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W-SYNC Wireless Synchronization Module

SPECIFICATIONS

Normal Operating Voltage:	18 to 30 VDC
Maximum Current Draw:	60 mA (in alarm)
Average Operating Current:	910 µA (with 3.9k ELR)
Monitor EOL Resistance:	3.9K Ohms
Maximum Monitor Wiring Resistance:	10 Ohms
Maximum Monitor Voltage:	3.2 Volts
Maximum Transmit RF Power:	17 dBm
Radio Frequency Range:	902-928 MHz
Temperature Range:	32°F to 120°F (0°C to 49°C)
Humidity:	10% to 93% Non-condensing
Battery Type (Supplemental):	4 Panasonic CR123A or 4 Duracell DL123A
Battery Life:	2 year minimum
Battery-only Current Draw:	268 µA (with 3.9k ELR)
Battery Replacement:	Upon TROUBLE BATTERY LOW display and/or during annual maintenance
Dimensions:	4¼ in. H x 4¼ in. W x 1½ in. D
Accessories:	SMB500 Electrical Box (preferred mounting option)

BEFORE INSTALLING

This wireless synchronization module must be installed in compliance with the control panel system installation manual, the SWIFT Wireless Gateway Manual, applicable NFPA standards, national and local Fire codes and the requirements of the AHJ (Authority Having Jurisdiction). Regular testing of the devices should be done in accordance with the appropriate NFPA standards. Modules offer maximum performance when installed in compliance with the National Fire Protection Association (NFPA); see NFPA 72.

NOTICE: This manual should be left with the owner/user of this equipment.

GENERAL DESCRIPTION

The wireless synchronization module works with System Sensor wireless AV base models WAV-RL, WAV-WL, WAV-CRL and WAV-CWL to provide audio and visual synchronization of a wireless notification appliance to a wired notification appliance and is intended for use with a wireless gateway. The device communicates through a robust, Class A bi-directional mesh network to the gateway and/or FACP. Rotary dial switches are provided for setting the wireless synchronization module's address (Figure 1). Synchronization is only available with notification appliances that use the System Sensor synchronization protocol. The W-SYNC also provides wireless control and monitoring of a Notification Appliance Circuit (NAC) expander or power supply. It does not support the "whoop" pattern.

The wireless synchronization module operates from 24V power with supplemental battery support. A trouble will be generated at the panel if batteries are not installed or at a low battery level. Synchronization is not available during supplemental battery operation. The supplemental batteries enable the wireless transceiver to continue to support wireless mesh communications so that other devices that are its parents or children are not affected by the loss of the 24V connection.

Synchronization of only wireless notification appliances within a single mesh network is inherent in the wireless system and a wireless synchronization module is not needed.

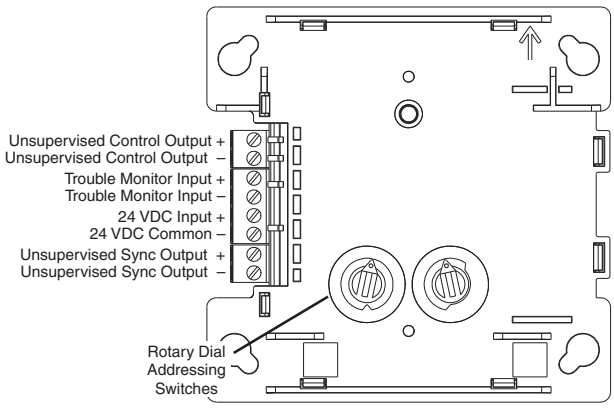
Panels offer different feature sets across the various models. As a result, certain features may be available on some control panels, but not on others. The possible feature sets available with the wireless synchronization include:

- An LED on the wireless synchronization module is controlled by the panel to indicate device status. Operational modes include red, green and amber colors in various solid or blink patterns.
- W-SYNC addressing requirements will vary; refer to the SWIFT Wireless Gateway Manual.

FACEPLATE

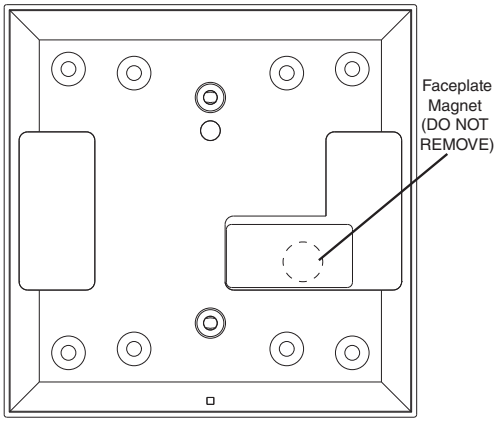
The faceplate includes a magnet for activation and tamper resistance (Figure 2). The faceplate magnet activates communication to the panel and must be installed for the module to work properly. The magnet also activates a supervi-

FIGURE 1. CONTROLS AND INDICATORS



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FIGURE 2. FACEPLATE INTERIOR



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sory tamper fault at the panel if the nameplate is removed. Do NOT remove this magnet. The faceplate for a wireless module CANNOT be replaced with the faceplate of a standard wired module.

COMPATIBILITY REQUIREMENTS

To ensure proper operation, this module shall be connected to a compatible system control panel.

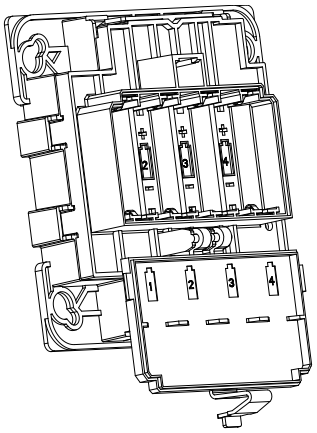
BATTERY REPLACEMENT

Low battery levels on the wireless devices are displayed as a trouble in the FACP or annunciator. Therefore when the message "TROUBLE BATTERY LOW" is displayed, replace the battery in the device. This message is an indication that approximately one week of battery life remains.

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

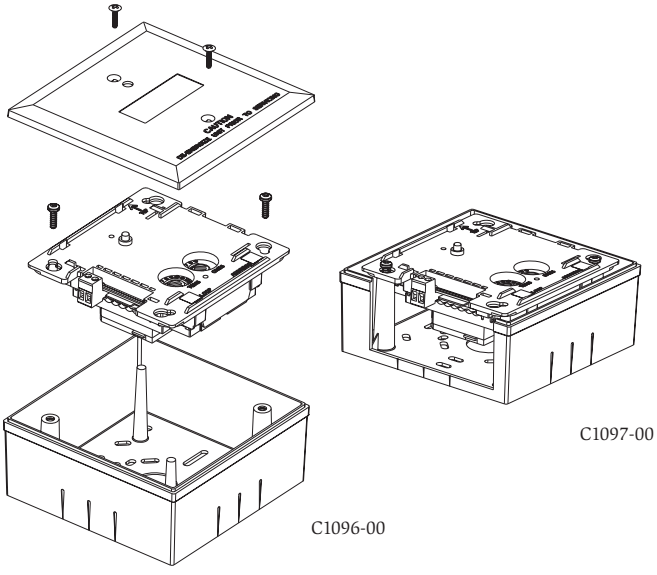
1. Have 4 CR123A (or DL123A) batteries available.
2. Remove the faceplate from the module.
3. Open the battery compartment. (See Figure 3.)
4. Remove the used batteries and replace with new batteries. The battery compartment is designed such that the batteries can only align in the appropriate direction. Do not force the batteries into the openings.
5. Replace the battery compartment cover.
6. Replace the faceplace.

FIGURE 3. BATTERY COMPARTMENT (SHOWN WITH DOOR OPEN)



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FIGURE 4. MODULE MOUNTING:



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SPACING

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

The W-SYNC mounts directly to an SMB500 electrical box. (See Figure 4.) To avoid interference with the wireless network metal electrical boxes are NOT recommended. Non-metal surface mounted electrical boxes (SMB500) are available from Honeywell. If not using an SMB500, the minimum mounting opening dimensions for the W-SYNC are 4 in. X 3¾ in. x 1½ in. deep.

NOTE: Do not attach the module to temporary structures such that the placement could be altered.

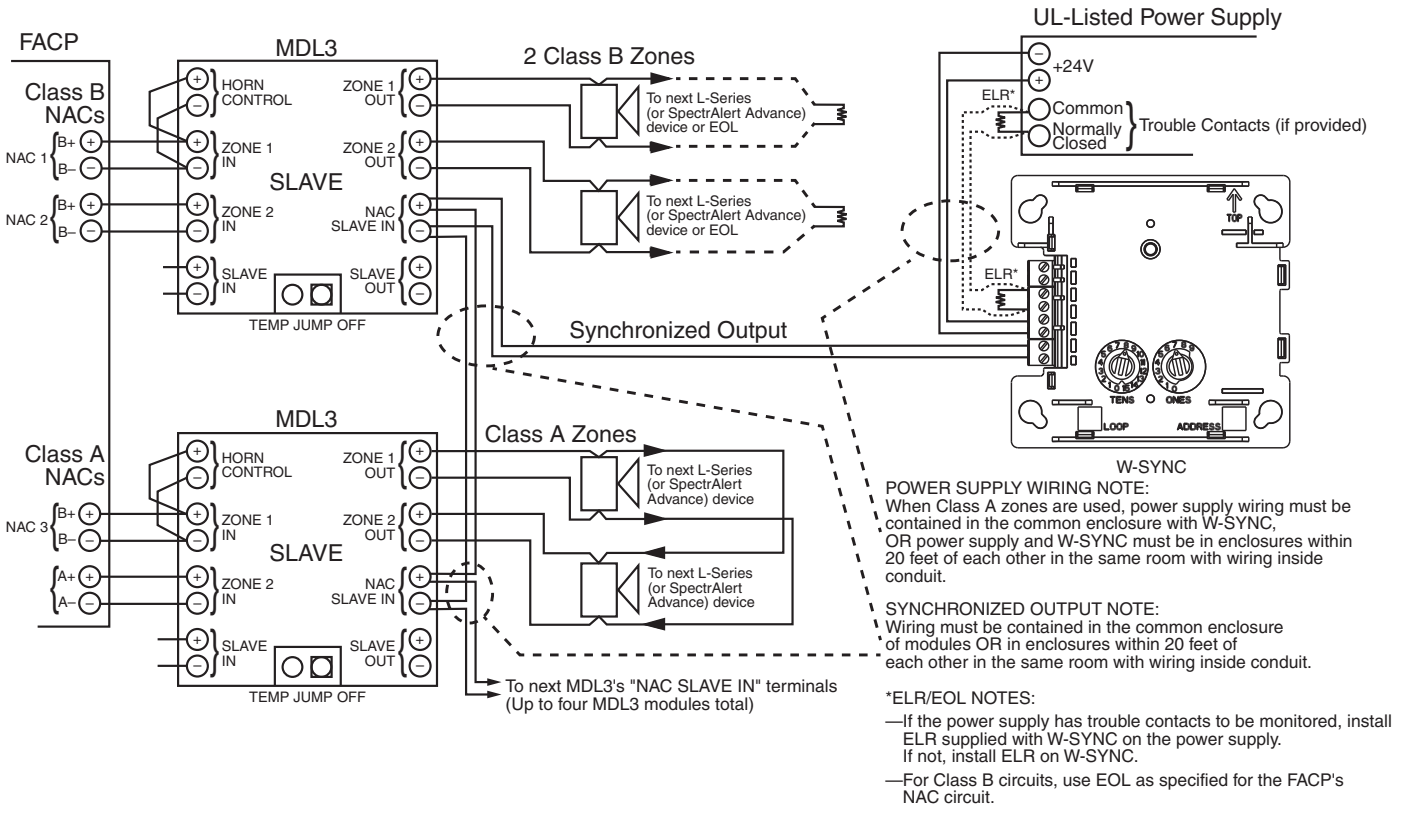
WIRING

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations. This module is intended for power limited wiring only. W-SYNC must be within 3 feet of the connected device when using field wiring or 20 feet in the same room in non-metallic conduit.

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.
2. Set the address on the module per job drawings.
3. Secure module to electrical box (supplied by installer), as shown in Figure 4.

Several W-SYNC applications provide synchronization between wireless AV devices and wired AV devices. For applications using W-SYNC with MDL3, see Figure 5. For all other compatible applications, see the W-SYNC section of the SWIFT® Instruction Manual.

FIGURE 5. MDL3/W-SYNC WIRING: SYNCHRONIZING WIRED AND WIRELESS NAC CIRCUITS



POWER SUPPLY WIRING NOTE:
When Class A zones are used, power supply wiring must be contained in the common enclosure with W-SYNC, OR power supply and W-SYNC must be in enclosures within 20 feet of each other in the same room with wiring inside conduit.

SYNCHRONIZED OUTPUT NOTE:
Wiring must be contained in the common enclosure of modules OR in enclosures within 20 feet of each other in the same room with wiring inside conduit.

*ELR/EOL NOTES:

—If the power supply has trouble contacts to be monitored, install ELR supplied with W-SYNC on the power supply. If not, install ELR on W-SYNC.

—For Class B circuits, use EOL as specified for the FACP's NAC circuit.

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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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