

HAI Omni-Bus Interface Translator

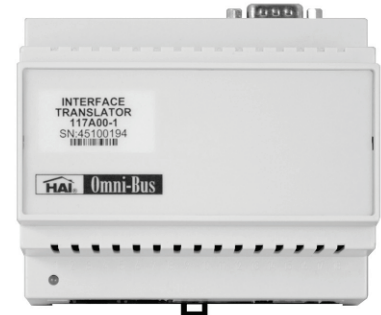
Model 117A00-1, Rev 2

Installation Instructions and User's Guide



Specifications

- Supply voltage: 16-24VDC (via bus network cable or external supply input)
- Supply current: 250mA maximum
- Ethernet port: 10BASE-T
- Number of simultaneous TCPIP connections: 8 maximum
- USB port: 1.1 Full speed
- RF Receiver: 433.92MHz
- Ambient Temperature: 0 – 40 °C (32 – 104 °F)
- Ingress Protection: IP20
- Dimensions: 105mm (width) x 58mm (height) x 86mm
- Compatible with the following HAI controllers:
 - OmniPro II ○ Lumina Pro
 - Omni Iie ○ Lumina
 - OmniLT



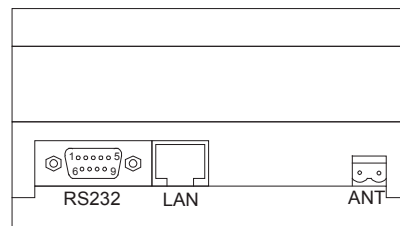
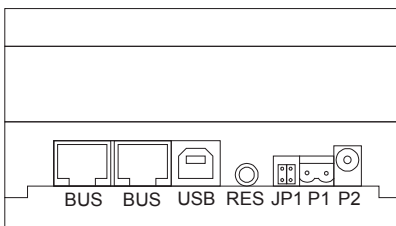
Installation

- Do not connect any mains wiring to the unit. The Interface connects directly to the HAI Omni-Bus network cable via 2 RJ45 connectors.
- The Interface is designed for indoor use only.
- Choose a location free of water, humidity, direct sunlight or heavy dust.
- A safe isolation distance should be kept between all mains wiring and the Bus network cable.
- For a RS232 connection to the HAI controller, connect the RS232 port on the Interface to the controller RS232 port using the appropriate cable (see *Omni-Bus Interface Translator Reference Manual for port pin out*)
 - For a HAI Omni controller use the HAI Serial PC Cable part number 21A05-2 (Included with controller kit)
- For a TCPIP connection to the HAI controller, connect the Interface to the local area network using a standard LAN network cable.
- Plug the included antenna into the 2-pin connector at the top left-hand side of unit.
- See the *Omni-Bus Network installation Guide* for more information on the Bus network wiring.

Setup

- Use the OMNIBUS Software (V1.0.2 or later) for setup of the Interface Translator (see the *Omni-Bus Interface Translator Reference Manual for more information*).
- OMNIBUS Software connection options to the Interface Translator:
 - Via Omni-Bus network using a 116A00-1 USB Programming Interface
 - Direct USB connection between computer and Interface Translator using a standard USB printer cable (cable not included)
 - TCPIP network connection to the Interface Translator

Interface Connections



BUS: RJ45 CAT5 connection to HAI Omni-Bus Network.

USB: USB interface connection to PC running OMNIBUS Installation software

P1, P2: 16 – 24VAC/DC supply input (Required current rating = 250mA + current required for any additional Bus devices powered from the Interface unit)

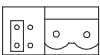
RS232: RS232 Port

- | | |
|-------------------|-------------------|
| Pin 1: DCD input | Pin 2: RXD input |
| Pin 3: TXD output | Pin 4: DTR output |
| Pin 5: GND | Pin 6: DSR input |
| Pin 7: RTS output | Pin 8: CTS input |
| Pin 9: RI input | |

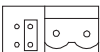
LAN: RJ45 CAT5 connection to Ethernet Local area network.

ANT: 433.92MHz antenna connector for internal RF Receiver (For use with supplied antenna).

JP1: Power supply options jumper:



Unit is supplied with power from the Omni-Bus network (no need for a supply input on P1 or P2)

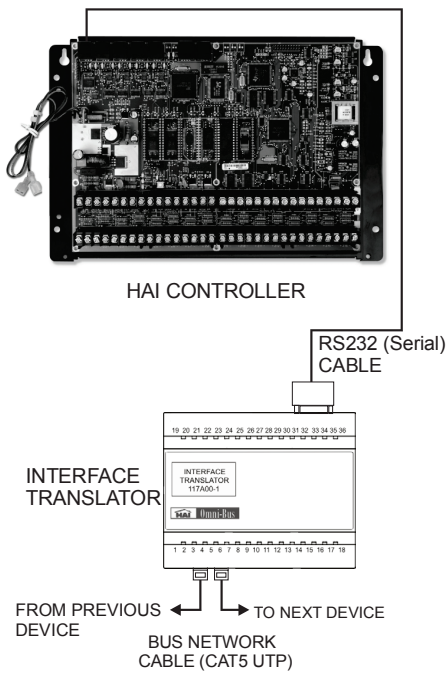


Unit supplies power to the Omni-Bus Network (300mA max) (must have a supply input on P1 or P2)

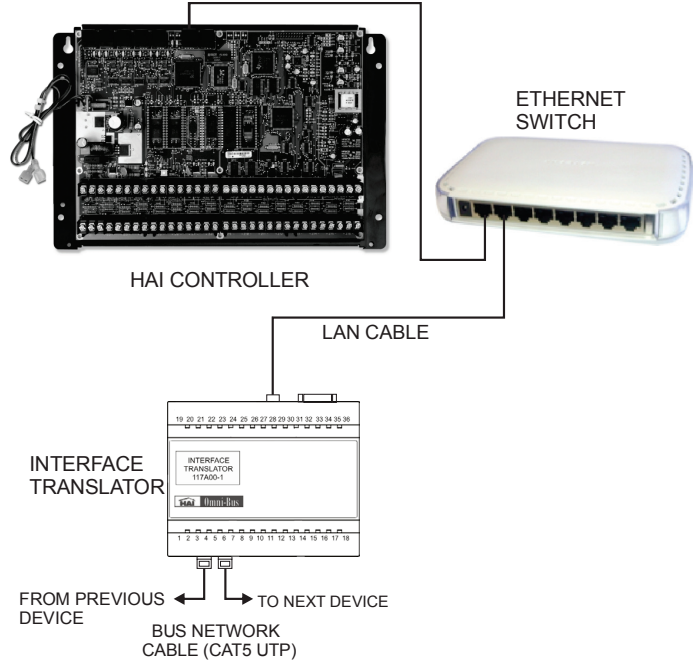
RES: Reset button. Press and release to reboot unit. Press and hold 3 seconds while applying power to run firmware loader. Press and hold 10 seconds while applying power to reset network settings to factory default values.

Wiring Diagrams

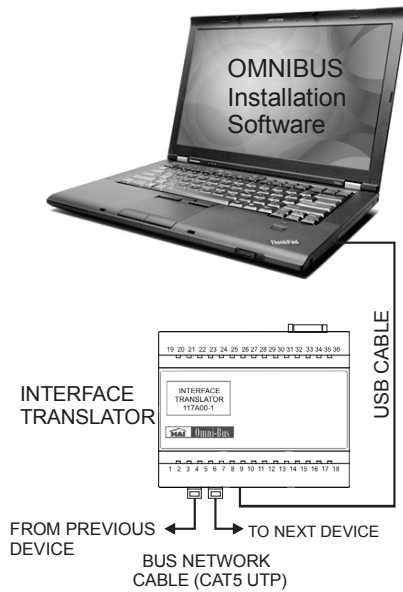
RS232 Connection to HAI Controller



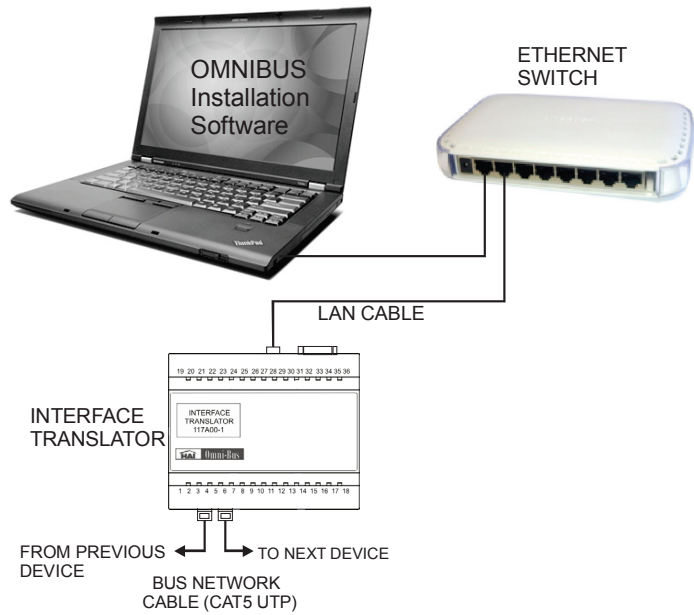
TCPIP Connection to HAI Controller



OMNIBUS USB Bus Gateway Connection



OMNIBUS TCPIP Bus Gateway Connection



Allowable Operating Mode Combinations

	USB Bus Gateway	TCPIP Bus Gateway	HAI Controller RS232	HAI Controller TCPIP
USB Bus Gateway		✓	✓	✓
TCPIP Bus Gateway	✓		✓	✓
HAI Controller RS232	✓	✓		*
HAI Controller TCPIP	✓	✓	*	

LED Indicators

Bottom LED

Omni-Bus Network Activity. Normally off.
 Green Flash = Bus packet received by Interface.
 Red Flash = Bus packet Transmitted by Interface.

Top LED

Indicates Interface Connection Status. Normally Green.
 In TCPIP mode the number of Red flashes indicates the number of active TCPIP connections to the Interface.
 In HAI Controller Interface mode, constant Red indicates that the Interface is not currently connected to the HAI controller.
 When flashing Green continuously, the Interface is in Firmware Download mode.