

## Commissioning

1. Firmware fitted in the Access 4000 Control Module must be V3 or later.
2. When wiring is complete and checked to be OK, connect power to the expander module.
3. With the DISABLE link out, the DISABLE LED should be lit and all floors connected to that interface board should be freely accessible.
4. Refer to "Lift Access Control with Floor button Feedback" in the Applications Programming section of the Programming Applications and Reference Manul for system programming details.  
Once programmed ensure that all floors connected, switch between the secure and free state. Review should also be monitored at this point to ensure that no excessive amounts of noise on the button inputs cause false triggering of these inputs.
5. Individually check each floor for correct operation as per the system programming.

While every effort has been made to ensure the accuracy of this manual, the manufacturer assumes no responsibility or liability for any errors or omissions.  
Due to ongoing development, this manual is subject to change without notice.

### **Warning**

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Designed & manufactured in Australia.**

# Model 3000 / Access 4000 Lift Interface Board P/N: 994020

## INSTALLATION NOTES

### Introduction

Lift Interface Boards are used in conjunction with the Universal Expander Module (993004) to provide a simple low level interface incorporating button feedback, between the Access 4000 and a Lift Control system. The Interface incorporates input conditioning and on-board hardware to provide the isolation required between the two systems.

### Specifications

Button Input Voltage:	16-48V dc full wave rectified non regulated.
Current Consumption:	150mA Peak.
Contact Rating.	
Max. switched current:	500mA @ 48V DC/AC RMS
Physical dimensions:	Length: 180mm      Width: 68mm
Installation environment:	0° to 40° Celsius 15% to 85% Relative humidity (non-condensing)

### **IMPORTANT NOTE!**

**Follow the installation instructions and warnings carefully. Setting an Invalid DIPswitch address or adjusting DIPswitch settings with power applied, may cause damage to both the Lift Interface board and the Universal Expander Module. See details on pages 2 & 5.**

## Lift Interface Board Parts List

- Lift Interface PCB sub-assy and plug on terminal blocks.
- Standard 8 Relay PCB connection cable. 200mm.
- 4 x M3 screws.
- Installation notes.

Note: An optional Lift Interface Extension cable P/N: 605020, (purchased separately) may be required in some installations (see below)

## Mounting the Lift Interface Boards

- **One Lift Interface board** can be mounted in the space provided on the Universal Expander Module chassis. The board is secured onto the existing standoffs using the four M3 screws provided. Connection is made between Universal Expander J1 and X6 on the lift interface board using the ribbon cable supplied. *See diagram on page 3.*
- **Two or more Lift Interface boards.**
  - a) The second board and subsequent boards can be mounted on the Auxiliary board chassis (P/N: 924020) in a separate enclosure (3/4000 Equip Box, P/N: 993021 or Jumbo Box, P/N 993023). Note that the Expander chassis and Auxiliary board chassis can be installed in the Jumbo box together. *See diagram on page 7.*
  - b) Alternatively, Lift interface boards can be mounted in a separate enclosure using self adhesive standoffs.

For either of the above options, the special **Lift Interface Extension cable P/N: 605020** (purchased separately) must be used when two to four lift interface boards are used on a Universal Expander Module.

- **Configure the DIPswitch settings exactly as per the following table. (Invalid settings may cause damage to the Interface board and the Universal Expander.) Must be set BEFORE power is applied.**

Floors to Control	Switch ON
1-8	1,5
9-16	2, 6, 9
17-24	3, 7, 10
25-32	4, 8, 9, 10

**CAUTION. Ensure that the connections between any Lift interface board and the Universal Expander are never connected or disconnected while the Universal Expander is powered up. This may result in permanent damage to both boards.**

- Configure the Universal Expander as per details on page 7.  
Note: If connecting three or four Lift Interface boards to the Universal Expander, the Expander must be configured as a type "B". (**B**ig Expander)

## Universal Expander Settings.

### Universal Expander DIPswitch settings.

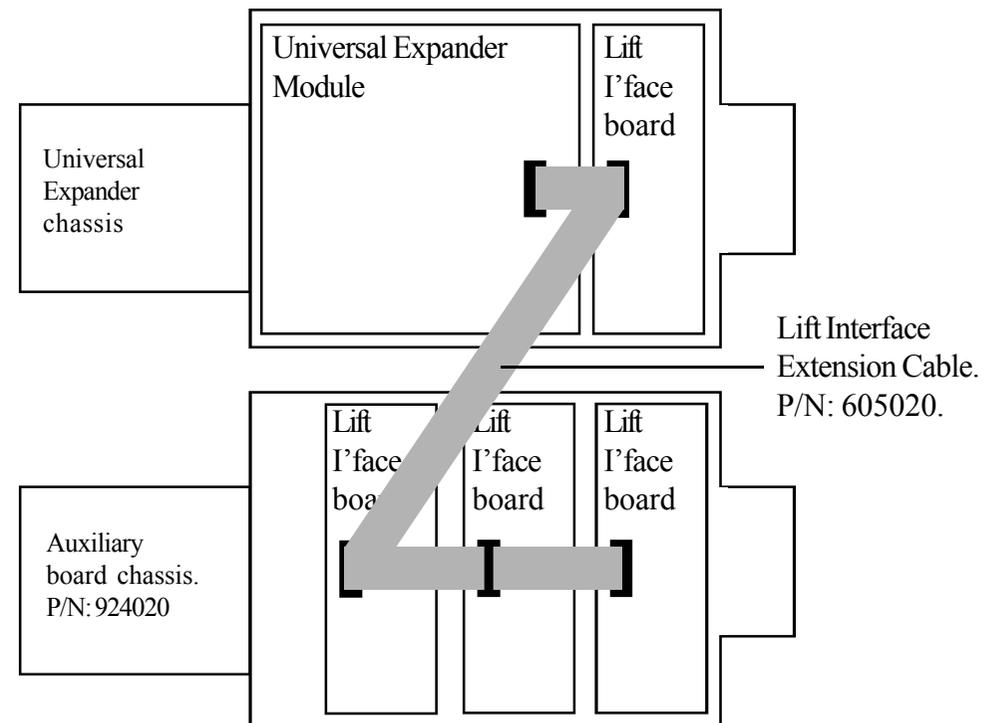
SW1	1	Expander type.	Off = "B" type Expander. (16 or 32 Zones/floors) On = "E" type Expander. (16 Zones/floors only)
	2	Input Debounce time.	Set to On = 40mS (fast)
	4	On = Lift Mode.	Set to On when Lift Interface board/s connected.
	5	Zones 1 to 8 External. (In Lift mode)	Link JP5 must also be removed.
	6	Zones 9 to 16 External. (In Lift mode)	Link JP2 must also be removed.

### Links.

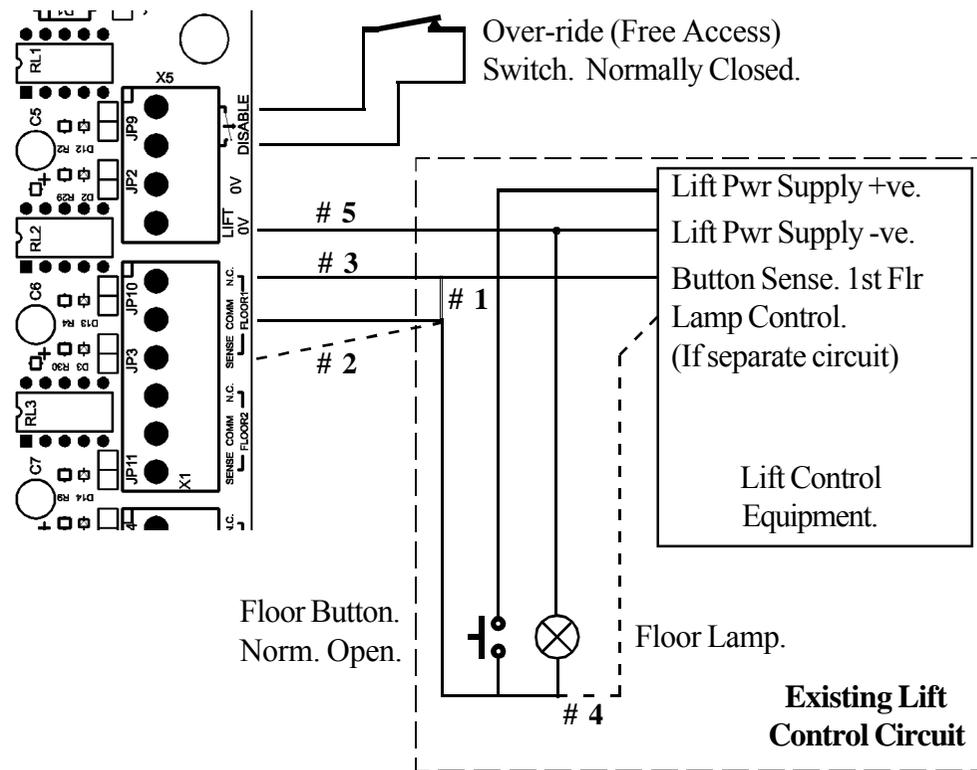
**JP2. Zones 9-16 External.** Removed if zones 9-16 are monitored externally via Lift Interface board. (DIPswitch 1-6 is On.)

**JP5. Zones 1-8 External.** Removed if zones 1-8 are monitored externally via Lift Interface board. (DIPswitch 1-5 is On.)

**JP4. Auxiliaries 1-8 External.** Normally in "EXP" position. Moved to "LFT" position if Auxiliaries 1-8 are provided externally via Lift Interface board.



### Typical Wiring Installation (Kone Lifts)



#### NOTES:

# 1. The existing connection between the Floor button and the Button sense input on the Lift Control equipment is broken.

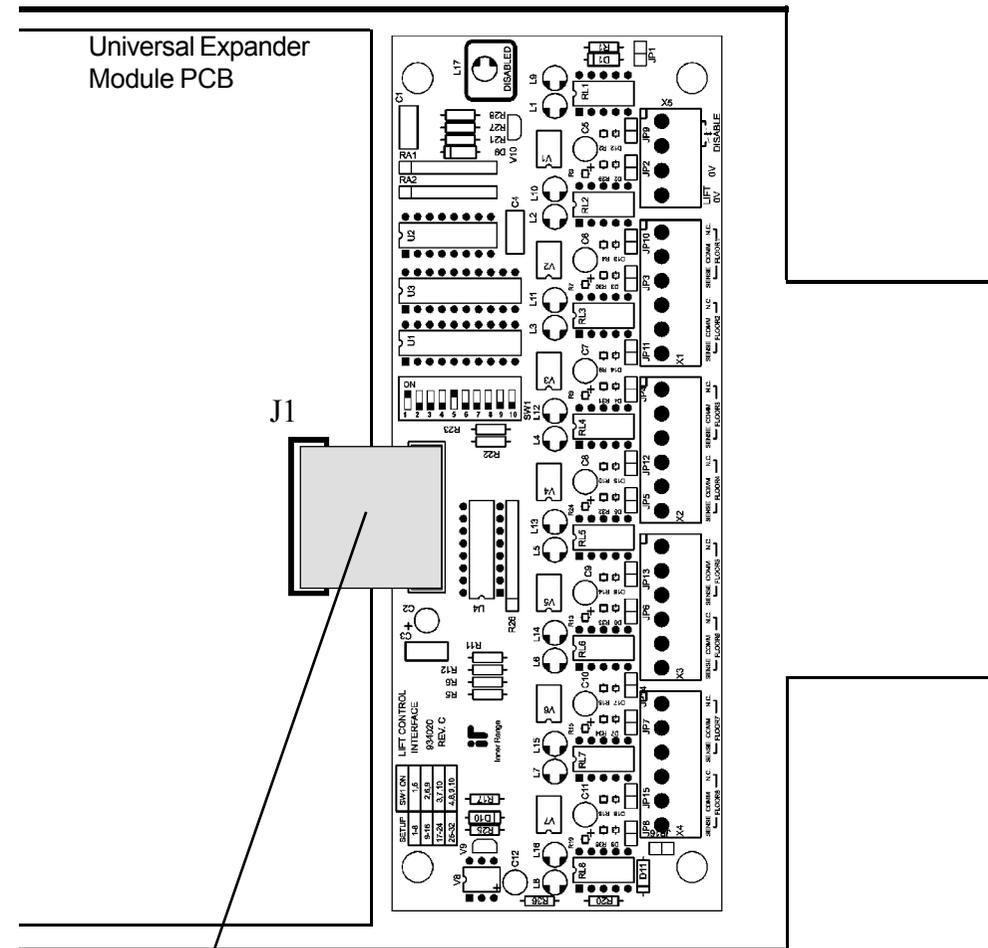
# 2. Connect the Floor button feed into the "Common" terminal if Button was wired directly to the Button sense input. (Links JP9-16 fitted on the Lift Interface board)  
Connect the Floor button feed into the "Sense" terminal if the Button was not wired directly to the Button sense input. (Links JP9-16 removed)

# 3. Connect the Lift Control equipment Button sense wire into the "N.C." terminal.

# 4. If Floor Button and Lamp are on a common circuit ensure that links JP1-8 are fitted on the Lift Interface board.  
If Button and Lamp are on separate circuits ensure that JP1-8 are removed.

# 5. "Lift 0V" MUST be connected to negative of the Lift Control DC Power Supply.

### Universal Expander Connections.



Lift Interface board connected to Universal Expander with ribbon cable supplied.  
When two to four Lift Interface boards are connected, the supplied ribbon cable is replaced with the Lift Interface Extension cable. (purchased separately)  
Part Number: 605020.

**NEVER connect or disconnect when Universal Expander is powered up.**

*See Page 7 for Universal Expander Settings and details of multiple Lift Interface board connections.*

**LEDs L1 to L8.**

Indicate the presence of +ve feed voltage on the "N.C." terminals for each floor.

Note: Will also follow the Floor button lamp when button lamp feedback voltage is sourced via Lift Controller button sense feed.

**LEDs L9 to L16.**

Indicate when the Floor Access Relays are active.

Note: Relays are normally active and de-activate to select the floor. Will not operate at all when in Disabled mode.

**X6** Ribbon cable connection to Universal Expander Module J1. See diagram on page 3. If two to four Lift interface boards are used, the Lift Interface Extension cable (purchased separately) must be used. P/No: 605020. NEVER connect or disconnect when Universal Expander is powered up.

**SW1. DIPswitches.**

Set DIPswitches as per table printed on PCB and on page 2. Ensure that the DIPswitch settings are valid and **NEVER** adjust DIPswitch settings when board has power applied. See warnings on pages 1 & 2.

**Socketed Relays.**

Replacements available in Spare Parts kit. P/No: 994020SPARES. (Contains 8 Relays and 8 Jumper links.)

**JP9 to JP16.**

Removed when the Floor request button and the Input to the Lift Control equipment are separate circuits. e.g. Normally fitted in Kone systems. (Shorts "Sense" and "Comm")

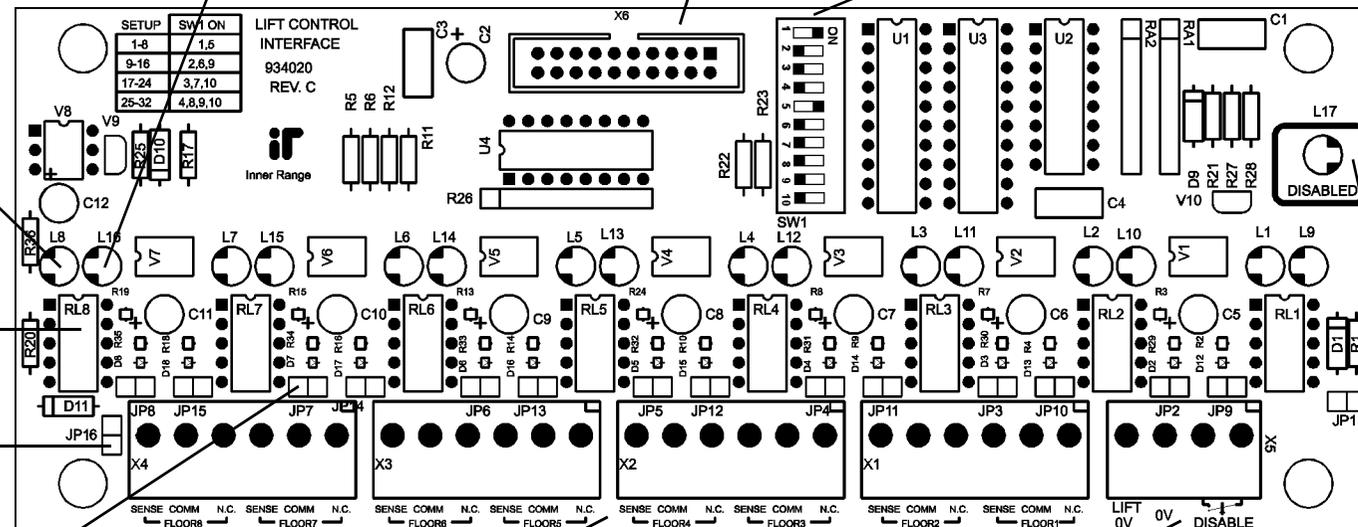
**JP1 to JP8.**

Fitted when button Lamp feedback voltage is sourced via Lift Controller button sense feed. e.g. Normally fitted in Kone systems. (Inserts diode between "NC" and "Comm")

**X1 to X4** Wiring terminals for connection to Floor request buttons/lamps and Lift Control equipment.  
SENSE: Floor button sense.  
COMM: Relay Common contact  
N.C.: Relay Normally Closed contact.  
See details on page 6.

**X5**

**LIFT 0V:** MUST be connected to common 0V (Pwr supply -ve) on the Lift system.  
**0V:** Concept equipment Common 0V. Not normally connected.  
**DISABLE:** MUST be connected to Normally Closed over-ride switch.  
-When Closed provides power to all floor access relays.  
-When Open sets all floors to free access.

**DISABLED LED.**

On when in disabled mode. i.e. "Disable" input is open circuit.