Σ®Simplex

Features

Convert conventional Notification Appliance Circuits (NACs) into SmartSync circuits or synchronized strobe circuits:
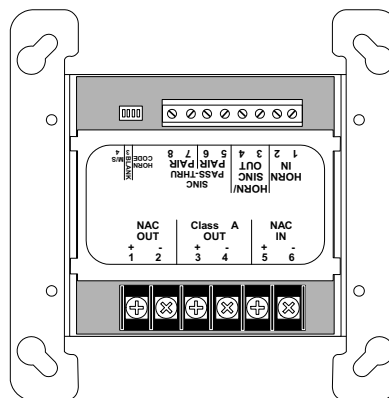
- SmartSync Control Modules combine separate horn and strobe NAC inputs into a 2-wire control that can silence horns while maintaining synchronized strobe operation**

- Synchronized Flash Modules provide a 2-wire synchronized strobe output that also operates compatible 24 VDC conventional reverse polarity notification appliances**

SmartSync Control Module (SCM) provides two-wire control to separately activate horns and strobes:

- Operation allows "on-until-silenced" and "on-until-reset" on the same two-wire pair while maintaining supervision continuity

- SmartSync horns sound as Temporal or March Time pattern, or continuous, controlled separately from strobes on the same circuit

- Strobes on the same circuit operate at a synchronized 1 Hz flash rate

- Output is either Class B or Class A

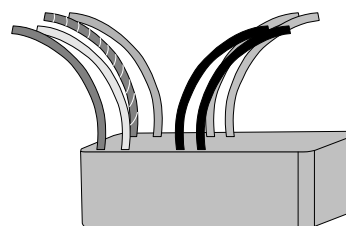**Conventional strobe synchronization models:**

- Encapsulated package with color coded wire leads provides 1 Hz strobe synchronization and maintains supervision continuity

- Conventional horns and other DC appliances operate on the same 2-wire circuit

- Models are available with Class B or Class A output

- Small size allows convenient mounting

UL listed to Standard 1971

4905-9938 SmartSync Control Module (SCM), Shown Approximately 1/2 Size

4905-9922, Class A Synchronized Flash Module, Shown Approximately 1/2 Size

Smart*Sync* Control Module (SCM)

Model 4905-9938 SCM (SmartSync Control Module) converts two conventional NAC inputs into a SmartSync two-wire NAC output. One NAC can be programmed to operate as "on-until-silenced" and would be designated as the horn control (non-coded, on continuously during alarm). A second NAC would be programmed to provide "on-until-reset" operation and would be for the visible appliance (strobe) control (also non-coded, on continuously during alarm). Power is supplied by the strobe control NAC.

Selectable Horn output and Synchronized Strobes. In addition to operating the strobe and the horn independently, the SCM can be switch selected to operate the horns as temporal coded, march time coded (60 beats/minute), or on continuously. Strobes are activated with 1 Hz synchronized flashes.

Additional SCM Features

Multi-Sync Mode. Up to eight SCMs can be interconnected to synchronize system notification. Interconnected SCMs are supervised for proper circuit connection. The horn input NAC powers the Multi-Sync function.

Isolated NAC Inputs. Both NAC inputs are isolated from each other and can be supplied from different control panels.

Class B (Style Y) and Class A (Style Z) output operation are both supported.

Earth fault detection is provided by the strobe control NAC during supervision mode.

For additional information refer to Installation Instructions 574-719.

Synchronized Flash Modules

Model 4905-9914 and 4905-9922 add the required control to activate Simplex synchronized strobes for NACs that do not provide that control. Conventional horns or other compatible 24 VDC notification appliances on the same circuit ignore strobe synchronization and operate when the NAC is in alarm.

For additional information refer to Installation Instructions 579-232.

Product Selection

Model	Description	Package Details
4905-9938	SmartSync Control Module, Class A or Class B output	Dimensions: 4" x 4-1/8" x 1-1/4" D (102 mm x 105 mm x 32 mm); mounts in 4" (102 mm) square box
4905-9914	Class B Synchronized Flash Module	Dimensions: 1-3/8" x 2-7/16" x 13/16" D (35 mm x 62 mm x 20 mm); epoxy encapsulated with 8" (203 mm) in/out 18 AWG (0.82 mm^2) wire leads; rated for 2 A NAC; requires 5 mA for power
4905-9922	Class A Synchronized Flash Module	

Specifications

General Specifications

Temperature Range	32° to 122° F (0° to 50° C)
Humidity Range	10% to 93%, non-condensing at 100° F (38° C)

4905-9938 SmartSync NAC Modules (for use with SmartSync compatible appliances)

Input Voltage Range	16 VDC to 33 VDC; with a maximum ripple of 2 V peak-to-peak
Output Ratings	2 A maximum; can be wired as Class A or Class B
	Up to 35 maximum SmartSync appliances with strobes
	Up to 40 maximum SmartSync horn-only appliances
Strobe Control NAC Input Current	Output NAC current, plus 30 mA @ 24 VDC for SCM operating power
Horn Control NAC Current	4 mA @ 24 VDC
Class A Operation Mounting Requirement	Mount SCM within 20 ft (6 m) of control panel, use metal conduit

4905-9914 & 4905-9922 Synchronization Modules

Input Voltage Range	16 VDC to 33 VDC
Output Ratings	2 A maximum output; requires 5 mA for power
	Up to 35 maximum strobes per synchronized circuit
	Mount in control panel or separate 4" (51 mm) square electrical box, 1-1/2" (38 mm) minimum depth

NAC Capability Reference

Control Panels/NAC Source	Available Output	Module Required/Function
4010 Series Fire Alarm Control Panels	Class A or Class B Strobe Synchronization	NA
	Class B SmartSync Operation	4905-9938 for Class A SmartSync operation
4006, 4008, and 4100U Series Fire Alarm Control Panels	Class A or Class B Strobe Synchronization	NA
	Class A or Class B SmartSync operation	NA
Model Series 4003, 4004, 4005, 4100, 4120, 4020, 4001, & 4002 Control Panels; 2190 Series Signal ZAMs; 4009 Series Conventional NAC Extenders	Conventional reverse polarity NACs, additional modules are required to control synchronized strobes and/or SmartSync appliances	4905-9914 for Class B synchronized strobes
		4905-9922 for Class A synchronized strobes
		4905-9938 for SmartSync control
4009 IDNet NAC Extenders	Class A or B Strobe Synchronization	NA
	Class B SmartSync Operation	4905-9938 for Class A SmartSync operation

Module Reference

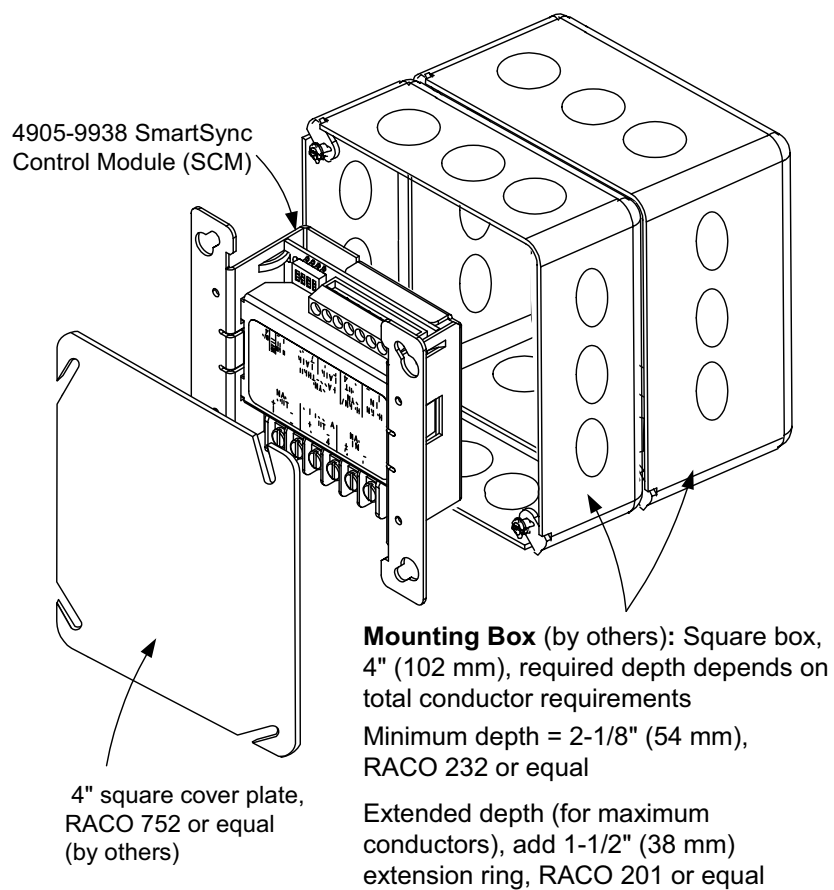| Module	Description
4905-9938	SmartSync Control Module, provides Class A or Class B SmartSync operation
4905-9914	Class B Strobe Synchronization Module
4905-9922	Class A Strobe Synchronization Module

Compatible Appliance Reference

Appliance Type		Model*			Module Reference**
Horn	Wall mount; selectable for **SmartSync** operation	4901-9820			4905-9938
Strobes	Wall mount; synchronized; also **SmartSync** compatible	4904-9331	4904-9342	**4906-9101**	4905-9914 4905-9922 4905-9938
		4904-9332	4904-9343	**4906-9103**	
		4904-9333	4904-9344		
	Ceiling mount; selectable for synchronized flash; also **SmartSync** compatible	4904-9183	4904-9345	**4906-9102**	
		4904-9184	4904-9346	**4906-9104**	
		4904-9185			
A/V Horn/Strobe	Wall mount; horn and strobe can be wired separately (4-wire); strobes are selectable for synchronized flash	4903-9425	4903-9427	4903-9432	4905-9914 4905-9922
		4903-9426	4903-9431	4903-9433	
	Wall mount; **SmartSync** operation only (2-wire)	4903-9331	4903-9342	**4906-9127**	4905-9938
		4903-9332	4903-9343	**4906-9129**	
		4903-9333	4903-9344		
	Ceiling mount; **SmartSync** operation only (2-wire)			**4906-9128**	
				4906-9130	
	Rectangular case wall mount; horn and strobe can be wired separately (4-wire); strobes are selectable for synchronized flash	4903-9252	4903-9257	4903-9256	4905-9914 4905-9922
		4903-9253	4903-9258		
		4903-9254	4903-9255		
S/V Speaker/Strobe	Wall mount; strobes are selectable for synchronized flash	4903-9356	4903-9359	**4906-9151**	4905-9914 4905-9922
		4903-9357	4903-9360	**4906-9153**	
		4903-9358	4903-9361		
	Ceiling mount; strobes are selectable for synchronized flash	4903-9196	4903-9198	**4906-9154**	
		4903-9197			
	Rectangular case wall mount; strobes are selectable for synchronized flash	4903-9148	4903-9150H	4903-9194	
		4903-9149	4903-9153	4903-9195	
		4903-9150	4903-9193		

***Bolded PIDs** are Multi-Candela products.

** Modules listed are required if control panel NAC or NAC extender does not provide either synchronized strobe output or SmartSync control output as required for proper appliance operation.

S4905-0003-2 9/2004

4905-9938 SmartSync
Control Module (SCM)

4" square cover plate,
RACO 752 or equal
(by others)

Mounting Box (by others)**:** Square box,
4" (102 mm), required depth depends on
total conductor requirements

Minimum depth = 2-1/8" (54 mm),
RACO 232 or equal

Extended depth (for maximum
conductors), add 1-1/2" (38 mm)
extension ring, RACO 201 or equal