# **INSTALLATION INSTRUCTIONS-ULC APPROVED**

# MODEL AST-4 SYNCHRONIZABLE EXPLOSION-PROOF STROBE WARNING LIGHT

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#### 1. INTRODUCTION

The Model Ast-4-Sync is an Explosion-Proof Strobe Warning Light which is CSA certified for both Canada and the United States for Class I Div.1 Environments and is Encl. 3 rated. The Ast-4-Sync contains a synchronization feature and is ULC listed for Visual Signal Appliances, Fire Alarm for Use in Hazardous Locations. The light is only compatible with the Siemens C-DSC and the Siemens PAD-3NAC Expander sync modules. A maximum of three lights may be connected to any one sync module at any time. The input voltage range is 21-30VDC with an rms operating current of .4-.8 A and an inrush current of 1.3A peak. The Ast-4 -Sync is only available with a clear lens. The operating temperature is -50 C to + 85 C with a candela rating of 10cd.

#### 2. <u>INSTALLATION</u>

#### **MOUNTING**

The Ast-4-Sync strobe can be mounted to a <sup>3</sup>/<sub>4</sub>" conduit(Pendant Mount), wall mount, or can be ceiling mounted and must be installed with the globe pointing down. For Pendant Mount ,prior to mounting the strobe , ensure that the threads on both the conduit and the pendant mount bracket are clean. Thread the pendant mount onto the conduit until tight and secure with the locking set screw. Next thread the strobe fixture onto the mount until tight and secure the locking set screw.

**Note**: Please refer to Ast-4 catalogue sheet for information on other types of mounting brackets.

#### **ELECTRICAL CONNECTIONS**

The Ast-4 Sync ULC approved strobe contains four leads for electrical supervision, two red and two black. Connect one red(+) lead to the positive side of the sync module output and the other red(+) lead to the outgoing power source to the next device. Connect one black (-) lead to the negative side of the sync module output and the other black(-) lead to the negative side of the outgoing power source to the next device. Refer to the installation instructions of the appropriate sync module for further information; Siemens C-DSC see instruction #315-545222-10, Siemens PAD-3NAC Expander see instruction #315-099082-9. There is a grounding screw in the base of the mount for connection to an earth ground if needed.

**Caution:** This is a four wire device, all of the wires must be terminated. Failure to do so can result in damage to the device or a potential for a fire hazard or a shock.

Caution: FACTORY FINISH-DO NOT CHANGE.

**Note:** Installation of the strobe in Canada shall be in accordance with:

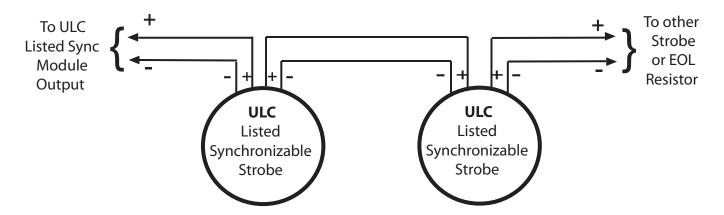
- i) CSA C22.1, Canadian Electrical Code, Part 1
- ii) CAN/ULC-S524, standard for Installation of Fire Alarm Systems
- iii) Local Authority Having Jurisdiction

AST-4 Typical Light Output per CAN/ULC-S526

	Verti	cal Dispers	sion, Cei	ings to Wal	ls and Floor		
X-Plane Dispersion				Y-Plane Dispersion			
X-Plane Angle (±°)	% of Rated Candela	Actual Candela Readings (cd)		Y-Plane Angle (±°)	% of Rated Candela	Actual Candela Readings (cd)	
		Expected	Typical	Angle (± )	Carideia	Expected	Typica
0	100	10	186	0	100	10	151
5	90	9	183	5	90	. 9	68
10	90	9	69	10	90	9	. 23
15	90	9	29	15	90	9	20
20	90	9	21	20	90	9	23
25	90	9	20	25	90	9	23
30	75	7.5	17	30	75	7.5	20
35	75	7.5	16	35	75	7.5	13
40	75	7.5	15	40	75	7.5	12
45	75	7.5	15	45	75	7.5	12
50	55	5.5	17	50	55	5.5	19
55	45	4.5	25	55	45	4.5	24
60	40	4	32	60	40	4	36
65	35	3.5	38	65	35	3.5	52
70	35	3.5	45	70	35	3.5	61
75	30	3	53	75	30	3	78
80	30	3	58	80	30	3	87
85	25	2.5	64	85	25	2.5	97
90	25	2.5	84	90	25	2.5	110

**Note:** With Ast-4 "-CG" cast guard: 1.) At 0 °(on axis) guard reduces light output approx.140 cd. 2.) At 45 ° x&y plane (lowest light output), "critical angle"), guard reduces light output approx. 3 cd.

## Synchronizable Strobe Wiring Diagram



### **NOTES**

- 1. Leads 16 AWG, minimum 152 mm long
- 2. For electrical supervision use in and out leads as shown
- 3. A maximum of three strobes may be connected to any one sync module at any time

Figure 1 Feb 2012