



Detector Bases: PAD100-LFSB, PAD100-SPKB

Detectors:
PAD100-PD, PAD100-PHD, PAD200-PD, PAD200-PHD,
PAD200-PCD, PAD200-PCHD, PAD100-HD and PAD100-CD

1. Description

This document provides instructions for mounting and wiring the detector bases PAD100-LFSB and PAD100-SPKB. The following detectors are compatible with detector bases PAD100-LFSB and PAD100-SPKB.

- PAD200-PD & PAD100-PD: Photoelectric Smoke Detector
- PAD200-PHD & PAD100-PHD: Photoelectric Smoke / Heat Detector
- PAD200-PCD: Photoelectric Smoke / CO Detector
- PAD200-PCHD: Photoelectric Smoke / CO Detector/ Heat Detector
- PAD100-HD: Heat Detector
- PAD100-CD: Carbon Monoxide Detector

2a. Field Wiring Diagram for PAD100-LFSB

Typical field wiring diagrams for the Signaling Line Circuit (SLC) (FIGURE 1). The SLC supports NFPA wiring Class B, A and X. (FIGURE 1) Typical of NFPA Class B SLC (S+, S-) Wiring using the PAD100-LFSB base. In Class A arrangement two separate conductors would return from the last detector base to a listed compatible Fire Alarm Control Panel (FACP).

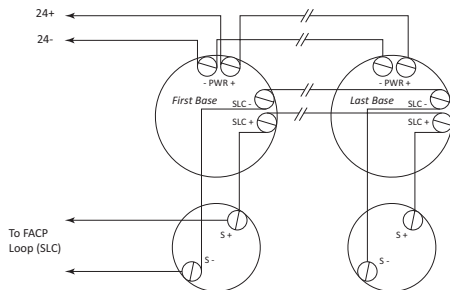


FIGURE 1: Wiring (Class B) Using PAD100-LFSB

Class X Wiring (FIGURE 2), requires use of PAD100-IM (Addressable Isolator Module). The typical field diagram is in Field Wiring Diagram(s) for PAD100-IM. The PAD100-IM manual can be obtained at www.pottersignal.com

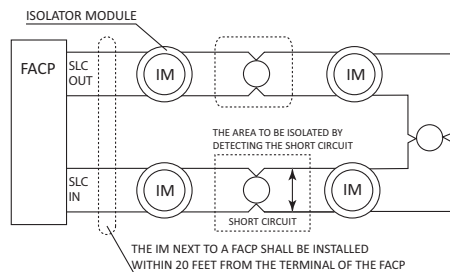


FIGURE 2: Wiring (Class X) Using PAD100-LFSB and PAD100-IM

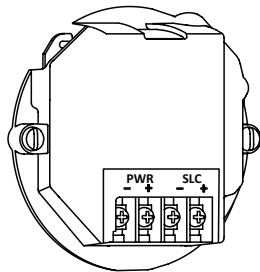


FIGURE 3: PAD100-LFSB Wiring

2b. Field Wiring Diagram for PAD100-SPKB

Typical field wiring diagrams for the Signaling Line Circuit (SLC) (FIGURE 4). The SLC supports NFPA wiring Class B, A and X. The PAD100-SPKB offer a choice of field selectable power taps: 1/8, 1/4, 1/2, 1, 2 and 4 watts (FIGURE 5) for use with either 25 VRMs or 70.7 VRMs audio amplifiers. The frequency range of the PAD100-SPKB is 400-4000 Hz. The PAD100-SPKB is suitable for line supervision. The PAD100-SPKB includes DC blocking capacitor which allows for supervision voltage of either polarity.

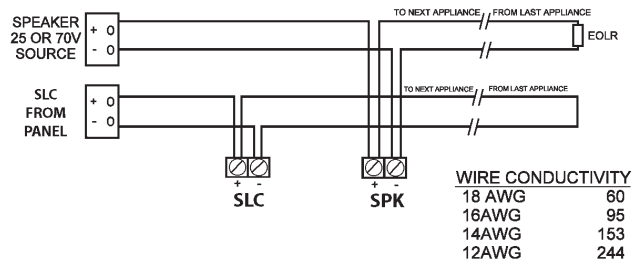


FIGURE 4: PAD100-SPKB Wiring Diagram

Adjust power taps using needle nose pliers.

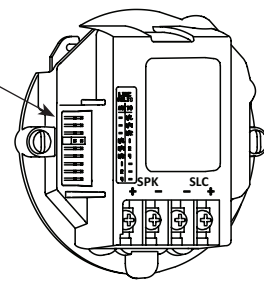


FIGURE 5: PAD100-SPKB Wiring and Power Tap

3. Wiring Instruction

- To ensure proper installation of the detector head to the base, wires shall be dressed properly at the time of installation
- When using PAD100-SPKB / PAD100-LFSB base, observe the correct polarity of SLC wiring.

NOTICE:

- THE WIRING TO BE USED SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF ARTICLE 300.3(B) OF THE NATIONAL ELECTRICAL CODE, NFPA 70, AS WELL AS ARTICLE 210.
- THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 72.
- DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTION.

CAUTION!

- Break wire runs to provide supervision for connections made to each wire pair.
- When installing, route field wiring away from sharp projections, corners and internal components.

Detector Base Mounting

PAD100-LFSB / PAD100-SPKB should be mounted directly on the electrical box (FIGURE 6a) or to the LFSBBB-W back box (FIGURE 6b). The PAD100-LFSB / PAD100-SPKB mounting holes are configured for a 4" x 2-1/8" deep square box. Use a box for each base and run the power circuit to all base locations.

Use 12 to 18 AWG conductors to connect to terminals of bases. It is recommended that the SLC conductors be color-coded to avoid wiring errors and assist in system troubleshooting. Improper SLC connections may prevent the system from operating normally. Disconnect power to the SLC until the detectors are installed.

- Wire the detector bases according to Field Wiring Diagrams.
- Use the dip switches (SECTION 11) to set address(es) (1 - 127) for each detector head.

NOTICE:

- THE PAD100-LFSB /PAD100-SPKB OBTAINS THE ADDRESS FROM THE DETECTOR HEAD.
- THE DETECTORS AND THE PAD100 MODULES MUST HAVE INDIVIDUAL ADDRESS(ES).
- To install the detector head onto the base, match the detector heads to the base using the alignment feature and twist clockwise until the detector heads snap into place (FIGURE 6a).

Mount the PAD100-LFSB / PAD100-SPKB base to the electrical box using the provided mounting screws.

Four screws are provided, two for securing speaker to the back box and two for aesthetics. The two non-functional screws will be held in place by the pressure fit of the faceplate.

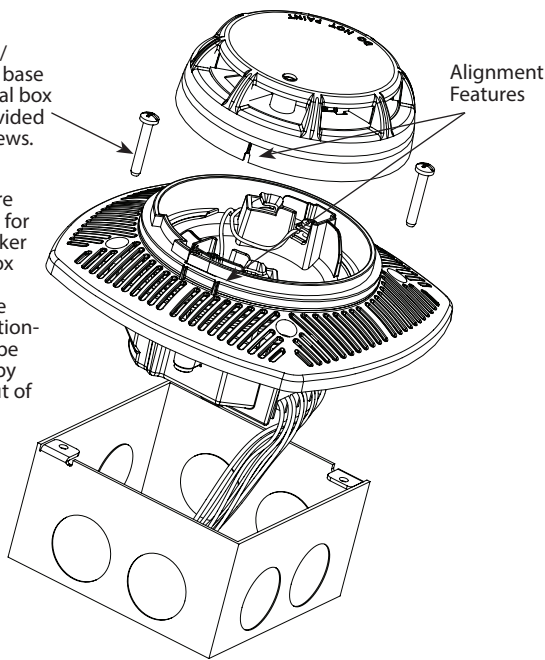


FIGURE 6a: Assembly of Detector on Electrical Box

Mount the PAD100-LFSB / PAD100-SPKB base to the LFSBBB-W Back Box using the provided mounting screws.

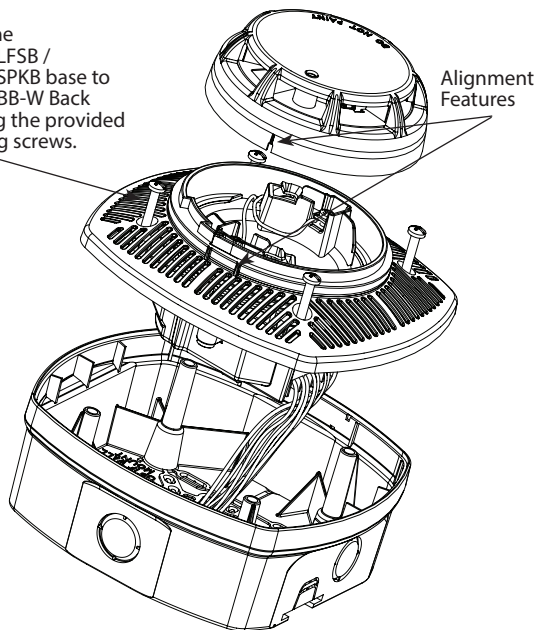


FIGURE 6b: Assembly of Detector on LFSBBB-W Back Box

4. After all detector heads, addressable bases and modules have been installed, apply power to the FACP.
 5. Test the detectors as described in the Testing Section of this manual.
- NOTICE:** DO NOT INSTALL DETECTOR HEADS UNTIL AREA HAS BEEN THOROUGHLY CLEANED TO REMOVE CONSTRUCTION DEBRIS, DUST, ETC., AS REQUIRED BY NFPA 72.

4. Spacing Limitations

NOTICE: REFER TO NFPA 72 FOR SPECIFIC INFORMATION REGARDING DETECTOR SPACING, MOUNTING LOCATION AND SPECIAL APPLICATIONS.

PAD100-PD, PAD200-PD, PAD100-PHD, PAD200-PCD, PAD200-PCHD and PAD200-PHD: Photoelectric Smoke Detector

PAD100-PD, PAD200-PD, PAD200-PCD, PAD200-PCHD, PAD100-PHD and PAD200-PHD are ANSI/UL listed on maximum 30ft spacing limitation with alarm set point from 135°-174° F on smooth ceiling. Refer to NFPA 72 for specific information regarding detector spacing, placement and special applications.

PAD100-HD: Heat Detector

The ANSI/UL listed spacing limitations of PAD100-HD smooth ceiling are dependent on alarm set point.

Alarm Set-Point	Rate of Rise Spacing	Fixed Temperature Spacing
135° to 174°F (57° to 79° C)	Maximum 60 ft.	Maximum 60 ft.
175° to 185°F (80° to 85° C)	Maximum 15 ft.	Maximum 15 ft.
135° to 160°F (57° to 71° C)	Maximum 70 ft.	Maximum 70 ft.

5. Testing

Testing shall be performed periodically to determine if each detector operates properly. Detectors will offer maximum performance when tested in compliance with NFPA 72.

NOTICE: REFER TO FIRE ALARM CONTROL PANEL (FACP) MANUAL FOR OPERATION OF DIRTY VALUE READ / PRINT, ALARM SIMULATION AND WALK TEST.

Operational Testing

When PAD100-PD, PAD200-PD, PAD100-PHD, PAD200-PHD, PAD200-PCD, PAD200-PCHD, PAD100-HD and PAD100-CD are under normal conditions in standby mode, the alarm indicator LEDs will pulse approximately once every 4 seconds.

NOTICE: WHEN A PANEL IS CONFIGURED TO NOT FLASH LEDS, THE LEDS ON THE DETECTORS WILL NOT FLASH AT ANY TIME.

Sensitivity Testing

(Dirty Value Read / Print)

The sensitivity drift value (Dirty Value) of the smoke detector can be checked at the FACP. The Dirty Value can be read and printed out at the FACP.

NOTICE: DETECTOR COMPENSATES SENSITIVITY UNTIL LIMIT OF COMPENSATION. WHEN COMPENSATION RATE REACHES LIMIT, A TROUBLE SIGNAL WILL BE INDICATED ON THE FACP.

Functional Testing

NOTICE: BE SURE TO DIS-ENGAGE ALL ALARM SIGNAL SERVICES, RELEASING DEVICES AND EXTINGUISHING SYSTEMS, PRIOR TO PERFORMING THE FOLLOWING TEST, EXCEPT AUTOMATIC TESTING BY THE FACP. BE SURE TO RE-ENGAGE THESE SYSTEMS WHEN ALL TESTING IS COMPLETE.

Walk Test

The FACP must be placed into Walk Test Mode and follow the steps below. Use the appropriate steps outlined below for the detector that is to be tested.

CAUTION! FAILURE TO ALARM DURING A TEST INDICATES A DEFECTIVE DETECTOR. REPLACE DETECTOR IMMEDIATELY.

- a. PAD100-PD, PAD200-PD, PAD100-PHD, PAD200-PCD, PAD200-PCHD and PAD200-PHD Smoke Detectors: Use a ANSI/UL listed aerosol such as Home Safeguard Model 255 or SDI Smoke Centurion as acceptable to the Authority Having Jurisdiction (AHJ).
- b. PAD100-PHD, PAD200-PHD, PAD200-PCHD and PAD100-HD Heat Detectors:

NOTICE: TAKE CARE DURING THE HEATING OF THE DETECTOR TO AVOID OVERHEATING THE PLASTIC HOUSING.

 - Use of a low powered heat gun is acceptable.
 - **CAUTION!** Do not heat over 210°F (98.9°C).
 - Maintain a minimum of 1 foot between the detector and the heat gun nozzle.
 - Heat the detector for a minimum of 10 seconds.
 - FACP will indicate with alarm when a sufficient amount of heat has been applied. LED indicator will continuously flash while detector is in alarm.
- c. PAD100-CD, PAD200-PCD, PAD200-PCHD: Carbon Monoxide Detectors: Use the Home Safeguard Model HO-CO2 Aerosol with Home Safeguard Model Versa-Test Head VT1 or the SDI Solo C6 Aerosol with SDI Solo 330 Dispenser as acceptable to the Authority Having Jurisdiction (AHJ).

NOTICE: NEVER USE EXHAUST FROM VEHICLE TO TEST CO PORTION OF DETECTOR. EXHAUST MAY CAUSE PERMANENT DAMAGE TO DETECTOR AND VOIDS THE WARRANTY.

6. Maintenance

The detector should be cleaned as needed. Detectors installed in environments more prone to dust may need cleaning based on build-up of dust. The Dirty Value Report provides an indication when the detectors should be cleaned.

NOTICE:

- THE DETECTOR IS NOT WASHABLE, DO NOT SUBMERGE THE DETECTOR IN WATER. WATER CAN AFFECT THE SENSOR, CAUSING PERMANENT DAMAGE.
 - DO NOT SPRAY CLEANING CHEMICALS OR INSECT SPRAYS DIRECTLY ON OR NEAR THE DETECTOR. DO NOT PAINT OVER THE DETECTOR. DOING SO MAY CAUSE PERMANENT DAMAGE.
- a. PAD100-PHD, PAD200-PHD, PAD100-HD, PAD200-PCD, PAD200-PCHD and PAD100-CD: When cleaning is needed, clean cover using a soft cloth.
 - DO NOT vacuum or use compressed air, water, cleaners or solvents to clean the detector.
 - DO NOT disassemble the detector to clean.
 - If the detector is not operating properly after cleaning, replace detector.
 - b. PAD100-PD and PAD200-PD: When cleaning is needed, follow the below steps to remove dust on the detector

1. Turn off electrical power to the PAD100-PD or PAD200-PD.
2. Remove the detector from the base. Do not remove the base from the wall.
3. Remove cover from detector by removing the two screws (T10) on back of detector (FIGURE 7).

NOTICE: DO NOT USE A POWER DRIVER WHEN REMOVING /INSTALLING SCREWS.

Remove the two screws (T10) on back of detector to remove detector cover.

NOTICE: DO NOT USE A POWER DRIVER WHEN REMOVING /INSTALLING SCREWS.

PAD200-PD shown

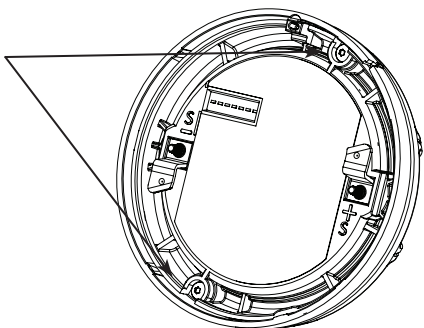
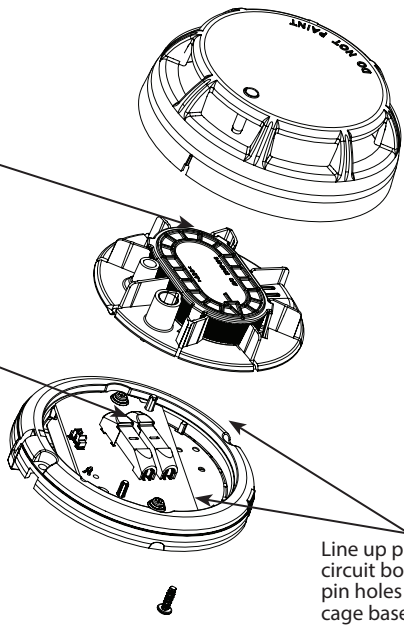


FIGURE 7: Removing Detector Cover (PD models only)

NOTICE: DO NOT REMOVE THE OPTIC CAGE OR METAL BUG SCREEN THAT IS AROUND THE OPTIC CAGE.

NOTICE: AVOID TOUCHING CIRCUIT BOARD. WHEN CLEANING IS NEEDED, USE CLEAN COMPRESSED AIR.

PAD200-PD shown



Line up pins on circuit board base to pin holes on optic cage base.

FIGURE 8: Remove Optic Cage Base from Detector for Cleaning (PD models only)

4. Remove optic cage base from the circuit board base (FIGURE 8).
 - DO NOT REMOVE OPTIC CAGE OR METAL BUG SCREEN FROM OPTIC CAGE BASE.
 - AVOID TOUCHING CIRCUIT BOARD WHEN CLEANING.
5. Using clean compressed air, blow out any dust and debris from the center of the optic cage base.
 - DO NOT vacuum or use water, cleaners or solvents to clean the detector.
 - DO NOT disassemble any other parts of the detector to clean, other than optic cage.
 - If the detector is not operating properly after cleaning, replace detector.
6. After cleaning with compressed air, line up the two pins on the back of the optic cage base to the pin holes on the circuit board to place the optic cage base on the circuit board (FIGURE 8 and FIGURE 9)
7. Place cover back on detector, using the LED indicator light on base and cover to guide the correct placement. When the cover and base are lined up correctly, the units will fit together.
8. Replace the two screws (T10) on the back of the product.

NOTICE: DO NOT USE A POWER DRIVER WHEN REMOVING /INSTALLING SCREWS. TIGHTEN SCREWS BETWEEN 4 AND 6 IN-LBS.

Line up pin holes on optic cage base to pins on circuit board base.

PAD200-PD shown

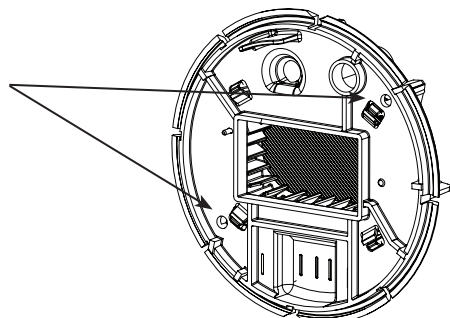


FIGURE 9: Pin Holes on Back of Optic Cage Base (PD models only)

Line up pin holes on optic cage base to pins on circuit board base.

PAD200-PD shown

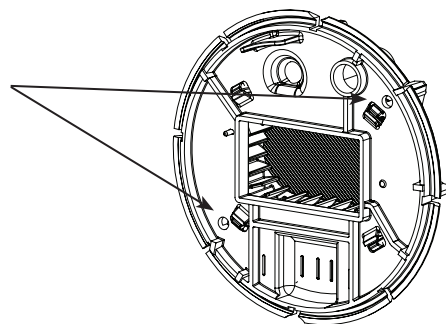


FIGURE 9: Pin Holes on Back of Optic Cage Base (PD models only)

7. Locking Feature

The PAD100-PD, PAD200-PD, PAD100-PHD, PAD200-PHD, PAD200-PCD, PAD200-PCHD, PAD100-HD and PAD100-CD include a tamperproof feature that locks the detector and does not allow removal without the use of a tool.

1. Once the detector has been installed the detector locks into the base. To remove the detector from the base, insert a small screwdriver into the slot on the detector (FIGURE 11) and push the plastic tab while simultaneously turning the detector head counter-clockwise.

Insert small screwdriver into slot to remove detector from base

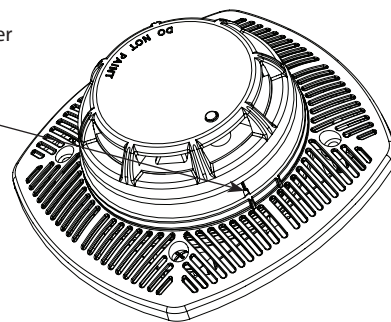
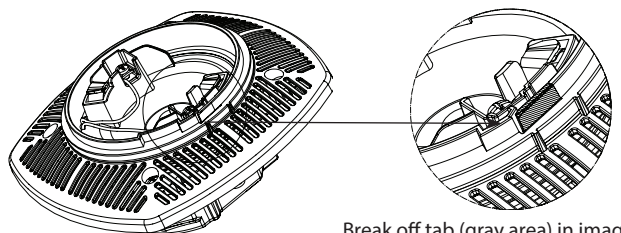


FIGURE 11: Locking Feature

2. The locking feature can be disabled. To disable the locking feature, break off the locking tab before installation (FIGURE 12).



Break off tab (gray area) in image to disable locking feature.

FIGURE 12: Disable Locking Feature

8. Detector Base Options

Model	Description
PAD100-6DB	6 inch detector base. See manual number: 550-0622-000
PAD100-4DB	4 inch detector base. See manual number: 550-0622-000
PAD100-IB	6 inch detector base with short circuit isolator. See manual number: 550-0671-000
PAD100-RB	6 inch detector base with relay module. See manual number: 550-0671-000
PAD100-SB	6 inch detector base with sounder module. See manual number: 550-0671-000
PAD100-LFSB	6 inch detector base with low frequency sounder module
PAD100-SPKB	6 inch detector base with speaker module

9. ⚠ WARNING

- **Detector will not operate without electrical power. Fire can cause power interruption, discuss with a fire protection specialist for additional safeguards.**
- **Do not open PAD100-PHD, PAD200-PHD, PAD100-HD, PAD200-PCD, PAD200-PCHD or PAD100-CD detector for cleaning. If the detector is opened, product warranty becomes void.**
- **If the detector does not work properly, do not try and fix it yourself. This will void your warranty. For technical assistance, contact Potter Electric Signal Company at 866-956-1211 for instructions to return a detector that does not operate properly.**
- **Detector will not sense fires that start in areas where smoke or heat cannot reach the detector. Smoke or heat from fires in walls, roofs or on the opposite side of closed doors may not reach the detector.**
- **Keep supplied dust cover in place during installation and construction. Remove dust cover prior to operation.**
- **Dust cover is not a substitute for removal of detector during new construction or remodeling.**
- **The detector cannot detect smoke when the dust cover is in place.**
- **Never use an open flame of any kind to test your device. You may ignite and damage the detector.**
- **Do not cover, tape or otherwise block the openings of your detector. The openings are designed to allow air to pass through the detector, thus sampling the air around the detector.**
- **DO NOT stand close to the device when the alarm is sounding. Exposure at close range could result in hearing damage.**
- **Detectors are not to be used with detector guards unless the combination has been evaluated by a nationally recognized testing laboratory and found suitable for that purpose.**
- **To ensure proper operation, store detector within the recommended ranges. Allow the detector to stabilize to room temperature before applying power.**
- **If the detector ever fails to test properly, replace it immediately. Products under warranty may be returned to the manufacturer for replacement, see LIMITED WARRANTY.**
- **For technical assistance, contact Potter Electrical Signal Company at 1-866-956-1211**

10a. Specifications / Ratings for Use with Detectors: PAD100-PD, PAD200-PD, PAD200-PCD, PAD200-PCHD, PAD100-PHD and PAD200-PHD

No.	Item	PAD100-PD	PAD100-PHD	PAD200-PCD	PAD200-PCHD	PAD200-PD	PAD200-PHD
1	Working Voltage Range	24 VDC					
2	Standby Current (*)	300 µA					
3	Alarm Indicator	1 LED					
4	Alarm Indicator Current	1.4 mA					
5	Smoke Sensitivity Range (**)	1.0-3.7 %/ft. (3.2-11.6%/m)	1.0-3.7 %/ft. (3.2-11.6%/m) / 135° to 174°F (57° to 79° C)	1.1-3.5 %/ft. (3.6-11%/m)	1.1-3.5 %/ft. (3.6-11%/m) / 135° to 174°F (57° to 79° C)	1.1-3.5 %/ft. (3.6-11%/m)	1.1-3.5 %/ft. (3.6-11%/m) / 135° to 174°F (57° to 79° C)
6	Installation Temperature Range	32° to 120° F (0° to 49° C)	32° to 115° F (0° to 46° C)	32° to 120° F (0° to 49° C)	32° to 115° F (0° to 46° C)	32° to 120° F (0° to 49° C)	32° to 115° F (0° to 46° C)
7	Operating Relative Humidity Range	0% to 93% (non-condensing)					
8	Start-up Time	1 second					
9	Maximum Number of Addresses per SLC Loop	127					
10	Maximum Number of Lighted Indicators in Alarm per SLC Loop	30					
11	Weight (without base)	110.5 g (3.9 oz)	116 g (4.1 oz)	113 g (4.0 oz)	118.5 g (4.2 oz)	110.5 g (3.9 oz)	116 g (4.1 oz)
12	Dimensions (without base)	Height	1.35 in (34 mm)	1.94 in (49 mm)	1.35 in (34 mm)	1.94 in (49 mm)	1.35 in (34 mm)
		Diameter	3.93 in. (100 mm)				
13	Approvals / Listings	ANSI/UL 268 6th edition	ANSI/UL 268 6th edition, ANSI/UL 521 7th edition	ANSI/UL 268 7th edition, ANSI/UL 2075 4th edition	ANSI/UL 268 7th edition, ANSI/UL 521 7th edition, ANSI/UL 2075 4th edition	ANSI/UL 268 7th edition	ANSI/UL 268 7th edition, ANSI/UL 521 7th edition
14	Permitted Mounting Location(s)	Ceiling, Wall					

10b. Specifications / Ratings for Use with Detectors: PAD100-CD , PAD100-HD

No.	Item	PAD100-HD			PAD100-CD
1	Working Voltage Range	24 VDC			
2	Standby Current (*)	300 µA			
3	Alarm Indicator	1 LED			
4	Alarm Indicator Current	1.4 mA			
5	Alarm Set-Point Range (**)	135° to 174° F (57° to 79° C)	175° to 185° F (80° to 85° C)	135° to 160° F (57° to 71° C)	Fixed 70, 150, 400 PPM
6	Installation Temperature Range	32° to 100° F (0° to 38° C)	32° to 150° F (0° to 66° C)	32° to 100° F (0° to 38° C)	32° to 100° F (0° to 38° C)
7	Operating Relative Humidity Range	0% to 93% (non-condensing)			
8	Start-up Time	1 second			
9	Maximum Number of Addresses per SLC Loop	127			
10	Maximum Number of Lighted Indicators in Alarm per SLC Loop	30			
11	Weight (without base)	82 g (2.89 oz)			92 g (3.25 oz)
12	Dimensions (without base)	Height	1.94 in (49 mm)		1.43 in (36 mm)
		Diameter	3.93 in. (100 mm)		
13	Approvals / Listings	ANSI/UL 521			ANSI/UL 2075
14	Permitted Mounting Location(s)	Ceiling, Wall			

* The standby current is the current that the device consumes when the device is in a non-activated condition and where no communication current is transmitted to the FACP.

** Reference spacing requirements in Section 4.

10c. Specifications / Ratings for Use with Detector Bases: PAD100-SPKB

No.	Item		PAD100-SPKB
1	Working Voltage Range for SLC		24 VDC
2	Standby / Alarm Current for SLC (*)		150 µA
3	Active Current (Including Indicator)		3.8 mA
4	Working Voltage for SPK		25 Volts, 70.7 Volts
5	Power Tap Selection for SPK		1/8 Watt , 1/4 Watt, 1/2 Watt, 1 Watt, 2 Watt, 4 Watt
6	Applicable SLC Wiring Style		Class B, Class A, Class X
7	Maximum Number of PAD100-SPKB per SLC Loop		127
8	Installation Temperature Range		32° to 150° F (0° to 66° C)
9	Operating Relative Humidity Range		0% - 93% (non-condensing)
10	Weight (without detector head)		460 g (16.23 oz)
11	Dimensions (without detector head)	Height	2.75 in (70 mm)
		Diameter	6 in x 6 in (153 mm X 153 mm)
12	Approvals / Listings		ANSI/UL 268 and ANSI/UL 1480

* The standby current is the current that the device consumes when the device is in a non-activated condition and where no communication current is transmitted to the FACP.

PAD100-SPKB Field Selectable Power Tap Selection - Reverberant (dBA @ 10ft.)						
Voltage	1/8 Watt	1/4 Watt	1/2 Watt	1 Watt	2 Watt	4 Watt
25 Volts	75.0 dBA	78.1 dBA	81.2 dBA	83.8 dBA	86.6 dBA	89.7 dBA
70.7 Volts	75.1 dBA	78.1 dBA	80.9 dBA	83.8 dBA	86.9 dBA	89.6 dBA

SYSTEM CONSIDERATIONS

- 1. To select the proper wattage input for the speaker, move the jumper to the appropriate pin.
- 2. Always maintain electrical isolation between speaker and strobe wiring on combination units.
- 3. The PAD100-SPKB in conjunction with the EVAX EVX-100 amplifier has been tested with and complies with the Low Frequency Signal Form (520 Hz) requirements in ANSI/UL 464 and ANSI/UL 864.
- 4. Do not exceed 130% of rated speaker voltage. If excessive distortion is heard, check amplifier for signal clipping. If clipping exists, reduce either amplifier input or gain.

11. PAD Protocol Dip Switch Settings

The following information is for setting the dipswitches on the PAD100-PD, PAD200-PD, PAD100-PHD, PAD200-PHD, PAD200-PCD, PAD200-PCHD, PAD100-HD and PAD100-CD detectors and modules.

Setting the Address: All PAD protocol detectors and modules require an address prior to connection to the panel's SLC loop. Each PAD device's address (i.e., detector and/or module) is set by changing the dip switches located on the device. PAD device addresses are comprised of a **seven (7) position dip switch** used to program each device with an address ranging from 1-127 (FIGURE 15).

The below examples (FIGURE 13 and FIGURE 14) illustrate a PAD device's dip switch settings. The first example (FIGURE 13) illustrates a device not addressed where all dip switch settings are in the default OFF position. The second example (FIGURE 14) illustrates an addressed PAD device via the dip switch settings.

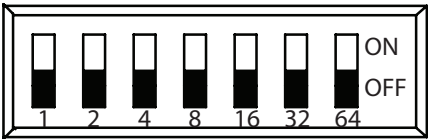


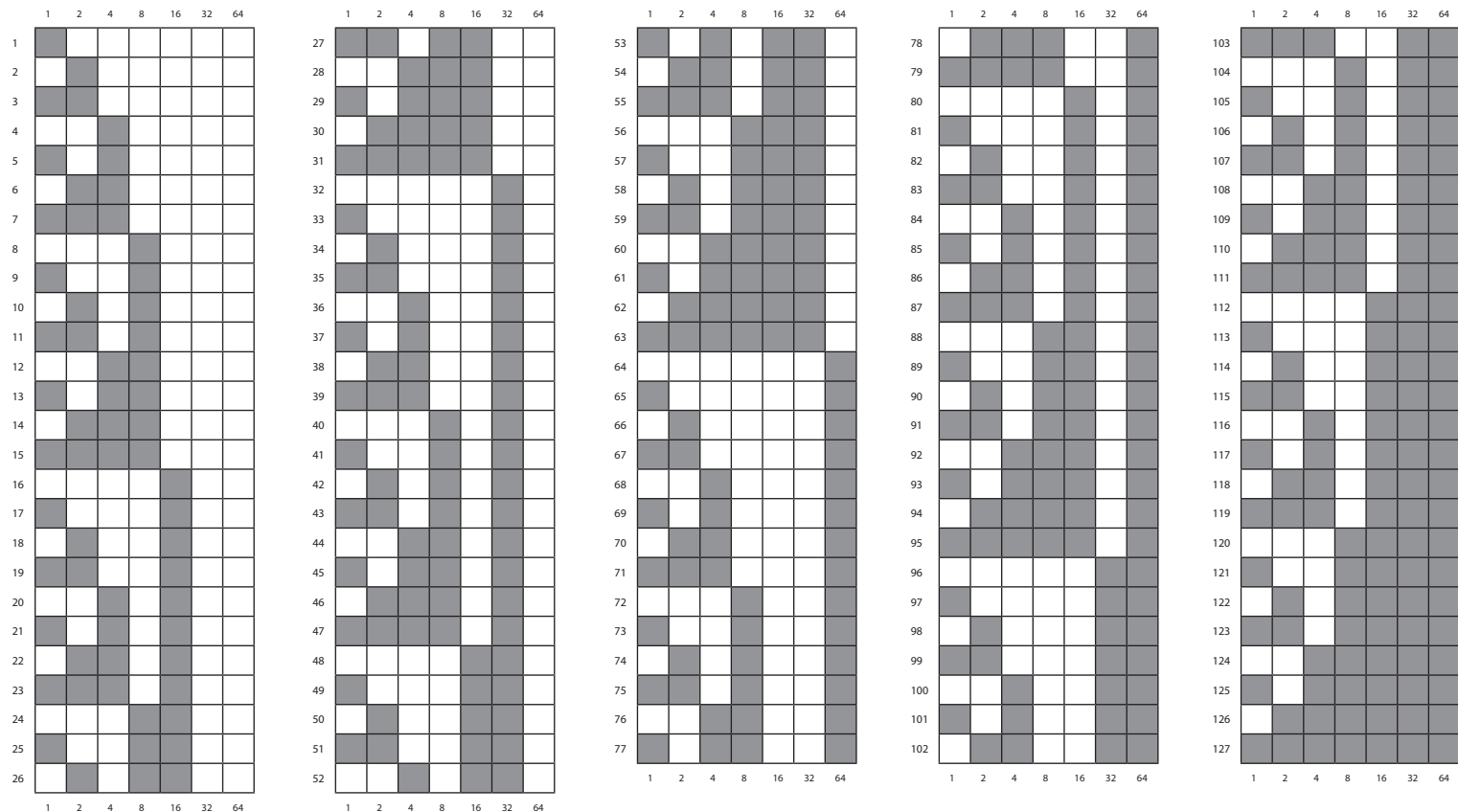
FIGURE 13: Enlarged View of PAD Device with Dip Switch Setting Unaddressed

All dip switches are shown in the OFF position



FIGURE 14: Enlarged View of PAD Device with Dip Switch Setting Addressed

Shows this PAD device's address is #42. Dip Switch 1, 4, 16 and 64 are OFF. Dip Switch 2, 8 and 32 are ON.



NOTE: Each gray box indicates that the dip switch is ON and each white box indicates the dip switch is OFF.

FIGURE 15: PAD Device Dip Switch Addresses Table (Addresses 1-127)

LIMITED WARRANTY

For a period of 60 months from the date of manufacture (or as long as required by applicable law), Potter Electric Signal Company, LLC warrants to you the original purchaser that the appliance described in this product information booklet will be free from defects in workmanship and materials under normal use and service.

This warranty does not apply and is void if damage or failure is caused by: accident, abuse, misuse, abnormal use, faulty installation, liquid contact, fire, earthquake or other external cause; operating the appliance outside Potter Electric Signal Company, LLC's published guidelines; or service, alteration, maintenance or repairs performed by anyone other than Potter Electric Signal Company, LLC. This warranty does not transfer to subsequent owners or purchasers of this appliance. This warranty also does not apply to: consumable parts, such as batteries; cosmetic damage, including but not limited to scratches or dents; defects caused by normal wear and tear or otherwise due to the normal aging of the appliance, or if any serial number has been removed or defaced from the appliance.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED. POTTER ELECTRIC SIGNAL COMPANY, LLC DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS TO THE EXTENT PERMITTED BY LAW. TO THE EXTENT SUCH WARRANTIES CANNOT BE DISCLAIMED, AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, SUCH IMPLIED WARRANTIES SHALL APPLY ONLY FOR THE WARRANTY PERIOD SPECIFIED ABOVE. PLEASE NOTE THAT SOME STATES (COUNTRIES AND PROVINCES/TERRITORIES) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY (OR CONDITION) LASTS. SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, POTTER ELECTRIC SIGNAL COMPANY, LLC WILL NOT BE LIABLE FOR ANY DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR ARISING IN CONNECTION WITH THE SALE, USE OR REPAIR OF THE APPLIANCE, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF REVENUE, LOSS OF ACTUAL OR ANTICIPATED PROFITS, LOSS OF THE USE OF MONEY, LOSS OF BUSINESS, LOSS OF OPPORTUNITY, LOSS OF GOODWILL, AND LOSS OF REPUTATION. THE MAXIMUM LIABILITY OF POTTER ELECTRICAL SIGNAL COMPANY, LLC SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE PAID BY YOU FOR THE APPLIANCE. PLEASE NOTE THAT SOME STATES (COUNTRIES AND PROVINCES/TERRITORIES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

If a defect in workmanship or materials causes your appliance to become inoperable within the warranty period, you must return the appliance to Potter Electric Signal Company, LLC postage prepaid to: Potter Electric Signal Company, LLC, 1609 Park 370, Hazelwood MO 63042. You must prove to the satisfaction of Potter Electric Signal Company, LLC the date of purchase of your appliance. You must also enclose a return address. Warranty service may only be performed by Potter Electric Signal Company, LLC personnel at Potter Electric Signal Company, LLC's facilities in Hazelwood, Missouri. You must also pack the appliance to minimize the risk of it being damaged in transit. If we receive an appliance in a damaged condition as the result of shipping, we will notify you and you must seek a claim with the shipper.

If you submit a valid claim to Potter Electric Signal Company, LLC during the warranty period, Potter Electric Signal Company, LLC will, at its option, repair your appliance or furnish you with a new or rebuilt appliance without charge to you except for postage required to return the appliance to us. Potter Electric Signal Company, LLC will not reimburse you for repairs or replacement parts provided by other parties. Your repaired or replacement appliance will be returned to you free of charge and it will be covered under the warranty for the balance of the warranty period, if any. When a product or part is replaced, any replacement item becomes your property and the replaced item becomes property of Potter Electric Signal Company, LLC. For additional warranty and product information go to www.pottersignal.com.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE/TERRITORY). BY THIS WARRANTY, POTTER ELECTRIC SIGNAL COMPANY, LLC DOES NOT LIMIT OR EXCLUDE YOUR RIGHTS EXCEPT AS ALLOWED BY LAW. TO FULLY UNDERSTAND YOUR RIGHTS, YOU SHOULD CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE/TERRITORY OR STATE.

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