Installation Instructions

Wireless Communication Interface for Zone Sensors (WCI-ZS)

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

October 2026

BAS-SVN243A-EN

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Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.
NOTICE	Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

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⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- **Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.**
- **When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.**
- **If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.**

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⚠ WARNING

Follow EHS Policies!

Failure to follow instructions below could result in death or serious injury.

- **All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.**
- **Non-Trane personnel should always follow local regulations.**

⚠ WARNING

Cancer and Reproductive Harm!

This product can expose you to chemicals including lead and bisphenol A (BPA), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Set Addresses

For detailed information and procedures, see *Tracer® Zone Sensor Wireless/Wired Communicating Installation, Operation, and Maintenance* (BAS-SVX096*-EN).

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Figure 1. Networking

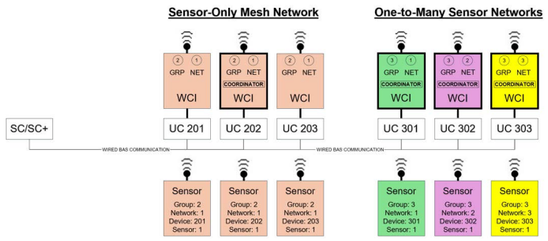
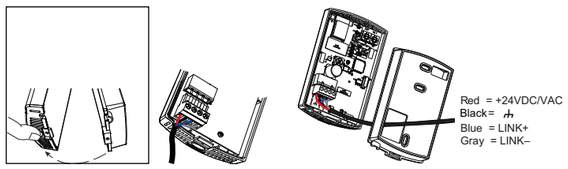


Figure 2. Connecting the Wiring Harness to the WCI



Power OFF Device

⚠ WARNING

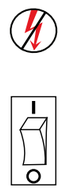
Hazardous Voltage!

Failure to disconnect power before servicing could result in death or serious injury.

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Verify that no power is present with a voltmeter.

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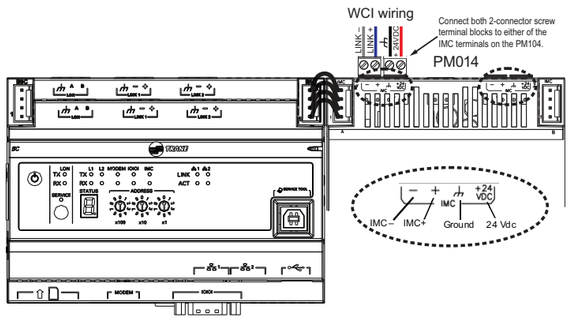
Figure 3. Power OFF



Connect WCI Wires to Controller

Figure 4. Tracer SC/SC+

***Note:** Use a PM014 with Tracer SC with one or more wireless networks, or Tracer SC+ when needed to stay within IMC power budget.*



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Figure 5. Symbio controller

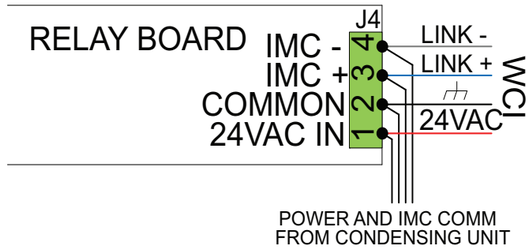
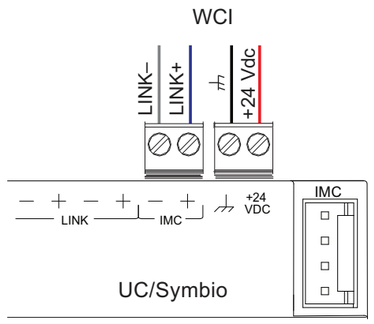


Figure 6. UC/Symbio controller



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Figure 7. Symbio 700 Precedent/Voyager 3

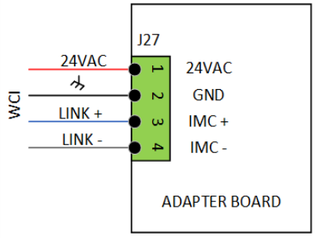


Figure 8. Tracer SC+/Symbio 800 when IMC power budget allows

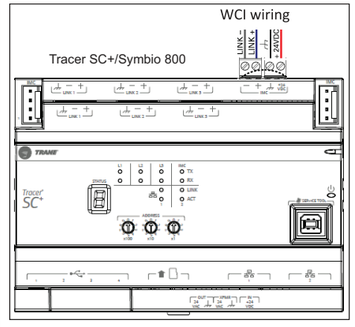
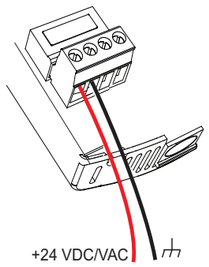


Figure 9. WCI as repeater



Note: *It is normal for the Repeater DIAG LED to flash.*

Power ON Device

Figure 10. Power ON





Note: *If all devices cannot be powered on at the same time, the best practice is to power them on in the following order:*

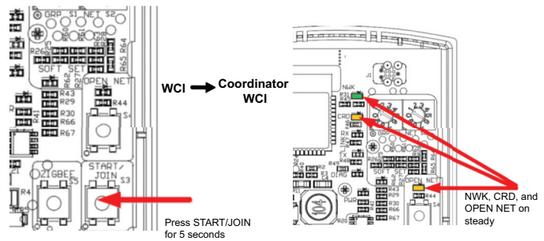
1. *All WCIs*
2. *All Controllers*
3. *All Zone Sensors*

Identifying the Network Coordinator (One per Network) and Initiating Network Formation

1. Identify a centrally located WCI to be the network coordinator.

2. Manually open the network by pressing the Start button for 5 seconds on the WCI that is to be network coordinator. The WCI becomes network coordinator and network formation is initiated.
3. Observe the LEDs on the network coordinator. See Table 1 for details.

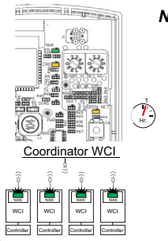
Figure 11. Network coordinator



The Network Forms

The NWK LED illuminates on every WCI that joins the network.

Figure 12. Network forms



Note:

- *Network automatically stays open 1 hr. After each WCI joins, the 1 hr. timer starts over. If time expires, press OPEN NET to re-open the network.*
- *The coordinator opens all WCIs in the network. A member WCI can only open itself for 10 minutes.*

LED Identification and Interpretation

Table 1. LED identification and interpretation

LED	LED activity	Indicates
Network LED (green) **NWK**	On solid	WCI is a network member
	Flashes for 10 seconds every 2.5 minutes.	WCI is not a member of a network The WCI will join a network when the NWK LED is flashing. If there is an open network nearby with the same rotary settings and the WCI joins the network, the NWK LED turns on solid and then the OPEN LED turns on solid.
Coordinator LED (yellow) **CRD**	On solid	WCI is network coordinator
Open Net LED (yellow) **OPEN NET**	On solid	Network is open for joining
	Off	Network is closed for joining
Reception LED (yellow) **RX LINK**	Flashes On Off	Data received Data received No data received
Transmission LED (green) **TX LINK**	Flashes On Off	Data transmitted Data transmitted No data transmitted
Diagnostic LED (red) **DIAG**[a]	Off	Normal operation
	Flashes (½ second on, ½ second off repeating)	Hardware failure or failed re-flash of a radio **Corrective action:** Replace WCI
	Triple flash pattern	Failed to join network. Occurs for 30 seconds after failing to join a network. Will continue this pattern until successful join. **Corrective Action:** Insure network is formed and open, then allow time for WCI to join on its own.
	Double flash pattern	• Normal for a repeater. • WCI lost IMC communication to the UC/BCI/Tracer® SC/SC+. **Corrective action:** Check IMC wiring, then cycle power to the controller/WCI to establish communication. • WCI was not configured correctly. (WCI did not get BACnet ID from UC/BCI/SC/SC+, and/or WCI did not get rotary address from the UC/BCI/SC/ SC+.) **Corrective Action:** Cycle power to the controller/WCI.
Power LED (green) **PWR**	On solid Off	WCI has power. WCI does not have power. **Corrective Action:** Check WCI power wiring for 24v DC or AC.

(a) If more than one condition is present, the priority is in the order listed.

Trane - by Trane Technologies (NYSE: TT), a global climate innovator - creates comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit trane.com or tranetechnologies.com.

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

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(NEW)

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