SpectrAlert® Series
Horns, Strobes, and Horn/Strobes

Section: Audio/Visual Devices

GENERAL

The **System Sensor SpectrAlert®** wall-mount series includes a complete line of electronic horns, strobes, and horn/strobes. Intended for primary signaling use, SpectrAlert® products meet UL 1971, UL 464, and Americans with Disabilities Act requirements.

Performance. With its extremely efficient reflector design and Xenon flash tube, SpectrAlert® offers current draw reductions as high as 40% over previous generation designs. With less current consumption, more devices per loop are possible for a lower installed cost.

Installation. SpectrAlert® products are designed for ease of installation, which also lowers the installed cost. SpectrAlert® strobes and horn/strobes take up no room in the backbox, making wiring connections simpler and faster. Each SpectrAlert® wall-mount device includes a universal mounting plate for 4" (10.16 cm) square and single-gang backbox mounting. Accessory mounting plates are also available for small-footprint or surface-mount applications.

Flexibility. The SpectrAlert® wall-mount series offers the flexibility to meet a broad range of requirements. Horns and horn/strobes feature a number of field-selectable/reversible horn tones. Strobes and horn/strobes are available in a wide variety of configurations to address visibility requirements for non-sleeping areas, sleeping areas, and corridors. 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 the aesthetic requirements of building owners, SpectrAlert® incorporates a stylish, low-profile design that is consistent across the SpectrAlert® wall-mount product line.

FEATURES

- Meets UL and ADA signaling requirements.
- Low current draw allows more devices per loop for a lower installed cost.
- Universal mounting plate included.
- Accessory mounting plates available.
- Field-selectable horn tones:
  - — Electromechanical / 3 kHz.
  - — 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.
- Aesthetically pleasing design.

SPECIFICATIONS

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

Input terminals: 12 to 18 AWG (3.25 mm² to 0.51 mm²).

Dimensions, *strobe and horn/strobe with universal plate:* 5" (127 mm) wide x 5-5/8" (142.875 mm) high x 2-15/16" (74.613 mm) deep; ***with small footprint plate:*** 3-3/8"

LISTED

◄ **S4011 & S5512:** P1215(W), P121575(W), P2415(W), P241575(W), P2475(W), P24110(W). **S5512:** S1215(W), S121575(W), S121575K, S2415(W), S241575(W), 241575AG, S241575EV, S241575P(W), S2430(W), S2475(W), S24110(W). **S4011:** P121575K, P241575AG, P241575EV, P241575P(W), P2430(W).

◄ **CS549:** P2415(W)A, P241575(W)A, P2475(W)A, 24110(W)A, S2415(W)A, S241575(W)A, S2475(W)A, S24110(W)A. **CS549 V3:** P121575KA, P2430(W)A, S121575KA, S2430(W)A. **CS548:** HC12/24A.

► P1215(W), P121575(W), P2415(W), P241575(W), P241575AG, P241575EV, P241575P(W), P2430(W), P2475(W), 24110(W), S1215(W), S121575(W), S2415(W), S241575(W) S241575AG, S241575EV, S241575P(W), S2430(W), S2475(W), S24110(W), H12/24(W).

FM Approved

California State Fire Marshal

◄ **7135-1209:173** – P1215(W), P121575(W), P121575K, P2415(W), P241575(W), P241575AG, P241575EV, P241575P(W), P2430(W), P2475(W), P24110(W).
7125-1209:174 – S1215(W), S121575(W), S121575K, S2415(W), S241575(W), S241575AG, S241575EV, S241575P(W), S2430(W), S2475(W), S24110(W).
7135-1209:143 – H12/24(W).

MEA

◄ **319-96-E:** P1215(W), P121575(W), P2415(W), P241575(W), P241575AG (**Vol. V**), P241575EV (**Vol. V**), P241575P(W) (**Vol. VI**), P2430(W) (**Vol. V**), P2475(W), P24110(W), S1215(W), S121575(W), S2415(W), S241575(W), S241575AG (**Vol. V**), S241575EV (**Vol. V**), S241575P(W) (**Vol. VI**), S2430(W) (**Vol. V**), S2475(W), S24110(W), H12/24(W).
173-98-E Vol. II: P121575K, S121575K.

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NOTIFIER 12 Clintonville Road, Northford, Connecticut 06472

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING

(85.725 mm) wide x 5-5/8" (142.875 mm) high x 2-15/16" (74.613 mm) deep.

Dimensions, *horn with universal mounting plate:* 5" (127 mm) wide x 5-5/8" (142.875 mm) high x 1-5/16" (33.338 mm) deep; ***without mounting plate:*** 5" (127 mm) wide x 5-5/8" (142.875 mm) high x 1-5/16" (33.338 mm) deep.

Weight, *horn only:* 7.2 oz. (204 g).

Weight, *strobe and horn/strobe:* 8.8 oz. (250 g).

Mounting: standard boxes 4" x 4" x 1-1/2" deep (101.6 x 101.6 x 38.1 mm) or 2" x 4" x 1-7/8" deep (50.8 x 101.6 x 47.625 mm).

Operating temperature, *indoor:* 32°F to 120°F (0°C to 49°C). ***Weatherproof models, horn and horn strobes:*** 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.

Maximum humidity: 95% as tested per UL 464.

Voltages: 12 or 24 VDC and FWR unfiltered.

Operating voltage range:* 12-volt models: 10.5 – 17 V. 24-volt models: 20 – 30 V. ***With Sync-Circuit™ module MDL*:*** 12-volt models: 11 – 17 V. 24-volt models: 20 – 30 V. *See current draw tables on page 4.*

** 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.

ENGINEERING SPECIFICATIONS

General — SpectrAlert® horns, strobes and horn/strobes shall be capable of mounting to a standard 4" x 4" x 1-1/2" (101.6 x 101.6 x 38.1 mm) backbox or a single-gang 2" x 4" x 1-7/8" (50.8 x 101.6 x 47.625 mm) backbox 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 10.5 - 17 volts. 24-volt rated devices shall have an operating voltage range of 20 - 30 volts. SpectrAlert® products shall have an indoor operating temperature range of 32°F to 120°F (0°C to 49°C) 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 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.

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 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 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).

Module — Module shall be a System Sensor Sync•Circuit™ model _____ Listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert® strobes at 1 Hz 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" (119.063 mm) square x 2-1/8" (53.975 mm) deep backbox 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 resynchronizing each other along the chain. The module shall ***NOT*** operate on a coded power supply.

SOUND OUTPUT GUIDE (dBA)			UL Reverberant Room dBA @ Volts DC						Anechoic Room Peak dBA @ 10 ft./VDC					
			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	79	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

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NOTES FOR PRODUCT LINE INFORMATION

NOTES: **1)** Canadian model numbers end in "A". **2)** Latin American model numbers end in "F". **3)** All weatherproof models ***must*** use weatherproof backbox model WBB. **4)** All SpectrAlert® products are designed for wall-mount only. **5)** 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. **6)** All 15/75 candela strobes or horn/strobes are recommended for 20' x 20' (6.096 x 6.096 m) rooms or less. **For a complete listing of SpectrAlert current requirements, please refer to the Current Draw tables on page 4 of this document, or the Instruction Manual. Horn and horn/strobe current draws assume the horn is set at Temp 3, electromechanical tone, and high audibility.*

PRODUCT LINE 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 (evacuation)	—	24	15 / 75	74	82
CANADIAN Models, Horn/Strobes	P2415A	P2415WA	24	15	68	78
	P241575A	P241575WA	24	15 / 75	74	82
	P2430A	P2430WA	24	30	92	100
	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
SPANISH Labeling, Horn/Strobes	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 (evacuation)	—	24	15 / 75	49	64
CANADIAN Models, Strobes	S2415A	S2415WA	24	15	43	60
	S241575A	S241575WA	24	15 / 75	49	64
	S2430A	S2430WA	24	30	67	82
	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
SPANISH Labeling, Strobes	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
CANADIAN Models, Horns	HC12/24A	HC12/24W	12 / 24	NA	10 / 25	10 / 18
	HC12/24KA (weatherproof)	—	12 / 24	NA	10 / 25	10 / 18
Sync•Circuit™ Module	MDL	MDLW	12 / 24	NA	10 / 11	12 / 15
CANADIAN Sync•Circuit™ Module	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 Backbox Skirt	BBS	BBSW	NA	NA	NA	NA
Universal Mounting Plate (replacement)	D-MP	D-MPW	NA	NA	NA	NA
Weatherproof Backbox	WBB	—	NA	NA	NA	NA

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CURRENT DRAW TABLES

STROBE ONLY ▶

Below:

HORN/STROBE 15 candela
HORN/STROBE 15/75 candela
HORN/STROBE 30 candela
HORN/STROBE 75 candela
HORN/STROBE 110 candela

HORN ONLY ▼

AVERAGE CURRENT (mA): STROBE ONLY													
Candela	12-VOLT MODELS						24-VOLT MODELS					
	10.5 V		12 V		17 V		20 V		24 V		30 V	
	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
15 / 75	168	182	142	171	99	150	56	65	49	64	44	62
30	NA	NA	NA	NA	NA	NA	78	84	67	82	58	72
75	NA	NA	NA	NA	NA	NA	145	170	123	159	102	141
110	NA	NA	NA	NA	NA	NA	169	220	140	191	115	174
PEAK CURRENT (mA): STROBE ONLY												
15	460	460	450	460	420	480	135	204	135	208	135	185
15 / 75	490	520	490	520	460	480	150	199	150	207	150	198
30	NA	NA	NA	NA	NA	NA	183	201	183	219	183	216
75	NA	NA	NA	NA	NA	NA	350	440	340	460	330	480
110	NA	NA	NA	NA	NA	NA	460	560	450	570	420	620
INRUSH CURRENT (mA): STROBE ONLY												
15	80	108	92	124	140	190	97	129	116	152	147	198
15 / 75	76	104	88	126	160	185	97	135	116	164	147	211
30	NA	NA	NA	NA	NA	NA	97	129	116	152	147	198
75	NA	NA	NA	NA	NA	NA	190	240	230	280	290	380
110	NA	NA	NA	NA	NA	NA	190	230	220	290	290	370

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HORN ONLY		12-VOLT MODELS						24-VOLT MODELS					
		10.5 V		12 V		17 V		20 V		24 V		30 V	
		DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR
AVERAGE CURRENT (mA): Electromechanical Tone													
HIGH VOL.	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 VOL.	TEMP	NA	NA	NA	NA	NA	NA	11	12	13	13	17	15
	NON	NA	NA	NA	NA	NA	NA	12	16	14	19	17	24
AVERAGE CURRENT (mA): 3,000 Hz Interrupted Tone													
HIGH VOL.	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 VOL.	TEMP	NA	NA	NA	NA	NA	NA	14	14	17	15	21	19
	NON	NA	NA	NA	NA	NA	NA	13	18	16	21	22	25

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H/S 30 cd		24-VOLT MODELS					
		20 V		24 V		30 V	
		DC	FWR	DC	FWR	DC	FWR
AVG. CURRENT (mA): Electromech.							
HIGH VOL.	TEMP	97	105	92	100	87	98
	NON	95	113	90	116	88	114
LOW VOL.	TEMP	89	96	80	95	75	87
	NON	90	98	81	101	75	96
AVG. CURRENT (mA): 3,000 Hz Inter.							
HIGH VOL.	TEMP	102	108	95	105	95	105
	NON	97	116	94	121	93	117
LOW VOL.	TEMP	92	96	84	97	79	91
	NON	91	100	83	103	80	97

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H/S 15 cd		12-VOLT MODELS						24-VOLT MODELS					
		10.5 V		12 V		17 V		20 V		24 V		30 V	
		DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR
AVERAGE CURRENT (mA): Electromechanical Tone													
HIGH VOL.	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 VOL.	TEMP	NA	NA	NA	NA	NA	NA	61	73	56	73	55	76
	NON	NA	NA	NA	NA	NA	NA	62	77	57	79	55	85
AVERAGE CURRENT (mA): 3,000 Hz Interrupted Tone													
HIGH VOL.	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 VOL.	TEMP	NA	NA	NA	NA	NA	NA	64	75	60	75	59	80
	NON	NA	NA	NA	NA	NA	NA	63	79	59	81	60	86

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H/S 75 cd		24-VOLT MODELS					
		20 V		24 V		30 V	
		DC	FWR	DC	FWR	DC	FWR
AVG. CURRENT (mA): Electromech.							
HIGH VOL.	TEMP	164	191	148	167	131	167
	NON	163	188	146	169	132	169
LOW VOL.	TEMP	156	182	136	162	119	156
	NON	157	182	137	162	119	157
AVG. CURRENT (mA): 3,000 Hz Inter.							
HIGH VOL.	TEMP	169	196	151	172	139	174
	NON	164	192	150	175	137	177
LOW VOL.	TEMP	159	184	140	164	123	160
	NON	158	188	139	163	124	162

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H/S 15/75 cd		12-VOLT MODELS						24-VOLT MODELS					
		10.5 V		12 V		17 V		20 V		24 V		30 V	
		DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR	DC	FWR
AVERAGE CURRENT (mA): Electromechanical Tone													
HIGH VOL.	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 VOL.	TEMP	NA	NA	NA	NA	NA	NA	67	77	62	77	61	77
	NON	NA	NA	NA	NA	NA	NA	68	81	63	83	61	86
AVERAGE CURRENT (mA): 3,000 Hz Interrupted Tone													
HIGH VOL.	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 VOL.	TEMP	NA	NA	NA	NA	NA	NA	70	79	66	79	65	81
	NON	NA	NA	NA	NA	NA	NA	69	83	65	85	66	87

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H/S 110 cd		24-VOLT MODELS					
		20 V		24 V		30 V	
		DC	FWR	DC	FWR	DC	FWR
AVG. CURRENT (mA): Electromech.							
HIGH VOL.	TEMP	188	241	165	209	144	200
	NON	186	238	163	211	145	202
LOW VOL.	TEMP	180	232	153	204	132	189
	NON	181	232	154	204	132	190
AVG. CURRENT (mA): 3,000 Hz Inter.							
HIGH VOL.	TEMP	193	246	168	214	152	207
	NON	188	242	167	217	150	210
LOW VOL.	TEMP	183	234	157	206	136	193
	NON	182	232	156	205	137	195

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