

OUTDOOR SELECTABLE- OUTPUT HORNS, STROBES, AND HORN STROBES FOR WALL APPLICATIONS

DESCRIPTION

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°F to 151°F.

Like the entire SpectrAlert Advance line, outdoor horns, strobes, and horn strobes for wall 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. Knock-outs located on the back eliminate the need to drill holes for screw-in mounting. Plastic and metal weatherproof back boxes come with ¾-inch top and bottom conduit entries and ¾-inch knock-outs at the back. A screw-in NPT plug with an O-ring gasket for a watertight seal is included with each back box.

FEATURES

- Weatherproof per NEMA 4X, IP56
- 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

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 1971 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.



APPROVALS:

- UL - S4011 (chimes, horn strobes, horns), S3593 (outdoor and alert strobes)
- FM - 3023572
- MEA - 452-05-E
- CSFM - 7300-1653:187 (outdoor strobes), 7125-1653:188 (horn strobes, chime strobes), 7135-1653:189 (horns, chimes)



Horn Strobe Combination

The horn strobe shall be a System Sensor SpectrAlert Advance Model _____ listed to UL 1971 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 or 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 approved per UL. The horn strobe shall be suitable for use in wet environments.

SPECIFICATIONS

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 with MLD3 Sync Module:	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
Input Terminal Wire Gauge:	12 to 18 AWG
Wall-Mount Dimensions (including lens):	5.6" L × 4.7" W × 2.5" D (142 mm L × 119 mm W × 64 mm D)
Horn Dimensions:	5.6" L × 4.7" W × 1.3" D (142 mm L × 119 mm W × 33 mm D)
Wall-Mount Weatherproof Back Box Dimensions: (SA-WBB)	5.7" L × 5.1" W × 2.0" D (145 mm L × 130 mm W × 51 mm D)

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. P, S, PC, and SC 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)						UL Max. Horn Current Draw (mA RMS)					
	Candela	8–17.5 Volts		16–33 Volts		Sound Pattern	dB	8–17.5 Volts		16–33 Volts	
		DC	FWR	DC	FWR			DC	FWR	DC	FWR
Standard Candela Range	15	123	128	66	71	Temporal	High	57	55	69	75
	15/75	142	148	77	81	Temporal	Medium	44	49	58	69
	30	NA	NA	94	96	Temporal	Low	38	44	44	48
	75	NA	NA	158	153	Non-Temporal	High	57	56	69	75
	95	NA	NA	181	176	Non-Temporal	Medium	42	50	60	69
	110	NA	NA	202	195	Non-Temporal	Low	41	44	50	50
	115	NA	NA	210	205	Coded	High	57	55	69	75
High Candela Range	135	NA	NA	228	207	Coded	Medium	44	51	56	69
	150	NA	NA	246	220	Coded	Low	40	46	52	50
	177	NA	NA	281	251						
	185	NA	NA	286	258						

UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15–115 cd)									
DC Input	8–17.5 Volts		16–33 Volts						
	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)									
DC Input	16–33 Volts				FWR Input	16–33 Volts			
	135	150	177	185		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.

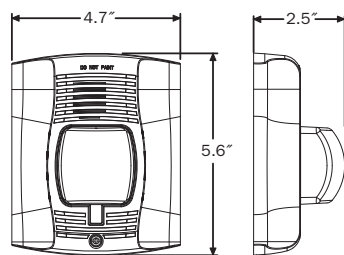
Strobe Output (cd)	
Listed Candela	Candela rating at –40°F
15	Do not use below 32°F
15/75	
30	
75	44
95	70
110	110
115	115
135	135
150	150
177	177
185	185

HORN TONES AND SOUND OUTPUT DATA

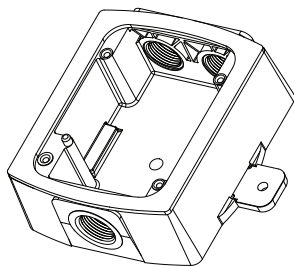
Horn and Horn Strobe Output (dBA)										
Switch Position	Sound Pattern	dB	8–17.5 Volts		16–33 Volts		24-Volt Nominal			
			DC	FWR	DC	FWR	Reverberant		Anechoic	
							DC	FWR	DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	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.

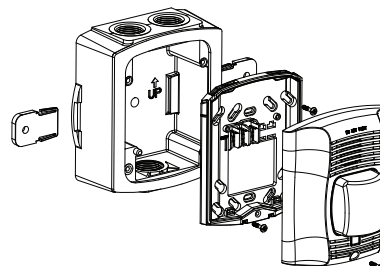
DIMENSIONS



Wall-Mount Horn Strobes



**Wall Plastic Weatherproof
Back Box**



**Wall-Mount Horn Strobe with Plastic
Weatherproof Back Box**

ORDERING INFORMATION

Fike P/N	Mfg. Model	Description
Wall Horn Strobes		
20-1270	P2RK	2-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
20-1348	P2RK-P	2-Wire Horn Strobe, Standard cd, Red, Outdoor, no text (includes plastic weatherproof back box)
20-1868	P2RK-R	2-Wire Horn Strobe, Standard cd, Red, Outdoor (no back box included, replacement device)
20-1271	P2RHK	2-Wire Horn Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
20-1349	P2RHK-P	2-Wire Horn Strobe, High cd, Red, Outdoor, no text (includes plastic weatherproof back box)
20-2004	P2RHK-R	2-Wire Horn Strobe, High cd, Red, Outdoor (no back box included, replacement device)
20-1491	P2WK	2-Wire Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
20-1475	P2WK-P	2-Wire Horn Strobe, Standard cd, White, Outdoor, no text (includes plastic weatherproof back box)
20-2005	P2WK-R	2-Wire Horn Strobe, Standard cd, White, Outdoor (no back box included, replacement device)
20-1492	P2WHK	2-Wire Horn Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
20-1476	P2WHK-P	2-Wire Horn Strobe, High cd, White, Outdoor, no text (includes plastic weatherproof back box)
20-2006	P2WHK-R	2-Wire Horn Strobe, High cd, White, Outdoor (no back box included, replacement device)
20-1282	P4RK	4-Wire Horn Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
20-1350	P4RK-P	4-Wire Horn Strobe, Standard cd, Red, Outdoor, no text (includes plastic weatherproof back box)
20-1493	P4WK	4-Wire Horn Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
20-1494	P2RHK-120	2-Wire Horn Strobe, High cd, Red, Outdoor, 120 V (includes plastic weatherproof back box)
Wall Strobes		
20-1292	SRK	Strobe, Standard cd, Red, Outdoor (includes plastic weatherproof back box)
20-1471	SRK-P	Strobe, Standard cd, Red, Outdoor, no text (includes plastic weatherproof back box)
20-2007	SRK-R	Strobe, Standard cd, Red, Outdoor (no back box included, replacement device)
20-1293	SRHK	Strobe, High cd, Red, Outdoor (includes plastic weatherproof back box)
20-1472	SRHK-P	Strobe, High cd, Red, Outdoor, no text (includes plastic weatherproof back box)
20-2008	SRHK-R	Strobe, High cd, Red, Outdoor (no back box included, replacement device)
20-2009	SWK	Strobe, Standard cd, White, Outdoor (includes plastic weatherproof back box)
20-1473	SWK-P	Strobe, Standard cd, White, Outdoor, no text (includes plastic weatherproof back box)
20-2010	SWK-R	Strobe, Standard cd, White, Outdoor (no back box included, replacement device)
20-2011	SWHK	Strobe, High cd, White, Outdoor (includes plastic weatherproof back box)
20-1474	SWHK-P	Strobe, High cd, White, Outdoor, no text (includes plastic weatherproof back box)
20-2012	SWHK-R	Strobe, High cd, White, Outdoor (no back box included, replacement device)
Horns		
20-1335	HRK	Horn, Red, Outdoor (includes plastic weatherproof back box)
20-2013	HRK-R	Horn, Red, Outdoor (no back box included, replacement device)
Accessories		
20-2014	SA-WBB	Red, Metal Weatherproof Back Box
20-1975	SA-WBBW	White, Metal Weatherproof Back Box

Notes:

All -P models have a plain housing (no "FIRE" marking on cover); All -R models only for use with weatherproof outdoor flush mounting plates, WTP or WTPW; "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 standard outdoor units both the device and back box must be replaced.**