Care@Home™

Family

Installation Guide

ESUGSC020

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1. Introduction

Training Video

Care@Home™ is based on a combination of independent peripherals designed to help you manage a resident's home activities. The floor plan of the resident's home determines where you put the peripherals.

Work with your healthcare service provider to determine the peripherals you would like to install initially. In the future, you can add more peripherals as needed.

Care@Home™ includes the following:

- Control Panel
- Door/window sensor
- Motion detector
- Voice panic detector – optional
- Camera detector - optional
- Emergency pendant - optional

Figure 1: Sample Care@Home™ Family Configuration

The Care@Home™ **Active** service is an optional service which extends the comfort and security of Care@Home™ to residents while out of their home. The service provides the following **at home and out of home**:

- Emergency call button
- Fall detection
- Step counting

For information about installing additional optional peripherals such as the flood detector or the smoke detector, or the optional **Active** service, contact your healthcare service provider or see the user guides here: http://www.essence-grp.com/resources/smart-care-download.html.

This guide provides instructions for installing the control panel and peripherals in a resident's home. Installing Care@Home™ includes the following:

- Preparing the required equipment
- Downloading the Care@Home™ app
- Installing the Care@Home™ control panel
- Testing the control panel installation
- Installing the peripherals
- Testing the peripherals' installation
- Setting up the **Active** service (optional)

NOTE: The Care@Home™ Family Installation guide refers to Care@Home™ version 2.4.2.

2. Preparing the Required Equipment

Ensure you have the following before you install Care@Home™:

- A SIM card from your healthcare service provider.

  Confirm with your service provider that the SIM card is active before installation.
- A flat screwdriver

If you are using screws for installation, refer to Appendix B Installing with Screws on page 48.

3. Installing the Care@Home™ Applications

You require the following applications:

- **Care web application** – for managing Care@Home™
- **Care app** – for verifying the installation process and remotely monitoring your resident
- **Active app** – only required if you have the Care@Home™ **Active** service

Web browser cookies must be allowed on both your personal computer (PC) and your mobile devices to run the Care@Home™ applications.

Contact your system administrator for your user credentials for the **Care** web application and the **Care** app.

3.1. Installing the Care Web Application

The **Care** web application requires a PC and an internet browser such as Chrome, Firefox, Internet Explorer (version 10 or later), Edge (Windows 10), or Opera.

To install the **Care** web application:

1. Contact your service provider for the **Care** web application URL.
2. Enter the URL on your web browser. The **Care** web application **SIGN IN** page appears.

You can add the link to your web browser **Favorites** for easy access.

3.2. Installing the Care App

Download the **Care** app from the Apple® App Store or the Google™ Play Store. Contact your service provider for a username and password to log in.

Make sure your mobile device meets the following requirements:

- Apple: iOS 9.0 or later
- Android™: OS 4 or later
- Minimum mobile screen size of 4.7”

3.3. Installing the Active App

Download the **Active** app from the Apple® App Store or the Google™ Play Store to the resident's smartphone.

Make sure the resident's smartphone meets the following requirements:

- Apple: iOS 9.0 or later
- Android™: OS 4 or later
- Minimum mobile screen size of 4.7”

4. Installing the Control Panel

The Care@Home™ control panel is a connected, emergency-response, control device, used for personal emergency applications.

The control panel interfaces with the Care@Home™ peripherals, collects information about the resident's daily activities, and transmits the information to the monitoring station of the service provider.

4.1. Choosing a Location

The locations recommended for the CP installation are either of the following:

- The living room
- The master bedroom.

You should position the CP in a location which is:

- Central within the premises
- Provided with sufficient cellular reception
- For a **PSTN** model, near an operating telephone jack
- Convenient for the resident to access, yet not where the CP would attract attention from unauthorized users
- Where the CP speakerphone can be heard throughout the premises
- Away from concrete walls to eliminate radio frequency (RF) interference
- Away from metal obstructions
- At least 2 m (6 ft.) from the peripheral devices

4.2. Setting Up the Control Panel

To set up the control panel:

1. Ensure the power switch is **off**.

2. Hold the back cover with your thumb near the power switch and lift the back cover off the panel.

Figure 2: Removing the Back Cover

3. Insert the SIM card, with its contacts facing downward.

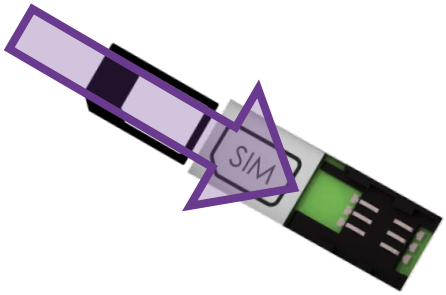

Figure 3: Inserting the SIM card

4. Insert the backup battery over the battery pull strip, such that the battery contacts are pointing towards the center of the control panel and facing downward. Ensure that the end of the battery pull strip is showing, and that the strip itself is not blocking the contacts.

Figure 4: Inserting the Backup Battery

Caution: A new battery can cause damage if it is incorrectly installed.

5. Plug the power adapter connector into the control panel power socket.
6. Secure the cable under the plastic tab.

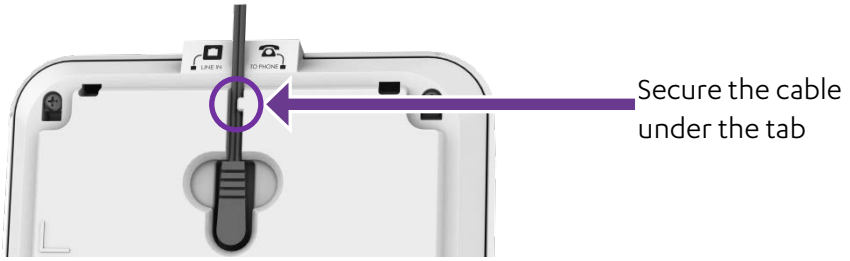

Figure 5: Connecting the Power Adapter Cable

7. Plug-in the power adapter.

   For USA product versions only: secure the power adapter cube.

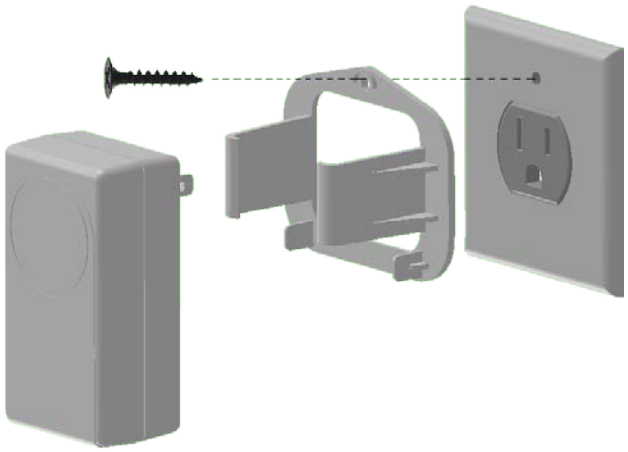

Figure 6: Securing the Power Adapter Cube

8. Turn the power switch **on**. The **Power** LED lights up green**.** The **Communication** LED lights up red. The ring around the **EMERGENCY** button lights up blue.

Figure 7: Powering Up the Control Panel

9. Wait for the **Communication** LED to change to green**.**
10. Replace the back cover.

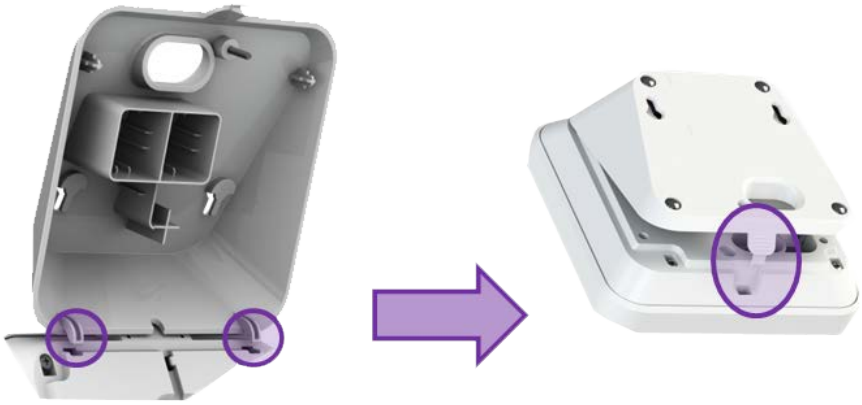

Figure 8: Replacing the Control Panel Back Cover

4.3. Testing the Control Panel Installation

You can test the control panel installation using the **Care** app's installation tool.

To test the control panel installation:

1. Log in to the **Care** app.

2. Tap 

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Figure 9: Tap to Test the Family Installation

3. If you care for more than one resident, select the resident for whom you are installing.
4. Tap 

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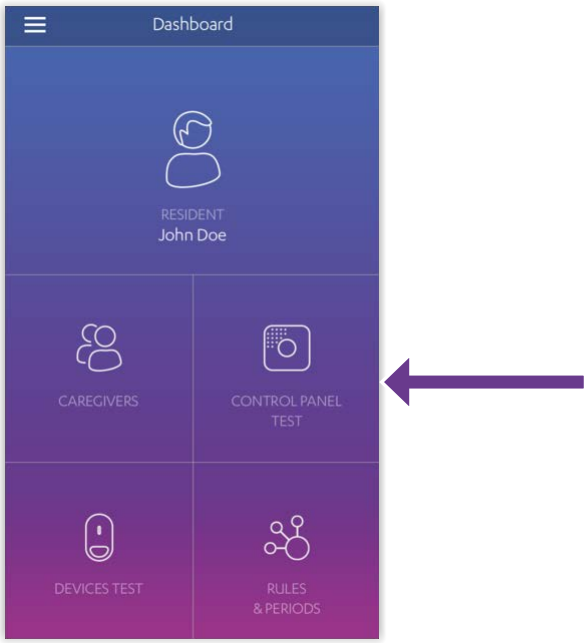

Figure 10: Tap to Test the Control Panel

5. Tap **Start**. The app checks the control panel GSM communications. This may take a few minutes.

   The app displays the following results:

   - GSM connection with the control panel is successful.

   - Error. GSM connection with the control panel failed.

6. If the control panel test fails, reposition the control panel and rerun the test.

5. Installing the Peripherals

Peripherals provided in the standard kit are pre-paired with the control panel to enable the peripherals to communicate with your Care@Home™. Before you install additional peripherals, contact your service provider to confirm that the peripherals are paired with your Care@Home™.

Installing the peripherals includes:

- Inserting the batteries
- Installing the peripheral in the chosen location

NOTE: Peripherals can be installed using mounting-tape. As an alternative, you can install using screws. Refer to Appendix B on page 48.

5.1. Installing the Door/Window Sensor

Training Video

The door/window sensor is a battery-operated, wireless, magnetic, bi-directional sensor that detects when a door or window is opened or closed. Install the sensor on the front door.

The door/window sensor consists of:

- The magnet
- The transmitter

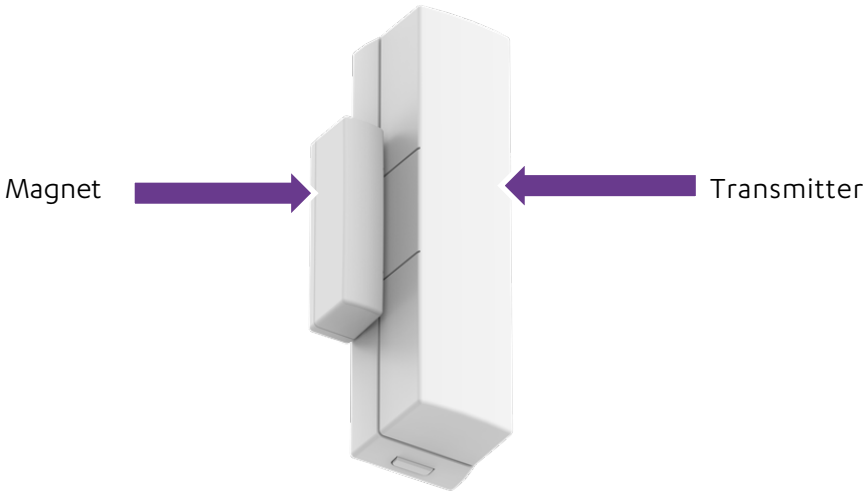

Figure 11: Door/Window Sensor

To install the door/window sensor:

1. Insert the flat screwdriver in the cover release tab opening and press the tab to release the back cover.

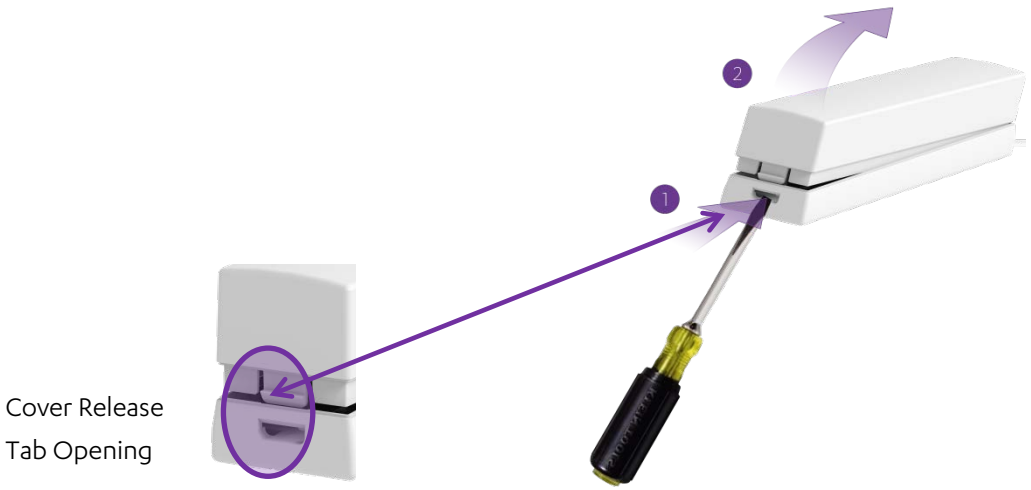

Figure 12: Releasing the Back Cover

2. Move the peripheral at least 2 m (~6 ft. 7 in.) from the control panel.
3. Insert a 3 V CR123A Lithium battery, observing the correct polarity.

Figure 13: Inserting the Battery

The red LED lights up, indicating that the transmitter has powered up successfully.

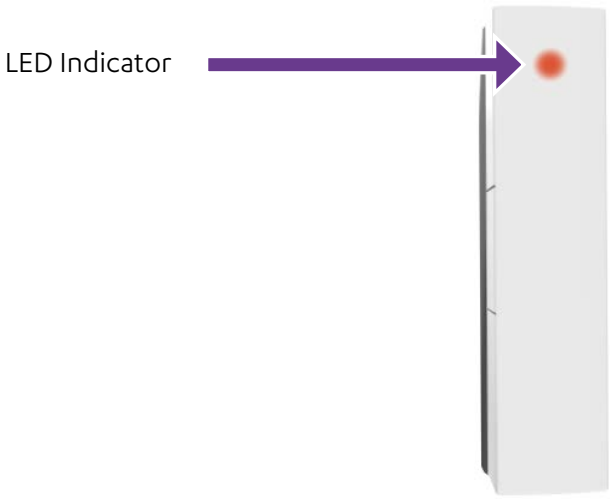

Figure 14: Transmitter Powered Up

4. Close the transmitter.

Figure 15: Closing the Transmitter

5. Choose a location on the front door according to the following recommendations:
   - A smooth, flat window or door surface
   - The transmitter attached to the fixed frame of the open/close item
   - The magnet attached to the moving edge of the open/close item
6. Clean and dry the mounting location surfaces.

7. Peel off the mounting-tape protective strips from both parts.

Figure 16: Peeling the Protective Strips

8. Mount the parts, as follows:
   - Within 3 cm (1.2 in.) of each other when closed
   - Aligned using the alignment marks

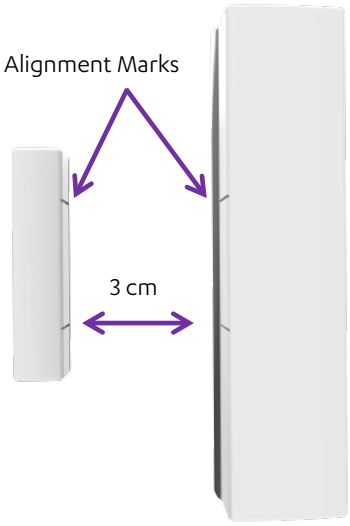

Figure 17: Aligning Components

9. Test by opening and closing the door or window. The LED should turn red when you open the door, and green when you close it.

5.2. Installing the Motion Detector

Training Video

The motion detector is a battery-operated, bi-directional, wireless, passive infrared detector.

Figure 18: Motion Detector

To install the motion detector:

1. Release the motion detector mounting-base by lifting the tab and pushing it forward.

Figure 19: Releasing the Mounting-Base

2. Open the battery compartment cover by sliding it upwards.

Figure 20: Opening Battery Compartment

3. Move the peripheral at least 2 m (~6 ft. 7 in.) from the control panel.
4. Insert a 3V CR123A Lithium battery, observing the correct polarity.

Figure 21: Inserting the Battery

The LED lights up red, indicating that the motion detector has powered up successfully.

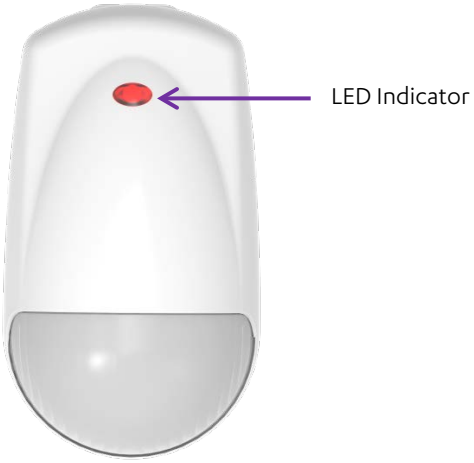

Figure 22: LED Indicator

5. Close the battery compartment cover.
6. If you have a pet on the premises, install a pet immune lens. Refer to Appendix C Installing a Pet Immune Lens on page 52.
7. If you have a combined bathroom and require just the restroom activities, install the optical limiter. Refer to Appendix D Installing an Optical Limiter on page 57.
8. Choose a location according to the following recommendations:
    - On a smooth surface, on either a flat wall or in a corner
    - At a height where the lens is 2 - 2.2 m (6.6 - 7.2 ft.) above the floor
    - Within view of the detection angle and range:
        - Maximum angle: 105° horizontal, 80° vertical
        - Maximum range: 12 m (40 ft.)
    - Avoid:
        - Tall, large objects, such as a bookcase or a cabinet
        - Locations with moving objects in the coverage area
        - Locations directly in front of an air conditioner, a heat source, a window facing sunlight, or any other strong light source
9. Clean and dry the mounting location surface.

10. Peel off the mounting-tape protective strips required for the installation location.

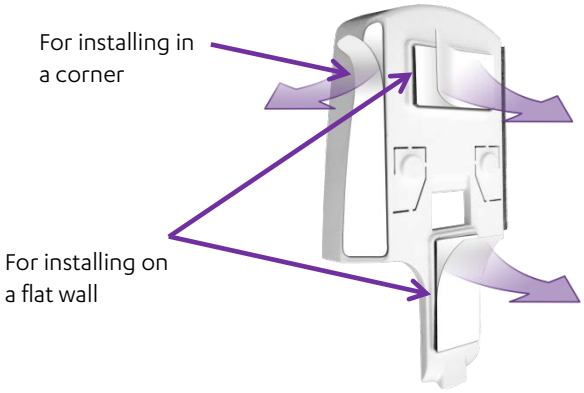

Figure 23: Peeling the Protective Strips

11. Press the mounting-base into place.
12. Insert the motion detector into the mounting-base until the motion detector clicks into place. Ensure that the lens is facing downward.

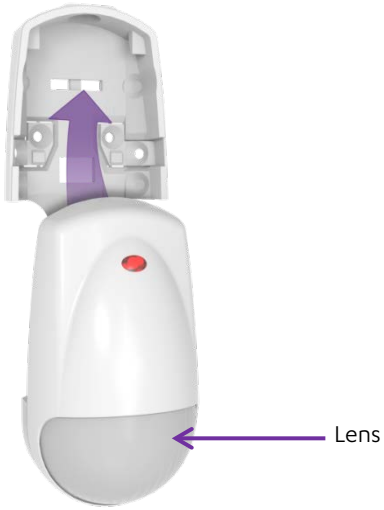

Figure 24: Inserting with Lens Facing Downward

13. Test by walking by the motion detector within 30 minutes after you install. The LED should light up red.

5.3. Installing the Voice Panic Detector

The voice panic detector (VPD) is a stationary emergency button with Intelligent Voice Activation™ (IVA) technology. The IVA™ technology allows your residents to literally call for help. The technology recognizes a specific spoken phrase that triggers an alarm and sends an emergency notification to the monitoring station.

The VPD can be installed on a table or on a wall. You need two 1.5V C alkaline batteries.

NOTE: For a table installation, you can use a power adapter. Contact your service provider to order the power adapter separately.

To install the VPD:

1. Choose an installation location:
   - It is recommended to install the VPD in the bathroom, living room, or bedroom.
   - If you are using the power adapter, install the VPD near a power outlet.
   - If you are installing the VPD on a wall:
     - Choose a flat, smooth surface.
     - The recommended height is 1.4 - 1.5 m (4.6 - 4.9 ft.).
2. Release the back cover of the VPD:

a. Place your thumb on the pull cord/power adapter connector.

b. Place your index finger in the notch at the top of the VPD.

c. Pull open the VPD.

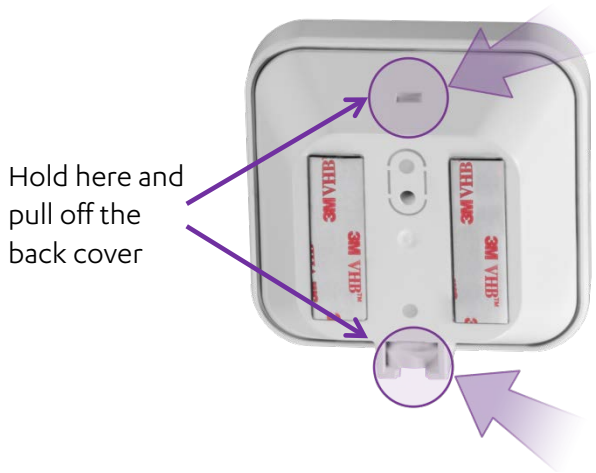

Figure 25: Pulling Open the VPD

3. On the right side of the control panel, press the **PAIRING** button for five seconds.
   The control panel beeps and the ring around the **EMERGENCY** button lights up blue with a circular movement effect.
4. Move the VPD at least 2 m (~6 ft. 7 in.) from the control panel.
5. Insert two 1.5V C batteries, observing the correct polarity.

Figure 26: Inserting Batteries

WARNING! A new battery can cause damage if incorrectly installed.

The VPD has powered up successfully when the LED lights up red.

When the pairing succeeds, the control panel beeps and the blue ring around the **EMERGENCY** button blinks three times.

6. Close the VPD by aligning the tamper pin with the tamper switch.

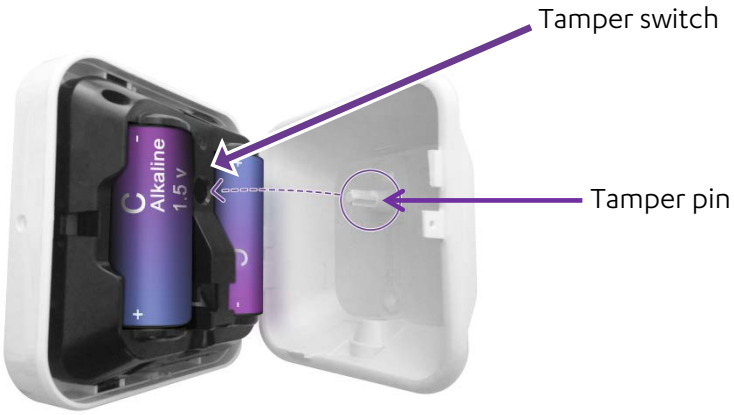

Figure 27: Aligning the Tamper Pin and Switch to Close the VPD

7. To install the VPD on a table, attach the table mount to the VPD, and press the tab until it clicks into place.

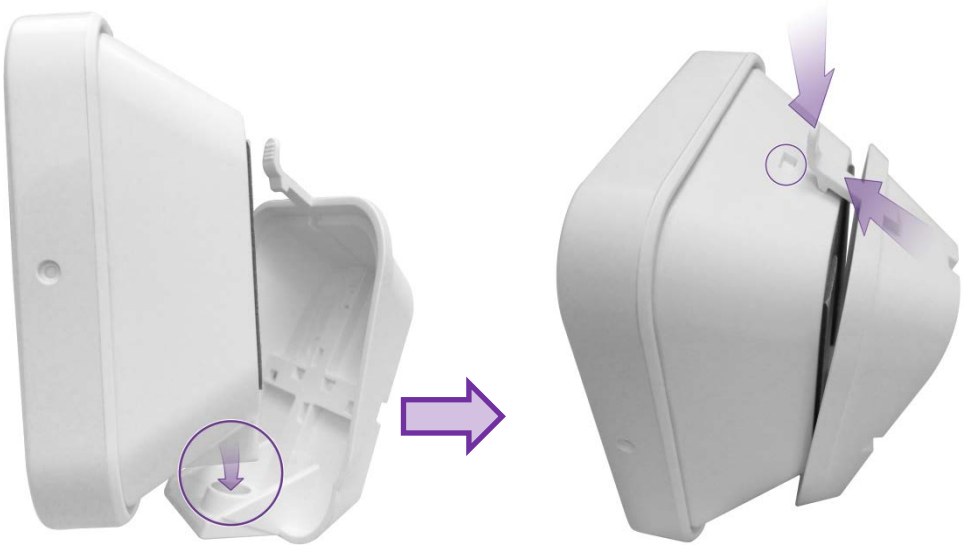

Figure 28: Attaching the Table Mount

8. To install the VPD on a wall:
   a. Clean the surface of the mounting location thoroughly.
   b. Peel the protective strips off the mounting tape.

Figure 29: Peeling the Protective Strips

   c. Press the VPD into place.
   d. Insert the cord into the opening.

Figure 30: Inserting the Pull Cord

NOTE: When pulled, the cord disconnects from the VPD, triggering an emergency alert. Reinsert the cord to reset for future use.

5.4. Installing the Camera Detector

The camera detector is an indoor sensor combining a battery-operated, bi-directional, wireless, passive infrared motion detector, with a JPEG-image-capturing camera. The camera detector is an optional peripheral that you can add to your Care@Home™.

Figure 31: Camera Detector

To install the camera detector:

1. Release the camera detector mounting-base by lifting the tab and pushing it forward.

Figure 32: Releasing the Mounting-Base

2. Open the battery compartment by pushing the tab and lifting the cover up and off.

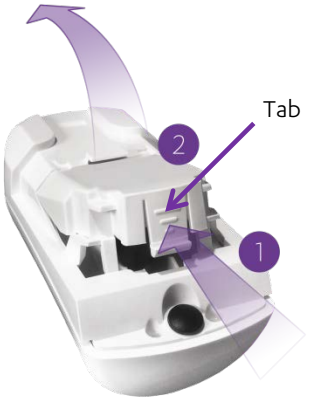

Figure 33: Opening the Battery Compartment Cover

3. Move the peripheral at least 2 m (~6 ft. 7 in.) from the control panel.

4. Insert three AA alkaline batteries, observing the correct polarity.

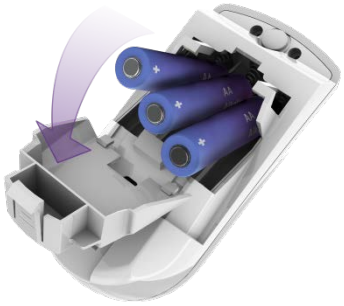

Figure 34: Inserting the Batteries

The LED in the lens compartment flashes red, indicating that the camera detector has powered up successfully.

5. Close the battery compartment cover.
6. If you have a pet on the premises, install a pet immune lens. Refer to Appendix C Installing a Pet Immune Lens on page 52.
7. Choose a location according to the following recommendations:
   - On a smooth surface, on either a flat wall or in the corner
   - In a position to capture images for monitoring activities such as unexpected entry or exit
   - At a height where the camera lens is 2.1 - to 2.3 m (6.9 - 7.5 ft.) above the floor
   - Not opposite a window, facing sunlight, or other strong light sources
   - Within 12 m (40 ft.) of the desired coverage area.
8. Clean and dry the mounting location surface.

9. Peel off the mounting-tape protective strips required for the installation location.

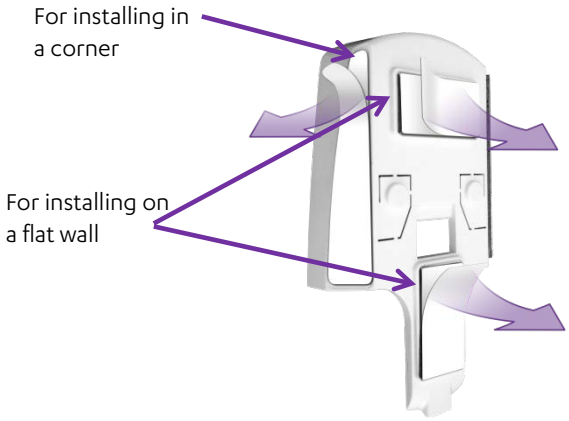

Figure 35: Peeling the Protective Strips

10. Press the mounting-base into place.
11. Insert the camera detector into the mounting-base until the camera detector clicks into place. Ensure that the lens is facing downward.

Figure 36: Inserting with Lens Facing Downward

12. Test by walking by the camera detector within 30 minutes after you install. The LED in the lens compartment should flash red.

5.5. Installing the Emergency Pendant

The emergency pendant is a small, user-friendly, portable peripheral, that when pressed, sends an emergency message to the control panel. The control panel passes the message to the monitoring station. The emergency pendant is provided with its battery installed. The emergency pendant is an optional peripheral that you can add to your Care@Home™.

There are the following types of emergency pendant:

- Emergency Pendant Plus (EP Plus)
- Emergency Pendant Advanced (EPA)

5.5.1 Installing the EP Plus

Figure 37: EP PLus

The EP Plus is designed to be worn as a pendant or on the wrist at all times:

- To wear the EP Plus around the neck, attach the EP Plus to the supplied lanyard.

Figure 38: As a Pendant

- To wear the EP Plus on the wrist, attach the EP Plus to the supplied wristband.

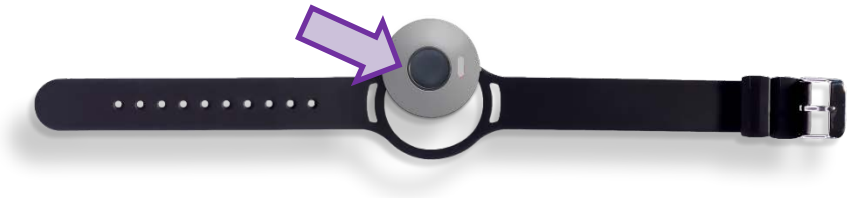

Figure 39: On a Wristband

5.5.2 Installing the EPA

Figure 40: EPA

The EPA is designed to be worn as a pendant.

To wear the EPA around the neck, attach the EPA to the supplied lanyard.

Figure 41: As a Pendant

6. Setting up the Active Service

To set up the Care@Home™ **Active** Service:

1. Install the **Active** app on the resident's smartphone. Refer to 3.3 Installing the Active App on page 7.
2. Ensure Bluetooth is enabled.
3. If the resident's phone is a **Xiaomi**:
   a. Tap **Security App** > **Permissions**, and toggle **Autostart** to **on** for **Care@Home™ Active**
   b. Tap **Settings** > **Battery & Performance** > **Manage apps battery usage** > **Choose apps** > **Care@Home™ Active**, and set to **no restrictions**
4. Ensure you have the resident's smartphone and EPA within 50 cm (20 in.) of the control panel.
5. Run the **Active** app, and follow the onscreen instructions. The app confirms when the **Active** service is set up by displaying "Successfully Registered."

6.1. Active Service Settings

If you tap **Settings** in the app, the following is displayed:

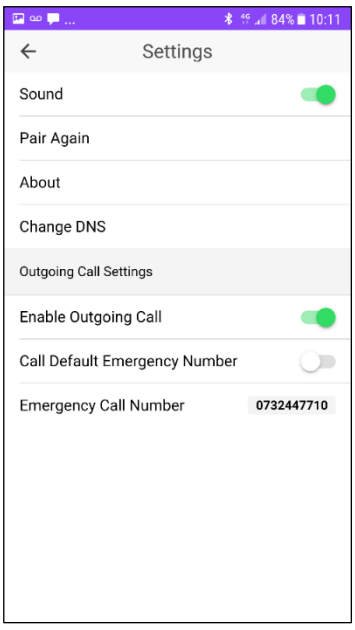

Figure 42: Active App Settings

Caution: Typically, there is no need to change the DNS settings. Therefore, do not change the DNS settings unless specifically instructed to do so by a technical support representative.

6.1.1 Outgoing Call Settings

You can change the outgoing call settings, if required.

- If **Enable Outgoing Call** is **On**, a telephone call is triggered when there is an emergency alarm.
- If **Call Default Emergency Number** is:
  - **On**, the emergency alarm call goes to the telephone number specified by your service provider.
  - **Off**, the emergency alarm call goes to the telephone number specified at **Emergency Call Number**.

6.1.2 Changing the Emergency Call Number

To change the **Emergency Call Number**:

1. Tap the **number**. The following screen is displayed:

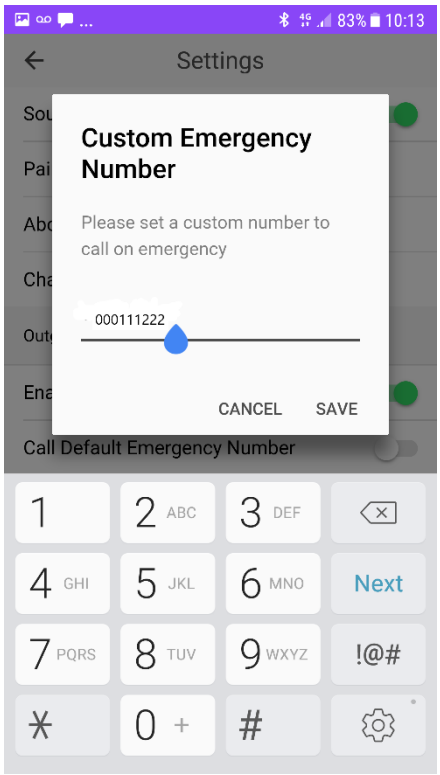

Figure 43: Changing the Emergency Number

2. Enter the new number and tap **SAVE**.

7. Testing the Peripheral Installation

Use the **Care** app's installation tool to verify that the following motion sensor peripherals are installed in their pre-defined rooms. Ensure that the installed peripherals' detections are received by the control panel.

The **Devices Test** tests each peripheral for the following:

- RF reception
- Sufficient battery charge
- Peripheral's tamper status notification
- Detection event notification

To test a peripheral's installation:

1. Log in to the **Care** app.
2. Tap 

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Figure 44: Tap to Test the Family Installation

3. If you care for more than one resident, select the resident for whom you are installing.

4. Tap 

. The **Activity Sensors** screen appears with a list of the peripherals to test.

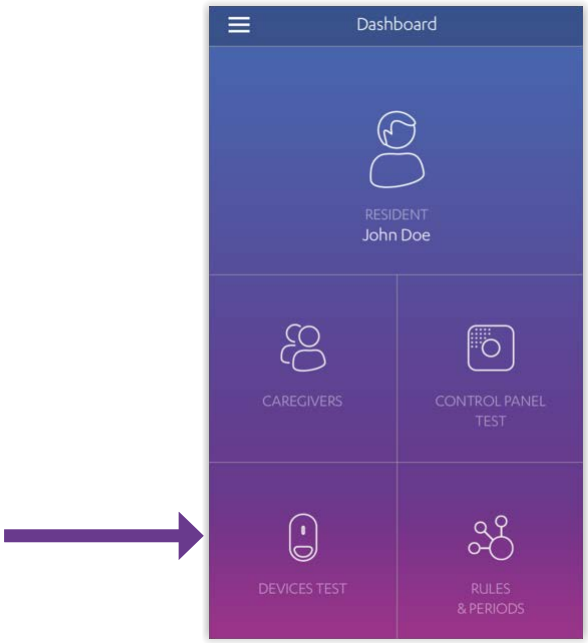

Figure 45: Tap to Test Devices

5. Tap  to allow testing. The control panel announces that the installation test has begun.
6. Tap the peripheral you want to test.
7. Tap **START**. Wait until the **Test Device** screen appears.
8. Trigger the device. For example, open the door when testing the door/window sensor.

   The control panel announces the name of the device.

   The app displays pass or fail for each step of the device test.

   If all the tests pass, the overall device test is successful. Otherwise, when the device test fails, a message appears with a link to a list of the errors.
9. Resolve the errors and/or re-install the peripheral, and rerun the device test. If the problem persists, contact your service provider.

8. Configuring Care@Home

To further configure Care@Home™, you can do the following:

Edit the resident's details

Add, edit, and delete caregivers

Use Care@Home™ to monitor your resident

NOTE: Contact your service provider for an explanation of the default rules defined in your Care@Home™.

For detailed instructions, refer to the ESUG05050 Care@Home™ Caregiver User Guide.

Appendix A Technical Specifications

The following are the technical specifications for the control panel and each of the peripherals:

- Control panel - Table 1
- Door/window sensor - Table 2
- Motion detector - Table 3
- Camera detector - Table 4
- Emergency pendants - Table 5
- Voice panic detector - Table 6

Table 1: Care@Home™ Control Panel

Category	Data
Part Number	ES6502HC
Communications	■ Proprietary bi-directional radio protocol ■ FSK modulation: 869.225 and 868.3 MHz (Europe and China) 916.5 MHz, (North America and Australia) 800 MHz (Israel) ■ 3G/4G (HSPA+) cellular module options with quad band (850/900/1800/ 1700/1900/2100 MHz) ■ Maximum RF range: up to 400 m (1,312 ft.) – open air ■ Data security: 32-bit ID, over 4 billion combinations ■ Reporting mode: SIA to standard receivers (V.90 for monitoring station configuration) DC09 Contact ID **NOTE:** For UL listing: the control panel must communicate with an SIA compatible UL listed central station receiver
Peripherals	■ Up to 64 peripheral devices can be assigned
Power	■ 90-240 VAC, 50/60 HZ external AC adapter ■ 3.7 V, 1400 mAh (North America) or 2800 mAh (Europe) li-polymer rechargeable backup battery, up to 40 hours of continuous operation

Category	Data
Physical	■ Size (H x W x D) 153 x 153 x 72 mm (6 x 6 x 2.9 in.) ■ Weight: 0.56 kg (1.23 lb.) including adapter and battery ■ Color: glossy white with a red button/grey button/yellow glow in the dark button
Environmental	■ Operating ambient temperature range: 0°C to 49°C (32°F to 120°F) ■ Storage temperature range: -20°C to 50°C (-4°F to 122°F) ■ Operating humidity: up to 95% non-condensing
Compliance	■ CE, FCC, IC, UL, cUL ■ EN 50134-2, EN 50134-3, and 50134-5 ■ EN50136-2:2014 Category C ■ AS4607 ■ PSTN model: ANSI/TIA-968-B – Terminal equipment standard ■ Cellular model: AT&T and PTCRB EN910-EUR – Global Connection (GCF) requirements, as well as the Global System for mobile communications standard EN 301 511

Table 2: Door/Window Sensor

Category	Data
Part Number	ES700MGLS
Communications	■ Proprietary bi-directional radio protocol ■ Advanced radio supervision algorithm ■ FSK modulation: 869.225 and 868.3 MHz (Europe and China) 916.5 MHz, (North America and Australia) 800 MHz (Israel) ■ Maximum RF range: up to 400 m (1,312 ft.) – open air ■ Data security: 32-bit ID, over 4 billion combination
Security	■ Nominal detection threshold: 35 mm (1.38 in.) closing distance and 45 mm (1.78 in.) opening distance ■ Visual indications: green LED for closure, red LED for opening ■ Double triggered tamper – cover open and wall tearing

Category	Data
Power	■ 3.7 V CR123A lithium battery ■ Up to three year battery life ■ Approved manufacturers: GP, Energizer, Duracell ■ Battery power test on power up and periodically
Physical	■ Size (H x W x D) Transmitter: 98 x 25 x 25 mm (3.86 x 0.98 x 0.98 in.) Magnet: 46 x 10 x 15 mm (1.81 x 0.39 x 0.57 in.) ■ Weight: Transmitter: 45 g (0.1 lb.) incl. battery Magnet: 25 g (0.06 lb.) ■ Color: RAL 9003 glossy white
Environmental	■ Operating ambient temperature range: 0°C to 49°C (32°F to 120°F) ■ Storage temperature range: -20°C to 60°C (-4°F to 140°F) ■ Operating humidity: up to 95% non-condensing
Compliance	■ CE ■ UL ■ FCC ■ IC

Table 3: Motion Detector

Category	Data
Part Number	ES700PIR
Communications	■ End-to-end bi-directional ESI protocol ■ Advanced radio supervision algorithm ■ FSK modulation: 869.225 and 868.3 MHz (Europe and China) 916.5 MHz (North America and Australia) 800 MHz (Israel) ■ RF coverage: 400 m (1,312 ft.) – open air ■ Encoding: 32-bit ID - over 4 billion combinations

Category	Data
Optical	■ Sensor: Dual element low-noise pyro-ceramic sensor RFI shielding Insect immunity – sealed optics ■ White ESI 4th generation DragonflyEye™ multi-zone lens: 12 m (39 ft.) detection range 90° horizontal, 50° vertical 102 zones, 6 vertical beams Daylight immunity
Functional	■ Advanced false alarm suppression algorithms ■ Advanced gain temperature control ■ Sealed PCB ■ Multiple detection mechanism: minimal wait time between detections of 20 seconds (PERS: 2.5 minutes) ■ Walk test: automatic after power up, for 10 minutes ■ Visual indications: LED for detection, tampering, and walk test
Power	■ One 3 V CR123A lithium battery ■ Up to three year battery life ■ Approved manufacturers: GP, Energizer, Duracell
Physical	■ Dimensions (H x W x D): 106 x 60 x 51 mm (4.17 x 2.36 x 2.01 in.) ■ Weight: 84 g (0.185 lb.) including battery ■ Color: glossy white ■ Mounting: standard ESI wall mount and standard ESI 2 screws ceiling/wall mount
Environmental	■ Operating temperature range: 0ºC to 49ºC (32ºF to 120.2ºF) ■ Storage ambient temperature range: -20ºC to 60ºC (-4ºF to 140ºF) ■ Operating humidity: up to 85% non-condensing ■ RFI protection: over 30 V/m
Compliance	CE

Table 4: Camera Detector

Category	Data
Part Number	ES700IPD

Category	Data
Communications	■ End-to-end bi-directional ESI protocol ■ Advanced radio supervision algorithm ■ FSK modulation: 869.225 and 868.3 MHz (Europe and China) 916.5 MHz (North America and Australia) 800 MHz (Israel) ■ RF coverage: 400 m (1,312 ft.) – open air ■ Encoding: 32-bit ID - over 4 billion combinations
Image Capture	■ Captures color motion: JPEG photos (up to 5 frames per second) ■ Multi-resolution: 80x60 to 640x480 VGA color CMOS camera ■ Illumination (at night or low-light conditions): auto-activated super bright white LED ■ Diagonal shooting angle: 67º ■ Camera range: up to 10 m (32.8 ft.)
Optical	■ Sensor: Dual element low-noise pyro-ceramic sensor RFI shielding Insect immunity – sealed optics ■ White ESI 4th generation DragonflyEye™ multi-zone lens: 12 m (39 ft.) detection range 105° horizontal, 80° vertical 102 zones, 6 vertical beams ■ Daylight immunity
Security	■ Tamper mechanism ■ Detection range: up to 12 m (39.4 ft.)
Functional	■ Advanced false alarm suppression algorithms ■ Advanced gain temperature control ■ Sealed PCB ■ Multiple detection mechanism: minimal wait time between detections of 20 seconds (PERS: 2.5 minutes) ■ Walk test: automatic after power up, for 10 minutes ■ Visual indications: LED for detection, tampering, and walk test
Power	■ 3 x 1.5 V AA alkaline batteries ■ Up to two year battery life ■ Approved manufacturers: GP, Energizer, Duracell

Category	Data
Physical	■ Dimensions (H x W x D): 123 x 60 x 60 mm (4.84 x 2.36 x 2.36 in.) ■ Weight: 210 g (0.165 lb.) including battery ■ Color: glossy white ■ Mounting: standard ESI wall mount and standard ESI 2 screws ceiling/wall mount
Environmental	■ Operating temperature range: 0ºC to 49ºC (32ºF to 120.2ºF) ■ Storage ambient temperature range: -20ºC to 60ºC (-4ºF to 140ºF) ■ Operating humidity: up to 95% non-condensing
Compliance	■ CE: EMC and Safety ■ FCC ■ IC

Table 5: Emergency Pendants

Category	Data
Part Number	■ EPA: ES700EPA ■ EPP: ES700EPP
Communications	■ Proprietary bi-directional radio protocol ■ FSK modulation: 869.225 and 868.3 MHz (Europe and China) 916.5 MHz (North America and Australia) 800 MHz (Israel) ■ RF coverage: 400 m (1,312 ft.) – open air NOTE: Nominal RF coverage is tested over LOS free space in a low interference environment ■ Encoding: 32-bit ID - over 4 billion combinations
Power	■ 1 x 3 V CR2450 lithium battery ■ Up to two year battery life NOTE: Nominal battery life is computed according to Essence's standard usage parameters.
Physical	■ Dimensions (H x Diameter): 12 x 40 mm (0.47 x 1.58 in.) ■ Weight: 15 g (0.53 oz.) including battery, excluding lanyard ■ Color: EPA: white EPP: gray

Category	Data
Environmental	■ Operating ambient temperature range: -10ºC to 49ºC (14ºF to 120ºF) ■ Storage ambient temperature range: -20ºC to 60ºC (-4ºF to 140ºF) ■ Water and dust resistant: IP67 ■ EN50130-5 Environmental Class 1
Compliance	■ CE ■ FCC ID: YXG ES700EPA-1 ■ UL1637 ■ EN 50134

Table 6: Voice Panic Detector

Category	Data
Part Number	■ VPD: ES700VPD ■ SPD: ES700SPD
Communications	■ Proprietary bi-directional radio protocol ■ FSK modulation: 869.225 and 868.3 MHz (Europe and China) 916.5 MHz, (North America and Australia) 800 MHz (Israel) ■ Maximum RF range: up to 400 m (1,312 ft.) – open air ■ Data security: 32 bit ID, over 4 billion combinations
Special Features	■ **E**mergency phrase detection by Intelligent Voice Activation™ technology ■ Voice extender for two-way communication with the monitoring station ■ Accessories: pull cord and table mount ■ Safety: tamper mechanism ■ Multiple-color LED for emergency and system status indications
Power	■ 2 C 1.5V alkaline batteries – not included ■ Battery life: up to two years ■ Approved manufacturers: GP, Energizer, Duracell NOTE: To comply with the UL certification standards, use GP International Limited batteries

Category	Data
Physical	■ Size (H x W x D) 95 x 95 x 42 mm (3.74 x 3.74 x 1.65 in.) ■ Weight: 300 g (0.66 lb.) not including batteries ■ Color: glossy white with a red button/grey button/yellow glow in the dark button
Environmental	■ Operating ambient temperature range: 0ºC to 45ºC (32ºF to 113ºF) ■ Storage temperature range: -10ºC to 60ºC (14ºF to 140ºF) ■ Operating humidity: up to 100% humidity ■ Water resistance: Water and dust resistant – IP54 compliant
Compliance	■ FCC ■ UL ■ IC ■ CE ■ EN50134 ■ AS4607 ■ SRRC ■ EN50130-5 Environmental Class I

Appendix B Installing with Screws

As an option, you can install Care@Home™ devices with screws.

Installing with screws:

- Allows more flexibility in choosing installation locations
- Provides support when installing at a difficult angle
- Can reinforce the tape installation

Prepare the following equipment:

- A drill with an appropriate bit
- A Philips screwdriver
- 3 X 35 DIN 7982 C screws and wall anchors– The number of the screws and wall anchors is determined by the device being installed. Screws and wall anchors are not provided.

Table 7: Screws and Wall Anchors Recommendations

Device	Quantity per Device
Door/Window Sensor	2
Motion Detector	2 - 6
Voice Panic Detector	2
Camera Detector	2 - 6

The following are instructions for installing with screws by device type.

Door/Window Sensor

For the door/window sensor, you can install the transmitter using screws. The magnet is installed only using mounting tape.

1. Using the screwdriver, remove the two punch-outs for the screws. Figure 47 shows the punch-out holes provided for the screws in the mounting base.

Figure 46: Transmitter Unit Base with Screws

2. Place and hold the mounting base on the desired mounting location.
3. Mark the drilling spots through the punch-outs.
4. Drill the holes.
5. Insert two wall anchors in the drilled holes, if needed.
6. Place the mounting base over the wall anchors in the drilled holes.
7. Screw in the two screws:
   a. Insert one screw into the mounting base to activate the "Tamper Protection" for the device. This is compliant with the EN 50131 standard.
   b. Insert the second screw to reinforce the mounting base installation.

Motion and Camera Detectors

The mounting-base has eight holes to allow for installation flexibility. Varying the combinations of holes allows you to install the camera or motion detector:

- Flat on a wall
- On an angle facing to the right
- On an angle facing to the left
- In a corner

The thin plastic covering over the holes can be removed, if necessary. All the corner support holes are blocked by the mounting-tape. You can drill through the tape, if needed.

To install the motion or camera detector using screws:

1. Release the mounting-base by lifting the tab and pushing it forward.

Figure 47: Release Mounting-Base

2. **For wall mounting**:
   a. Remove the punch-outs 1 and 2 using a flat screwdriver.
b. Place and hold the base on the desired mounting location and mark the drilling spots.

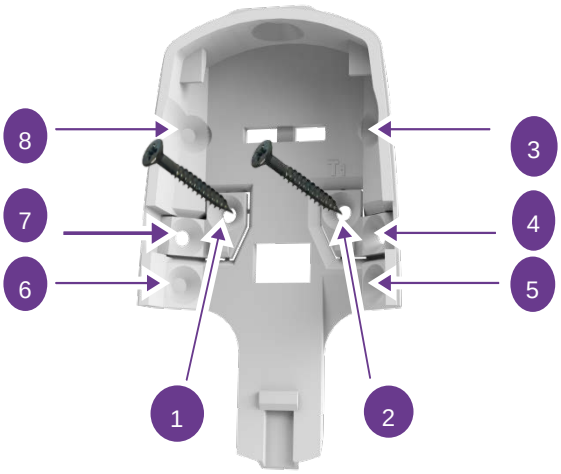

Figure 48: Mounting-Base Screw Punch-outs

   c. Remove the punch-outs 1 and 2 using a flat screwdriver.
d. Place and hold the base on the desired mounting location and mark the drilling spots.
e. Drill the holes.
f. Insert the wall anchors, if needed.
g. Place the base over the wall anchors and screw in the screws.
3. For corner mounting, repeat the above procedure for punch-outs 3 through 8, using six screws and six wall anchors.

Voice Panic Detector

The back cover of the VPD serves as the mounting-base. The mounting-base has two holes. One is the tamper pin, triggering a tamper event if the VPD is disturbed.

The rubber seal covering the holes is for waterproofing the VPD. The seal allows you to screw through the holes and retain the waterproofing capability.

To install the VPD using screws:

1. Remove the back cover of the VPD, as instructed in step 2 on page 23.
2. Mark the position of the screws on the wall by screwing the screws slightly through the wall-mount and tapping them until a mark appears on the wall.

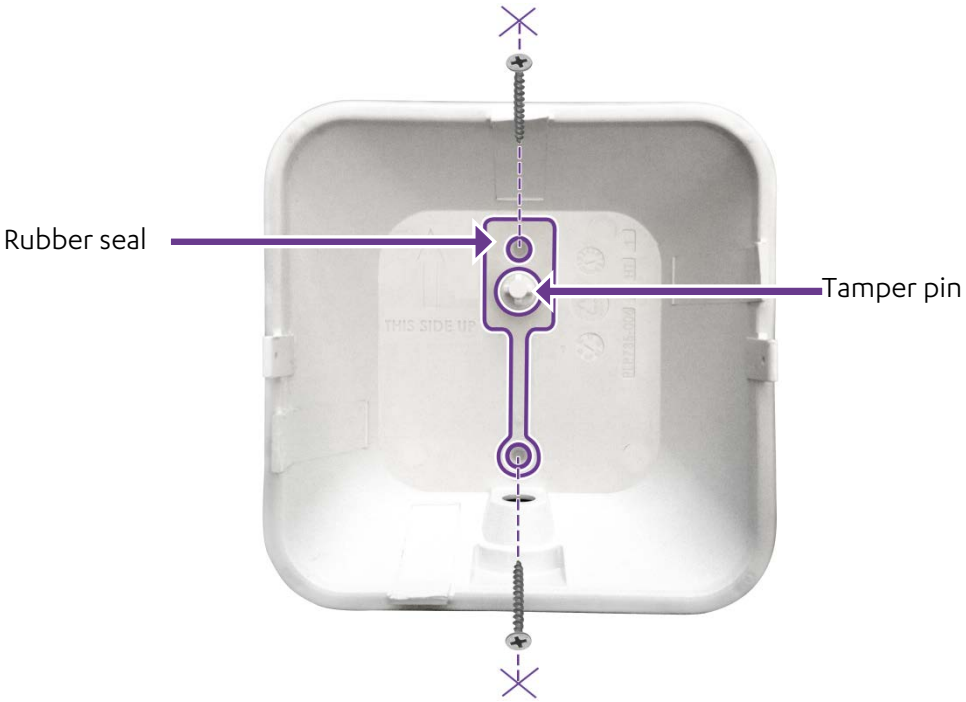

Figure 49: Rubber-sealed Screw Holes in the VPD Mounting-Base

3. Drill holes where marked and insert the wall anchors.
4. Align the wall mount with the inserted wall anchors and screw the two screws through the rubber seal in the wall mount into the wall.

Appendix C Installing a Pet Immune Lens

Training Video

If you have a pet, use a pet immune lens. The pet immune lens reduces false detections by avoiding detections of small moving objects such as pets.

Figure 50: The Pet Immune Lens

To install the pet immune lens in the motion or camera detectors:

> Caution: Perform this procedure with special care, since the top part of the front panel is breakable.

1. Release the device from the mounting base.

Figure 51: Releasing the Mounting Base

2. For the camera detector:
   a. Unscrew the two screws above the battery compartment at the top of the back cover.

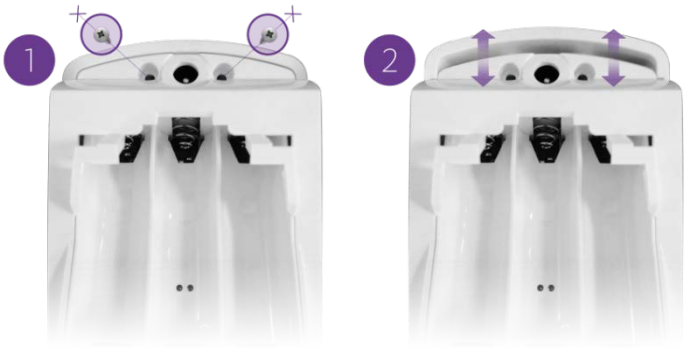

Figure 52: Unscrewing the Screws

b. Detach the back cover from the front panel. The circuit board is attached to the inner compartment of the camera detector back cover.

> Caution: When working within the inner compartment of the camera detector, be careful not to damage the circuit board and other parts of the device.

3. Use a flat screwdriver to release the three latch tabs.

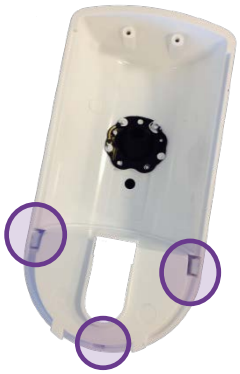

Figure 53: Lens Latch Tabs

The lens falls free of the panel. If the lens is not released, insert a dull, thin object through the oval opening and gently push the lens.

Figure 54: Front Panel Oval Opening

4. Insert the pet immune lens into the lens opening in the front panel. The pet immune lens fits **inside** the lens opening.

Figure 55: Assembling the Pet Immune Lens

5. Insert the lens in the groove surrounding the lens opening, placing the lens on top of the pet immune lens.

6. Insert the latch tabs at the bottom center and at the side of the lens into the latch tab slots on the lens opening. Figure 57 illustrates where and how to install the lens.

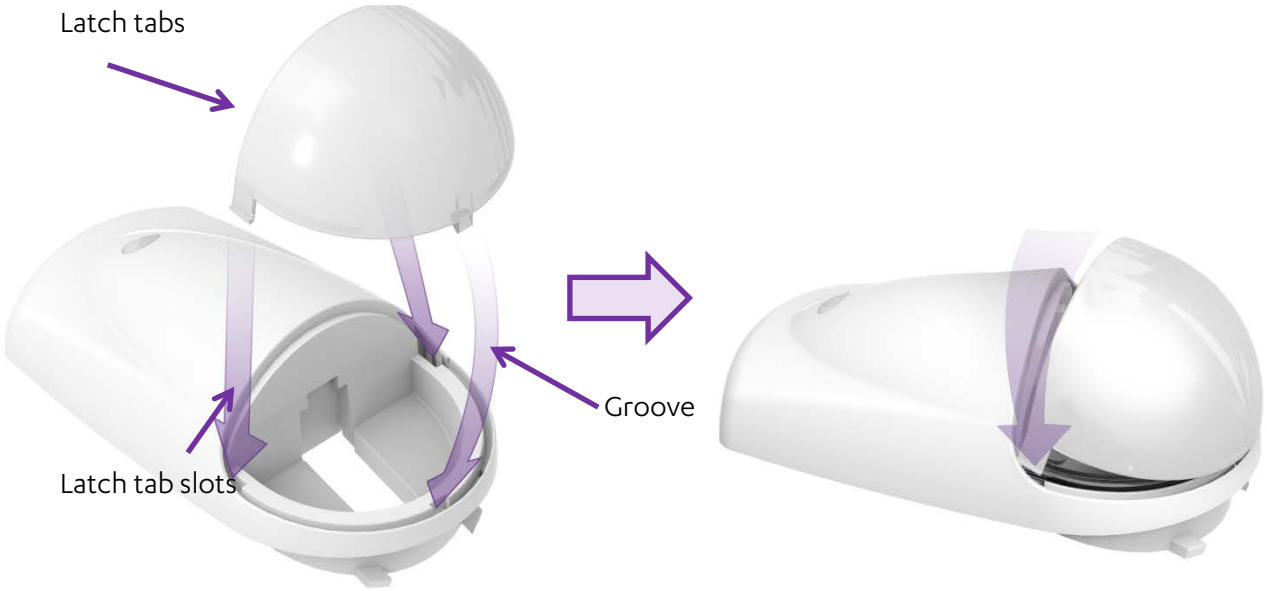

Figure 56: Inserting the Lens using the Latch Tabs

The side and center latch tabs hold both lenses in place.

7. Insert the tabs, at the bottom end of the front panel, into the inner square slots, at the bottom end of the back cover.

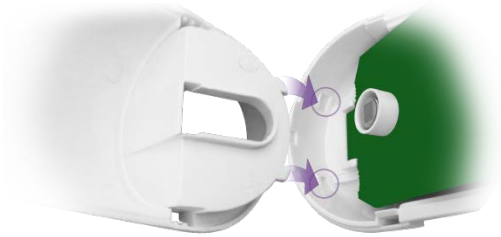

Figure 57: Aligning and Inserting Tabs in Square Slots

8. For the motion detector:
   a. Position the top of the back cover onto the top of the front cover, while aligning the latch tab under the lock tab of the front panel.
   b. Holding the PIR with the back cover facing you and both thumbs on the holes for the screws, press the back cover into the front panel until the latch tab clicks under the lock tab of the front panel.

Alternatively, use a flat screwdriver to press downward on the back cover latch-tab, until the latch tab clicks under the lock tab of the front panel.

9. For the camera detector:

   a. Position the top of the back cover onto the top of the front cover, while aligning the holes for the screws.

Figure 58: Aligning Holes for Screws

b. Attach the front panel to the back cover using the two screws.

10. Insert the batteries.
11. Close the battery compartment.
12. Return the device onto the mounting-base such that the lens is facing downward.

Figure 59 : Inserting the Device with the Lens Facing Downward

Appendix D Installing an Optical Limiter

Training Video

The optical limiter is installed in the motion detector between the detection mechanism and the lens.

Figure 60: Optical Limiter

Figure 62 illustrates the installation location for the motion detector in a combined bathroom.

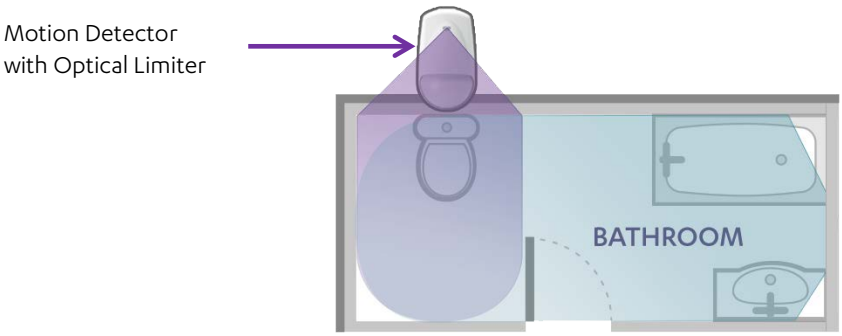

Figure 61: Combined Bathroom Installation

The coverage area radius for a motion detector with an optical limiter is 25% of the installation height.

To install the optical limiter:

1. Open the restroom motion detector by holding the back cover upright and inserting a flat screwdriver between the lock tab of the front panel and the top of the back cover, pushing downward on the inner latch tab, to release the back cover from the front panel.

2. Slide the optical limiter into the flat-end slot at the top of the oval opening.

Figure 62: Inserting the Optical Limiter

3. Push the limiter until it completely fits into place.

Figure 63: Optical Limiter Installed in the Motion Detector

4. Close the motion detector as instructed on page 55.
5. Install the restroom motion detector over the toilet.

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