

Outdoor Selectable-Output Strobes and Horn Strobes for Ceiling Applications

SpectrAlert® Advance outdoor audible visible products are rich with features that cut installation times and maximize profits.





Features

- Weatherproof NEMA 4X, IP56 rated
- Listed to UL 1638 (strobe) and UL 464 (horn)
- Compatible with System Sensor synchronization protocol and legacy SpectrAlert products
- Field-selectable candela settings: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Rotary switch for horn tone and three volume selections
- Horn rated at 88+ dBA at 16 volts
- Rated from -40°F to 151°F
- Universal mounting plate with an onboard shorting spring that tests wiring continuity before devices are installed
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Listed for ceiling or wall mounting

SpectrAlert Advance offers the broadest line of outdoor horns, strobes, and horn strobes in the industry. With white or red plastic housings, wall or ceiling mounting options, and plain or FIRE-printed devices, SpectrAlert Advance can meet virtually any application requirement, including indoor, outdoor, wet, and dry applications in temperatures from $-40^{\circ}F$ to $151^{\circ}F$.

Like the entire SpectrAlert Advance line, outdoor strobes and horn strobes for ceiling applications include a variety of features that increase application flexibility and simplify installation. First, field-selectable settings, including candela, automatic selection of 12- or 24-volt operation, horn tones, and three volume options enable installers to easily adapt devices to meet requirements.

Next, SpectrAlert Advance devices use a universal mounting plate for both wall and ceiling applications. This mounting plate includes an onboard shorting spring that ensures wiring continuity before devices are installed, so installers can verify proper wiring without mounting the devices and exposing them to potential construction damage. Once the plates are mounted, all SpectrAlert Advance devices utilize a plug-in design with a single captured screw to speed installation and virtually eliminate costly ground faults.

Outdoor devices ship with weatherproof plastic back boxes (metal back boxes are available separately) that accommodate in-and-out wiring for daisy chaining devices. Plastic back boxes feature removable side flanges and improved resistance to saltwater corrosion. Plastic and metal weatherproof back boxes come with ¾-inch top and bottom conduit entries and ¾-inch knock-outs at the back. Three screw-in NPT plugs with O-ring gaskets for a watertight seal is included with each back box.

Agency Listings







MFA452-05-F

7300-1653:187 (outdoor strobes) 7125-1653:188 (horn strobes, chime strobes) 7135-1653:189 (horns, chimes)

SpectrAlert Advance Outdoor Strobe, and Horn Strobe Specifications

Architect/Engineer Specifications

General

SpectrAlert Advance outdoor horns, strobes, and horn strobes shall mount to a weatherproof back box. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, when used with the Sync◆Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync◆Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Outdoor SpectrAlert Advance products shall operate between −40 and 151 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185.

Strobe

The strobe shall be a System Sensor SpectrAlert Advance Model ______ listed to UL 1638 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The strobe shall be suitable for use in wet environments.

Horn Strobe Combination

The horn strobe shall be a System Sensor SpectrAlert Advance Model _______ listed to UL 1638 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have three audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options shall be set by a multiple position switch. On four-wire products, the strobe shall be powered independently of the sounder. The horn strobe on a 2-wire model shall work on a non-coded power supply. The horn on 4-wire horn strobe models shall operate on a coded or non-coded power supply. The horn strobe must be installed with its weatherproof back box in order to remain outdoor listed per UL. The horn strobe shall be suitable for use in wet environments.

Physical/Electrical Specifications	
Operating Temperature	–40°F to 151°F (–40°C to 66°C)
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12 DC/FWR or regulated 24 DC/FWR ¹
Operating Voltage Range ²	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Operating Voltage Range with MDL3 Sync Module	8.5 to 17.5V (12 V nominal) or 16.5 to 33V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Ceiling-Mount Dimensions (including lens)	6.8" diameter × 2.5" high (173 mm diameter × 64 mm high)
Strobe / Horn Strobe Dimensions	5.6 L \times 4.7 W \times 1.3 D (142 mm L \times 119 mm W \times 33 mm D)
Strobe / Horn Strobe Dimensions with Back Box	5.6 L \times 4.7 W \times 1.3 D (142 mm L \times 119 mm W \times 33 mm D)
Ceiling-Mount Weatherproof Back Box Dimensions	7.1" diameter \times 2.0" high (180 mm diameter \times 51 mm high)

Notes:

- 1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
- 2. Products will operate at 12 V nominal only for 15 and 15/75 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)							
		8-17.5	Volts	16–33 \	16-33 Volts		
	Candela	DC	FWR	DC	FWR		
Standard	15	123	128	66	71		
Candela	15/75	142	148	77	81		
Range	30	NA	NA	94	96		
	75	NA	NA	158	153		
	95	NA	NA	181	176		
	110	NA	NA	202	195		
	115	NA	NA	210	205		
High	135	NA	NA	228	207		
Candela	150	NA	NA	246	220		
Range	177	NA	NA	281	251		
	185	NA	NA	286	258		

		8–17.5	Volts	16–33	Volts
Sound Pattern	dB	DC	FWR	DC	FWR
Temporal	High	57	55	69	75
Temporal	Medium	44	49	58	69
Temporal	Low	38	44	44	48
Non-Temporal	High	57	56	69	75
Non-Temporal	Medium	42	50	60	69
Non-Temporal	Low	41	44	50	50
Coded	High	57	55	69	75
Coded	Medium	44	51	56	69
Coded	Low	40	46	52	50

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15–115 cd)											
	8–17.5 V	olts	16–33 V	16–33 Volts							
DC Input	15	15/75	15	15/75	30	75	95	110	115		
Temporal High	137	147	79	90	107	176	194	212	218		
Temporal Medium	132	144	69	80	97	157	182	201	210		
Temporal Low	132	143	66	77	93	154	179	198	207		
Non-Temporal High	141	152	91	100	116	176	201	221	229		
Non-Temporal Medium	133	145	75	85	102	163	187	207	216		
Non-Temporal Low	131	144	68	79	96	156	182	201	210		
FWR Input											
Temporal High	136	155	88	97	112	168	190	210	218		
Temporal Medium	129	152	78	88	103	160	184	202	206		
Temporal Low	129	151	76	86	101	160	184	194	201		
Non-Temporal High	142	161	103	112	126	181	203	221	229		
Non-Temporal Medium	134	155	85	95	110	166	189	208	216		
Non-Temporal Low	132	154	80	90	105	161	184	202	211		

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, High Candela Range (135–185 cd)											
16–33 Volts						16-33	16-33 Volts				
DC Input	135	150	177	185	FWR Input	135	150	177	185		
Temporal High	245	259	290	297	Temporal High	215	231	258	265		
Temporal Medium	235	253	288	297	Temporal Medium	209	224	250	258		
Temporal Low	232	251	282	292	Temporal Low	207	221	248	256		
Non-Temporal High	255	270	303	309	Non-Temporal High	233	248	275	281		
Non-Temporal Medium	242	259	293	299	Non-Temporal Medium	219	232	262	267		
Non-Temporal Low	238	254	291	295	Non-Temporal Low	214	229	256	262		

Candela Derating

For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.

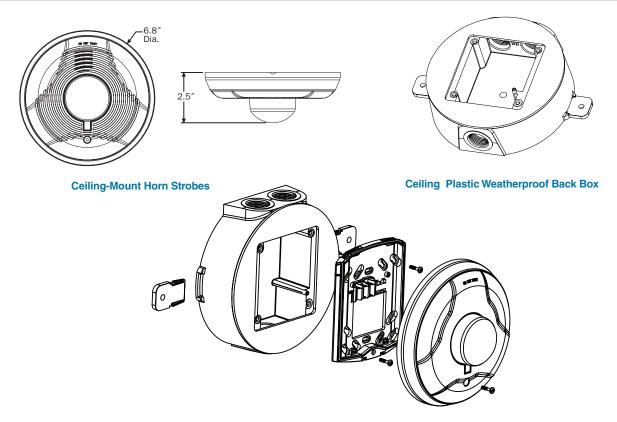
tillo table.	
Strobe Output (cd)	
Listed Candela	Candela rating at -40°F
15	
15/75	Do not use below 32°F
30	
75	44
95	70
110	110
115	115
135	135
150	150
177	177
185	185

Horn Tones and Sound Output Data

			8-17.5		16-33		24-Volt Nominal			
Switch	Sound		Volts	8	Volts		Reve	rberant	Anechoic	
Position	Pattern	dB	DC	FWR	DC	FWR	DC	FWR	DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	89
4	Non- Temporal	High	82	82	88	88	93	92	100	100
5	Non- Temporal	Medium	78	78	85	85	90	90	98	98
6	Non- Temporal	Low	75	75	81	81	88	84	96	92
7 [†]	Coded	High	82	82	88	88	93	92	101	101
8 [†]	Coded	Medium	78	78	85	85	90	90	97	98
9 [†]	Coded	Low	75	75	81	81	88	85	96	92

[†]Settings 7, 8, and 9 are not available on 2-wire horn strobe.

SpectrAlert Advance Diagrams



Ceiling-Mount Horn Strobe with Plastic Weatherproof Back Box

SpectrAlert Advance Ordering Information

Model	Description
Ceiling Horn Strobes	
PC2RK	2-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
PC2RHK	2-Wire Horn Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
PC2WK	2-Wire, Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
PC2WHK	2-Wire, Horn Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
Ceiling Strobes	
SCRK	Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
SCRHK	Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
SCWK	Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
SCWHK	Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
Accessories	
SA-WBBC	Red, Metal Weatherproof Back Box
SA-WBBCW	White, Metal Weatherproof Back Box
MP120K	

Notes:

"Standard cd" refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd" refers to strobes that include 135, 150, 177, and 185 candela settings. When replacing outdoor units, both the device and back box must be replaced.

