



# Care@Home™

## Care@Home™ Pro Installation Guide



August 2021



# Table of Contents

- 1. Overview .....3
- 2. Residence Floor Plan Survey .....5
- 3. Tools and Equipment ..... 6
- 4. Installation .....7
  - 4.1. Planning the Installation.....7
    - 4.1.1 Performing the On-Site Survey .....7
    - 4.1.2 Determining Peripheral Placement ..... 8
  - 4.2. Installing the Control Panel ..... 8
  - 4.3. Activate Installation Mode ..... 9
  - 4.4. Installing Peripherals ..... 9
  - 4.5. Testing the Installation ..... 10
    - 4.5.1 Testing Activity Sensors ..... 11
    - 4.5.2 Testing Emergency Devices ..... 11
- 5. Best Practices .....13
  - 5.1. Positioning per Location .....13
  - 5.2. Special Cases ..... 14
    - 5.2.1 Living Room vs Bedroom..... 14
    - 5.2.2 Combined Bathroom..... 14
    - 5.2.3 Pets on the Premises .....15
- 6. Troubleshooting ..... 16
- Appendix A Floor Plan Questionnaire.....17
- Appendix B Sensors..... 18
  - Kit Pre-Configured Activity Peripherals ..... 18
  - Optional Activity Peripherals ..... 19
  - Optional Safety Peripherals ..... 19
- Appendix C Batteries ..... 21
- Appendix D Screws and Wall Anchors..... 22

# 1. Overview

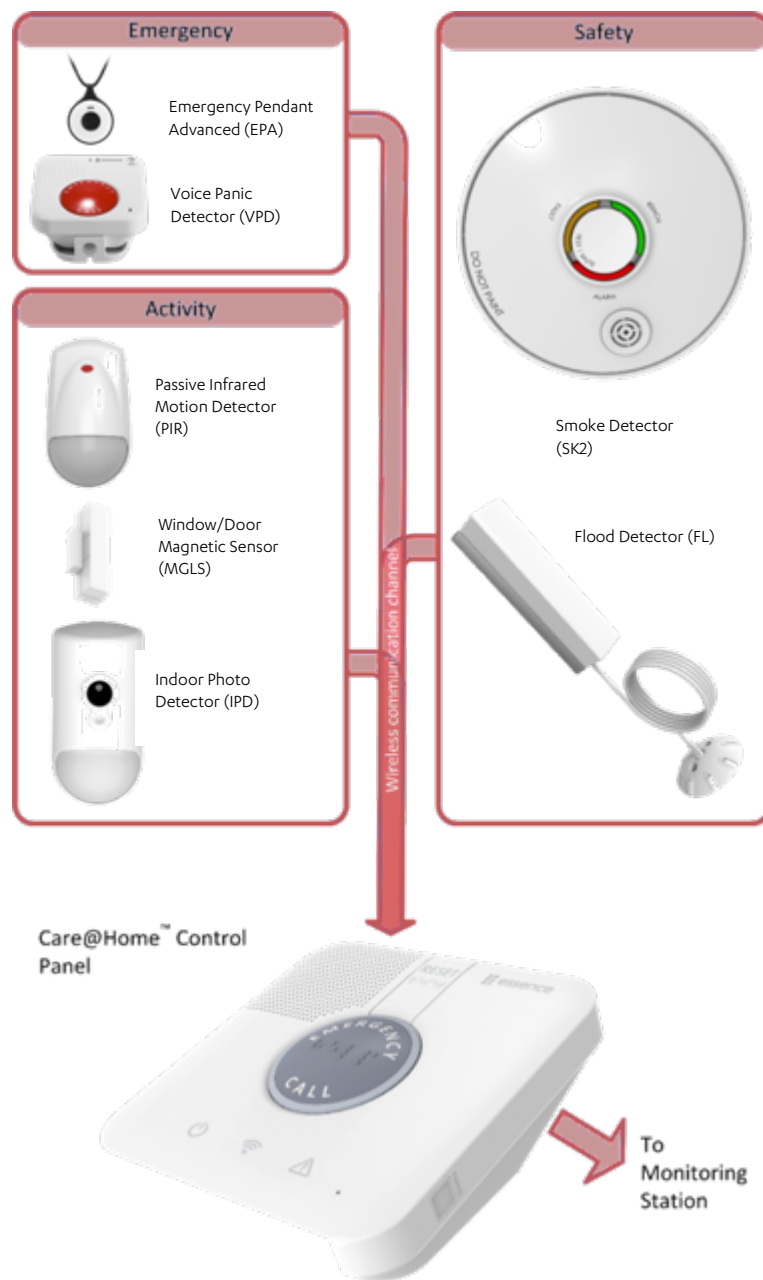
Care@Home Pro alerts healthcare service providers or family members of any deviation from the resident's daily routine, enabling proactive, personal, and real-time care, anywhere, and anytime.



**NOTE:** The Care@Home Pro System Installation User Guide refers to version Care 2.5.10 of the Care@Home system.

---

Care@Home's basic configuration is depicted below.



## 2. Residence Floor Plan Survey

Essence recommends filling out a short questionnaire about the floor plan of the premises:

- Number of rooms
- Functionality of rooms
- Pets
- Bathroom with toilet
- Exit doors

Use the questionnaire to identify the tools and equipment required for the installation, such as the number and type of:

- Peripherals
- Accessories
- Batteries

There is an example questionnaire in Appendix A on page 17.

### 3. Tools and Equipment

You will need the following:

- Care@Home system kit
- Additional peripherals, if necessary
- Batteries - refer to Appendix C Batteries on page 21.
- Pet immune lens, if necessary
- Optical limiter, if necessary
- Standard Phillips and standard flat screwdrivers
- A probe or paper clip

## 4. Installation

Following are the Care@Home Pro installation steps and where to find instructions for each step.

Step	See
Plan the installation	7
Install the control panel	8
Activate the installation mode	9
Install the peripherals	9
Test the installation	10

### 4.1. Planning the Installation

At the premises review the installation plan and adjust it accordingly:

1. Survey the premises to check if any unplanned tasks are required.
2. Determine where each peripheral should be placed.



**NOTE:** If you need to register a resident or caregiver, refer to ESUG05051 Care@Home Admin Guide.

#### 4.1.1 Performing the On-Site Survey

To perform the on-site survey:

1. Tour the premises with the questionnaire and verify that the information is accurate.
2. Review any the discrepancies and adjust the installation plan accordingly.
3. If there is a pet, add a pet immune lens in each PIR and IPD.
  - For the PIR, refer to **Pet Immune Lens** in the ESUGSC008 Care@Home PIR User Guide.
  - For the IPD, refer to **Installing Pet Immune Lens** in the ESUGSC006 Care@Home IPD User Guide.

- If there is a combined bathroom and toilet, add an optical limiter in the motion detector assigned to the restroom (toilet) zone. Refer to **Optical Limiter** in the ESUGSC008 Care@Home PIR User Guide.

### 4.1.2 Determining Peripheral Placement

The PIR and IPD peripherals should be placed as follows:

- An unobstructed view of the coverage area
- At a height of 2 to 2.2 m (6 ft. 7 in. to 7 ft. 3 in.)
- Away from any heat source or air-conditioning vents
- Away from any glaring light sources
- Not opposite doorways or hallways
- No overlap in sensor coverage areas

For the best practices for positioning peripherals by room, refer to 5 Best Practices on page 13.

For position considerations for a specific peripheral, refer to the peripheral’s user guide. See <http://www.essence-grp.com/resources/smart-care-download.html>

## 4.2. Installing the Control Panel

Follow the installation instructions in your control panel's user guide, as follows:

Control Panel Type	Refer To
C7000	ESUGSC089 Care@Home C7000 User Guide
Not C7000	ESUGSC003 Care@Home CP User Guide



Verify that the installation of the control panel is successful as follows:

- Check that the power LED is lit green and stable.



- Check that the communications LED is lit green and stable.
- Check the cellular reception of a mobile device using the same cellular service provider. Ensure the reception level is at least two bars.



**NOTE:** Do not replace the back cover of the control panel until after you complete the installation process.

### 4.3. Activate Installation Mode

Since the peripherals are pre-configured to their assigned locations, the control panel can help guide you through the installation process using vocal announcements.

To activate installation mode:

1. Push a probe or the open end of a paperclip into the TEST pinhole. The control panel announces “Installation test starts”.



### 4.4. Installing Peripherals

The following is the procedure to install the Care@Home peripherals, pre-configured to communicate with the installed control panel.

Essence recommends you install the peripherals in the following order:

1. Install an MGLS on the refrigerator door.
2. Install an MGLS on the front door.
3. Install a motion detector (PIR) in the bedroom.

4. Install a PIR in the restroom (toilet room).
5. Install a PIR in the bathroom.
6. Install a PIR in the living room.
7. Install a PIR in the dining room.
8. Install additional activity peripherals (PIR and MGLS) as determined during the planning stage.

Perform each peripheral installation according to the following general installation procedure:

9. Insert the batteries in the peripheral. When control panel recognizes the peripheral, the control panel installation mode program gives a prompt to verify correct placement and that detection is working.
10. Secure the peripheral in its pre-determined location, using either double-side adhesive mounting-tape (recommended) or screws and wall anchors (if preferred).
11. Test the peripheral installation.

For detailed instructions for each of the peripherals, refer to the user guide for that specific peripheral. See: <http://www.essence-grp.com/resources/smart-care-download.html>

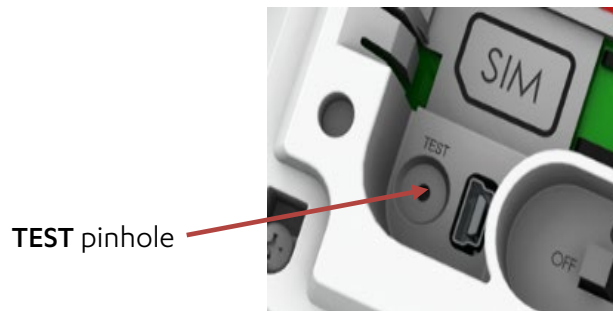
## 4.5. Testing the Installation

Test the installation to ensure that all components work properly. The control panel responds with a voice message after each interaction with a peripheral. If the control panel does not respond, make a note and continue testing.

### 4.5.1 Testing Activity Sensors

To test the activity sensors:

1. Push a probe into the control panel’s **TEST** pinhole, once or twice, until the control panel responds “Installation test starts”

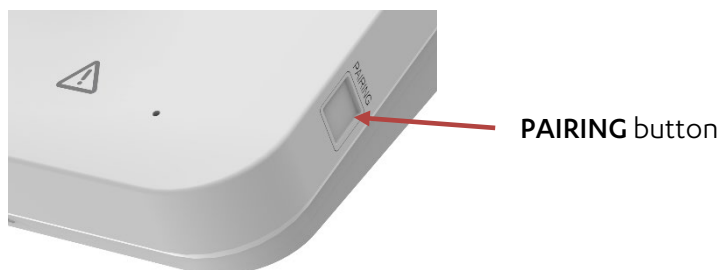


2. Test the MGLSs:
  - a. Open and close the main door.
  - b. Open and close the refrigerator door.
3. Walk past each PIR.
4. Push a probe into the control panel’s **TEST** pinhole until the control panel responds, “Installation test ends”.

### 4.5.2 Testing Emergency Devices

To test the emergency devices:

1. Press the control panel’s **PAIRING** button twice. The control panel’s LEDs flash. The control panel responds, “Control panel entered test mode”.



2. Test fall detection:
  - a. Move the EPA in a circular motion three times as follows:
    - Parallel with the floor
    - Making a circle about the size of a dinner plate

- Making one circle per second
  - b. While sitting, hit the EPA on your thigh three times.
  - c. Place the EPA on its edge on a table top. You can lean it at an angle against the control panel or other object.
  - d. Wait 20 seconds. The LED should blink red.
3. Press the pendant's button.
4. Test the VPD - Do one of the following:
  - Press the **EMERGENCY CALL** button.
  - Pull the emergency cord.
  - Shout the trigger phrase.
5. Press the SPB's **SOS** button.
6. Test the SPD - Do one of the following:
  - Press the **EMERGENCY CALL** button.
  - Pull the emergency cord.
7. Press the control panel's **RESET** button. The control panel responds, "Control panel exited test mode".
8. Press the control panel's **EMERGENCY CALL** button. The monitoring center responds.

## 5. Best Practices

The following are suggestions for installing the peripherals.

### 5.1. Positioning per Location

For best results, follow Essence guidelines when choosing a position to install each of the peripherals in their assigned locations:

- Bedroom PIR:
  - **Height:** 1.5-2 m (4 ft. 11 in. - 6 ft. 7 in.)
  - **Direction:** diagonal to the bed and not in front of the door
- Restroom PIR:
  - **Height:** 30-50 cm (12 in. – 1 ft. 8 in.) above the toilet seat, depending on the distance from the seat
  - **Direction:** diagonal to the seat and not facing the door
  - If it is not possible to avoid the doorway, position the PIR in front of the seat
- Bathroom PIR:
  - **Height:** 1.5-2 m (4 ft. 11 in. - 6 ft. 7 in.)
  - **Direction:** diagonal to the sink and the bath and not facing the door
- Dining room PIR:
  - **Height:** 1.5-2 m (4 ft. 11 in. - 6 ft. 7 in.)
  - **Direction:** diagonal to the dining table and not facing the living room, specifically for a dining room and living room without a separating wall
- Living room PIR:
  - **Height:** 1.5-2 m (4 ft. 11 in. - 6 ft. 7 in.)
  - **Direction:** diagonal to the sitting area and not facing the dining room, specifically for a dining room and living room without a separating wall
- MGLS (for either the refrigerator or front doors):
  - Position the magnet:
    - Next to the detector so that the line marks on both the magnet and the detector are aligned
    - No further than 3 cm (1 in.) from the detector

## 5.2. Special Cases

The following cases describe situations that are exceptions to the standard living arrangements. Installation solutions are suggested for each of these non-standard situations.

### 5.2.1 Living Room vs Bedroom

A resident may choose to sleep in the living room. In this case, either:

- The living room has been converted to a bedroom:
- If the living room has been converted to a bedroom or the resident is using the couch or other living room furniture exclusively for sleeping purposes, contact the monitoring station to request to re-classify the PIR, identified by its serial number, for living room activity to a PIR for bedroom activity.
- In the activity sensors module of the Care@Home CMS application, update the **Activity Type** of the PIR to bedroom, according to the PIR serial number.
- The resident is sleeping in a bed in the living room which includes a separate seating area:
- Install the two PIRs such that their coverage areas do not overlap.
  - The PIR, whose coverage area includes the bed or sleeping area, should be assigned an activity type of bedroom, according to the PIR serial number.
  - The PIR, whose coverage area **does not** include the bed or sleeping area, should be assigned an activity type of living room, according to the PIR serial number.

### 5.2.2 Combined Bathroom

A special case for installation is when a bathroom includes a toilet. This is called a combined bathroom or a correlated restroom.

For this special case, you must install both the bathroom PIR and the toilet PIR in the same room. You need to be careful to isolate the toilet activities from the bathroom activities. Activity within a small space does not easily allow the PIRs to be installed affectively without overlap.

Detection overlap can cause possible fall events not to be reported. There is a timer in the PIR that is triggered when the PIR senses movement. The timer monitors the time until the next movement. If movement is not detected within a pre-determined time frame, the Care@Home™ system assumes the resident has fallen and issues a possible fall alert.

When there is detection overlap, the PIR timer is constantly reset. This makes it next to impossible to identify a possible fall event.

The combined bathroom arrangement requires installation of special equipment to help focus the movement detections. Install an optical limiter in each of the combined bathroom PIRs to reduce the

coverage area of each PIR. The reduced coverage area allows you to place the PIRs such that their coverage areas do not overlap.

For more information and installation instructions about the optical limiter, refer to **Optical Limiter** in the ESUGSC008 Care@Home PIR User Guide.

### 5.2.3 Pets on the Premises

If the resident has a pet, it is important to block the movement sensors from registering the pet's movement. Do this by installing a pet immune lens in the PIR and IPD.

For more information and installation instructions about the pet-immune lens:

- For the PIR, refer to **Pet Immune Lens** in the ESUGSC008 Care@Home PIR User Guide.
- For the IPD, refer to **Installing Pet Immune Lens** in the ESUGSC006 Care@Home IPD User Guide.

## 6. Troubleshooting

The following table describes installation error situations and recommended solutions.

Situation	Possible Causes	Solution
A peripheral is not recognized by the control panel	The peripheral is located too close to the control panel when its batteries are inserted.	<ol style="list-style-type: none"> <li>1. Remove the batteries from the peripheral.</li> <li>2. Shake the peripheral gently to remove the residual power. You should hear a rattling sound. That is the tamper switch. The rattling sound is normal.</li> <li>3. Position the peripheral no less than 2 m (6 ft. 7 in.) from the control panel.</li> <li>4. Insert the batteries into the peripheral. The control panel should recognize the peripheral.</li> </ol>
The control panel announces the wrong location assignment for a peripheral, after batteries are inserted into the peripheral.	The location label on the peripheral does not match the location on the kit label. Installer error.	Reinstall the peripheral according to the list on the kit label.
	The kit label list is incorrect. Production process error.	Reassign the peripheral to the location announced by the control panel installation mode.
	The peripheral serial number is defined in the CMS for a different location (activity type). Pairing process error.	Reassign the peripheral to the location announced by the control panel installation mode.



## Appendix A Floor Plan Questionnaire

The following is an example of the questions to include in a questionnaire for the resident or the resident's family. It is important to complete the questionnaire prior to determining the configuration of the Care@Home™ system to be installed in the resident's premises. The responses may have an impact on the equipment to bring to the premises.

- Does the resident live alone?
- Does a care professional live with the resident?
- If so, which room is occupied mainly by the care professional?
- Does a care professional regularly visit the resident?
- If so, what is the schedule of these visits? Daily? Weekly? What are the hours of the visit?
- How many rooms are on the premises?
- What is the classification of each room?
- Define the classification of each room in terms of activity:
  - Living room
  - Bedroom
  - Dining room
  - Bathroom
  - Toilet
  - Kitchen
  - Other room
- How many exits are there?
- Define the classification for each exit:
  - Front door
  - Back door
  - Patio or balcony door
  - Entrance door from garage
  - Other
- Is there more than one bathroom on the premises?
- If so, does the resident use more than one bathroom?
- Is there more than one restroom on the premises?
- If so, does the resident use more than one restroom?
- Is there a bathroom on the premises which includes a toilet?
- Are there pets living on the premises?

## Appendix B Sensors

The motion detectors identify movement when the resident crosses in front of the detector, and not when the resident moves directly towards or away from the detector. To ensure that movement is detected, place the motion detector at an angle to the coverage area.

For example, if the coverage area in the living room is the couch and its immediate surroundings, the motion detector should be placed to the side of the couch, at an angle, such that the detector can view the couch.

Activity is recognized when movement is detected by two or more consecutive motion detectors in different locations, such as moving from room to room within the residence.

For example, movement is detected by the motion detector installed in the restroom and by the detector in the bathroom. The consecutive movement detections define an activity. In this case, the activity is recognized as restroom activity.

Care@Home uses the activities detected by peripherals to define a profile of the resident's habits and daily routine. The location of peripherals includes:

- Refrigerator door
- Front door entrance
- Bedroom
- Restroom (toilet room)
- Bathroom
- Living room
- Dining room

### Kit Pre-Configured Activity Peripherals

The standard kit for the Care@Home includes the following peripherals, pre-configured to communicate with the control panel:

- Two magnetic sensors (MGLS) for the front door and refrigerator door. Refer to ESUGSC007 Care@Home MGLS User Guide.
- Five motion detectors (PIR). Refer to the ESUGSC008 Care@Home PIR User Guide.

## Optional Activity Peripherals

You can add additional optional activity sensors to Care@Home. These include:

- Bed sensor (BD) - Care@Home™ uses the bed sensor, together with an associated motion detector, to determine if the resident is in the bedroom.
- Camera detector - The indoor camera detector (IPD) is not only a camera but also includes the same motion detection functionality as the PIR.
- Additional motion detector (PIR) - If a room has more than 30 minutes of activity at a time, the room should have a motion detector.
- Additional door/window detector (MGLS) - If the premises have more than one external door, each external door should have a door/window detector.



**NOTE:** A control panel can monitor and manage up to 64 peripherals.

---

To add an additional activity peripheral:

1. Use Care@Home CMS to:
  - a. Add the serial number and the activity type of the peripheral to the control panel. Refer to ESUG05074 Care@Home CMS Reference.
  - b. Download the changes to the control panel for the activity sensor.
2. Install and pair the device. Refer to:
  - Bed sensor - ESUGSC104 Care@Home BD User Guide
  - Camera detector - ESUGSC006 Care@Home IPD User Guide
  - Motion detector - 4.4 Installing Peripherals on page 9
  - Door/window detector - 4.4 Installing Peripherals on page 9

## Optional Safety Peripherals

To further ensure resident safety, you can add safety peripherals to your Care@Home system configuration.

To add a safety peripheral:

- Use Care@Home CMS or Care@Home CareView to:
  - Add the serial number of the peripheral to the control panel.
  - Download the changes to the control panel.
- Insert the batteries into the peripheral.

Refer to ESUG05074 Care@Home CMS Reference or ESUGSC181 CareView User Guide.

For information about pairing the EPA or EPP, refer to **Pairing with the CP** in the ESUGSC032 Care@Home EPA User Guide.

## Appendix C Batteries

The following table defines the batteries to use for each of the Care@Home system devices.

Product	Quantity per Device	Voltage	Size	Chemistry	Recommended Manufacturer
Control panel	1	3.7 V	NA	Lithium Polymer rechargeable	Essence only
Emergency pendant advanced	1	3 V	CR2450	Lithium	Energizer, Duracell, GP
Emergency pendant plus	1	3 V	CR2450	Lithium	Energizer, Duracell, GP
Motion detector	1	3 V	CR123A	Lithium	Energizer, Duracell, GP
Magnetic sensor	1	3 V	CR123A	Lithium	Energizer, Duracell, GP
Camera detector	3	1.5 V	AA	Alkaline	Energizer, Duracell, GP
Voice panic detector	2	1.5 V	C	Alkaline	Energizer, Duracell, GP
Smoke detector	2	1.5 V	AA	Alkaline	Energizer, Duracell, GP
Flood detector	1	3 V	CR123A	Lithium	Energizer, Duracell, GP
Bed sensor	1	3 V	CR123A	Lithium	Energizer, Duracell, GP

## Appendix D Screws and Wall Anchors

The mounted Care@Home peripherals have the option to be installed with screws rather than with adhesive tape.

Product		Screws per Device	Screw Type	Wall Anchor Type
Indoor Photo Detector (IPD)		2-4	Philips cross recessed flat countersunk head screws type DIN7892C ST3.5x32	Plastic series 108 wall anchors - drill hole 5 * 25 mm
Passive Infrared Motion Detector (PIR)		2-4		
Door/Window Magnetic Sensor (MGLS)	Transmitter	2		
	Magnet	0	None	None
Flood Detector (FL)	Transmitter	2	Philips cross recessed flat countersunk head screws type DIN7892C ST3.5x32	Plastic series 108 wall anchors - drill hole 5 * 25 mm
	Sensor	2		
Smoke Detector (SK2)		2-4		
Voice Panic Detector (VPD)		2		

## Legal Notice

*Usage of this document, and all information (including product information) provided within, are subject to the following terms and conditions, and all applicable laws. If you do not agree with these terms, please do not access or use the remainder of this document.*

*This document contains highly confidential information, which is proprietary to Essence SmartCare Ltd. and/or its affiliates (hereafter, "Essence"). No part of this document's contents may be used, copied, disclosed or conveyed to any third party in any manner whatsoever without prior written permission from Essence.*

*The information included in this document is intended for your knowledge and for negotiation purposes only. Essence makes no implicit representations or warranties with respect to such information.*

*The information included in this document is subject to change without notice. Any decision to rely on the information contained herein shall be at your sole responsibility, and Essence will not accept any liability for your decision to use any information or for any damages resulting therefrom.*

*Certain laws do not allow limitations on implied warranties or the exclusion or limitation of certain damages. If these laws apply to you, some or all of the above disclaimers, exclusions, or limitations may not apply to you.*

*By using the information contained herein, you agree that the laws of the State of Israel, without regard to principles of conflict of laws, will govern any dispute of any sort that might arise between you and Essence regarding the information contained herein, and any such dispute shall be settled exclusively in the competent courts of Tel Aviv-Jaffa, Israel.*

*All registered or unregistered trademarks, product names, logos and other service marks mentioned within this document are the property of Essence, or their respective owners. Nothing contained herein shall be construed as conferring by implication, estoppels, or otherwise any license or right, either express or implied, under any patent or trademark of Essence or any third party. No use of any trademark may be made without the prior written authorization of Essence.*

*This document and all of its contents are protected intellectual property of Essence. Any copying, reprinting, reuse, reproduction, adaptation, distribution or translation without the prior written permission of Essence is prohibited.*

*Please check your End User License Agreement (EULA) for terms and conditions.*

*© 2021 All rights reserved to Essence SmartCare Ltd.*

For more information, please contact:      Essence SmartCare Ltd.  
12 Abba Eban Avenue,  
Ackerstein Towers Bldg. D  
Herzliya Pituach, 4612001 Israel  
[www.essence-grp.com](http://www.essence-grp.com)  
Tel: +972-73-2447777  
Fax: +972-9-7729962