

A photograph of a city skyline at night, featuring several tall skyscrapers with illuminated windows. The sky is a deep blue with some light clouds. A large red diagonal shape cuts across the lower half of the image, and a black diagonal shape cuts across the bottom left corner.

ZONE SENSING

AimLite

YOUR TRUSTED PARTNER

ABOUT US

Our ISO/IEC 17025 certified laboratory is qualified by CSA International under the CPC (Certification by Category) program which allows us to conduct safety and performance evaluations and to perform over 100 different tests on our products. This allows AimLite to certify new custom products quickly and launch to the market.

AimLite's target is to maintain and improve its quality through programs that enable employees to do their job right the first time and use the best suppliers that share these same values.

Our team consists of some of the most knowledgeable and recognizable people in the Canadian emergency and lighting industry.

NEW PRODUCT DEVELOPMENT

Our engineering and marketing team is composed of specialists ranging from a variety of technical backgrounds which allows us to develop a multitude of new products to meet today's market needs and requirements. Our focus is to design innovative products at a competitive price to set ourselves ahead of our competition while maintaining industry standards such as long life and energy efficiency.

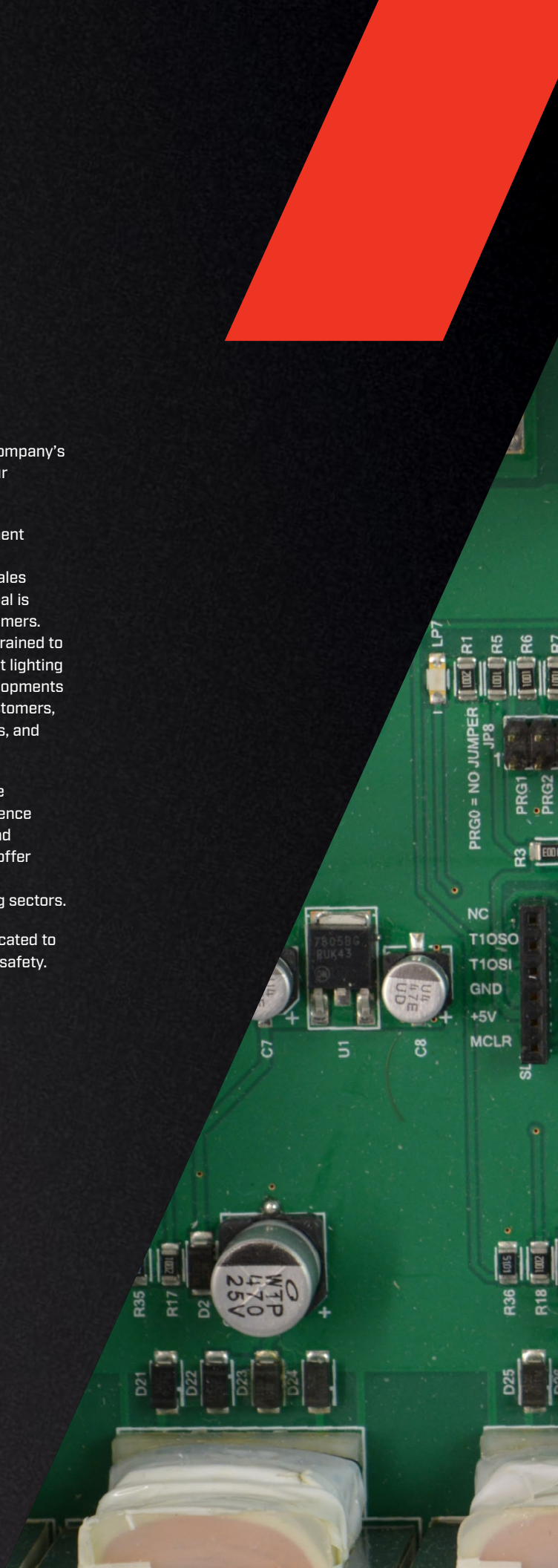
CUSTOMER SATISFACTION

Customer satisfaction is the company's main priority: we want to be our customers' preferred supplier.

Our customer service department is comprised of highly trained, knowledgeable and bilingual sales representatives whose only goal is to meet the needs of the customers. Sales staffs are continuously trained to keep them abreast of the latest lighting trends, technologies and developments so they may actively serve customers, resolve issues, initiate changes, and teach co-workers.

Our technicians have extensive academic and practical experience with degrees in engineering and administration, allowing us to offer technical support in the retail, distribution and manufacturing sectors.

AimLite's management is dedicated to its customers, employees and safety.



TBAC3

TBDC3

TBAC4

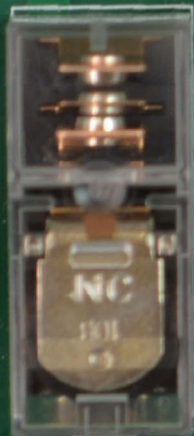
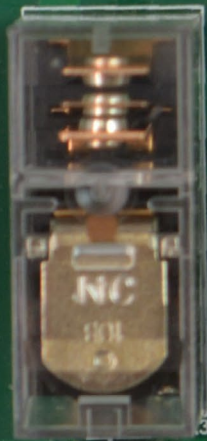
TBDC4

TBAC5

TBDC5

TBAC6

TBDC6



D8
Q3
R30

D10
Q4
R31

D11
Q5
R32

D12
Q6
R33

R8
R9
R10
R11
R12
R13
R14
PRG1
PRG2
PRG3
PRG4
PRG5
PRG6
PRG7
PRG8
PRG9
PRG10

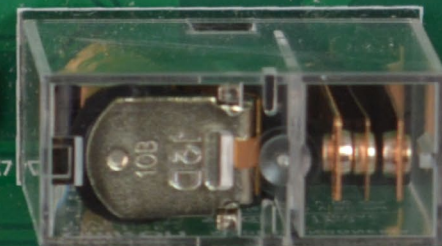


PCB-0050C REV0

PLACE LABEL HERE



R2
Q13
D13
K7



D25
D26
D27
D28

D29
D30
D31
D32

D33
D34
D35
D36

D37
D38
D39
D40

TB-DCIN-1

TB-DCIN+1

TB-AUXAC1

WHY WE NEED ZONE SENSING

When a monitored lighting circuit loses AC power, a closed relay opens which triggers emergency lighting in the affected area. The other lighting circuits not suffering from power loss, emergency lighting in those areas remain off.

ADVANTAGES OF HAVING ZONE SENSING

Preserves the life of the sealed lead batteries (ATD feature should be used in conjunction).

Power failure to any single lighting circuit can trigger emergency lighting to the required area.

Initially specified for the Armed Forces, was soon adopted province-wide and put into the Building Inspector's check list for all new construction to ensure the lighting circuits in paths of egress are monitored.



ZONE SENSING TYPES

INDIVIDUAL & PARALLEL MONITORING

When lighting circuits are monitored individually, only specific emergency lighting will come on.

When lighting circuits are monitored parallel, all the emergency will come on in the lighting circuits that are being monitored.

AC OUTPUT OR DC OUTPUT

- Battery as well as zone sensing control all in 1 cabinet.
Maximum 6 monitored circuits and 6 outputs per cabinet.
- AC output provides power towards the battery.
DC output provides power towards the remote & signs.



THE AIMLITE ADVANTAGE

- Zone test switch is standard
- Zone pilot lights is standard
- 120/277/347V input monitoring
- 120/277V output
- AC/DC output
- “Voltages can vary from one circuit to another”
- “Voltages can vary from one output to another”
- Connect up to 6 battery units
(one per output)

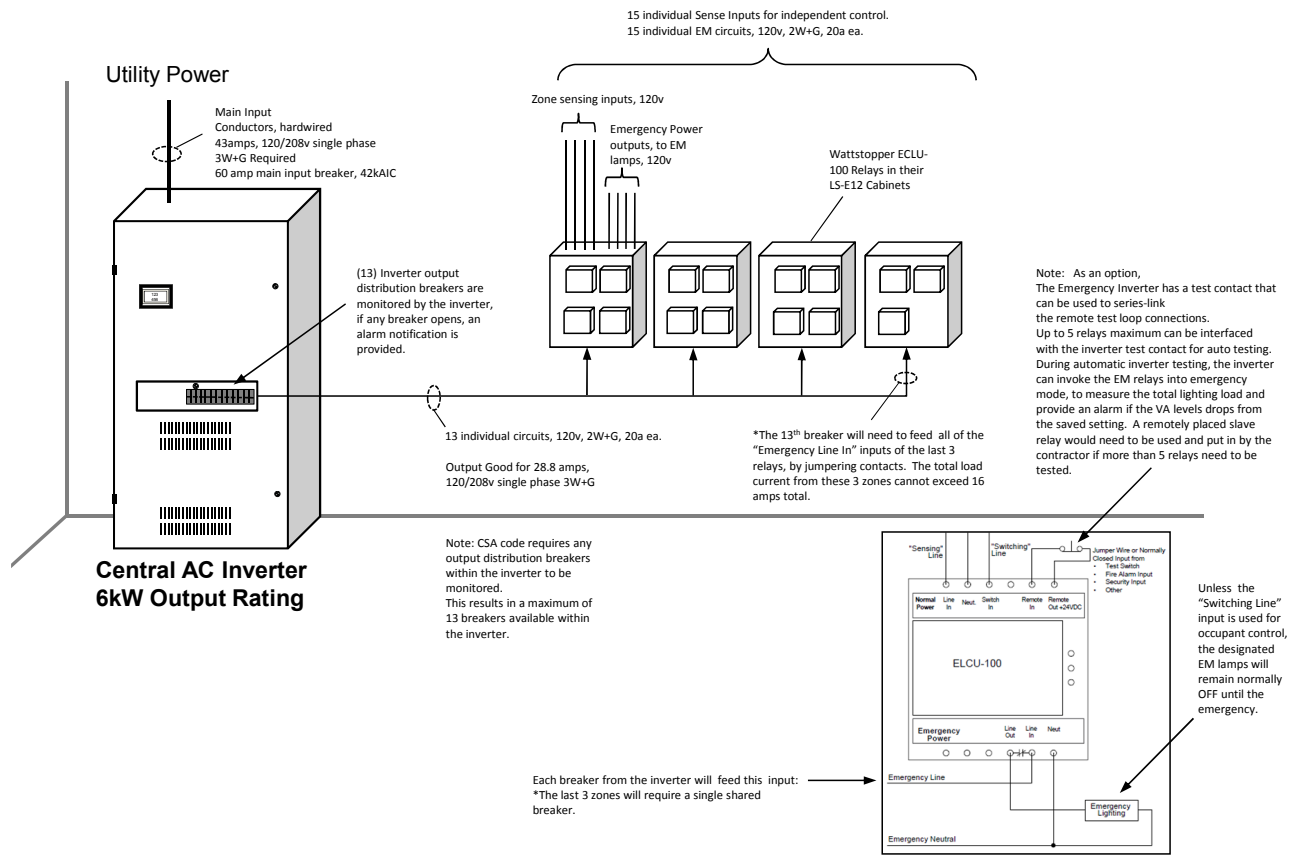
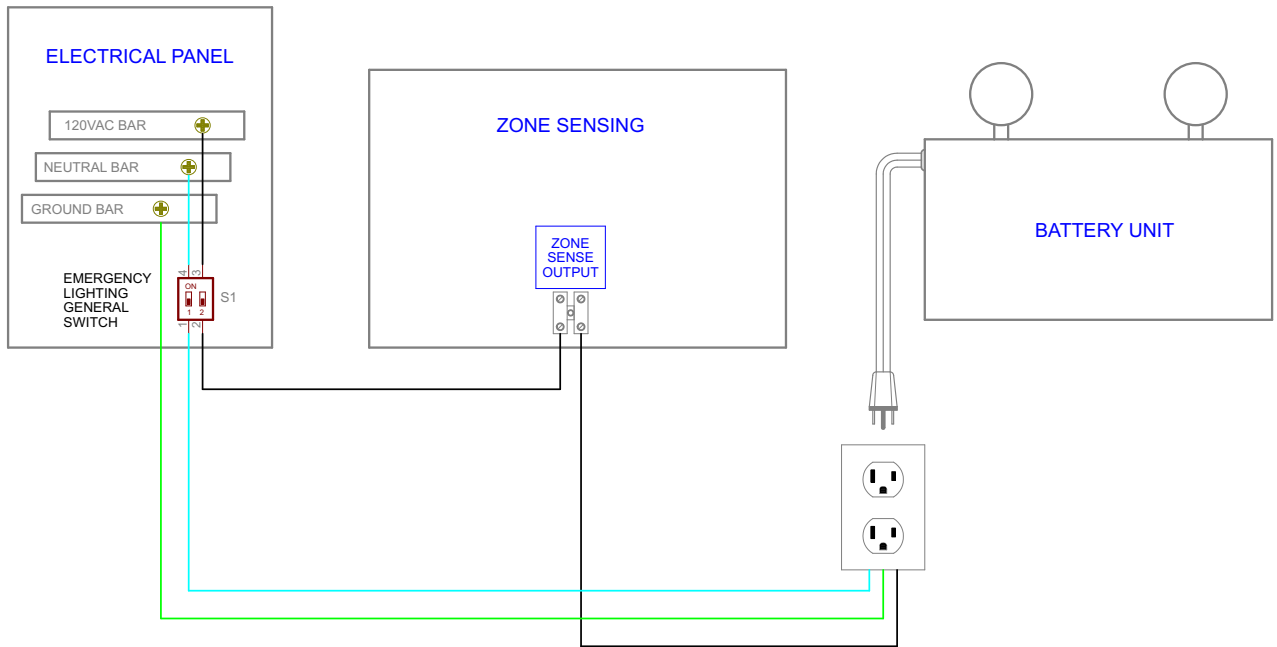


INTERCONNECTION BETWEEN ELECTRICAL PANEL, ZONE SENSING & BATTERY UNIT



EXAMPLES OF SPECIAL APPLICATIONS

- Emergency Egress with Zone Sensing Devices Centrally Located
- Central location assists with testing function – Zone Relay's have a Integral Test Button



ZNSC2 ZONE SENSING CONTROL PANEL

COMPLIES TO THE WINNIPEG BY-LAW NO. 77/2015

COMPLIES TO THE ALBERTA ELECTRICAL SAFETY BULLETIN 10-2017 CEC-046



The ZNSC2 series is the latest generation of zone sensing control units. It's designed to monitor electrical circuits at various voltages (120VAC, 277VAC, and 347VAC). The ZNSC2 will automatically trigger emergency lighting operation upon loss of AC current. With the ZNSC2, emergency lighting will come on if a zone monitored loses power

(triggering emergency lighting specific to that zone).

The unit comes standard with zone test switch and zone pilot lights, for easy monitoring and testing. It is also compatible with AimLite autotest battery units. This new design is clear and simple to install.

FEATURES & SPECIFICATIONS

CIRCUITRY

- Up to 6 circuits monitored (inputs) per cabinet
- AC (formally external zone sensing) or DC (formally internal zone sensing)
- Up to 6 outputs
- 120/277/347 VAC Input
- 120/277/347 VAC output
- Zone pilot lights are standard
- Zone test switch are standard
- Compatible with AimLite's automatic-testing, self-diagnostic boards
- Clearly identified terminal blocks with high gauge caliber, for easy wiring

MECHANICAL

- Rugged steel cabinet with ultraguard rust-coating
- 24 knockouts for easy installation
- Pivoting door
- Keyhole mounting slots stamped into back of cabinet
- Built and assembled in Canada
- Grey powder coat finish is standard

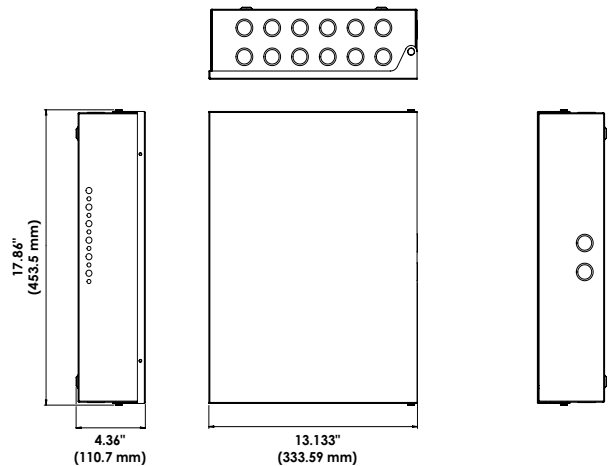
COMPLIANCE

- Meets requirements of ICES-005

APPROVALS

- CSA Certified to C22.2 #141-15

TECHNICAL DRAWINGS



CANADIAN
MADE



ICES
005



ORDERING GUIDE

ZNSC2	—		—		GRY	
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SERIES	# OF MONITORED ZONES (?Z)	RELAY CONTROL OUTPUT (?O)	CURRENT	COLOR	PROGRAM ¹
ZNSC2	_Z [BETWEEN 1 AND 6]	_O [BETWEEN 1 AND 6 - NO MORE THAN #Z]	AC DC	GRY- GREY [STANDARD]	TO BE COMPLETED BY AN AIMLITE REPRESENTATIVE ¹

¹ Complete the quiz and submit it to your customer service representative for proper configuration

GETTING STARTED

ZONE SENSING QUIZ

How many circuits are you monitoring? _____

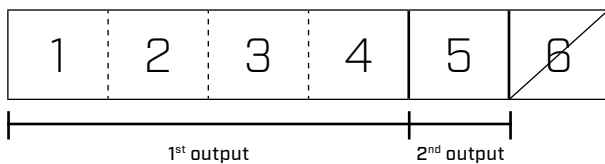
How many outputs are required? [Each output corresponds to a single battery unit]? _____

Will the output of the power be AC [towards the battery] or DC [towards the remote & signs]? _____

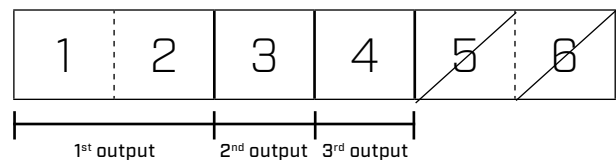
DRAW LINES TO IDENTIFY WHAT ARE YOU ZONE GROUPING TOGETHER FOR EACH BATTERY, STARTING WITH THE LARGEST GROUP

1	2	3	4	5	6
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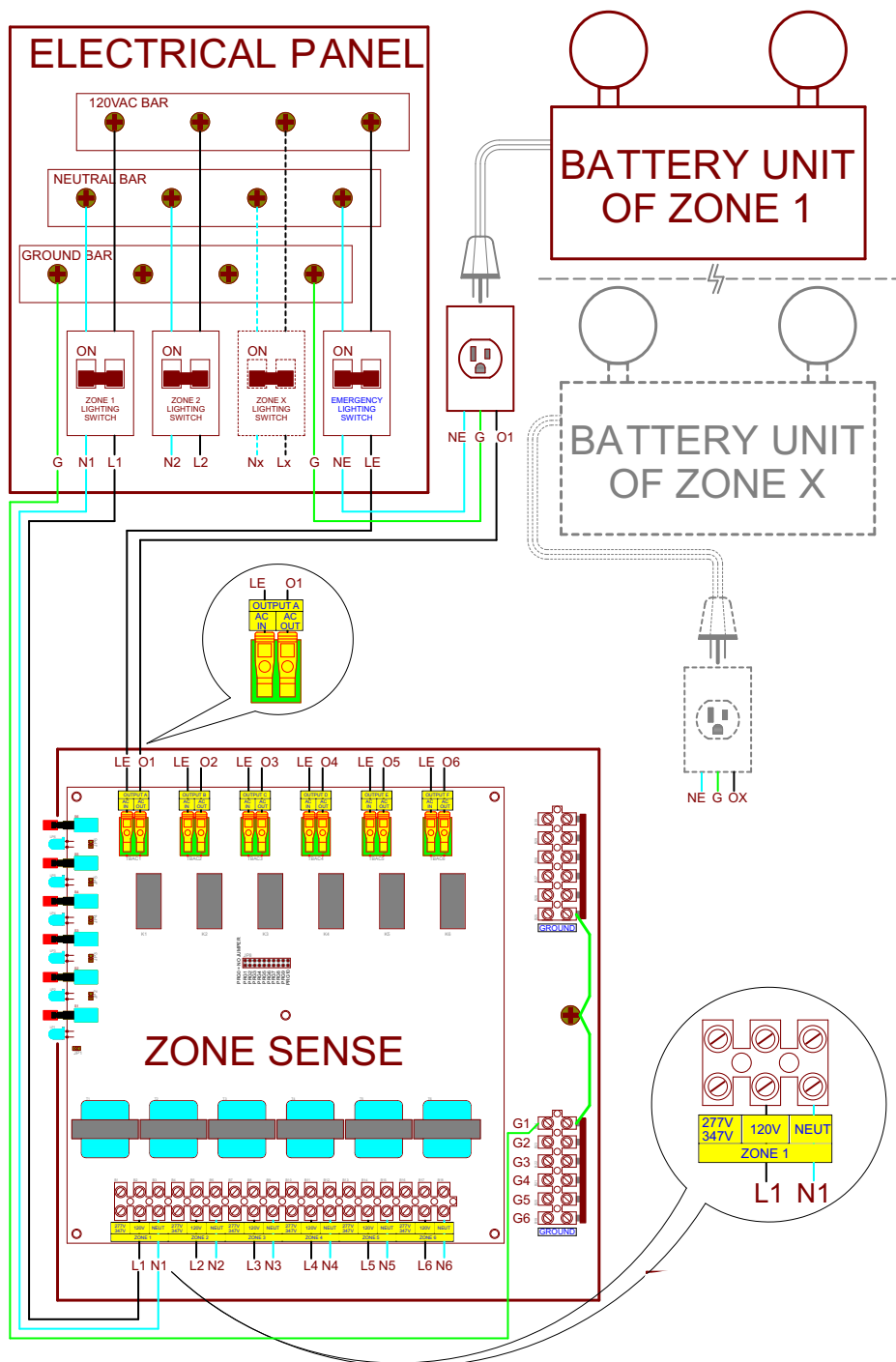
I.E:
5 CIRCUITS, 2 OUTPUTS.
4 CIRCUITS FOR THE 1ST OUTPUT.
1 CIRCUIT FOR THE 2ND OUTPUT



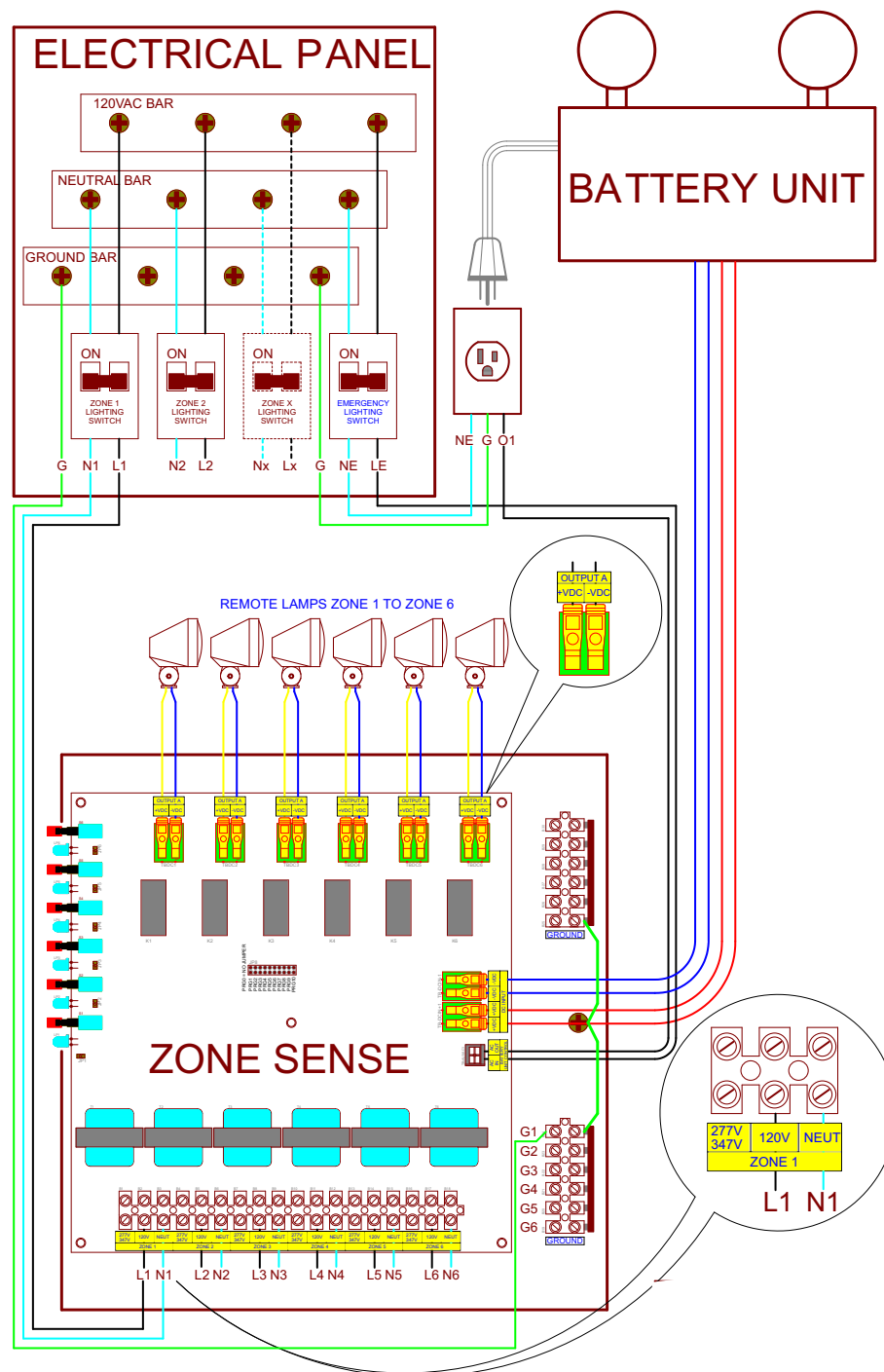
4 CIRCUITS, 3 OUTPUTS.
2 CIRCUITS FOR THE 1ST OUTPUT,
1 CIRCUIT FOR THE 2ND OUTPUT,
AND 1 CIRCUIT FOR THE 3RD OUTPUT



AC OUTPUT WIRING DIAGRAM



DC OUTPUT WIRING DIAGRAM





DIFFERENCE BETWEEN TRADITIONAL SETUP & ZONE SENSING

TRADITIONAL

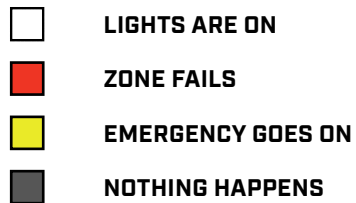


TRADITIONAL



When lighting circuits are individually monitored, only specific emergency lighting will come on.

When lighting circuits are parallel monitored, all the emergency will come on in the lighting circuits that are being monitored (as in the case of having regular emergency lighting).



ZONE
SENSING
(INDIVIDUAL)



ZONE
SENSING
(PARALLEL)









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