Ampac

High Level Interface Controller

Installation guide

Description

The High-Level Interface Expander provides the ability for the FireFinder Series II Fire Alarm Control Panels (FACP's) to support a range of high level interface options.

The physical interface between the FACP and equipment can be RS232 or RS485.

Typical applications where the HLI Expander is used are:

- Building Management
- Paging system
- Nurse Call Systems
- EV3000
- SmartGraphics
- MODBUS

The FireFinder Series II FACP can support up to three HLI Expanders

Note: Each HLI Expander added to a system can ONLY be configured for ONE individual interface type.

Introduction

Observe anti-static precautions at all times

The High Level Interface Controller Fast Fit Kit consists of:

- 1 x HLI Controller
- 1 x CAB2804 450mm RJ45M Comms
- 1 x ENC2704-F Loop/B Term/B Plate III White
- 8 x HW1585 M3 x 6mm screws (only required for the metal cabinet)
- 4 x HW2520 20mm standoffs (only required for the metal cabinet)
- 2 x CON2578 Jumper link

Installation

Power down and disconnect the batteries

Mounting

1. If necessary fit the stand offs to the suitably spaced captive nuts in the lower right hand side backpan position
2. Mount the board onto the standoffs using the 4 M3 x 6mm screws
3. If required the ENC2704 can be fitted above the Loop Termination Board to provide extra mounting for the HLI Controller (SP1 cabinets)

Connecting to the FACP

1. Using the supplied Comms cable connect CN4 on the HLI Board to CN20 (Comms Out) of the Main Control Board or, the RS485 Comms out of the previous internal backpan board.
2. Ensure LK1 and LK3 are fitted.
3. Ensure LK2 is installed if it is the last Add-On on the bus.
4. Bring the field cabling into the FACP through a suitable knockout and terminate to the required Connectors. See Figure 2
5. Set Address SW (Addresses 1 to 4 can be used). See Figure 2 ensuring it is the same as the config
6. Power up the panel and reconnect the batteries
7. HLI Expander is configured using the ConfigManager Tool for FireFinder Series II (refer ConfigManager V6 AS4428 manual (MAN2599))
8. Test

HLI Setup Checklist

Ensure the latest HLI Firmware and compatible FACP application software are used.

Try to avoid configuring too many other add-ons (especially SmartTerminal's) on the same node and add-on bus as the HLI. The worst case add-ons with respect to timing include the HLI and Smart Terminal. Try to distribute add-ons evenly across nodes where possible.

HLI EV3000 Specific Setup

1. Ensure RS485 EOL jumper link (LK1) is fitted on the HLI
2. Ensure FACP EOL jumper link (LK2) is fitted on the HLI if it is the last connected add-on on the FACP add-on bus
3. Ensure 0V on the HLI (SHD on RS485 TB1) is connected to 0V on the EV3000.

HLI MODBUS Specific Setup

1. Ensure PLC Address and Parity (EEPROM locations 95 and 96 at the FACP) match on the MODBUS and FACP.
2. Ensure the same baud rate is setup on the FACP and MODBUS
3. Ensure the same physical interface (RS232/RS485) is setup on the FACP and MODBUS and the corresponding hardware is physically setup correctly
4. Ensure the same handshaking (None/Hardware/Software) is setup on the FACP and MODBUS and the corresponding hardware is physically setup correctly

High Level Interface Controller **Item Number: 4310-0080**

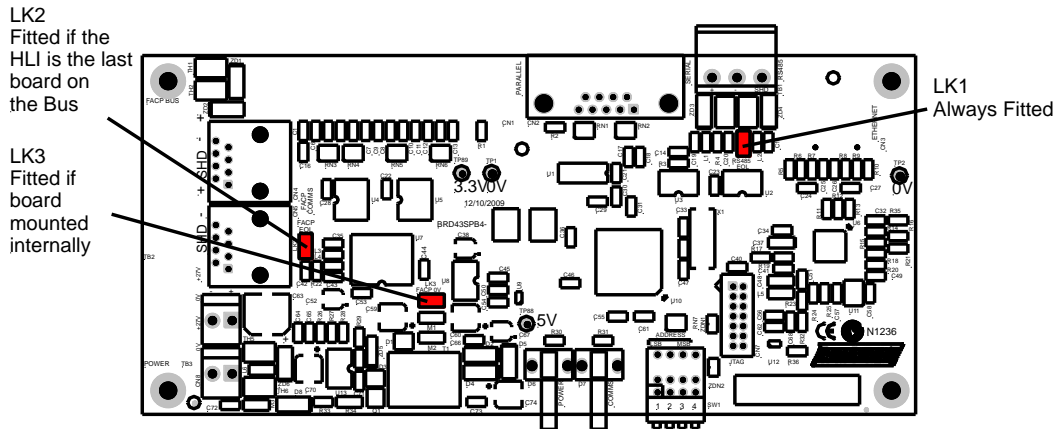Installation guide

Connection and Settings

Figure 1: High Level Interface Controller PCB layout

CN2	RS232 Out
CN4	RS485 Comms In from the previous RS485 Comms output or CN10 (Comms out) of the Main Control Card
CN5	RS485 Comms Out to RS485 Comms In of the next RS485 Add-On board.
CN6	27 Volts from CN8 of the Main Control Card or Power Connector of previous RS485 Add-On board.
CN8	Optional 27 Volts to the next RS485 Add-On board
TB1	RS485 Out
SW1	Address set SW as shown in Figure 2
LK1	EOL Always Fitted
LK2	EOL Link is fitted if the HLI is the last board on the Bus
LK3	EOL Link fitted if the board is mounted internally to a panel

Address Switch Setting (SW1)

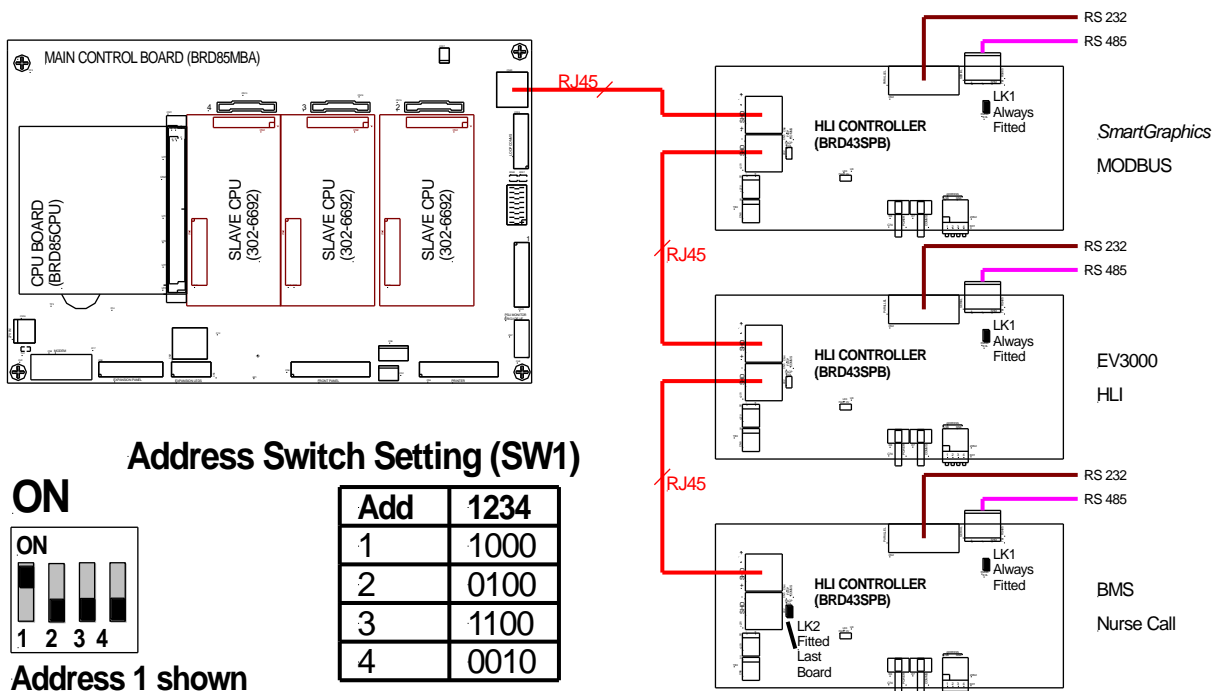| Add	1234
1	1000
2	0100
3	1100
4	0010

Figure 1: High Level Interface Controller Typical wiring layout and Address Setting