Simplex

UL, ULC, CSFM Listed; FM Approved* True Alert[®] Multi-Candela Notification Appliances

SmartSync[™] Operation Audible/Visible Notification with Multi-Tone Horn and Synchronized Flash, Non-Addressable

Features

Audible/visible wall mount notification appliances with electronic multi-tone horn and high output xenon strobe:

- Strobe operation is compatible with ADA requirements (refer to important installation information on page 3)
- Rugged, high impact, flame retardant thermoplastic housings are available in red or white with clear lens

Operates over a two-wire Simplex[®] SmartSync circuit to provide:

- Horn tones controlled separately from strobes on the same two-wire circuit with "on-until-silenced" and "on-until-reset" operation on the same two-wire pair
- Strobe appliances on the same circuit operating at a synchronized 1 Hz flash rate (refer to page 2 for additional SmartSync control information and panel compatibility)

Audible notification appliance (multi-tone horn):

- Low current, 24 VDC electronic multi-tone horn with per appliance tone selection of: Horn, Bell, 500 Hz Horn, Canadian Horn, Slow Whoop, Siren, or Hi/Lo; selected using an on-board DIP Switch
- Slow Whoop, Siren, and Hi/Lo tone selections sound their tones continuously, synchronized to each other, when receiving Temporal Pattern, March Time, or continuous SmartSync commands
- SmartSync March Time pattern produces a 60 BPM output for the Horn, 500 Hz Horn, and the Bell tone; Canadian Horn produces a 20 BPM output from the SmartSync March Time pattern command
- Output level selectable as standard or high (refer to sound output details on page 3)
- Listed to UL 464 and ULC S525

Visible notification appliance (strobe):

- 24 VDC xenon strobe; intensity is selectable as 15, 30, 75, or 110 candela with visible selection jumper secured behind strobe housing
- Regulated circuit design ensures consistent flash output and provides controlled inrush current
- Listed to UL 1971 and ULC S526

Wall mount multi-tone horn/strobes features:

- Wiring terminals are accessible from the front of the housing providing easy access for installation, inspection, and testing
- Covers are available separately to convert housing color
- Optional UL/ULC listed sound damper for locations requiring attenuation of 5 to 6 dBA (stairwells, small rooms, highly reverberant areas, etc.)
- Adapters are available to cover surface mounted electrical boxes and to adapt to Simplex 2975-9145 boxes
- UL listed red wire guards are available*



Multi-Tone Horn/Strobes

Description

Multi-Candela TrueAlert multi-tone horn/strobes provide convenient wall mounted installation to standard electrical boxes. Tone selection and output level is set per appliance, allowing notification needs to be tailored to specific area requirements. (Refer to tone output details on page 3.)

Local Tone Selection. DIP Switch selection determines the local tone choice. Selecting Canadian Horn allows the SmartSync March Time pattern input to be produced as 20 BPM (typically required for Canadian two stage alarm applications as the pre-signal, followed by the Temporal Pattern). A separate DIP Switch position allows selection of a standard or a high output sound level, selectable appropriate to the location. (See page 3 for sound output ratings.)

Enclosure designs are both impact and vandal resistant and provide a convenient strobe intensity selection. Since each model can be selected for strobe intensity output and specific tone output, on-site model inventory is minimized and changes encountered during construction can be easily accommodated.

Wall mount multi-tone horn/strobe housings are a one-piece assembly (including lens) that mounts to a single or double gang, or 4" square standard electrical box. The cover can be quickly removed (a tool is required) and covers are available separately for color conversion.

Strobe Intensity Selection

During installation, a selection plug at the back of the housing determines the desired strobe intensity. An attached flag with black letters on a highly visible yellow background allows the selected intensity to be seen at the side of the strobe lens.

- * Refer to page 2 for guard listing. This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7135-0026:335 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Safety Products Westminster.
- ** Simplex multi-candela SmartSync two-wire multi-tone horn/strobe appliance operation is protected under one or more of the following U.S. Patent Numbers: 5,559,492; 5,622,427; 5,865,527; 5,886,620; 6,281,789; 6,954,137; 7,005,971; and 7,006,003.

Strobe Application Selection

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: the *National Fire Alarm Code* (NFPA 72), ANSI A117.1; the appropriate model building code: BOCA, ICBO, or SBCCI; and the application guidelines of the Americans with Disabilities Act (ADA).

Synchronized Strobes

Multiple Strobes. When multiple strobes and their reflections can be seen from one location, synchronized flashes reduce the probability of photo-sensitive reactions as well as the annoyance and possible distraction of random flashing. The multi-candela strobes of these multi-tone horn/strobes are synchronized by the controlling SmartSync operation NAC.

SmartSync Two-Wire Control

SmartSync operation mode allows a two-wire circuit to provide the ability to activate both the multi-tone horn and strobe on the same NAC and then allow the multitone horn to be silenced while the strobe remains flashing. The multi-tone horn operates as "on-until-silenced" while the strobe operation is "on-until-reset."

SmartSync Control Sources

- 4006, 4008, 4100U, and 4010 Fire Alarm Control Panels (refer to individual product data sheets for more information)
- 4009 IDNet NAC Extender (refer to data sheet S4009-0002)
- SmartSync Control Module (SCM) 4905-9938 (refer to data sheet S4905-0003)

Additional SmartSync compatible notification appliances include separate multi-tone horns and combination multi-tone horn/strobe notification appliances.

Product Selection

Multi-Candela Multi-Tone Horn/Strobes

Model	Housing Color	"FIRE" Lettering	Description	
4906-9137	Red	White	Wall mounted electronic multi-tone horn with multi-candela strobe; strobe intensity selectable as: 15, 30, 75, or 110 candela; operates with SmartSync two-wire control	
4906-9138	White	Red		

Wall Mount Multi-Tone Horn/Strobe Accessories

Model	Descripti	ion	Dimensions		
4905-9937	Red	Surface Mount Adapter Skirt; use to cover 1-1/2" (38 mm) deep surface mounted boxes			
4905-9940	White	surface mounted boxes	depth with strobe = 4-3/8" (111 mm)		
4905-9931		pter Plate for mounting to Simplex 2975-9145 box (typically for nay be mounted vertical or horizontal)	8-5/16" x 5-3/4" x 0.060" Thick (211 mm x 146 mm x 1.5 mm)		
2975-9145	Red Mou	inting Box, requires Adapter Plate 4905-9931	7-7/8" x 5-1/8" x 2-3/4" D (200 mm x 130 mm x 70 mm)		
4905-9838	Optional Sound Damper; package of 20; field installed adhesive backed horn output attenuator; reduces output 5 to 6 dBA NOTE: After Sound Damper installation, measure sound level to ensure compliance with applicable code requirements				
SmartSync	Control	Module			
Model	Descript	ion	Dimensions		
4905-9938	SmartSy (102 mm	nc Control Module with Class B or Class A output; mounts in 4") square box; refer to data sheet S4905-0003 for details	4" x 4-1/8" x 1-1/4" D (102 mm x 105 mm x 32 mm)		
Replaceme	nt Cover	s for Wall Mount Multi-Tone Horn/Strobes			
Model	Description		Dimensions		
4905-9994	Red cove	er with white "FIRE" lettering	5-1/8" H x 5" W x 1-1/2" D		
4905-9995	White co	ver with red "FIRE" lettering	(130 mm x 127 mm x 38 mm)		
Wire Guard					
Model	Descripti	on	Dimensions		
4905-9961*		Int red wire guard with mounting plate, compatible with semi-flush e mounted boxes	6-1/16" H x 6-1/16" W x 3-1/8" D (154 mm x 154 mm x 79 mm)		

* UL listed by Space Age Electronics Inc.

Common Spec	ifications					
Rated Voltage	Range	Regulated 24 DC; see Note 1 below				
Flash Rate and	Synchronized NAC Loading	1 Hz; with up to 35 synchronized strobes maximum per NAC				
Environmental;	Temperature and Humidity	32° to 122° F (0° to 50° C); 10% to 93%, non-condensing at 100° F (38° C)				
Connections		Terminal blocks for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); two wires per terminal for in/out wiring				
Housing Dimen	sions (with lens)	5-1/8" H x 5" W x 2-3/4" D (130 mm x 127 mm x 70 mm)				
Multi-Tone Ho	rn Sound Output Characteristi	cs (see notes as indic	ated)			
		Sound Output Ratings per UL 464 Reverberant Chamber test @ 10 ft (~3 m)		Sound Output Ratings per ULC S525 Anechoic Chamber test @ 3 m (~10 ft		
Tone	Description	Standard Output	High Output	Standard Output	High Output	
Horn ² or Canadian Horn ²	2400 to 3700 Hz sweep, modulated at 120 Hz rate	77 dBA	86 dBA	92 dBA	102 dBA	
Bell ²	1560 Hz modulated at 7 ms intervals	73 dBA*	87 dBA	84 dBA**	99 dBA	
500 Hz Horn ²	500 Hz tone	77 dBA	86 dBA	84 dBA**	99 dBA	
Slow Whoop ³	500 Hz to 1200 Hz sweep	73 dBA*	83 dBA	90 dBA	103 dBA	
Siren ³	600 Hz to 1200 Hz, 1 sec on then repeat	67 dBA*	79 dBA	87 dBA	100 dBA	
High/Low ³	Alternating tones of 1000 Hz and 800 Hz, 250 ms duration	77 dBA	86 dBA	91 dBA	102 dBA	
0		-3 dBA at +/-30° off-axis				
Sound Dispersi	on per ULC S525 testing	-6 dBA at +/- 50° off-axis				
Strobe Output	Ratings (see notes as indicated) (k				
	Current Poting por Strobo	15 cd	30 cd	75 cd	110 cd	

Maximum RMS Current Rating per S	trobe	15 cd	30 cd	75 cd	110 cd
Setting (see Note 4 below)	81 mA	117 mA	216 mA	281 mA	
Reference RMS Currents at other	18 VDC	72 mA	104 mA	192 mA	250 mA
voltages	24 VDC	54 mA	78 mA	144 mA	187 mA

* For Private Mode use only. Always test installed sound level against local requirements.

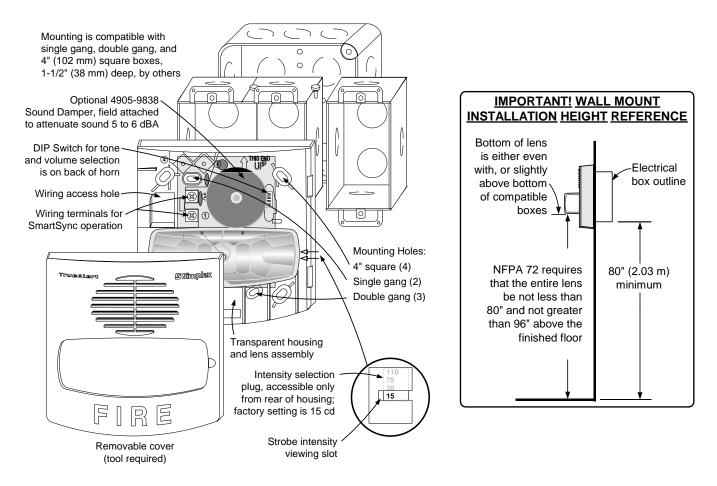
** Tones at this setting are not for use in ULC fire alarm applications.

Notes:

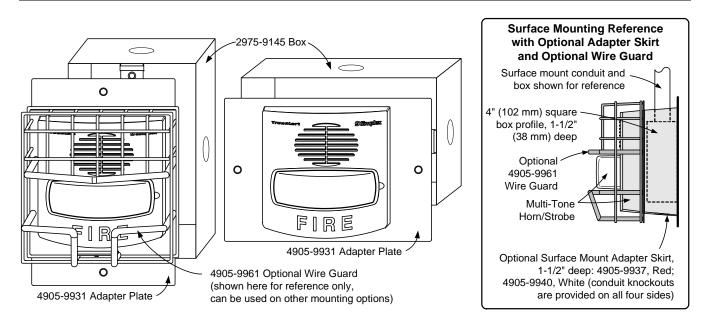
- "Regulated 24 DC" refers to the voltage range of 16 to 33 VDC per UL Standard 1971, Signaling Devices for the Hearing Impaired. This voltage range is the absolute operating range. Operation outside of this range may cause permanent damage to the appliance. Please note that 16 VDC is the lowest operating voltage that is allowed at the last appliance on the NAC under worst case conditions.
- These tones are controlled by SmartSync commands to produce Temporal Pattern, March Time Pattern, or Continuous. Selecting Horn, 500 Hz Horn, or Bell mode will produce a 60 BPM March Time Pattern; selecting Canadian Horn mode (CA Horn) will produce a 20 BPM March Time Pattern, typically used for Canadian applications.
- Slow Whoop, Siren, and High/Low tones run Continuous when receiving any of the SmartSync ON commands. As with the horn
 and bell tones, they are synchronized to the controlling SmartSync timing commands, allowing synchronization across multiple
 NACs.
- 4. Currents are with multi-tone horn on steady. The maximum RMS current listed is the device nameplate rating. Strobe designs are constant wattage and the maximum RMS current rating occurs at the lowest allowable operating voltage. (RMS is root mean square and refers to the effective value of a varying current waveform.)

Installation Reference, Surface or Semi-Flush Mounting

For additional information, refer to Installation Instructions 579-907.



Wall Mount Installation Reference; Adapter Plate, Guard, and Adapter Skirt



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5 Simplex

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