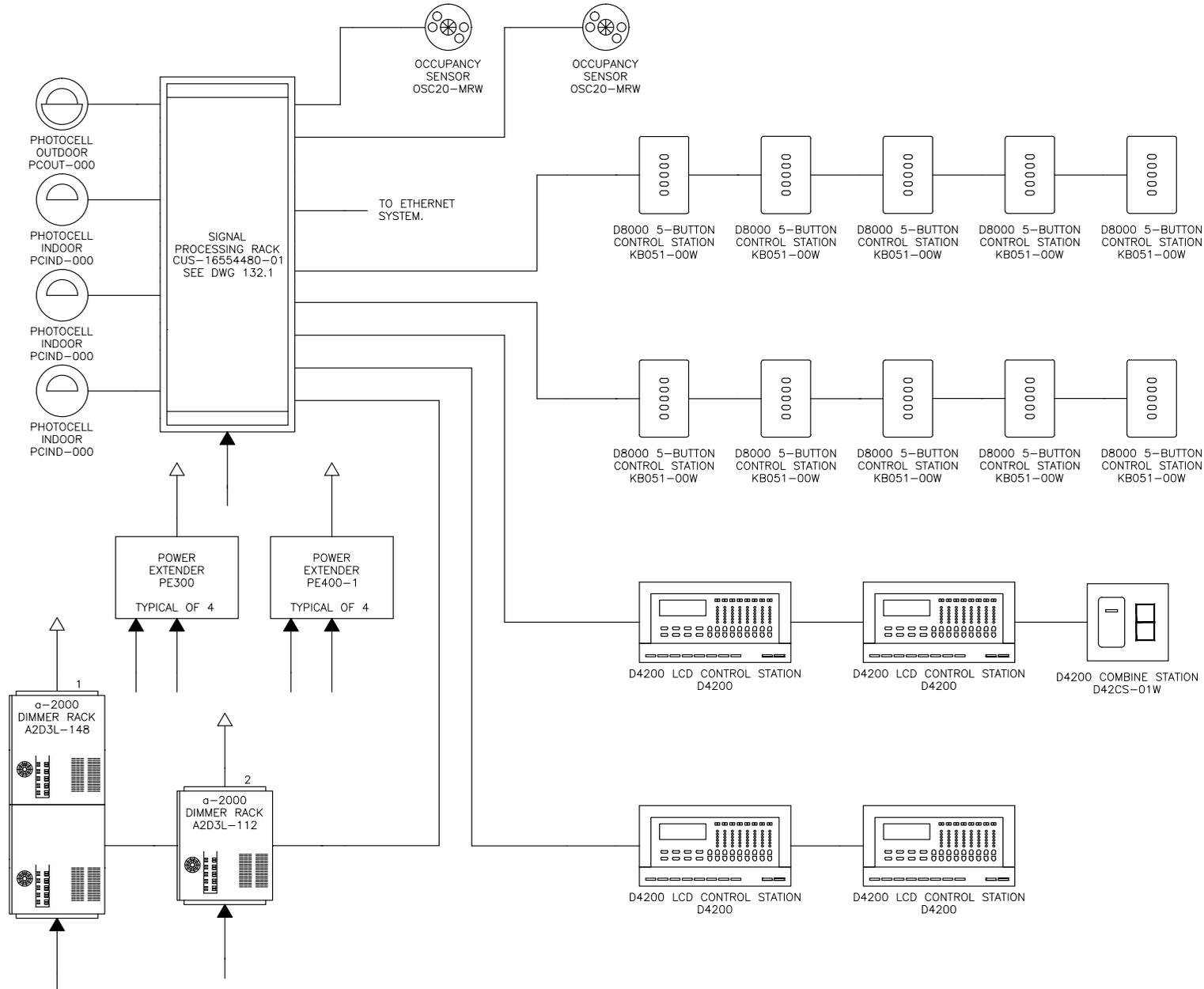
Preset and Timer-Based Lighting Control



a2000, D4200, SIGNAL PROCESSING RACK, ROOM COMBINE STATION, PHOTOCELLS, OCCUPANCY SENSORS, POWER EXTENDERS

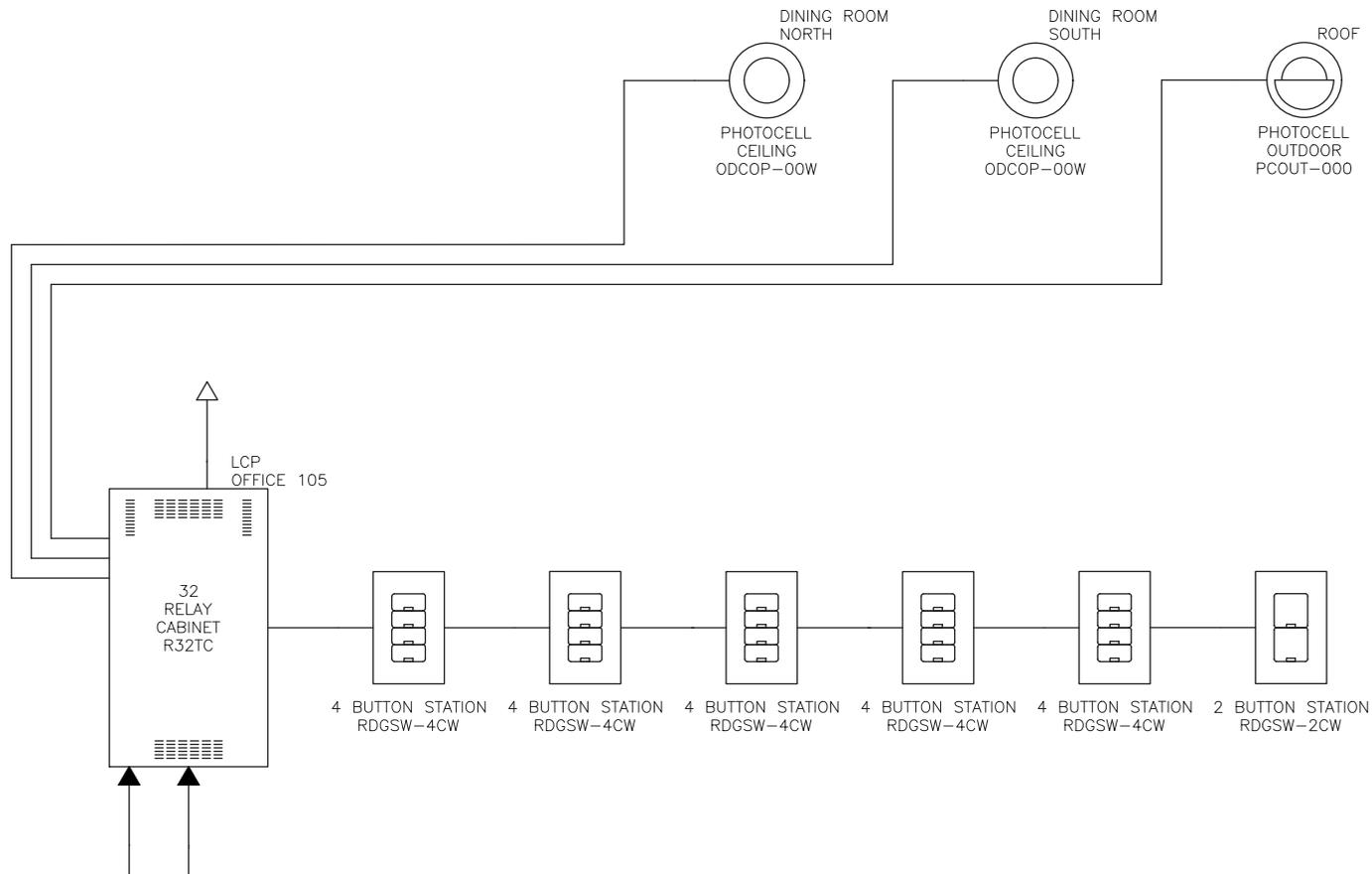


Facility Controls with Presets, Based on Occupancy and Daylighting Control, Plus Room Combine



GREENMAX, 2 AND 4 BUTTON STATIONS, PHOTOCELLS

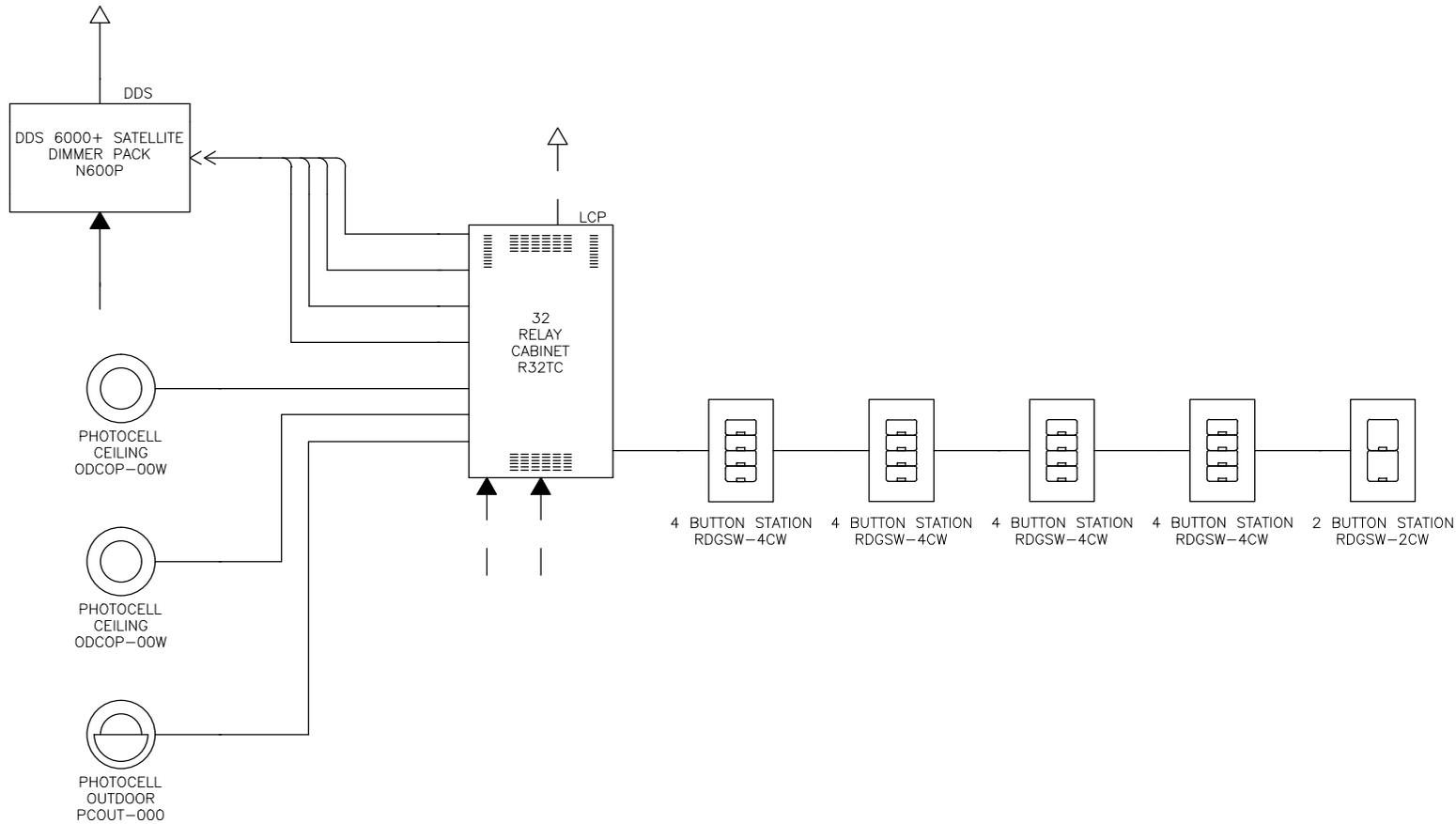
Timer and Manual Lighting Control with Daylighting



GREENMAX, DDS 6000 SATELLITE DIMMER PACK, PHOTOCELLS, 2 AND 4 BUTTON STATIONS, OCCUPANCY SENSORS



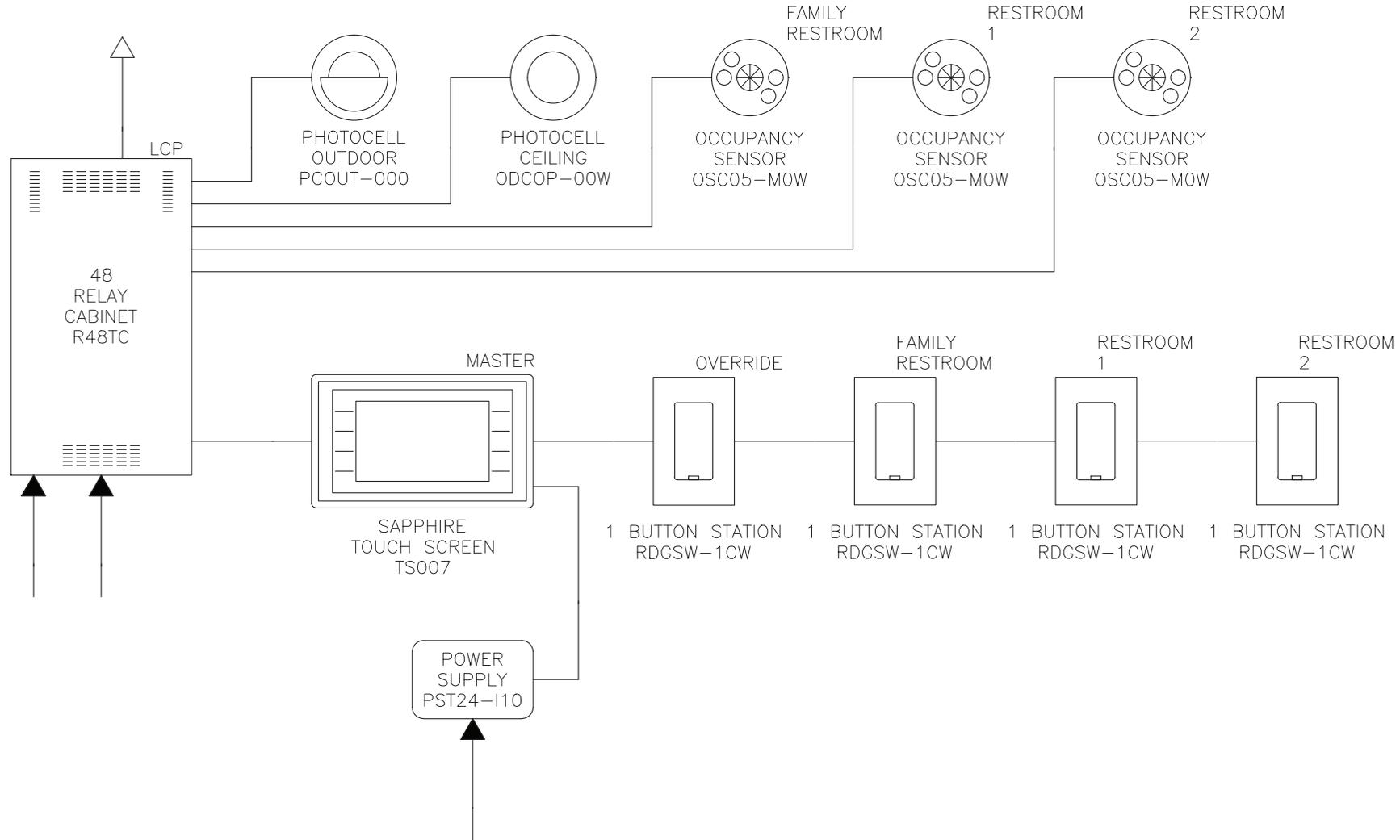
Timer and Manual Lighting Control with Daylighting



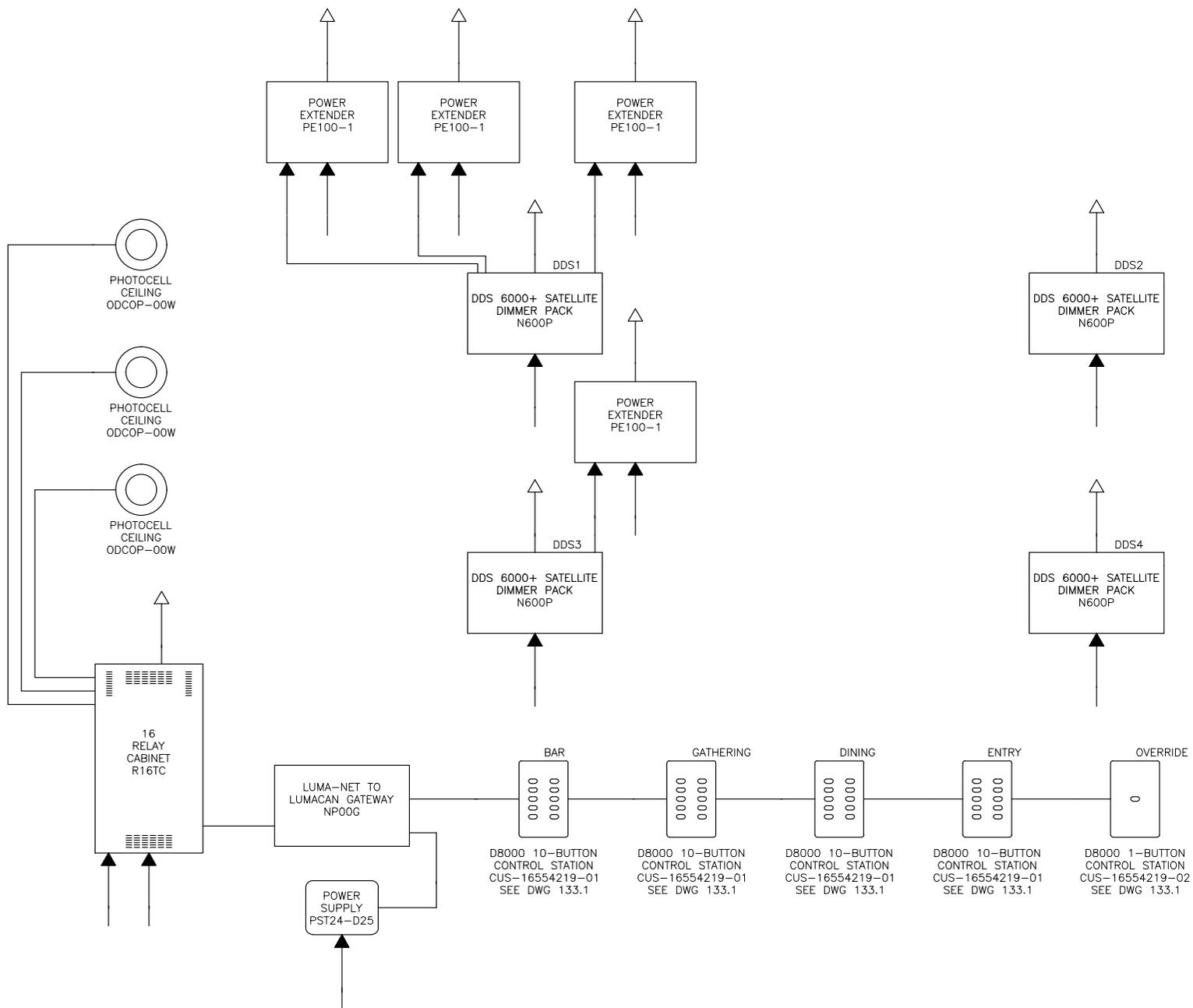
GREENMAX, SAPPHIRE, PHOTOCELLS, OCCUPANCY SENSORS, 1 BUTTON STATION, POWER SUPPLY



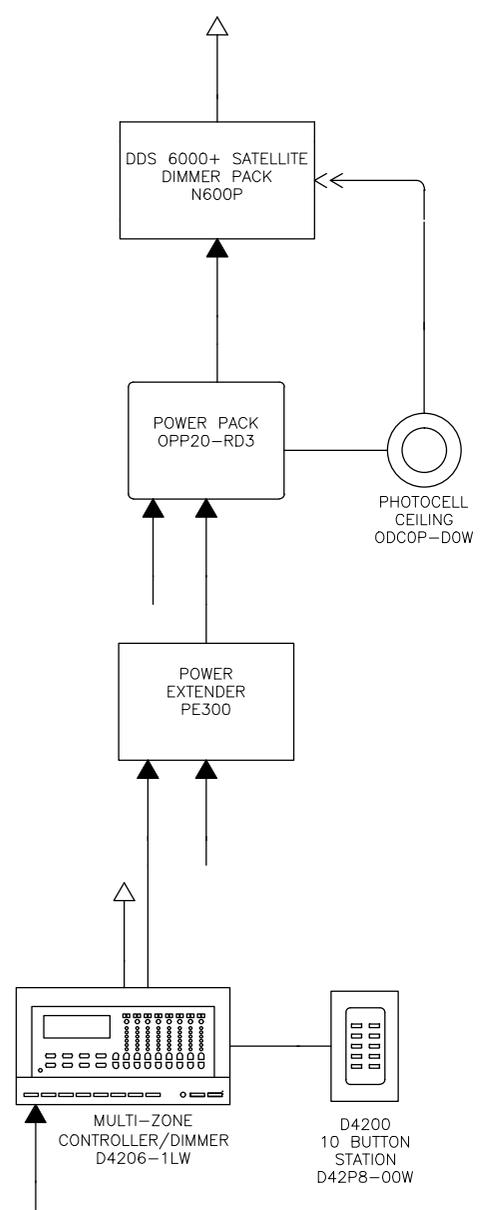
Timer and Manual Lighting Control with Daylighting



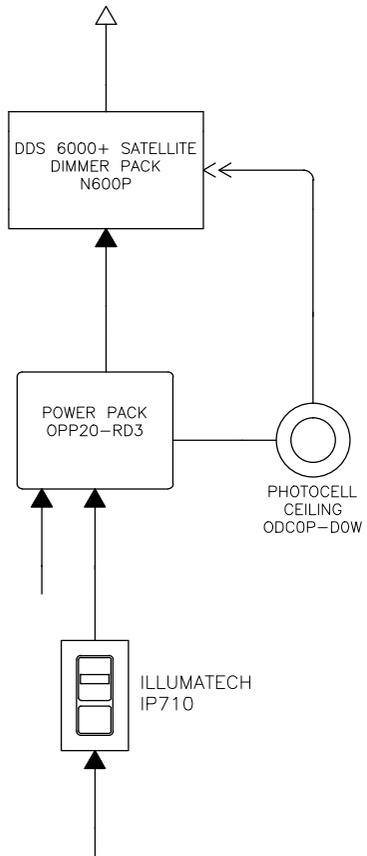
GREENMAX, DDS 6000 SATELLITE DIMMER PACK, PHOTOCELL, POWER PACK, POWER EXTENDER



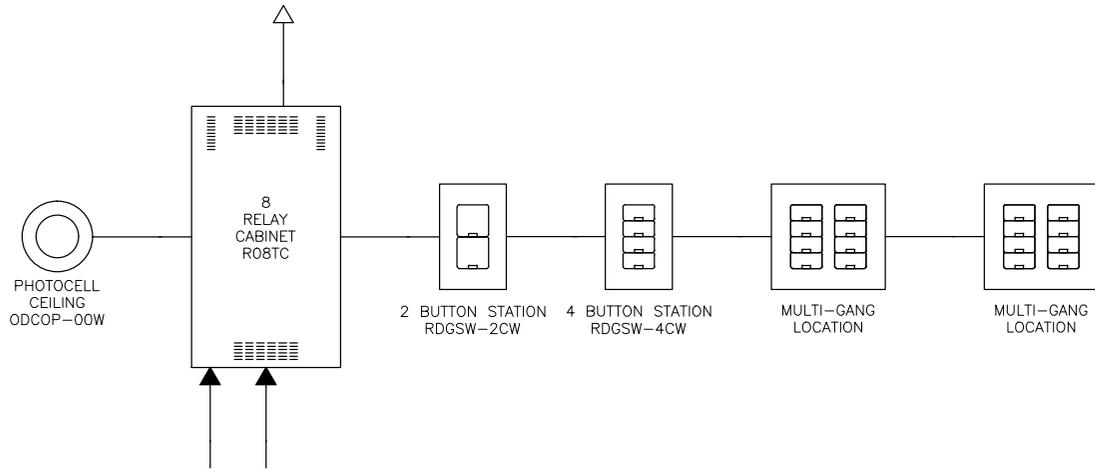
D4206, DDS 6000+ SATELLITE DIMMER PACK, PHOTOCELL, POWER PACK, POWER EXTENDER



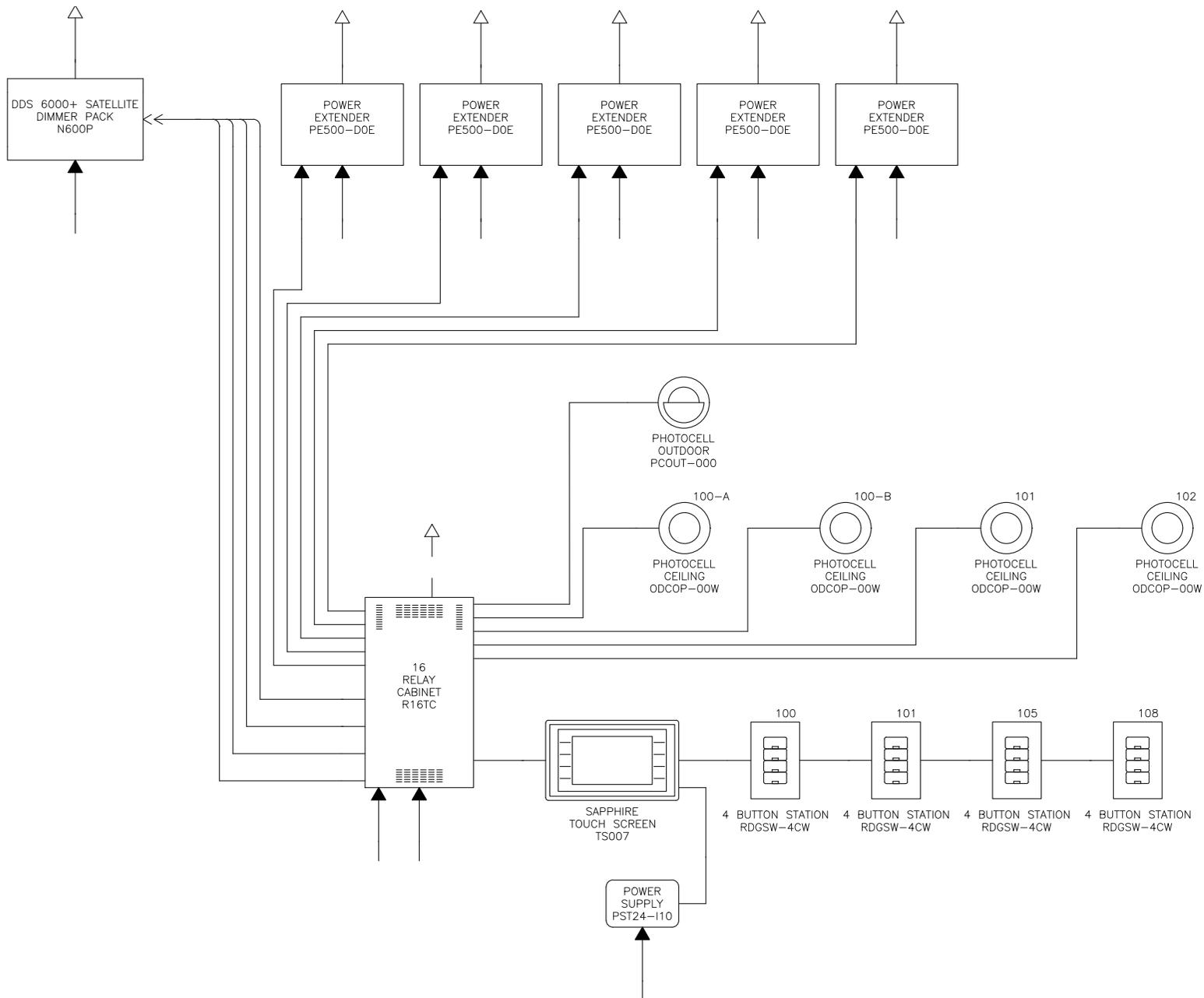
DDS 6000 SATELLITE DIMMER PACK, PHOTOCELL, DIMMER, POWER PACK



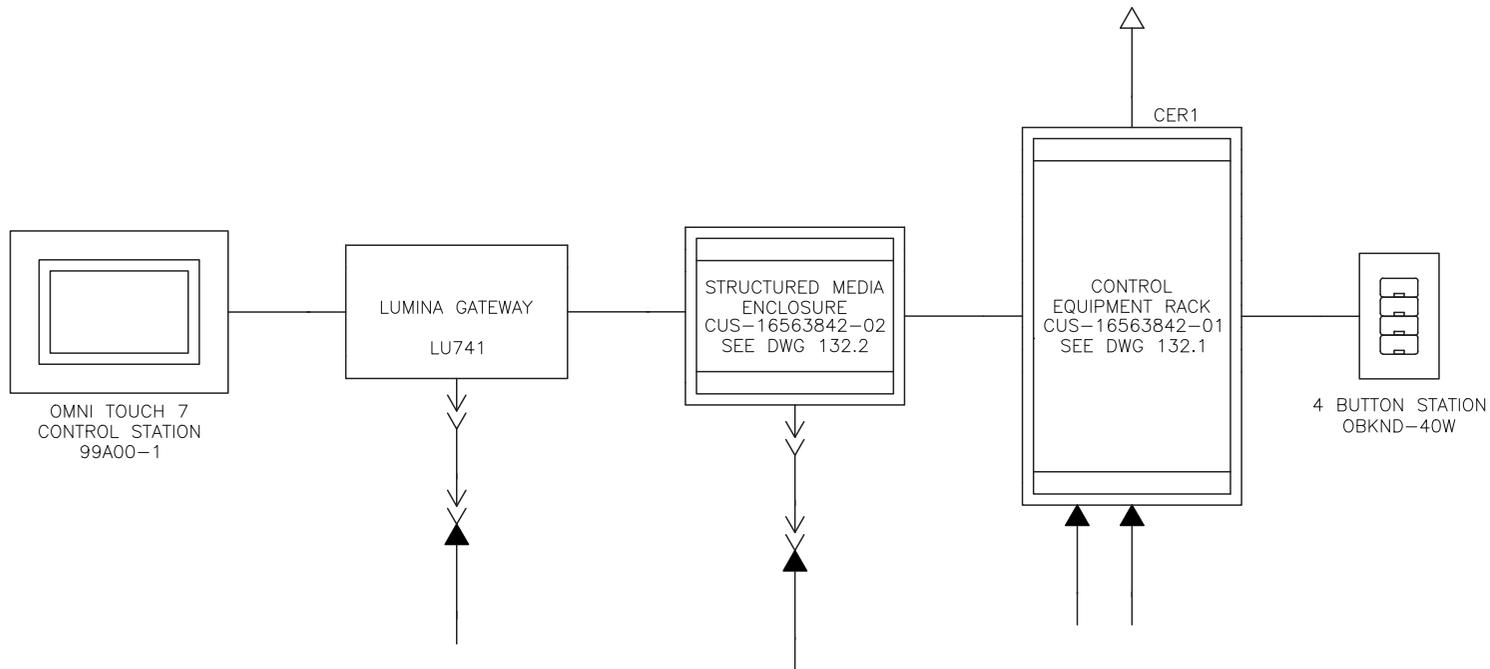
GREENMAX, MULTI-GANG STATION, PHOTOCELLS



GREENMAX, SAPPHIRE, DDS 6000 SATELLITE DIMMER PACK, PHOTOCELLS, POWER SUPPLY, POWER EXTENDER



LUMINA GATEWAY, OMNITOUCH, STRUCTURED MEDIA ENCLOSURE





Leviton Manufacturing Co., Inc. Energy Management, Controls and Automation

20497 SW Teton Avenue, Tualatin, OR 97062 **tel** 800-736-6682 **fax** 503-404-5594 **tech line** (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 **tel** 800-323-8920 **fax** 800-832-9538 **tech line** (8:30AM-7:00PM ET Mon-Fri) 800-824-3005

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