

SpectrAlert™ Series Horns, Strobes, and Horn/Strobes

Section: Audio/Visual Devices

GENERAL

System Sensor SpectrAlert Series strobes, horns, and combination horn/strobes are UL listed for primary signaling in life safety systems and meet ADA public mode visible signaling requirements. SpectrAlert products can be connected to the alarm indicating circuit of a fire alarm control panel and are compatible with DC line supervision. The SpectrAlert product line mounts to standard backboxes using a universal mounting plate included with each unit. An optional small footprint mounting plate fits to a single-gang box. An accessory backbox skirt gives a cosmetic finish to a 4" x 4" x 1-1/2" or a 2" x 4" x 1-7/8" surface-mounted backbox. All strobe and horn/strobe mounting options require only one screw attachment of product to plate.

These products are designed for 12 and 24 VDC and full-wave rectified unfiltered power. Full-wave rectified operation requires more current than DC operation. For detailed current draw information, consult the Current Draw Tables (*page 2*). The horn/strobe combination products are factory-assembled with jumper wires for in-tandem operation. For independent wiring of horn and strobe, remove jumper wires. When wired for independent operation, the strobe will continue to run while the horn can be silenced. However, the strobe must be running for horn to operate.

Horns — The SpectrAlert Series horns and horn/strobes provide two different field-selectable/reversible tones, a high-low field-selectable/reversible sound output setting (low setting on 24-volt models only) and a field-selectable/reversible temp 3 pattern or non-temporal continuous pattern. These field-selectable features are accomplished using pins and jumpers located on the back of each SpectrAlert horn and horn/strobe. An accessory module is not needed to make these field selections. The horn on horn/strobe models will operate on a coded power supply. **Those horn-only models with "HC" in their part numbers will also operate on a coded power supply.** The horn and horn/strobe series includes weatherproof models.

Strobes — The ADA-compliant SpectrAlert strobes are electronic visible warning signals that flash at 1 Hz over their operating voltage range. These products are available in 24-volt models at 15, 15/75, 75 and 110 candela intensities and in 12-volt models at 15 and 15/75 candela intensities. The strobe series includes weatherproof models. SpectrAlert products feature dramatic reductions in current requirements.

Sync•Circuit Module (MDL) — The Sync•Circuit Module is available for synchronization of strobes and horns and can synchronize two Style Y (class B) circuits or one Style Z (class A) circuit. The module can also generate a synchronized temp 3 tone for System Sensor's Multi-Alert™ and PA400 horn products.* The synchronization module allows the SpectrAlert horns on combination horn/strobes to be silenced on two-wire systems. SpectrAlert's Sync•Circuit Module can be daisy-chained for multiple zone synchronization. The module does not operate on a coded power supply.

**For Multi-Alert and PA400: Strobes must be wired to a continuous source of power (non-coded power supply).*



◀ **S4011 & S5512** (P1215, P121575, P2415, P241575, P2475, P24110). **S5512** (S1215, S121575, S2415, S241575, S2475, S24110). **S4011** (HC12/24).



◀ **CS549** (P2415A, P241575A, P2475A, P24110A, S2415A, S241575A, S2475A, S24110A). **CS548** (H12/24A, HC12/24A).



OB8A4.AY (P1215, P121575, P2415, P241575, P2475, P24110, S1215, S121575, S2415, S241575, S2475, S24110, H12/24). **OD4A7.AY** (HC12/24).



California State Fire Marshal

◀ **7135-1209:173** (P1215, P121575, P2415, P241575, P2475, P24110). **7125-1209:174** (S1215, S121575, S2415, S241575, S2475, S24110). **7135-1209:143** (H12/24, HC12/24).

MEA ▶ **319-96-E** (P1215, P121575, P2415, P241575, P2475, P24110, S1215, S121575, S2415, S241575, S2475, S24110, H12/24, HC12/24).



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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **Fire-Lite Alarms**, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll Free FAX: (877) 699-4105, FAX Back:(888) 388-3299
WEB: www.firelite.com

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING

ENGINEERING SPECIFICATIONS

General — SpectrAlert horns, strobes and horn/strobes shall be capable of mounting to a standard 4" x 4" x 1-1/2" (10.16 x 10.16 x 3.81 cm) backbox or a single-gang 2" x 4" x 1-1/2" (5.08 x 10.16 x 3.81 cm) backbox using the universal mounting plate included with each SpectrAlert product. Also, SpectrAlert products, when used in conjunction with the accessory SyncCircuit 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 operating temperature of 32°F to 120°F (0°C to 49°C) and operate from a regulated DC or full-wave rectified, unfiltered power supply.

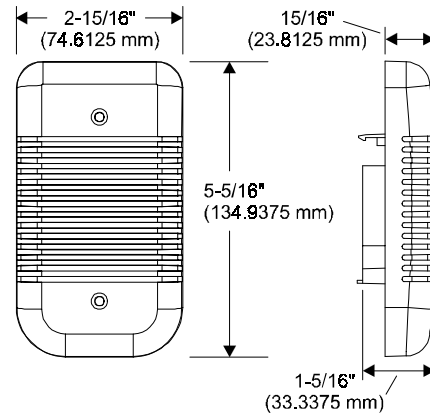
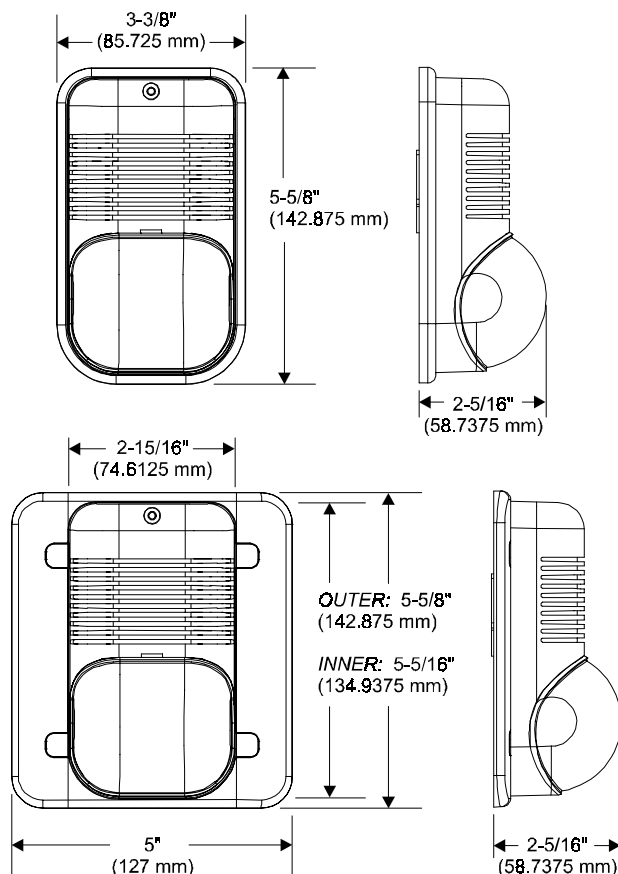
Horn — Horn shall be a System Sensor SpectrAlert model _____ capable of operating at 12 and 24 volts. Horn shall be listed to UL 464 for fire protective signaling systems. The horn shall have two tone options, two audibility options (at 24 volts) and the option to switch between a temporal 3 pattern and a non-temporal continuous pattern. The horn-only model shall NOT operate on a coded power supply **except** those models (model numbers contain "HC") designed to do so.

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 its 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.

Module — Module shall be a System Sensor SyncCircuit 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" (119.0625 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.

DIMENSIONS

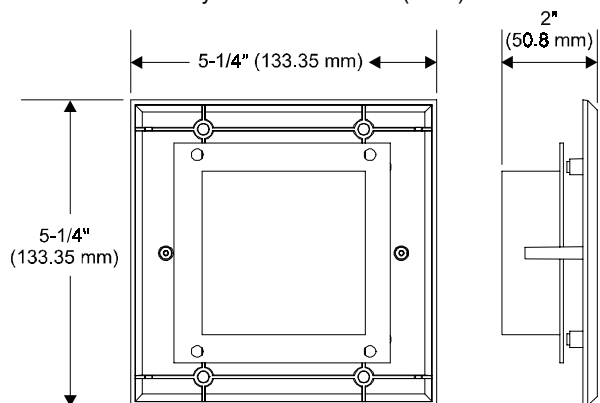


UPPER LEFT: Horn/Strobe with Small Footprint Mounting Plate (same dimensions for strobe only).

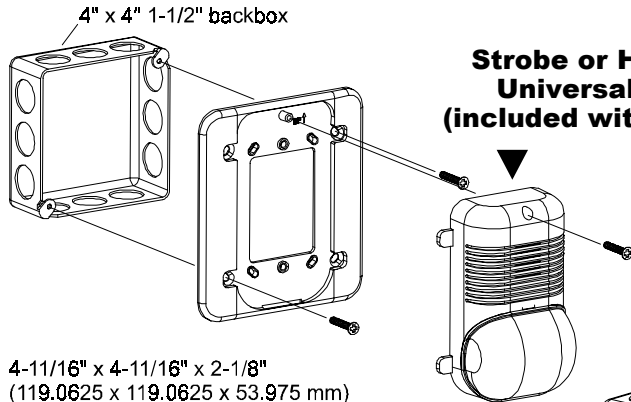
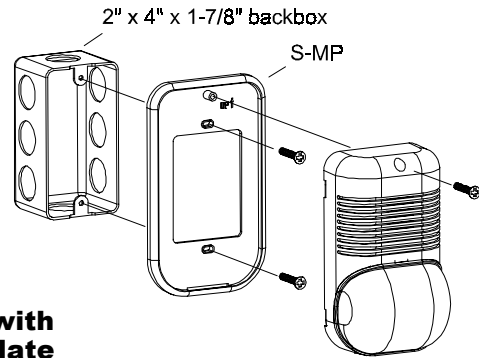
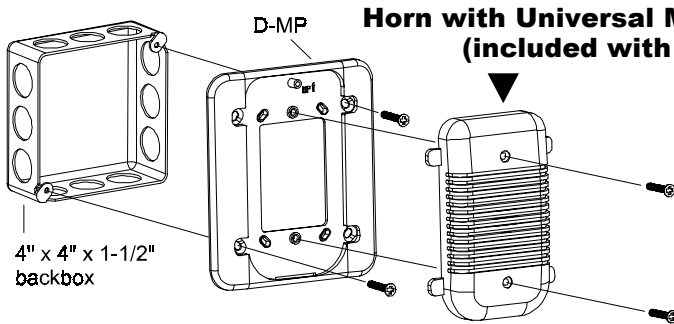
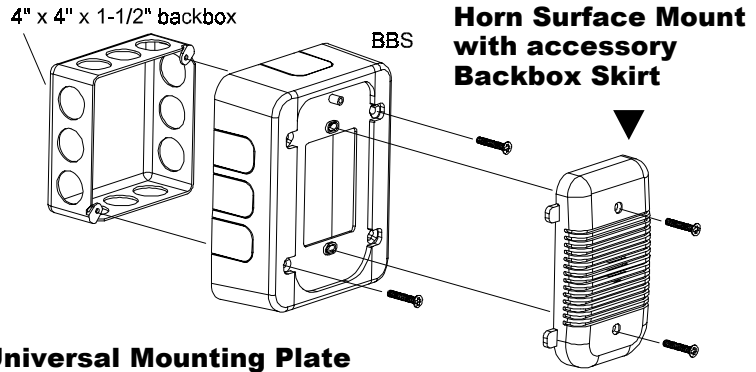
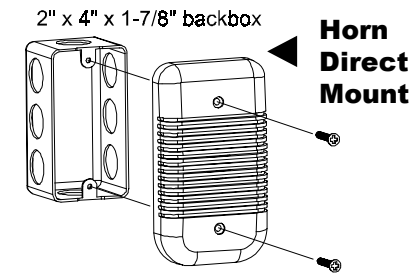
LOWER LEFT: Horn/Strobe with Universal Mounting Plate (same dimensions for strobe only).

UPPER RIGHT: Horn only (may be mounted with either Small Footprint or Universal Mounting Plate).

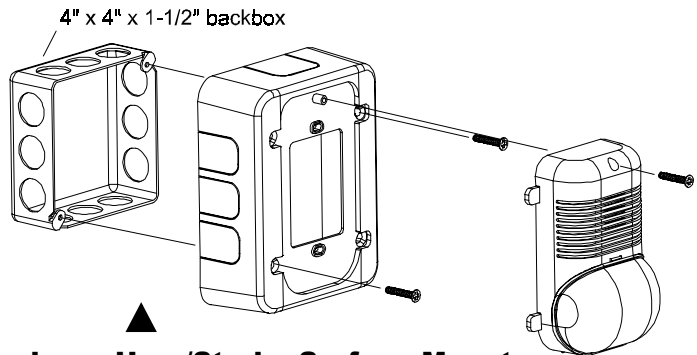
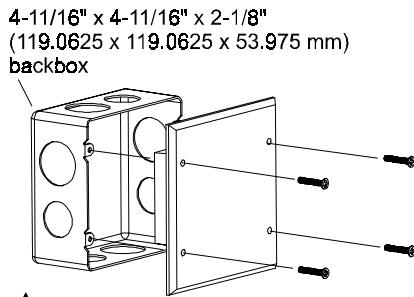
LOWER RIGHT: SyncCircuit Module (MDL).



MOUNTING DIAGRAMS



Strobe or Horn/Strobe with accessory Small Footprint Mounting Plate



Sync•Circuit Module Direct Mount

Strobe or Horn/Strobe Surface Mount with accessory Backbox Skirt

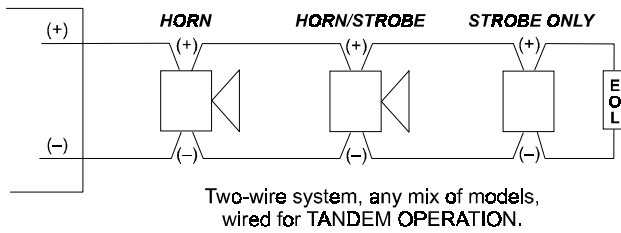
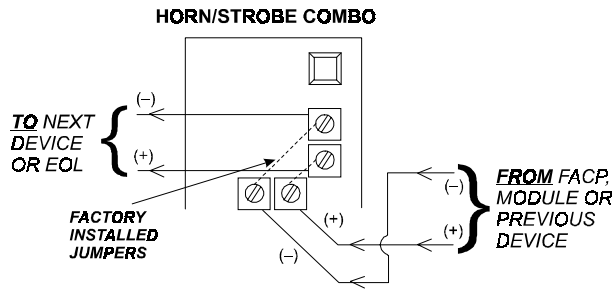
SOUND OUTPUT GUIDE (dBA)

			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	90	93	95	98	100	101	102

WIRING DIAGRAMS

NOTE: Do NOT loop wires under terminal screws.

Tandem Operation



▼ Horns silenced over two-wire circuit.

- Any mix of horn/strobes or strobe-only devices is acceptable.
- Horn control connects to interruptible power source.

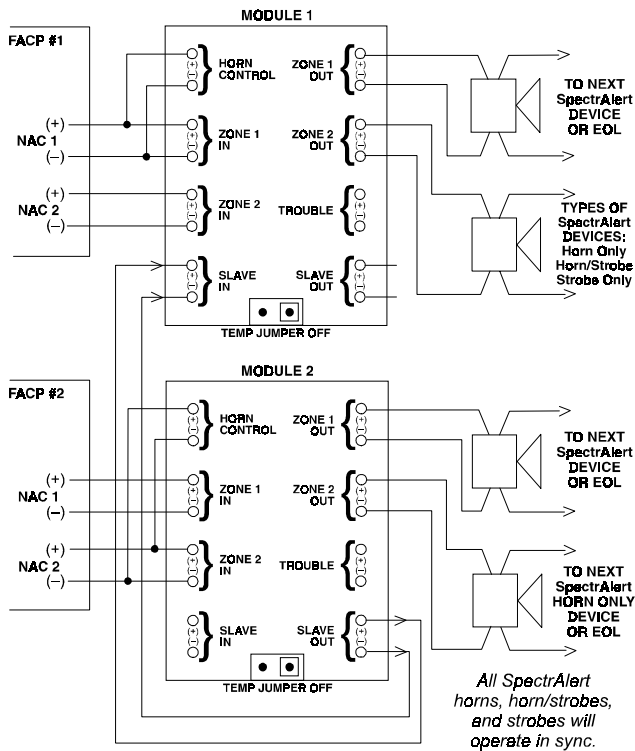
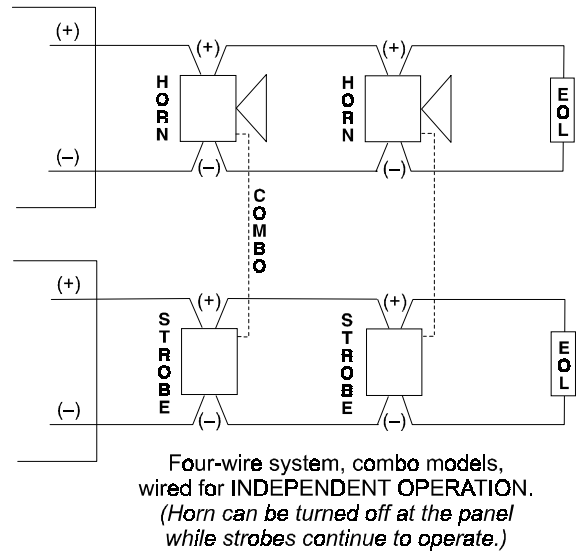
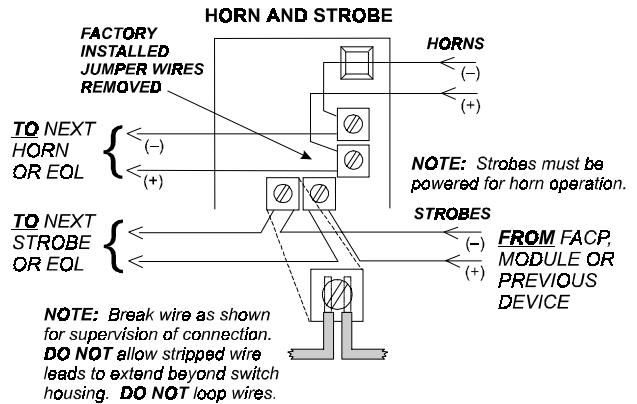


DIAGRAM NOTES:

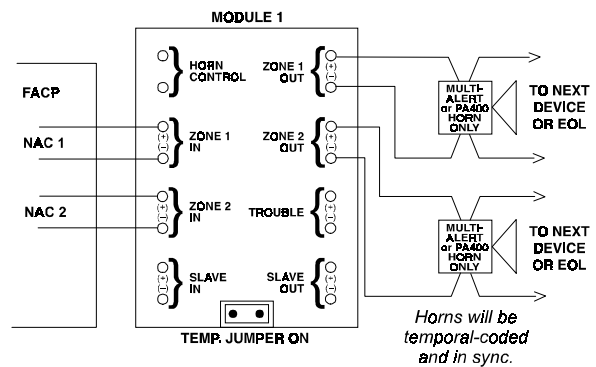
- 1) Any mix of SpectrAlert horn/strobe, strobe-only, or horn-only devices is allowable for Zone 1.
- 2) No devices or horn-only are allowed on Zone 2. If no devices are installed on Zone 2, terminate EOL resistor at horn control terminal.

Independent Operation



▼ Temp 3 coding of Multi-Alert and PA400 sounders.

NOTE: Strobes must be powered from non-coded supply.



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	78	98
	P241575	P241575W	24	15/75	91	111
	P2475	P2475W	24	75	148	167
	P24110	P24110W	24	110	165	209
	P241575K (weatherproof)	—	24	15/75	91	111
	P2475K (weatherproof)	—	24	75	148	167
	P24110K (weatherproof)	—	24	110	165	209
Canadian Models, Horn/Strobes	P2415A	P2415WA	24	15	78	98
	P241575A	P241575WA	24	15/75	91	111
	P2475A	P2475WA	24	75	148	167
	P24110A	P24110WA	24	110	165	207
	P241575KA (weatherproof)	—	24	15/75	91	111
	P2475KA (weatherproof)	—	24	75	148	167
	P24110KA (weatherproof)	—	24	110	165	209
Spanish Labeling, H/S	P241575F (FUEGO)		24	15/75	91	111
Strobes	S1215	S1215W	12	15	114	157
	S121575	S121575W	12	15/75	142	171
	S2415	S2415W	24	15	53	80
	S241575	S241575W	24	15/75	66	93
	S2475	S2475W	24	75	123	149
	S24110	S24110W	24	110	140	191
	S241575K (weatherproof)	—	24	15/75	66	93
	S2475K (weatherproof)	—	24	75	123	159
	S24110K (weatherproof)	—	24	110	140	191
Canadian Models, Strobes	S2415A	S2415WA	24	15	53	80
	S241575A	S241575WA	24	15/75	66	93
	S2475A	S2475WA	24	75	123	149
	S24110A	S24110WA	24	110	140	191
	S241575KA (weatherproof)	—	24	15/75	66	93
	S2475KA (weatherproof)	—	24	75	123	149
	S24110KA (weatherproof)	—	24	110	140	191
Spanish Labeling, Strobes	S241575F (FUEGO)		24	15/75	66	93
Horns	H12/24	H12/24W	12/24	NA	12 / 23	12 / 21
	H12/24K (weatherproof)	—	12/24	NA	12 / 23	12 / 21
	HC12/24 (coded power)	HC12/24W (coded power)	12/24	NA	12 / 23	12 / 21
	HC12/24K (weatherproof, for coded power)	—	12/24	NA	12 / 23	12 / 21
	H12/24A	H12/24WA	12/24	NA	12 / 23	12 / 21
	H12/24KA (weatherproof)	—	12/24	NA	12 / 23	12 / 21
Accessories ▼	HC12/24A (coded power)	HC12/24WA (coded power)	12/24	NA	12 / 23	12 / 21
	Sync•Circuit Module					
	MDL	MDLW	12/24	NA	16	24
	MDLA	MDLWA	12/24	NA	16	24
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

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' rooms or less. *For a complete listing of SpectrAlert current requirements, please refer to the Current Draw tables on page 2 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.