

PHOTO DIODE SENSOR

a) LOCATION/MOUNTING

A PHOTO DIODE SENSOR SHALL BE MOUNTED IN A WATERTIGHT ENCLOSURE ON THE NORTHERN MOST SIDE OF THE BUILDING.  
THE PHOTO DIODE MUST BE MOUNTED IN THE PROPER ORIENTATION. THE WATERTIGHT ENCLOSURE SHALL BE MOUNTED USING THE APPROPRIATE WALL ANCHORS. ANY EXTERIOR WALL PENETRATION SHALL BE SEALED PROPERLY WITH WEATHER-TIGHT CAULK/SILICON.

b) CONNECTIONS

THE PHOTO DIODE LEADS MUST BE EXTENDED USING 18-24 AWG SHIELDED TWISTED PAIR CABLE, AND ROUTED BACK TO THE LCA/LCP J5 PS+/- TERMINALS. TERMINALS ARE POLARITY SENSITIVE.

LCP-2 (LOAD CONTROL PANEL) – NOT APPLICABLE FOR SITES CONTAINING EXISTING SMART LIGHTING CONTROLS

a) LOCATION/MOUNTING

(1) LCP-2 SHALL BE MOUNTED WITHIN THE ELECTRICAL ROOM  
THE LCP-2 SHALL BE MOUNTED USING THE APPROPRIATE WALL ANCHORS.

b) POWER REQUIREMENTS

THE 120 VAC POWER SOURCE FOR THE LCP-2 MUST BE OBTAINED FROM A DEDICATED 15-20 AMP SINGLE POLE BREAKER.

HIGH VOLTAGE KNOCKOUTS FOR THE LCP-2 ARE LOCATED ON THE SIDE/BOTTOM OF THE CABINET ENCLOSURE. WHEN USING SIDE KNOCKOUTS THE INSTALLER SHALL ONLY UTILIZE KNOCKOUTS BELOW THE GROUNDING BAR WITHIN THE LCP-2 CABINET.

LOW VOLTAGE KNOCKOUTS FOR THE LCP-2 ARE LOCATED ON THE TOP OF THE CABINET ENCLOSURE.

c) CONNECTIONS

THE LCP-2 SHALL CONTROL THE FOLLOWING:

- EXTERIOR SIGNS AND BUILDING LIGHTING
- EXTERIOR PARKING LOT LIGHTS
- INTERIOR LIGHTING

THE LIGHTING ZONES SHALL BE SEPARATED PER THE SOW.

LINE AND LOAD WIRING SHALL BE ROUTED FROM THE ELECTRICAL PANEL CONTAINING THE CIRCUITS TO BE CONTROLLED BACK TO THE LCP-2. SINCE THE LCP-2 DOES NOT REQUIRE NEUTRAL WIRES, LINE AND LOAD WIRING MUST ENTER AND EXIT THE LCP-2 THROUGH THE SAME CONDUIT. LINE SIDE WIRING IS ON THE LEFT SIDE OF THE CONTACTORS AND LOAD SIDE WIRING IS ON THE RIGHT SIDE OF THE CONTACTORS.

DO NOT BREACH CONDUIT WIRING CAPACITY, AND INSTALL ADDITIONAL CONDUIT IF NEEDED TO CONTAIN LINE AND LOAD PAIRS.

d) COMMUNICATION

RS-485 CONNECTIONS SHALL BE OBTAINED USING THE A+/B- TERMINALS USING CAT5E CABLE AND WIRED BACK TO AN OPEN CHAIN OF THE HUB.

e) LABELING

THE LCP-2 SHALL BE LABELED PER POWER SOURCE. THE LABEL SHALL BE APPLIED TO THE FRONT CABINET DOOR.

Terminal	Load Description
K2	
	Signs (Building and Pole)
K4	
	Exterior Lighting
K5	
	Spare

CONTACTOR SCHEDULE

FOR ANY SITES THAT REQUIRE MORE THAN 6 CONTACTORS A SECOND LCP-2 WILL BE REQUIRED.

NOTE:  
IF THE BUILDING IS <=10K SQFT  
INSTALL 2 MOTION SENSORS  
IF THE BUILDING IS >10K SQFT  
INSTALL 3 MOTION SENSORS

GRIDPOINT CONTACT

PLEASE CONTACT GRIDPOINT INSTALLATION  
MANAGEMENT @ 866-800-8906 FOR INSTALLATION  
CONTACT BASED ON THE STORE LOCATION.  
EMAIL: SUPPORT@GRIDPOINT.COM

FIRE ALARM COORDINATION  
PER NFPA 2015

IF THE LCP IS OFF, THEN ALL THE LIGHTS  
WILL TURN ON. IF THE LCP IS ON AND THE  
FIRE ALARM TRIGGERS, THEN GRIDPOINT WILL  
MONITOR THE FIRE ALARM SIGNAL AND TURN  
LIGHTS ON. NOTE: THE FIRE ALARM SIGNAL  
NEEDS TO STAY ACTIVE FOR AT LEAST 1  
MINUTE.

HOMERUN TO 24VDC POWER SUPPLY

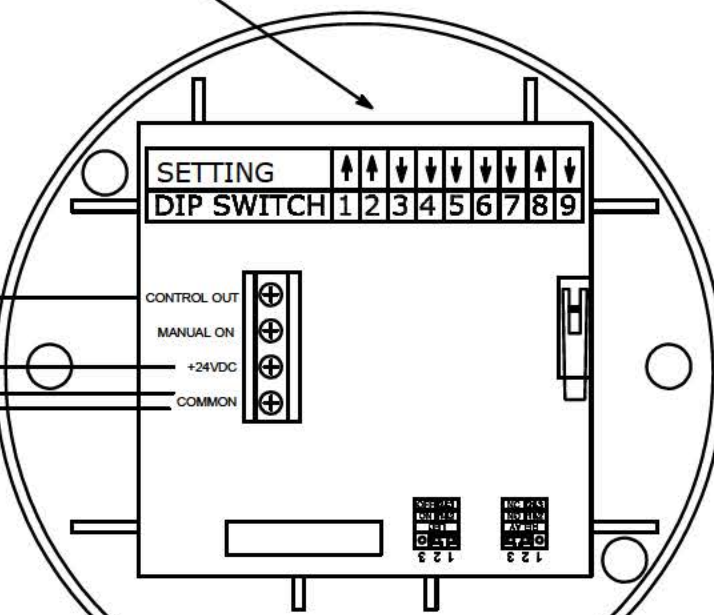
300 V-600 V RATED WIRE

18-24 STP

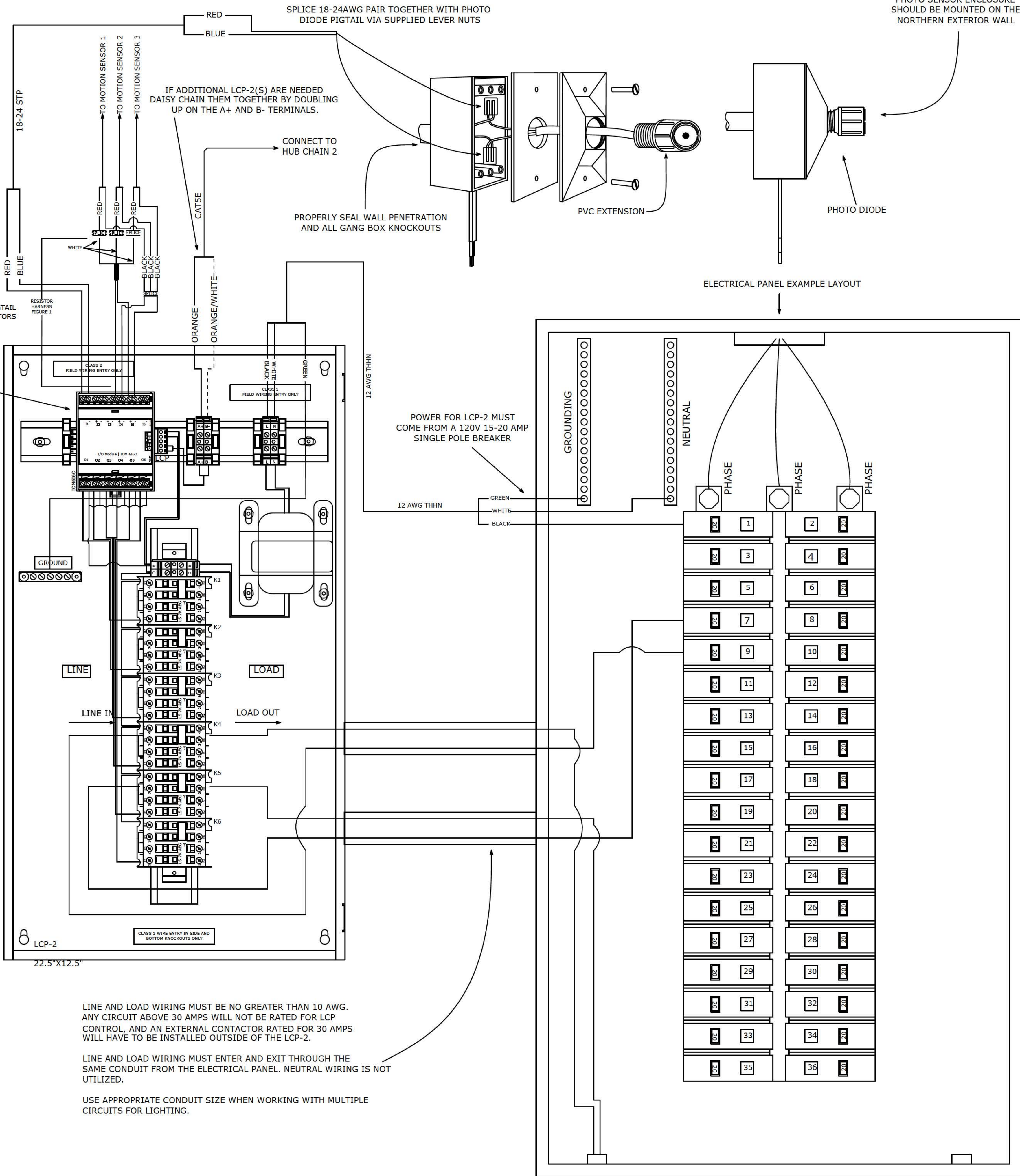
TO IOM6160 INPUTS  
4 AND 5

A DEDICATED 24 VDC POWER SUPPLY  
HAS BEEN SUPPLIED TO POWER THE  
MOTION SENSOR.

NOTE:  
DIPSWITCH TABLE HAS BEEN MOVED  
AND ENLARGED FOR EASE OF VIEWING



MOTION SENSOR  
MOUNT SENSOR AT 12' AFF. THE  
COVERAGE AREA AT THIS HEIGHT IS 26'.



1/13/20

REVISIONS

THIS DRAWING	NOT FOR CONSTRUCTION	NOT FOR CONSTRUCTION	NOT FOR CONSTRUCTION	NOT FOR CONSTRUCTION
FOR COORDINATION	FOR BIDDING	FOR PERMIT	FOR CONTRACTING	FOR CONSTRUCTION
1/1/21/19	1/1/21/19	1/1/21/19	1/1/21/19	1/1/21/19

KMA & ASSOCIATES, INC. ARCHITECTS  
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O'REILLY AUTO PARTS  
DOLTON PLAZA  
1317 E. SIBLEY BLVD. DOLTON, IL 60419  
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE  
LIGHTING CONTROL  
AND MOTION SENSOR

1906

EM  
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