Inner Range

EliteX Keypad / EliteX-SIFER Keypad

Part Number: 995400 / 995400SI

Installation Manual

The EliteX Keypads are a User interface for the Integriti, Infiniti, Inception and Concept 3000/4000 hardware platforms. They feature 8 status LEDs, an easy to read OLED display and ergonomic backlit keypad. The intensity of the display and keypad backlighting are configurable for idle and in-use conditions, while beeper volume and Status LED brightness can also be adjusted.

EliteX Keypads can be used to perform commissioning, user operations, display alarms, review system activity and some programming. The module number and basic configuration options are programmed from the keypad. A built-in optical tamper sensor detects any attempt to open the case or remove the product from the mounting surface.

On an Integriti, Infiniti or Concept LAN, EliteX shares module numbering with LCD Terminals (Tnn). On the Inception LAN they are a unique module type (EliteX Terminal) unless configured for 'Elite Mode'. *(See p8)*

Features

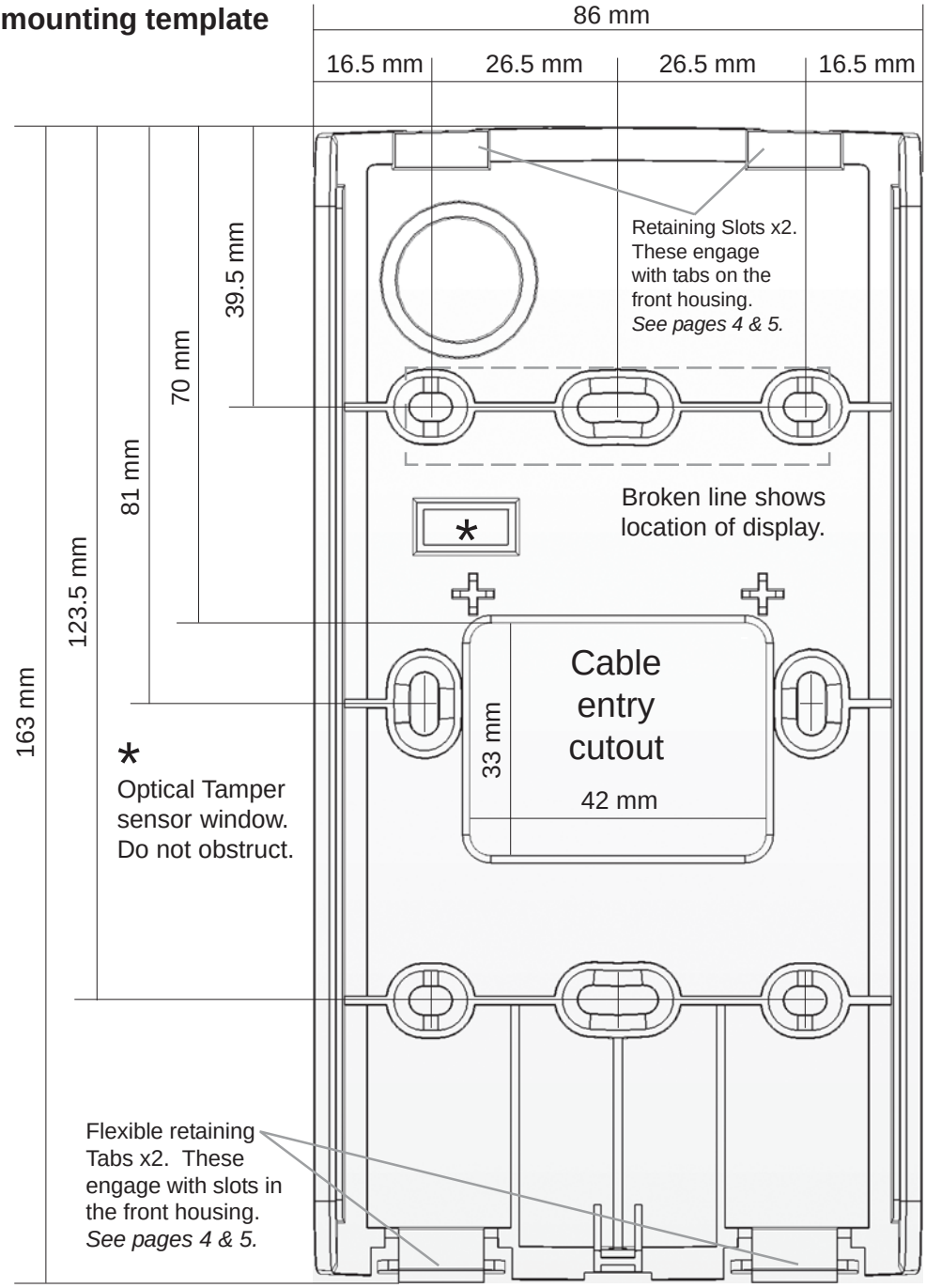
NOTE: Features 1 to 4 are <u>not</u> available in Concept 3000/4000 systems.

1 Firmware updates over the system LAN.
2 Firmware version reporting in Review.
3 EliteX-SIFER version includes built-in mulit-format SIFER Reader.
4 Zone inputs can be configured for EOL or non-EOL operation.

***

5 Familiar Elite LCD Terminal User interface means no new operations to learn.
6 8 configurable LED status indicators.
7 2 dedicated Auxiliary open collector outputs.
8 2 universal I/Os. Can be open collector auxiliaries or zone inputs.
9 Variable display/keypad and LED indicators brightness.
10 Optical tamper sensor detects opening of case or removal from wall.
11 Electrical compliance with RCM & CE.
12 Environmental compliance with ROHS & W.E.E.E.

Backplate mounting template



Specifications

ELECTRICAL

Power Supply Input:	11V to 14V DC
Operational Current@13.7VDC.	
Typical idle current:	17mA (Display dimmed)
Minimum:	15mA (Backlight & LEDs OFF)
Maximum (No beeper):	42mA (Backlight & LEDs maximum brightness)
Maximum (Beeper ON):	49mA with beeper volume level at maximum.
SIFER Model.	
Typical idle current (Display dimmed).	SIFER only: 48mA Multi-format: 71mA
Minimum:	46mA (Backlight & LEDs OFF)
Maximum:	186mA (Card being read + Backlight & LEDs maximum brightness)

Note: Current will increase slightly if supply voltage at the keypad LAN+/0V terminals is lower. i.e. When keypad is on a longer cable run.

Auxiliary Outputs. (AX1, AX2, AX3 & AX4)	
Maximum Current per Auxiliary:	500mA
Max total current all Auxiliaries:	500mA. PTC protected (self-resetting). Note: If PTC is tripped, all Auxes are shut off.
Maximum Voltage:	18 VDC

PHYSICAL

Dimensions:	Height: 168mm. Width: 88mm Depth: 19mm
Enclosure material:	Polycarbonate
Installation environment:	0º - 50º C @15% to 85% relative humidity (non condensing). For Indoor use only.

CONTROLLER FIRMWARE COMPATIBILITY

Platform	**In 'Elite Terminal mode' *** *See page 8 for details.*	**Full EliteX Feature Support (Recommended Firmware Version)**
Inception	Any Version	V1.3.5 or later
Integriti/Infiniti	Any Version	V17 or later
Concept 3k/4k	Any Version	Not supported.

***** Special features (features 1 to 4 on page 1) are not supported.

Installation

Parts List

- EliteX Keypad assembly.
- 1 x Countersunk self-tapping screw.
- 4 x 2k2 End-Of-Line (EOL) Resistors.
- Installation Manual and mounting template. (This document)

Mounting

1. Choose an appropriate mounting location with a solid, flat, vertical surface and ensure the keypad & display will be at a suitable height for the intended users.

2. a) Remove the backplate (rear of the case) by first applying gentle pressure to the two lower locking tabs in the bottom rear of the housing with a small flat-blade screwdriver, while gently pulling the lower front of the housing away from the rear.
   b) Next, gently pull the lower front of the housing clear of the backplate then lift upwards to release the upper locking tabs.

3. Check that the mounting surface is free from any materials or irregularities which may distort the case, then mark the mounting hole and cable entry locations using the backplate or the mounting template provided on page 2.

4. Drill the required holes and install the LAN cable and any other cabling needed for Auxiliaries or Zone Inputs.

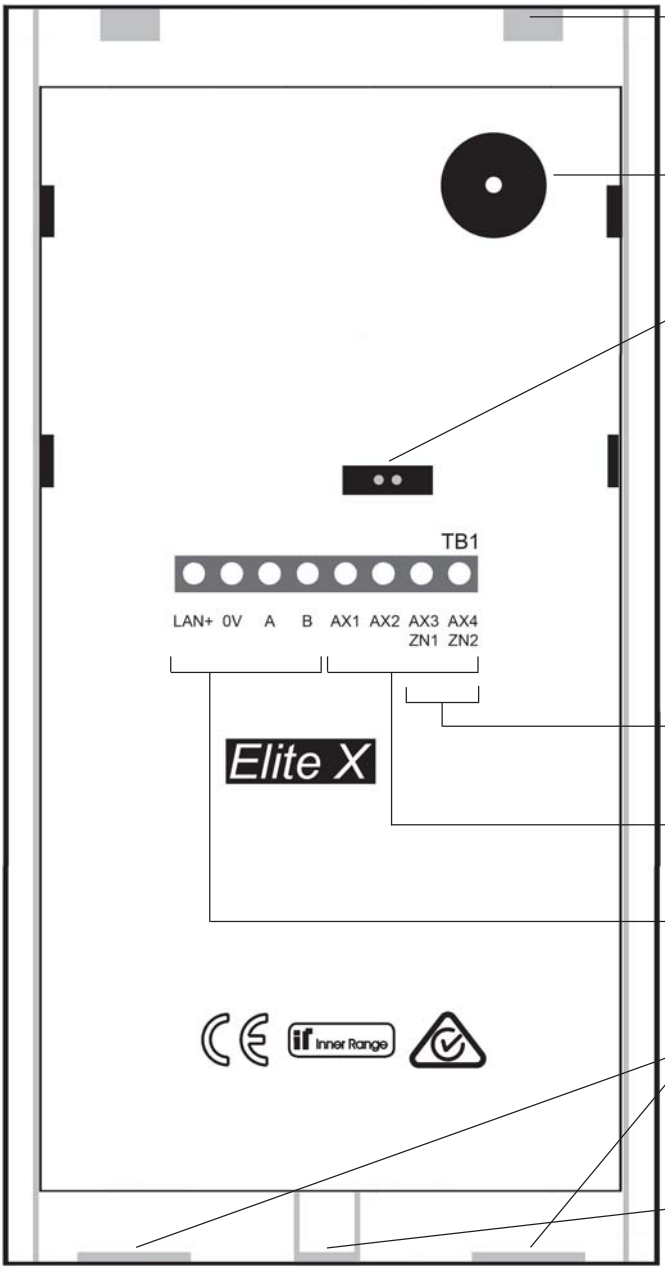
5. Install the backplate using two or more countersunk screws or bolts.
   Remember to insert the LAN cable and any other wiring through the cable entry cutout in the backplate before fastening it to the mounting surface.

6. Connect the wiring into the Screw Terminal block. *See pages 5 & 6 for details.*
   NOTE: The EliteX Keypad does not have a LAN Termination Link. If used in a Concept 3000/4000 system and LAN Termination is required, fit a 470 Ohm, 1/4W Resistor between the ‘A’ and ‘B’ terminals, or terminate the LAN on another Module nearby.

7. Position the two tabs at the top of the front housing into the slots at the top of the backplate, then gently press the two halves together until the locking tabs at the bottom of the housing engage.

8. Install the countersunk retaining screw in the hole provided in the bottom of the housing.

Internal layout and connection terminals



Retaining Tabs (x2)
These engage with slots in the backplate.

Beeper

Optical Tamper Sensor

CAUTION !
Take care not to damage the PCB surface or exposed components during installation.

Zone Inputs
See page 6.

Auxiliary Outputs
See page 6.

LAN Connections.
See page 6.

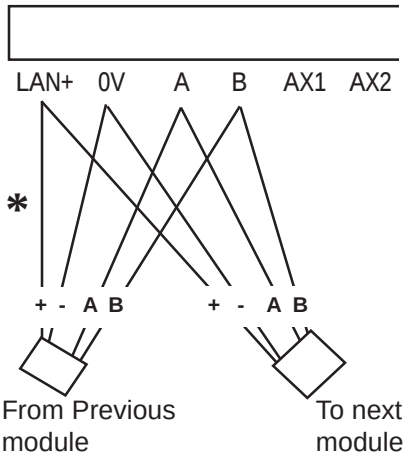
Retaining Slots
These engage with the flexible tabs on the backplate.

Hole for retaining screw

LAN Wiring

The LAN is connected using twisted pair cable. Connect LAN A & LAN B using one pair; LAN+ & 0V with another pair. A & B must be on the same pair. (Over longer distances, use heavy duty Figure 8 cable for LAN+ & 0V, or a separate local power supply)
Cabling distance should be no more than 1500m from the Control Module or from the RS485 LAN port on a LAN Isolator ('LAN 2' or LAN 3'), Fibre Modem or CLOE.

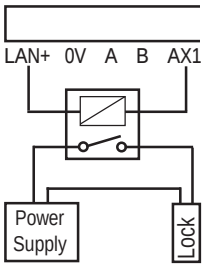
Refer to the relevant Controller Installation Manual for full LAN wiring details.
i.e. The ISC, IAC, Inception or Concept 3000/ 4000 Control Module installation manual.



* LAN+ not connected if Keypad powered from external Power supply.

Auxiliaries and LEDs

Tnn:X01 AX1 Open Collector Output*. e.g. Switch a relay, indicator lamp, sounder, etc.
Tnn:X02 AX2 Open Collector Output* **or** LED 4 control. *See page 8.*
Tnn:X03 AX3 Open Collector Output* **or** Zone 1 Input.
Tnn:X04 AX4 Open Collector Output* **or** Zone 2 Input **or** Pulse Beeper control. *See p8.*
Tnn:X05 Internal Beeper control. Continuous tone.
Tnn:X06 LED 1.
Tnn:X07 LED 2.
Tnn:X08 LED 3.



* AX1 to AX4 are designed to switch low-voltage, low-power loads. ***See Specifications on p2.*** To control heavier loads such as a mag-lock, a relay must be used to switch power to the load from a separate battery-backed power supply as shown here.

Zone Inputs

Input wiring is connected between the 'ZN' terminal and 0V.
Tnn:Z01 ZN1 Zone Input 1. e.g. Door Reed.
Tnn:Z02 ZN2 Zone Input 2. e.g. REX button, PIR, etc.

EOL Resistors.
Integriti / Inception: Optional via module programming.
Concept 3k/4k or 'Elite Mode' enabled: EOL not used. (Closed=Seal / Open=Alarm)
Refer to relevant Controller Installation Manual for EOL Input wiring details.

Commissioning

When installation is complete, power the Terminal. If the LAN connection is operational, the screen should show the programmed default display (e.g. 'System Ready' or Area status or Time & Date, etc.) or a message (e.g. Alarm message, etc.). This means that the default Terminal number (*Set to 1 at the factory*) has been accepted. To change the Terminal number and configure the other hardware setup options, go to step 1 below.
Other Terminal setup options are programmed in the relevant Module programming via the management software or browser. For the EliteX-SIFER version, all SIFER Reader options are also programmed via the management software or browser.

CONCEPT 3K/4K NOTE: When connected to a Concept LAN, 'Elite Mode' is automatically selected; However, a 'module type' error message may appear in review before the EliteX switches to this mode. This can be avoided by enabling the 'Force Elite Mode' option prior to connecting. *See step 9 below*.

Alternatively, one of the messages opposite may be displayed if:

Display message:

- There is a LAN cabling and/or connection problem — **`EliteX Vn.n.nn`** **`No Rx.`**
- There is already an EliteX Keypad, Elite LCD Terminal or Membrane Terminal with the same Module Number. — **`Module Exists`** **`Change No.: 1`**
- The module number is too high. — **`Module Too Big.`** **`go to step 1.`**

1. Enable Terminal Configuration Mode.

Remove power; push down & hold the <HELP> key;
Re-apply power and release the <HELP> key.
Use the 'OK' & '<' keys at any time to step forward or back through the options. Press 'OFF' to clear a setting.
Press the <END> key when finished.

Note: Settings shown in the display examples in this column are the Factory defaults.

2. Terminal Number.

Set the module number by entering the required number on the keypad, followed by <OK> to save.

`Module number` **`Change No.: 1`**

3. Beeper Volume.

Set the beeper volume to a value from 0 to 50.

`Beep Volume: 30`

4. Minimum keypad backlight & display level.

Use the '^' and 'v' keys to set the idle keypad & display brightness level to a value from 0 (off) to 50.

`Min Keypad&OLED` **`Brightness^v:10`**

5. Maximum keypad backlight & display level.

Use the '^' and 'v' keys to set the keypad & display brightness level to apply when the keypad is in use. Choose a value from 0 (off) to 50.

```
Max Keypad&OLED
Brightness^v:40
```

6. Maximum status LED brightness level.

Use the '^' and 'v' keys to set the maximum LED brightness level to a value from 0 (off) to 50.

```
Maximum LED
Brightness^v:30
```

7. LED 4 Control.

Enable control of LED 4 via Tnn:X02.
Press <ON> to enable, <OFF> to disable.

```
LED 4 on
AUX 2: [ ]
```

8. Pulsing Beeper.

Enable pulsing beeper control via Tnn:X04. *DO NOT wire to Zone 2/Aux 4 if this option is selected.*
Press <ON> to enable, <OFF> to disable.

```
Beeper on
AUX 4: [ ]
```

9. Elite Terminal mode.

Forces the EliteX to behave exactly like an Elite LCD Terminal (disables features 1-4 listed on p1). May be required when using EliteX on an Integriti or Inception system with older firmware or when directly replacing an Elite Terminal. Press <ON> to enable, <OFF> to disable.

```
Force Elite
mode: [ ]
```

10. Language

Use the digit keys to enter the Language number to match the language of the Controller Firmware:

```
Language:
1 Eng
```

1 English **2** Czech/Albanian
3 NEuro (Denmark/Sweden/Iceland/Norway/Finland)
4 Estonian **5** CEuro (Italy/Holland/Portugal/
6 Latvian Spain/France/Germany)
7 Lithuanian **8** Polish **9** Turkish
10 Slovak **11** Hungarian **12** Croatian

11. LAN Encryption Key:

Infiniti/Integriti systems with encrypted LAN only. e.g. Infiniti Class 5 systems. If known, and required to be entered manually, the LAN encryption key is entered here in hexadecimal format.

```
LAN Key:
```

 Part No: 635400