Installation Guide

LonTalk Communications Interface

Used with Odyssey Split Systems Symbio™ 700 Controls



Model Number: BAYLTCI005

Used with: 5 to 25 Ton Split System units with Symbio™ controls

A 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.

Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

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:

AWARNING

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-including industry replacements for CFCs and HCFCs such as saturated or unsaturated HFCs and HCFCs.

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.

A 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.

A 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 Labelling 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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A 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.

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General Information

The IzoT U60 FT Network Interface Module is a USB to TP/FT-10 network interface module in a compact board-level form factor. The IzoT U60 FT Network Interface Module is a board-level module that can be easily integrated with the Symbio™ control system for LonTalk communication.

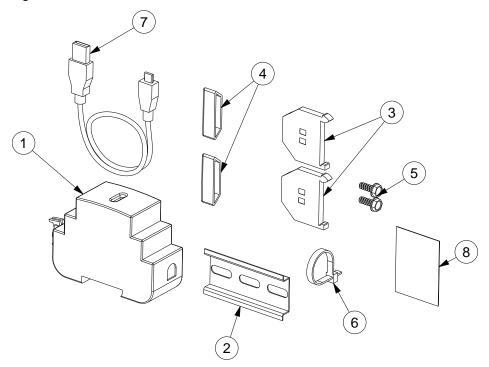
On-board Tx and Rx LEDs provide an indication of FT packet transmission and reception. The Tx and Rx signals are provided on the U60 connector so that the host controller can provide transmit and receive indicators.

An on-board Service LED provides an indication of the network status of the U60 module. The Service signal is provided on the U60 connector so that the host controller can provide a network Service indicator.

Three pin header connectors are provided by the FT network. The USB, the power input, transmit/receive signals, and the service signal are described in this document. For LonTalk system integration information, refer to the latest version of the Symbio 700 LonTalk Integration Guide (ACC-SVP002*-EN).

Parts List

Figure 1. Kit contents



- 1. (1) ECHELON IZOT U60 interface module
- 2. (1) Din rail
- 3. (2) End stops
- 4. (2) End cap
- 5. (2) Screw
- 6. Wire tie
- 7. USB cable
- 8. Information label

Inspection

Remove the kit contents from the shipping package and inspect for damage. Report any damage

immediately to the transportation company and make any appropriate claims.

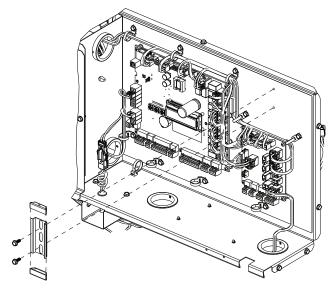
Installation

Important: When Model Number Digit 21= 0 (No Communication Option), no communication options are enabled. In this case, the LonTalk kit will not be supported because the Symbio™ 700 would not be licensed for it, and must be replaced with a communication licensed Symbio 700 through Trane Service Parts while installing the LonTalk kit. Refer to Symbio 700 LonTalk Integration Guide (ACC-SVP002).

Single Fan Outdoor Units

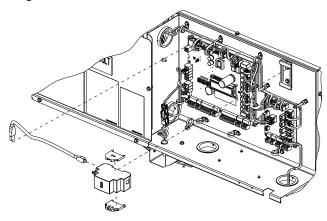
- Ensure all power to the unit has been disconnected and locked out.
- Remove Unit access panel to gain access to the control box.
- 3. Place an end cap on each end of the din rail. See Figure 2, p. 6.
- Secure the din rail in the low voltage section of the control box using the two screws provided. See Figure 2, p. 6.

Figure 2. Din rail installation – single fan units



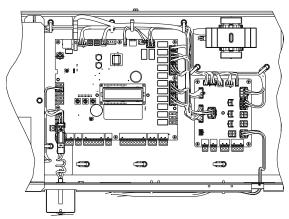
- 5. Install Echelon Module centered on din rail. See Figure 3, p. 6.
- Install an end stop on each side of the Echelon Module to keep the Module in place on the din rail. See Figure 3, p. 6.
- Connect the USB cable to the Echelon Module and the Symbio[™] Module per the unit diagram. See Figure 3, p. 6.

Figure 3. Echelon module and cable installation – single fan units



- Using the wire tie provided, secure the cable in the control box away from sharp edges. See Figure 4, p. 6.
- 9. Reinstall the access panel that was removed earlier.
- 10. Apply the Information Label next to the unit nameplate.
- 11. Reconnect all power to the unit.

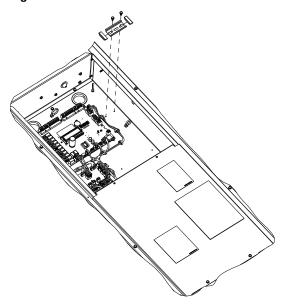
Figure 4. Echelon module installed – single fan units



Dual Fan Outdoor Units

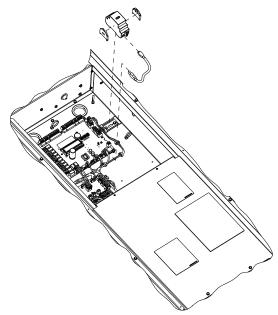
- Ensure all power to the unit has been disconnected and locked out.
- 2. Remove the unit top access panel and low voltage access panel on the control box.
- 3. Place an end cap on each end of the din rail. See Figure 5, p. 7.

Figure 5. Din rail installation - dual fan units



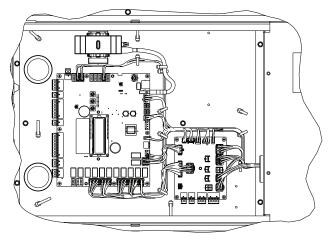
- 4. Secure the din rail in the low voltage section of the control box using the 2 screws provided. See Figure 5, p. 7.
- 5. Install Echelon Module centered on din rail. See Figure 6, p. 7.

Figure 6. Echelon module and cable installation – dual fan units



- Install an end stop on each side of the Echelon Module to keep the Module in place on the din rail. See Figure 6, p. 7.
- Connect the USB cable to the Echelon Module and the Symbio™ Module per the unit diagram. See Figure 6, p. 7.
- Using the wire tie provided, secure the cable in the control box away from sharp edges. See Figure 7, p. 7.

Figure 7. Echelon module installed - dual fan units



- 9. Reinstall the low voltage access panel and unit access panel that was removed earlier.
- 10. Apply the Information Label next to the unit nameplate.
- 11. Reconnect all power to the unit.

Visual Indicators

Three LEDs are located on the Primary side of the PCB, centered between the two mounting holes. The SVC LED blinks yellow for Service indication. The RX LED flashes green when data is received on the FT network. The TX LED flashes green when data is transmitted on the FT network.

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