POTTER SMD10-3A Synchronization Module Instruction Manual

POTTER
The Symbol of Protection

Contents

POTTER SMD10-3A Synchronization Module Instruction Manual

SIGNALING UL LISTED ULC LISTED

We recommend use of this product in accordance with installation instructions provided in this manual.

Fire Alarm Equipment Visual Appliance Accessory for the Hearing Impaired

GENERAL DESCRIPTION

AMSECO's SMDI 0-3A is designed to provide operation of synchronized temporal pattern (code 3) tones and synchronized strobe flashes on all AMSECO series Select-A-Horn,Select-A-Horn/Strobe and Select-A-Strobe, as well as the ability to silence the horn while maintaining the strobe flashes. It has the capability of connecting two style Y (class B) circuits or one style Z (class A) circuit, and is rated for 3 amperes per circuit.

SMDI 0-3A can be interconnected so that more than two alarm zones can be synchronized by connecting SYNC terminals as shown in the wiring Fig.6 and 7 (Daisy chain connection).

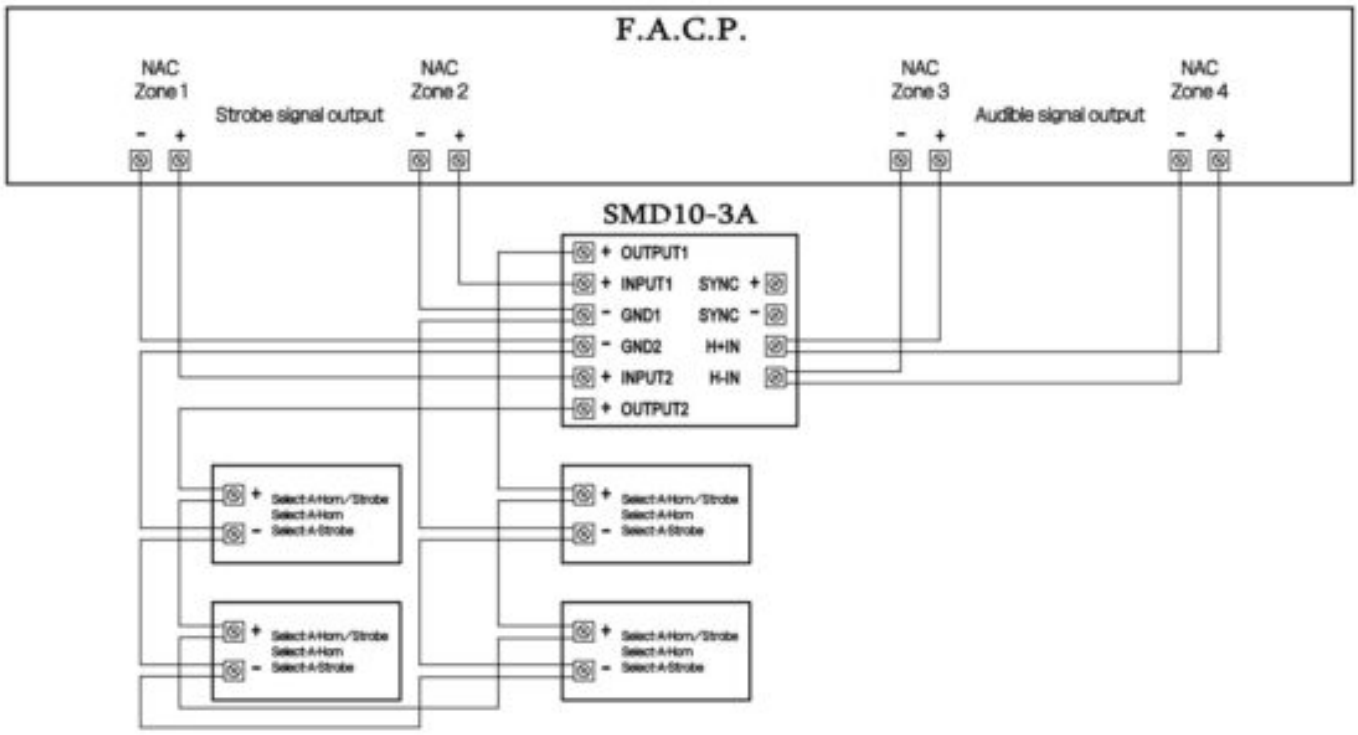
The Max number of interconnected SMDIO-3A is twenty (20).
All input are polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (F.A.C.P.).

SMDI 0-3A is available in standard red color.
The SMDI 0-3A can be interconnected so that more than two alarm zones can be synchronized by connecting the sync terminals (daisy chain connection). The maximum number of interconnected modules is twenty.

All inputs are polarized for compatibility with standard reverse polarity supervision of circuit wiring for F.C.A.P.
For additional compatibility information refer to Compatibility document 5401513 Rev A.

WIRING DIAGRAM

Fig. 1
Wiring Diagram for One Class "A" Circuit.



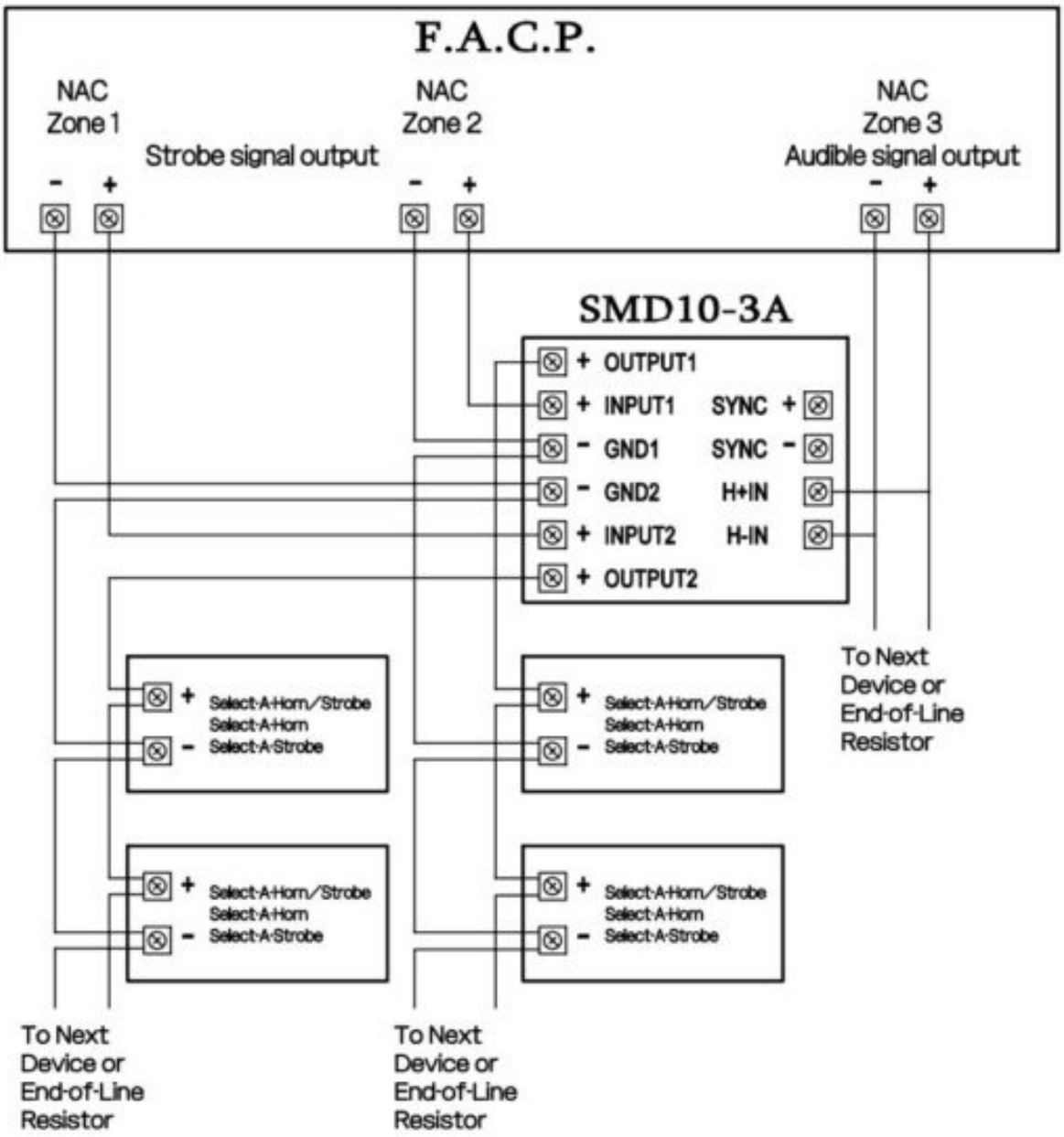
Note 1 :
The SMDIO-3A terminals will accept two #12 to #18 AWG wires per terminal.
Use SMDIO-3A Sync module only on NAC circuit with continuous applied voltage.
The total length of wire connection of the SMDIO-3A's Sync terminal should not exceed '2,000ft of #18AWG overall between the first and last SMDIO-3A (The Max. impedance is 14 ohms). If this limit is exceeded, loss of synchronization between SMDIO-3A's may result.

Do not loop wires under terminal. Use both terminals (or leads) for connection.
Break wire run to provide electrical supervision.

Note 2 :

In Canada, installation should be in accordance with
1) CAN/ULC-S524-06
2) Canadian Electrical code, Part 1.
3) Final acceptance subject to Authorities Having Jurisdiction.

Fig.2
Wiring Diagram for Two Class "B" Circuit with audible silence feature.



Note : INPUT must be powered continuously for OUTPUT2 operation.

Fig.4
Wiring Diagram for Two Class "B" Circuit with no audible silence feature.

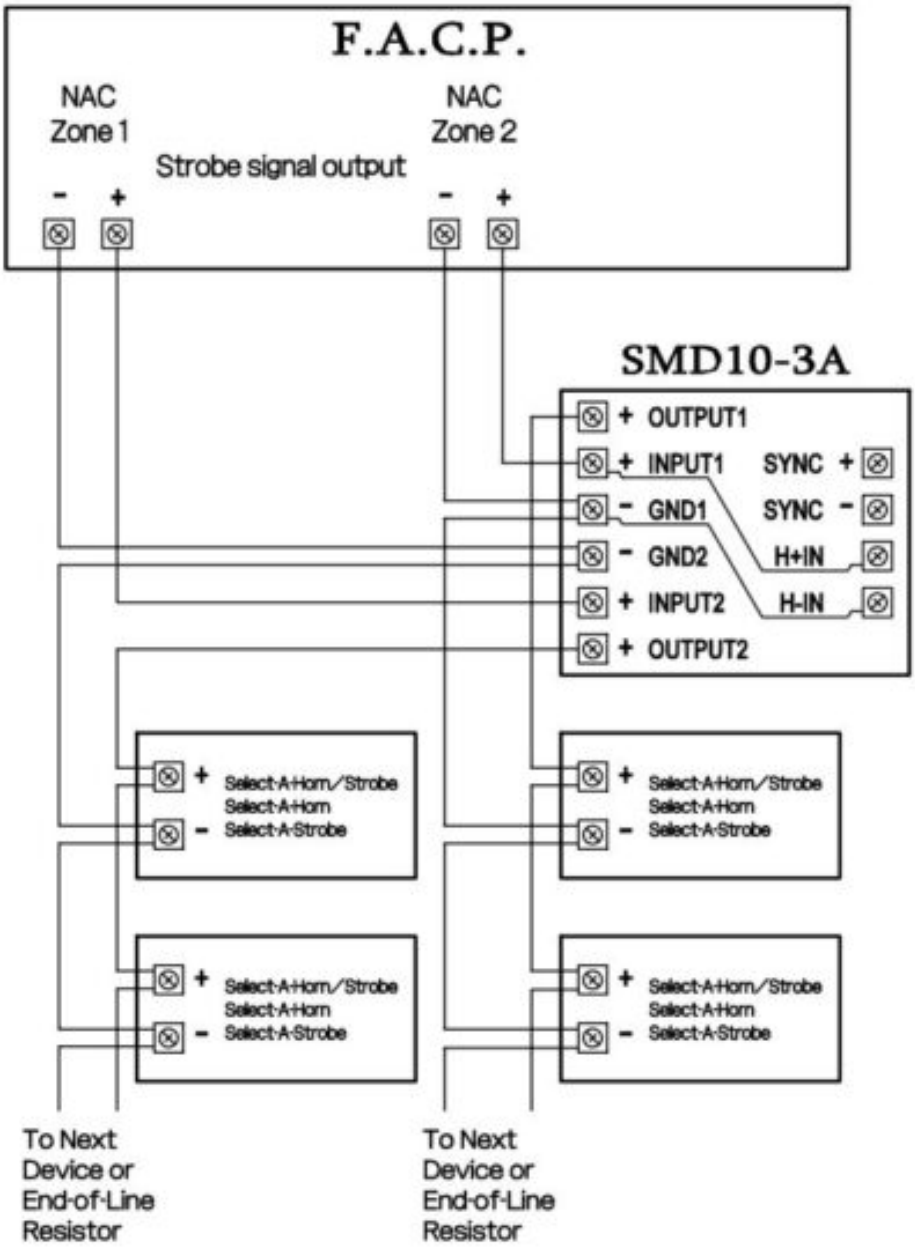


Fig.5
Wiring Diagram for One Class "B" Circuit with no audible silence feature.

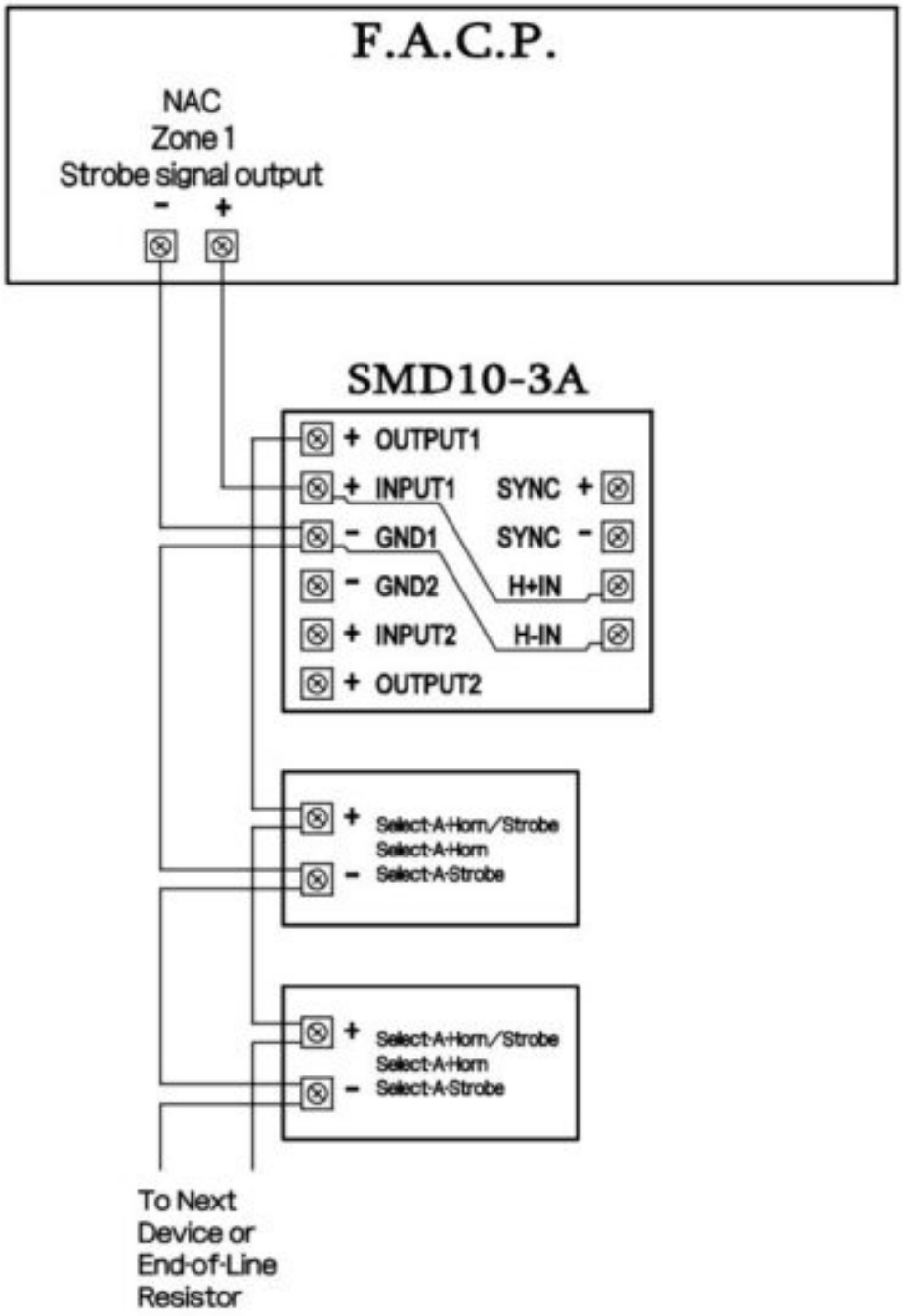
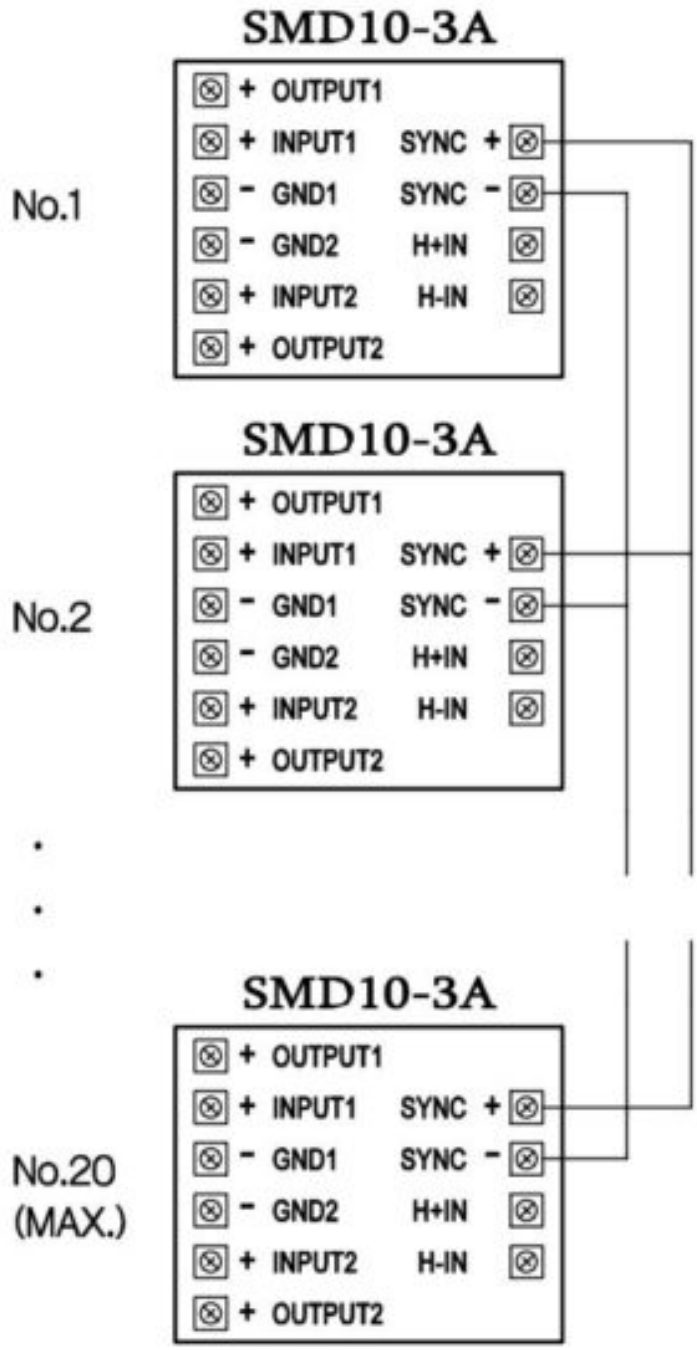
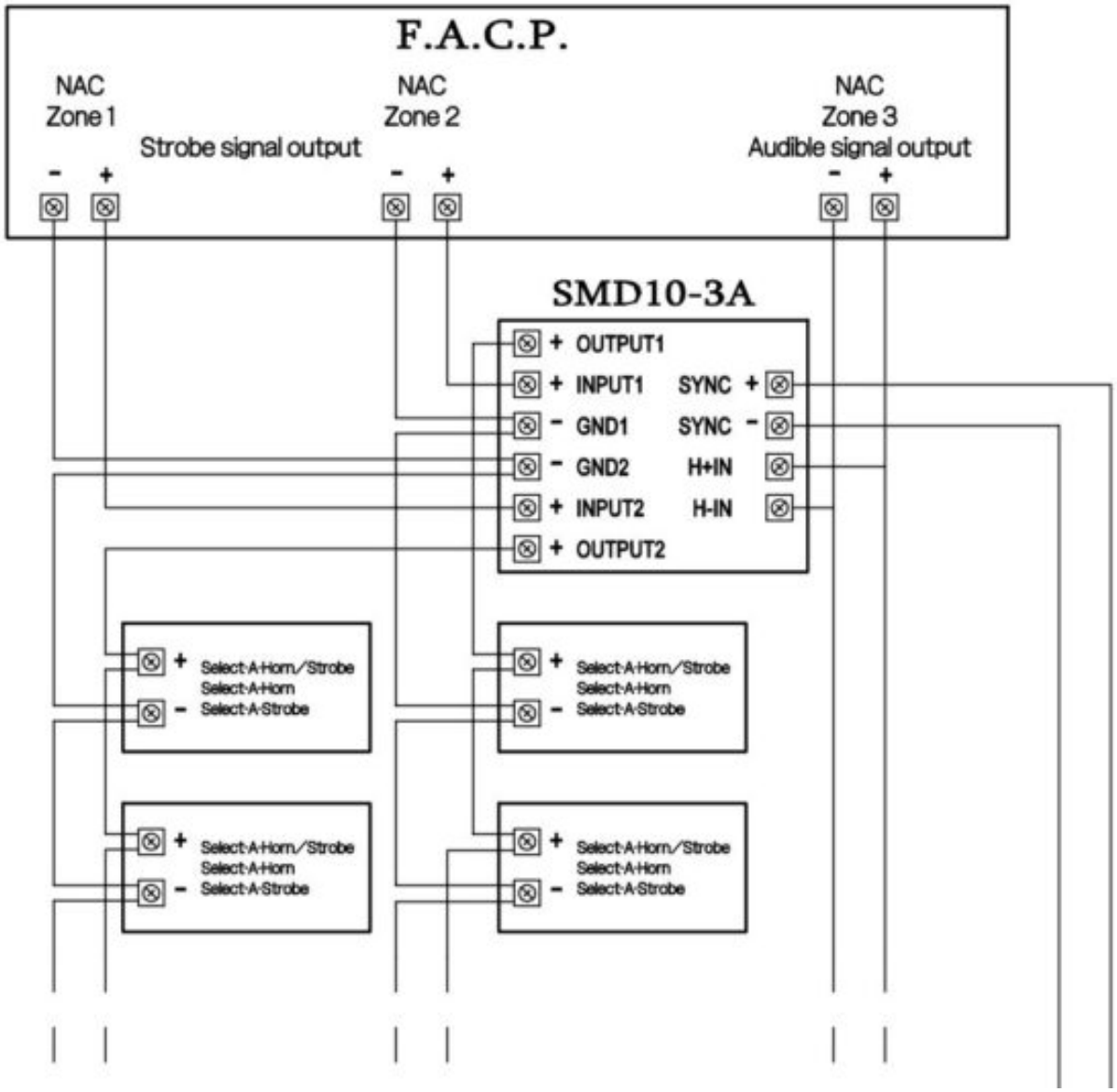


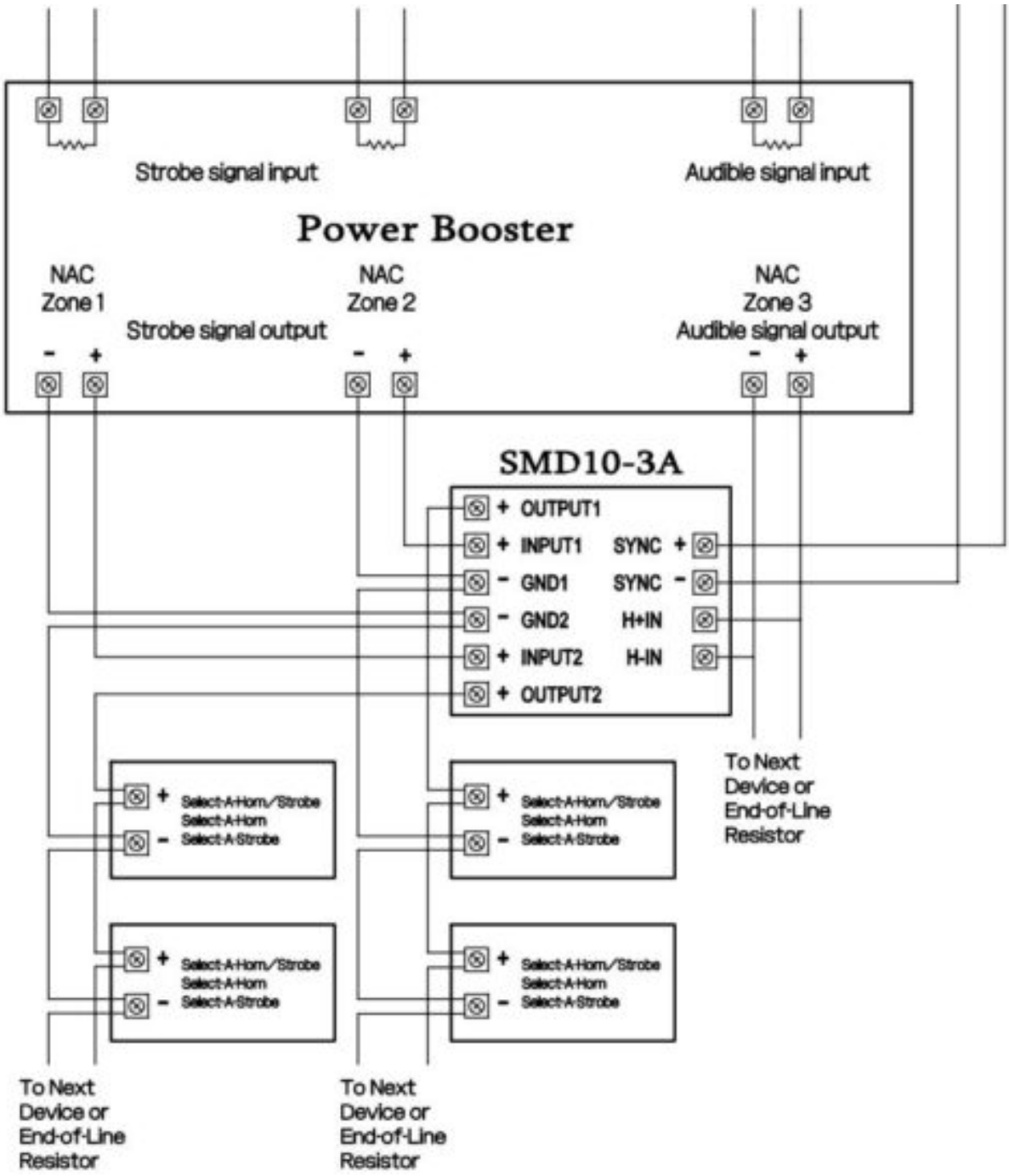
Fig.6
Wiring diagram for Synchronization with more than two alarm zones.



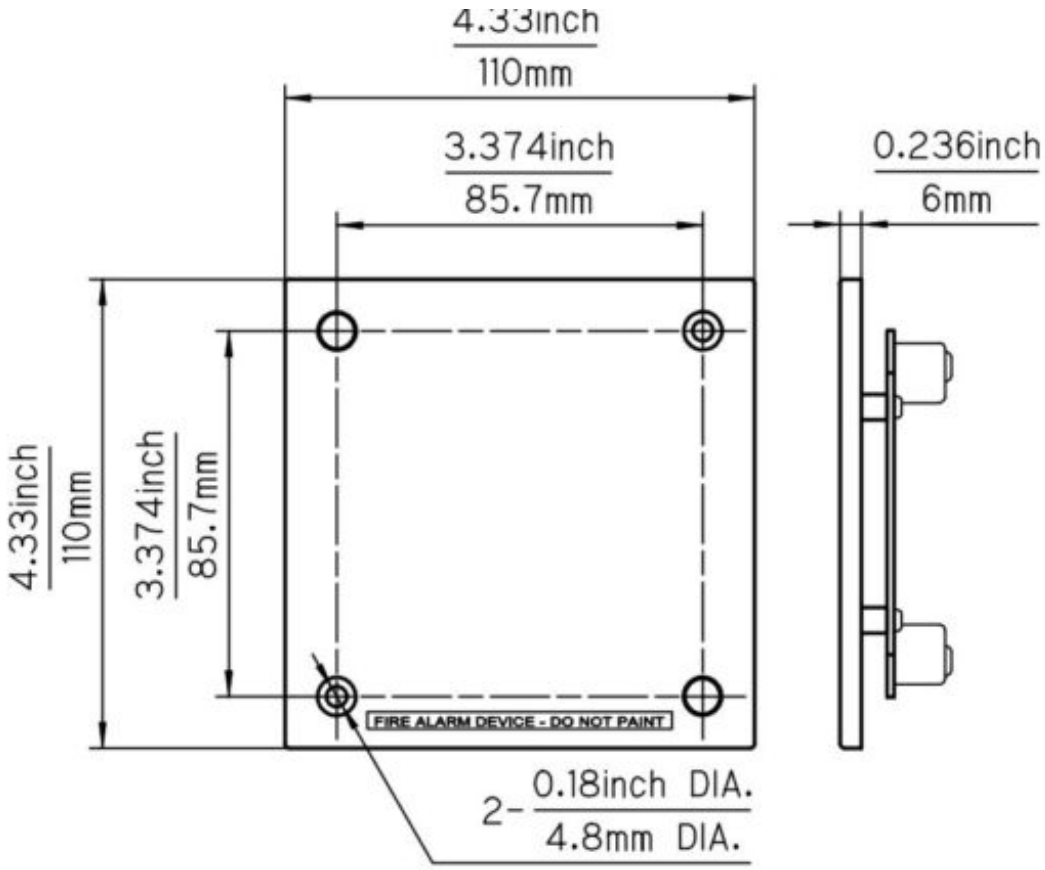
Note
When the connection between two or more synchronization modules is disconnected or loses continuity, the strobe lights connected to one synchronization module may not be synchronized with the strobe lights on a different synchronization module.

Fig.7
Wiring Diagram for Four Class “B” Circuit.


F.A.C.P.
NAC
Zone 1
Strobe signal output
NAC
Zone 2
NAC
Zone 3
Audible signal output
- +
- +
- +
SMD10-3A
+ OUTPUT1
+ INPUT1
SYNC +
- GND1
SYNC -
- GND2
H+IN
+ INPUT2
H-IN
+ OUTPUT2
+ Select-A-Horn/Strobe
Select-A-Horn
- Select-A-Strobe
+ Select-A-Horn/Strobe
Select-A-Horn
- Select-A-Strobe
+ Select-A-Horn/Strobe
Select-A-Horn
- Select-A-Strobe
+ Select-A-Horn/Strobe
Select-A-Horn
- Select-A-Strobe


Strobe signal input
Audible signal input
Power Booster
NAC
Zone 1
NAC
Zone 2
NAC
Zone 3
Strobe signal output
Audible signal output
SMD10-3A
OUTPUT1
INPUT1
SYNC
GND1
SYNC
GND2
H+IN
INPUT2
H-IN
OUTPUT2
Select-A-Horn/Strobe
Select-A-Horn
Select-A-Strobe
To Next
Device or
End-of-Line
Resistor

DIMENSIONS



INSTALLATION

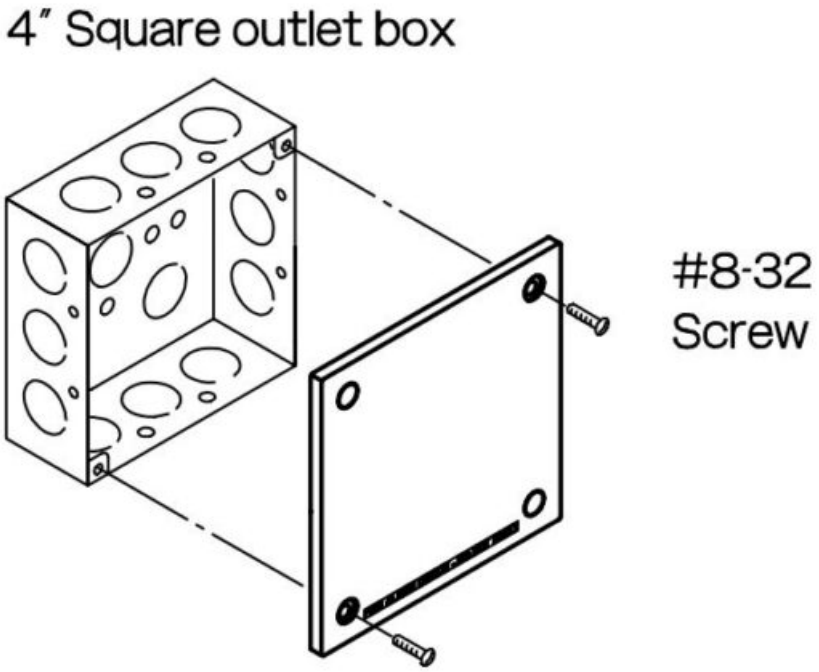


Table 1

Select-A-Horn/Strobe	Select-A-Horn	Select-A-Strobe
SH24W-153075	H24W	SL24W-153075
SH24W-75110	H-1224W	SL24W-75110
SH-1224		SL-1224
SH-24H		SL-24H
SH24C-3075110		SL24C-3075110
SH24C-177		SL24C-177
SHB24-75		SLB24-75
		SA24-153075
		SA24-75110
		SAD/RSD24-153075
		SAD/RSD24-75110

Chime/Select-A-Strobe	Chime
SCM24W-153075	CM24W
SCM24W-75110	CM24C
SCM24C-3075110	
SCM24C-177	

The maximum sync wire impedance between any adjacent SMD10-3A is 14 ohm.

$$\text{MAXIMUM WIRE DISTANCE (Includes wire to and from appliance. In Feet)} = \frac{(\text{PANEL VOLTAGE} - \text{APPLIANCE MIN. VOLT}) \times \text{WIRE CONDUCTIVITY}}{\text{TOTAL CURRENT DRAW}}$$

WIRE	CONDUCTIVITY
18AWG	60
16AWG	95
14AWG	153
12AWG	244

CAUTION : Applies only to regulated supplies. Assumes all appliance are at the end of wire run (worst case).

NOTE : For maximum number of strobe lights for a synchronization system, refer to installation instruction of SELECT-A-HORN/STROBE and SELECT-A-STROBE.

SPECIFICATIONS

Voltage	24V
UL designation	Regulated 24 DC／FWR
Operating Voltage Range	16~33 VDC, 16~33 VFWR
Maximum Load on Loop	3A Average (Maximum 5A Peak)
Operating Temperature Range	32~120° F (0~49° C)
Weight	4oz (115g)
Construction	INDOOR USE

Max. RMS Operating Current (mArms)	
Regulated 24 DC	Regulated 24 FWR
34	68

Note:
UL and ULC current values have different standards-UL1971 and CAN/ULC-526.

Note
The total current required by all devices connected to the SMDI 0-3A shall not exceed 3.0 Amps. average, and not exceed 5.0 Amps. peak.
The SMDIO-3A shall be connected to circuits that provide continuous power voltage.
(Do not use SMDIO-3A on coded or interrupted circuits where the voltage is cycled on and off.)

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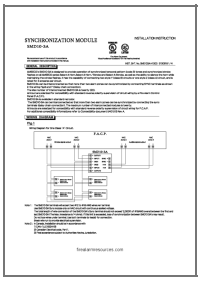	POTTER SMD10-3A Synchronization Module [pdf] Instruction Manual SMD10-3A Synchronization Module, SMD10-3A, Synchronization Module, Module

References

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