WAV-RL, WAV-WL, WAV-CRL and WAV-CWL Wireless L-Series AV Base

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For use with System Sensor L-series AV devices: See Table 1 for complete list.

SPECIFICATIONS

RF Operating Voltage Range:	3.3 VDC
RF Maximum Current Draw:	5 mA (LED On)
AV Operating Voltage Range:	12 VDC
AV Maximum Standby Current:	6.5 mA
AV Maximum Alarm Current:	550 mA
Standby Current:	210 µA @ 3.3 VDC (LED blink enabled)
Maximum Transmit RF Power:	17 dBm
Radio Frequency Range:	902-928 MHz
Operating Humidity Range:	10% to 93% Relative Humidity, Non-condensing
Operating Temperature Range:	32°F to 120°F (0°C to 49°C)
Battery Type:	8 Panasonic CR123A or 8 Duracell DL123A
Battery Life:	*RF batteries:* 2 year minimum. *AV batteries:* See Tables 2 and 3 for AV battery life.
Battery Replacement:	Replace during annual maintenance or when TROUBLE BATTERY LOW displays.
Dimensions (Wall):	Height 6" (15 cm); Width 5.1" (13 cm); Depth 1.6" (4 cm)
Dimensions (Ceiling):	Diameter 7.4" (19 cm); Depth 1.6" (4 cm)
Weight: (Wall)	17.6 oz (499 g) installed with 8 batteries
Weight (Ceiling):	20.0 oz (567 g) installed with 8 batteries

This audio visual (AV) wireless base must be installed in compliance with the control panel system installation manual, the AV notification appliance manual and the SWIFT Wireless Manual. The installation must meet the re-quirements of the Authority Having Jurisdiction (AHJ). Notification appliances offer maximum performance when installed in compliance with the National Fire Protection Association (NFPA); see NFPA 72.

GENERAL DESCRIPTION

Models WAV-RL, WAV-WL, WAV-CRL and WAV-CWL provide a wireless base for use with compatible System Sensor L-Series AV notification appliances (listed in Table 1). The AV notification appliance is attached directly to the wireless AV base. (See Figure 1.) The wireless AV base communicates through a wireless mesh to a gateway. The gateway sends information to/from the Fire Alarm Control Panel (FACP).

The wireless AV base provides power through 2 sets of 4 batteries – one set provides power for the RF communication and the other set provides power to the audible and/or visible output on the notification appliance. (See Figure 2.) The life of the AV set of batteries depends upon the activation time of the audible and/or visible output as indicated in Table 3. The AV base includes 2 optional battery cartridges to ease battery replacement. (See Figure 2.) Batteries can be inserted directly into the AV base or pre-loaded into the battery cartridge and inserted as two groups of 4 batteries. The battery compartment and cartridge indicate the correct orientation of the batteries. Carefully align the batteries with these markings and do not force them into place.

Rotary dial switches are provided on the wireless base to set the device address. (See Figure 2.) Notification appliance settings are adjusted through the notification appliance directly. Temporal 3 and continuous tone patterns are available and set directly on the notification appliance. Refer to the specific notification appliance manual for available setting options.

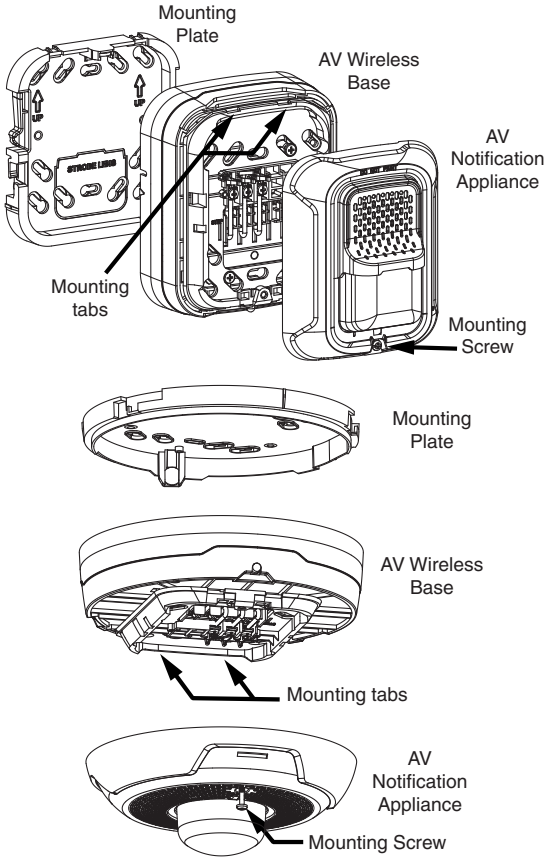
Panels offer different feature sets across the various models. As a result, certain features may be available on some control panels, but not on others. The possible feature sets available with Models WAV-RL, WAV-WL, WAV-CRL and WAV-CWL include:

- An LED on the wireless base is controlled by the panel to indicate device status. Operational modes include red, green and amber colors in various solid or blink patterns.
- A magnet test feature allows the individual AV appliance to be turned on/off for testing purposes reducing the activation time needed during testing of the horn and/or strobe in support of longer battery life (refer to the SWIFT Wireless Gateway Manual for complete instructions).
- Custom and Temporal 4 patterns generated through the FACP.

The Models WAV-RL, WAV-WL, WAV-CRL and WAV-CWL require compatible addressable communications to function properly. Connect these devices to listed compatible control panels only. Please refer to the operation manual for the UL listed control panel for specific operation.

The wireless AV base and notification appliance will synchronize both audio and visual indications between devices located within the same mesh network. Synchronization of a wireless AV device with a wired notification appliance requires a synchronization module (W-SYNC) available from System Sensor or your FACP provider. Synchronization is only available through notification appliances that use the System Sensor synchronization protocol.

FIGURE 1. AV MOUNTING ASSEMBLY (WALL, CEILING)



SPACING

System Sensor recommends spacing AV notification appliances in compliance with NFPA 72. For specific information regarding notification appliance placement and special applications, refer to NFPA 72 or the Audible Visible Appliance Reference Guide, available from SystemSensor.com.

Wireless technologies can exhibit communication disruption if devices are spaced too close together. To avoid this form of disruption, SWIFT devices should not be placed closer than 2 feet (60 cm) apart without an intervening structure.

MOUNTING

To mount the wireless AV notification appliance, secure the wireless AV base mounting plate to a permanent structure. An optional tamper resistance feature can be activated (refer to TAMPER RESISTANCE section for details). The mounting plate can be surface mounted. To avoid interference with the wireless network metal electrical boxes are NOT recommended. To install models WAV-CRL and WAV-CWL, align the arrow on the mounting plate with the light pipe on the AV base, and rotate the AV base clockwise onto the mounting plate. To install models WAV-RL and WAV-WL, align the arrow on the right side of the mounting base to the arrow on the side of the AV base, and slide the AV base down onto the mounting plate. (See Figure 3.) To attach the System Sensor L-series notification appliance to the wireless AV base, hook the tabs on the top of the product housing into the grooves on the wireless AV base. Then, hinge the product into position to engage the pins on the product with the terminals on the wireless AV base. Make sure that the tabs on the back of the product housing fully engage with the wireless AV base. Secure the notification appliance by tightening the single mounting screw in the front of the product housing. (See Figure 1.)

NOTE: Attach the wireless AV base in a way that it cannot be moved after placement. If attaching to temporary structures such as removable ceiling tiles, permanently secure the structure, or mount the detector across a ceiling panel support.

TABLE 1. SYSTEM SENSOR L-SERIES AV COMPATIBLE DEVICES

Note: ULC-listed models have all required languages.

Model (UL listed)	Model (ULC listed)	Description
CHRL	CHRLA*	Chime Red Wall
CHSCRL	CHSCRLA*	Chime/Strobe Red Ceiling
	CHSCRLA-E	Chime/Strobe Red Ceiling, English
	CHSCRLA-F	Chime/Strobe Red Ceiling, French
CHSCWL	CHSCWLA*	Chime Strobe White Ceiling
	CHSCWLA-E	Chime/Strobe White Ceiling, English
	CHSCWLA-F	Chime/Strobe White Ceiling, French
CHSRL	CHSRLA*	Chime Strobe Red Wall
	CHSRLA-E	Chime/Strobe Red Wall, English
	CHSRLA-F	Chime/Strobe Red Wall, French
CHSWL	CHSWLA	Chime Strobe White Wall
	CHSWLA-E	Chime/Strobe White Wall, English
	CHSWLA-F	Chime/Strobe White Wall, French
CHWL	CHWLA	Chime White Wall
HCRL-LF	HCRLA-LF†	520Hz Sounder Red Ceiling
HRL	HRLA	Horn Red Wall
HRL-LF	HRLA-LF†	520Hz Sounder Red Wall
HCWL-LF	HCWLA-LF†	520Hz Sounder White Ceiling
HGRL-LF	—	520Hz Sounder Red Compact
HGWL-LF	—	520Hz Sounder White Compact
HWL	HWLA	Horn White Wall
HWL-LF	HWLA-LF†	520Hz Sounder White Wall
P2RL	P2RLA*	Horn/Strobe 2-wire Red Wall
	P2RLA-E	Horn/Strobe 2-wire Red Wall, English
	P2RLA-F	Horn/Strobe 2-wire Red Wall, French
P2RL-LF	P2RLA-LF†	520Hz Sounder/Strobe Red Wall
P2RL-P	P2RLA-P	Horn Strobe 2-wire Red Wall, Plain
P2RL-SP	—	Horn Strobe 2-wire Red Wall, Fuego
P2WL	P2WLA	Horn Strobe 2-wire White Wall
	P2WLA-E	Horn/Strobe 2-wire White Wall, English
	P2WLA-F	Horn/Strobe 2-wire White Wall, French
P2WL-LF	P2WLA-LF†	520Hz Sounder/Strobe White Wall
P2WL-P	P2WLA-P	Horn Strobe 2-wire White Wall, Plain
P2WL-SP	—	Horn Strobe 2-wire White Wall, Fuego
PC2RL	PC2RLA*	Horn Strobe 2-wire Red Ceiling
	PC2RLA-E	Horn/Strobe 2-wire Red Ceiling, English
	PC2RLA-F	Horn/Strobe 2-wire Red Ceiling, French
PC2WL	PC2WLA*	Horn Strobe 2-wire White Ceiling
	PC2WLA-E	Horn/Strobe 2-wire White Ceiling, English
	PC2WLA-F	Horn/Strobe 2-wire White Ceiling, French
SCRL	SCRLA*	Strobe Red Ceiling
	SCRLA-E*	Strobe Red Ceiling, English
	SCRLA-F	Strobe Red Ceiling, French
SCWL	SCWLA*	Strobe White Ceiling
	SCWLA-E	Strobe White Ceiling, English
	SCWLA-F	Strobe White Ceiling, French
SCWL-CLR-ALERT	—	Stobe White Ceiling Clear Lens Alert
SRL	SRLA*	Strobe Red Wall
	SRLA-E	Strobe Red Wall, English
	SRLA-F	Strobe Red Wall, French
SRL-P	SRLA-P	Strobe Red Wall, Plain
SRL-SP	—	Strobe Red Wall, Fuego
SWL	SWLA*	Strobe White Wall
	SWLA-E	Strobe White Wall, English
	SWLA-F	Strobe White Wall, French
SWL-ALERT	—	Strobe White Wall, Amber Lens
SWL-CLR-ALERT	—	Strobe White Wall, Clear Lens
SWL-P	SWLA-P	Strobe White Wall, Plain

*Bilingual Canadian model

†Add suffix “E” for English, “-F” for French, and “-P” for plain version (no text).

TABLE 2. BATTERY LIFE AT TEMPORAL 3 HIGH, AMBIENT CONDITIONS

Model	Model Type	Battery Life (Hours,minutes), permodel and Candela Setting									
		No Strobe	15 cd	30 cd	75 cd	95 cd	110 cd	115 cd	135 cd	150 cd	177 cd	185 cd
Chime-only	Wall	127h 23m	—	—	—	—	—	—	—	—	—	—
	Ceiling	—	—	—	—	—	—	—	—	—	—	—
Horn-only	Wall	31h 51m	—	—	—	—	—	—	—	—	—	—
	Ceiling	—	—	—	—	—	—	—	—	—	—	—
Strobe-only	Wall	—	20h 44m	14h 09m	8h 20m	7h 22m	6h 02m	—	5h 11m	—	—	4h 01m
	Ceiling	—	21h 45m	14h 09m	8h 02m	6h 39m	—	5h 39m	—	4h 43m	3h 57m	—
Chime-Strobe	Wall	—	18h 12m	12h 55m	7h 58m	6h 31m	5h 18m	—	4h 26m	—	—	3h 37m
	Ceiling	—	18h 35m	12h 44m	7h 41m	6h 28m	—	5h 24m	—	4h 29m	3h 45m	—
Horn-Strobe	Wall	—	16h 31m	12h 03m	7h 22m	6h 17m	5h 30m	—	4h 33m	—	—	3h 38m
	Ceiling	—	12h 34m	9h 54m	6h 14m	5h 24m	—	4h 46m	—	4h 07m	3h 31m	—
Low-Freq. Sounder-Only	Wall	8h 15m	—	—	—	—	—	—	—	—	—	—
Low-Freq. Sounder-Strobe	Wall	—	9h 6m	7h 45m	5h 39m	4h 56m	4h 54m	-	4h 12m	—	—	3h 18m

NOTE: Battery life will decrease using continuous tone or other coded patterns and under non-ambient environmental conditions.

BATTERY REPLACEMENT

When a low battery trouble is indicated in the system, replace the batteries in the device. This message is an indication that approximately one week of RF battery life remains or one week of AV battery life plus the alarm time referenced in Table 3. Separate indications are provided for the AV battery and Radio battery groups. Each battery group can be replaced independently.

To replace the batteries in a wireless device use the following steps:

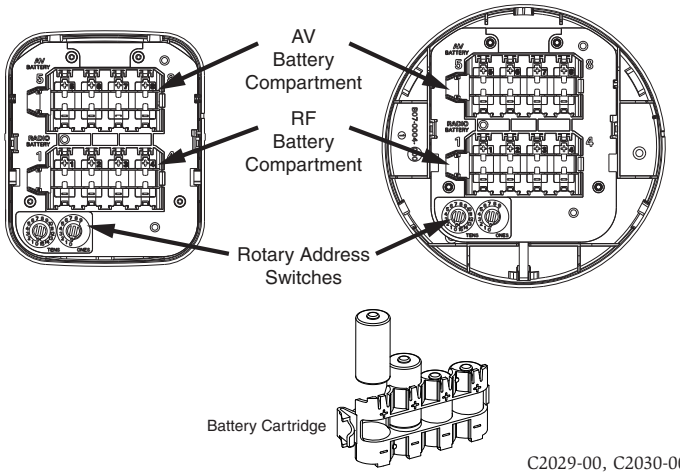
1. Have 4 CR123A (or DL123A) batteries available for each battery group (AV and/or RF) being replaced.
2. Remove the AV device and AV base as one unit from the mounting plate to access the battery compartment. An optional tamper-resist feature may be engaged see TAMPER RESISTANCE section for operational instructions.
3. Batteries can be inserted directly into the AV base or pre-loaded into the battery cartridge and inserted as two groups of 4 batteries. Remove the used batteries and replace with new batteries. The battery compartment and cartridge indicate the correct orientation of the batteries. Carefully align the batteries with these markings and do not force them into place. Inserting batteries in the wrong orientation could physically damage the battery contacts.
4. Return the device to its original location.

TABLE 3. HORN-STROBE BATTERY LIFE AT TEMP 3, HIGH SETTING AFTER 2 YEARS NORMAL OPERATION*

NOTE: Normal operation over 2 years defined as standby with 30 second alarm once per month.

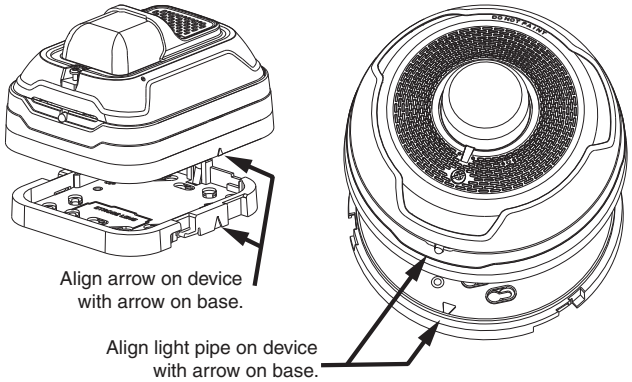
	Battery Life (hours, minutes), per Candela Setting				
Device Type	15 cd	95 cd	110 cd	177 cd	185 cd
Ceiling	10h15m	4h04m	—	2h31m	—
Wall	11h32m	—	3h33m	—	2h25m

FIGURE 2. BATTERY COMPARTMENT AND ROTARY DIAL SWITCHES



C2029-00, C2030-00

FIGURE 3. ALIGNMENT ARROWS



C2031-00

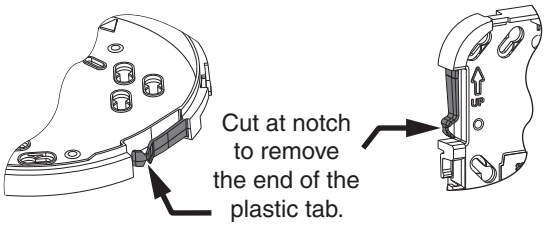
TAMPER RESISTANCE

The wireless AV bases include a tamper-resistant capability that prevents their removal from the mounting plate without the use of a screwdriver or similar tool. To activate this feature, use diagonal wire cutters to break the tab on the wireless AV mounting plate as shown in Figure 4. Then install the AV base. To remove the device from the mounting plate once the tamper-resist feature has been activated, insert a screwdriver into the notch, as indicated in Figure 4 to press the plastic lever. For models WAV-CRL and WAV-CWL rotate the AV base counter clockwise while pushing the tamper-resistance lever. For models WAV-RL and WAV-WL slide the AV base up while pushing the tamper-resist lever.

The tamper-resist feature can be defeated by cutting and removing the plastic lever from the base. However, this prevents the feature from being used again.

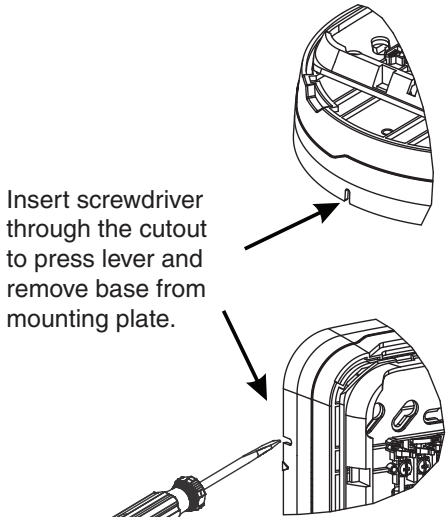
The base also includes a magnet for tamper resistance. The magnet activates a supervisory tamper fault at the panel if the wireless AV base is removed from the mounting plate.

FIGURE 4. TAMPER RESIST FEATURE



C2032-00

FIGURE 5. TAMPER RESIST RELEASE (WALL, CEILING)



C2033-00

TESTING

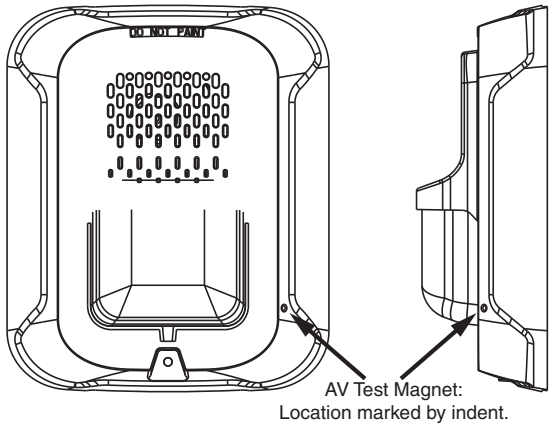
Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted alarms.

All AV notification appliances must be tested after installation and periodically thereafter. Testing methods must satisfy the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when tested and maintained in compliance with NFPA 72.

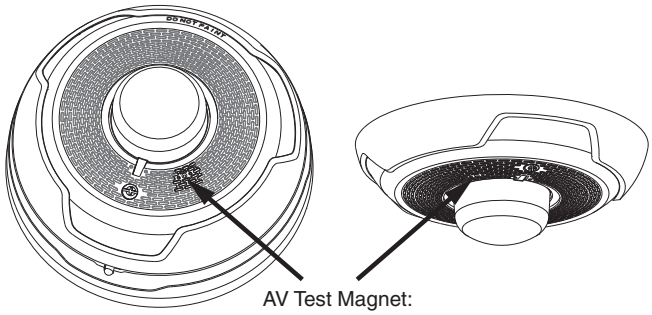
Magnet testing allows the AV device to be activated at the device individually to quickly check the audible and/or visible signal. The magnet test can be initiated at the FACP and activated by placing a magnet on the AV device magnet test mark. (See Figure 6.) Refer to the SLC Gateway Manual for additional information.

NOTE: The magnet test mode uses more current consumption than standby mode, therefore, ensure the system is not left in magnet test mode.

FIGURE 6. AV TEST MAGNET (HORN STROBES SHOWN)



A0538-02



A0541-00

Please refer to insert for the Limitations of Fire Alarm Systems

LICENSING STATEMENT

Use of these products in combination with non-Honeywell products in a wireless mesh network, or to access, monitor or control devices in a wireless mesh nework via the internet or another external wide area network, may require a separate license from Sipco, LLC. For more information, contact Sipco, LLC or Ipco, LLC at 8215 Roswell Rd., Building 900, Suite 950, Atlanta, GA 303350, or at www.sipocollc.com or www.intusiq.com.

FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference, and 2. This device must accept any interference received, including interference that may cause undesired operation. WARNING: Do not make changes to the equipment. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

IC STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

RAPPORT D'IC

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

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