«Clare[™]

Clare Hardwired Zone Input Module CS-HWT-10 Installation Sheet



Last modified: 08/28/19

Description / Operation

The Clare Hardwired Zone Input Module (CS-HWT-10) is used to convert existing wired security sensors to wireless protocol in order to communicate with the ClareSecure panel. Use the Install Assist app to configure the zones after physical installation is complete.

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

Quick setup

Follow the steps below for quick installation.

To mount and wire the module:

- 1. Select a mounting position for the module.
- 2. Wire the zones, see Figure 2: Module wiring, on page 2.
- 3. If applicable, connect 12VDC output to any powered zones.

Note: The module has a 90 second lockout after power up.

To configure the module:

- 1. For ClareSecure, ensure the "PANEL SELECT" knob is set to "CRYPTIX". See Figure 2: Module wiring.
- 2. Configure the zones.
 - No zone configuration is necessary for installations with a normally closed zone that does not require tamper detection.
 - See Installations with other zone types:3.

To enroll the panel:

Refer to <u>Clare Security Panel Integration Release Notes (DOC ID 1524)</u> for complete instructions on how to enroll the module with the Clare Secure panel.

To complete module installation:

- 1. Close the module's cover.
- 2. Test and verify proper operation of the sensors using the panel.
- Cut the lock wire to lock the module.
 See To complete module installation: on page 3.
- 4. Secure the cover with screw. See Figure 1: Wall mounting the module, on page 1.

Figure 1: Wall mounting the module



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

- [1] Wall mounting screw locations
- [2] Wall tamper (do not overtighten the mounting screw)



Advanced setup

Follow the steps for below for advanced module settings and configuration.

To mount and wire the module:

- 1. Select a mounting position and location.
 - Mount the module at least 5ft away from the Control Panel's receiver.
 - Do not mount the module in a metal box or on a metal surface.
- 2. Wire the zones. See Figure 2: Module wiring on page 2.
 - 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 lining the bottom edge of the module housing may be used to secure zone wiring with tie wraps.

- 3. Connect 12VDC output to powered zones, if applicable.
 - 12VDC output of the module must be used to power any powered zones. Do not use an external power supply to power the zones.
- 4. Connect the power supply to the module using either the supplied barrel connector or flying leads.
 - The module has a 90 second lockout after power up. During this time no zone activity will be transmitted, and the green and red LEDs 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 module.
 - Do not connect to module to a receptacle controlled by a switch.
 - In the United States, the transformer must be secured to an outlet.
 - In Canada, do not secure the transformer to an outlet.

To configure the module:

- 1. Configure the Zones:
 - Zone configuration is not necessary for installations with normally closed zones that do not require tamper detection.

Installations with other zone types:

- 1. Verify that all zones are ready (in a non-alarm) state.
- Press the Configure button to enter module configuration mode. The yellow LED illuminates when configuration mode is entered. Configuration mode is not accessible during the 90 second power up lockout. During this process:
 - The module learns the normal state for each zone.
 - The Zone tampers are detected but are transmitted to the panel as "alarm."
- 3. **[Optional]** Cycle each zone to alarm and back to normal.
 - Zone tampers are transmitted to the panel as "tamper."
- Press the **Configure** button to exit module configuration mode. The yellow LED extinguishes when no longer in module configuration mode.

Notes:

- Normally closed zones can be cycled at the sensor, or by a break-and-make at the module connection.
- Normally open zones can be cycled at the sensor, or by shorting across the connection to the module.
- Configuration mode ends automatically when the cover is closed or 30 minutes after the last action.
- When re-entering module configuration mode, zones must be in their ready state. However, previously programmed settings are retained for each zone. Zone subsets can be modified without reconfiguring all zones.
- Configuration mode is locked out 24 hours after power-up. To re-enable configuration mode, the module must be power cycled by removing both the 12VDC input power and backup battery for at least 5 seconds.

To enroll the panel:

Refer to <u>Clare Security Panel Integration Release Notes (DOC</u> <u>ID 1524</u>) for complete instructions on how to enroll the Hardwired zone input module with the Clare Secure panel.

To complete module installation:

- 1. Close the cover. Test and verify proper operation at the panel. Ensure all zone alarms are reported properly to the central station.
- 2. **Module Locking:** Locking the module locks all zone configuration settings and provides takeover protection.
 - a. Ensure all zones are functioning as desired. Carefully review the effects of manual module locking before proceeding:
 - The module cannot be factory defaulted.
 - Existing zone configurations cannot be changed.
 - Panel selection can not be changed.
 - Manual module LOCKING CAN NOT BE UNDONE.
 - b. Open the module cover, and then cut the lock wire. The green and red LEDs flash and the sounder beeps to confirm.

Note: If the lock wire is not cut, the module automatically locks 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 module while the cover is open.

c. With the cover closed, insert the cover securing screw into the hole near the cover latch. See Figure 1: Wall mounting the module on page 1.

Notes

Be aware of the below information for the zones, fault conditions, and factory default.

Zones

- The module has a 90 second lockout after power up. During this time:
 - No zone activity is transmitted.
 - Green and red LEDs alternate on and off every second.
 - Configuration mode cannot be entered.
- Powered zones are turned off when the battery gets low.
- Powered zones have a 4-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 module loses both AC and battery backup power, zone configuration data is retained.
- Low battery, tamper, and supervisory signals are reported by the module on its base zone with an ID ending in "0".
- Zone ID's are the module's base ID with the last digit replaced by the zone number 1-8.
- Low battery signals from the module 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 module to a factory default condition, press and hold the **Configure** button. After a couple seconds, the sounder starts beeping rapidly. Continue holding the button until the sounder stops beeping.
- Factory default is not possible if the module is locked.

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% non-condensing relative humidity				
Power					
12VDC output	10.2VDC to 13VDC, 150mA Max (80mA Max for UL installations				
Power transformer Input Output	100-240VAC 50/60Hz 0.5A 12VDC 1A				
Battery Specifications Trickle charge Fast charge	6VDC 800mAh NiMH 8mA 32mA				
Wireless radio					
RF frequency	319.5MHz, 345MHz, 433.92MHz				
Zones					
Supported types Powered zones Non-powered zones	4-wire devices only NC (normal closed) or NO (normal open)				
Battery backup Powered zones Non-powered zones	4 hours minimum at 80mA 24 hours minimum				
Zone end of line resistor NC – No tamper detect NC – Tamper detect NO – No tamper detect NO – Tamper detect zones	None (short) 750 ohm to 15k ohm None (open) 750 ohm to 15k ohm				
Wire length zone	1000ft max				
Wire gauge	22 AWG min				
Certifications					
ETL listing	UL1023, ULC1023, UL1610, ULC S304				
Other	FCC, IC				

Zone input table

Use this table to keep track of your zones.

Table	1:	Zone	inputs
-------	----	------	--------

Zone #	Input #	Zone Type	Description	

Warranty information

Clare Controls offers a three (3) year limited warranty on original Clare Controls components, from the date of shipment from Clare Controls. To view complete limited warranty details, including limitations and exclusions, www.clarecontrols.com/warranty.

warranty details.

Scan the code to view product

Contact information

Clare Controls, LLC. 7519 Pennsylvania Ave, Suite 104 Sarasota, FL 34243

General: 941.328.3991 Fax: 941.870.9646 www.clarecontrols.com

Integrator/Dealer Support: 941.404.1072 claresupport@clarecontrols.com

Homeowner Support (ClareCare): 941.315.2273 (CARE) help@clarecontrols.com