

6.3.2.3 Discovering and Registering the Indoor Siren (Model SW-ATT-SRN)

Follow these steps to discover and register the indoor siren:

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Plug in the indoor siren and once it has powered make it discoverable by pressing the Learn button located on the side of the unit for a minimum of three (3) seconds and release.
3.	Confirm that the indoor siren has been discovered in DLD.
4.	Label the indoor siren in DLD.

6.3.2.4 Specifications—Indoor Siren (Model SW-ATT-SRN)

Specifications	
AT&T Model Number	SW-ATT-SRN
Voltage	120VAC, 50/60Hz
Current	15 mA maximum
Required Batteries	2
Battery Type	Non-rechargeable, 3V CR123 (Duracell® DL123A, Panasonic® CR123A)
Projected Battery Life	48 hours
Operating Frequency	911.78 MHz - 919.78 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F (0° to 49° C) Relative Humidity: 8 to 85%, non-condensing

6.3.3 Signal Booster (915) (Model SW-ATT-RPTR9)

The AT&T model number **SW-ATT-RPTR9** is a proprietary 915 MHz signal booster and is shown in Figure 52. Once it is installed and discovered, it will perform the repeating function automatically by determining which 915MHz transmissions are not being received by the DLC-200C and will automatically repeat those 915 MHz transmissions.

The 915 MHz wireless signal booster has one (1) LED, which is located on the front panel, as shown in Figure 52.

Figure 52: Signal Booster (915) (Model SW-ATT-RPTR9) Front Panel



The LED shows the system status, as follows:

- Solid Green—unit is AC powered and backup battery is good.
- Blinking Green—unit is not AC powered and is operating on backup batteries.
- Solid Red—unit is AC powered and the backup battery needs to be replaced.
- Off—unit is not AC powered and backup battery has failed.

The Signal Booster (915) (Model SW-ATT-RPTR9) is a fully supervised peripheral device that communicates with the DLC-200C via a two-way proprietary 915 MHz radio protocol. The Signal Booster (915) (Model SW-ATT-RPTR9) receives and recognizes messages from other 915 MHz devices (including the keypads, indoor

siren and DLC-200C and automatically repeats those messages from devices that are not being received by the DLC-200C to extend the range of these devices.

6.3.3.1 Installing/Replacing the Signal Booster (915) (Model SW-ATT-RPTR9) Batteries

The Signal Booster (915) (Model SW-ATT-RPTR9) has two (2) non-rechargeable 3V CR123 (Duracell® DL123A, Panasonic® CR123A) batteries that provide twenty-four (24) hour battery backup. The batteries can be replaced by opening the battery compartment located on the rear of the unit.

Follow these steps to install/replace the batteries:

Action	Illustration
1. Turn the Signal Booster (915) (Model SW-ATT-RPTR9) to its underside and remove the Phillips Head screw at the bottom to open battery compartment cover.	
2. Remove the battery compartment cover. 3. Insert two (2) non-rechargeable 3V CR123 (Duracell® DL123A, Panasonic® CR123A) batteries. NOTE: Ensure that polarity of the batteries is correct during installation. 4. Replace the battery compartment cover and the Phillips Head screw.	

CAUTION: Replace batteries with Duracell® DL123A, Panasonic® CR123A only. Use of another battery may present a risk of fire or explosion.

6.3.3.2 Installing the Signal Booster (915) (Model SW-ATT-RPTR9)

Follow these steps to install the Signal Booster (915).

Step	Action
1.	Plug the Signal Booster (915) (Model SW-ATT-RPTR9) into the lower socket of an AC power outlet.
2.	Insert the retaining screw into the plastic tab located at the top of the unit and secure the unit to the AC outlet. 

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234732) that is shipped with the device for further details.

6.3.3.3 Discovering and Registering the Signal Booster (915) (Model SW-ATT-RPTR9)

Follow these steps to discover and register the Signal Booster (915):

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the Signal Booster (915) (Model SW-ATT-RPTR9) discoverable by pressing the Learn button for a minimum of three (3) seconds and release.
3.	Confirm that the Signal Booster (915) has been discovered in DLD.
4.	Label the Signal Booster (915) in DLD.

6.3.3.4 Specifications—Signal Booster (915) (Model SW-ATT-RPTR9)

Specifications—Signal Booster (915) (Model SW-ATT-RPTR9)	
AT&T Model Number	SW-ATT-RPTR9
Voltage	120VAC, 50/60Hz
Current	15mA maximum
Required Batteries	2
Battery Type	Non-rechargeable, 3V CR123 (Duracell® DL123A, Panasonic® CR123A)
Projected Battery Life	48 hours
Operating Frequency	911.78MHz - 919.78MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F (0° to 49° C) Relative Humidity: 8 to 85%, non-condensing

6.4 433 MHz Products

The 433 MHz devices feature proprietary one-way communication with the DLC-200C. The 433 MHz devices are:

- Smoke Sensor (Model SW-ATT-SMKT)
- Carbon Monoxide (CO) Sensor (Model SW-ATT-CO)
- Surface Contact Sensor (Model SW-ATT-V2)
- Recessed Contact Sensor (Model SW-ATT-RDW)
- Glass Break Sensor (Model SW-ATT-GB)
- Motion Sensor (PIR) (Model SW-ATT-PIR)
- Keychain Remote (Model SW-ATT-FOB)
- Conversion Kit (Model SW-ATT-TAKRF)
- Signal Booster (433) (Model SW-ATT-RPTR4)
- Garage Door Sensor (Model SW-ATT-TILT) (Supplementary use only. Not part of the fire and security system.)

Approximately once an hour the 433 MHz devices automatically transmit supervisory messages to the DLC-200C. These supervisory messages are also known as heartbeat messages. These supervisory messages communicate the identity of the device, device specific information and battery level status. A 433 MHz device only sends a supervisory message if it has not sent any transmissions to the DLC-200C within the last hour. If the DLC-200C does not receive three consecutive hourly supervisory messages from a 433 MHz device, then the device is considered to be offline and an advisory message is automatically sent to the AT&T Digital Life Central Monitoring Center.

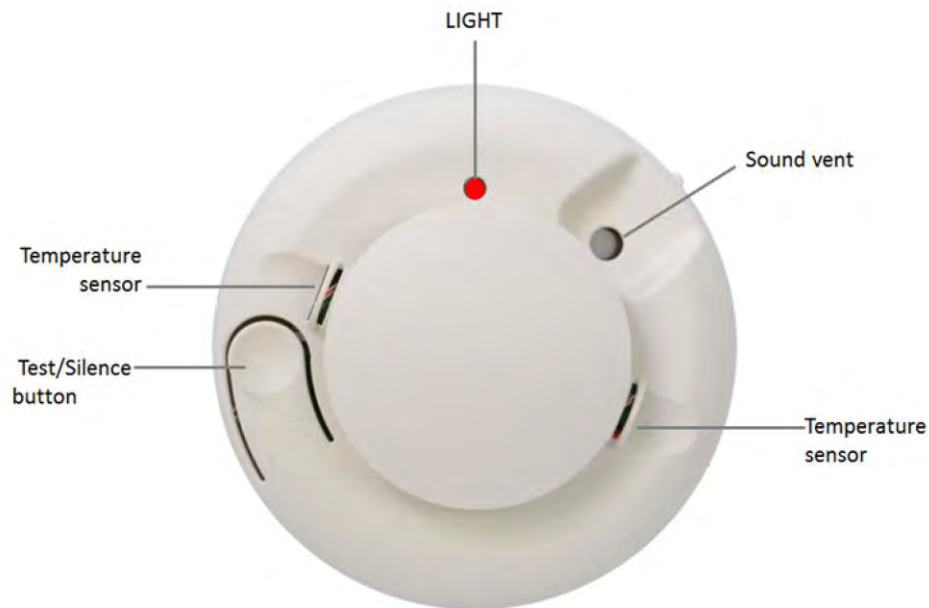
The Conversion Kit (Model SW-ATT-TAKRF) and Signal Booster (433) (Model SW-ATT-RPTR4) always send supervisory messages to the DLC-200C on an hourly basis independent of previous transmissions to the DLC-200C. The Conversion Kit (Model SW-ATT-TAKRF) and Signal Booster (433) normally operate on power from an AC to DC converter. Both devices are also equipped with customer replaceable batteries that provide twenty-four (24) hour battery backup. When the Conversion Kit (Model SW-ATT-TAKRF) and Signal Booster (433) send their supervisory messages to the DLC-200C, the messages include an indication of whether the device is operating on power from the AC to DC converter or operating on power from the batteries.

6.4.1 Smoke Sensor (Model SW-ATT-SMKT)

The AT&T model number **SW-ATT-SMKT** is a proprietary one-way 433 MHz photoelectric smoke alarm with a built-in transmitter designed for use with the DLC-200C, as shown in Figure 53. When smoke is detected, the Smoke Sensor sounds a loud local temporal 3 alarm (three short beeps then silence repeating). Twenty (20) seconds after the local alarm sounds, the built-in transmitter sends a digitally coded wireless Smoke Sensor signal to the DLC-200C. The wireless signal will be repeated every twenty (20) seconds as long as smoke is still present. When the Smoke Sensor is sounding an alarm, the 915 MHz Indoor Siren (Model SW-ATT-SRN) will also be sounding a temporal 3 alarm.

In addition to the photoelectric sensor, the unit contains an integrated fixed 135° temperature and rate-of-rise heat sensor that will send an alarm signal to the DLC-200C based on temperature detected.

Figure 53: Smoke Sensor (Model SW-ATT-SMKT)



6.4.1.1 Smoke Sensor (Model SW-ATT-SMKT) LED Functions

The operation of the Smoke Sensor (Model SW-ATT-SMKT) LED is outlined below:

- Flashing—Flashes every 9 seconds to indicate normal operation.
- On—Detects smoke.
- Off—Trouble or maintenance is required.

6.4.1.2 Installing/Replacing the Smoke Sensor (Model SW-ATT-SMKT) Batteries

The Smoke Sensor (Model SW-ATT-SMKT) is not shipped with the batteries installed. Therefore, the DLT must install the batteries during initial installation. When the batteries are low, the integral transmitter will send a low battery report to the DLC-200C, the Smoke Sensor LED is extinguished and the Smoke Sensor will chirp every forty-five (45) seconds until the batteries are replaced. The low battery trouble chirps can be silenced for twenty-four (24) hours by pressing the TEST/SILENCE button. Typical battery life is a minimum of one year, but varies depending on how often the unit is tested.

Use only 3V lithium batteries, as listed on the battery compartment cover. Follow these steps to install/replace the batteries:

Step	Action
1.	Remove the unit from the mounting base, grasp the unit and turn it counter clockwise approximately 15 degrees.
2.	Slide the battery compartment cover away from the smoke alarm to unsnap it and lift it off.
3.	Remove the batteries, if applicable, and dispose of them properly
4.	Observing correct polarity, insert two (2) new 3V CR123A lithium batteries into the battery compartment and replace the cover.
5.	Reattach the unit to the mounting base.
6.	Test the system.

WARNING!

This Smoke Sensor will not operate and the alarm will not sound if the batteries are dead or not installed properly.

6.4.1.3 Discovering and Registering the Smoke Sensor (Model SW-ATT-SMKT)

Follow these steps to discover and register the Smoke Sensor:

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the Smoke Sensor discoverable by inserting the two batteries. Alternate Method: Remove the back mounting bracket after batteries have been installed. NOTE: A tamper signal is only sent after the batteries are installed.
3.	Confirm that the Smoke Sensor has been discovered in DLD.
4.	Label the Smoke Sensor in DLD.

6.4.1.4 Selecting Location(s) for Installation for the Smoke Sensor (Model SW-ATT-SMKT)

Smoke Sensors should be installed in accordance with Chapter 2 of the National Fire Alarm Code, ANSI/NFPA 72.

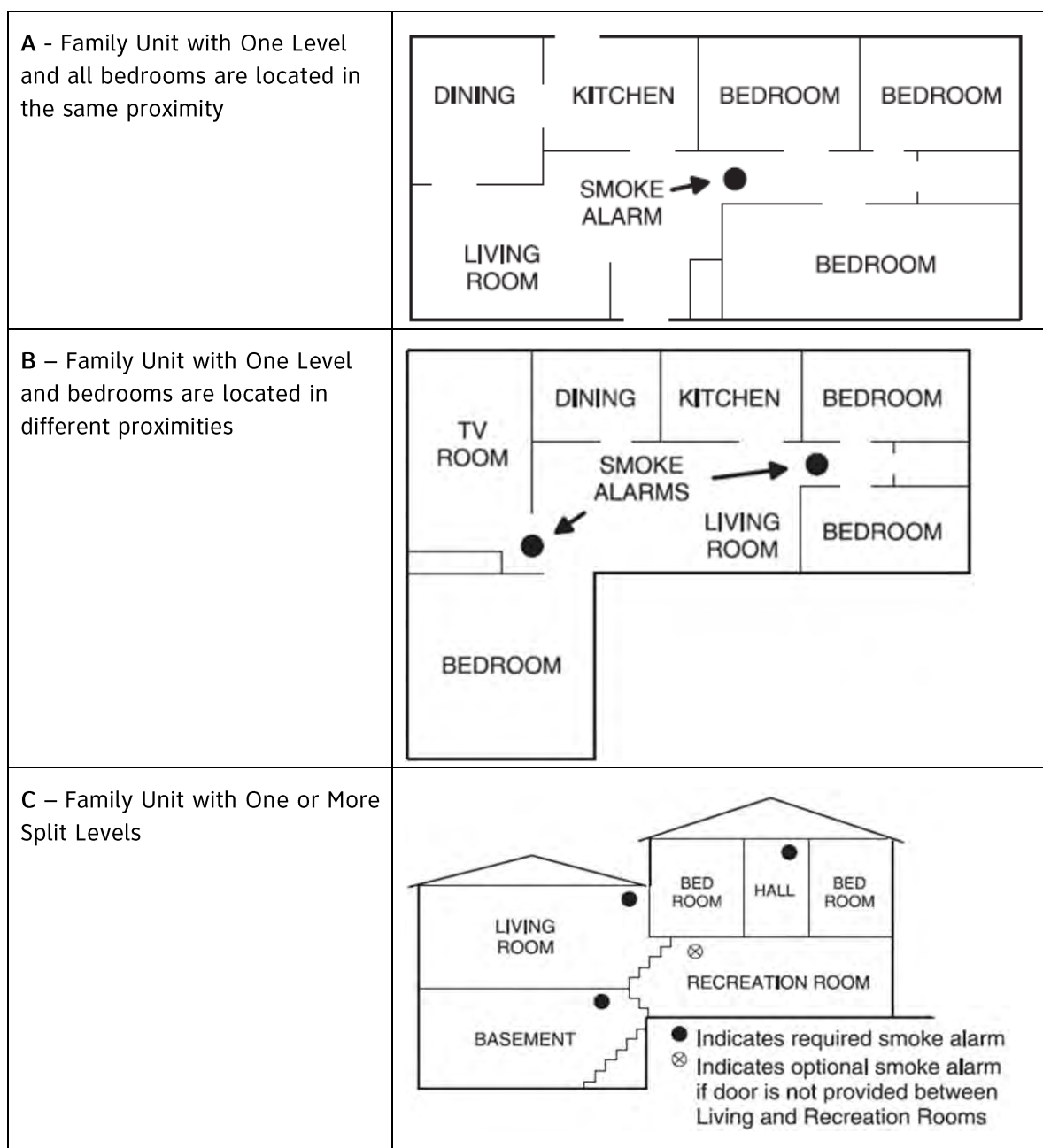
6.4.1.4.1 Existing Construction

For existing construction Smoke Sensors are best located between the bedroom areas and the rest of the home. In homes with only one bedroom area on one floor, the Smoke Sensor(s) should be located between the sleeping area and the rest of the family living unit as shown in Figure 54 - A. Multiple Smoke Sensors are required for homes with more than one sleeping area, as shown in Figure 54 - B. For split-level homes with multi-living areas, Smoke Sensors are required for each living area, including adjacent lower levels, the hallway to adjoining sleeping areas and basement area (if applicable), as shown in Figure 54 - C. For multiple-level homes, including

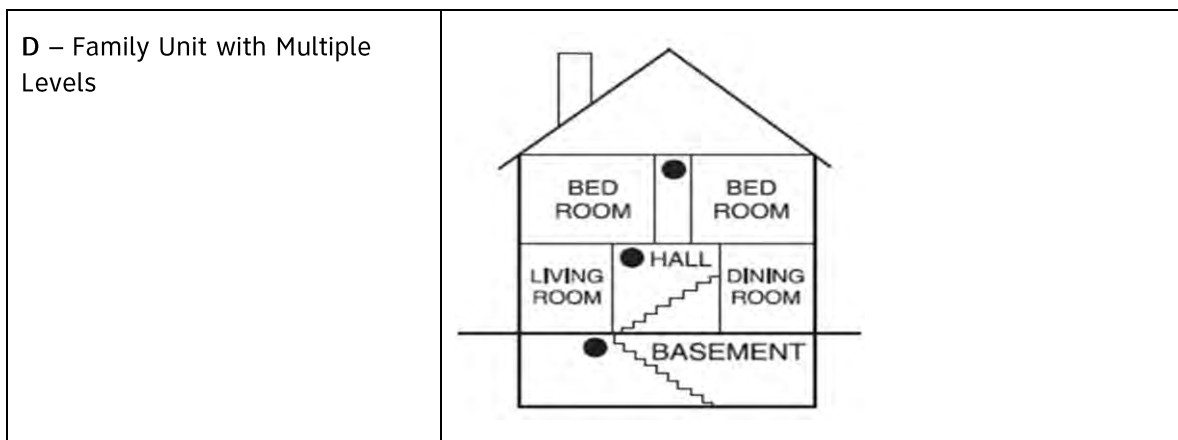
the basement, Smoke Sensors are required in the hallway of each level and near the basement stairwell, as shown in Figure 54 - D.

In addition, it is recommended that Smoke Sensors be located in areas separated by a door from protected areas to provide increased protection.

Figure 54: Smoke Sensor Location for Existing Construction



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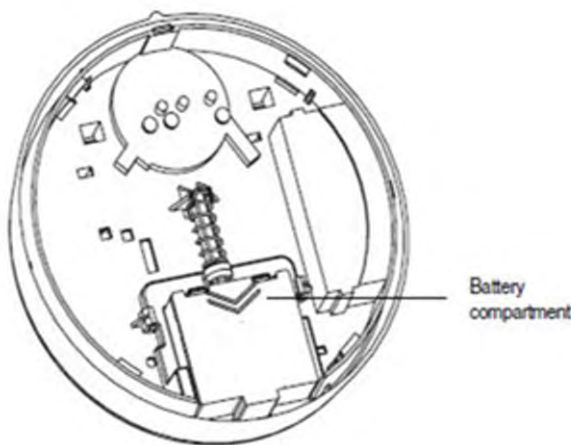


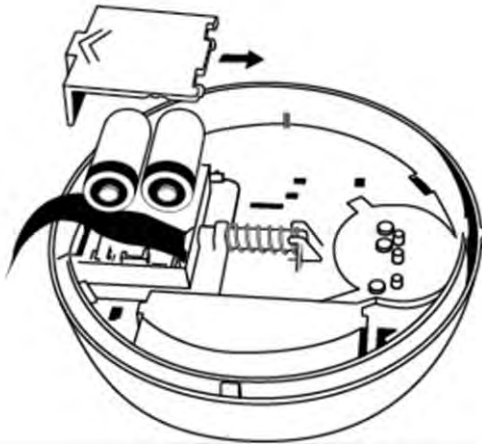
6.4.1.4.2 New Construction

For new construction, Smoke Sensors should be installed in the same areas as noted in Existing Construction, as well as in each bedroom.

6.4.1.5 Installing the Smoke Sensor (Model SW-ATT-SMKT)

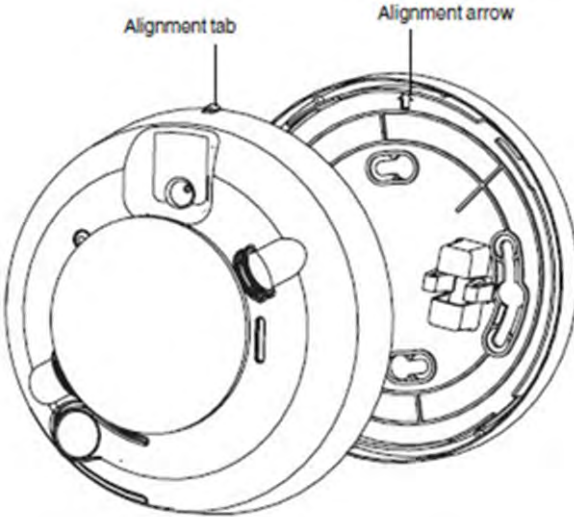
Follow these steps to assemble the Smoke Sensor (Model SW-ATT-SMKT):

Step	Action
1.	Slide the battery compartment cover away from the unit to unsnap it and lift it off as shown in Figure 55. Figure 55: Smoke Sensor (Model SW-ATT-SMKT) Battery Compartment 

Step	Action
2.	Observing proper polarity, insert the two 3V CR128A lithium batteries supplied into the alarm battery compartment and replace the battery cover, as shown in Figure 56 . Figure 56: Smoke Sensor (Model SW-ATT-SMKT) Battery Installation  NOTE: Pull and hold the spring guard and insert the battery closest to the spring guard first. This will make it easier to install the remaining battery.

Follow these steps to mount the Smoke Sensor (Model SW-ATT-SMKT):

Step	Action
1.	Remove the red plastic dust cover from the unit.
2.	Using the two (2) screws and anchors provided, mount the base

Step	Action
3.	Attach the unit to the base as shown in Figure 57: Figure 57: Smoke Sensor (Model SW-ATT-SMKT) to Base Alignment  - Line up the raised alignment tab on the lip of the unit with the alignment arrow on the base. - Insert the unit into the base and turn clockwise approximately fifteen (15) degrees. It should snap firmly into place. IMPORTANT! The unit cannot be attached to the base if no batteries are installed.

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234724) that is shipped with the device for further details.

6.4.1.6 Testing the Smoke Sensor (Model SW-ATT-SMKT)

To test the sensitivity of the Smoke Sensor, do the following:

- Press and hold the TEST/SILENCE button for 4 seconds. Once the test starts, the smoke alarm LED flashes 1 to 9 times.

2. Count the number of LED flashes and use the following table to determine if any action is necessary.

LED Flashes Indication—Action	
0-3	Replace the unit.
4-7	Unit is within normal sensitivity range. No action required.
8-9	Replace the unit.

6.4.1.7 Maintaining the Smoke Sensor (Model SW-ATT-SMKT)

The units are designed for easy field service and maintenance. When installed and used properly, they require minimal maintenance. Follow these guidelines:

- Test the unit weekly.
- Clean the cover with a dry or damp (water) cloth as needed to keep it free from dust and dirt.
- When a unit requires maintenance, it extinguishes its LED and stops sending supervisory signals to the alarm DLC-200C. If the DLC-200C indicates supervisory trouble for the smoke alarm, perform the sensitivity test and follow the recommended actions.

6.4.1.8 Specifications—Smoke Sensor (Model SW-ATT-SMKT)

Specifications—Smoke Sensor (Model SW-ATT-SMKT)	
AT&T Model Number	SW-ATT-SMKT
Voltage	3V DC
Current	• Typical average standby current 35μA • Typical test current 2mA • Typical alarm current 70mA
Required Batteries	1

Specifications—Smoke Sensor (Model SW-ATT-SMKT)	
Battery Type	3V Lithium (Duracell® 123A, Panasonic® CR123A, Sanyo® 123A)
Projected Battery Life	3 – 5 years
Low Battery Threshold	2.70V causes low battery signal
Low Battery Beep Rate	1 every 45 seconds
Operating Frequency	433.92MHz
Open Air Wireless Signal Range	Up to 500 feet
Sounder	85dBa at 10' temporal pattern
Sensitivity	2.2% ± 1.3% / ft.
Dimensions	4.68" x 2.75" x 1.85" (119 x 70 x 47 mm)
Storage Temperature	4° to 140°F (- 20° to 60°C)
Operating Environment	Temperature: 40°-100°F (4.4°-37.8°C) Relative Humidity: 8-85% non-condensing
Alarm Dimensions	5.6" x 2.4" (14.2 cm x 6.1cm)
Base Dimensions	5.4" x 0.46" (13.7 cm x 1.17cm)
Drift Compensation Adjustment	0.5% / ft. max.
Heat Detector Specifications	• Rate-of-rise 15°F/min>105°F • 8.3°C/min>40.6°C • Fixed 135°F ± 5°F (57.2°C ± 2.8°C) • Listings, UL217, CSFM

6.4.2 Evacuation Plan

The purpose of an early warning smoke alarm is to detect the presence of fire in its early stages and sound an alarm giving the occupants time to exit the premises safely.

NOTE: It is recommended that the Evacuation Plan be in accordance with ANSI/NFPA 72.

6.4.2.1 Avoid Fire Hazards

No detection device can protect life in all situations. Therefore, safeguards should be taken to avoid potentially dangerous situations as follows:

- Do not smoke in bed.
- Do not leave children home alone.
- Never clean with flammable liquids such as gasoline.
- Properly store materials. Use general good housekeeping techniques to keep your home neat and tidy. A cluttered basement, attic, or other storage area is an open invitation to fire.
- Use combustible materials and electrical appliances carefully and only for their intended uses. Do not overload electrical outlets
- Do not store explosive and/or fast burning materials in your home.
- Even after proper precautions have been taken, fires can start. Be prepared.

6.4.2.2 In Case of Fire

In the event of a fire:

- Leave immediately. Do not stop to pack or search for valuables.
- In heavy smoke, hold your breath and stay low, crawl if necessary.
- The clearest air is usually near the floor.
- If you have to go through a closed door, carefully feel the door and door knob to see if undue heat is present. If they seem cool, brace your foot against the bottom of the door with your hip against the door and one hand against the top edge. Open it slightly. If a rush of hot air is felt, slam the door quickly and

latch it. Unvented fire tends to build up considerable pressure. Be sure all members of the household realize and understand this danger.

- Use your cell phone, a neighbor's phone or a street fire alarm box to call the fire department. The job of extinguishing the fire should be left to the professionals.

6.4.2.3 Be Prepared

Practice the following steps to prepare you and your family in the event of a fire:

- Perform fire drills regularly. Use them to assure recognition of an alarm signal.
- Draw a floor plan and show two exits from each room. It is important that children be instructed carefully, because they tend to hide in times of crisis.
- Establish one meeting place outside the home. Insist that everyone meet there during an alarm. This will eliminate the tragedy of someone reentering the house for a missing member who is actually safe.
- If you have children and/or physically challenged people residing in your household, use window decals to help emergency personnel identify the sleeping quarters of these individuals.

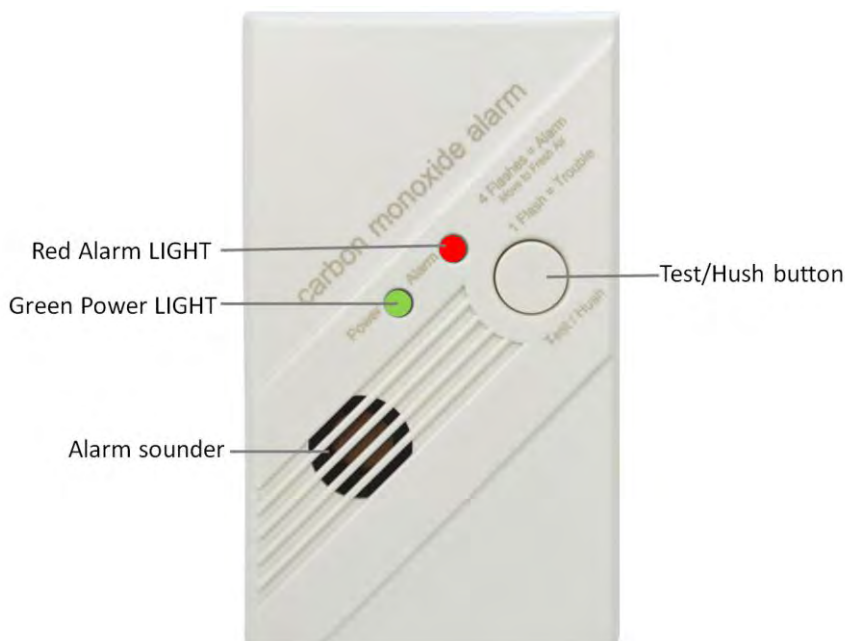
WARNING!

Smoke alarms CANNOT provide warnings for fires resulting from explosions, smoking in bed or other furniture, ignition of flammable liquids, vapors and gases, children playing with matches or lighters.

6.4.3 Carbon Monoxide (CO) Sensor (Model SW-ATT-CO)

The AT&T model number **SW-ATT-CO** is a proprietary 433 MHz one-way wireless carbon monoxide (CO) sensor that monitors the levels of CO gas and gives early warning when potentially dangerous levels exist, as shown in Figure 58.

Figure 58: CO Sensor (Model SW-ATT-CO)



The CO Sensor (Model SW-ATT-CO) detects CO only. It does NOT detect fire, smoke, or any other gas. If a dangerous concentration of CO is detected by the electrochemical sensor, the red LED indicator illuminates and the CO Sensor sounds a local temporal 4 alarm (four short beeps then silence repeating). The CO Sensor also transmits an alarm signal to the DLC-200C within 15 seconds of detecting dangerous concentration of CO gas. When the CO Sensor is sounding an alarm, the 915 MHz indoor siren will also be sounding a temporal 4 alarm.

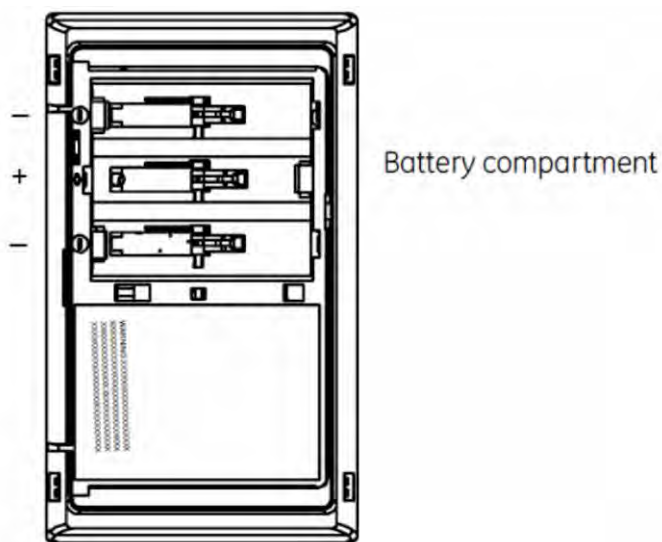
The CO Sensor (Model SW-ATT-CO) detects low battery, wall tamper, and sensor end-of-life. These trouble codes are transmitted to the DLC-200C. The alarm automatically resets when CO is no longer detected.

6.4.3.1 Installing/Replacing the CO Sensor (Model SW-ATT-CO) Batteries

Follow these steps to install/replace the batteries:

1. Slide the alarm body off of the mounting plate.
2. If replacing batteries, remove the old batteries and properly dispose of them.
3. Install three new alkaline AA batteries (Duracell[®] MN1500, Duracell[®] MX1500 or Energizer[®] E91).
4. Note the polarity illustration in the battery compartment, as shown in Figure 59.

Figure 59: Install Batteries in CO Sensor (Model SW-ATT-CO)



5. Slide the alarm body back onto the mounting plate.

NOTE: The mounting plate will not close unless all three batteries are installed.

After installing or changing the batteries, reinstall your alarm. Test your alarm by using the Test/Hush button and check that the green Power LED is on.

NOTE: Constant exposures to high or low humidity may reduce battery life.

6.4.4 Discovering and Registering the CO Sensor (Model SW-ATT-CO)

Follow these steps to discover and register the CO Sensor:

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the CO Sensor discoverable by inserting the three (3) batteries. Alternate Method: Remove and reinstall the back case (sends tamper signal). NOTE: Ensure that the CO unit is properly reinstalled on the mounting plate.
3.	Confirm that the CO Sensor has been discovered in DLD.
4.	Label the CO Sensor in DLD.

6.4.4.1 Selecting Location(s) for CO Sensor (Model SW-ATT-CO) Installation

CO Sensors should be mounted in or near bedrooms and living areas, as shown in Figure 60 and Figure 61.

Figure 60: CO Sensor Recommended Locations for Single Level Residence

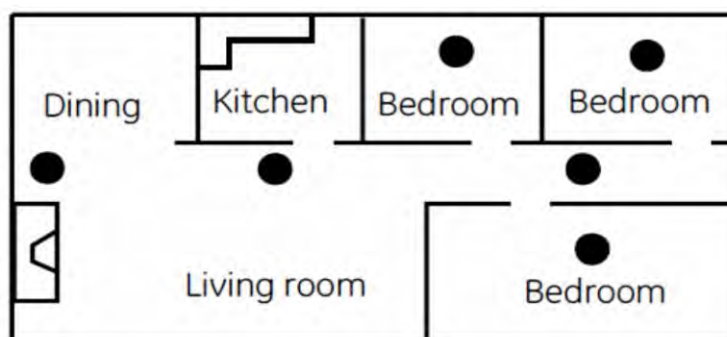
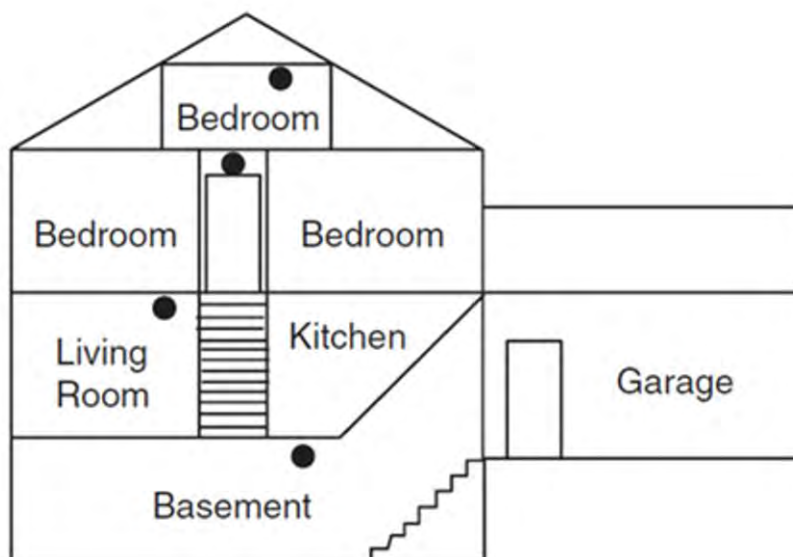


Figure 61: CO Sensor (Model SW-ATT-CO) Recommended Locations for Multi-Level Residence



It is recommended that you install a sensor on each level of your home. When choosing your installation locations, make sure you can hear the alarm from all sleeping areas. If you install only one (1) CO Sensor in your home, install it near bedrooms, not in the basement or furnace room.

NOTE: Place the CO Sensor (Model SW-ATT-CO) out of reach of children. Under no circumstances should children be allowed to handle the CO Sensor.

The CO Sensor (Model SW-ATT-CO) will only indicate the presence of carbon monoxide at the sensor, even though CO may be present in other areas.

WARNING:

CO Sensors are not smoke alarms. CO Sensors are not substitutes for installing and maintaining an appropriate number of Smoke Sensors in your home. The CO Sensors will not sense smoke, fire, or any poisonous gas other than carbon monoxide even though carbon monoxide can be generated by fire.

For this reason you must install Smoke Sensors to provide early warning of fire and to protect you and your family from fire and its related hazards.

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 9700423) that is shipped with the device for further details.

6.4.4.2 Locations to Avoid When Installing the CO Sensor (Model SW-ATT-CO)

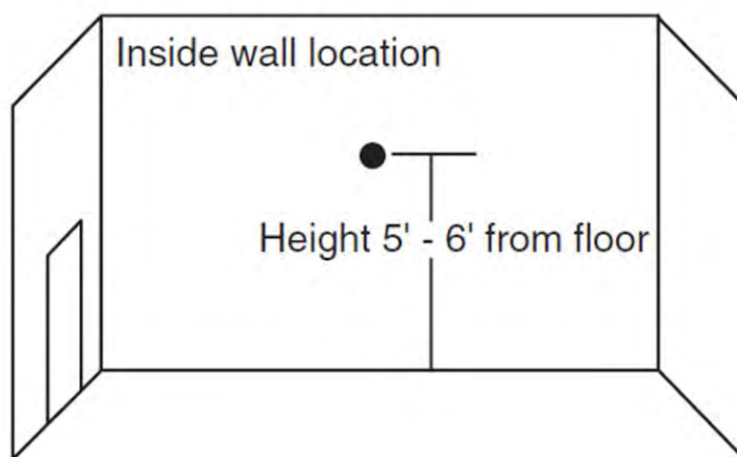
Improper location can affect the sensitive electronic components in the CO Sensor (Model SW-ATT-CO). To avoid causing damage to the unit, to provide optimum performance, and to prevent unnecessary nuisance alarms:

- Do not install in kitchens, garages, or furnace rooms that may expose the sensor to substances that could damage or contaminate it.
- Do not install in areas where the temperature is colder than 40°F (4.4°C) or hotter than 100°F (37.8°C) such as crawl spaces, attics, porches, and garages.
- Do not install within 5 ft. of heating or cooking appliances. (15 ft. is recommended to prevent nuisance alarms.)
- Do not install near vents, flues, chimneys, or any forced/unforced air ventilation openings.
- Do not install on metal surfaces.
- Avoid mounting in areas with a large quantity of metal or electrical wires.
- Do not install near ceiling fans, doors, windows, or areas directly exposed to the weather.
- Do not install in dead air spaces, such as peaks of vaulted ceilings or gabled roofs, where CO may not reach the sensor in time to provide early warning.
- Do not install near deep-cell large batteries. Large batteries have emissions that can cause the alarm to perform at less than optimum performance.
- Do not obstruct the vents located on the alarm. Do not place the alarm where drapes, furniture, or other objects block the flow of air to the vents.

6.4.4.3 Mounting the CO Sensor (Model SW-ATT-CO)

The CO Sensor (Model SW-ATT-CO) should be mounted five (5) to six (6) feet from the floor, as shown in Figure 62.

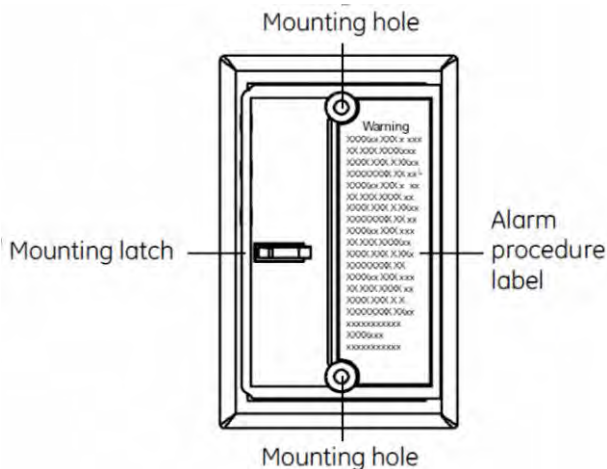
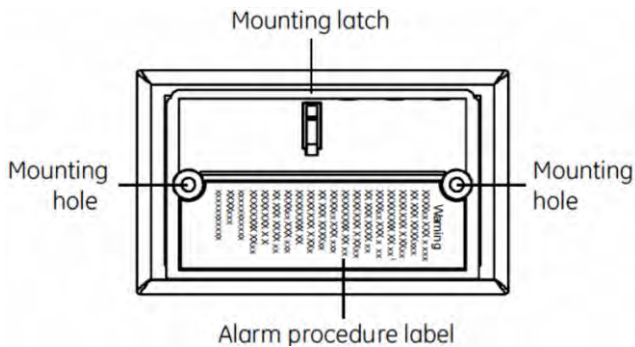
Figure 62: Recommended CO Sensor Mounting Location



Follow these steps to mount the CO Sensor (Model SW-ATT-CO):

Step	Action
1.	Slide the alarm body off of the mounting plate.
2.	Place the mounting plate in the desired location, and mark the location of the two mounting holes.
3.	Orient the mounting plate vertically or horizontally as shown in Figure 63 and Figure 64.

Figure 63: Vertical Mounting

Step	Action
	 Figure 64: Horizontal Mounting 
4.	Insert the two (2) screws provided and secure the mounting plate to the wall or ceiling surface. (If mounting in plasterboard or drywall, drill a 3/16 inch hole and use the plastic anchors provided.)
5.	After the mounting plate is secured, slide the alarm over the mounting plate.
6.	Complete labels and attach: Two (2) labels have been provided that have important information on what to do in case of an alarm. Add the phone number of your emergency service provider in the space provided. Place one label next to the alarm after it is mounted, and one label near a fresh air source such as a door or window.

WARNING:

After seven years from initial power up, this alarm will beep two (2) times every thirty (30) seconds to indicate that it is time to replace the unit. Replace the unit immediately! It will not detect CO in this condition.

To help identify the date to replace the unit, an area has been reserved on the side of the unit. Write the “replace by” date (seven years from power up) with a permanent marker in the area provided.

6.4.4.4 Testing the CO Sensor (Model SW-ATT-CO)

NOTE: This unit is sealed. The cover is not removable.

WARNING:

The DLC-200C must be placed into Test Mode while conducting CO Sensor tests. The DLT can utilize DLD to place the DLC-200C into Test Mode. Placing the DLC-200C into Test Mode helps to protect against sending false alarms to the AT&T Digital Life Central Monitoring Center.

NOTE: Due to the loudness of the alarm, it is recommended that you place your fingers over the sounder vent while testing the CO Sensor alarm.

CAUTION: Continuous exposure to the high sound level of this alarm over an extended period of time may cause hearing loss.

6.4.4.4.1 Normal CO Alarm Test

The CO Sensor has one (1) test mode: **Normal CO Alarm Test**. This test mode allows you to conduct an internal self-test and test the sounder.

Follow these steps to perform a self-test and test the sounder:

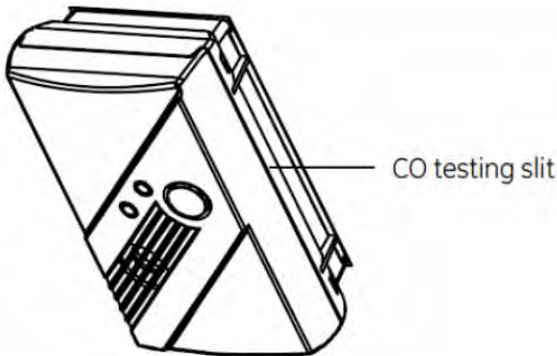
Step	Action
1.	Wait at least ten (10) minutes after installation to test the CO Sensor.
2.	The DLT will utilize DLD to place the DLC-200C into Test Mode.
3.	Make sure the green Power LED is flashing for normal operation.
4.	Press and hold the Test/Hush button until the unit beeps two (2) times (approximately five (5) seconds), and then release the button. If the unit is operating properly, you will hear four (4) quick beeps.

6.4.4.4.2 CO Inspection and Functional Gas Test (Qualified DL Technicians Only)

NOTE: Consult the most recent version of NFPA 720 for more information regarding the requirement for functional testing of CO alarms and/or your Local Authority Having Jurisdiction (AHJ).

NOTE: A canned CO testing agent must be used for the CO functional gas test.

Follow these steps to perform the CO functional gas test:

Step	Action
1.	Wait at least ten (10) minutes after installation to test the CO Alarm.
2.	Make sure the green Power LED is flashing for normal operation.
3.	The DLT will utilize DLD to place the DLC-200C into Test Mode.
4.	Press and hold the Test/Hush button until the unit beeps three (3) times (approximately 10 seconds), and then release the button. The unit will enter the functional gas test mode. The Power LED will blink once per second while in functional test mode.
5.	Use an apparatus to enclose the CO Sensor prior to emitting the gas.
6.	Apply UL approved CO test agent to the slit as shown in Figure 65 below. When CO is detected, the unit will activate a CO Alarm. CAUTION: CO is a dangerous gas and if not handled properly can cause personal injury! Figure 65: CO Functional Gas Test 
7.	Press and release the Test/Hush button; or a two (2) minute timeout will automatically cause the CO to return to normal operating mode.

6.4.4.5 Maintaining the CO Sensor (Model SW-ATT-CO)

To keep your alarm in good working order:

- Perform a CO Alarm test once a week (see “Normal CO Alarm test”).
- Vacuum the alarm cover once a month to remove accumulated dust.
- Never use detergents or solvents to clean the alarm. Chemicals can permanently damage or temporarily contaminate the sensor.
- Avoid spraying air fresheners, hair spray, paint, or other aerosols near the alarm.
- Do not paint the unit. Paint will seal the vents and interfere with proper sensor operation.
- Move the CO Alarm to a remote location, to prevent possible damage or contamination of the sensor, prior to performing any of the following:
 - Staining or stripping floors or furniture, painting or wall-papering.
 - Using aerosols or adhesives.
- Reinstall the CO Sensor as soon as possible to assure continuous protection.

The following is a list of substances that at high levels can damage the CO sensor or cause temporary readings that are not CO readings:

- Ethylene, ethanol, alcohol, iso-propanol, benzene, toluene, ethyl acetate, hydrogen, hydrogen sulfide, and sulfur dioxide.
- Also most aerosol sprays, alcohol-based products, paint, thinner, solvent, adhesive, hair spray, after shave, perfume, auto exhaust (cold start), and some cleaning agents.

6.4.4.6 Troubleshooting the CO Sensor (Model SW-ATT-CO)

If the unit does not power up properly or reports low battery:

1. Make sure the batteries are fully seated within the battery compartment and the polarity is correct.
2. Make sure that all three batteries are installed.
3. Check the battery voltage (1.5 VDC nominal per battery).

6.4.4.7 Specifications—Carbon Monoxide Sensor (SW-ATT-CO)

Specifications—Carbon Monoxide Sensor (SW-ATT-CO)	
AT&T Model Number	SW-ATT-CO
Voltage	1.5 V DC
Required Batteries	3
Battery Type	AA Alkaline (Duracell® MN 1500, Duracell® MX 1500, Energizer® E91)
Projected Battery Life	7 years (Sensor)
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 40° to 100°F (4.4° to 37.8°C) Relative Humidity: 8 to 85% non-condensing
Compatible Panels	Digital Life Controller (DLC-200C)
Supervisory Interval	64 minutes
Audible Alarm	Temporal 4
Alarm Response times	70 PPM = 60 - 240 min. 150 PPM = 10 - 50 min. 400 PPM = 4 -15 min.
Dimensions	4.68 x 2.75 x 1.85 in. (119 x 70 x 47 mm)
Storage Temperature	4° to 140°F (- 20° to 60°C)

6.4.4.8 Operational Characteristics of CO Sensor (Model SW-ATT-CO)

	LED Display	Alarm Sound	Units Status	Recommendation
Normal operation	Green Power LED flashes every 30 seconds.	None.	Normal DC operation (sensing no CO) and with good batteries.	None.
Carbon monoxide alarm	Red Alarm LED flashes with beeps.	Four quick beeps, 5 seconds silence, repeating.	Alarm condition. Dangerous concentrations of CO detected.	None
Low battery / low battery hush	Red Alarm LED flashes every 60 seconds.	One quick beep every 60 seconds.	Batteries need to be replaced.	Replace all three AA batteries. Press Test/Hush button and release. This will silence the low battery audible chirp between 8 and 11 hours allowing for a more convenient time to replace the batteries.
Alarm end-of-life indicator	Red Alarm LED flashes two times every 30 seconds.	Two quick beeps every 30 seconds.	End of CO Alarm life.	Press the Test/Hush button and release. This will silence the end-of-life signal for up to three days. After three days, the unit will resume end-of-life chirps. Hush mode will silence the alarm ten times or up to 30 days. After 30 days, the unit can no longer be hushed. Replace the CO Alarm immediately. The unit will not respond to CO.
Trouble/service alarm	Red Alarm LED flashes every 30 seconds.	One quick beep every 30 seconds.	Unit is in trouble condition.	Replace batteries. If condition continues, unit has malfunctioned. Replace immediately. Unit will not respond to CO.
Error condition	Red Alarm LED constantly on.	Constant alarm.	Very low battery or unit malfunction.	Replace batteries. If condition continues, unit has malfunctioned. Replace immediately.
Test mode	Red Alarm LED flashes with beeps.	Four quick beeps, 5 seconds silence, repeated once.	Normal operation when Test/Hush button is pressed.	CO not detected. Alarm for test purposes only.
Tamper	Red Alarm LED flashes every 30 seconds.	One quick beep every 30 seconds.	Unit is in tamper condition.	Place alarm body back onto mounting plate. If condition continues, unit has malfunctioned. Replace immediately

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6.4.5 Surface Contact Sensor (Model SW-ATT-V2)

The AT&T model number **SW-ATT-V2** device is a fully supervised, tamper-protected proprietary one-way 433 MHz sensor that is designed to be installed on most doors or windows, as shown in Figure 66. The V2 sensor includes a radio transmitter that sends information to the DLC-200C. Opening the door or window will cause the radio transmitter to send an alarm report. Closing the door or window will cause the radio transmitter to send a restore code. If the case of the V2 sensor is removed for any reason, the radio transmitter will send a tamper alert to the DLC-200C.

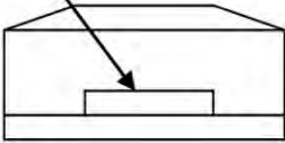
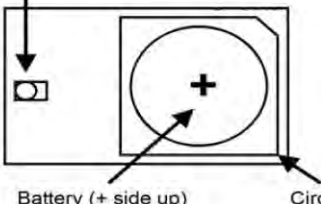
Figure 66: Surface Contact Sensor (Model SW-ATT-V2)



6.4.5.1 Installing/Replacing the Surface Contact Sensor (Model SW-ATT-V2) Battery

The Surface Contact Sensor requires one 3V CR2032 lithium battery. Follow these steps to install the battery:

Step	Action
1.	Remove the cover.
2.	Once cover is removed, insert the battery with the positive (+) side up, as indicated in Figure 67. Figure 67: Install/Replace Battery—Surface Contact Sensor (Model SW-ATT-V2)

Step	Action
	To remove battery, insert screwdriver here and twist.  Tamper Switch  Battery (+ side up) Circuit Board

NOTE: The Surface Contact Sensor includes low battery reporting. When the system indicates a low battery condition, replace the battery.

6.4.5.2 Discovering and Registering the Surface Contact Sensor (Model SW-ATT-V2)

Follow these steps to discover and register the Surface Contact Sensor:

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the Surface Contact Sensor discoverable by inserting the battery. Alternate Method: Press and release the tamper switch (sends tamper signal).
3.	Confirm that the Surface Contact Sensor has been discovered in DLD.
4.	Label the Surface Contact Sensor in DLD.

6.4.5.3 Installing and Mounting the Surface Contact Sensor (Model SW-ATT-V2)

You may mount the Surface Contact Sensor using the following methods:

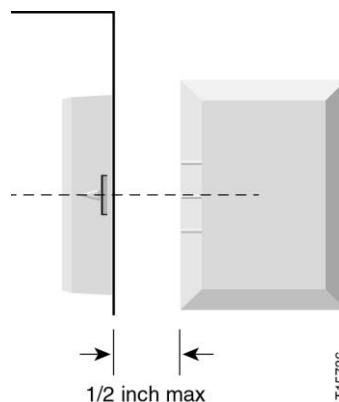
- Transmitter – Door
 - With screws
 - With double sided adhesive tape (UL R/C tape, 3M VHB (Very High Bond) model 4932)
- Transmitter – Window
 - With screws
 - With double sided adhesive tape (UL R/C tape, 3M VHB (Very High Bond) model 4932)

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234723) that is shipped with the device for further details.

6.4.5.3.1 Transmitter—Door

Select the location where the surface contact sensor is to be mounted. The transmitter should be located vertically on the door jamb no more than six inches from the top of the door. The integral magnet should be mounted on the door, within $\frac{1}{2}$ inch of the transmitter with the notch on the magnet aligned with the middle notch on the transmitter as shown in Figure 68.

Figure 68: Mounting Surface Contact Sensor (Model SW-ATT-V2)



6.4.5.3.2 Transmitter—Window

Select the location where the surface contact sensor is to be located. Mount the transmitter on the window jam near the top of the section of the window to be protected. The integral magnet should be mounted on the window, within $\frac{1}{2}$ inch, or less, of the transmitter with the notch on the magnet aligned with the middle notch on the transmitter.

6.4.5.3.3 Mounting the Transmitter

Follow these steps to mount the transmitter:

Step	Action
1.	Use the base of the sensor as a template and mark the mounting holes with a pencil.
2.	Drill the holes for the screws using a 5/16" drill bit.
3.	Mount the base to the door jamb with the screws provided • For doors that open on the left hand side, the round battery cavity in the base should be at <u>top</u> when the base is mounted to the door jam. • For doors that open on the right hand side, the round battery cavity in the base should be at the <u>bottom</u> when the base is mounted to the door jam.
4.	Carefully replace the sensor on the base by aligning the tamper switch with the plastic tamper tab and snap the cover down on the base.

6.4.5.3.4 Using Double-Sided Adhesive Tape

Make sure that the surface is clean and dry. Apply the supplied double-sided adhesive tape (UL R/C tape, 3M VHB (Very High Bond) model 4932) to the back of the Surface Contact Sensor (Model SW-ATT-V2), press and hold firmly in the desired location for approximately ten (10) to fifteen (15) seconds.

NOTE: It may take up to twenty-four (24) hours for the double-sided adhesive tape (UL R/C tape, 3M VHB (Very High Bond) model 4932) to reach its maximum bonding strength.

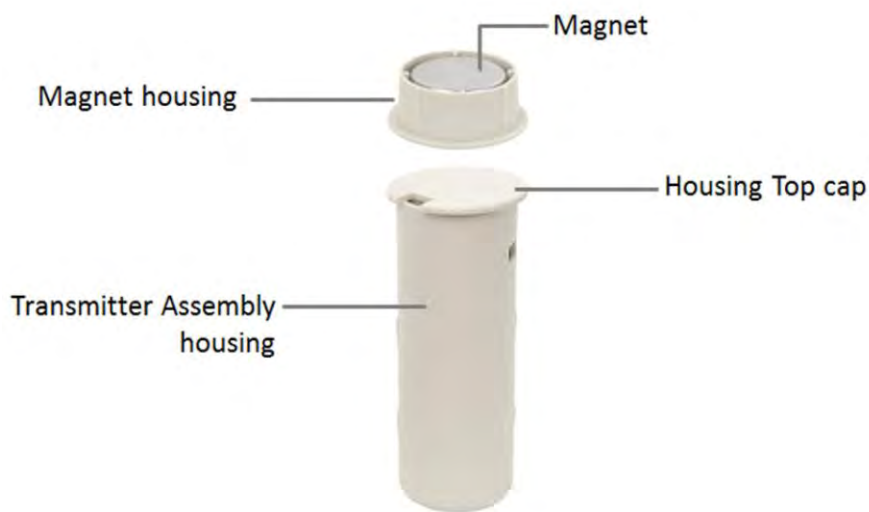
6.4.5.4 Specifications-V2 Sensor (SW-ATT-V2)

General Specifications— V2 Sensor (SW-ATT-V2)	
AT&T Model Number	SW-ATT-V2
Voltage	3V
Required Batteries	1
Battery Type	CR2032 Lithium (Panasonic® CR-2032L/BN, Maxell® CR2032, GP® CR2032, Sony® CR2032)
Project Battery Life	5 years
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F(0° to 49° C) Relative Humidity: 8 to 85%, non-condensing

6.4.6 Recessed Contact Sensor (Model SW-ATT-RDW)

The AT&T model number **SW-ATT-RDW** is a fully supervised proprietary one-way 433 MHz door/window sensor that reports to the DLC-200C. The recessed contact sensor includes a radio transmitter that sends information to the DLC-200C, as shown in Figure 69. Opening the door or window will cause the radio transmitter to send an alarm report. Closing the door or window will cause the radio transmitter to send a restore code. The detection portion of the device is imbedded into the door or window frame, while the integral magnet is installed adjacent to the detection device.

Figure 69: Recessed Contact Sensor (Model SW-ATT-RDW)



6.4.6.1 Installing/Replacing the Recessed Contact Sensor (Model SW-ATT-RDW) Battery

The RDW sensor requires one 3V CR2 Lithium Battery. Follow these steps to install or replace the batteries:

Step	Action
1.	Remove the transmitter assembly from the door or windows jams (if installed.)
2.	Using a flathead screwdriver, pop off the top cap.

Step	Action
3.	Carefully remove the transmitter circuit board from its housing.
4.	Remove the depleted battery and dispose of them properly.
5.	Insert the replacement battery paying careful attention to the battery polarity. The positive polarity (+) is the side nearest the transmitter printed circuit board, as shown in Figure 70. Figure 70: Installing Recessed Contact Sensor (Model SW-ATT-RDW) 
6.	Reinsert the transmitter assembly into its housing. NOTE: Make sure you properly slide the unit into the channel for proper fit.
7.	Replace the cap for the transmitter assembly.
8.	Insert the transmitter assembly into the door or window jam.
9.	Install the screws for securing the transmitter (if they were used in the initial installation process.)
10.	Test the Recessed Contact Sensor (Model SW-ATT-RDW) to ensure that it is working properly.

NOTE: The Recessed Contact Sensor includes low battery reporting. When the system indicates a low battery condition, replace the battery.

6.4.6.2 Discovering and Registering the Recessed Contact Sensor (Model SW-ATT-RDW)

Follow these steps to discover and register the Recessed Contact Sensor:

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the Recessed Contact Sensor (Model SW-ATT-RDW) discoverable by inserting the battery.
3.	Confirm that the Recessed Contact Sensor (Model SW-ATT-RDW) has been discovered in DLD.
4.	Label the Recessed Contact Sensor (Model SW-ATT-RDW) in DLD.

6.4.6.3 Installing and Mounting the Recessed Contact Sensor (Model SW-ATT-RDW)

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234724) that is shipped with the device for further details.

6.4.6.3.1 Door Installation

Select the location where the Recessed Contact Sensor (Model SW-ATT-RDW) is to be mounted. Two locations are preferred. The transmitter can be located in the top portion of the door jam, near the side where the door opens, or it can be located near the top of the door jam on the side where the door opens. The integral magnet will be mounted in the door.

6.4.6.3.2 Window Installation

Select the location where the Recessed Contact Sensor (Model SW-ATT-RDW) is to be located. Mount the transmitter in the window jam near the top of the section of the window to be protected. The integral magnet should be mounted in the window.

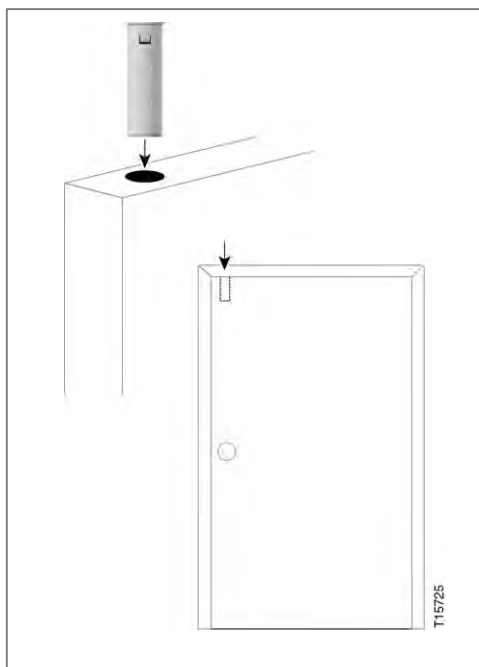
CAUTION: Many windows may not accept the magnet which is approximately 5/8 inch deep. Be sure to measure and determine whether the window can accept the SW-ATT-RDW. If not, use the SW-ATT-V2.

CAUTION: Do not use the SW-ATT-RDW if the door or window jams are made of metal. The metal will severely limit the performance of the transmitter portion of the device.

6.4.6.4 Installing the Recessed Contact Sensor (Model SW-ATT-RDW) Transmitter

The hardware kit for the Recessed Contact Sensor provides additional plastic parts for securing the transmitter to the door jam, as shown in Figure 71.

Figure 71: Installing Recessed Contact Sensor (Model SW-ATT-RDW)



Follow these steps to install the Recessed Contact Sensor (Model SW-ATT-RDW):

Step	Action
1.	Locate the position where the transmitter section will be located on the door or window jam and mark the location with a pencil.

Step	Action
2.	Based upon this mark, locate the position for the integral magnet in the door or window and mark the location with a pencil.
3.	Using an 11/16 inch drill bit, slowly drill a hole for the magnet.
4.	Drill the mating hole for the sensor. Use either the flush mount cap for a snug fit or a flanged cap for a door or window frame.
5.	Remove the round transmitter cap.
6.	Carefully remove the transmitter assembly from its housing.
7.	Install the battery, making sure that you observe the battery polarity. The positive polarity (+) is nearest the printed circuit board. NOTE: If you are mounting the transmitter on the top portion of the door jam, go to step 8. Otherwise, go to step 11.
8.	Replace the transmitter cap with the cap from the accessories package that includes the two screw holes.
9.	Slide the transmitter assembly into the 7/8 inch hole.
10.	Using the screws provided, secure the assembly into the door jam.
11.	If you are mounting the transmitter into the side of the door jam, proceed as follows. Slide the transmitter assembly into the 7/8 inch hole.

6.4.6.5 Mounting the Recessed Contact Sensor (Model SW-ATT-RDW) Magnet Assembly

The integral magnet assembly must be aligned with the Recessed Contact Sensor transmitter assembly.

1. Locate the mark previously made for the magnet position.
2. Drill a 3/4 inch hole into the door or window.
3. Insert the magnet assembly into the drilled hole.

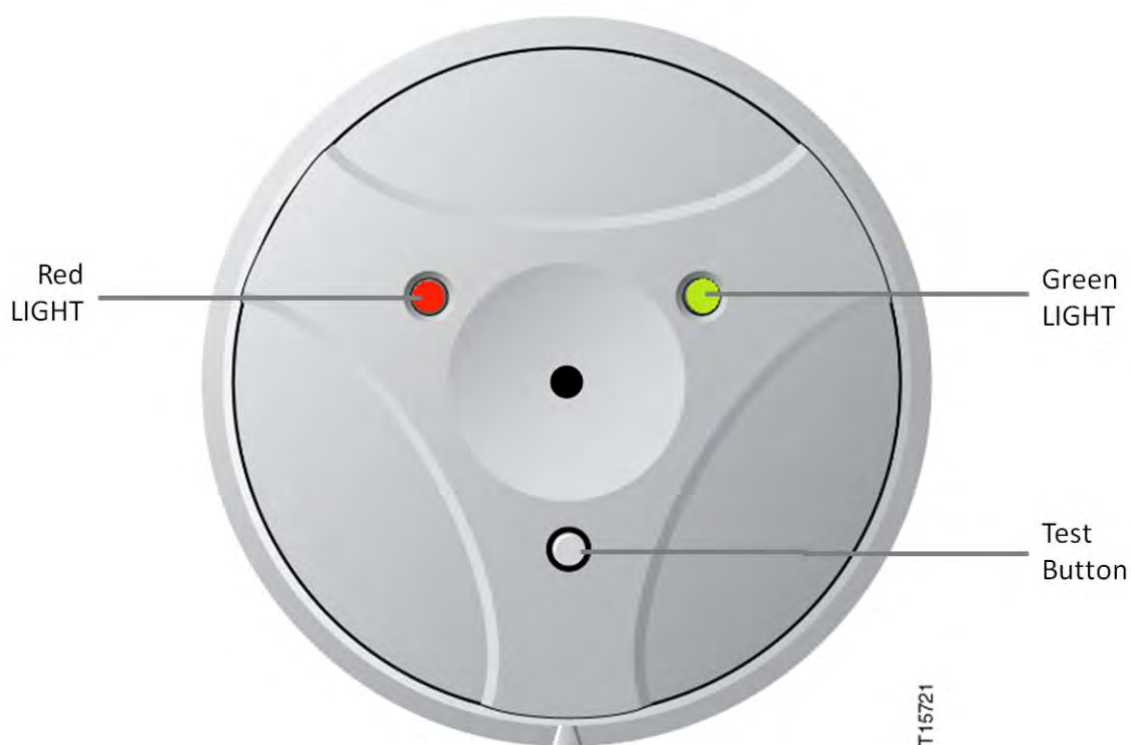
6.4.6.6 Specifications—Recessed Contact Sensor (Model SW-ATT-RDW)

Specifications—Recessed Contact Sensor (Model SW-ATT-RDW)	
AT&T Model Number	SW-ATT-RDW
Voltage	3V
Required Batteries	1
Battery Type	CR2 Lithium (Panasonic® CR-2PT/1FE, GP® GPCR2)
Projected Battery Life	5 years
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F(0° to 49° C) Relative Humidity: 8% to 85%, non-condensing

6.4.7 Glass Break Sensor (Model SW-ATT-GB)

The AT&T model number **SW-ATT-GB** is a proprietary one-way 433 MHz Glass Break Sensor. It is a tamper protected ceiling- or wall-mounted unit with a fifteen (15) foot maximum detection range, 360° maximum horizontal sensing angle, and dual-stage glass break detection, as shown in Figure 72.

Figure 72: Glass Break Sensor (Model SW-ATT-GB)



6.4.7.1 Installing/Replacing the Glass Break Sensor (Model SW-ATT-GB) Batteries

The glass break sensor includes low battery detection. When the system indicates a low battery condition for the glass break sensor, replace the batteries, as shown in Figure 73.

Figure 73: Installing/Replacing the Glass Break Sensor (Model SW-ATT-GB) Batteries



Follow these steps to install or replace the batteries:

Step	Action
1.	Remove the Glass Break Sensor (Model SW-ATT-GB) from the base by turning it counterclockwise.
2.	Remove the depleted batteries and dispose of them as required by local laws.
3.	Replace with two (2) CR123A batteries, paying careful attention to the battery polarity.
4.	Re-attach the glass break sensor to its base. Match the alignment marks and twist clockwise. NOTE: If batteries are not installed, the sensor cannot be installed on its base.

6.4.7.2 Discovering and Registering the Glass Break Sensor (Model SW-ATT-GB)

Follow these steps to discover and register the Glass Break Sensor (Model SW-ATT-GB):

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the glass break sensor discoverable by inserting the two (2) CR123A batteries supplied with the unit. Alternate Method: Press and hold the tamper switch for at least two (2) seconds then release the switch. NOTE: The tamper switch is located on the inside base of the unit.
3.	Confirm that the glass break sensor has been discovered in DLD.
4.	Label the glass break sensor in DLD.

6.4.7.3 Mounting the Glass Break Sensor (Model SW-ATT-GB)

Follow these steps to mount the Glass Break Sensor (Model SW-ATT-GB):

Step	Action
1.	Select the appropriate location to mount the glass break sensor.
2.	Place the glass break sensor base on the opposite wall or adjacent wall to the window being protected. NOTE: You may also mount the glass break sensor base on the ceiling.
3.	Use the base as a template for locating the three (3) mounting holes, as shown in Figure 74.

Step	Action
	Figure 74: Mounting Glass Break Sensor—Step 1 
4.	Affix the base to the desired location utilizing the three (3) long mounting screws and anchors supplied with the unit. NOTE: For wall mounting the test button should be oriented downward nearest the floor.
5.	When attaching the sensor to the base, match the alignment marks and twist clockwise, as shown in Figure 75. Figure 75: Mounting Glass Break Sensor—Step 2  NOTE: If the batteries are not installed, the sensor cannot be installed on its base.

6.4.7.4 Installing the Glass Break Sensor (Model SW-ATT-GB)

Follow these steps to install the glass break sensor:

Step	Action
1.	Hold the Glass Break Sensor unit upside down and twist the base counter clockwise to remove the sensor from the base.
2.	Install the two (2) CR123A batteries supplied with the unit paying careful attention to observe the correct battery polarity.
3.	Wait five (5) seconds for the power up delay.

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234726) that is shipped with the device for further details.

6.4.7.5 Testing the Glass Break Sensor (Model SW-ATT-GB)

6.4.7.5.1 Functional Test - Glass Break Sensor (Model SW-ATT-GB)

Step	Action
1.	Push the test button for two (2) seconds and release. The red LED will be on while the button is pressed. The green LED will blink once to indicate that the unit is in auto test mode for ninety (90) seconds.
2.	Activate a glass break simulator in the area of the window or windows that you are attempting to protect with the glass break sensor. The glass break sensor should first acknowledge the detection of a thud sound by illuminating the green LED and then illuminate the red LED when the unit detects the crash portion of the glass breaking sound. NOTE: Use a glass break simulator, such as the Intellisense Model FG-701.

6.4.7.5.2 Wireless Range (RF) Test - Glass Break Sensor (Model SW-ATT-GB)

Step	Action
1.	Push and hold the test button for five (5) seconds and release. The red LED will illuminate while the button is pressed.
2.	The green LED will blink twice to indicate that the unit is in RF test mode for 90 seconds.

6.4.7.6 Specifications—Glass Break Sensor (Model SW-ATT-GB)

General Specifications—Glass Break Sensor (Model SW-ATT-GB)	
AT&T Model Number	SW-ATT-GB
Voltage	3V
Required Batteries	2
Battery Type	CR-123A Lithium (Panasonic® CR123PT/1FE, GP® GPCR123A)
Projected Battery Life	>3 years
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F(0° to 49° C) Relative Humidity: 8 to 85%, non-condensing
Installation Kit:	Three (3) Phillips Head screws, three (3) plastic wall anchors
Sensor Type	Single microphone, dual stage—thud and crash
Approved Glass Break Simulator:	Intellisense Model FG-701
Glass Type/Thickness	
Minimum size for all glass types is 11" x 11" (28 cm x 28 cm) square. Glass must be framed, in a wall of the room or mounted in a barrier of 36" (91 cm) minimum width.	
Glass Type	Minimum to Maximum Thickness
Plate	1/8 inch to 1/4 inch (3.2 mm to 6.4 mm)
Tempered	1/8 inch to 1/4 inch (3.2 mm to 6.4 mm)
Sealed, Insulating	5/8 inch (15.9mm) to 1/4 inch (6.4 mm)
Laminated or Coated	1/4 inch (6.4mm)

6.4.8 Motion Sensor (PIR) (Model SW-ATT-PIR)

The AT&T model number **SW-ATT-PIR (Passive Infrared)** is a fully supervised, tamper protected proprietary one-way 433 MHz infrared motion sensor. It is equipped with pet immunity that reports to the DLC-200C, as shown in Figure 76.

Figure 76: PIR Motion Sensor (SW-ATT-PIR)



The PIR Sensor (Model SW-ATT-PIR) has field adjustable pet immunity settings for thirty-three (33) and fifty-five (55) pound animals as well as adjustable pulse count settings. For normal operation the PIR is set at a pulse count of two (2) and a pet immunity setting of thirty-three (33) pounds.

The PIR Sensor (Model SW-ATT-PIR) incorporates a battery saver cycle timer. Upon activation of the PIR, the detection circuitry will “go to sleep” for a period of three (3) minutes. During this time period the PIR will not be capable of sending an alarm transmission.

6.4.8.1 Installing/Replacing the PIR Sensor (Model SW-ATT-PIR) Battery

The PIR Sensor (Model SW-ATT-PIR) includes low battery detection. When the system indicates a low battery condition on the PIR Sensor (Model SW-ATT-PIR), replace/install the battery by following these steps:

Step	Action
1.	Insert a small coin or small flathead screwdriver into the small slot located on the bottom of the PIR and pull forward to disengage the PIR sensor

Step	Action
	from the back plate. NOTE: For first time install, go to Step 3.
2.	Remove the depleted battery, if applicable, and dispose of it as required by local laws.
3.	Insert the new battery. NOTE: Ensure that careful attention is given to the polarity of the battery during battery installation/replacement.
4.	Attach the PIR to its back plate.
5.	Test the PIR by entering the Walk/RF Test Mode.

6.4.8.2 Discovering and Registering the PIR Motion Sensor (Model SW-ATT-PIR)

Follow these steps to discover and register the PIR motion sensor:

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the PIR motion sensor discoverable by inserting the battery. Alternate Method: Press and hold the tamper switch, located on the back of the PIR, for two (2) seconds, then release. See Case Tamper Detection.
3.	Confirm that the PIR motion sensor has been discovered in DLD.
4.	Label the PIR motion sensor in DLD.

6.4.8.3 Selecting a Mounting Location for the PIR (Model SW-ATT-PIR)

When selecting a mounting location, do the following:

- Select a location for the PIR (Model SW-ATT-PIR) that allows an intruder to cross the beams of the selected pattern.
- Do not install the sensor in areas where large metal objects might interfere with the transmission of signal.

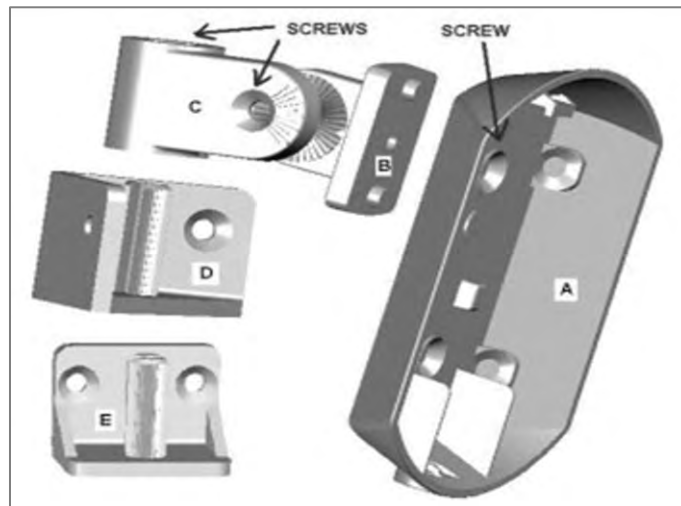
- Choose a location that is at least 7 ½ feet and less than 8 feet above the floor to mount the PIR.

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234727) that is shipped with the device for further details.

6.4.8.4 Assembling the PIR (Model SW-ATT-PIR)

The PIR (Model SW-ATT-PIR) contains the following supplied brackets, as shown in Figure 77.

Figure 77: PIR Back Cover and Brackets



To assemble the PIR (Model SW-ATT-PIR) do the following:

1. Screw the back plate, Part A, using one of the back side mounting holes to Part B.
2. Screw Part C to Part B.
3. For corner mounting, select bracket Part D and for wall mounting select bracket Part E.

NOTE: The screw holes on the back plate must be drilled out in order to attach the mounting bracket.

CAUTION: Using the mounting brackets in either the -9 degree or -18 degree setting will disable the pet immunity feature.

6.4.8.5 Mounting the PIR (Model SW-ATT-PIR)

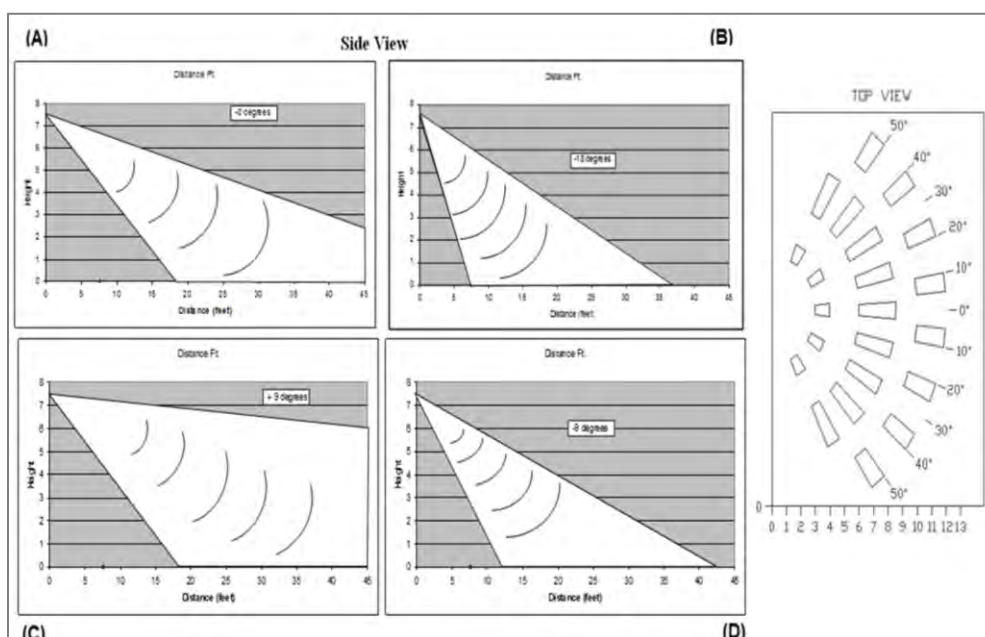
The PIR (Model SW-ATT-PIR) can be mounted to a wall or ceiling using the supplied brackets. Mounting the PIR (Model SW-ATT-PIR) using the supplied bracket offers additional detection options including adjustment angles for the installation.

1. For installations that *require pet immunity*, the bracket angle must be 0 degrees.
2. For installations with no pet immunity requirement setting the bracket angle at -9 degrees will customize the PIR for a room size of approximately 15 feet x 15 feet.
3. For installations with no pet immunity requirement setting the bracket angle at -18 degrees will customize the PIR for a room size of approximately 10 feet x 10 feet.

6.4.8.5.1 Sensor Coverage Pattern for PIR Sensor (Model SW-ATT-PIR)

The charts, as shown in Figure 78, demonstrate how the beam pattern changes as you tilt the angle of the PIR. All units are in feet: 0° is the PIR facing straight outwards with no tilt (A); -18° is the PIR tilted down 2 clicks (B); +9° is the PIR tilted up one click (C); -9° is the PIR tilted down one click (D).

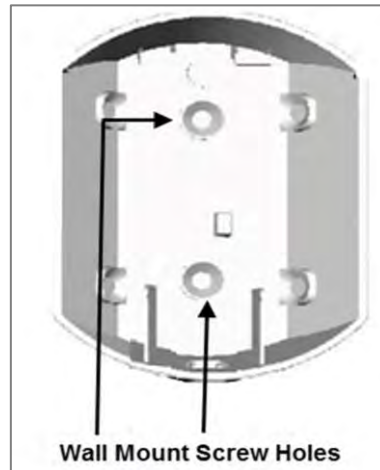
Figure 78: PIR Detection Options



6.4.8.5.2 Wall Mounting the PIR Sensor (Model SW-ATT-PIR)

1. Insert a small coin or small flat-head screwdriver into the small slot on the bottom of the PIR Sensor (Model SW-ATT-PIR) and pull forward to disengage PIR Sensor (Model SW-ATT-PIR) from the back plate.
2. Using a small Phillips Head screwdriver, punch through the plastic on the two wall mounting holes located on the inside of the mounting plate.

Figure 79: PIR Sensor (Model SW-ATT-PIR) Wall Mount Screw Holes



1. Use the selected bracket as a template to locate the mounting holes and mark with a pencil.
2. Choose a location that is at least 7 ½ feet and less than 8 feet above the floor to mount the PIR Sensor (Model SW-ATT-PIR).
3. Mount the selected part to the wall using the supplied screws and anchors.
4. Place the back plate assembly onto the shaft of the bracket.
5. Secure the back plate/bracket assembly by inserting a screw into the shaft of the selected bracket.
6. Use the supplied long screws and anchors to mount the PIR Sensor (Model SW-ATT-PIR) back plate using the two mounting holes.
7. Install the battery into the PIR Sensor (Model SW-ATT-PIR), observing the proper battery polarity.

NOTE: There is a power up delay of approximately ten (10) seconds.

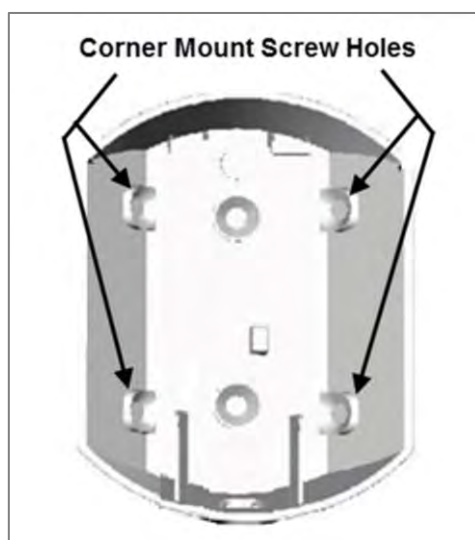
8. Attach the PIR assembly onto the back plate on the wall.

NOTE: The back plate must be mounted with the button for releasing the device on the bottom.

6.4.8.5.3 Corner Mounting the PIR Sensor (Model SW-ATT-PIR)

1. Insert a small coin or small flat-head screwdriver into the small slot on the bottom of the PIR and pull forward to disengage PIR sensor from the back plate.
2. Using a small Phillips Head screwdriver, punch through the plastic on the two wall mounting holes located on the inside of the mounting plate.
3. Use the selected bracket as a template to locate the mounting holes and mark with a pencil, as shown in Figure 80.
4. Press the button on the bottom of the PIR to disengage the back plate.
5. Using a small Phillips Head screwdriver, remove the plastic from the top mounting holes on the side of the back plate.
6. Choose a location that is at least 7 ½ feet and less than 8 feet above the floor to mount the PIR.
7. Use the supplied long screws and anchors to mount the PIR back plate using the two upper corner mounting holes, as shown in Figure 80.

Figure 80: PIR Sensor (Model SW-ATT-PIR) Back Cover with Corner Mount Screw Holes



8. Install the battery into the PIR, observing the proper battery polarity.
- NOTE:** There is a power up delay of approximately ten (10) seconds.
9. Attach the PIR assembly onto the back plate.

NOTE: The back plate must be mounted with the button for releasing the device on the bottom.

6.4.8.6 Configuring the PIR Sensor (Model SW-ATT-PIR)

The following Jumper Settings allows you to adjust the PIR sensitivity settings as desired:

1. The 15K and High Sensitivity setting (factory default) offer the highest level of protection. This setting allows for pet immunity for animals up to 33 pounds and is recommended for installations where no pet immunity is required.
2. The 25K and High Sensitivity setting allow for pet immunity for animals of up to 55 pounds while providing excellent coverage.
3. The use of the Low Sensitivity setting is not recommended when used with the 25K setting.

6.4.8.7 Case Tamper Detection of the PIR Sensor (Model SW-ATT-PIR)

Removing the cover of the PIR Sensor (Model SW-ATT-PIR) will cause the integral transmitter to send a case tamper report to the DLC-200C. This tamper condition will remain on the system until the case cover is reinstalled and the integral transmitter sends a tamper restore to the DLC-200C.

6.4.8.8 Testing the PIR Sensor (Model SW-ATT-PIR)

The PIR sensor includes a walk-test feature. Test the PIR by following these steps:

Step	Action
1.	Press the button on the right hand side of the PIR Sensor (Model SW-ATT-PIR). NOTE: The PIR will remain in the Walk/RF Test mode for approximately one minute.
2.	Move (create motion) in the area that is to be covered by the PIR.
3.	Observe that the red LED on the PIR flashed as you move. NOTE: The LED will flash approximately once every three (3) seconds.

Step	Action
4.	If your testing is not completed within the one minute period, you may re-enter the Walk/RF Test mode again by pressing the button on the right hand side of the PIR. NOTE: Once the PIR has detected motion and activated an alarm, there is a three (3) minute time delay in which no motion activity will be detected or recorded.

6.4.8.9 Specifications—PIR Motion Sensor (SW-ATT-PIR)

General Specifications—PIR Motion Sensor (Model SW-ATT-PIR)	
AT&T Model Number	SW-ATT-PIR
Voltage	3V
Required Batteries	1
Battery Type	CR123A Lithium (Panasonic® CR123PT/1FE, GP® GPCR123A)
Projected Battery Life	>3 years
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F(0° to 49° C) Relative Humidity: 8% to 85%, non-condensing
PIR Sleep Cycle	Three (3) minutes

6.4.9 Keychain Remote (Model SW-ATT-FOB)

The AT&T model number **SW-ATT-FOB** is an encrypted four-button proprietary one-way 433 MHz keychain remote transmitter that features over 16 billion different encrypted code sequences. Three buttons have been assigned a task within the DLS, as shown in Figure 81.

Figure 81: Keychain Remote (Model SW-ATT-FOB)



Whenever the Arm-AWAY, Arm-STAY or Disarm button is pressed, a text message is sent indicating the state of the alarm.

Keychain Remote (Model SW-ATT-FOB) Functions	
Button/Function	Action
Arm-AWAY Button	Fully arms the intrusion portion of the DLS, including door/window sensors and motion sensors.
Arm-STAY Button	Arms the door/window sensors only. Does not arm the motion sensors in the DLS.
Disarm Button	Disarms the security portion of the DLS.
Blank Button	No action.

The Keychain Remote (Model SW-ATT-FOB) is battery operated. Under normal operation when a button is pressed on the keychain remote, the red LED at the top of the keychain remote will emit a solid flash during the transmission to the DLC-200C. If the battery in the keychain remote is low and needs to be replaced, when a button is depressed, the red LED will flash quickly during the transmission to the DLC-200C.

6.4.9.1 Replacing the Keychain Remote (Model SW-ATT-FOB) Batteries

Batteries are installed in the Keychain Remote (Model SW-ATT-FOB) during the production process. The Keychain Remote (Model SW-ATT-FOB) is ready to use right out of the box.

Follow these steps to change the batteries:

1. Remove the top cover by inserting a coin in the slot located at the bottom of the keychain remote and turn it ninety (90) degrees.
2. Use a small Phillips Head screwdriver to remove the screw located in the center of the printed circuit board. (Do not discard the screw.)
3. Remove the printed circuit board.
4. Remove the two depleted batteries and dispose of them as required by local laws.
5. Insert the two (2) replacement CR2025 Lithium (Panasonic® CR-2025L/BN) batteries, paying careful attention to the batteries polarity.

NOTE: The positive (+) side of the batteries should be facing down.

6. Replace the printed circuit board with the side with the two large circles facing the batteries.
7. Secure the printed circuit board by screwing it in place with the screw previously removed using a small Phillips Head screwdriver.
8. Snap the cover of the keychain remote transmitter over the base assembly.
9. Verify that the keychain remote is working properly by pushing the buttons. You will see the red LED illuminate if the transmitter is working.

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234725) that is shipped with the device for further details.

6.4.9.2 Discovering and Registering the Keychain Remote (Model SW-ATT-FOB)

Follow these steps to discover and register the Keychain Remote (Model SW-ATT-FOB):

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the keychain remote discoverable by pressing and holding all four (4) buttons simultaneously.
3.	Confirm that the Keychain Remote (Model SW-ATT-FOB) has been discovered in DLD.
4.	Label the Keychain Remote (Model SW-ATT-FOB) in DLD.

6.4.9.3 Specifications—Keychain Remote 1.0 (SW-ATT-FOB)

Specifications- Keychain Remote (Model SW-ATT-FOB)	
AT&T Model Number	SW-ATT-FOB
Voltage	3V
Required Batteries	2
Battery Type	CR2025 Lithium (Panasonic® CR-2025L/BN)
Projected Battery Life	>3 years.
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Operating Environment	Temperature: 32° to 120° F(0° to 49° C) Relative Humidity: 8% to 85%, non-condensing

6.4.10 Conversion Kit (Model SW-ATT-TAKRF)

When Digital Life installations are performed in locations with existing wired security systems, an AT&T model number **SW-ATT-TAKRF** Conversion Kit may be utilized to re-use the existing wired, passive resistive terminated contact switches, e.g., door/window sensors, and re-use the existing wiring to keypads for powering two-way 915 MHz wireless keypads, as shown in Figure 82 and Figure 83. More than one Conversion Kit may be installed. (See 6.4.10.1.2 *Powering the 915 MHz Two-Way Keypad (Model SR-KPD02)*)

NOTE: The Conversion Kit can only be used with wired door/window sensors.

Figure 82: Conversion Kit (Model SW-ATT-TAKRF) Connections

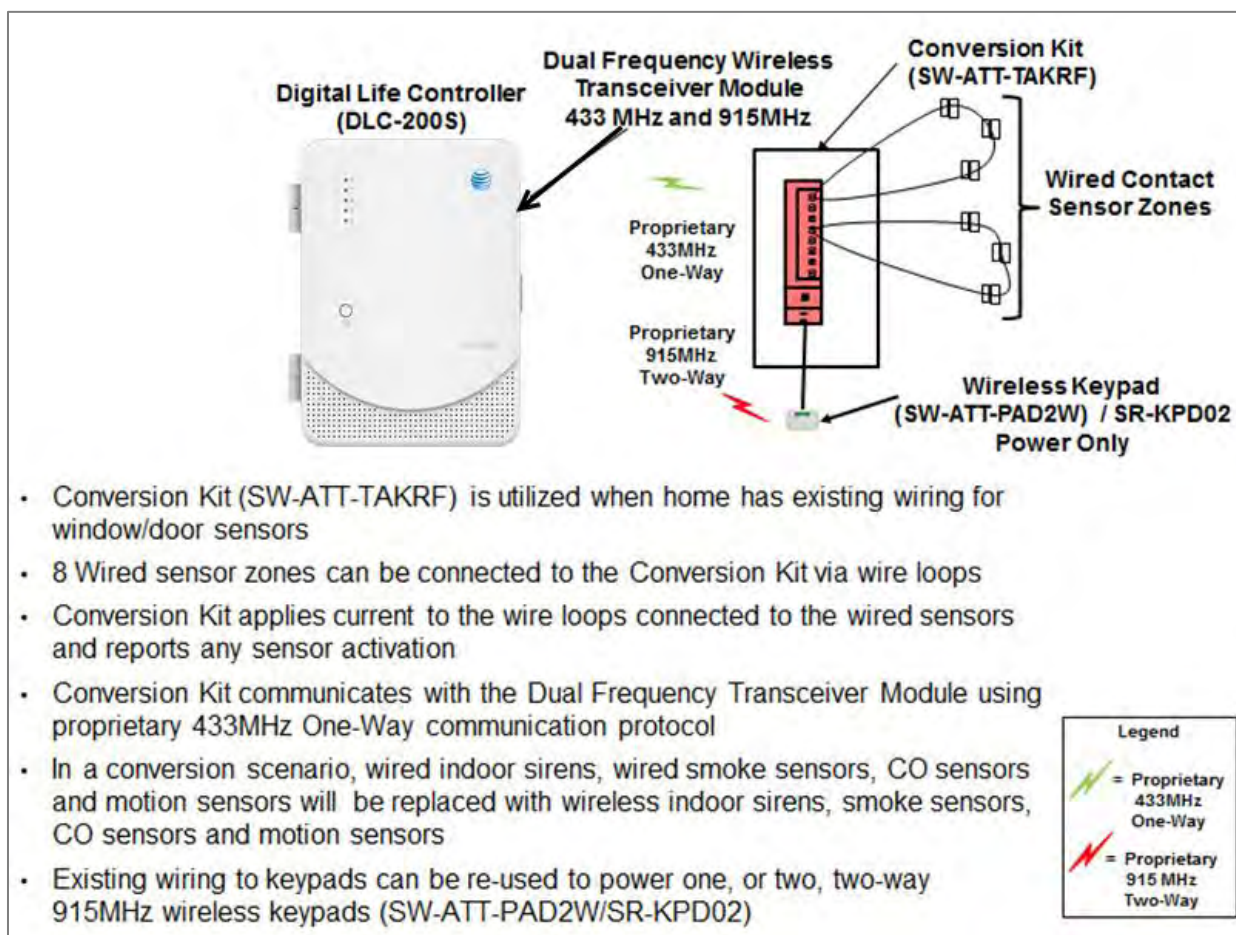


Figure 83: Conversion Kit (Model SW-ATT-TAKRF)

The Conversion Kit (Model SW-ATT-TAKRF) will be installed at the location of the existing security cabinet. The Conversion Kit (Model SW-ATT-TAKRF) supports eight wired zones and includes wiring terminals for terminating the wiring going to existing wired door/window sensors. The Conversion Kit (Model SW-ATT-TAKRF) communicates with the 433 MHz/915 MHz Transceiver Module in the DLC-200C cabinet via the proprietary one-way 433 MHz communication protocol. In most installations the Conversion Kit will be installed adjacent to the DLC-200C cabinet, but in some installations it may be installed in a different location in the home. All of the zones in the Conversion Kit act as supervised wireless zones in the DLS.

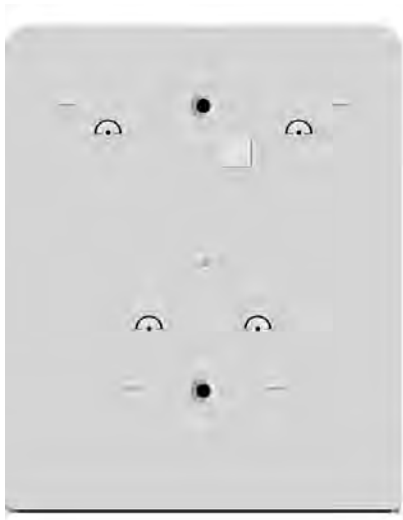
NOTE: DO NOT connect the DLC-200C or Conversion Kit to an AC power outlet that is controlled by a switch.

The Conversion Kit (Model SW-ATT-TAKRF) is equipped with twenty-four (24) hour battery backup. When the Conversion Kit is operating during a local power failure condition, it will not supply power to the two-way 915 MHz wireless keypads. The two-way 915 MHz wireless keypads are also equipped with twenty-four (24) hour battery backup.

When the Conversion Kit (Model SW-ATT-TAKRF) is installed, it will only be used to take over existing wired door/window sensors. Wired indoor sirens, Smoke Sensors, CO Sensors and motion sensors will be replaced with wireless indoor sirens, Smoke Sensors, CO Sensors and motion sensors.

6.4.10.1 Mounting and Installation Guidelines for Conversion Kit (Model SW-ATT-TAKRF)

Follow these instructions to mount the Conversion Kit (Model SW-ATT-TAKRF):

Step	Action
1.	Ensure that an AC Power outlet is near the mounting location and within RF range of the DLC-200C. NOTE: Signals will not be received if the Conversion Kit (Model SW-ATT-TAKRF) is not within range of the DLC-200C.
2.	Remove the mounting bracket from the Conversion Kit housing unit, if attached, as shown in Figure 84. Figure 84: Conversion Kit (Model SW-ATT-TAKRF) Wall Mounting Bracket  NOTE: Slide the mounting bracket downward to remove.
3.	Screw the mounting plate to the wall, using the included hardware.

Step	Action
4.	Attach the Conversion Kit by aligning tabs on the wall mounting bracket with the tabs on the back panel of the Conversion Kit. Then slide the unit downward to lock into place, as shown in Figure 85. Figure 85: Conversion Kit (Model SW-ATT-TAKRF) Mounted 

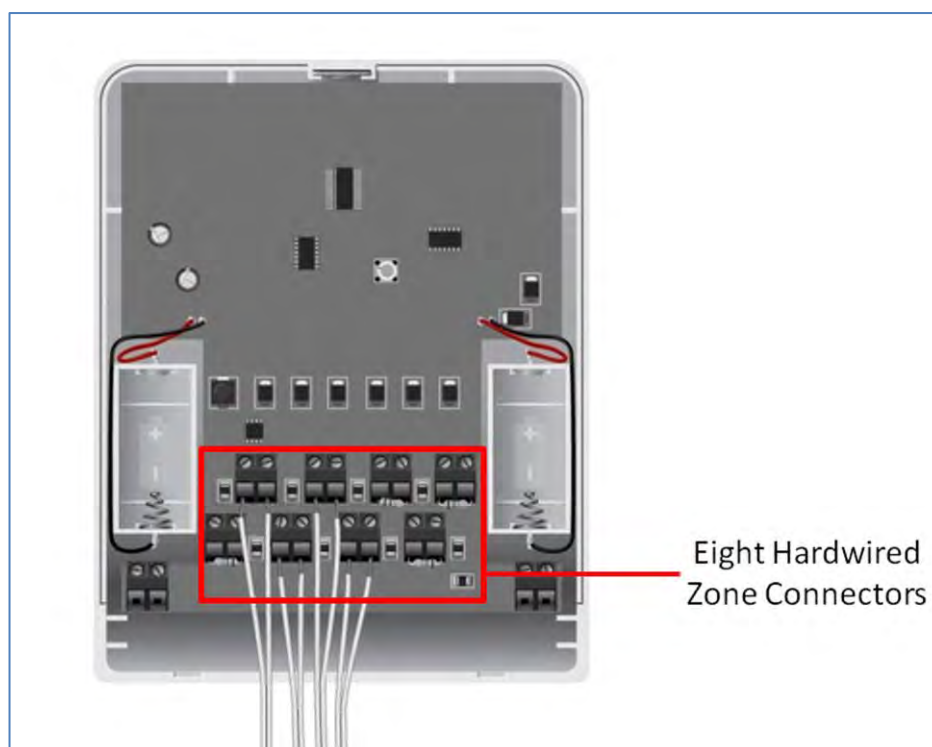
6.4.10.1.1 Connecting Wired Zones to Conversion Kit (Model SW-ATT-TAKRF)

The Conversion Kit (Model SW-ATT-TAKRF) determines the presence and status of each zone based on the zone's loop resistance. A package of eight 4.3K Ohm End of Line Resistor (EOLR) resistors is shipped with each Conversion Kit (Model SW-ATT-TAKRF). Before using the prewired zone, close all the contacts in the zone and confirm that the zone resistance is between 2.2K and 6K Ohms. DLTs will install the resistors as needed on unused zone connectors.

1. Remove the screw located on the top of the Conversion Kit and detach the front cover.
- NOTE:** Place the front cover and screw in a secure location for reinstallation.
2. Remove the strain relief bracket (plastic bracket) from the Conversion Kit.
3. Disconnect AC power from the existing wired panel.
4. Remove leads from battery on existing wired panel.

5. Disconnect the hardwired zones from the existing panel. ENSURE THAT THE AC POWER IS DISCONNECTED.
6. Connect each hardwired zone wire pair to a pair of connectors in the Conversion Kit. (See Figure 86.)

Figure 86: Conversion Kit (Model SW-ATT-TAKRF) - Hardwired Zone Connectors



7. Install the End of Line Resistors (EOLRs) on the unused connectors.

NOTE: A package of eight 4.3K Ohm EOLRs is shipped with each Conversion Kit. DLTs will install the resistors as needed on unused zone connectors.

8. If you are installing a new keypad proceed to the next section, otherwise see Section 6.4.10.1.3 Connecting Power to Conversion Kit (Model SW-ATT-TAKRF).

6.4.10.1.2 Powering the 915 MHz Two-Way Keypad (Model SR-KPD02)

The Conversion Kit (Model SW-ATT-TAKRF) can be used to power the 915 MHz Two-Way Keypad (Model SR-KPD02). This is done by using an existing pair of wires to the previous wired keypad location.

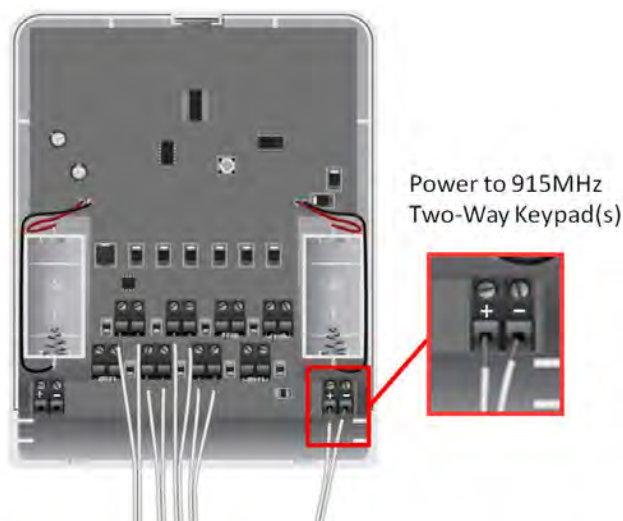
To power the two-way keypad using the Conversion Kit (Model SW-ATT-TAKRF).

1. Remove the screw located on the top of the Conversion Kit and detach the front cover.

NOTE: Place the front cover and screw in a secure location for reinstallation.

2. Remove the strain relief bracket (plastic bracket) from the Conversion Kit.
3. Remove AC power from the existing wired panel.
4. Remove the screw located on the top of the Conversion Kit.
5. Remove leads from battery on existing wired panel.
6. With power removed from existing security panel, disconnect the keypad wires from the existing keypad.
7. Replace the existing keypad with a 915 MHz Two-Way Keypad (Model SR-KPD02). Connect the new Keypad (Model SR-KPD02) wires to the Conversion Kit (Model SW-ATT-TAKRF) connectors, as shown in Figure 87.

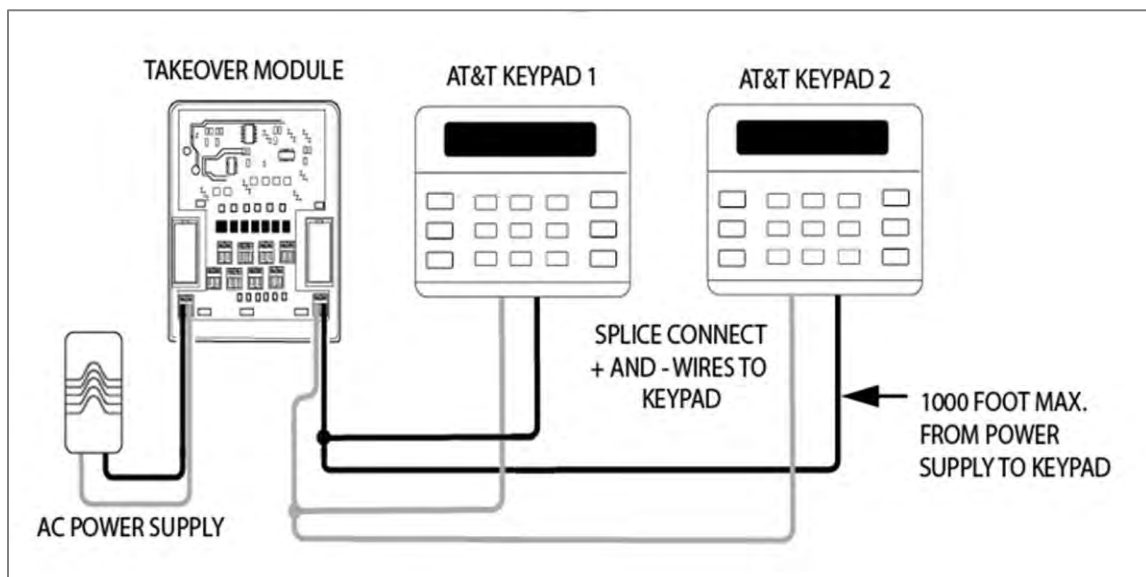
Figure 87: Conversion Kit (Model SW-ATT-TAKRF) - Powering 915 MHz Two-Way Keypad



The Conversion Kit (Model SW-ATT-TAKRF) can be used to power one (1) or two (2) 915 MHz Two-Way Keypads (Model SR-KPD02). If the Conversion Kit is used to power

two (2) 915 MHz Two-Way Keypads, the wires from the two (2) keypads should be connected in parallel to the keypad connectors in the Conversion Kit, as shown in Figure 88.

Figure 88: Two Keypad (Model SR-KPD02) Installation



NOTE: The minimum wire size is 18 AWG. The wires must be connected via a hardwire splice or a terminal block, then a single wire feed should go to the connector.

6.4.10.1.3 Connecting Power to Conversion Kit (Model SW-ATT-TAKRF)

The Conversion Kit (Model SW-ATT-TAKRF) is supplied 14VDC power from an AC-to-DC Adapter (Flourish Model # ZB-A 140017) that plugs into an AC power outlet.

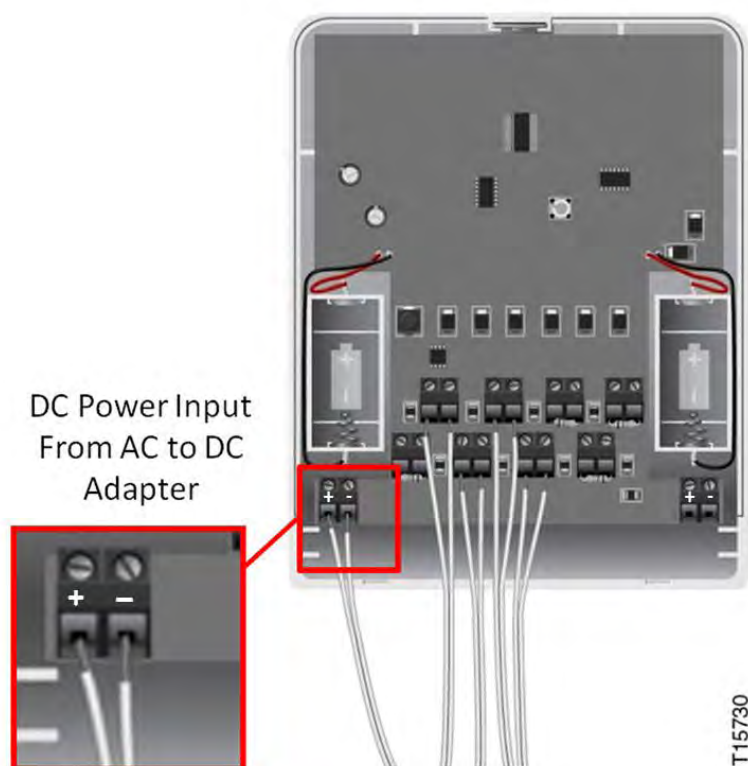
The Conversion Kit also contains replaceable CR123A batteries for 24 hour battery backup. The Conversion Kit **does not** recharge these batteries. The Conversion Kit **does** monitor the batteries and power supply and will signal the DLC when the Conversion Kit is operating on battery backup and/or the batteries are low.

The green LED on the Conversion Kit (Model SW-ATT-TAKRF) illuminates solid when the batteries are fully or partially charged, flashes when the batteries are low, and is off when not powered.

To connect the Conversion Kit (Model SW-ATT-TAKRF) to a power source you must connect the power wire pair from the AC-to-DC converter to the power connectors in

the Conversion Kit with the positive (+) wire on the left side and the negative (–) wire on the right side. (See Figure 89.).

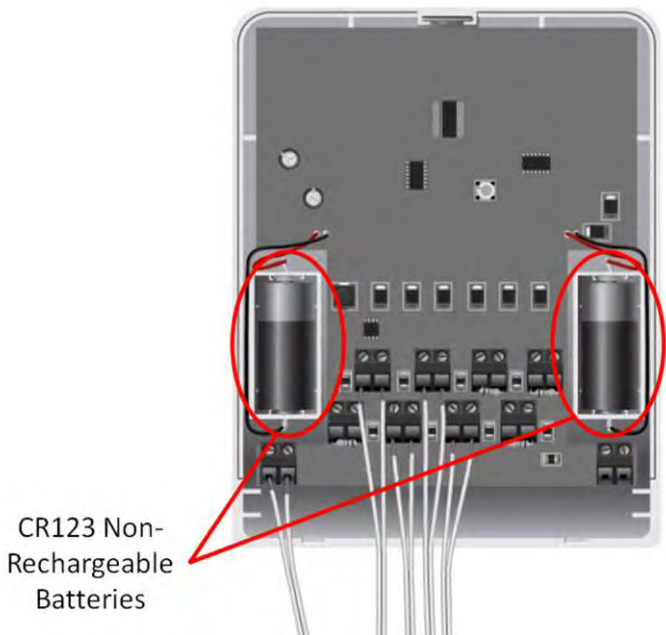
Figure 89: Conversion Kit (Model SW-ATT-TAKRF) - DC Power Input



6.4.10.1.4 Discovering and Registering the Conversion Kit (Model SW-ATT-TAKRF)

Follow these steps to discover and register the Conversion Kit (Model SW-ATT-TAKRF):

Step	Action
1.	Place the DLC-200C in Discovery Mode in DLD.
2.	Install the two (2) CR123A batteries. (Panasonic® CR123A, Duracell® DL123A) (See Figure 90).

Step	Action
3.	Figure 90: Conversion Kit (Model SW-ATT-TAKRF) - 24-Hour Battery Backup  CR123 Non-Rechargeable Batteries NOTE: There will be a three (3) seconds delay before the green LED turns on. If the green LED continues to flash after installing the new batteries, the batteries are not good. Replace the bad batteries with good ones. The green light will illuminate indicating that the unit is discoverable. IT WILL ONLY POWER UP IN BATTERY MODE.
4.	Connect the two power wires to the AC-to-DC power adapter. CAUTION: Pay close attention to the polarity, positive (+) and negative (-), indicated on the AC to DC power adapter. When connecting the wires to the AC/DC adapter, 18 AWG 6/32" spade connectors should be crimped to the power wires for attachment to the AC/DC adapter. THE CONVERSION KIT WILL ONLY POWER UP IN BATTERY MODE. ENSURE THAT THE BATTERIES ARE INSTALLED AND THE GREEN LIGHT IS ILLUMINATED.
5.	Replace the front cover of the unit and reinsert the screw in the top of the unit. NOTE: If the internal tamper spring is not present the unit will not function properly.

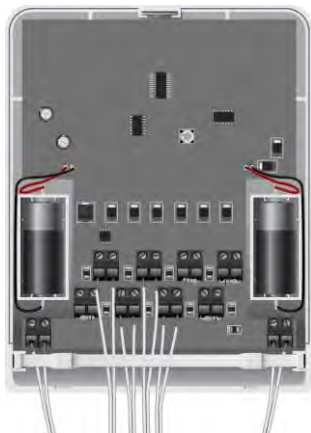
Step	Action
6.	Install the retaining screw into the plastic tab located at the top of the AC-to-DC power adapter secure the unit. Then plug the AC-to-DC power adapter to the AC power outlet.(See Figure 91). Figure 91: Conversion Kit (Model SW-ATT-TAKRF) —AC-to-DC Adapter Plugged into AC Power Outlet  THE CONVERSION KIT WILL ONLY POWER UP IN BATTERY MODE. ENSURE THAT THE BATTERIES ARE INSTALLED AND THE GREEN LIGHT IS ILLUMINATED. NOTE: For U.S installations only: Use the supplied power cube mounting bracket. Not for use in Canada. CAUTION: DO NOT connect the AC-to-DC Adapter to an AC power outlet that is controlled by a switch.
7.	Proceed to Section 6.4.10.1.5 Conversion Kit (Model SW-ATT-TAKRF) Final Installation.

NOTE: Once the Conversion Kit (Model SW-ATT-TAKRF) is registered with the DLC-200C, the DLC-200C automatically knows the corresponding zones. Each zone **DOES NOT** need to be discovered individually.

6.4.10.1.5 Conversion Kit (Model SW-ATT-TAKRF) Final Installation

For final installation, do the following:

- STEP 1.** Use the included strain relief bracket to prevent wires from being accidentally pulled out of their connectors.

Action	Device Photo/Illustration
- Slide bracket over all the wire pairs. The wire pairs go into the long slot. - Turn the bracket half a turn to capture the wires. - Slide the bracket into the slots on the case back.	

- STEP 2.** Install the case and Conversion Kit (Model SW-ATT-TAKRF).

Action	Device Photo/Illustration
- Attach the case front by snapping it to the case back. NOTE: Be careful to capture the strain relieved wires. - Attach the Conversion Kit (Model SW-ATT-TAKRF) to the wall mount bracket by aligning the bracket posts with case holes and sliding the case down. - Insert the screw in the top of the Conversion Kit to secure.	

NOTE: If the Conversion Kit LED does not illuminate, the unit is not functional. Repeat Steps 1-7 of section 6.4.10.1.4 Discovering and Registering the Conversion Kit (Model SW-ATT-TAKRF).

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234728) that is shipped with the device for further details.

IMPORTANT!

1. All of the zones in the Conversion Kit are “normally closed” zones.
2. The loop resistance should be between 2.2K and 6K Ohms. If the loop resistance is out of range, then the end of line resistor must be changed or the wiring must be repaired.

WARNING:

The Conversion Kit cannot be used to power or monitor any type of Fire or CO detection zone. The Conversion Kit does not power or monitor PIR or Glass Break devices.

6.4.10.2 Specifications—Conversion Kit (Model SW-ATT-TAKRF)

Specifications—Conversion Kit (Model SW-ATT-TAKRF)	
AT&T Model Number	SW-ATT-TAKRF
Voltage	120VAC, 50/60 Hz
Battery Power Supply	14V DC
Required Batteries	2
Battery Type	CR123A (Panasonic [®] CR123A, Duracell [®] DL123A)
Projected Battery Life	>4 days
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet

Specifications—Conversion Kit (Model SW-ATT-TAKRF)	
Operating Environment	Temperature: 32°F to 120°F (0°C to 49°C) Relative Humidity: 8% to 85%, non-condensing
Code Outputs	For device: Power up, Tamper, Low battery, Supervisory, AC power, DC (battery) power. For each Zone: Open, Short, Restore
Supervisory Interval	60-70 minutes
Dimensions:	Approximately 4.75 x 3.00 x 1.5 inches
Weight	Approximately 8.0 Ounces
Housing	ABS plastic
Color	White
Regulatory Listing(s)	UL, FCC part 15 (pending)
Included Accessories	AC/DC Adapter (Flourish Model # ZB-A 140017), Mounting plate, two (2) screws, two (2) plastic drywall anchors, one (1) 14VDC power supply

6.4.11 Signal Booster (433) (Model SW-ATT-RPTR4)

The AT&T module number **SW-ATT-RPTR4** is a Signal Booster (433) for proprietary one-way 433 MHz devices, as shown in Figure 92.

Figure 92: Signal Booster (433) Front and Back Panels (SW-ATT-RPTR4)



The RPTR4 signal booster is a peripheral device that communicates with the DLC-200C using a proprietary one-way 433 MHz transmitter. The RPTR4 signal booster receives and recognizes messages from other 433 MHz devices using a one-way 433 MHz receiver and repeats those messages to extend the range of these devices. The RPTR4 signal booster has the capacity to learn and re-transmit the TX-ID and its status for up to sixteen (16) devices.

The RPTR4 signal booster is plugged into an AC power outlet and is equipped with batteries which support 24 hour battery backup under conditions of local power failure. When the power source for the RPTR4 signal booster changes from AC power to battery backup, or from battery backup to AC power, the RPTR4 signal booster will automatically send a message to the DLC-200C within two (2) minutes indicating that the power source has changed. In addition, the supervisory messages that are sent from the RTP4 signal booster, approximately once an hour, indicate whether the RTP4 signal booster is currently operating on AC power or battery backup.

The RPTR4 signal booster is used to “repeat” signals from 433 MHz devices that are unable to directly communicate with the DLC-200C. Typically the RPTR4 signal booster will be installed at the mid-point between the DLC-200C and the 433 MHz device(s) that is being repeated. When a transmission from a 433 MHz device is repeated by the RTP4 signal booster, the signal booster adds an additional bit to the transmission, so that the DLC-200C will be aware that the transmission is not coming directly from a 433 MHz device.

The RTP4 is equipped with a status green LED on the front surface of the unit and a Learn Button that it located on the side of the unit. The green LED blinks when it is initially plugged in then turns off. The green LED blinks dimly and quickly when it detects 433 MHz radio traffic that it is not repeating. The green LED blinks brightly and quickly when it detects 433 MHz radio traffic that it is has learned to repeat.

For life safety devices (Smoke Sensor and CO Sensor) a secondary Signal Booster (433) (Model SW-ATT-RPTR4) must be installed.

6.4.11.1 Signal Booster (433) (Model SW-ATT-RPTR4) Status LED Indicators and LEARN Button Operation

Status LED Indicators—RPTR4	
Learn Mode	Press the Learn button for three (3) seconds and release. The LED lights for fifteen (15) seconds indicating that the signal booster is in the learn mode.
Transmitter Learn	Flashes two (2) times indicating that the 433 MHz transmitting device has been learned.
Learn Mode Exit	LED turns off.
Transmitter Memory	LED blinks one (1) time for each 433 MHz transmitting learned by the signal booster, e.g., eight (8) blinks means eight (8) 433 MHz transmitting devices have been learned.
Memory Erase	LED blinks 1 time approximately five (5) seconds after the completion of the transmitter memory count.
RF Detected	LED brightly flashes intermittently when any learned RF packet is detected and repeated. LED dimly flashes intermittently when non-learned RF packets are received.

6.4.11.2 Signal Booster (433) (Model SW-ATT-RPTR4) Function

When the RTP4 signal booster receives a transmission from a 433 MHz device, the following occurs:

- For unlearned transmitters the transmission is ignored.
- For learned transmitters the signal booster re-transmits exact TX-ID and conditions to the DLC-200C 433 MHz receiver and adds an additional bit which indicates to the DLC-200C that the transmission has been repeated by a signal booster.

NOTE: All Keychain Remote (SW-ATT-FOB) transmissions are automatically repeated and do not need to be learned into the signal booster.

6.4.11.3 Learning Transmitters

Transmitters are learned by the signal booster by use of the “Learn Button.” Push and hold the learn button three (3) seconds and release. An integral LED indicator illuminates, indicating that the signal booster is in the transmitter learn mode.

NOTE: If no action occurs on the signal booster module within fifteen (15) seconds, the LED extinguishes and the signal booster module automatically exits the “Learn Mode.”

Transmitters are learned via the signal booster by tamper or power on actuation of the actual transmitter to be learned (fault & restore in two (2) seconds).

1. Once a transmitter is learned, the LED indicator on the Signal Booster (433) blinks two (2) times verifying that the transmitter has been learned by the signal booster.
2. The signal booster automatically exits the “Learn Mode.”
3. To learn additions transmitters, repeat Steps 1 and 2.

6.4.11.4 Determining the number of transmitters learned into memory

1. Push and hold the “Learn” button.
2. After approximately five (5) seconds the LED indicates the number of transmitters learned by the signal booster by blinking one (1) time for every

transmitter learned by the signal booster (e.g., eight (8) blinks indicates that eight (8) transmitters have been learned by the signal booster).

3. Release the “Learn” button after the flashes start.

6.4.11.5 Erasing Transmitters from Memory

1. Push and hold the “Learn” button.
2. After approximately five (5) seconds the LED indicates the number of transmitters learned by the signal booster by blinking one (1) time for every transmitter learned by the signal booster.
3. Continue to hold the “Learn Button.”
4. Approximately five (5) seconds after indicating the number of transmitters learned by the signal booster, the LED blinks indicating that the memory has been erased.
5. Release the “Learn Button.”

6.4.11.6 Installing/Replacing the Signal Booster (433) (Model SW-ATT-RPTR4) Batteries

The signal booster has two (2) non-rechargeable CR123A Lithium (Panasonic® CR123A, Duracell® DL123A) batteries that provide twenty-four (24) hour battery backup. The batteries can be replaced by opening the battery compartment located on the rear of the unit.

Follow these steps to install/replace the batteries:

Action	Illustration
1. Turn the Signal Booster (433) to its underside and remove the Phillips Head screw at the bottom to open battery compartment cover.	 T15714
2. Remove the battery compartment cover.	 T15715
3. Insert two (2) non-rechargeable 3V CR123 (Duracell® DL123A, Panasonic® CR123A) batteries. NOTE: Ensure that polarity of the batteries is correct during installation. 4. Replace the battery compartment cover and the Phillips Head screw.	 T15716

CAUTION: Replace batteries with Panasonic® CR123A or Duracell® DL123A batteries only. Use of another battery may present a risk of fire or explosion.”

6.4.11.7 Installing the Signal Booster (433) (Model SW-ATT-RPTR4)

The installation kit includes one (1) retaining screw. Twenty-four (24) hour battery back-up for the SW-ATT-RPTR4 is provided by two (2) non-rechargeable lithium CR123A batteries.

Follow these steps to install the Signal Booster (433).

Step	Action
1.	Plug the Signal Booster (433) into the lower socket of a 120V AC power outlet.
2.	Insert the retaining screw into the plastic tab located at the top of the unit and secure the unit to the AC outlet. 

NOTE: Installation instructions are provided for reference only. Consult the Installation Instruction Manual (Part Number: 234729) that is shipped with the device for further details.

6.4.11.8 Discovering and Registering the Signal Booster (433) (Model SW-ATT-RPTR4)

Follow these steps to discover and register the Signal Booster (433):

Step	Action
1.	Place the DLC-200C into Discovery Mode in DLD.
2.	Make the Signal Booster (433) discoverable by inserting the batteries and plugging into an AC power outlet.
3.	Confirm that the Signal Booster (433) has been discovered in DLD.
4.	Label the Signal Booster (433) in DLD.

6.4.11.9 Specifications—Signal Booster (433) (Model SW-ATT-RPTR4)

6.4.11.9.1 General Specifications – RPTR4

General Specifications—RPTR4	
AT&T Model Number	SW-ATT-RPTR4
Voltage	120VAC, 50/60Hz
Required Batteries	2
Battery Type	CR123A Lithium (Panasonic® CR123A, Duracell® DL123A)
Projected Battery Life	>3 days
Operating Frequency	433.92 MHz
Open Air Wireless Signal Range	Up to 500 feet
Compatible Panels	Digital Life Controller (DLC-200C)
Backup Power	Two (2)3V CR123A lithium batteries
Operating Environment	Temperature: 32°F (0°C) to 120°F (49°C) Relative Humidity: 8% to 85% non-condensing
Physical Dimensions	Overall Size: 5.0 inch x 2.6 inches x 1.3 inches Material: High impact ABS Plastic Color: AT&T White
Power	Nominal Input Voltage: 120VAC, 50/60 HZ Nominal Current: Less than 100 milliamperes

6.4.11.9.2 Specifications – RPTR4RF Receiver

Specifications—RPTR4 RF Receiver	
Receiver Type	Crystal controlled
Receiver Frequency	433.92 MHz
Receiver Output	Internal Antenna in DLC-200C Cabinet

6.4.11.9.3 Specifications – RPTR4RF Transmitter

Specifications—RPTR4 RF Transmitter	
Transmitter Type	Crystal controlled
Transmitter Frequency	433.92 MHz
Transmitter Range	500 feet minimum with REC receiver unit.
Transmitter Output	Eight transmissions with a random delay of 50ms - 360ms between packets (anti-clashing)
Transmitter Reports	Status (transmitter condition) Low Battery Low Battery Restore AC Power Source DC Power Source

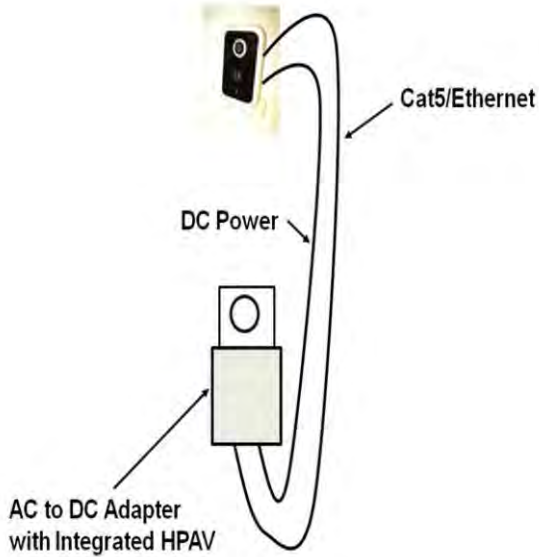
6.5 Indoor Camera (Model RC8221) (Supplementary use only. Not part of the fire and security system.)

The Indoor Camera (Model RC8221) has an Integrated Microcomputer and a high quality digital-image-sensor (DIS), enabling it to display high quality live streaming video.

6.5.1 Indoor Camera AC-to-DC Adapter with Integrated HPAV (IP532CG) (Supplementary use only. Not part of the fire and security system.)

AT&T model number **RC8221** is an Indoor Camera that is typically installed with AC-to-DC Adapter with Integrated HPAV (IP532CG).

To connect an Indoor Camera (Model RC8221) AC/DC adapter with integrated HPAV (IP532CG), do the following:

Step	Device Photo/Illustration
1. Go to each location where you want to install an Indoor Camera and install the Cat5/Ethernet cable and DC power cable from the AC-to-DC Adapter with integrated HPAV and the Indoor Camera. 2. Place the DLC-200C in Discovery Mode using DLD. 3. Plug the AC-to-DC Adapter with integrated HPAV (IP532CG) into an available AC power outlet. 4. Repeat Steps 1-2 for each additional Indoor Camera AC-to-DC adapter with integrated HPAV installation. 5. Verify the Indoor Camera(s) (RC8221) has been discovered.	 The diagram illustrates the connection setup for the AC-to-DC Adapter with Integrated HPAV (IP532CG). It shows a power outlet at the top with a plug connected to it. A cable labeled 'Cat5/Ethernet' runs from the outlet down to a device labeled 'AC to DC Adapter with Integrated HPAV'. Another cable labeled 'DC Power' runs from the adapter back up to the outlet. The adapter is depicted as a small rectangular box with a circular port on top.

6.5.2 Wi-Fi Indoor Camera (Model RC8221) Installation (Supplementary use only. Not part of the fire and security system.)

To connect an Indoor Camera to Wi-Fi, do the following:

Step	Device Photo/Illustration
1. Connect one end of Ethernet cable into the LAN port on the back of the camera. At this time, please do not connect the power adapter.	
2. Plug the other end of Ethernet cable into an available port on the customer's Broadband Home Router (BHR).	
3. Connect the DC power cord from the camera AC-to-DC adapter into the power port on the back of the camera. 4. Place the DLC-200C in Discovery Mode using DLD. 5. Plug the camera AC-to-DC adapter into an AC power outlet. 6. Verify the Indoor Camera (Model RC8221) has been discovered. 7. Unplug the Cat5/Ethernet cable from the BHR and the camera. 8. Unplug the camera AC-to-DC adapter from the AC power outlet. 9. Move the camera to the selected installation location and plug the AC-to-DC adapter into an AC power outlet.	