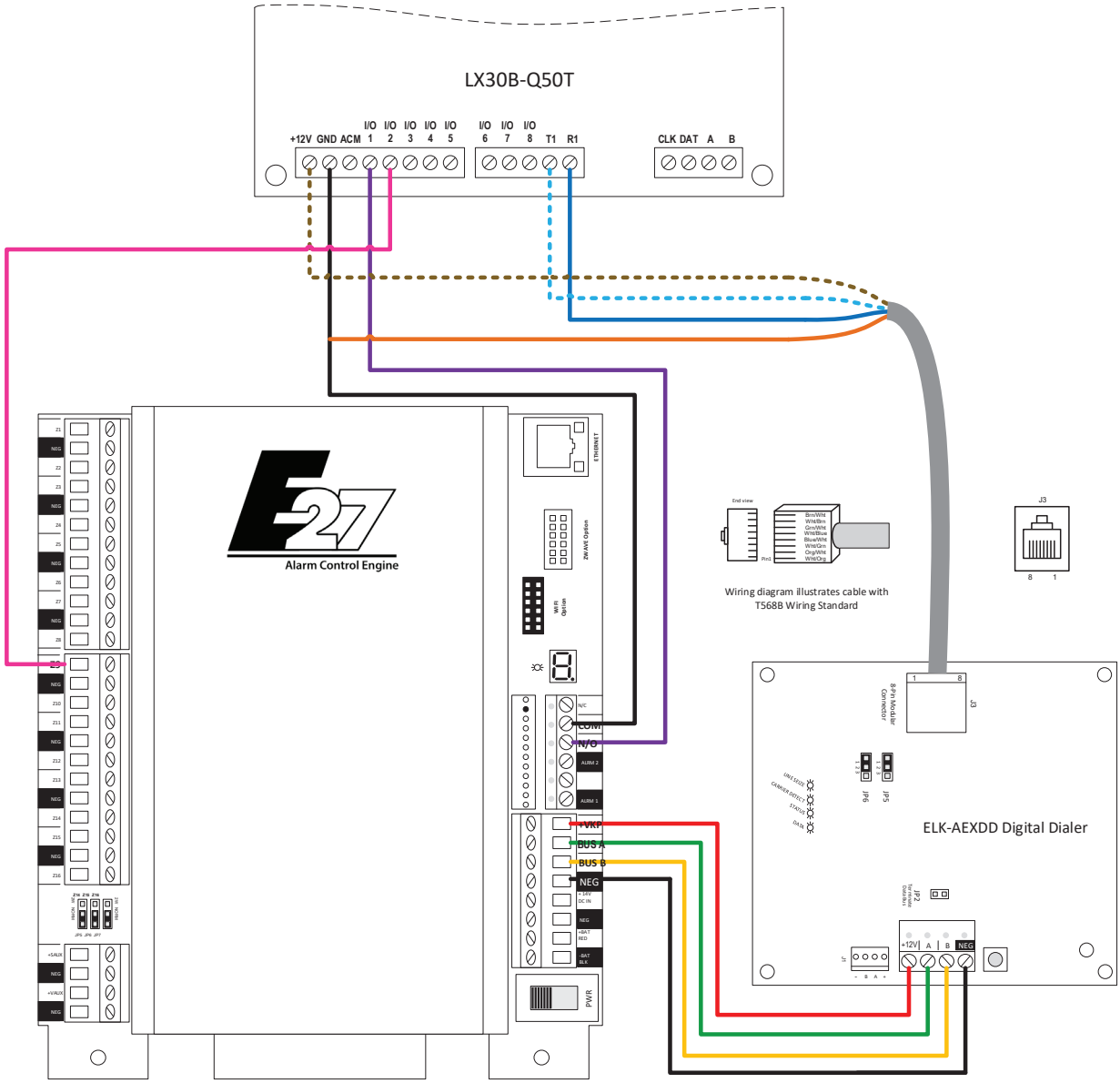
ELK-E27 Alarm Engine and Alarm.com LX30B Universal Communicator Setup Guide

APPLICATION:

The Alarm.com LX30B-Q50T Universal Communicator is a dial capture based cellular communicator. It captures alarm communications from the ELK-AEXDD Digital Dialer for the E27 Alarm Engine and forwards event signals to a monitoring center via AT&T cellular service. Once installed and configured, this communicator also allows the E27 to connect to the Alarm.com platform providing basic interactive features via the Alarm.com app; check system status, get alerts, and remotely arm and disarm. This setup guide will provide specific wiring and configuration details for using the Alarm.com LX30B Universal Communicator with the ELK E27 Alarm Engine panel.

* * IMPORTANT NOTE * *

Event reporting and interactive services require an active Alarm.com subscription and are subject to Alarm.com subscription fees. **Please refer to Alarm.com installation instructions for specific details on the proper mounting, installation, and activation guidelines for the Alarm.com LX30B Universal Communicator**



WIRING INSTRUCTIONS

1. Wire the ELK-AEXDD to the E27 RS485 data bus, using 4 conductors to connect terminals BUS +12V, Data A, Data B, and Neg from control to terminals +12V, A, B, and Neg on the AEXDD.
2. The LX30B-Q50T requires 12VDC operating voltage, with peak current draw of 125mA. The communicator may be powered through the AEXDD modular connector (J3) on pins 2 & 7. This requires an jumper to be installed on pins 1&2 of jumpers JP5 and JP6 on the AEXDD. Connect the +12V terminal of the communicator to the PIN 7 on J3. Connect the GND terminal of the communicator to the to the PIN 2 on J3.

ALTERNATIVE POWER OPTIONS

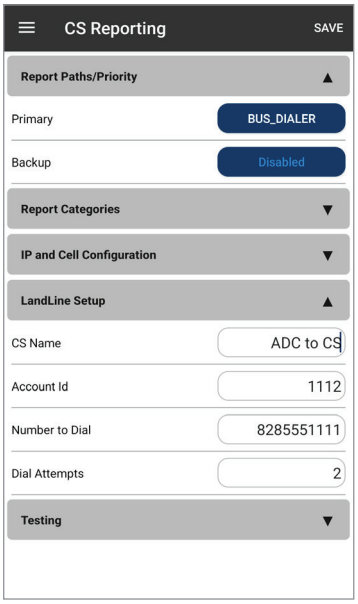
- If desired, the communicator can be powered from the E27 using the +VAUX and NEG terminals on the lower left side of the main board.
- An auxiliary power source may also be used . The auxiliary power source must have a common negative with the E27 control to ensure proper operation of the communicator.

3. Connect the T1 terminal of the communicator to PIN 5 of the J3 modular connector on the AEXDD. Connect the R1 terminal of the communicator to PIN 4 of the J3 modular connector on the AEXDD.
4. A programmable output is used to indicate current E27 arm status. The communicator requires a switched negative trigger on I/O 1 for this purpose. A dry contact relay output from the E27 main board or AEXOU output expander can be used to switch negative to the communicator. Connect the GND terminal of the communicator to the COM terminal of the relay output. Connect the I/O 1 terminal of the communicator to the N/O (normally open) terminal of the relay (E27 main board Output 11 shown in wiring diagram).
5. Remote arm/disarm functionality requires the communicator to be connected to a input on the E27 board configured for "keyswitch" operation. Connect the I/O 2 terminal of the communicator to the desired zone input on the E27 main board, or AEXIN input expander (E27 main board Zone 9 shown in wiring diagram).

CS REPORTING CONFIGURATION

Event reporting through the LX30B communicator and Alarm.com requires CS Reporting configuration for the Digital Dialer.

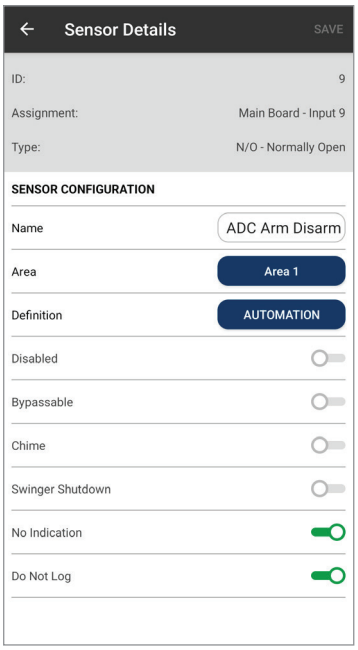
1. Using the ElkConnect app, connect to the E27 control. From the main menu, navigate to CS Reporting.
2. If the LX30B will be the primary reporting path, set Primary to BUS_DIALER, in the Report Path/Priority section. If the LX30B will be used as a backup reporting path, set Backup to BUS_DIALER, in the Report Path/Priority section. (Only one report path may be set to BUS_DIALER)
3. Enable the desired categories in the Reporting Categories section.
4. In the Land Line Setup section, enter the desired name in the CS Name field.
5. Enter the reporting account number in the Account ID field.
6. Enter the CS receiver telephone number in the Number to Dial field.
7. Enter the desired dial attempts in the Dial Attempts field (default =2).
8. Tap SAVE at the top to save changes



SENSOR (ZONE) CONFIGURATION

Remote arming and disarming from the Alarm.com app requires a zone to be configured for "keyswitch" operation.

1. Using the ElkConnect app, connect to the E27 control. From the main menu, navigate to Sensors (Zones).
2. Create a new sensor or edit an existing sensor that will be assigned to the physical input connected to the LX30B.
   - Name the sensor as desired
   - Assign the sensor to the appropriate area
   - Set the Definition to Automation
   - Enable the No Indication attribute. This will suppress audible and visual indicators for the sensor, which are not needed in this application.
   - Enable the Do Not Log attribute. This will suppress log entries for the sensor, which are not needed in this application.
3. Tap SAVE at the top to save changes.
4. The physical input connected to the LX30B needs to be assigned to the Sensor and configured to N/O Normally Open.
   - If the input is on the main board, navigate to Main Board I/O from the main menu. In the Input section, locate the desired input and tap the left button to set the Hookup Type to N/O Normally Open. Tap the right button and select the Sensor configured in Step 2. Then tap SAVE to save changes.
   - If the input is on the AEXIN expander, navigate to Bus Devices from the main menu. Choose the appropriate device in the Input Expander section. In the Input section, locate the desired input and tap the left button to set the Hookup Type to N/O Normally Open. Tap the right button and select the Sensor configured in Step 2. Then tap SAVE to save changes.



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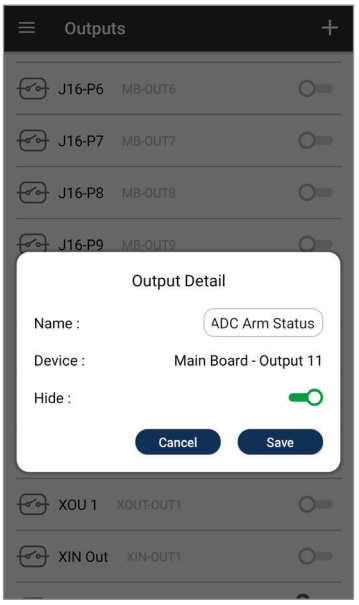
ARM STATUS OUTPUT CONFIGURATION

An output must be configured to provide an indication of arm status to the Alarm.com app.

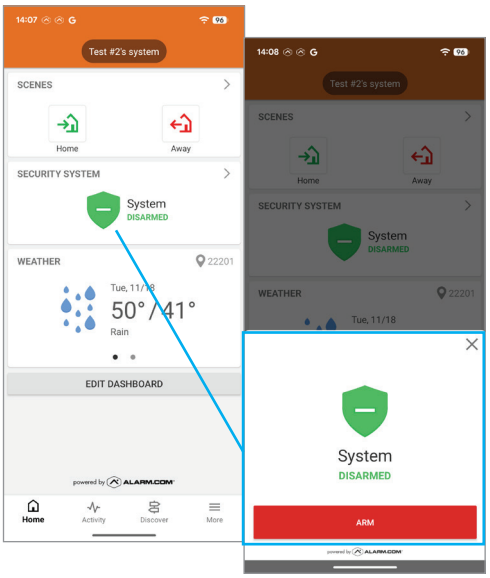


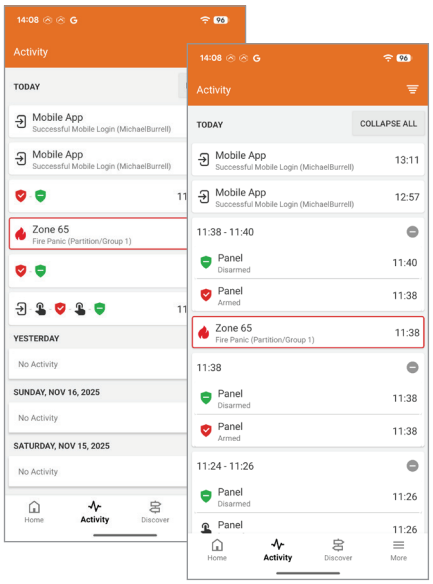
1. Using the ElkConnect app, connect to the E27 control. From the main menu, navigate to Outputs.
2. Create a new output or edit an existing output that will be assigned to the physical output connected to the LX30B.
   - Name the Output as desired
   - Enable the Hide option for the output. This will hide the output from user interfaces to avoid unintended activation that may cause synchronization issues with the Alarm.com app.
3. Tap SAVE at the top to save changes.
4. The physical output connected to the LX30B needs to be assigned to the logical Output configured in step 2.
   - If the output is on the main board, navigate to Main Board I/O from the main menu. In the Outputs section, locate the desired output and set the assignment to the output configured in Step 2. Then tap SAVE to save changes.
   - If the output is on the AEXOU expander, navigate to Bus Devices from the main menu. Choose the appropriate device in the Output Expander section. In the Outputs section, locate the desired output and set the assignment to the output configured in Step 2. Then tap SAVE to save changes.

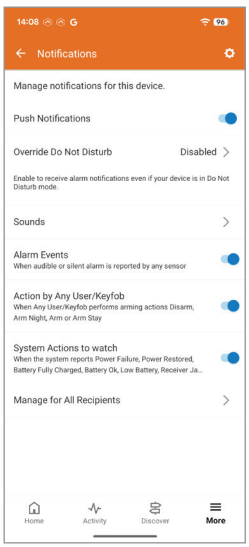
Use the E27 Rules engine from the ElkConnect web portal to create rules that will change the state of the Arm Status output and control the operation of the "keyswitch" automation zone

Rule Name	Rule	Editor Tools
Enabled Rules		
Rule 1	WHENEVER "AREA NAME" Area ARM STATUS IS DISARMED BY Any User THEN TURN OFF "OUTPUT NAME" Output	
Rule 2	WHENEVER "AREA NAME" Area ARM STATUS IS ARMED TO ANY MODE BY Any User THEN TURN ON "OUTPUT NAME" Output	
Rule 3	WHENEVER "ZONE NAME" Sensor (Zone) BECOMES SECURE IF THE ARM STATUS FOR "AREA NAME" Area IS DISARMED THEN ARM THE "AREA NAME" Area TO AWAY ELSE DISARM THE "AREA NAME" Area	

USING THE ALARM.COM APP







HOME PAGE

The SECURITY SYSTEM section of the Home Page displays the current arm status of the E27. Tap shield to access Arm/Disarm Options.

ACTIVITY

This Activity page displays system activity, including logins, arm/disarm event, alarm events, system troubles, etc. Entries may be grouped together based on time. Tap to expand.

NOTIFICATIONS

Tap More in the bottom menu, then tap Notifications. This page provides settings to enable/disable push notifications and configure sound settings.