



3.5. The Remote Control Unit (KF) - ES800KF

The Remote Control Unit (KF) is a bi-directional ultra-compact We.R[™] system control device with advanced functions for security and automation.



Figure 51: The Remote Control Unit (KF)

3.5.1. The Remote Control Unit (KF) Function

The Remote Control Unit (KF) incorporates the following functions:

- End-to-End bi-directional Essence proprietary communication protocol.
- LED visual indication of system status (Armed/Alarm triggered).
- Serves as personal SOS alarm device (panic button).
- 5 command keys to perform:



Figure 52: The Remote Control Unit's Command Keys



- Remote deactivation in case of loss or theft.
- Powered by a single 3V CR2450 lithium battery.
- Long operation period (over 24 months).
- Protection mechanisms against inadvertent activation.
- Supports automatic over-the-air software upgrade programming and configuration.

3.5.2. Installing and Activating the Remote Control Unit (KF)

Prepare the 3V CR2450 lithium (coin) battery for the KF device before adding it to the system.

Note: You may also want to refer to paragraph 5.1 below to get acquainted with the process of installing/replacing a battery in the KF.

- 1. Press any of the KF's keys for a while to discharge its circuit.
- 2. Release the cover of the KF battery compartment by inserting a coin into the slot and turning the cover a quarter of a circle (90°) counter-clockwise until the two small bumps align (facing each other) as presented in Figure 53 below:



Figure 53: Releasing the Remote Control Unit's Battery Cover



- 3. Remove the cover.
- 4. Activate the Web Application.
- 5. Click over the Devices tab and then over the Add New Device button.
- 6. A roll-down menu will open where you need to select Add Key Fob.



Figure 54: Add Device Roll-down Menu

weR			Welcome Niv Amit Settings Help Log out
	System Disarmed	Pull Arm	Day Arm Right Arm
Dashboard	Users		Hute Sound 🕕
Devices Add New Device V Remove Devi Device Type	Name/Location	Status	
Siren	Siren-1	Active	Name / Location:
U Window/Door Sensor	MagneticContact-2	Connection lost	
Motion Detector	PirMotionDetector-1	Connection lost	
Camera	PhotoPir-3	Connection lost	

Figure 55: First Steps of Adding a New Device



- 7. Add Device window will pop-up (see Figure 56 below).
- 8. Verify that Device Type is Key Fob.



Figure 56: Add Device Window – Key Fob

9. Click over the Browse... button to open the list of all pre-defined system Users (see paragraph 3.3.6.4 above).

Note: The Remote Control Unit is a specific User device therefore; its User need to be defined/added prior to the following described User assignment.

- 10. Select the specific User this Remote Control Unit (KF) should be assigned by clicking over its name.
- 11. Click over the select button to assign the Remote Control Unit (KF) to its specified User.
- 12. The assigned User name will be displayed on the Add Device window (above Figure 56).
- 13. The timer will start its count-down. It provides a time-frame of three (3) minutes within which the battery should be installed.



Note: In case the installation of the battery could not be completed within the three (3) minutes period, it is possible to restart the process by applying steps 3 (page 84) and onwards again.



Figure 57: Inserting the Remote Control Unit's Battery

- 18. Seal the cover by turning it a quarter of a circle (90°) clockwise.
- 19. A built-in software will:
 - i. Trigger a self-test program which will cause the Remote Control Unit's entire front panel LEDs to blink twice to indicate that the battery was properly installed.
 - ii. Triggers an automatic software handshake procedure in which the KF communicates with the Central Control Unit to flag its presence.
- 20. Other ways to verify that the Remote Control Unit (KF) was properly added to the system are:
 - i. By pressing the Status key to see the right status LED turning ON (see subparagraph 3.5.3 below), or,



ii. By checking the details of the We.R[™] Web Application's **Devices** page to see that the Key Fob icon is on display.

3.5.3. The Remote Control Unit (KF) Status Reporting

Table 4 below summarizes all possible states of the Key Fob LED display, presented following press over the Status Key.

LED (under key) Status		Duration	Description	
Status	•	ON red	Short	A quick press on the Status key will turn ON the status LED correlating with the current system status. Blinking LED following an additional press over another key means the KF's battery is low.
Disarm	•	ON red	Short	System fully dis-armed.
Night Arm	•	ON red	Short	System partially armed in accordance with night scenario defined from within the Web Application.
Day Arm	•	ON red	Short	System partially armed in accordance with day scenario defined from within the Web Application.
(full) Arm	•	ON red	Short	System is fully armed.
All LEDs	8	Blinks red	Five (5) times	An alarm was triggered (burglary in progress).

Table 4: Remote Control Unit (KF) LED Indications



3.6. The Motion Indoor Photo Detector (IPD) – ES800IPD

The Motion Indoor Photo Detector (referred to as Camera or IPD) is a We.R[™] indoor sensor combining Passive Infrared (PIR) motion detector with a video-like, high-resolution, full-color, JPEG images capturing camera.

Accessories available for the Camera:

- Double-sided adhesive tape.
- Pet immune lens (upon request).



Figure 58: The Motion Indoor Photo Detector

3.6.1. The Motion Indoor Photo Detector Function

The Motion Indoor Photo Detector (IPD) incorporates the following functions:



- Both security and comfort look-in motion detected image sequences via a smartphone and the Web Applications.
- On-demand or PIR-triggered photo verification capabilities captures high resolution, full-color JPEG images at rate of up to 5 frames per second, with automatic selection of quality/resolution – from 80x60 to 640x480.
- Compresses the photos data streams sent in real-time via ECOP RF to the CCU. These streams are relayed to a designated device (smartphone, computer, etc.).
- On-board Flash Memory for Video clip re-transmissions.
- Data security is ensured with 128-bit AES encryption.
- Up to 500m (1640 feet) RF range (open air) communication.
- Employs sealed optics and temperature compensation for the PIR to become immune to direct light, insects, and pets (optional) for reduction of false alarms.
- Utilizes multi-zone spherical lens for exceptional detection coverage (120° horizontal, 105° vertical) and detection range of about 12m (40ft).
- Supports automatic over-the-air software upgrade programming and configuration.
- Tamper Alarm when the unit is tilted.
- Provides long operation period (pending video look-in usage) while powered by three
 (3) standard AA-size Alkaline batteries.
- Super bright white LED (flash) for intruder pre-emption in total darkness.
- Shooting Angle: 67°.
- Shooting Range: Up to 10m (33ft).

3.6.1.1. The Camera Modes of Operation

The Camera can be used in two different modes of operation:

- **Security Mode** Captures images of intruders caught "red-handed".
- Comfort Mode Remotely activated allowing users to see (via Web Application or the mobile devices) what happens within the premises, whenever desired.



3.6.2. Installing the Camera

Note: Rattling sounds might be heard during the installation process of the Camera. This is the internal tampering prevention mechanism and no damage was made to the Camera.

The Camera can be mounted on a wall or the corner of a room using the mounting base.

The mounting base is the Camera back cover which should be disassembled from the Camera, as demonstrated in Figure 59 below, and attached to the wall either by the double-sided tape (pre-attached to the base) or using screws as demonstrated in Figure 60 below.



Figure 59: Releasing the Camera Wall Mounting Base



3.6.2.1. Camera Positioning Recommendations

Note: The Camera MUST always be installed with the lens pointing down.

For optimal surveillance, the following factors must be taken into consideration when selecting the Camera mounting position:

- A flat vertical wall surface, or
- In a corner of a room (between two walls).
- Attach the Camera to a surface that is clean, dry, flat and smooth.
- The Camera must be installed with the spherical lens pointing down.
- The Camera should not be facing sunlight or other strong light sources including installation opposite to a window.
- The Camera should be placed in a position where it will capture images from the main point of entry.
- For maximal effective detection range, the center of the Camera should be installed 2.1 meters (6.9ft) to 2.3m (7.5ft) above the floor.

• Note: Lower positioning of the Camera will limit its detection range.

- For daytime coverage the Camera must be mounted within 10m (33ft) of the desired coverage area.
- For both day and nighttime coverage the Camera must be mounted within 6m (20ft) of the desired coverage area.
- The Camera must be mounted within 700m (2300ft) (open air nominal) of the CCU.
- The wall mounting base includes eight (8) holes to allow maximum flexibility of installation.



Extra holes are punch-outs (covered with thin plastic) that may be removed if necessary.

3.6.2.2. Installing with Screws

- 1. Release the Camera wall mounting back cover by lifting the tab and pushing it forward as illustrated in Figure 40 above.
- 2. For Flat Wall Mounting:
 - i. Use a flat screwdriver to remove the punch-outs 1 and 2 (see Figure 41 above).
 - ii. Place and hold the base on the desired mounting location and mark the drilling locations (the above-mentioned punch-outs 1 and 2).
 - iii. Drill the holes; insert two (2) dowels if needed, place the base over them and screw in the two (2) screws.



Figure 60: Camera Wall-mounting Base with Screws



- 3. For Corner Mounting:
 - i. Repeat the above while using punch-outs 3 to 8 as required.

3.6.2.3. Installing with Pre-attached Double-side Tape

- 1. Release the Camera wall mounting base (above Figure 59).
- 2. Peel the tapes' protective covers where needed (position pending).
- 3. Clean the surfaces were the Camera should be installed.
- 4. Attach the wall mounting base to its designated location while applying slight pressure.
- 5. Slide the Camera into the wall mounting base.

3.6.2.4. Dismounting the Camera



Figure 61: Dismounting the Camera



3.6.3. Adding the Camera to the We.R[™] System

The Camera need to be functionally added to the system following the above described physical installation procedure. The addition of the Camera is a standard **Add Device** procedure performed as follows:

Note: You may also want to refer to paragraph 5.1 below to get acquainted with the process of installing/ replacing a battery in the Camera.

- 1. Prepare the three (3) AA-size Alkaline batteries required to power the Camera.
- Assuming the wall mounting base is already installed release the batteries (inner) cover. The release is done by pressing against the inner base (battery cover) tab and twist-lift of the cover up as demonstrated in Figure 62 below:



Figure 62: Opening the Camera Inner Batteries Cover

3. Activate the We. R^{TM} Web Application.



- 5. A roll-down selection menu will open.
- 6. Click over the Add Camera option of the menu as illustrated in Figure 63 below:

we.R	X			Welcome Niv Amit Settings (B	elp Log out
		System Disarmed	Full Arm	Day Arm Night Arm	
Dashboa	Devices story Users			м	lute Sound 🌗
Devices	Add Motion Detector				
Device Ty	Add Window/Door sensor	Name/Location	Status	Name / Location:	
	Add Key Fob Add Siren	Siren-1	Connection lost	Type:	
9	Add Tag Reader Add Tag Add Flood Detector	Niv Amit's Key Fob	Active	L	
Qo	Add Smoke Detector Add Universal Device	MagneticContact-2	Low battery		
	Camera	Nīv Test Camera 1	Active		

Figure 63: Add Camera Device Utilizing Web Application

- 7. An Add New Device (Camera) window will pop-up and its timer will start running.
- 8. Verify that the **Device Type** is **Camera**.



button.





Add new device	≊ 2vice Type: ammera
Insert Batte	eries
Please inse and wait fe You have t	ert batteries into the new device or the system to detect it. three minutes to do so
	Next Cancel

Figure 64: Add Camera Window

9. The down-counter provides a time-frame of three (3) minutes within which the batteries should be installed to power-up the camera, as demonstrated in Figure 65 below (the + poles aiming towards the lens):



Figure 65: Inserting Batteries into the Camera



Note: In case the installation of the batteries could not be accomplished within the three (3) minutes period, it is possible to restart the process by applying step 3 (on page 95) and onwards again.

- 10. Batteries insertion triggers a handshake process in which the Camera communicates with the CCU to inform it of its presence and the CCU add it to its peripherals' inventory.
- 11. If the CCU did not detect the new Camera within this time-frame, the following error (^S) message will appear within the **Add New Device** window:



Figure 66: Add New Camera Timeout Error Message



12. If the new Camera was properly detected by the CCU within this time-frame, the counter will freeze and a **Device Properties** sub-window will appear within the **Add New Device** window, where the Camera's system name/location needs to be typed-in.



ew device	
Device Type: Camera	
Device properties	
Please enter new device's name below	
tip: indicate the device's type and location:	
Name / Location:	
More >>	
-	
2 Camera successfully recognized	

Figure 67: Add New Camera Device Properties

Clicking over the **Finish** button will end the Add New Device process while the new Camera is added onto the system configuration.

13. Clicking over the More >>> button will enlarge this sub-window for further possible definitions of the Camera's operation modes.



Figure 68: Add New Camera Detailed Device Properties



In the case of a Camera, these definitions include:

- Camera arming scenarios
- Armed Camera detection response
- Unarmed Camera detection response

These details may be added or edited later, by a Master User, from within the We.R[™] Web Application's Devices page.



Clicking over the Finish button will end the Add New Device process while the new Camera is added onto the system configuration with more detailed definitions.

- 14. Carefully insert the batteries' cover back to place and firmly close it down.
- 15. You may verify that the Camera (IPD) was properly added by checking the details of the We.R[™] Web Application's **Devices** page.

Note: Advanced Configuration of the Camera can be found in paragraph 4.5.4 below.

3.6.4. The Camera Operational Modes

The We.R[™] system has two operational modes for the IPD devices:

- Walk Test Mode
- Normal Operation Mode



3.6.4.1. Walk Test Mode

The Walk Test Mode is a test mode used following a device power-up (replacement of a battery or once a new Camera was added) for initial testing of the system functionality.

This test runs for about 10-minutes and during this period the device sends an event to the Central Control Unit following detecting an actual event.

3.6.4.2. Normal Operation Mode

Following the termination of the Walk Test Mode (i.e. after 10 minutes), the system switches the Camera into Normal Operation Mode. This mode saves Camera battery power.

In this mode, the Camera switches into 2½ minutes hibernation period following a detection event. This means that the Camera will not transmit events to the Central Control Unit during this period.

If a detection event occurs during this hibernation, the timer counting the 2½ minutes will restart and count the 2½ minutes period again.

This process will repeat itself until there is no detection for the entire 21/2 minutes.

Following the 2½ minutes hibernation period, the Camera will be switched back to normal triggering mode of operation.

Note: Advanced Configuration of the Camera can be found in paragraph 4.5.4 below.

3.7. The Motion Detector (PIR) – ES800PIR

The Motion Detector is a battery operated bi-directional wireless Passive Infrared Detector (PIR). It utilizes Essence's unique white 4th generation DragonflyEye[™] Multi-Zone spherical lens with a optional pet immune feature and advanced detection algorithms for false alarm suppression and excellent detection. The Motion Detector's ease of installation and long battery life result in reduced operational costs.



Accessories available for the Motion Detector:

- Double-sided adhesive tape.
- Pet immune lens (upon request).



Figure 69: The Motion Detector

3.7.1. The Motion Detector Function

The Motion Detector incorporates the following functions:

- Data security is ensured with 128-bit AES encryption.
- Up to 500m (1640 feet) RF range (open air) communication.





- Employs sealed optics and temperature compensation for the Motion Detector to become immune to direct light, insects and pets (optional) for reduction of false alarms.
- Utilizes multi-zone spherical lens for exceptional detection coverage (90° horizontal, 105° vertical) and detection range of about 12m (39ft).
- Supports automatic over-the-air software upgrade programming and configuration.
- Walk test mode.
- Tamper Alarm when the unit is tilted.
- Provides long operation period while powered by two (2) standard AA-size Alkaline batteries.

3.7.2. Installing the Motion Detector

Note: Rattling sounds might be heard during the installation process of the Motion Detector.

This is the internal tampering prevention mechanism and no damage was made to the Motion Detector.

The Motion Detector can be mounted on a wall, or the corner of a room using the mounting base.

The mounting base is the Motion Detector back cover (also serving the purpose of batteries' cover), which should be disassembled from the Motion Detector, as demonstrated in Figure 70 below, and attached to the wall either by the double-sided tape (pre-attached to the base) or using screws as demonstrated in Figure 71 below.





Figure 70: Releasing the Motion Detector Wall Mounting Base

3.7.2.1. Motion Detector Positioning Recommendations

Note: The Motion Detector MUST always be installed with the spherical lens pointing down.

For optimal surveillance, the following factors must be taken into consideration when selecting the Motion Detector mounting position:

- A flat vertical wall surface, or
- In a corner of a room (between two walls).
- Attach the Motion Detector to a surface that is clean, dry, flat and smooth.



- The Motion Detector must be installed with the spherical lens pointing down.
- The Motion Detector should not be facing sunlight or other strong light sources including installation opposite to a window.
- For maximal effective detection range, the center of the Motion Detector should be installed 2.1 meters (6.9 ft.) to 2.3m (7.5 ft.) above the floor.

Note: Lower positioning of the Motion Detector will limit its detection range.

- The Motion Detector must be mounted within 700m (2300ft) (open air nominal) of the CCU.
- The wall mounting base includes eight (8) holes to allow maximum flexibility of installation.

Six out of these eight are extra holes (punch-outs covered with thin plastic) that may be removed if necessary.



Figure 71: Motion Detector Wall-mounting Base with Screws



3.7.2.2. Installing with Screws

- 1. Release the Motion Detector wall mounting base by lifting the tab and pushing it forward as demonstrated in Figure 70 above.
- 2. For Flat Wall Mounting:
 - i. Use a flat screwdriver to remove the punch-outs 1 and 2 (see Figure 71 above).
 - ii. Clean the surface where the Motion Detector is to be installed.
 - iii. Place and hold the base on the desired mounting location and mark the drilling locations (the above-mentioned punch-outs 1 and 2).
 - iv. Drill the holes; insert two (2) dowels if needed, place the base over them and screw in the two (2) screws.
- 3. For Corner Mounting:
 - i. Repeat the above while using punch-outs 3 to 8 as required.

3.7.2.3. Installing with Pre-attached Double-side Tape

- 1. Release the Motion Detector wall mounting base (above Figure 70).
- 2. Peel the tapes' protective covers where needed (position pending).
- 3. Attach the wall mounting base to its designated location while applying slight pressure.
- 4. Slide the Motion Detector into the wall mounting base.

3.7.2.4. Dismounting the Motion Detector

For dismounting the Motion Detector from the wall (i.e. in case of battery replacement), press the wall mounting base's tab at the bottom of the Motion Detector and slide it downwards simultaneously, as demonstrated in the below Figure 72.





Figure 72: Dismounting the Motion Detector

3.7.3. Adding the Motion Detector to the We.R[™] System

The Motion Detector need to be functionally added to the system following the above described physical installation procedure.

Addition of Motion Detector device is a standard Add Device procedure performed as follows:



we.R	X			Welcome Niv Amit Settings (Help Log out
		System Disermed	rail Arm	Day Arm Right Arm
Devices	Add Motion Detector b move Device			Place South Tr
Device Tv	Add Window/Door sensor	Name/Location	Status	
	Add Camera Add Key Fob Add Siren	Siren-1	Connection lost	Name / Location:
9	Add Tag Reader Add Tag Add Flood Detector	Niv Amit's Key Fob	Active	
00	Add Smoke Detector Add Universal Device	MagneticContact-2	Low battery	
	Camera	Niv Test Camera 1	Active	

Figure 73: Add Motion Detector Device Utilizing Web Application

Note: You may also want to refer to paragraph 5.1 below to get acquainted with the process of installing/ replacing a battery in the Motion Detector.

- 1. Prepare the two (2) AA-size Alkaline batteries required to power the Motion Detector.
- 2. Activate the We.R[™] Web Application.
- 3. Select the **Devices** page (tab) and click over the Add New

Add New Device y button.

- 4. A roll-down selection menu will open.
- 5. Click over the Add Motion Detector option of the menu as illustrated in Figure 73 above:





6. An Add New Device (Motion Detector) window will pop-up and its timer will start running.



Figure 74: Add Motion Detector Window

- 7. Verify that the Device Type is Motion Detector.
- 8. The down-counter provides a time-frame of three (3) minutes within which the batteries should be installed to power-up the camera, as demonstrated in Figure 75 below (the + poles aiming towards the top end of the device):



Figure 75: Inserting Batteries into the Motion Detector



Note: In case the installation of the batteries could not be accomplished within the three (3) minutes period, it is possible to restart the process by applying step 1 (on page 107) and onwards again.

- 9. The insertion of batteries into the Motion Detector triggers a handshake process in which the Motion Detector communicates with the CCU to inform it of its presence and the CCU add it to its peripherals' inventory.
- 10. If the CCU did not detect the new Motion Detector within this time-frame, the following error (²) message will appear within the **Add New Device** window:

In such a	a case, it is	possible to	re-initiate	the Add	New	Device	process	by cl	icking	over	the
Try Again	button.										

Clicking over the Cancel	button will terminate the Add New Device process
--------------------------	--

d new device	
Device Type: Motion Detector	
Insert Batteries	
Please insert batteries into the new device	
and wait for the system to detect it.	
You have three minutes to do so	
00:00	
😢 No device was detected in the allotted time	
Try Again	
Next	Cancel

Figure 76: Add New Motion Detector Timeout Error Message

11. If the new Motion Detector was properly detected by the CCU within this time-frame, the counter will freeze and a Device Properties sub-window will appear within the Add New Device window, where the Motion Detector's system name/location needs to be typed-in.



	ice
	Device Type: Motion Detector
Insert	Batteries
Please	enter new device's name below
tip: ind	licate the device's type and location:
Name	/ Location:
Mo	re >>
Mo	<pre>>></pre>
Mo	re >>) indow/Door Sensor successfully recognized
Mo	now/Door Sensor successfully recognized
Mo	ndow/Door Sensor successfully recognized

Figure 77: Add New Motion Detector Device Properties

Clicking over the Finish button will end the Add New Device process while the new Motion Detector is added onto the system configuration.

12. Clicking over the More >>> button will enlarge this sub-window for further possible definitions of the Motion Detector's operation modes.

-			
	Device Type:		
	Motion Detector		
~			
Insert	Batteries		
Please	enter new device's name b	elow	
tip: in	dicate the device's type and	location:	
Namo	(Location)		
ivanie	y Location.		
-			
Le	ss <<		
Arm (levice in the following so	enarios:	
Day	levice in the following so Arm	enarios:	
Day	levice in the following so Arm it Arm	enarios:	
In ca	levice in the following so Arm it Arm se of detection when dev	enarios: ice is armed:	
Arm o Day Nig In ca	levice in the following so Arm ht Arm se of detection when dev avs trigger alarm	enarios: ice is armed:	
In ca Alw	evice in the following so Arm ht Arm se of detection when dev ays trigger alarm w delayed entry	enarios: ice is armed:	
Arm (Day Nig In ca Alw Alw Allo	Jevice in the following so Arm tt Arm se of detection when dev ays trigger alarm w delayed entry w walking through device	enarios: ice is armed:	
Arm (Day Nig In ca Alw Allo Allo	levice in the following so Arm at Arm se of detection when dev sys trigger alarm w delayed entry w walking through device is of detection when device	ice is armed:	

Figure 78: Add New Camera Detailed Device Properties



In the case of a Motion Detector these definitions include:

- Motion Detector arming scenarios
- Armed Motion Detector response
- Unarmed Motion Detector response

These details may be added or edited later, by a Master User, from within the We.R[™] Web Application's Devices page.

Clicking over the Finish button will end the Add New Device process while the new Motion Detector is added onto the system configuration with more detailed definitions.

16. You may verify that the Motion Detector (PIR) was properly added by checking the details of the We.R[™] Web Application's **Devices** page.



3.7.4. The Motion Detector Operational Modes

The We.R[™] system has two operation modes for the Motion Detector devices:

- Walk Test Mode
- Normal Operation Mode

3.7.4.1. The Walk Test Mode

The Walk Test Mode is a test mode used following a device power-up (replacement of a battery or after adding the Motion Detector as a new system device) for initial testing of the system functionality.



This test runs for about 10-minutes and during this period the device sends an event to the Central Control Unit following detecting an actual event.

3.7.4.2. The Normal Operation Mode

Following the termination of the Walk Test Mode (i.e. after 10 minutes), the system switches the Motion Detector into Normal Operation Mode. This mode saves Motion Detector battery power.

In this mode, the Motion Detector switches into 2½ minutes hibernation period following a detection event. This means that the Motion Detector will not transmit events to the Central Control Unit during this period.

If a detection event occurs during this hibernation, the timer counting the $2\frac{1}{2}$ minutes will restart counting the $2\frac{1}{2}$ minutes.

This process will repeat itself until there is no detection for the entire 21/2 minutes.

Following the 2½ minutes hibernation period, the Motion Detector will be switched back to normal triggering mode of operation.

Note: Advanced Configuration of the Motion Detector can be found in paragraph 4.5.4 below.

3.8. The Door/Window Magnetic Sensor (MGL) – ES800MGL

The Magnetic Sensor (MGL) is a We.R[™] Door/Window Magnetic Sensor/Detector.

This sensor device consists of two (2) parts – a smaller passive magnet unit (the Magnet) and a larger magnetic detector with a RF transmitter unit (the Transmitter).

Accessories available for the Magnetic Sensor:

Double-sided adhesive tape on both the Transmitter and the Magnet.





Figure 79: The Magnetic Sensor

3.8.1. The Magnetic Sensor Function

The Magnetic Sensor incorporates the following functions:

- Bi-directional wireless sensor.
- Detect opening and closing of doors, windows, cabinets, etc.
- Dual-LED indication for Open (red) and Close (green) status.
- Data security is ensured with 128-bit AES encryption.
- Up to 500m (1640 feet) RF range (open air) communication.
- Unique electronic serial number.
- Supports automatic over-the-air software upgrade programming and configuration.
- Tamper Alarm when the transmitter unit is ripped off its base.
- Provides long operation period while powered by a single standard AA-size Alkaline battery.

3.8.2. Installing the Magnetic Sensor

The Magnetic Sensor can be mounted on a door or a window using the mounting bases.





Figure 80: Releasing the Transmitter Base

Installation instructions will be divided into two parts:

- The installation of the Transmitter
- The installation of the Magnet

The mounting base, of both parts, is the Magnetic Sensor back cover (in the Transmitter unit it also serves the purpose of battery cover).

For the Transmitter unit, the base should be disassembled from the Transmitter body, as demonstrated in Figure 80 above, and attached to the wall either by the double-sided tape (pre-attached to the base) or using screws as demonstrated in Figure 83 below.

3.8.2.1. Magnetic Sensor Positioning Recommendations

For optimal surveillance, the following factors must be taken into consideration when selecting the Magnetic Sensor mounting position:

- A flat vertical window or door surface.
- Attach the Magnetic Sensor (applicable for both parts) to a surface that is clean, dry, flat and smooth.



- The Magnetic Sensor must be mounted within 700m (2300ft) (open air nominal) of the CCU.
- Typically, the Transmitter unit will be attached onto the fixed frame of the window/door while the Magnet unit – to the moving edge.



Figure 81: Typical Location for Magnetic Sensor Installation

Special attention should be given, throughout the installation process of the Magnetic Sensor, to the final arrangement of the two units – they should end up aligned to each other (dot-to-dot) as demonstrated in Figure 82 below, as well as mounted with 1-2mm (0.04-0.08 in.) gap between them when door/window is closed.



Figure 82: Dot Alignment of the Magnetic Sensor Units



3.8.2.2. Installing the Transmitter Unit with Screws

- 1. Release the Transmitter unit's base by inserting a coin into one of the edge slots, as demonstrated in the above Figure 80, and twist it to open the cover.
- 2. Use a flat screwdriver to remove the punch-outs 1 and 2 (see Figure 83 below).



Figure 83: Magnetic Sensor Transmitter Unit Base with Screws

- 3. Place and hold the base on the desired mounting location on the window/door frame and mark the drilling locations (the above-mentioned punch-outs 1 and 2).
- 4. Drill the holes; insert two (2) dowels if needed, place the base over them and screw in the two (2) screws.
- 5. Attach the Transmitter Unit back to its base.

3.8.2.3. Installing with Pre-attached Double-side Tape

Due to the common installation (door/window) of the Magnetic Sensor, the pre-attached double-sided tape will be mostly used for both the Transmitter and the Magnet units.

1. For the Transmitter unit – release the base (see above Figure 80).



- 2. No need to release the base of the Magnet unit.
- 3. Peel the tapes' protective covers of both units.
- 4. Attach the base of each unit to its designated location while applying slight pressure.
- 5. Attach the Transmitter back into the base.

3.8.2.4. Dismounting the Magnetic Sensor

For dismounting the Magnetic Sensor (Transmitter unit only) from the door/window (i.e. in case of battery replacement):

- 1. Insert a flat screw driver (or coin) into one of the edge slots as demonstrated in Figure 84 below.
- 2. Twist it to raise the cover (body) edge.
- 3. Pull the body strait out of the base's shoulders.



Figure 84: Dismounting the Magnetic Sensor's Transmitter



3.8.3. Adding the Magnetic Sensor to the We.R[™] System

The Magnetic Sensor need to be functionally added to the system following the above described physical installation procedure.

The addition of the Magnetic Sensor is a standard Add Device procedure as follows:

Note: You may also want to refer to paragraph 5.1 below to get acquainted with the process of installing/ replacing a battery in the Magnetic Sensor.

Add New Device

button.

- 1. Prepare a single AA-size Alkaline battery required to power the Magnetic Sensor.
- 2. Activate the We.R[™] Web Application.
- 3. Select the Devices page (tab) and click over the

Figure 85: Add Magnetic Sensor Device Utilizing Web Application



- 4. A roll-down selection menu will open.
- 5. Click over the Add Window/Door Sensor option of the menu as illustrated inn Figure 85 above:
- 6. An Add New Device (Window/Door Sensor) window will pop-up and its timer will start running.

Add new device	22
Device Type: Window/Door Sensor	
Insert Batteries	
Please insert batteries into the new device and wait for the system to detect it. You have three minutes to do so	
Next	Cancel

Figure 86: Add Magnetic Sensor Window

- 7. Verify that the Device Type is Window/Door Sensor.
- 8. The down-counter provides a time-frame of three (3) minutes within which the battery should be installed, as demonstrated in Figure 87 below (the + pole as marked within the device body), to power-up the Magnetic Sensor.

Verify battery polarity match to marking within the unit body.

Note: In case the installation of the batteries could not be accomplished within the three (3) minutes period, it is possible to restart the process by applying step 2 (on page 118) and onwards again.





Figure 87: Inserting a Battery into the Transmitter Unit

- 9. The insertion of the battery into the Magnetic Sensor triggers a handshake process in which the Magnetic Sensor communicates with the CCU to inform it of its presence and the CCU add it to its peripherals' inventory.
- 10. If the CCU did not detect the new Magnetic Sensor within this time-frame, the following error (⁽²⁾) message will appear within the **Add New Device** window:



Figure 88: Add New Magnetic Sensor Timeout Error Message



In such a case, it is possible to re-initiate the Add New Device process by clicking over the Try Again button.

Clicking over the Cancel button will terminate the Add New Device process.

11. If the new Magnetic Sensor was properly detected by the CCU within this time-frame, the counter will freeze and a **Device Properties** sub-window will appear within the **Add New Device** window, where the Magnetic Sensor's system name/location needs to be typed-in.

Add new device					
Device T Window/I	ype: Joor Sensor				
Device properties					
Please enter new device's name below tip: indicate the device's type and location:					
More >>					
Window/Doo	r Sensor successfully recognized				
	Finish				

Figure 89: Add New Magnetic Sensor Device Properties

Clicking over the Finish button will end the Add New Device process while the new Magnetic Sensor is added onto the system configuration.

12. Clicking over the button will enlarge this sub-window for further possible definitions of the Magnetic Sensor's operation modes.





new device	
Device Type: Window/Door Sensor	
Insert Batteries	
Please enter new device's name below tip: indicate the device's type and location:	
Name / Location:	
Less <<	
Arm device in the following scenarios:	
Day Arm	
Night Arm	
In case of detection when device is armed:	
Always trigger alarm	
Allow delayed entry	
 Allow walking through device 	
In case of detection when device is not armed:	
Window/Door Sensor successfully recognized	
Finish	

Figure 90: Add New Magnetic Sensor Device Properties

In the case of a Magnetic Sensor these definitions include:

- Magnetic Sensor arming scenarios
- Armed Magnetic Sensor response
- Unarmed Magnetic Sensor response

These details may be added or edited later, by a Master User, from within the We.R[™] Web Application's Devices page.



Clicking over the **Finish** button will end the Add New Device process while the new Magnetic Sensor is added onto the system configuration with more detailed definitions.



13. You may verify that the Magnetic Sensor (MGL) was properly added by checking the details of the We.R[™] Web Application's **Devices** page.

Note: Advanced Configuration of the Magnetic Sensor can be found in paragraph 4.5.4 below.

3.8.4. Testing the Magnetic Sensor

To verify proper operation of the Magnetic Sensor simply open and close the window/door and watch the Magnetic Sensor's LED which should turn red for open window/door or green for closed window/door.

3.9. The Indoor Siren (SRN) – ES800SRN

The Indoor Siren is a battery operated, wireless, passive, powerful siren for indoor alarm applications.

Within the We.R[™] system, the Indoor Siren also serves the purpose of a door bell.

Accessories available for the Indoor Siren:

Double-sided adhesive tape.

It features:

- Battery-operated, wireless, powerful siren for explicit alarm indication
- Emits more than 85dBA sound at 1 meter
- Adjustable volume level
- Dual purpose may also be used as a door bell (chime)
- Wall Mount with double sided tape or screws





Figure 91: The Indoor Siren

- Uses four (4) standard AA-size Alkaline batteries
- Long operation up to 24 months
- Tamper Alarm when the unit is detached from its base

3.9.1. The Indoor Siren Function

The Indoor Siren has two (2) functions:

- 1. Indoor siren for burglary events.
- 2. System's doorbell when used in conjunction with the Wireless Access Control Tag Reader (see paragraph 3.10. below).



3.9.2. Installing the Siren

The Indoor Siren is designed be mounted on a vertical wall using the mounting base.



Figure 92: Releasing the Indoor Siren Mounting Base

The mounting base should be disassembled from the Indoor Siren body, as demonstrated in Figure 92 above, and attached to the wall either by the double-sided tape (pre-attached to the base) or using screws as demonstrated in Figure 93 below.

Slightly press on the mounting base's tab and slide it in the tabs direction to release it from the Indoor Siren body.

3.9.2.1. Siren Positioning Recommendations

For optimal surveillance, the following factors must be taken into consideration when selecting the Indoor Siren mounting position:





- A flat vertical wall surface.
- Attach the Siren to a surface that is clean, dry, flat and smooth.
- Location should be selected for best sound spreading around the house.
- The mounting base includes three (3) wide punch-outs to allow maximum flexibility of installation.



Figure 93: Indoor Siren Mounting Base with Screws

Note: The Indoor Siren should always be installed with the latch tab pointing down.



3.9.2.2. Installing with Screws

- 1. Release the Indoor Siren mounting base by lifting the tab and sliding the base in the tab's direction as demonstrated in Figure 93 above.
- 2. Use a flat screwdriver to remove the punch-outs (see Figure 93 above).
- 3. Place and hold the base on the desired mounting location and mark the drilling locations (the above-mentioned punch-outs).
- 4. Drill the holes; insert three (3) dowels if needed, place the base over them and screw in the three (3) screws.

3.9.2.3. Installing with Pre-attached Double-side Tape

- 1. Release the Indoor Siren mounting base (above Figure 92).
- 2. Peel the tapes' protective covers.
- 3. Attach the mounting base to its designated location while applying slight pressure.
- 4. Slide the Indoor Siren into the mounting base.

3.9.2.4. Dismounting the Indoor Siren

For dismounting Siren from its designated installation site (i.e. in case of battery replacement):

- 1. Press over the tab
- 2. Slide the Indoor Siren body upwards as demonstrated in Figure 120 below.





Figure 94: Dismounting the Indoor Siren

3.9.3. Adding the Indoor Siren to the We.R[™] System

The Siren need to be functionally added to the system following the above described physical installation procedure.

The addition of the Indoor Siren is a standard Add Device procedure performed as follows:



Note: You may also want to refer to paragraph 5.1 below to get acquainted with the process of installing/replacing a battery in the Indoor Siren.

- 1. Prepare four (4) AA-size Alkaline batteries required to power the Siren.
- 2. Activate the We.R[™] Web Application.
- 3. Select the **Devices** page (tab) and click over the **Add New Device** button.
- 4. A roll-down selection menu will open.

we.R	X			Welcome Niv Amit Settings (Help) (Log out)
		System Disarmed		Day Arm Night Arm
Dashboar	Devices story Users	,		Mute Sound 🌗
Device Ty	Add Window/Door sensor	Name/Location	Status	
	Add Camera Add Key Fob Add Siren	Siren-1	Connection lost	Name / Location:
9	Add Tag Reader Add Tag Add Floed Detector	Niv Amit's Key Fob	Active	
00	Add Smoke Detector Add Universal Device	MagneticContact-2	Low battery	
	Camera	Niv Test Camera 1	Active	

Figure 95: Add Siren Device Utilizing Web Application

- 5. Click over the Add Siren option of the menu as illustrated in Figure 95 above:
- 6. An Add New Device (Siren) window will pop-up and its timer will start running.





Add new device Device Type: Siren	23
Insert Batteries	
Please insert batteries into the new device and wait for the system to detect it. You have three minutes to do so	
	Not Card

Figure 96: Add Indoor Siren Window

- 7. Verify that the Device Type is Siren.
- 8. The down-counter provides a time-frame of three (3) minutes within which the batteries should be installed to power-up the Siren, as demonstrated in Figure 97 below:



Figure 97: Inserting the Batteries into the Siren



Note: The Siren will double-beep following the insertion of the first two (2) consecutive batteries to indicate proper power-up sequence.

Verify batteries polarity to match marking within the batteries' compartment.

Note: In case the installation of the batteries could not be accomplished within the three (3) minutes period, it is possible to restart the process by applying step 2 (on page 129) and onwards again.

- 9. The insertion of batteries into the Siren triggers a handshake process in which the Siren communicates with the CCU to inform it of its presence and the CCU add it to its peripherals' inventory.
- 10. If the CCU did not detect the new Siren within this time-frame, the following error (^{S)} message will appear within the **Add New Device** window:



Figure 98: Add New Siren Timeout Error Message

In such a case, it is possible to re-initiate the Add New Device process by clicking over the Try Again button.