

SPECTRAlert®

Wall-Mount Horns, Strobes, and Horn/Strobes



Models Available*

Horn/Strobes

P1215	P121575
P2415	P241575
P2430	P2475
P24110	

Strobes

S1215	S121575
S2415	S241575
S2430	S2475
S24110	

Horns

H12/24

*Refer to Ordering Information for other configurations



Product Overview

Meet UL and ADA signaling requirements

Lower current draw

- More devices per loop
- Lower installed cost

Universal mounting plate included

Accessory mounting plates available

Field-selectable horn tones

- Electromechanical / 3kHz
- Temporal 3 / Non-temporal 3
- High / Low dBA output

Available in 15, 15/75, 30, 75, and 110 candela

Synchronizable horns and strobes with Sync•Circuit™ module

Aesthetic design

System Sensor's SpectrAlert® wall-mount series includes a complete line of electronic horns, strobes, and horn/strobes. Intended for primary signaling use, SpectrAlert products meet UL1971, UL464, and Americans with Disabilities Act requirements.

Technology. With its extremely efficient reflector design and Xenon flash tube, SpectrAlert offers current draw reductions as high as 40% over previous generation designs. By consuming less current, the flexibility to connect more devices per loop is possible, for a lower installed cost.

Installation. SpectrAlert products offer installation ease which also lowers the installed cost. By taking up no room in the back box, SpectrAlert strobes and horn/strobes make wiring connections simpler and faster. Each SpectrAlert includes a universal mounting plate for 4" square and single gang back box mounting. Accessory mounting plates are also available for small footprint or surface mount applications.

Flexibility. SpectrAlert offers the flexibility to meet a broad range of requirements. The SpectrAlert horns and horn/strobes feature a number of field-selectable/reversible horn tones. For visible requirements, SpectrAlert strobes and horn/strobes are available in a wide variety of configurations to address non-sleeping area, sleeping area, and corridor requirements. Offerings include 24-volt models at 15, 15/75, 30, 75, and 110 candela, and 12-volt devices at 15 and 15/75 candela.

Aesthetics. To meet building owner aesthetic requirements, SpectrAlert incorporates a stylish, low profile design. And this aesthetic is consistent across all SpectrAlert wall-mount products.



Engineering Specifications

General

SpectrAlert horns, strobes and horn/strobes shall be capable of mounting to a standard 4" x 4" x 1 1/2" back box or a single gang 2" x 4" x 1 7/8" back box using the universal mounting plate included with each SpectrAlert product. Also, SpectrAlert products, when used in conjunction with the accessory Sync•Circuit Module, shall be powered from a non-coded power supply and shall operate on 12 or 24 volts. 12 volt rated devices shall have an operating voltage range of 10.7–17 volts. 24-volt rated devices shall have an operating voltage range or 20–30 volts. SpectrAlert products shall have an operating temperature of 32° to 120°F and operate from a regulated DC or full wave rectified, unfiltered power supply.

Horn

Horn shall be a System Sensor SpectrAlert Model _____ capable of operating at 12 and 24 volts. Horn shall be listed to UL 464 for fire protective signaling systems. The horn shall have two tone options, two audibility options (at 24 volts) and the option to switch between a temporal 3 pattern and a non-temporal continuous pattern. All horn models shall operate on a coded power supply.

Strobe

Strobe shall be a System Sensor SpectrAlert Model _____ listed to UL 1971 and 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 1Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

Horn/Strobe Combination

Horn/Strobe shall be a System Sensor SpectrAlert Model _____ listed to UL 1971 and UL 464 and shall be approved for fire protective service. 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 1Hz 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 two tone options, two audibility options (at 24 volts) and the option to switch between a temporal 3 pattern and a non-temporal continuous pattern. Strobes shall be powered independently of the sounder with the removal of factory installed jumper wires. The horn on horn/strobe models shall operate on a coded or non-coded power supply (the strobe must be powered continuously).

Synchronization Module

Module shall be a System Sensor Sync•Circuit _____ listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1Hz and horns at temporal 3. Also, the module shall silence the horns on horn/strobe models, while operating the strobes, over a single pair of wires. The module shall be capable of mounting to a 4 11/16" x 4 11/16" x 2 1/8" back box and shall control two Style Y (class B) or one Style Z (class A) circuit. Module shall be capable of multiple zone synchronization by daisy chaining multiple modules together and re-synchronizing each other along the chain. The module shall not operate on a coded power supply.

Specifications

Walk Test SpectrAlert horn/strobe and horn only work on "walk tests" with time durations of 4 seconds or greater

Input Terminals

12 to 18 AWG

Dimensions

Strobe and horn/strobe with universal plate

5" x 5 5/8" x 2 15/16"

Strobe and horn/strobe with small footprint plate

3 3/8" x 5 5/8" x 2 5/16"

Horn with universal mounting plate

5" x 5 5/8" x 1 5/16"

Horn without mounting plate

2 15/16" x 5 5/16" x 1 5/16"

Weight, horn only

7.2 oz.

Weight, strobe and horn/strobe

8.8 oz.

Mounting

4" x 4" x 1 1/2" or 2" x 4" x 1 7/8"

standard boxes

Indoor Operating Temperature

32°F to 120°F (0°C to 49°C)

Maximum humidity

95% as tested per UL464

Weatherproof (horn and horn/strobes)

Operating Temperature

32°F to 150°F (0°C to 66°C)

(outdoor strobe only)

–40°F to 158°F (–40°C to 70°C)

ULC Canadian Models

–40°C to 66°C

Voltages

12 or 24VDC and FWR unfiltered

Operating voltage range*

12V: 10.5-17V; 24V: 20-30V

Operating voltage range*

(with Sync•Circuit module, MDL)

12V, 11-17V; 24V, 20-30V

* These products should be operated within their rated voltage range; UL does, however, test functional integrity to -20% and +10% of manufacturer's stated ranges.

U.S. Patent Numbers

5,593,569

5,914,665

6,049,446

SpectrAlert Current Draw Table

Strobe Only

	Average Current (mA)												Peak Current (mA)												In Rush Current (mA)											
	12V Models						24V Models						12V Models						24V Models						12V Models						24V Models					
	10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V						
Candela	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR						
15	133	159	114	157	81	128	50	61	43	60	38	60	460	460	450	460	420	480	135	204	135	208	135	185	80	108	92	124	140	190						
15/75	168	182	142	171	99	150	56	65	49	64	44	62	490	520	490	520	460	480	150	199	150	207	150	198	76	104	88	126	160	185						
30	NA	NA	NA	NA	NA	NA	78	84	67	82	58	72	NA	NA	NA	NA	NA	NA	183	201	183	219	183	216	NA	NA	NA	NA	NA	NA						
75	NA	NA	NA	NA	NA	NA	145	170	123	159	102	141	NA	NA	NA	NA	NA	NA	350	440	340	460	330	480	NA	NA	NA	NA	NA	NA						
110	NA	NA	NA	NA	NA	NA	169	220	140	191	115	174	NA	NA	NA	NA	NA	NA	460	560	450	570	420	620	NA	NA	NA	NA	NA	NA						

Horn Only

Tone	High/Low Volume	Temp/Non	Average Current (mA)											
			12V Models						24V Models					
			10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V
Electro-mech.	High	Temp	10	11	10	10	14	14	19	21	25	18	29	26
		Non	10	16	10	19	14	25	17	29	23	34	30	42
	Low	Temp	NA	NA	NA	NA	NA	NA	11	12	13	13	17	15
3000 Hz Interrupt.	High	Temp	11	13	11	11	16	16	24	26	28	23	37	33
		Non	11	17	11	21	14	28	19	34	27	39	35	45
	Low	Temp	NA	NA	NA	NA	NA	NA	14	14	17	15	21	19
		Non	NA	NA	NA	NA	NA	13	18	16	21	22	25	

Horn/Strobe 30 cd

Tone	High/Low Volume	Temp/Non	Average Current (mA)					
			24V Models					
			20V	24V	30V			
Electro-mech.	High	Temp	97	105	92	100	87	98
		Non	95	113	90	116	88	114
	Low	Temp	89	96	80	95	75	87
3000 Hz Interrupt.	High	Temp	102	108	95	105	95	105
		Non	97	116	94	121	93	117
	Low	Temp	92	96	84	97	79	91
		Non	91	100	83	103	80	97

Horn/Strobe 15 cd

Tone	High/Low Volume	Temp/Non	Average Current (mA)											
			12V Models						24V Models					
			10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V
Electro-mech.	High	Temp	143	170	124	167	95	142	69	82	68	78	67	87
		Non	143	170	124	167	95	142	67	90	66	94	68	103
	Low	Temp	NA	NA	NA	NA	NA	NA	61	73	56	73	55	76
3000 Hz Interrupt.	High	Temp	144	172	125	168	97	144	74	87	71	83	75	94
		Non	144	173	125	168	95	146	69	95	70	99	73	106
	Low	Temp	NA	NA	NA	NA	NA	NA	64	75	60	75	59	80
		Non	NA	NA	NA	NA	NA	63	79	59	81	60	86	

Horn/Strobe 75 cd

Tone	High/Low Volume	Temp/Non	Average Current (mA)					
			24V Models					
			20V	24V	30V			
Electro-mech.	High	Temp	164	191	148	167	131	167
		Non	163	188	146	169	132	169
	Low	Temp	156	182	136	162	119	156
3000 Hz Interrupt.	High	Temp	169	196	151	172	139	174
		Non	164	192	150	175	137	177
	Low	Temp	159	184	140	164	123	160
		Non	158	188	139	163	124	162

Horn/Strobe 1575 cd

Tone	High/Low Volume	Temp/Non	Average Current (mA)											
			12V Models						24V Models					
			10.5V	12V	17V	20V	24V	30V	10.5V	12V	17V	20V	24V	30V
Electro-mech.	High	Temp	178	193	152	181	113	164	75	86	74	82	73	88
		Non	178	193	152	181	113	164	73	94	72	98	74	104
	Low	Temp	NA	NA	NA	NA	NA	NA	67	77	62	77	61	77
3000 Hz Interrupt.	High	Temp	179	195	152	183	115	166	80	91	77	87	81	95
		Non	179	196	152	183	113	168	75	99	76	103	79	107
	Low	Temp	NA	NA	NA	NA	NA	NA	70	79	66	79	65	81
		Non	NA	NA	NA	NA	NA	69	83	65	85	66	87	

Horn/Strobe 110 cd

Tone	High/Low Volume	Temp/Non	Average Current (mA)					
			24V Models					
			20V	24V	30V			
Electro-mech.	High	Temp	188	241	165	209	144	200
		Non	186	238	163	211	145	202
	Low	Temp	180	232	153	204	132	189
3000 Hz Interrupt.	High	Temp	193	246	168	214	152	207
		Non	188	242	167	217	150	210
	Low	Temp	183	234	157	206	136	193
		Non	182	232	156	205	137	195

Sound Output Guide (dBA)

			UL Reverberant Room dBA @ volts DC						Anechoic Room Peak dBA @ 10ft./volts DC					
			10.5	12	17	20	24	30	10.5	12	17	20	24	30
Temporal	Low Tone	Electromechanical	NA	NA	NA	75	75	79	NA	NA	NA	94	96	98
		3000 HZ Interrupted	NA	NA	NA	75	75	79	NA	NA	NA	94	96	98
	High Tone	Electromechanical	75	75	79	82	82	82	94	95	98	100	101	102
		3000 HZ Interrupted	75	75	79	82	85	85	94	95	98	100	101	102
Non-Temporal	Low Tone	Electromechanical	NA	NA	NA	79	82	85	NA	NA	NA	94	96	98
		3000 HZ Interrupted	NA	NA	NA	82	82	85	NA	NA	NA	94	96	98
	High Tone	Electromechanical	79	79	85	85	88	88	94	95	98	100	101	102
		3000 HZ Interrupted	79	82	85	88	88	88	93	95	98	100	101	102

SpectrAlert Ordering Information

	Red	White	Voltage	Candela	Avg. mA* @Nom. VDC	Avg. mA* @Nom.FWR**	
Horn/Strobes	P1215	P1215W	12	15	124	167	
	P121575	P121575W	12	15/75	152	181	
	P2415	P2415W	24	15	68	78	
	P241575	P241575W	24	15/75	74	82	
	P2430	P2430W	24	30	92	100	
	P2475	P2475W	24	75	148	167	
	P24110	P24110W	24	110	165	209	
	P121575K (weatherproof)	—	12	15/75	124	167	
	P241575K (weatherproof)	—	24	15/75	74	82	
	P2475K (weatherproof)	—	24	75	148	167	
	P24110K (weatherproof)	—	24	110	165	209	
	P241575P (no lettering)	P241575PW	24	15/75	74	82	
	P241575AG (AGENT)	—	24	15/75	74	82	
	P241575EV (EVAC)	—	24	15/75	74	82	
	Canada	P2415A	P2415WA	24	15	68	78
		P241575A	P241575WA	24	15/75	74	82
		P2475A	P2475WA	24	75	148	167
	P24110A	P24110WA	24	110	165	209	
	P241575KA (weatherproof)	—	24	15/75	74	82	
	P2475KA (weatherproof)	—	24	75	148	167	
	P24110KA (weatherproof)	—	24	110	165	209	
Latin America	P241575F (FUEGO)	—	24	15/75	74	82	
Strobes	S1215	S1215W	12	15	114	157	
	S121575	S121575W	12	15/75	142	171	
	S2415	S2415W	24	15	43	60	
	S241575	S241575W	24	15/75	49	64	
	S2430	S2430W	24	30	67	82	
	S2475	S2475W	24	75	123	159	
	S24110	S24110W	24	110	140	191	
	S121575K (weatherproof)	—	12	15/75	142	171	
	S241575K (weatherproof)	—	24	15/75	49	64	
	S2475K (weatherproof)	—	24	75	123	159	
	S24110K (weatherproof)	—	24	110	140	191	
	S241575P (no lettering)	S241575PW	24	15/75	49	64	
	S241575AG (AGENT)	—	24	15/75	49	64	
	S241575EV (EVAC)	—	24	15/75	49	64	
	Canada	S2415A	S2415WA	24	15	43	60
		S241575A	S241575WA	24	15/75	49	64
		S2475A	S2475WA	24	75	123	149
	S24110A	S24110WA	24	110	140	191	
	S241575KA (weatherproof)	—	24	15/75	49	64	
	S2475KA (weatherproof)	—	24	75	123	149	
	S24110KA (weatherproof)	—	24	110	140	191	
Latin America	S241575F (FUEGO)	—	24	15/75	49	64	
Horns	H12/24	H12/24W	12/24	NA	10/25	10/18	
	H12/24K (weatherproof)	—	12/24	NA	10/25	10/18	
	Canada	HC12/24A	HC12/24WA	12/24	NA	10/25	10/18
		HC12/24KA	—	12/24	NA	10/25	10/18
Sync • Circuit	MDL	MDLW	12/24	NA	10/11	12/15	
Module	Canada	MDLA	MDLWA	12/24	NA	10/11	12/15
Small Footprint Mounting							
Plate for Single Gang Only	S-MP	S-MPW	NA	NA	NA	NA	
Surface Mount Back Box Skirt	BBS	BBSW	NA	NA	NA	NA	
Universal Mounting							
Plate (replacement)	D-MP	D-MPW	NA	NA	NA	NA	
Weatherproof Back Box	WBB	—	NA	NA	NA	NA	

Notes: Agency Listings – Indoor models: UL, ULC, FM, CSFM, MEA. Weatherproof models: UL, CSFM (strobe only), MEA, ULC.
 All of these SpectrAlert products are designed for wall mount only. All weatherproof models must use weatherproof back box model WBB. Installation of less than 75 candela strobes may be permissible under the equivalent facilitation clause of the ADAAG (Sec. 2.2). However, it is the responsibility of the person or entity designing the fire alarm system to determine the acceptability of less than 75 candela strobes. All 15/75 candela strobes or horn/strobes are recommended for 20' x 20' rooms or less.
 *Horn and horn/strobe current draws assume horn is set at temp 3, electromechanical tone and high audibility.
 ** FWR = Full Wave Rectified

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