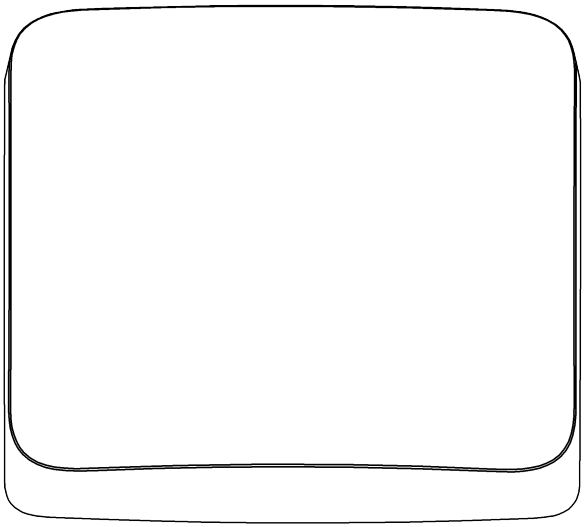
alula®

An **M2M Services** Brand



# Connect-FLX
# Security and Automation Hub

INSTALL GUIDE

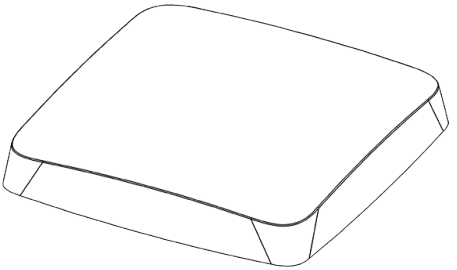
Connect-FLX™
Security and Automation Platform Installation Guide

# *Meet Connect-FLX*

***Connect-FLX*** is a professional wireless security panel designed to deliver security and automation services. Secured and supervised Multi-Carrier SIM Cellular, Wi-Fi™ and Ethernet connections come standard. Its long-range encrypted wireless receiver easily provides whole site coverage. Integrated sensor translator enables simplified takeovers of existing systems. Wireless arming stations and mobile devices uncouple Connect-FLX from the entry wall and allow it to be installed at a location convenient for Internet and power connections.

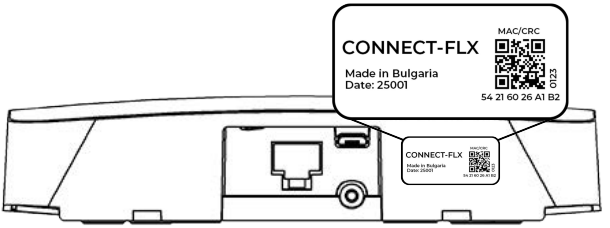
***FEATURES***

- Multi-Carrier Cellular
- Wi-Fi and Ethernet
- Control from a user's mobile device
- Up to 49 users
- Up to 96 zones
- Up to 8 partitions
- Optional Z-Wave
- 5 year warranty



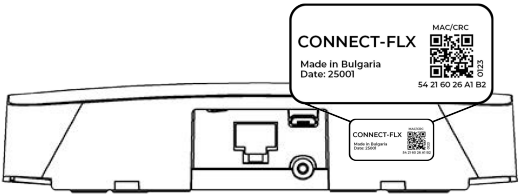
***ITEMS INCLUDED IN THE BOX***

- The Connect-FLX panel
- Rechargeable backup battery
- 12-Volt power adapter
- 6-foot Ethernet cable
- Wall mounting plate
- Installation guide




# *System Setup*

1 ***Set up a new account*** with Alula following the instructions in the platform guide included. You will need the MAC address, which is located on the back the panel.



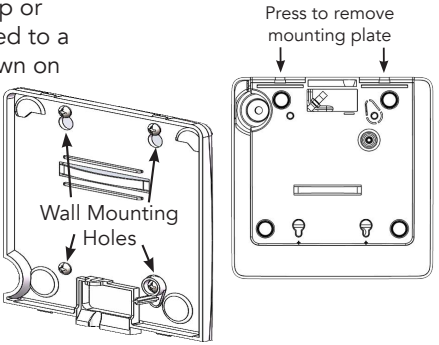

**STOP DO NOT PROCEED UNTIL YOU HAVE FINISHED STEP 1**

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

***Panel Location Guidelines***

- Locate centrally on the main floor.
- Avoid mounting below ground level.
- Do not mount near ducts, appliances, or other large metal objects.
- Do not mount directly adjacent to other RF devices.

3 ***Mount the panel*** setting it on the counter-top or table. Alternatively, the panel can be mounted to a wall using the wall mounting plate. Press down on the two tabs to release the mounting plate




4 ***Power up the panel*** by inserting the power supply barrel into the power jack on the back of the panel.

***UL Installation Requirements***

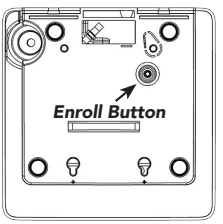
- Do not connect the panel to an AC power receptacle controlled by a switch.

5 ***Bring the panel online*** by wiring its Ethernet port to the home router, or by connecting to the local Wi-Fi.

6 ***Enroll sensors and peripherals*** by first pressing the Enroll button on the underside of the panel until it beeps once (roughly 3 seconds) and then sending an enrollment signal from the sensor or peripheral. Alternatively, a device can be enrolled by entering its 8-character serial number on Touchpad programming, or AlulaConnect dealer portal.

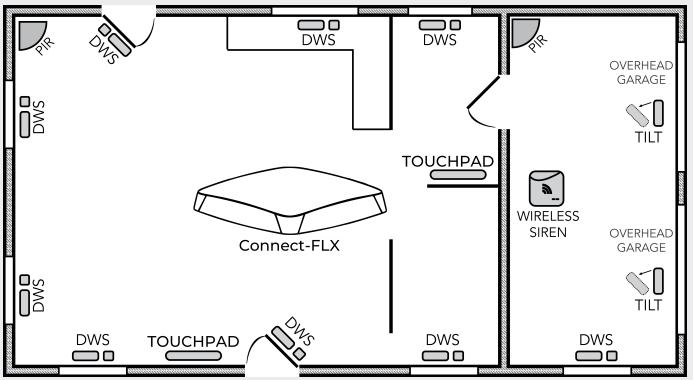
***Enrollment Tips***

- Enrollment signals are typically triggered by removing the battery tab or tampering the device. See the specific device manual for more information.
- The Alula App, Touchpad programming, and the AlulaConnect dealer portal can be used to enroll and configure sensors.
- The AlulaConnect dealer portal provides a way to enter and exit wireless enrollment mode.
- Wireless enrollment mode will end 5 minutes after the last sensor is enrolled.
- Enrolling a Keypad or other 2.4GHz peripheral will automatically end wireless enrollment mode.
- Short hold of the Enroll/WPS button will end wireless enrollment mode.



**7** ***Install your sensors & peripherals*** in desired locations around the house. Refer to the specific device manual for more information regarding installation and use.

*Typical Burglary Protection Installation*




**8** ***Configure the panel, sensors, and peripherals*** using the Alula app, Touchpad programming, or the AlulaConnect dealer portal. Configuration options are described in the configuration guide.

**9** ***Finally, test the system*** after finishing installation, enrollment, and configuration. Verify proper operation of all installed sensors and peripherals using the Alula app, Touchpad programming, or the AlulaConnect dealer portal. All sensors and peripherals should score at least 25 on the RF signal strength indicator.

## *Pro-Tips*

***RF Signal Strength*** is an averaged signal-to-noise indication. Even in the absence of sensor transmissions, the panel experiences ambient RF energy (i.e. noise). 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:

1. **High ambient noise -** Ensure the panel is not mounted adjacent to other electronics.
2. **Panel isn't centrally located, or is mounted below ground -** Move the panel to a central location in the home that is above ground level.
3. **Panel is located near ducts, appliances, or other large metal objects** - Relocate the panel away from these types of objects.

***Sensor Signal Strength Tips***

- The signal strength scale is from 0 to 100.
- There is **nothing wrong** with a sensor that has at least one bar (e.g. a signal strength of at least 20).
- Signal strength readings are averaged. If you move the panel or a sensor, it takes some time for the signal strength readings to update. Tripping a sensor several times will help update a sensor's signal strength faster.
- Before mounting a sensor permanently, expose a slight portion of its mounting tape and apply it (**very lightly)** to the desired location. If it performs well, mount it permanently. If it performs poorly, try rotating it by 90 degrees.
- *Do not test a mounting location by tripping a sensor in your hand.* Holding a sensor changes how it radiates RF energy. Sometimes these "hand effects" help, and sometimes they hurt.

# *Connect-FLX LED Guide*

***System Status Indication*** is provided via the underglow LED on the front bottom of the panel. The LED may all be forced OFF to conserve battery power during an AC power failure.

***Normal Operation***

Green
- Solid On - Disarmed
- Breathing - Disarmed, not ready to arm

Yellow
- Solid On - Disarmed and Trouble

Blue
- Solid On - Armed Night
- Breathing - Entry Delay, Exit Delay

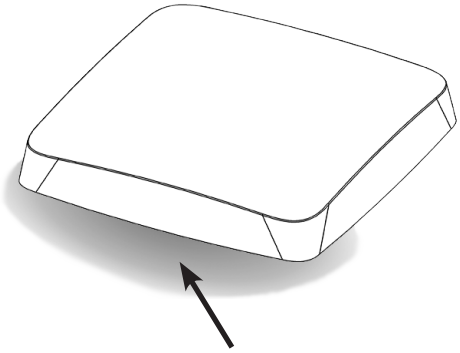
Cyan
- Solid On - Armed Stay
- Breathing - Entry Delay, Exit Delay

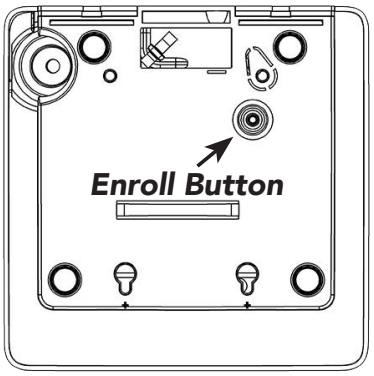
Red
- Solid On - Armed Away
- Breathing - Entry Delay, Exit Delay

White
- Solid On - Enroll Mode

Red/White Alternating
- Alarm

OFF
- AC Removed




***Installer Operations***

*Enroll Mode*
*Press and Hold Enroll Button 3s*

White
- Solid On - Enroll Mode

*Cell Signal Indication Mode*
*Press and Rapidly Release Enroll Button*

Red
- Breathing - Searching for Signal

Orange
- 1 Blink - 1 Bar

Yellow
- 2 Blinks - 2 Bars

Green
- 3 Blinks - 3 Bars
- 4 Blinks - 4 Bars

***Resetting the Panel***

*When in Cell Signal Indication Mode*
*(Press and Rapidly Release Enroll Button)*
*AND Tamper is Open*

Press and Hold 3s
- Enroll Mode

Press and Hold 10s
- Reset Panel

Press and Hold 30s
- Factory Default Panel

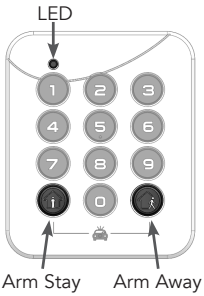
## *Using PINPad* (See PINPad™ manual for detailed operation)

***Disarm the system*** by entering a valid user code on the number pad.

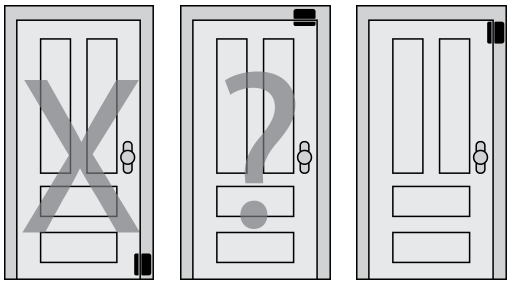
***Arm Away*** by pressing the "AWAY" button until the PINPad LED flashes red.

***Arm Stay*** by pressing the "STAY" button until the PINPad LED flashes red.

***Trigger a panic alarm*** by pressing the "STAY" & "AWAY" buttons together until the PINPad LED flashes red.

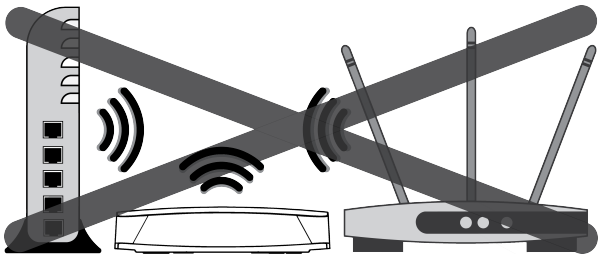



***Wireless performance*** of door window sensors is optimized when mounted vertically near the top corner of the door.




***WRONG*** ***OK*** ***BEST***

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



***POTENTIAL FOR INTERFERENCE***

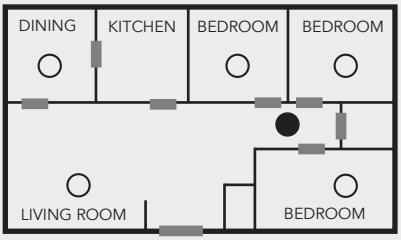
- Put some space between the panel and the home router. A 6-foot cable is included for this purpose.
- Ethernet connection is only allowed to router located in the same room as the control unit

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

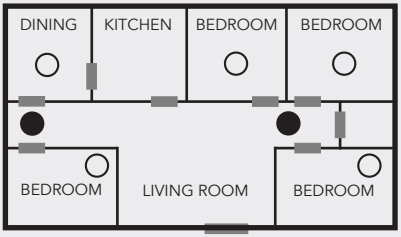
- Use the AlulaConnect dealer portal to configure the trouble beep suppression period.
- Trouble beeps can be temporarily silenced for 24 hours using AlulaConnect, the Touchpad, a keyfob or the user's mobile app.

***Smoke Alarms*** should be installed in accordance with Chapter 29 of the "National Fire Alarm and Signaling Code, *ANSI/72."* (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*".

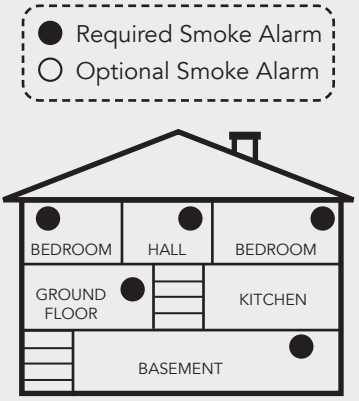
*Smoke Alarm Placement*




*(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.

## *Emergency Planning*

***Emergencies happen,*** so have a plan.

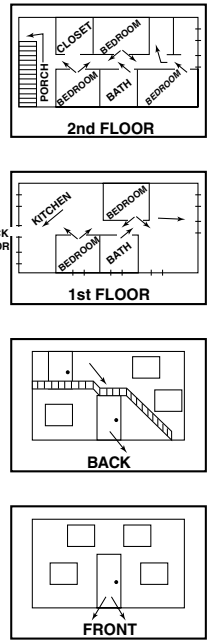
***Emergency Planning Tips***

- 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.

# *Emergency Evacuation Plan*

Establish and regularly practice a plan of escape in the event of fire. The following steps are recommended by the National Fire Protection Association:

- Position your detector or your interior and/or exterior sounders so that they can be heard by all occupants.
- Determine two means of escape from each room. One path of escape should lead to the door that permits normal exit from the building. The other may be a window, should your path be impassable. Station an escape ladder at such windows if there is a long drop to the ground.
- Sketch a floor plan of the building. Show windows, doors, stairs, and rooftops that can be used to escape. Indicate escape routes for each room. Keep these routes free from obstruction and post copies of the escape routes in every room.
- Assure that all bedroom doors are shut while you are asleep. This will prevent deadly smoke from entering while you escape.
- Try the door. If the door is hot, check your alternate escape route. If the door is cool, open it cautiously. Be prepared to slam the door if smoke or heat rushes in.
- When smoke is present, crawl on the ground. Do not walk upright, since smoke rises and may overcome you. Clearer air is near the floor.
- Escape quickly; don't panic.
- Establish a common meeting place outdoors, away from your house, where everyone can meet and then take steps to contact the authorities and account for those missing. Choose someone to assure that nobody returns to the house —many die going back.




# *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 glassbreak 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 RE656 Keypad and RE652 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.

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

## *Connectivity Troubleshooting*

| *Symptom* | *Troubleshooting Steps* |
|---|---|
| **Network Connectivity** | **Ethernet Connections**<br>1. Ensure the Ethernet cable is fully inserted in both the panel and router/ modem.<br>2. Ensure another device is able to connect over Ethernet<br>**Wi-Fi Connections**<br>Ensure the panel has been configured with the proper Wi-Fi credentials<br>**Cellular Connections**<br>Cell Signal Indication Mode Press and Rapidly Release Enroll Button<br>• See Connect-FLX LED Guide<br>• A solid LED indicates the panel is connected to the network.<br>• 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 flashing for more than ten minutes, try power cycling the panel and consider mounting in a different location |
| **Central Station Connectivity** | 1. Ensure the panel is registered to an account with Alula<br>2. Ensure the panel has been configured with the proper central station reporting information: Account Number, Central Station Receiver |
| **Alula Platform Connectivity** | 1. Ensure port UDP 1234 is open in the router/modem settings.<br>2. Ensure the panel is registered to an account with Alula and the account is active. |
| **System Firmware** | 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. |

If your system appears Offline, or has an Expansion Device Failure, or Ethernet Trouble see above connectivity table for troubleshooting steps

## *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.
Manually test the panel siren by pressing the test button on a smoke or closing and opening a door/ window sensor.

## *Battery Replacement*

***Replace the battery by*** removing the mounting plate, disconnect the old battery, and connecting a new battery. The battery connector is polarized and can be inserted only one way into the panel receptacle.
Rechargeable battery pack to be replaced every 6 years under normal operating conditions.
Batteries to be charged to at least 30% if not used for the following:
• 1 year when stored at -20° to 25°C
• 6 months when stored at -20° to 35°C

# Regulatory

## UL SYSTEM REQUIREMENTS

***Control Unit, consisting of:***

- Base Panel: Connect-FLX using 75-00152-00 v1 firmware
- Backup Battery: RE029 (6V, 2.5Ah, NiMH)
- Power Supply: RE012-6W (In: 100-240VAC; Out: 12VDC, 1A)
- PINPad (RE652) connected wirelessly
- Cellular, Ethernet or Wi-Ficonnection native to the panel

***Compatible ETL listed signal initiating devices:***

- RE601 Door/Window Sensor
- RE622 NanoMax Door/Window Sensor
- RE611P Motion Detector
- RE614 Smoke Alarm
- RE615 CO Alarm

***Optional devices, not ETL listed:***

- Any of a wide array of Connect Family compatible sensors
- Frequencies 319.5MHz and 345MHz not evaluated by Intertek

***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

***ULC-S304 Canadian Intrusion Alarm Systems:***

- Control Unit and installation as described for UL1023
- Siren timeout: 6 minutes or more

***UL985 Household Fire Warning System:***

- Control Unit
- RF supervision: 4 hours
- 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 Canadian Household Fire Warning System:***

- Control Unit and installation as described for UL985
- Siren timeout: 6 minutes or more

***Central Station Communicator Requirement is at least one of:***

- 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 or Wi-Fi connection
- Ethernet connection is only allowed to a router located in the same room as the control unit

***UL 2610 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 Signal Line Transmission
- Remote features were not evaluated to UL2610 requirements.

***Battery Forseeable Misuses***

- Do not replace battery with an incorrect type. Risk of fire
- Do not dispose of battery into fire, hot oven, mechanically crush or cut. Can result in explosion.

# 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 you 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 you 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.

# *Specifications*

| PHYSICAL | |
|---|---|
| Housing Body Dimensions<br>Weight with Battery<br>Mounting Fastener | 6 x 6 x 1.28 inches (15.21 x 15.21 x 3.25 cm) 26.8 ounces (760 grams)<br>#6 screws and wall anchors (4) |
| **ENVIRONMENTAL** | |
| Operating Temperature<br>Storage Temperature<br>Maximum Humidity | 32 to 120 °F (0 to 49 °C)<br>-4 to 86 °F (-20 to 30 °C)<br>85% non-condensing relative humidity |
| **PANEL SPECIFICATIONS** | |
| Radio Frequencies<br>Power Supply Part Number<br>Input<br>Output<br>Battery Part Number<br>Backup<br>Specifications<br>Battery Charger<br>Current Draw<br>Tamper Indications Sensors<br>Interface Devices<br><br>Maximum Number of Users | 433.92MHz, 345MHz, 319.5MHz, 908.42MHz 2.4GHz<br>RE012-6(W) (US)<br>100-240VAC, 50/60 Hz, 0.5A<br>12VDC, 1A<br>RE029<br>24 hours minimum<br>6VDC, 2.5Ah, NiMH<br>25mA (Trickle), 95mA (Fast)<br>XXXmA (Normal), 372mA (Alarm)<br>Cover opening and Wall removal<br>Up to 96 Connect Family Compatible Wireless Security Zones Up to 8 PINPads (RE652) and/or mobile devices, up to 4 Touchpads<br>49 |
| **CERTIFICATIONS** | |
| CONNECT-FLX | UL 985, UL 1023, UL 2610<br>FCC, IC<br>ULC-S304, ULC-S545 |

*Specifications subject to change without notice.*

### *WARRANTY*

Alula will replace products that are defective in their first five (5) 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-CFLXRF
IC: 8310A-CFLXZ

### *TRADEMARKS*

Alula and Connect-FLX are trademarks owned by Alula, 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 Alula could void the user's authority to operate this equipment.

FCC ID: U5X-CFLXRF
FCC ID: U5X-CFLXZ