Clare Security Panel Quick Start Guide

Content

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Introduction

Thank you for choosing Clare Controls. In today's competitive market place, we can appreciate that you have many choices for your home automation needs.

Clare Security is a professional wireless security panel designed to deliver home security and automation services. A secured and supervised Ethernet connection comes standard. Optional Cellular cards provide primary/backup communication channels. Its long-range encrypted wireless receiver easily provides whole home coverage.

This document is intended as a quick-start guide, not a full product guide. For more information, view the full Clare Security Panel Integration Release Notes (DOC ID 1524).

Note: Only the Clare Security Panels are fully compatible with the Clare platform.

Features

- Cellular and Ethernet communication channels
- Control from a user's mobile device
- Industry-leading wireless range
- Up to 50 users
- Up to 96 zones
- 3-year warranty

Included

The below items are included with the panel.

- The Clare Security Panel
- Rechargeable backup battery
- 12-Volt power adapter
- 6-foot Ethernet cable
- Table-top mounting base
- A screw to secure the cover (required for UL installations)

Expansion cards

- LTE Cellular Card (Verizon) – CS-LET-10
- Wireless to Wireless Translator – CS-WWT-10

Installation and setup

Note: You must have a CLIQ.mini installed in the home. See the CLIQ.mini Quick Start Guide (DOC ID 1284).

A qualified technician should install the security panel. Refer to the installation instructions that came with your device. Clare Controls does not assume any responsibility for damages caused by improper installation or connection to the network.

To setup the Clare Security Panel system:

1. Find a location for the panel, keeping in mind it needs AC power and at least one network connection.

   Panel location tips:

   - Located centrally on the main floor

   - Avoid mounting the panel below ground level

   - Do not mount the panel near ducts, appliances, or large metal objects

   - Do not mount the panel directly adjacent to other RF devices

2. Mount the panel by sliding it downward into the table-top base.

   – or –

   The panel can be mounted to a wall using the mounting holes in the back cover.

   Note: You must remove the backup battery to reveal the lower mounting hole.
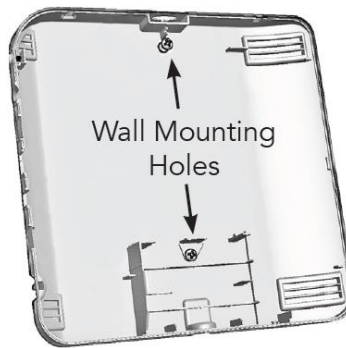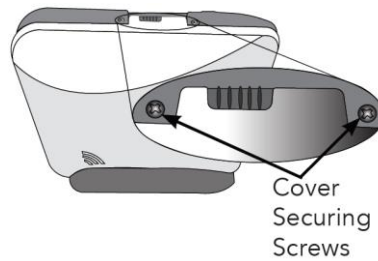

3. Connect the panel to the Local Area Network (LAN) by wiring its Ethernet port to the home's router.

4. Power up the panel by inserting the power supply barrel into the power jack on the side. Route the power cable under the stress relief peg.
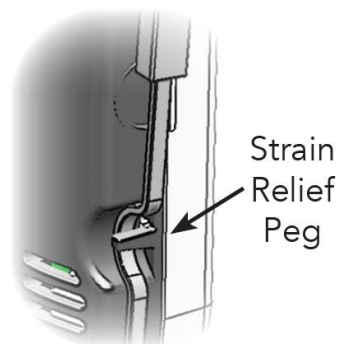
UL installation requirements:

- Install the cover-securing screws.

Cover
Securing
Screws

- Do not connect the panel to an AC power receptacle controlled by a switch.
- The power supply must be secured to an outlet if installed in the USA.
- The power supply must NOT be secured to an outlet if installed in Canada.

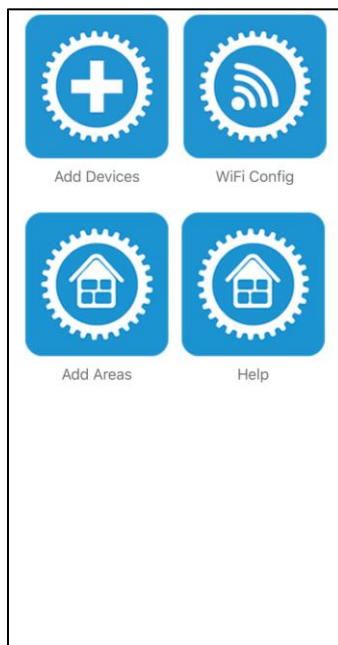## Configuring with Clare Controls Install Assist

After the panel is successfully installed, add and configure it with the Install Assist App.

Note: You must have access to the wireless network and the Clare Controls Install Assist app.

To add devices with the App:

1. Using the Install Assist app, tap **Add Devices**.

2. At the bottom of the screen, tap the plus icon ⊕.
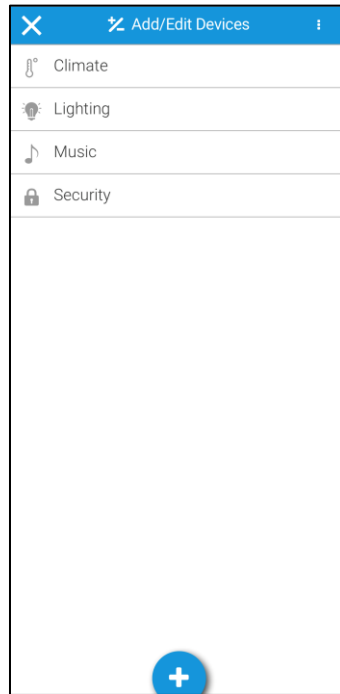
3. Tap **Security**.

4. Read the displayed information, and then tap **Discover the security panel**.

5. The panel is discovered. Enter a name for the panel, and then customize the panel settings as desired.

Notes

- Discovery can take up to a minute.
- The panel's defaults are recommended for standard use.

System Settings

Audible Alarm: This feature allows audible alarms. If disabled all audible alarms, except chimes, are silenced.

Global Auto Bypass: This allows a zone(s) to be bypassed when the alarm is set. It must be enabled for the auto bypass to function.

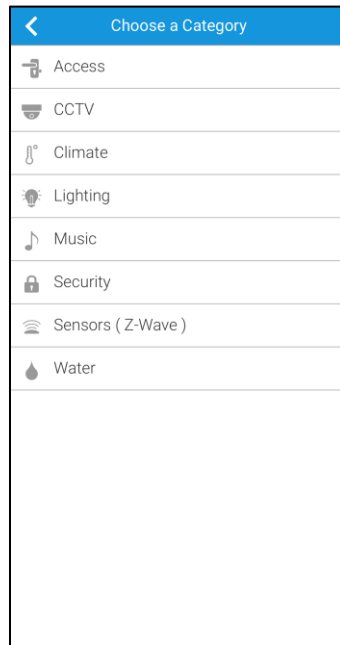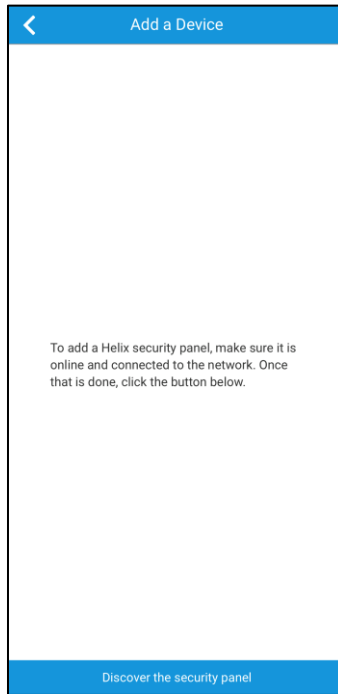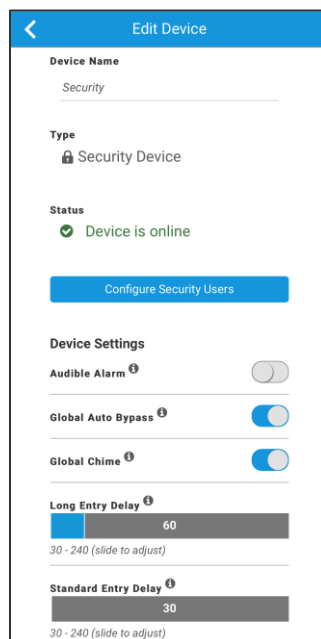**Global Chime:** This allows the panel to use chimes. If this is not enabled, all chimes are silenced.

Delay options

Note: There are 2 delay options, allowing zones to use different set delays.

Long Entry Delay: The time in seconds between a zone fault (door opening) and triggering the alarm. This is set to a longer amount of time than the Standard Entry Delay.

Standard Entry Delay: The time in seconds between a zone fault (door opening) and triggering the alarm. This is set to a shorter amount of time than the Long Entry Delay.

Status (Chime/Arm/Disarm) Volume: This determines the volume of chimes and entry/exit delays sounds.

Wireless Siren Status Volume: This determines the volume for any wireless sirens used with Connect+ panel.

6. Tap **< Edit Device** to save the panel settings.

   The security devices page displays.

7. Tap the plus icon ⊕ to add a new security zone (sensors, keypads, and sirens).

8. Tap **Pair Sensor or Keypad**, and then follow the on-screen instructions regarding device tab removal for sensor/peripheral enrollment.
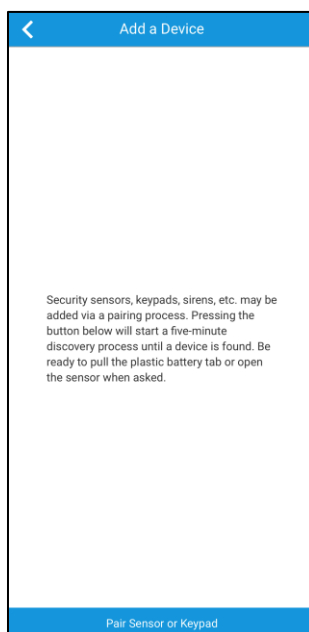
– or –

Press the Enroll/WPS button on the side of the panel until it beeps once (roughly 3 seconds).
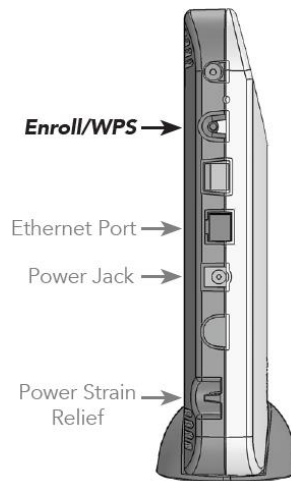
Enrollment tips:

- Enrollment signals are typically triggered by removing the battery tab or tampering the device. See the specific device manual for more information.

- The Install Assist app can be used to enroll and configure sensors.

- Wireless enrollment mode ends 5 minutes after the last sensor is enrolled.

- Enrolling a Keypad or other 2.4GHz peripheral will automatically end wireless enrollment mode.

- Tapping the Enroll/WPS button will end wireless enrollment mode.

9. The security zone is discovered, name the zone and customize the fields.
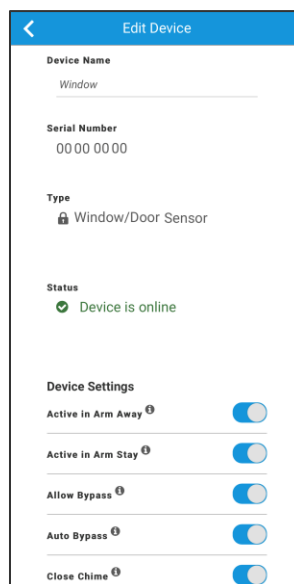
Notes:

- Installing your sensors and peripherals in desired locations around the house. Refer to the specific device manual for more information regarding installation and use.

  Example of a typical burglary protection installation.
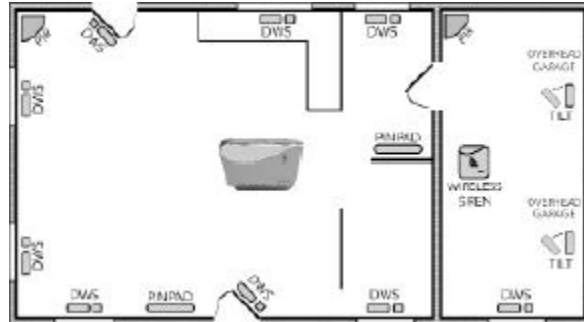
- Configure the panel, sensors, and peripherals using the Install Assist app. Configuration options are described in the [Alula Connect+ (Clare Security) Panel Configuration Guide (DOC ID 1831 Rev 01)](#).

10. If the system is going to be professionally monitored, create a Fusion project and setup your central station through the [ClareNet Portal](#).

    Note: You will need the CRC code. This code is on the label located on the bottom of the Clare Security Panel.

11. Test the system after finishing installation, enrollment, and configuration. Verify successful operation of all installed sensors and peripherals using the Install Assist app.

Pro-Tips

This section contains tips and "how to's" for the Clare Security Panel.

Expansion card

Install an Expansion card by first disconnecting AC power and the battery. Cellular cards must use slot 1 and square cards must use slot 3. Always refer to the specific card manual for a full list of installation requirements. Next, carefully align the nylon retention posts and 8-pin connector while pushing the card firmly until all the posts are fully seated. Finally, reconnect the battery, AC power, and verify proper operation using the LED indicators on the expansion card.
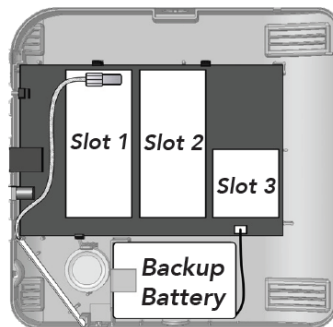
To install a cellular antenna:

1. Route the antenna wire near the Ethernet jack.
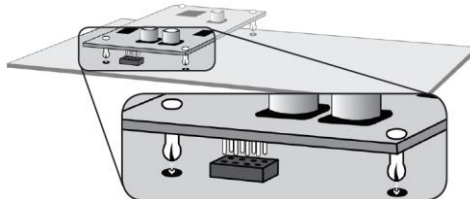
2. Install the antenna with the feed wire on the top side.
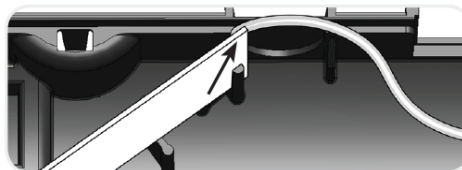
RF signal strength

RF signal strength is an average signal-to-noise indication. Even in the absence of sensor transmissions, the panel experiences ambient RF energy. The RF signal strength indication represents a sensor's signal relative to ambient noise. If multiple sensors score low signal strength, this could be due to one or more of the following:

- High ambient noise - Ensure the panel is not mounted adjacent to other electronics.

- Panel is not centrally located or is mounted below ground - Move the panel to a central location in the home that is above ground level.

- Panel is located near ducts, appliances, or other large metal objects - Relocate the panel away from these types of objects.

Wireless performance

Wireless performance of door window sensors is optimized when mounted vertically neat the top corner of the door.

Routers, modems, and other electronic devices

Routers, modems, and other electronic devices emit RF noise. For best results, avoid mounting the panel directly beside other electronic devices.

Note: Put some space between the panel and the home router. A 6-foot cable is included for this purpose.

Trouble beeps

Trouble beeps can be suppressed so they only occur during a specific window of time each day.

- Use the Install Assist app to configure the trouble beep suppression period.

- Trouble beeps can be temporarily silenced for 24 hours using a Keypad or Keyfob.

Smoke alarms

Smoke alarms should be installed in accordance with Chapter 2 of "ANSI/NFPA 72: National Fire Alarm and Signaling Code" (National Fire Protection Association, Batterymarch Park, Quincy, MA 02169) when installed in the USA. Smoke alarms installed in Canada should be installed in accordance with "Standard for the Installation of Residential Fire Warning Systems, CAN/ULC-S540".

Smoke Alarm Placement

● Required Smoke Alarm
○ Optional Smoke Alarm

(Single Sleeping Area)

(Multiple Sleeping Areas)

(Multi-Floor Home)
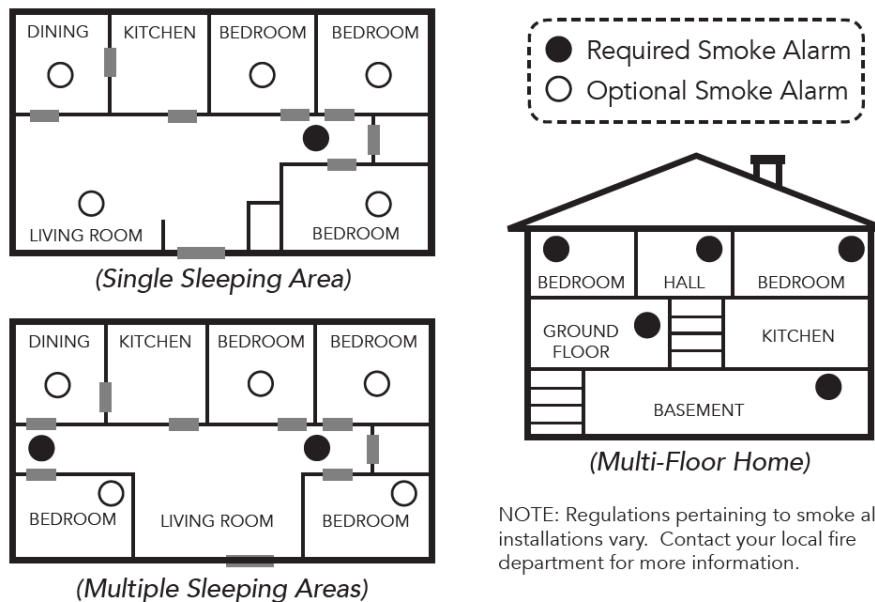
NOTE: Regulations pertaining to smoke alarm installations vary. Contact your local fire department for more information.

Battery replacement

Should the battery need replacing, remove the cover, disconnect the old battery, and connect a new battery. The battery connector is polarized and can be inserted only one way into the panel receptacle.

Emergency planning

Emergencies happen, so have a plan.

Emergency planning tips:
- Periodically discuss and rehearse emergency plans.
- Understand how to use your security system.
- Know the normal states of doors and windows: open, closed, or locked.
- Escape fast! (Do not stop to pack.)
- Use a different escape route if closed doors feel hot to the touch.
- Smoke is toxic. Stay low and breathe strategically when escaping a burning building.
- Designate a nearby landmark as a safe family re-grouping location.

- Emphasize that no one should return to the premises if there is a fire.
- Call 911 as soon as possible but do it in a safe location.
- Do not enter the premises if you arrive and hear sirens. Call for emergency assistance from a safe location.

Clare Security Panel LEDs

System Status Indication is provided via eight LEDs on the front of the panel. These LEDs may all be forced OFF to conserve battery power during an AC power failure.
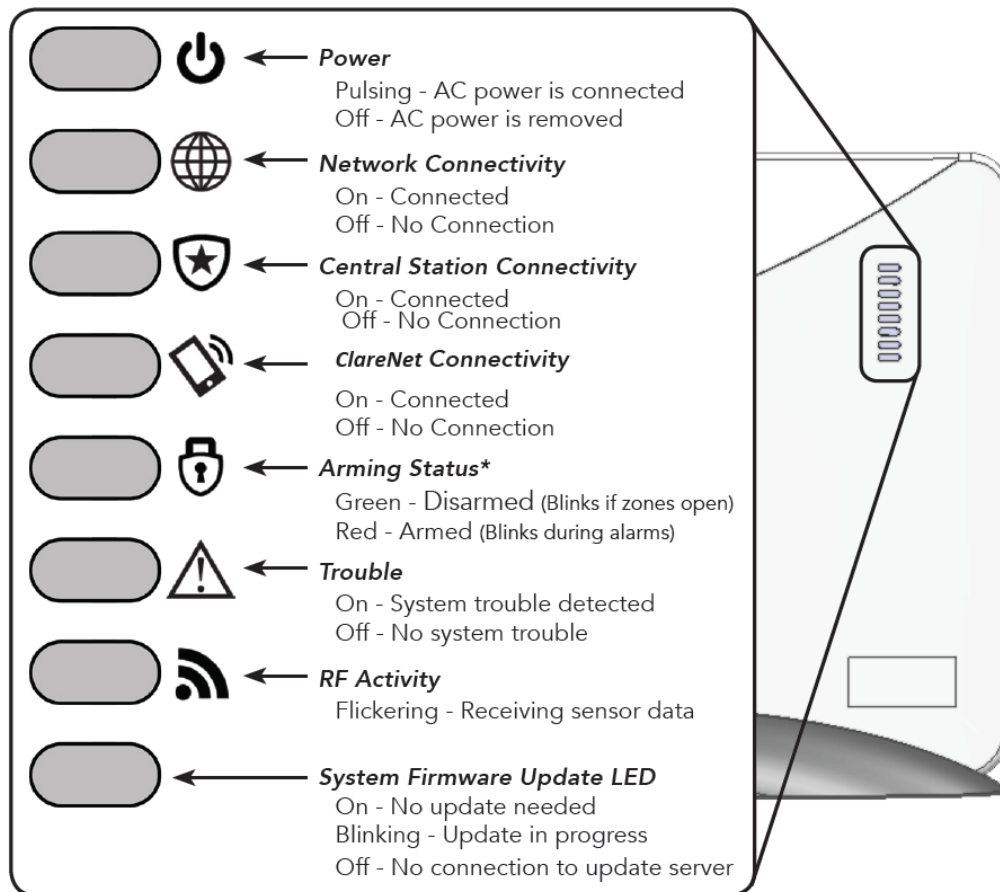
*This LED toggles between reg and green while enrollment mode is active.

Using the Keypad

See the Keypad manual for detailed operation.
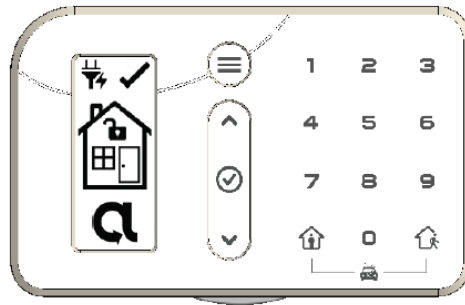
Disarm the system: Enter a valid user code on the number pad.

Arm Away: Press **ARM AWAY** ⌂ until the keypad clicks.

Arm Stay: Press **ARM STAY** ⌂ until the keypad clicks.

Trigger a panic alarm: Press **ARM STAY** ⌂ and **ARM AWAY** ⌂ together until the display indicates a panic alarm.

View real-time status: View the keypad's display.
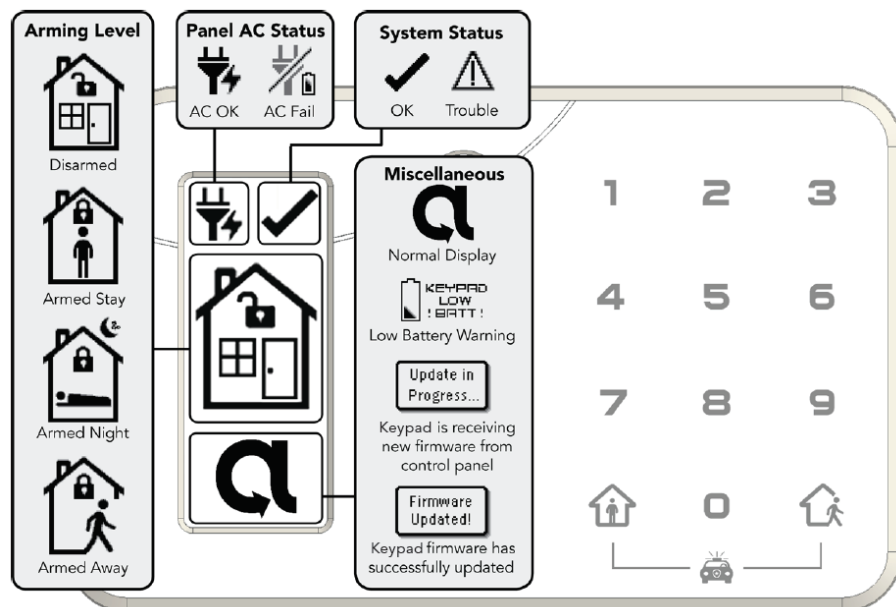
Using the PINPad

See PINPad manual for detailed operation.

Disarm the system: Enter a valid user code on the number pad.

Arm Away: Press the "**AWAY**" button until the PINPad LED flashes red.

Arm Stay: Press the "**STAY**" button until the PINPad LED flashes red.

Trigger a panic alarm: Press the "**STAY**" and "**AWAY**" buttons together until the PINPad LED flashes red.
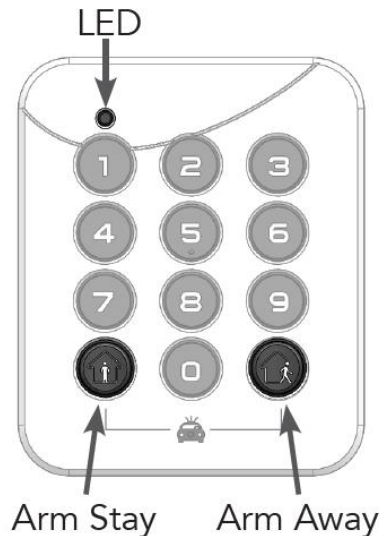
Connectivity troubleshooting

The following items can help troubleshot connectivity issues.

Network connectivity LED off

Ethernet Connections

1. Ensure the Ethernet cable is fully inserted in both the panel and router/modem.

Cellular Connections

1. Ensure the Cellular card is properly installed, and the Power LED on the card is pulsing.
2. Inspect the LED on the expansion card.

   - A solid LED indicates the panel is connected to the network.

   - A flashing LED indicates the panel has found a tower and is attempting to connect to the network. Wait until the LED is solid. If the LED has been double.

Central Station Connectivity LED off

1. Ensure the Network Connectivity LED is on. If it is off, see the network connectivity troubleshooting section above.

2. Ensure port TCP 9999 is open in the router/modem settings.

3. Ensure the panel is registered to an account with Clare and the account is active.

4. Ensure the panel has been configured with the proper central station reporting information: Account Number, Central Station Receiver Host and Port, Central Station Receiver ID and Line ID.

Clare Platform Connectivity LED off

1. Ensure the Network Connectivity LED is on. If it is off, see the network connectivity troubleshooting section above.

2. Ensure port UDP 1234 is open in the router/modem settings.

3. Ensure the panel is registered to an account with Clare and the account is active.

System Firmware Updated LED off

Ensure port UDP 1235 is open in the router/modem settings. The panel and peripherals will not be able to receive firmware updates if this port isn't available or is already in use.

User Information – Definitions

Report Delay: Consult with your installer to determine if your system is configured with a communicator delay. A communicator delay will prevent a report to the central station if the control panel is disarmed within _____ seconds (default is 30 seconds) after an intrusion alarm is triggered. Note that fire-type alarms and Carbon Monoxide alarms are normally reported without a delay.

Exit Delay: The period of time allowed, after Arming a security system, to exit the entry/exit door without tripping an alarm.

Note: Enabling silent exit doubles the exit delay time

Entry Delay: The door used to enter the premise will start an entry delay when tripped. You will hear entry delay beeps when you trip the sensor: this will allow you time to disarm the system. Entering a user code will disarm the system.

Entry Delay Progress: Three beeps every four seconds and three beeps every two seconds during the last ten seconds of entry delay.

Exit Delay Progress: Two beeps every two seconds and two beeps every second during last ten seconds of exit delay time.

System Acknowledgment: Sounders will sound one beep to confirm disarm, two beeps to confirm stay arming and four beeps to confirm away arming.

Exit Delay Restart: The feature will recognize when your arm the system, leave your house and then quickly re-enter. If this happens, the system will restart your exit delay to give you the full exit delay again.

Auto Stay Arming: Determines whether the system automatically arms down to Stay if your arm the system to Away without exiting the system entry/exit door. This feature will not be enabled when arming from a keyfob.

Arming Level - Disarm: In this level, only 24-hour sensors are active.

Arming Level - Stay: Perimeter sensors are active. Interior sensors are not active.

Arming Level - Away: Perimeter and interior sensors are active.

Panic Alarm: To trigger panic alarm from Keypad, press and hold stay and away buttons at the same time.

Alarm Abort: If the panel beeps three times after disarming an alarm, then the alarm is aborted.

Alarm Cancel Report: If an alarm has previously been transmitted, a cancel signal will be transmitted when the alarm system is disarmed. The panel will sound two beeps three seconds after disarming when sending a cancel message.

Alarm Memory: After canceling an alarm, press status on Keypad to view alarm memory.

Duress Code: The user uses a unique code, which disarms the system and transmits a "Duress" alarm to the monitoring center.

Cross Zoning: Refers to two different sensors that must be tripped within two minutes of each other to report an alarm to the central station. When motion is detected by the first sensor, it starts a two-minute timer. If the other sensors trip within two minutes, an alarm report will be sent to the central station.

Swinger Shutdown: This setting determines how many times the sensor will go into alarm during a single arming period. Once the sensor is in swinger mode it will not be active again until the alarm is canceled.

Note: Swinger shutdown does not affect Fire and Carbon Monoxide sensors.

Fire Alarm Verification: The panel immediately reports to the central station when a smoke alarm goes into alarm. With this option on, if a single smoke alarm goes into alarm, the panel will not report for 60 seconds unless another smoke alarm goes into alarm. If the first smoke alarm is cleared of an alarm within the first 60 seconds, no report will be sent to the central station unless it or a second smoke alarm goes into alarm within 5 minutes.

User Information- Testing the system

Before testing alarms, contact your central station and tell them you are testing the system.

Central station phone number _____

System account number _____

Test door/window sensors by first closing all doors and windows that have sensors. Verify the display on the keypad or mobile app indicates the system is in the ready state. Trip each sensor by opening the door or window and verify it shows open at the keypad or on the mobile app.

Test smoke alarms by pressing the test button until smoke alarm sounds. Check mobile app activity to verify fire walk test signal was reported. (The sirens will play one cycle of the temporal 3 siren pattern when a smoke test is pressed).

Test CO alarms by pressing the test button until CO alarm sounds. Check mobile app activity to verify CO test signal was reported. (The sirens will play one cycle of the temporal 4 siren cadence when a CO test is pressed.)

Test glass break sensors using a glass break sound tester to trip sensor.

Testing Panic Alarms: Panic alarms will be reported to the central station and will cause the panel siren to sound. Ensure your central station knows you are testing the system. Press the panic button and verify the system goes into alarm. To test panic alarms on the keypad and PINPad, press and hold the stay and away arming buttons to trigger a panic alarm.

Test panel communication by verifying the alarms you tripped were reported to and received by the central station.

Note: When finished, remember to tell the central station you are done testing the system.

System maintenance

System testing should be performed after installation is completed and whenever a problem occurs.

Smoke and CO alarms should be tested after installed and weekly by pressing the test button on the alarm. The panel will indicate it has properly received a test signal by sounding a temporal three sound for a Smoke alarm or a temporal four sound for a CO alarm.

Critical functions and communication links of the system are automatically monitored and exercised to detect trouble conditions.

Regulatory

UL System Requirements

Control unit consisting of:

- Base Panel: CS-SEC-10 series

- Backup Battery: (6V, 2.5Ah, NiMH)

- Power Supply: (In: 100-240VAC; Out: 12VDC, 1A)

- PINPad (CS-PIN-10), connected wirelessly

- Ethernet connection native to base panel or Cellular module

Compatible ETL listed signal initiating devices:

- CS-SMK-10 Smoke Alarm

- CS-CMD-10 CO Alarm

- CS-OMS-10 Outdoor Motion Sensor

- CS-360-10 360 Motion Sensor

- CS-DWS-10 Door/Window Sensor

- CS-NDWS-10 NanoMax Door/Window Sensor

- CS-PIR-10 Motion Detector

Optional devices, not ETL listed:

Any of a wide array of compatible sensors.

UL1023 Household Burglar Alarm System:

- Control Unit

- At least one burglary signal initiating device

- Entry delay: 45 seconds or less

- Exit delay: 60 seconds or less

- Sensor supervisory: 24 hours or less

- Panel status volume: on

- Panel siren: on

- Auto force arm: on

- Siren timeout: 4 minutes or more

ORD-C1023-1974 Canadian Household Burglar Alarm System:

- Control Unit and installation as described for UL1023

- Power supply: Do NOT secure with a receptacle securing screw. Ne pas se connecter à une prise contrôlée par un interrupteur.

- Siren timeout: 6 minutes or more

UL985 Household Fire Warning System:

- Control Unit

- At least one smoke signal-initiating device enrolled into "Fire" zone profile.

- Smoke supervision: on

- Panel siren: on

- Siren timeout: 4 minutes or more

- Panel status volume: on

ULC-S545-M8a9 Canadian Household Fire Warning System:

- Control Unit and installation as described for UL985

- Power supply: Do NOT secure with a receptacle securing screw. Ne pas se connecter à une prise contrôlée par un interrupteur.

- Siren timeout: 6 minutes or more

Central Station Communicator Requirement is at least one of:

- UL1610 Central Station Burglar Alarm System: Ethernet connection native to base panel

    -OR-

    UL1635 Digital Alarm Communicator System: Cellular module

- RF supervision: 4 hours

- Communication interface supervision: on

- Entry delay plus reporting delay must not exceed 60 seconds.

- Reporting delay is 30 seconds.

Network equipment:

Use a UL 60950-1 listed broadband router/modem for the 10/100 Ethernet port.

UL 1610 Commercial Burglar Alarm System:

- Commercial: on

- The product shall be installed in accordance with National Electrical Code, ANSI/NFPA 70, the standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681, the Standard for Central-Station Alarm Services, UL 827, CSA C22.1, Canadian Electrical Code, Part I, Safety and Standard for Electrical Installations, CAN/ULC S302, Standard for the Installation, Inspection and Testing of Intrusion Alarm Systems, and CAN/ULC S301, Installation, Inspection and Testing of Intrusion Alarm Systems, and CAN/ULC S301, Standard for Signal Receiving Centre Intrusion Alarm Systems and Operations.

- Ethernet Port must be connected directly to a router without any Ethernet switches.

- Siren Test: Siren should be tested once a week. Trip alarm to sound the siren. Disarm system to silence siren. Contact Central Station if alarms will be reported.

- Intended use includes: Commercial Central Station, Encrypted Line Security, Single and Dual Signal Line Transmission

- Communication interface options need to have supervision enabled depending on panel setup. Ethernet, Slot 1, Slot 2.

CE System Requirements

Access levels:

- **Access Level 1:** Person with no access to the security system features.

- **Access Level 2:** Regular users with access to all features on the security system with a code.

- **Access Level 3:** Master and Alarm company users that can do everything a level 2 user can do and also change system settings (e.g. add, modify, or delete users).

- **Access Level 4:** Manufacturer of equipment access. Typically used for system updates.

User codes:

- Four or more invalid code attempts will disable the interface and trigger a tamper condition.

- There are 10,000 unique 4-digit PIN codes.

- There are 16,777,215 unique identification codes for logical keys (Keyfobs).

Priority of indicators:

1. Fire alarm

2. CO alarm

3. Panic alarm

4. Burglary alarm

5. Tamper alarm

6. Auxiliary alarm

7. Freeze alarm

8. Heat alarm

9. Water alarm

10. Tamper indication

11. Fault indication

Ancillary control devices:

- Up to 8 PINPads

- Up to 8 Keypads and/or mobile devices.

- PINPads and Keypads can issue panic alarms.

ANSI-SIA CP-01 Requirements

Required equipment:

- CS-SEC-10 Clare Security Panel

- CS-PIN-10 Keypad

Notes:

- Combined entry delay and abort window should not exceed 1 minute.

- Programming at installation may be subordinate to other UL requirements for the intended application.

Table 1: Nonprogrammable SIA options

Nonprogrammable options	Setting
Silent Exit	Annunciators Enabled
Progress Annunciation	Annunciation Enabled
Cancel Report Annunciation	Enabled
Recent Closing	Enabled (2-minute window)
Exit Error	Enabled
Restoration of Power	Panel will ignore sensor trips for the first 60 seconds after power up
Cancel Alarm	Enabled
Remote Arming	Annunciators Enabled

Table 2: SIA setting requirements

Programmable options	Default	Recommended Setting	Range
Entry Delay	30 Seconds	30 Seconds	30-240 Seconds
Exit Delay	60 Seconds	60 Seconds	45-240 Seconds
Abort Time	30 Seconds	15-45 Seconds	1-45 Seconds
Auto Stay Arming	On	On	On/Off
Exit Delay Restart	On	On	On/Off
Swinger Threshold	Two Trips	Two Trips	1-6 Trips
Duress	Disabled	Disabled	Disabled, valid duress code
Cross Zoning	Disabled	Enabled for sensors that may cause false alarm	On/Off
Fire Alarm Verification	Disabled	Enabled unless sensor can self-verify	On/Off
Alarm Abort Annunciation	ON	On	On/Off
Alarm Cancel Annunciation	On	On	On/Off

Specifications

Physical	
Housing body dimensions	8.9 x 8.9 x 1.5 inches (22.6 x 22.6 x 3.8 cm)
Housing base dimensions	8.2 x 1.3 x 2.7 inches (20.8 x 3.3 x 6.7 cm)
Weight with battery	26.8 ounces (760 grams)
Mounting fastener	#6 or #8 screws (not provided)
Environmental	
Operating temperature	32 to 120 °F (0 to 49 °C)
Storage temperature	-4 to 86 °F (-20 to 30 °C)
Maximum humidity	85% non-condensing relative humidity
Panel specifications	
Radio frequency	433.92MHz, 2.4GHz
Power supply part number	RE012-6 (US), RE012-7 (AUS), RE012-8 (CE)
Input	100-240VAC, 50/60 Hz, 0.5A
Output	12VDC, 1A
Battery part number	RE029
Backup	24 hours minimum (4 hours minimum for RE6130)
Specifications	6VDC, 2.5Ah, NiMH
Battery charger	25mA (Trickle), 95mA (Fast)
Current draw (CS-SEC-10, RE6110, RE6120)	150mA (Normal), 300mA (Alarm)
Current draw (RE6130P-XW-X)	250mA (Normal), 400mA (Alarm)
Current draw (RE6130P-LX-X)	150mA (Normal), 400mA (Alarm)
Tamper indications	Cover opening and wall removal
Sensors	Up to 96 compatible wireless security zones
Interface devices	Up to 8 PINPads, Up to 8 Keypads and/or mobile devices, up to 4 touchpads
Maximum number of users	50
Certifications	
CS-SEC010	UL1023, UL985, UL1635, UL1610, ORD-C1023-1974, ULC S304, ULC-S545-M89, ETL, FCC, IC

Warranty

Clare will replace products that are defective in their first three (3) years.

IC notice

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) This device may not cause interference, and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux cnr d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) L'appareil ne doit pas produire de brouillage, et

(2) L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC: 8310A-RE6100

Trademarks

Clare Controls LLC.

FCC notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Clare could void the user's authority to operate this equipment.

FCC ID: U5X-RE6100

CE declaration of conformity

Hereby, Clare declares that this RE6120 is in compliance with the essential requirements and other relevant provisions of directive 1999/5/EC.

(This declaration can be translated to other languages via a myriad of translation tools found on the Internet.)

Original Document:

http://alula.net/wp-content/uploads/2018/07/RE6100S_47-0009-08_RevF_Web.pdf