alula™ Installation Guide: RE508X & RE508XC Universal Hardwire Translator™

Features

- Selectable wireless panel compatibility
- Rechargeable backup battery
- Automatic zone polarity and end of line detection
- Battery backed 12VDC output for powered zones
- Cover tamper
- Certified to UL1023, ULC1023, UL1610, and ULC S304

Quick Setup

1 MOUNT AND WIRE
- **A** Select a mounting position and location.
- **B** Wire the zones.
- **C** Connect 12VDC output to powered zones, if any.
- **D** Connect the power supply to the translator.
  - Translator has a 90 second lockout after power up.

Wall mounting screw locations

Wall Tamper (Do not overtighten mounting screw)

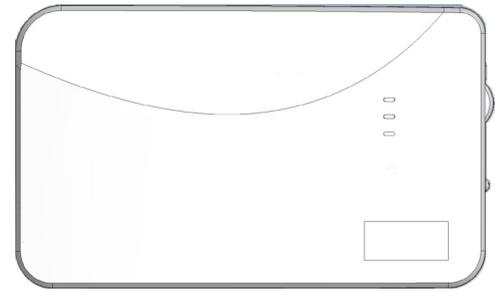**2** TRANSLATOR CONFIGURATION
- **A** Select the brand of panel that the translator must talk to using the "PANEL SELECT" knob.
- **B** Configure Zones.
  - No zone configuration is necessary for installations with normally closed zones that don't require tamper detection.
  - Installations with other zone types: Refer to the Advanced Setup, step 2.

(Mounting hardware not included. Use two #4 or # 6 screws for mounting)

3 PANEL ENROLLMENT (For full zone enrollment instructions, refer to Advanced Setup, step 3)
- **A** Enroll Translator into Panel.
  - Trip the translator tamper to enroll the translator into the panel (For Honeywell® and 2GIG® panels select loop 1).
    -or-
  - Enter translator ID into panel. The translator's base ID is printed on the bar code label and ends with a 0.
- **B** Enroll Zones into panel (not required for Cryptix® (Connect+™) Installations)
  - With the cover open, trip each zone to enroll into to the panel (For Honeywell® and 2GIG® panels select loop 1).
    -or-
  - Enter ID into panel. The zone ID is the translator's base ID with the last digit replaced with zone number 1-8.
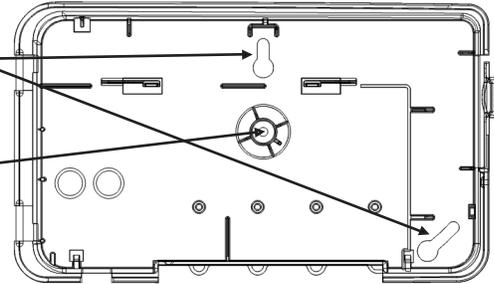- **C** Finish setup of each zone at the panel.

4 FINISH
- **A** Close the cover. Test and verify proper operation of the sensors at the panel.
- **B** Cut the lock wire to lock the translator (For more information on locking, refer to Advanced Setup, step 4).
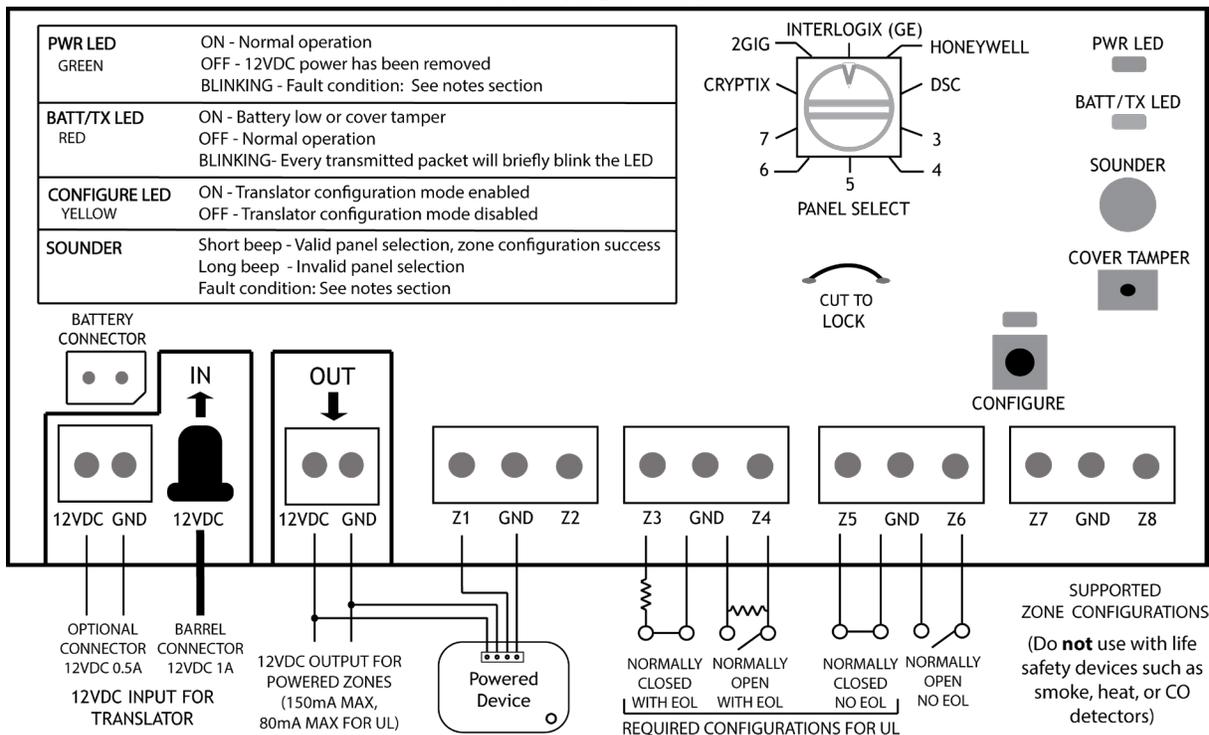- **C** Secure cover with screw.

WIRING DIAGRAM

PWR LED GREEN	ON - Normal operation OFF - 12VDC power has been removed BLINKING - Fault condition: See notes section
BATT/TX LED RED	ON - Battery low or cover tamper OFF - Normal operation BLINKING- Every transmitted packet will briefly blink the LED
CONFIGURE LED YELLOW	ON - Translator configuration mode enabled OFF - Translator configuration mode disabled
SOUNDER	Short beep - Valid panel selection, zone configuration success Long beep - Invalid panel selection Fault condition: See notes section

PANEL SELECT

2GIG — INTERLOGIX (GE) — HONEYWELL
CRYPTIX — DSC
7 — 3
6 — 4
5

PWR LED
BATT/TX LED
SOUNDER
COVER TAMPER

CUT TO LOCK

CONFIGURE

BATTERY CONNECTOR

IN ↑   OUT ↓

12VDC GND   12VDC   12VDC GND   Z1 GND Z2   Z3 GND Z4   Z5 GND Z6   Z7 GND Z8

OPTIONAL CONNECTOR 12VDC 0.5A   BARREL CONNECTOR 12VDC 1A

12VDC INPUT FOR TRANSLATOR

12VDC OUTPUT FOR POWERED ZONES (150mA MAX, 80mA MAX FOR UL)

Powered Device

NORMALLY CLOSED WITH EOL   NORMALLY OPEN WITH EOL

NORMALLY CLOSED NO EOL   NORMALLY OPEN NO EOL

REQUIRED CONFIGURATIONS FOR UL

SUPPORTED ZONE CONFIGURATIONS

(Do **not** use with life safety devices such as smoke, heat, or CO detectors)

Advanced Setup

① MOUNT AND WIRE

A Select a mounting position and location.
- Mount the translator at least 5 feet from the Control Panel's receiver.
- Do NOT mount the translator in a metal can or on a metal surface.
- Verify adequate RF signal strength at the panel before permanently mounting.

B Wire the zones.
- End of line resistors are not required.
- Normally closed zones may have end of line resistors up to 15k ohms.
- Normally open zones may have end of line resistors down to 750 ohms.
- Do NOT put power on zone input terminals.
- The plastic loops along the bottom edge of the translator housing may be used to secure the zone wiring with tie wraps.

C Connect 12VDC output to powered zones, if any.
- 12VDC output of the translator must be used to power any powered zones. Do NOT use an external power supply to power zones.

D Connect the power supply to the translator using either the supplied barrel connector or flying leads.
- Translator has a 90 second lockout after power up. During this time no zone activity will be transmitted and the green and red LEDs will alternate on and off every second.
- Rotate the barrel plug down to the right so the wires exit the enclosure through the strain relief area.
- Ensure the backup battery connector is plugged into the translator.
- Do not connect to a receptacle controlled by a switch. Ne pas se connecter à une prise contrôlée par un interrupteur.
- In the United States, the transformer must be secured to an outlet.
- In Canada, the transformer must NOT be secured to an outlet.

② TRANSLATOR CONFIGURATION

A Select the brand of panel that the translator must talk to using the "PANEL SELECT" knob.

B Configure Zones:
- Zone configuration is not necessary for installations with normally closed zones that don't require tamper detection.

Installations with other zone types: Follow steps below.

a) Put all zones into normal (non-alarm) state.

b) Press and release the CONFIGURE button to enter translator configuration mode. The yellow LED will turn on when configuration mode is entered. Configuration mode can not be entered during the 90 second power up lockout.
- Translator will learn normal state for each zone.
- Zone tampers will now be detected, but are transmitted to the panel as "alarm."

c) [Optional] Cycle each zone to alarm and back to normal.
- Zone tampers will now be transmitted to the panel as "tamper."

d) Press CONFIGURE button to exit translator configuration mode. The yellow LED will turn off when the translator configuration mode is exited.
- Normally closed zones can be cycled at the sensor, or by a break-and-make at the connection to the translator.
- Normally open zones can be cycled at the sensor, or by a shorting across the connection to the translator.

② TRANSLATOR CONFIGURATION (continued)

- Configuration mode ends automatically when the cover is closed or 30 minutes after the last action.
- When re-entering translator configuration mode, zones must be in their normal state. However, previously programmed settings are retained for each zone. There is no need to re-configure every zone if the intention is to modify a subset of the zones.
- Configuration mode is locked out 24 hours after power-up. To re-enable configuration mode, the translator must be power-cycled by removing both the 12VDC input power and backup battery for at least 5 seconds.

③ PANEL ENROLLMENT

A Enroll Translator into Panel:
- Trip the cover tamper to enroll the translator into the panel.
  -or-
- Enter ID into panel. The translator's base ID is printed on the bar code label and ends with a 0.

  (For Honeywell® and 2GIG® panels, select loop 1)

B Enroll Zones into panel (non-Cryptix Installations):
- With the cover open, trip each zone to send an enrollable zone transmission to the panel.
  -or-
- Enter ID into panel. The zone ID is the translator's base ID with the last digit replaced with zone number 1-8.

C Finish setup of each zone at the panel. Below are guidelines on how to enroll the translator and zones into your panel. Refer to the panel installation manual for complete panel instructions.

Cryptix ® (Connect+)

A *Translator and Zone enrollment:*
  a) Press the enroll button on the panel.
  b) Trip the translator cover tamper to enroll the translator.
  c) Finish setup of each zone at the online portal.

Interlogix ® (formerly GE ®)

A Translator enrollment:
  a) Enter Learn Sensor mode.
  b) At the Trip Sensor prompt: Trip the translator's cover tamper to enroll the translator into the panel.
  c) Select Group 13 instant perimeter

B Sensor enrollment:
  a) Enter Learn Sensor mode.
  b) At the Trip Sensor prompt: With the translator cover open, trip each zone to enroll it.
  - For the first 24 hours after powerup, all GE zone trips will transmit a temporary tamper for enrollment if the translator cover is open.
  c) Setup sensor for desired behavior.

Honeywell ®

A Translator enrollment:
  a) Enter Programming mode.
  - Zone Type: 3 (Perimeter).
  - Input Type: 3 (Supervised RF).
  b) When prompted: Trip the translator's cover tamper multiple times or enter the translator's ID number, which is printed on the unit.
  c) Use loop 1 for translator itself.

B Sensor enrollment:
  a) Enter Programming mode.
  - Set up the sensor for the desired behavior.
  b) When prompted: Perform the typical Honeywell enrollment sequence or enter the zone ID number.
  - Ensure loop 1 is selected.

3 PANEL ENROLLMENT (continued)

2GIG ®

  A Translator enrollment:
    a) Enter RF enrollment mode
     • Sensor Type: (03) perimeter
     • Equipment Code: For GC3, use (0873) Take-345.
      For other panels, (0862) DW10-345 may also be used.
    b) At "Enter RF Serial Number"
     • Press SHIFT, Learn, then trip the translator cover
      tamper to enroll the translator
      -or-
     • Enter translator's base ID number printed on the unit
    c) Equipment Age: (0) new
    d) Loop Number: (1)

  B Sensor enrollment:
    a) Enter RF enrollment mode.
    b) Setup the zone for the desired behavior.
    c) At "Enter RF Serial Number"
     • Press SHIFT, Learn, then trip sensor
      -or-
     • Enter zone ID number (translator's base ID with the
      last digit replaced with zone number 1-8).
    d) Equipment Age: (0) new
    e) Loop Number: (1)

DSC ®

  A Translator enrollment:
    a) Enter Wireless Enrollment mode.
    b) Trip the translator cover tamper to enroll the translator.
    c) Zone Type: 03 (instant)
     • For the first 24 hours after power-up, all translator
      tamper trips will send a temporary "open" for
      enrollment purposes.

  B Sensor enrollment:
    a) Enter Wireless Enrollment Mode.
    b) Trip each zone to initiate enrollment.
    c) Confirm ESN, Enter Zone #, and Zone Type.
    d) Setup the zone for the desired behavior.

Qolsys ®

 • Qolsys IQ panel uses Interlogix 319.5MHz protocol.
 • DSC Touch panel made by Qolsys uses DSC 433.92MHz
  protocol.

4 FINISH

  A Close the cover. Test and verify proper operation at the
    panel. Ensure all zone alarms are reported properly to the
    central station.

  B Translator Locking: Locking the translator locks all
    translator configuration settings and provides takeover
    protection.
    a) Ensure all zones are functioning as desired.
    b) Carefully review the effects of manual translator locking
      before proceeding:
     • Translator can not be factory defaulted.
     • Existing zone configurations can not be changed.
     • Panel selection can not be changed.
     • Manual translator **LOCKING CAN NOT BE UNDONE**.
    c) Open the translator cover and cut the lock wire. The green
      and red LED will flash, and the sounder will beep to
      confirm.
     • *NOTE:* If the lock wire is not cut, the translator
      will automatically lock after 30 days of continuous
      operation. The effects are the same as manual locking;
      however, the automatic lock can be reset by power
      cycling the translator while the cover is open.

  C With the cover closed, insert the cover securing screw into the
    screw hole near the cover latch.

Notes

ZONES

 • Translator has a 90 second lockout after power up.
  During this time:
   • No zone activity will be transmitted.
   • Green and red LEDs will alternate on and off every second.
   • Configuration mode can not be entered.
 • Powered zones are turned off when the battery gets low.
 • Powered zones have a four hour minimum battery backup after
  power failure.
 • Non-powered zones have 24-hours minimum battery backup
  regardless of powered zones.
 • All zone status is sent out within a couple minutes of the cover
  being closed.
 • If the translator loses both AC and battery backup power, zone
  configuration data is retained.
 • Low battery, tamper, and supervisory signals are reported by the
  translator on its base zone with ID ending in "0".
 • Zone ID's are the translator's base ID with the last digit replaced
  with the zone number 1-8.
 • Low battery signals from the translator are suppressed in the first
  24 hours after power-up. However, a missing battery condition is
  reported right away.

FAULT CONDITIONS

 • 12VDC output fault: Flashes and beeps every 10 seconds on the
  green LED and sounder.
 • 12VDC input overvoltage fault: Continually flashes and beeps on
  the green LED and sounder.
 • 12VDC input removed fault: Green LED turns off and the
  sounder makes a long beep.

FACTORY DEFAULT

 • To return the translator to a factory default condition, press and
  hold the configure button. After a couple seconds, the sounder
  will start beeping rapidly. Continue holding the button until the
  sounder stops beeping.
 • Factory default is not possible if the translator is locked.

ZONE TABLE

ZONE #	SERIAL #	DESCRIPTION
0		Translator Base
1		
2		
3		
4		
5		
6		
7		
8		

Specifications

PHYSICAL

Housing Dimensions	8.5 x 5.0 x 1.3 inches
Weight with Battery	16.0 Ounces
Tamper Activation	Cover Opening, Wall Removal
Mounting Screws	#4 or #6 (not included)

ENVIRONMENTAL

Operating Temperature	32 to 120°F (0 to 49°C)
Storage Temperature	-4 to 86°F (-20 to 30°C), Long-Term
Maximum Humidity	85% relative humidity, non-condensing

POWER

12VDC Output	10.2VDC to 13VDC, 150mA Max
	(80mA Max for UL installations)
Power Transformer	
Input	100-240VAC 50/60Hz 0.5A
Output	12VDC 1A
Part Number	RE012-6
Battery	
Specifications	6VDC 800mAh NiMH
Part Number	RE030
Trickle Charge	8mA
Fast Charge	32mA

WIRELESS RADIO

RF Frequency	319.5MHz, 345MHz, 433.92MHz
Compatibility	Cryptix® (Connect+), Interlogix® (formerly GE®), Honeywell®, DSC®, 2GIG®, Qolsys®

ZONES

Supported Types	
Powered Zones	4-wire devices only
Non-Powered Zones	NC (Normal closed) or NO (Normal open)
Battery Backup	
Powered Zones	4 hours minimum at 80mA
Non-Powered Zones	24 hours minimum
Zone End of Line Resistor	
NC - No Tamper Detect	None (short)
NC - Tamper Detect	750 ohm to 15k ohm
NO - No Tamper Detect	None (open)
NO - Tamper Detect	750 ohm to 15k ohm
Zone Wire Length	1000 feet max
Zone Wire Gauge	22 AWG min

CERTIFICATIONS

ETL Listings	
RE508X	UL1023, ULC1023
RE508XC	UL1023, ULC1023, UL1610, ULC S304
Other	FCC, IC

Specifications subject to change without notice.

This product is NOT for use with life safety devices, such as Smoke, Heat, or CO detectors.

This product is NOT for use in bank installations.

Notices