**BAT-Connect™ Communicator**

**BAT-Connect** is a device that connects to security panels and provides interactive services, home automation, and the ability to update the user interface.

**Features**

- Three network connectivity paths: cellular, ethernet, and Wi-Fi™
- Provides interactive services, home automation, and the ability to update the user interface on existing panels without panel replacement
- Full interactive support of Honeywell® Vista™, DSC® PowerSeries®, Interlogix™ NX, Interlogix Concord, and Napco™ panels
- Telco event capture and reporting on most legacy panels using phone line emulation
- Keyswitch arming for remote control of most legacy panels
- Supports connected panel's 2-way voice alarm verification
- Optional remote control is available via the Alula Security app from the APP STORE™ or GOOGLE PLAY™
- Alarm event reporting support for multiple partitions
- Virtual keypad support for Honeywell, DSC, Interlogix NX, and Interlogix Concord
- Support for native panel downloader using uDownloader for Honeywell Vista panels and DSC panels (requires PC-Link)

**Installation Overview**

1. Set up an account at alulaconnect.com.
2. Program the panel to use the BAT-Connect. (Refer to the programming section for your panel below.)
3. Mount the BAT-Connect to a wall using the mounting holes on the back plate.
4. Wire the panel to the BAT-Connect. (Refer to the wiring diagram section for your panel below.)
   - Maximum cable length to the panel:
     - 18 gauge wire: 350 feet
     - 22 gauge wire: 130 feet
     - 24 gauge wire: 75 feet
5. Set up the network communication path.

**Note:** If 2-way voice will be used, the network communication path must be ethernet or Wi-Fi. Cellular can be used as back-up; however, it does not support 2-way voice.

**Verify proper enrollment and operation using your control panel's installation manual.**
Connecting via ethernet:
Plug in cable and ensure ethernet LED is on.

Connecting via cellular:
Verify cellular LED is on and verify signal strength. (See Operation Overview section for signal strength.) A minimum of two signal bar LEDs is recommended.

Connecting via Wi-Fi:
- Connecting via WPS:
  1. Enable WPS on router.
  2. Press and hold the WPS button on BAT-Connect until Wi-Fi LED flashes.
  3. Unplug the ethernet cable (if used). After approximately 1-2 minutes, the Wi-Fi LED will turn on. Wi-Fi network credentials are now saved in BAT-Connect.
  4. If the Wi-Fi LED does not turn on after 2 minutes, then WPS was not successful. Repeat steps 1-3.

- Connecting via AlulaConnect™ (if WPS is unavailable):
  1. Wi-Fi credentials can be entered at alulaconnect.com. For the Wi-Fi credentials to be pushed from AlulaConnect, the BAT-Connect must be online.
  2. Go to Account > Account Devices > BAT-Connect > Communication > Primary Wi-Fi Credentials (Enter information) > Save.
  3. The Wi-Fi LED will turn on. (This may take up to 2 minutes.) Wi-Fi network credentials are now saved in BAT-Connect. **Note:** It should switch to Wi-Fi, regardless of the active interface previously used (ethernet or cell).
  4. If the Wi-Fi LED does not turn on after 2 minutes:
     - Repeat step 2, verifying that the credentials entered are correct.
     - Verify the BAT-Connect is online.

6. Mount and enroll Touchpads if needed. (Refer to Touchpad install guide for additional information.)

**Note:** It is recommended to keep one original keypad in the system.

7. Installation is complete. After installing BAT-Connect, or modifying any panel programming, verify proper operation and reporting of all event codes using your control panel’s installation manual.
Honeywell Vista and First Alert Programming

Full interactive control/status, zone status and access code management is available for partition 1 if BAT-Connect is on AUI 2. Virtual keypad is available for all Honeywell panels, allowing control/status of all partitions. Event reporting is available for all partitions.

BAT-Connect can be added to the Honeywell panel the following ways:

- **Virtual keypad support only:** Vista 10P, Vista 128, Vista 15P less than v3.0, Vista 20P less than v3.0, First Alert FA148CP less than v3.0, and First Alert FA168CP less than v3.0
- **Full interactive & virtual keypad support:** Vista 15P v3.0 & later, Vista 20P v3.0 & later, Vista 21IP, Safewatch Pro 3000, First Alert FA148CP v3.0 & later, & First Alert FA168CP v3.0 & later

1. Set up an account at alulaconnect.com.
2. Add the MASTER CODE to the primary account user before connecting the BAT-Connect. This is required for the BAT-Connect to be able to properly configure the system settings.
   **Note:** Skip this step if using virtual keypad only.
3. Disarm the system (all partitions).
4. Enter panel programming mode using the installer code and program the following:
   **Note:** If using virtual keypad, only program Keypad 8, Event capture, and uDownloader.

**AUI 2:**
- If the panel supports AUI, verify that AUI 2 is enabled using field *189. AUI is not used if using virtual keypad only.
- If another device is using AUI 2, that device must first be moved to a different AUI address. The other device should be moved to AUI 1 for Vista 15P and AUI 1, 3, or 4 for Vista 20P, Vista 21IP, or Safewatch Pro 3000.

**RIS:**
- Vista panels that have a *91 field that supports RIS need to have RIS disabled. No action is required if RIS is not supported.

**Keypad lockout:**
- Vista 15P and 20P panel versions 10.21 and later have the keypad lockout feature enabled by default. It is recommended this feature be disabled to prevent possible keypad lockout conditions if the system master code in the BAT-Connect is not synchronized with the master code in the Vista panel.
- *188 to disable keypad lockout.
- If it is required to have the keypad lockout feature enabled, it is critical that the system master code be set up as a user for this account before connecting the module to the panel (see step 2 above). Also, all changes to the system master code must be done at AlulaConnect or with the Alula app, not at the Vista keypad. Failing to do this may result in a keypad lockout condition.

**Keypad 8:**
- Verify that Keypad 8 is enabled for all partitions that are enabled in the alarm panel using field *196. For Vista 128, enable address 07 as an alpha keypad, with global option enabled if control of all partitions is required.

**Event capture:**
- Configure the panel for event reporting via IP/GSM or telco event capture using panel programming items *29 and *55. Vista 15P and 20P panels with firmware earlier than 4.0 and Vista 128 panels should always use telco event capture. Use programming items *56 and *57 for Vista 128.
- Telco event capture is required if 2-way voice will be used for alarm verification. Panel speaker and microphone will be used for the 2-way voice session.
- IP/GSM event capture:
  *29 = 1, 0
  *55 = 1
- Telco event capture:
  *29 = 0, 0
  *55 = 0
  *48 = set report format to Contact ID
  *41 = enter a telephone number
  *43 = enter an account number for all partitions that are used
5. Exit programming mode and power down the Vista system.
6. Connect the Vista system and BAT-Connect as shown in the wiring diagram below.
7. For Vista 21IP panels, Internal IP/GSM jumper needs to be set to “OFF”.
8. Power up the Vista system.

- The Vista system will be busy for 50-60 seconds after power up before it will automatically program. Programming of the panel will only be performed if the panel supports AUI.
- BAT-Connect will set the following fields automatically:
  * Opening report (*65) = 1 (enabled)
  * Closing report (*66) = 1, 1 (stay closing and away closing reports enabled)
  * Alarm cancel report (*68) = 1 (enabled)
  * AC power restoral report (*73) = 1 (enabled)
  * Low Battery restoral report (*74) = 1 (enabled)
- All zones that are enabled in partition 1 will be read from the panel and added to the Alula platform.
- Access codes will be synced with the panel.

9. Once the keypad(s) display **DISARMED Ready to Arm**, installation is complete.
10. Verify proper operation and reporting of all event codes using your control panel’s installation manual.

**Note:** Access code management for master code and up to 47 normal user codes is supported for Vista 20P panels. Master code and 31 normal users are supported for Vista 15P panels.

**Honeywell Vista and First Alert Wiring for Interactive Control and Event Reporting**

- **Panel Bus Connector**
- **Tip/Ring connections required only for telco event capture or 2-way voice**
• Replace a Vista Cellular Module by removing the ECP cable from the cellular module and inserting the ECP cable into the Panel Bus Connector on BAT-Connect. No other panel bus wiring is needed. **Note:** Other cellular radios need to be disconnected from the bus for BAT-Connect to operate properly.

• Panel Bus Connector is available on BAT-Connect Rev J and later.

• For IP/GSM reporting, Vista control panels require connection to panel bus only. Tip/ Ring connections are required only if telco event capture reporting or 2-way voice alarm verification is used.

• Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel bus wiring. Tip & Ring should be in a separate cable.

• See below for supported Vista and First Alert panels. If Vista or First Alert panel is not listed, please contact Alula Support.

### Compatible Panels
- Vista 10P (virtual keypad support only)
- Vista 15P
- Vista 20P
- Vista 21IP
- Safewatch Pro 3000
- Vista 128 (virtual keypad support only)
- First Alert FA148CP
- First Alert FA168CP

**REVIEW BAT-CONNECT COMMUNICATOR ALARM PANEL COMPATIBILITY SECTION OR SEE FRONT COVER FOR QR CODE**

**DSC PowerSeries Programming**

1. Set up an account at alulaconnect.com.

2. Add the MASTER CODE to the primary account user before connecting the BAT-Connect. This is required for the BAT-Connect to be able to properly configure the system settings. Six digit access codes are not supported.

3. Disarm the system (all partitions).

4. Enter panel programming mode using the installer code and program the following:

   **Note:** DSC PowerSeries panels may use different programming locations or the option may not be available. Always refer to the installation manual of the specific panel for programming locations and options.

   - Enable Communicator ([380]:[1])
   - Enter a Telephone Number ([301])
   - Enter Account Number ([310])
   - Verify 1st Telephone Number is enabled in Call Direction Options ([351]-[376])
   - Verify that [015] Option [6] is set to OFF (master code is user changeable)
   - Verify Access Code Required for *1, *2, *3 menus is disabled ([022]:[1])
   - Verify that keypad lockout is either zero (disabled) or higher than 6 ([012])
   - Set Communicator Format to Contact ID ([350])
   - Verify the panel is properly set up for Contact ID event reporting
   - To enable reporting of the Period Test Transmission, program the “Periodic Test Transmission” ([348]:[4]) and the “Periodic Test Transmission with Trouble” ([348]:[3]) reporting codes to “02” (optional)
   - If zone definition and label capture will be used, enable T-Link option ([382]:[5]). If the panel does not support T-Link, skip this step

5. Exit programming mode and power down the DSC system.

6. Connect the DSC system and the BAT-Connect as shown in the wiring diagram. If zone definition and label capture will be used, wire the PC-Link cable (RE049) as shown below.
7. Power up the DSC system.
   • The DSC control panel will begin automatic configuration and access code sync. Panel
     keypads will be unavailable during this time.

   **Note:** In order for the BAT-Connect to download on a DSC panel, the Downloading Access
   Code [403] and Panel Identification Code [404] need to be the panel default values.

For optional zone definition and label capture using the PC-Link cable (RE049):

   **Note:** An alpha-numeric LCD keypad (such as PK5500 or LCD5500Z) must be present and
   enrolled in slot 8 for zone label capture.

If the panel supports T-Link:
   • Zone definition and label capture will automatically begin after panel configuration and
     access code sync is complete. This will complete approximately 4-5 minutes after power
     up of the panel.
   • If a re-sync is required, temporarily disable the T-Link option, then follow the steps below.

If the panel does not support T-Link or T-Link is disabled:
   • Enter programming mode [*][8][installer code].
   • Initiate PC-Link download [499][installer code][499].
   • Keypad should display “Download in progress”. Typically the download takes less than
     one minute and the keypad will perform one loud beep when complete.

   **Note:** Occasionally a keypad has difficulty syncing shortly after the user auto sync process. If
   the first attempt fails, wait at least 2 minutes and try again. If uDownloader is not used, the
   PC-Link cable can be removed when the zone definition and label capture is complete.

8. If you have removed any bus devices, perform a Module Supervision Reset ([902]). BAT-Connect
   will be supervised by the panel as a PC5400 module.

9. Verify proper operation and reporting of all event codes using your control panel's installation
   manual.

   **Note:** During normal operation, BAT-Connect will occasionally use the panel bus for some system
   tests. Typically, this lasts for 5-6 seconds. During this time, panel keypads will be unavailable.
   Access code management for the master code and up to 32 normal user codes is supported for
   DSC panels.

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**DSC Wiring for Interactive Control and Event Reporting**

![Diagram of DSC Wiring](image-url)
• DSC control panels require connection to panel bus and Tip & Ring.

• Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel bus wiring. Tip & Ring should be in a separate cable.

• See below for supported DSC panels.

Compatible Panels
• PC580 (Power 432)
• PC1555 (Power 632)
• PC1555MX (Power 632)
• PC5010 (Power 832)
• PC5020 (Power 864)
• PC1616
• PC1832
• PC1864

**REVIEW BAT-CONNECT COMMUNICATOR ALARM PANEL COMPATIBILITY SECTION OR SEE FRONT COVER FOR QR CODE**

Wiring PC-Link Cable to BAT-Connect

Note: When using PC580, PC1555, PC1555MX, PC5010 or PC5020 panels, add a 470 to 1K Ohm resistor from PC-Link TD to Ground

To wire the PC-Link cable to the DSC panel:

• Locate the PC-link connector on the DSC panel.
• The red wire should be on the left, with the line below the connector. Insert the cable onto the PC-link connector.
Interlogix NX Programming

1. Set up an account at alulaconnect.com.

2. Add the MASTER CODE to the primary account user before connecting the BAT-Connect. This is required for the BAT-Connect to be able to properly configure the system settings.

3. Disarm the system (all partitions).

4. Enter panel programming mode using the installer code and program the following:

   **Note:** Interlogix NX panels may use different programming locations or the option may not be available. Always refer to the installation manual of the specific panel for programming locations and options:
   - Enter a Telephone Number (Location 0)
   - Enter Account Number (Location 1)
   - Enable Communicator in Contact ID Format (Location 2)
   - Verify All Desired Events are enabled for Phone #1 (Location 4)

5. Exit programming mode and power down the Interlogix NX system.

6. Connect the Interlogix NX system and the BAT-Connect as shown in the wiring diagram.

7. Power up the Interlogix NX system.

   Shortly after power up, the BAT-Connect will begin automatic configuration of the Interlogix NX control panel. Automatic configuration should complete about 2 minutes after power up.

   During automatic configuration:
   - Opening and Closing Reports (Location 4->Segment 1->#2) will be enabled in the panel; however, these reports will only be sent to the monitoring station if enabled in AlulaConnect
   - Access codes will be synced with the panel
   - Zone information will be read from the panel. The following zones will be added to the Alula platform:
     * Any zones that are enabled in partition 1 and have had their zone type or zone name changed will be added to the Alula platform
     * Any zone that is tripped will be added to the Alula platform
     * All on-board hardwire zones that are enabled in partition 1 will be added to the Alula platform
   **Note:** If you want to remove zones from the Alula platform, do so by one of the two methods below:
   o Disable the zone for partition 1 and default the BAT-Connect to allow it to re-read the zones
   o On-board hardwire zones can be deleted at alulaconnect.com

8. Verify proper operation and reporting of all event codes using your control panel’s installation manual.

**Additional Notes for Interlogix NX Installation**

- When user codes are added to the system, the authority levels are not modified. The default user authority includes access to all partitions. If a different authority level is desired, it can be modified on a local keypad using the *6 menu.
- Six digit access codes are not supported.
- The BAT-Connect is supervised by the Interlogix NX panel as device number 247.
- Access code management for the master code and up to 48 normal user codes is supported for Interlogix NX panels. NX-4 panels support a maximum of 4 user codes and NX-6 panels support a maximum of 40 user codes.
Interlogix NX Wiring for Interactive Control and Event Reporting

- Interlogix NX control panels require connection to panel bus and Tip & Ring.
- Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel bus wiring. Tip & Ring should be in a separate cable.
- See below for supported Interlogix NX panels.

**Compatible Panels**
- NX-4/NX-4V2
- NX-6/NX-6V2
- NX-8/NX-8V2
- NX-8E

**REVIEW BAT-CONNECT COMMUNICATOR ALARM PANEL COMPATIBILITY SECTION OR SEE FRONT COVER FOR QR CODE**
Interlogix Concord Programming

BAT-Connect will attempt to scan into the panel as a keypad and as an automation module. Concord panels have limits on the number of automation modules that can be enrolled in the panel:
- Concord Express: 0 automation modules allowed
- Concord 2 & Concord 3: 1 automation module allowed
- Concord 4: 1 automation module allowed, later versions support 2 automation modules

If the panel is Concord 4, full interactive control/status, zone status and access code management is available for partition 1 if BAT-Connect is allowed to scan into the panel as an automation module. **Note:** ensure that other automation modules are deleted before attempting to scan BAT-Connect into the panel.

Virtual keypad mode is available for all Concord panels, allowing control/status of all partitions. Event reporting is available for all partitions.

1. Set up an account at alulaconnect.com.
2. Add the MASTER CODE to the primary account user before connecting the BAT-Connect to the panel. This is required for the BAT-Connect to be able to properly configure the system settings.
3. Disarm the system (all partitions).
4. Enter panel programming mode using the installer code and program the following:

**Note:** Interlogix Concord panels may use different programming locations or the option may not be available. Always refer to the installation manual of the specific panel for programming locations and options.

- Enter a Telephone Number for CS PHONE 1 (shortcut 01000).
- Enter an account number for all partitions that require central station event reporting (shortcuts 0010-0060).
- Enable Contact ID format for CS PHONE 1 (CS PHONE 1 menu, shortcut 01006).
- Verify All Desired Events are enabled for reporting to CS PHONE 1. Open/close reports must be enabled (CS PHONE 1 menu).
- If the panel is Concord 4, delete any automation modules that are enrolled in the panel (Accessory modules/bus devices menu, shortcuts 10000 to 10015).
- Set Access Code Lock option to OFF (shortcut 0003).

**Note:** If the panel is Concord 4 and the version is 4.x or later, the panel supports 2 automation modules, so 1 automation module can remain enrolled in the panel.

5. Exit programming mode and power down the Interlogix Concord system.
6. Connect the Interlogix Concord system to the BAT-Connect as shown in the wiring diagram.
7. Power up the Interlogix Concord system.
8. Perform a bus scan to enroll the BAT-Connect into the Concord panel.
9. If the panel is Concord 4 and BAT-Connect was allowed to scan into the panel as an automation module, automatic configuration will begin shortly after the bus scan.

Automatic configuration should complete about 2 minutes after power up.

During automatic configuration:
- Access codes will be synced with the panel.
- Zone information will be read from the panel. All zones that are enabled in partition 1 will be added to the Alula platform.
Additional Notes for Interlogix Concord Installation

- When user codes are added to the system, the authority levels are not modified. The default user authority includes access to partition 1. If a different authority level is desired, it can be modified on a local keypad using the User Programming Menu.
- Six digit access codes are not supported.
- The BAT-Connect is supervised by the Interlogix Concord panel as a keypad device and an automation device (if allowed by the panel).
- Access code management for the master code and up to 48 normal user codes is supported on Concord 4 panels.

Interlogix Concord Wiring for Interactive Control and Event Reporting

- Interlogix Concord control panels require connection to panel bus (interactive control) and Tip & Ring (event reporting).
- Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel bus wiring. Tip & Ring should be in a separate cable.
- See below for supported Interlogix Concord panels.

Compatible Panels

- Concord 4
- Concord 3 (virtual keypad only)
- Concord 2 (virtual keypad only)
- Concord Express (virtual keypad only)

**REVIEW BAT-CONNECT COMMUNICATOR ALARM PANEL COMPATIBILITY SECTION OR SEE FRONT COVER FOR QR CODE**
1. Set up an account at alulaconnect.com.

2. Configure the panel dealer code and user code 1 in AlulaConnect before connecting the BAT-Connect. This is required for the BAT-Connect to be able to properly configure the system settings.
   
   **Note:** The BAT-Connect should be connected in step 13.

3. Disarm the system (all partitions).

4. Enter panel programming mode on a system keypad using the dealer code and program the following:

   - Increase the number of keypads by 1.
     - The BAT-Connect operates as a keypad. In order to properly configure the panel, the BAT-Connect must be enrolled at keypad address 1. Steps 6-11 will guide you through relocating keypad 1 to the address allocated in this step.
   - Program 4-digit Account Number.
   - Verify zone names are programmed.
     - The BAT-Connect will automatically read zone names from the panel.
   - Verify all CS Zone Reporting Options are configured accordingly.
     - CS reporting options will control the zone type and report code for each zone. All reports are generated directly from the panel.
   - If enrolling an Alula Touchpad and you want the ability to send panic alarms, enable panics for keypad 1.

5. Exit programming mode.

6. Power down the panel.

7. Move the panel operating jumper located on the panel board into the configuration position.

8. Power up the panel.

9. Join keypad configuration on keypad 1 by entering “11123” + “FUNCTION”.

10. Scroll to select the keypad address and move keypad 1 to the open keypad address allocated in step 4.

11. Power down the panel.

12. Move the jumper back into the normal operating mode.

13. Connect the Napco panel and the BAT-Connect as shown in the wiring diagram.
   
   **Note:** Verify a jumper wire is installed between data terminals G and Y.

14. Power up the Napco system.
   
   **Note:** Shortly after power up, the BAT-Connect will begin automatic configuration of the Napco panel. Automatic configuration should complete about 3 minutes after power up.

   During automatic configuration the BAT-Connect will program the following options:
   - A placeholder phone number will be programmed if one does not exist.
   - Opening and Closing Reports will be enabled in the panel but these reports will only be sent to the monitoring station if enabled in AlulaConnect.
   - Access codes will be synced with the panel.
   - AC fail and low battery reporting will be enabled.
   - Zone information will be read from the panel. All zones assigned to partition 1 will automatically be added to the Alula platform.

   **Note:** To remove zones from the Alula platform, do so by one of the two methods below:
   - Disable the zone and default the BAT-Connect to allow it to re-read the zones.
   - On-board hardwire zones can be deleted at alulaconnect.com.

15. Verify proper operation and reporting of all event codes using your control panel’s installation manual.
**Additional Notes for Napco Installation**

- A dealer code is required to properly configure the system. If no dealer code is configured, the BAT-Connect will automatically try the default panel dealer code. (456789)
- Automatic Interior Bypass/Easy Exit panel options should be disabled to allow remote arm away.
- When the BAT-Connect is waiting for the dealer code to be written from the server, the Panel Bus LED will flash every 4 seconds.
- The BAT-Connect supports user codes 4-6 digits in length.
- Ensure dealer code lockout is not enabled (programming location 96, option 1).
- Access codes should be managed from the Alula platform. Any changes made at the local keypad will not be detected.
- Revisions of these panels prior to v30 will not allow a Napco downloader session if the BAT-Connect is installed on the bus.
- The BAT-Connect will automatically configure panel date and time after any power-up reset. Date and time configuration is not supported for panels prior to version 10.
- Access code management for up to 32 normal user codes is supported for Napco P1632 panels. 16 normal user codes are supported for P816 panels.

**Napco GEM P816/ P1632 Wiring for Interactive Control and Event Reporting**

- Napco control panels require connection to panel bus and Tip & Ring.
- Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel bus wiring. Tip & Ring should be in a separate cable.
- See below for supported Napco panels.

**Compatible Panels**
- GEM P816
- GEM P1632

**REVIEW BAT-CONNECT COMMUNICATOR ALARM PANEL COMPATIBILITY SECTION OR SEE FRONT COVER FOR QR CODE**
Napco GEM P800/ P801 Programming

1. Set up an account at alulaconnect.com.
2. Configure the panel dealer code and user code 1 in AlulaConnect before connecting the BAT-Connect. This is required for the BAT-Connect to be able to properly configure the system settings. 
   **Note:** The BAT-Connect should be connected in step 7.
3. Disarm the system.
4. Enter panel programming mode on a system keypad using the dealer code and program the following:
   - Telephone 1 Subscriber ID Number. (Location 30)
   - Verify zone Point ID Report Codes are programmed properly. (Location 61)
     - Point ID Report Codes will control sensor type for each zone. All reports are generated directly from the panel.
   - If enrolling an Alula Touchpad and you want the ability to send panic alarms, verify they are enabled in the panel.
     - PAnics can be enabled in Keypad Features 1 (Location 20).
     - Panic event reporting can be enabled in System Reporting, Telco 1 (Location 36).
5. Exit programming mode.
6. Power down the panel.
7. Connect the Napco panel and the BAT-Connect as shown in the wiring diagram.
8. Power up the Napco system.
   **Note:** Shortly after power up, the BAT-Connect will begin automatic configuration of the Napco panel. Automatic configuration should complete about 2 minutes after power up.
   During automatic configuration the BAT-Connect will program the following options:
   - A placeholder phone number will be programmed if one does not exist.
   - Opening and Closing Reports will be enabled in the panel but these reports will only be sent to the monitoring station if enabled in AlulaConnect.
   - Access code 1 will be synced with the panel.
   - AC fail and low battery reporting will be enabled.
   - Zone information will be read from the panel.
     - All six on-board hardwired zones will automatically be enrolled into the BAT-Connect.
     - Zones 7 and 8 will be enrolled if wireless sensors are configured at programming locations 77 and 78.
   **Note:** Zones can be removed from the Alula platform at alulaconnect.com.
9. Verify proper operation and reporting of all event codes using your control panel's installation manual.

**Additional Notes for Napco Installation**
- A dealer code is required to properly configure the system. If no dealer code is configured the BAT-Connect will automatically try the default panel dealer code. (4567)
- When the BAT-Connect is waiting for the dealer code to be written from the server, the Panel Bus LED will flash every 4 seconds.
- An entry/ exit zone must be tripped in order to arm away.
- Access code management for up to 8 normal user codes is supported for Napco P800 and P801 panels. If user code 8 is configured as a duress code, the BAT-Connect will support management of 7 normal user codes.
Napco GEM P800/ P801 Wiring for Interactive Control and Event Reporting

- Napco control panels require connection to panel bus and Tip & Ring.
- Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel bus wiring. Tip & Ring should be in a separate cable.
- See below for supported Napco panels.

**Compatible Panels**
- GEM P800
- GEM P801

**REVIEW BAT-CONNECT COMMUNICATOR ALARM PANEL COMPATIBILITY SECTION OR SEE FRONT COVER FOR QR CODE**
**Generic Alarm Panel Programming**

1. Set up an account at alulaconnect.com.
2. Disarm the system (all partitions).
3. Enter panel programming mode using the installer code and program the following:
   - Enter a Telephone Number into the Central Station Phone Number field
   - Enter Customer Account Number for all partitions that are enabled in the panel
   - Enter Reporting Codes
   - Program panel to transmit events in Contact ID format

4. Exit programming mode and power down the system.
5. Connect the system and the BAT-Connect as shown in the wiring diagram.
6. Power up the system.
7. Verify proper operation and reporting of all event codes using your control panel’s installation manual.

**Generic Alarm Panel Wiring for Event Reporting**

- Any control panel can be supported for event reporting as long as it provides Tip & Ring connection and transmits events in Contact ID format.
- Tip & Ring should not be wired to BAT-Connect using the same multi-conductor cable as the panel wiring. Tip & Ring should be in a separate cable.
Generic Alarm Panel Keyswitch Arming Requirements

- An arming status output on the alarm panel will be used to signal to the BAT-Connect (Y IN terminal) that the panel has entered Arm/Disarmed state.
  * A pull-up resistor must be installed from Y IN to 12V. The value of the pull-up resistor can be 1k-5k.
  * BAT-Connect requires the arming status output to be stable for more than 3 seconds to register an arming level change.
  * The output level when the panel is disarmed is learned by the BAT-Connect by pressing and holding the enroll button until the Device Link LED begins to flash. The disarm output level can only be enrolled one time. If the level is enrolled incorrectly, change it by defaulting the BAT-Connect.
  * The panel's arming status output typically must be programmed for keyswitch operation. Refer to the specific panel manual for keyswitch output operation setup instructions.
- The BAT-Connect provides an open collector output OC1 that is pulsed for 1 second when an arm or disarm command is received from the Alula platform.
  * OC1 must be connected to the panel's keyswitch input.
  * The panel's keyswitch input typically must be programmed for keyswitch operation. Refer to the specific panel manual for keyswitch input operation setup instructions.

Generic Alarm Panel Keyswitch Arming Set-Up Procedure and Wiring

1. Disarm the panel.
2. Connect Y IN and OC1 as described in the Generic Alarm Panel Keyswitch Arming Requirements section, and in accordance to specific directions described by the panel's keyswitch arming documentation.
3. Program the panel as specified in its documentation.
4. With the panel disarmed, press the enroll button on the BAT-Connect.
5. Arm the panel for 10 seconds, then disarm the panel for at least 10 seconds. The BAT-Connect will not enable keyswitch arming until an arming cycle is performed.
Operation Overview

Events are reported to the Alula server and the central station. All events use Contact ID reporting codes.

Ensure that the required events are enabled for reporting. (See panel programming sections.)

Remote control of the system can be done through the Alula apps on Honeywell Vista, DSC, and Interlogix NX panels. Arming and disarming control and status apply only to partition 1. Keyswitch arming can be used for remote control of any alarm panel that can be configured for keyswitch arming.

Enroll/Reset button

- Hold for 2 seconds to enable Device Link enroll mode (Device Link LED will flash)
- Hold for 5 seconds to reset the BAT-Connect
- Hold for 10 seconds to factory default the BAT-Connect

* All LEDs flash on then off at 5 seconds and again at 10 seconds when the BAT-Connect is factory defaulted.
* If BAT-Connect was previously connected to another panel, it should be defaulted.

LED indicators

<table>
<thead>
<tr>
<th>LED</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Pulses every second when AC power is present</td>
</tr>
<tr>
<td>Panel Bus</td>
<td>Flashing fast - attempting to discover panel type</td>
</tr>
<tr>
<td></td>
<td>Flashing slow - panel identified, attempting to connect to panel</td>
</tr>
<tr>
<td></td>
<td>On - connected to panel</td>
</tr>
<tr>
<td>Device Link</td>
<td>Flashing - Device Link enroll mode is enabled</td>
</tr>
<tr>
<td></td>
<td>On - Device Link network is operational</td>
</tr>
<tr>
<td>Cellular, Wi-Fi, Ethernet</td>
<td>Off - interface not ready, or interface not used</td>
</tr>
<tr>
<td></td>
<td>Flashing slow - attempting server connection using this interface</td>
</tr>
<tr>
<td></td>
<td>On - connected to server using this interface</td>
</tr>
<tr>
<td></td>
<td>Short blink every 2 seconds (cellular LED only) - this is a backup interface, last test was successful</td>
</tr>
<tr>
<td>Update</td>
<td>Off - no connection to server</td>
</tr>
<tr>
<td></td>
<td>Flashing - update is in progress</td>
</tr>
<tr>
<td></td>
<td>On - all firmware is up to date</td>
</tr>
<tr>
<td>Trouble</td>
<td>Green - no trouble conditions exist</td>
</tr>
<tr>
<td></td>
<td>Yellow - trouble conditions exist (cover tamper, wall tamper, server communications failure)</td>
</tr>
</tbody>
</table>

Note: trouble LED is available on BAT-Connect Rev J or later

Cellular signal bar LEDs indicate the quality of the cellular connection. A minimum of two signal bar LEDs is recommended.

<table>
<thead>
<tr>
<th>Number of Signal Bar LEDs Lit</th>
<th>Cellular Signal Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Bad (0-14)</td>
</tr>
<tr>
<td>1</td>
<td>Marginal (15-19)</td>
</tr>
<tr>
<td>2</td>
<td>Acceptable (20-24)</td>
</tr>
<tr>
<td>3</td>
<td>Good (25-30)</td>
</tr>
<tr>
<td>4</td>
<td>Best (30+)</td>
</tr>
</tbody>
</table>

Note: During a 2-way voice session, the first two cellular LEDs will flash.
**Pro Tips**

- Do not mount inside of a metal can. The cellular and Wi-Fi antennas need to be in free air to communicate.
- Default the BAT-Connect if it was wired up before moving keypad 1 to a different address.
- Mount as high in the building as possible to optimize cellular strength.
- An auxiliary power supply may be used to power BAT-Connect. This power supply must have a backup battery to provide power if AC power fails. Ensure voltage is 12 VDC. A common ground must be run from the BAT-Connect's ground to the panel's ground terminal.
- The uDownloader which allows for uploading and downloading of alarm panels can be found at AlulaConnect.com. (Dealer Portal > Resources)
- If 2-way voice alarm verification is required, ensure the alarm panel is configured for 2-way voice support. For 2-way voice, telco event capture event reporting must be used. Refer to the alarm panel installation manual for additional information.
- The BAT-Connect supports up to 48 users, or the maximum supported by the alarm panel. Consult your alarm panel installation manual for additional information.
- If your panel has a configurable Auto Stay option, it needs to be disabled in order to remotely Arm Away.

BAT-Connect will send any signal sent from the panel it is connected to. Additionally, the following signals can be generated from the BAT-Connect directly.

<table>
<thead>
<tr>
<th>Signal</th>
<th>Report Code</th>
<th>Device - Zone/User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral Tamper</td>
<td>341</td>
<td>BAT Connect – 0 Touchpad – 600+ Touchpad number</td>
</tr>
<tr>
<td>Peripheral Trouble (Supervisory)</td>
<td>330</td>
<td>Touchpad – 600+ Touchpad number</td>
</tr>
<tr>
<td>Peripheral Low Battery</td>
<td>338</td>
<td>Touchpad – 600+ Touchpad number</td>
</tr>
<tr>
<td>Peripheral AC Fail</td>
<td>342</td>
<td>Touchpad – 600+ Touchpad number</td>
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<tr>
<td>Comm Test Fail</td>
<td>358</td>
<td>BAT Connect - 3 (cellular interface)</td>
</tr>
<tr>
<td>Expansion Module Failure</td>
<td>333</td>
<td>BAT Connect - virtual interface number 0-3 (0-ethernet, 1-wifi infrastructure, 2-wifi soft AP, 3-cellular)</td>
</tr>
<tr>
<td>Comm Test</td>
<td>601</td>
<td>Manual Trigger from AlulaConnect</td>
</tr>
</tbody>
</table>
# Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Troubleshooting Steps</th>
</tr>
</thead>
</table>
| **Panel Bus LED Blinking**                   | **General**<br>1. Incorrect wiring.<br>2. Unsupported panel version.<br>3. Unsupported panel model.<br>4. Panel is in Installer Program Mode.  
**Honeywell Vista**<br>1. AUI not enabled.<br>2. AUI used for some other function.<br>3. LRR not enabled.<br>4. Another LRR or IP/GSM device connected to panel bus. |
| **Ethernet, Wi-Fi, and Cellular LED Flashing Slow** | 1. If registration information changes after the BAT-Connect is powered up, perform a factory default.<br>2. For Wi-Fi and ethernet, ensure internet connectivity at the router. |
| **Ethernet LED Off**                         | 1. Confirm cable connected.<br>2. Ensure router is powered.<br>3. Ensure UDP ports 1234 and 1235 are open in router/modem settings. |
| **Wi-Fi LED Off**                            | 1. Ensure router is powered.<br>2. Ensure Wi-Fi credentials are correct. |
| **Cellular LED Off**                         | Verify sufficient signal strength for cellular (see Cellular signal bar table in Operation Overview section). |
| **Supervisory Trouble Information**         | **Honeywell Vista - LRR Fault/bF error**<br>1. Verify panel is 4.0 or later.<br>2. Verify that no other LRR devices are connected to the panel bus. |
| **No Alarm CS Reports**                      | 1. Incorrect wiring.<br>2. Panel Configuration for alarm reporting not set up properly. Please refer to the programming section for your panel type.<br>3. Account is not properly configured for event relay. |
| **Poor Cellular Signal Strength**           | 1. Make sure antenna is securely snapped into the circuit board.<br>2. Reposition the unit (move or rotate).<br>3. Move the unit higher in the building.<br>4. Move the unit away from metal objects (appliances, ducts).<br>5. Move the unit closer to a window.<br>6. Move to one of the higher performance antenna options (see Antenna Options section). |
Antenna Options

**Internal antenna - RE048 (Included with BAT-Connect)**
- Good performance
- Offers a compact solution

**Wall Drop antenna - RE036**
- 8-foot antenna
- Better performance
- Antenna can be hidden in the wall

**Wall Drop antenna - RE036-0**
- 1-foot antenna
- Better performance
- Antenna can be hidden in the wall
## Antenna Removal and Installation

1. Pull up gently on the internal antenna’s connector to release it from the cellular module.
2. Remove the internal antenna.
3. Break out the plastic plug in hole at top of enclosure.
4. Install the large (MMCX) end of the supplied cable in hole in top of enclosure, and secure with supplied nut.
5. Snap the small end of the supplied cable into the circuit board.
6. Thread the high gain antenna to the MMCX connector at top of enclosure.

### Side Mount Antenna - RE046
- Best performance
- Offers optimal cellular performance

### Other cellular antenna options (requires Cellular External Antenna Cable, part number ANTENNA-CBL-5)
- Nearson T6155AM-LTE-S
- Taoglas™ TG.30.8113
- Taoglas OMB.6912.03F21 (rated for Outdoor use)
- Laird™ DBA6927C1-FSMAM
# BAT-Connect Communicator

## Alarm Panel Compatibility Guide

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Part #s
- BAT-Connect-V (Verizon)
- BAT-Connect-A (AT&T)
Specifications

Physical

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<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Housing Dimensions</td>
<td>8.5 x 5.0 x 1.3 inches (21.6 x 12.7 x 3.3 cm)</td>
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<tr>
<td>Weight</td>
<td>10.0 ounces (283.5 g)</td>
</tr>
<tr>
<td>Mounting Fasteners</td>
<td>#6 screws and wall anchors (included)</td>
</tr>
<tr>
<td>Cover Securing Screw</td>
<td>#4 screw (included)</td>
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Device Specification

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<tr>
<td>Reported Indications</td>
<td>Cover Tamper, Wall Tamper</td>
</tr>
<tr>
<td>Current Draw</td>
<td>Standby: 100mA, Maximum: 300mA</td>
</tr>
<tr>
<td>Input Voltage</td>
<td>9 - 14 VDC</td>
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Environmental

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<td>Operating Temperature</td>
<td>32°F to 120°F (0°C to 48.9°C)</td>
</tr>
<tr>
<td>Maximum Humidity</td>
<td>85% non-condensing relative humidity</td>
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Accessories

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<td>Antenna, LTE, MMCX/M R/A, 90mm Cable</td>
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<tr>
<td>RE036</td>
<td>Antenna, LTE, MMCX, 2.5m Cable</td>
</tr>
<tr>
<td>RE036-0</td>
<td>Antenna, LTE, MMCX, 0.3m Cable</td>
</tr>
<tr>
<td>RE046</td>
<td>Antenna Assembly, LTE, Sidemount, 1-piece bag</td>
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<tr>
<td>ANTENNA-CBL-5</td>
<td>Cellular External Antenna Cable, 5 pieces</td>
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<td>RE049</td>
<td>BAT-Connect, DSC PC-Link Cable</td>
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Models

<table>
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<td>BAT-CONNECT-V</td>
<td>BAT-Connect, Verizon™</td>
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<td>BAT-CONNECT-A</td>
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Certification

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TRADEMARKS

Alula, AlulaConnect, and BAT-Connect are trademarks owned by Alula Holdings, LLC. Wi-Fi is a trademark owned by the Wi-Fi Alliance. GOOGLE PLAY is a trademark of GOOGLE LLC. APP STORE is owned by APPLE INC. TAOGLAS is a trademark owned by TAOGLAS Group Holdings Limited. LAIRD is a trademark of LAIRD. Intel Property II, L.P. Verizon is a trademark of Verizon Trademark Services LLC. Honeywell is a registered trademark and VISTA is a trademark owned by Honeywell International Inc. DSC is a registered trademark owned by TYCO. PowerSeries is a registered trademark owned by Tyco Safety Products Canada Ltd. INTERLOGIX is a trademark of UTC. NAPCO is a trademark owned by NAPCO SECURITY TECHNOLOGIES, INC. Alula products will function with one of either Honeywell, Interlogix, Napco, or DSC systems. However, no Alula product is produced by, endorsed by, nor is officially associated with Honeywell, Interlogix, Napco, or DSC. Alula recommends verifying proper enrollment and operation, per control panel installation instructions, at installation.

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 cause undesired operation.

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

RF Exposure:

To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended.

Cellular

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Wi-Fi

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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.

Cellular

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Specifications subject to change without notice