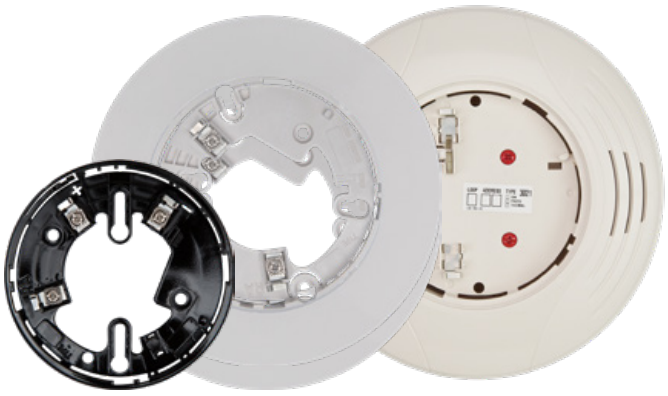
Select Series Mounting Base Options

System Sensor mounting bases and kits provide a variety of installation options for detectors in any application.



Features

- Bases enable quick and secure detector plug-in
- SEMS screws provide easy wiring connection
- Support for 12-24 AWG provides installation flexibility
- Multiple base formats meet application requirements
- Standard white color with ivory and black options
- UL 268 compliant
- Mechanical locking feature restricts removal of attached sensor head

Specialty Base Features

- Pre-wired mounting plate simplifies installation
- Application driven feature sets
- Sounder bases both UL 268 and UL 464 compliant

Agency Listings

SIGNALING UL LISTED S911

FM APPROVED 3062622

4" & 6" bases: 7300-1653:0109
Relay & Isolator bases: 7300-1653:0126
Sounder bases: 7135-1653:0213
Low-frequency bases: 7300-1653:0238

To meet local code and application requirements, System Sensor offers **standard 4" and 6" bases**, as well as, specialty base designs including relay, isolator, sounder and low frequency sounder options for Select Series detectors.

The standard 4" and 6" bases offer a plug-in detector base intended for use in intelligent systems, with screw terminals provided for power (+ and –), and remote annunciator connections. Communication takes place over the power (+ and –) lines. The 4" base offers a compact design while the 6" base provides compatibility with a wider range of junction boxes.

The Select Series specialty bases support application driven requirements. The bases employ a separate mounting plate that installs on various junction box sizes to eliminate unsightly surface-mount boxes. The mounting plate enables pre-wiring of all connections to speed and simplify installation.

Relay bases (B224RB-WH/B224RB-IV) provide one form C contact relay for control of auxiliary functions, such as door closure and elevator recall. The relay can operate in two different modes (short and long delay). The activation time for the short delay is 60 ms to 100 ms, while the activation time for the long delay is 6 sec to 10 sec. A shunt with pin headers, located on the base PC board, is used to set the delay timing.

Isolator bases (B224BI-WH/B224BI-IV) allow the Signaling Line Circuit (SLC) loop to operate under fault conditions created from a short circuit preventing an entire communication loop from being disabled. The base isolates the section of the loop containing the short circuit from the remainder of the circuit and automatically restores when the fault is corrected.

The Select Series **sounder and low frequency sounder bases** are designed for new and existing dwelling unit applications. They offer maximum flexibility in installation, configuration, and operation to meet or exceed UL 268 and UL 464 requirements. The

† Consult your fire alarm control panel manufacturer for compatibility with the addressable model of the sounder base.

Select Series low frequency sounder bases are designed to meet the NFPA 72 sleeping space requirement to produce a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent. Studies show that a lower frequency, centered around 520 Hz, is the most ideal to wake sleeping occupants, even those with mild to severe hearing loss. The B200SR sounder and LF sounder bases (B200SR-WH/B200SR-IV/B200SR-LF-WH/B200SR-LF-IV) are fully compatible with existing B501BH-Series sounder base installations. The device enables users to select one of two B501-supported tones (ANSI Temporal 3 or Continuous) through a jumper.

The B200S sounder and LF sounder bases (B200S-WH/B200S-IV/B200S-LF-WH/B200S-LF-IV) adopt the same address as the detector, but use a unique device type on the loop. The Fire Alarm Control Panel (FACP) can use that address to command an individual sounder — or a group of sounders — to activate. The command set from the FACP can be tailored to multiple event-driven tone outputs allowing selection of volume (75 or 85 dBA), tone (ANSI Temporal 3, ANSI Temporal 4 or March Time) and group. In addition, some FACPs will enable custom tone patterns. The B200S series sounder bases recognize the System Sensor synchronization protocol. This enables it to be used as a component of the general evacuation signal — along with other System Sensor AV appliances — when connected to a power supply or FACP output capable of generating the System Sensor synchronization pulses.

Specifications – Select Series Bases

Physical Specifications	
Diameter	B501-WHITE, B501-IV, B501-BL: 4.0" (10.2 cm) B200S-WH, B200S-IV, B200S-LF-WH, B200S-LF-IV, B200SR-WH, B200SR-IV, B200SR-LF-WH, B200SR-LF-IV: 6.85" (17.4 cm) B300-6, B300-6-IV: 6.1" (155 mm) B224BI-WH, B224BI-IV, B224RB-WH, B224RB-IV: 6.85" (17.4 cm)
Base Height (without sensor)	B501-WHITE, B501-IV, B501-BL: 0.74" (18.8 mm) B200S-WH, B200S-IV, B200S-LF-WH, B200S-LF-IV, B200SR-WH, B200SR-IV, B200SR-LF-WH, B200SR-LF-IV: 1.6" (4.1 cm) B300-6, B300-6-IV: 0.76" (19 mm) B224BI-WH, B224BI-IV, B224RB-WH, B224RB-IV: 1.61" (4.1 cm)
Weight:	B501-WHITE 0.32 lb (145 gm) B200S-WH, B200S-IV, B200SR-WH, B200SR-IV: 0.50 lb (227 gm) B200S-LF-WH, B200S-LF-IV, B200SR-LF-WH, B200SR-LF-IV: Weight: 0.6 lb (272 gm) B300-6, B300-6-IV: 0.32 lb (145 gm) B224RB-WH, B224RB-IV, B224BI-WH, B224BI-IV 0.50 lb (227 gm)
Wire Gauge	B501-WHITE, B501-IV, B501-BL, B224BI-WH, B224BI-IV, B224RB-WH, B224RB-IV, B300-6, B300-6-IV: 18 AWG (0.823 mm^2) to 12 AWG (3.31 mm^2) B200S-WH, B200S-IV, B200S-LF-WH, B200S-LF-IV, B200SR-WH, B200SR-IV, B200SR-LF-WH, B200SR-LF-IV: 14 AWG to 12 AWG
Temperature Range	Refer to applicable sensor Operating Temperature Range using the Base/Sensor Cross Reference Chart at systemsensor.com
Humidity Range	10% to 93% RH non-condensing

Electrical Specifications: B501-WHITE, B501-IV, B501-BL (Includes base and detector)	
Operating Voltage	15 to 32 VDC
Standby Current	150 µA

Electrical Specifications: B300-6, B300-6-IV	
Operating Voltage	15 to 32 VDC
Standby Current	170 µA max.

Electrical Specifications: B224BI-WH, B22BI-IV	
Operating Voltage	15 to 32 VDC
Standby Current	450 µA max.
Isolation Current	15 mA max

Electrical Specifications: B224RB-WH, B22RB-IV	
Operating Voltage	15 to 32 VDC
Standby Current	170 µA max.
Set Time	Position 1, Short Delay: 60 to 100 ms Position 2, Long Delay: 6 to 10 sec
Reset Time	20 ms max.
Relay Characteristics	2 coil latching relay 1 Form C contact UL/ULC Rating:

CURRENT RATING	MAXIMUM VOLTAGE	LOAD DESCRIPTION	APPLICATION
2 A	25 VAC	PF = 0.35	Non-coded
3 A	30 VDC	Resistive	Non-coded
2 A	30 VDC	Resistive	Coded
0.46 A	30 VDC	(L/R = 20ms)	Non-coded
0.7 A	70.7 VAC	PF = 0.35	Non-coded
0.9 A	125 VDC	Resistive	Non-coded
0.5 A	125 VAC	PF = 0.75	Non-coded
0.3 A	125 VAC	PF = 0.35	Non-coded

Electrical Specifications: B200S-WH, B200S-IV	
External Supply Electrical Ratings	
External Supply Voltage	16 to 33 VDC (VFWR)
Standby Current:	500 µA maximum
Alarm Current:	35 mA maximum (at high volume setting); 15 mA maximum (at low volume setting)
SLC Electrical Ratings	
SLC Operating Voltage:	15 to 32 VDC
SLC Standby Current:	300 µA maximum
Sound Output	
High Volume:	Greater than 85 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)
Low Volume:	Greater than 75 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)

Electrical Specifications: B200S-LF-WH, B200S-LF-IV	
External Supply Electrical Ratings	
External Supply Voltage	16 to 33 VDC (VFWR)
Standby Current:	550 µA maximum VDC
Alarm Current, High-volume setting	70 mA maximum @ 33.0 VDC 90 mA maximum @ 24.0 VDC 140 mA maximum @16.0 VDC
Alarm Current, Low-volume setting	15 mA maximum @ 33.0 VDC 20 mA maximum @ 24.0 VDC 25 mA maximum @ 16.0 VDC
SLC Electrical Ratings	
SLC Operating Voltage:	15 to 32 VDC
SLC Standby Current:	300 µA maximum (base only, refer to applicable sensor specification)
Sound Output	
High Volume:	Greater than 85 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)
Low Volume:	Greater than 75 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)

Electrical Specifications: B200SR-WH, B200SR-IV	
External Supply Electrical Ratings	
External Supply Voltage	16 to 33 VDC (VFWR)
Standby Current:	500 µA maximum
Alarm Current:	35 mA maximum
SLC Electrical Ratings	
SLC Operating Voltage:	15 to 32 VDC
SLC Standby Current:	300 µA maximum
Sound Output	Greater than 85 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)

Electrical Specifications: B200SR-LF-WH, B200SR-LF-IV	
External Supply Electrical Ratings	
External Supply Voltage	16 to 33 VDC (VFWR)
Standby Current:	1 mA maximum VDC
Alarm Current	65 mA maximum @ 33.0 VDC 90 mA maximum @ 24.0 VDC 125 mA maximum @16.0 VDC
SLC Electrical Ratings	
SLC Operating Voltage:	15 to 32 VDC
SLC Standby Current:	Refer to applicable sensor specification.
Sound Output	Greater than 85 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)

Select Series Junction Box Selection Guide

Model	Single Gang	Double Gang	3.5" Octagonal	4" Octagonal	4" Square	4" Square with mud ring*	50 mm	60 mm	70 mm	75 mm
B501-WHITE, B501-IV, B501-BL	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No
B200S-WH, B200S-IV, B200S-LF-WH, B200S-LF-IV, B200SR-WH, B200SR-IV, B200SR-LF-WH, B200SR-LF-IV	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
B300-6, B300-6-IV	Yes	No	Yes	Yes	Yes	Yes	No	No	No	No
B224BI-WH, B224BI-IV	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
B224RB-WH, B224RB-IV	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No

* with 3.0" mud ring
Note: Box depth contingent on base and wire size. Refer to National Electric Code or applicable local codes for appropriate recommendations.

Ordering Information

Model			Description
White	Ivory	Black	
B501-WHITE	B501-IV	B501-BL	4" Flangeless mounting base
B501-WHITE-BP	—	—	4" Flangeless mounting base bulk pack, white
B300-6	B300-6-IV	—	6" Flanged mounting base
B300-6-BP	—	—	6" Flanged mounting base bulk pack, white
B200S-WH	B200S-IV	—	Intelligent addressable sounder base
B200S-LF-WH	B200S-LF-IV	—	Intelligent addressable sounder base, low-frequency
B200SR-WH	B200SR-IV	—	Standard sounder base (compatible with B501BH series)
B200SR-LF-WH	B200SR-LF-IV	—	Low-frequency sounder base (compatible with B501BH series)
B224BI-WH	B224BI-IV	—	Isolator base
B224RB-WH	B224RB-IV	—	Relay base

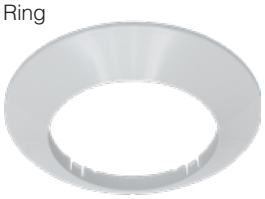
Related Accessories			
White	Ivory	Black	
CK300	CK300-IV	CK300-BL	Color kit (includes cover and trim ring)
CK300-IR	CK300-IR-IV	CK300-IR-BL	PTIR Color kit (includes cover and trim ring)
TR300	TR300-IV	—	Trim ring
—	SMB600		Surface mounting kit (flanged), ivory
RA100Z	—	—	Remote LED annunciator
M02-04-00			Detector test magnet
M02-09-00			Test magnet with telescoping handle

Accessories

RA100Z
Remote LED Annunciator

CK300-BL
Color Kit

TR300
Trim Ring



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