

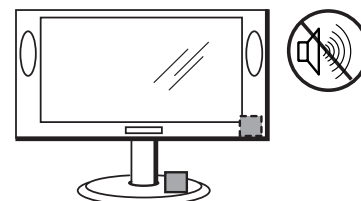
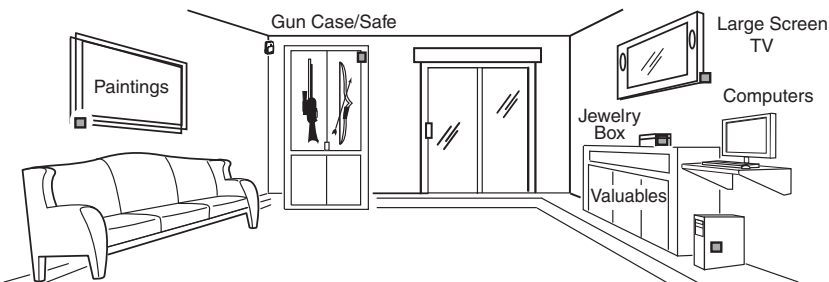
# Honeywell

## 5870API Wireless Indoor Asset Protection Device

### INSTALLATION AND SETUP GUIDE

#### QUICK INSTALLATION

##### Step 1. Select Location

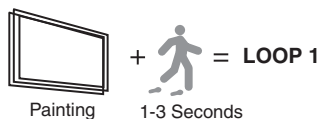


- Avoid sources of vibration (i.e. speakers, fans, motors)
- Choose a stable, clean, flat surface
- Mount in an inconspicuous area.

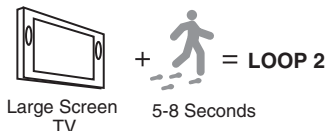
##### Step 2. Select Operating Mode (refer to table 1)



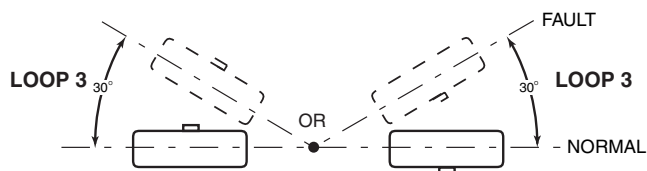
**LOOP 1 is for High Security (Fast Trigger) applications and should ONLY be used if the asset will NOT be subject to external vibration. Loop 2 (Standard Security mode) should be used in most cases.**



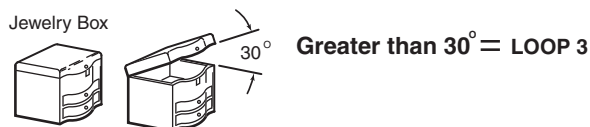
##### High Security (Fast Trigger) Mode (Loop 1)



##### Standard Security Mode (Loop 2)

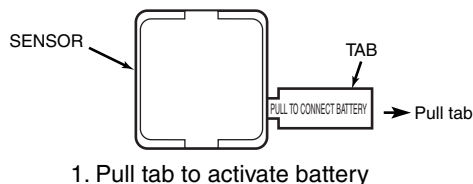


##### MOUNT HORIZONTALLY ONLY (LOOP 3 ONLY)

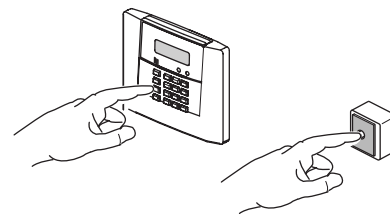


##### Tilt Mode (Loop 3)

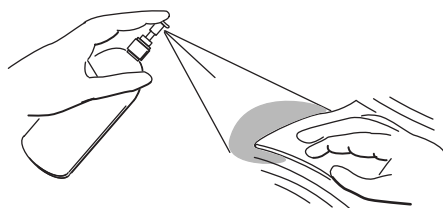
##### Step 3. Program Device (refer to Programming Section)



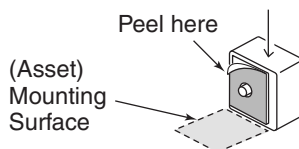
2. Enter Zone Number, Zone Type, Input Type at Keypad
- Enroll Serial Number (press tamper switch)
- Enter Loop Number at Keypad (use Loop 2 unless Fast Trigger or Tilt is required)



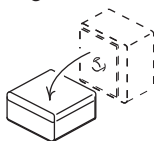
##### Step 4. Install Device



1. Clean mounting surface (refer to mounting notes)



2. Peel tape backing before installing. Place onto asset.

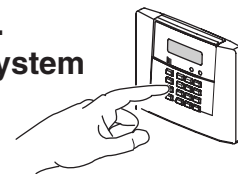


3. Rotate into position



4. Press down firmly for 5 sec.

##### Step 5. Test System



## GENERAL INFORMATION

5870API is a wireless, supervised asset protection device that is compatible with systems that support 5800 series devices. When affixed to a high-value asset, the device will trigger an alarm if an attempt is made to move or disturb the asset.



**For commercial applications, the 5870API must be used in conjunction with the 5881ENHC receiver and compatible control panel.**



**5870API is for use on objects that do not move frequently or vibrate. Mounting the sensor near sources of vibration may cause false alarm conditions to occur.**

## OPERATING MODES

5870API provides three programming options (loops).

- High Security (Fast Trigger) Mode (Loop 1)
- Standard Security Mode (Loop 2)
- Tilt Mode (Loop 3)



**Loop 1 is for high security applications and should ONLY be used if the asset will NOT be subject to external vibration. Loop 2 (Standard Security mode) should be used in most cases.**

## Selecting the Operating Mode

Table 1 provides a list of 5870API's various operating modes, with the respective Loop numbers for each.

## Tamper Supervision

5870API's tamper supervision feature (Loop 4) causes a trouble signal to be sent to the control if the sensor is removed from the asset being protected or if the unit's cover is removed from the base. The tamper switch is also used to program the unit's serial number and loop assignments in the control panel.

## OPERATION

**Installer Test Mode-** Upon initial battery power up, the unit will transmit each time it is faulted or restored, which enables you to enroll and test the device. After the sensor transmits its first supervisory message (about 70-80 minutes after power-up), it switches to normal mode.

**Normal Mode** - In normal mode there is a 3-minute lockout between transmissions, to help conserve battery life. To return to the installer test mode, remove and reinstall the battery.

Before enrolling the device, perform the following:

1. Remove the "PULL TO CONNECT BATTERY" tab  
This will allow the device to transmit. For additional transmissions, move or rotate the sensor. When the battery is connected the sensor powers up in the installer test mode. In this mode the sensor transmits fault and restore messages on all loops when it detects motion (or lack thereof).



**When configured for use with the UL approved control panels (refer to UL Approved Compatible Control Panel list), the panel must be programmed not to transmit off-premises for the 5870API zone only.**

## PROGRAMMING

Each transmitter has its own unique serial number, assigned during manufacture, which must be "enrolled" in the control panel before the device can be used with the system.

*Please refer to the control panel's installation instructions for details on device enrollment. Please note that you must program a separate zone for each loop you are using on the transmitter.*



**If the asset being protected will not be moved under normal circumstances (i.e., a painting), it can be programmed as a 24 hour zone type. If the asset will occasionally be moved when the system is disarmed, it can be programmed as a perimeter zone type.**

## MOUNTING

The 5870API is mounted directly to the asset being protected via 3M VHB double-sided tape. The device should be mounted in an inconspicuous place on the asset. Refer to Mounting Notes section for additional information.



**When installing the 5870API, select an area on the asset that is stable, clean and flat. Avoid areas that are subject to vibration (i.e.; speaker grills)  
When using Loop 3 the device must be mounted horizontally.**

1. Determine the optimum mounting location taking care to avoid damp locations. To maximize the transmitter's range, avoid mounting the device to metal objects, if possible.
2. Temporarily mount the device to the asset to be protected using masking tape or any suitable method.
3. Before the transmitter is permanently mounted, conduct Go/No Go tests (refer to the Control Panel's instructions) to verify adequate signal strength from the mounting location.
4. Always verify range by holding the sensor in the approximate mounting location and moving the asset. The panel (in test mode) should respond to the transmissions. If not, move the asset sensor to a more suitable mounting location.
5. Remove the tape backing paper and firmly press the sensor in the desired mounting location. Apply firm pressure for 5 seconds.
6. Verify operation by moving the asset. Always check the alarm panel keypad to verify that the zone has tripped.

**Table 1 - 5870API Operating Mode Choices**

Operating Mode	Loop	Faults when...	Restores when...
<b>High Security (Fast Trigger) Mode</b> - Short Travel Time, minimum movement detection	1	Asset/sensor is moved for 1-3 seconds (typical)*	Motion of the asset/sensor has stopped for 3 seconds*.
<b>Standard-security Mode</b> - Long Travel Time, occasional movement detection	2	Asset/sensor is moved for 5-8 seconds (typical)*	Motion of the asset/sensor has stopped for 3 seconds*.
<b>Tilt Mode</b> - Intended for boxes with lids that can be opened (e.g.; jewelry or cash boxes).	3	Asset/sensor is tilted >30 degrees (+/-10) (with respect to the horizon)	Asset/sensor is tilted <15 (+/-5) degrees (with respect to the horizon).

\* Response time will be affected by the type of motion (walking, running, dropping, etc.) as well as other tasks being processed by the panel.

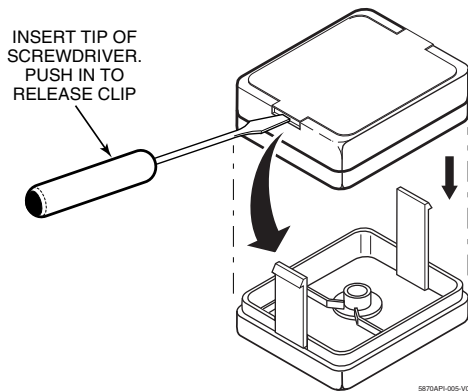
## REPLACING THE BATTERY

5870API is powered by a 3-volt lithium battery. If the battery voltage gets too low, the device sends a low battery signal to the control panel. The 5870API consumes less battery power when stationary than when in motion. Maximum battery life will be obtained when used on assets that are moved infrequently (e.g.; televisions, paintings, sculpture, etc.)



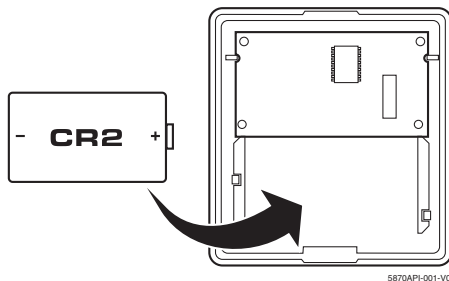
**Replace the battery with Ademco 469, Panasonic CR2 or Duracell DLCR2. Use of another battery may present the risk of fire or explosion**

1. Using a screwdriver, release the case's retaining tabs.
2. Carefully remove the sensor's cover. (see Figure 1)



**Figure 1 – Replacing the 5870API Battery**

3. Check the battery polarity orientation before installing (see Figure 2).
4. Insert the battery securely in the sensor.
5. Snap the sensor cover back in place.



**Figure 2 – Replacing the 5870API Battery**

## SPECIFICATIONS

### Dimensions:

1.8" H x 1.7" W x 0.63" D  
(45.72 mm x 43.18 mm x 16.02 mm)

### Power:

Single 3V Ademco 469, Panasonic CR2 or Duracell DLCR2 Lithium Battery

### Environmental Conditions:

14° to 122°F (-10° to 50°C)  
<90% RH (non-condensing)

## MOUNTING NOTES

**UL**

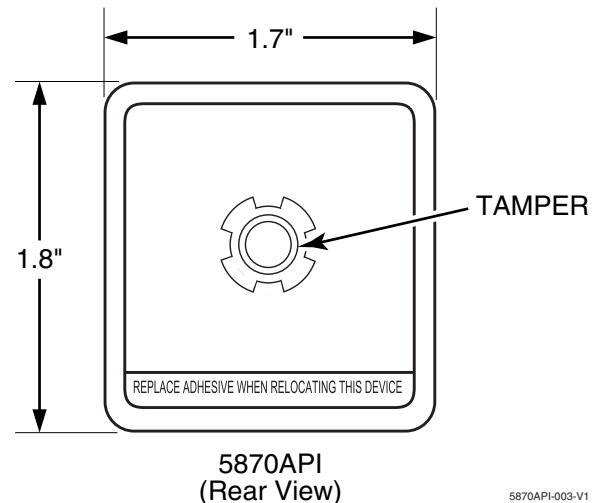
3M VHB double-sided tape can be used on the following surfaces: acrylic, polycarbonate, coated polycarbonate, cellulose acetate butyrate, aluminum, acrylic/polyurethane paint, galvanized, stainless and enameled steel, rigid PVC, epoxy, polyester and epoxy polyester paint, uncoated and silane coated glass, glass epoxy, polybutylene terephthalate, nylon, noryl (PPE) polyphenylene ether, and acrylonitrile butadiene styrene.

**Note:** Most consumer electronics with plastic cases are manufactured from acrylonitrile butadiene styrene (ABS).

1. To obtain proper performance with adhesive tapes, it is important to ensure that the surfaces are dry and free of grease and condensed moisture. Clean the area where the sensor will be installed with a 50/50 mixture of water and isopropyl alcohol, and allow to dry.
2. Replace the adhesive when relocating the device. Take care to align the hole in the tape with the device's tamper switch plunger. Additional mounting tape squares are available in packs of 10; 5870APITAPE-B general application tape.
3. Firm application pressure develops better adhesive contact and helps improve bond strength, which is achieved after 72 hours.
4. If using Loop 3 the device must be mounted horizontally.



- 5870API is not watertight, and therefore should not be used in damp locations.
- The device should not be installed in locations where temperatures may drop below 14° F.
- 5870API is not intended for use on swinging doors.



### UL APPROVED COMPATIBLE CONTROL PANELS

The 5870API is compatible with the following commercial control panel families:

Vista-10P/10PCN/10PSIA, Vista-10SE/10SEADT/10ROSE, Vista-10P1PACK, Vista-10PASE Vista-15/15CN, Vista-15P/15PCN/ PSIA, Vista-15PMT, Vista-20BAY, Vista-20P/20PCN/20PBAY, Vista-20MT, Vista-20PS/20PSCN, Vista-20PSIA, Vista-20SE/-20HWSE, Vista-20AMT3, Vista-40, Vista-48C/48D, Vista-50P/50PADT, Vista-50PEN/50PENADT, Vista-128B, Vista-128BP/128BPADT, Vista-128FBP, Vista-250BP, Vista-250FBP, FA130CP/130CP-CN/130CPSIA, FA148C/148C-CN, FA148CP/148CP-N/148CPSIA, FA168C/168C-CN/168C-GP, FA168CPS/168CPS-CN/168CPSSIA, FA1660C, FA1670C, FA1700C, Safewatch Pro and Security Manager, Security Manager 2000, Safewatch Pro 3000/3000EN, Security Manager 3000/3000EN, Entrepreneur 3000EN, AFA15P, CFV15P/PCN, AM100, V-10SE/WT, V10SMITH, V10SELECT, V12C, 250-P1, 300P1, 320P1

### WARNING

Risk of fire, explosion, and burns. Do not recharge, disassemble, heat above 212° F (100° C) or incinerate. Dispose of used batteries properly. Keep away from children.

### TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its components parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to ensure the system's proper operation at all times.

### FCC and Industry Canada Statement

This device complies with Part 15 of FCC rules and RSS 210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modifications could void the user's authority to operate the equipment.

### WARRANTY INFORMATION

For the latest warranty information, please go to:

[www.honeywell.com/security/hsc/resources/wa](http://www.honeywell.com/security/hsc/resources/wa)

**U.S. Patent Number** 6,724,316

# Honeywell

**2 Corporate Center Drive, Suite 100**

**P.O. Box 9040, Melville, NY 11747**

Copyright © 2010 Honeywell International Inc.

[www.honeywell.com/security](http://www.honeywell.com/security)



K14379V2 1/10 Rev. A