ABOVE 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.
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 8 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
Output good for 28.8 amps, 120/208v single phase 3W+G.

Note: CSA code requires any output distribution breakers within the inverter to be monitored. This results in a maximum of 13 breakers available within the inverter.

Each breaker from the inverter will feed this input:
*The last 3 zones will require a single shared breaker.

Central AC Inverter:
6kW Output Rating

Main Input Conductors, hardwired:
43amps, 120/208v single phase 3W+G Required
60 amp main input breaker, 42kAIC

13 individual circuits, 120v, 2W+G, 20a ea.
Output good for 28.8 amps, 120/208v single phase 3W+G.

Note: CSA code requires any output distribution breakers within the inverter to be monitored. This results in a maximum of 13 breakers available within the inverter.

15 individual Sense Inputs for independent control:
15 individual EM circuits, 120v, 26W+G, 20a ea.

Central location assists with testing function – Zone Relay’s have an integral test button.

Wattstopper ECLU-100 relays in their LS-E12 cabinets

Note: As an option, the Emergency Inverter has a test contact that can be used to series-link the remote test loop connections. Up to 5 relays maximum can be interfaced with the inverter test contact for auto testing. During automatic inverter testing, the inverter can invoke the EM relays into emergency mode, to measure the total lighting load and provide an alarm if the VA levels drop from the saved setting. A remotely placed slave relay would need to be used and put in by the contractor if more than 5 relays need to be tested.

*The 13th breaker will need to feed all of the “Emergency Line In” inputs of the last 3 zones, by jumpering contacts. The total load current from these 3 zones cannot exceed 16 amps total.

Each breaker from the inverter will feed this input:
*The last 3 zones will require a single shared breaker.

Utility Power

Main Input Conductors, hardwired:
43amps, 120/208v single phase 3W+G Required
60 amp main input breaker, 42kAIC

13 individual circuits, 120v, 2W+G, 20a ea.
Output good for 28.8 amps, 120/208v single phase 3W+G.

Note: CSA code requires any output distribution breakers within the inverter to be monitored. This results in a maximum of 13 breakers available within the inverter.

15 individual Sense Inputs for independent control:
15 individual EM circuits, 120v, 26W+G, 20a ea.
**ZNSC2**
**ZONE SENSING CONTROL PANEL**

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 using either AC or DC 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 Stanpro Autotest battery units.

### FEATURES & SPECIFICATIONS

**CIRCUITY**
- Up to 6 circuits monitored (inputs)
- AC or DC output
- Up to 6 outputs
- 120/277/347 VAC Input for DC output
- 120/277 VAC Input for AC output
- Zone pilot lights are standard
- Zone test switch are standard
- Compatible with Aimlite’s automatic-testing, self-diagnostic boards
- Well labeled terminal blocks for easy wiring

**MECHANICAL**
- Rugged steel cabinet with ultraguard rust-coating
- 24 knockouts for easy installation
- Dimensions: 17” x 13” x 4”
- Pivoting door
- Keyhole mounting slots stamped into back of cabinet
- Built and assembled in Canada
- White powder coat finish standard, other finishes and colors optional

**COMPLIANCE**
- Meets requirements of ICES-005

**APPROVALS**
- CSA Certified to C22.2 #141-15

### ORDERING GUIDE

<table>
<thead>
<tr>
<th>SERIES</th>
<th># OF MONITORED CIRCUITS (#C)</th>
<th>RELAY CONTROL OUTPUT (#O)</th>
<th>CURRENT</th>
<th>COLOR</th>
<th>PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZNSC2</td>
<td>_C (BETWEEN 1 AND 6)</td>
<td>_O (BETWEEN 1 AND 6 - NO MORE THAN #C)</td>
<td>AC, DC</td>
<td>GY- GREY (STANDARD)</td>
<td>P00, P01, P10</td>
</tr>
</tbody>
</table>

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

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6 ZNSC2
AC OUTPUT
WIRING DIAGRAM

ELECTRICAL PANEL

BATTERY UNIT
OF ZONE 1

BATTERY UNIT
OF ZONE X

ZONE SENSE

GENERAL INTERCONNECTION
FOR AC ZONE SENSE

PRG0 = NO JUMPER
PRG1
PRG2
PRG3
PRG4
PRG5
PRG6
PRG7
PRG8
PRG9
PRG10

title: 
document number: 
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sheet: 1/1
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DRAWN BY: EM
DIFFERENCE BETWEEN TRADITIONAL SETUP & ZONE SENSING
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).
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

I.E: 5 CIRCUITS, 2 OUTPUTS

4 CIRCUITS FOR THE 1ST OUTPUT
1 CIRCUIT FOR THE 2ND OUTPUT

I.E: 4 CIRCUITS, 3 OUTPUTS

2 CIRCUITS FOR THE 1ST OUTPUT
1 CIRCUIT FOR THE 2ND OUTPUT
1 CIRCUIT FOR THE 3RD OUTPUT