

# Inner Range

## EliteX / EliteX-SIFER Terminal

Part Number: 995400 / 995400CM / 995400SI

### Installation Manual

The EliteX Terminal is a User interface for Integrity, Infiniti, Inception and Concept 3000/4000 hardware platforms. It features 8 configurable LEDs, an ergonomic backlit keypad, easy-to-read OLED display and built-in optical tamper sensor.

Options including the module number, display & keypad brightness are configurable from the Terminal. EliteX Terminals can be used to perform user operations, commissioning, some programming and to display alarms, events and system status.

On an Integrity, 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 p6)

### Features

Features 1-4 **not** available in legacy Concept 3000/4000 systems †

- 1 Firmware updates over the system LAN.
- 2 Firmware version reporting in Review.
- 3 SIFER Reader kit (P/N: 994721PCB&K) adds a mulit-format SIFER Reader.  
(NOTE: EliteX firmware V3.0.13 or later recommended)
- 4 Zone inputs can be configured for EOL or non-EOL operation.
- 5 Familiar Elite LCD Terminal interface means no new operations to learn.
- 6 2 dedicated Auxiliary open collector outputs.
- 7 2 universal I/Os. Can be open collector auxiliaries or zone inputs.
- 8 Installer configurable screen-saver options. (F'ware V3.0.12 or later only)



### Controller Firmware Compatibility

Platform	In 'Elite Terminal mode' * <i>See page 6 for details.</i>	Full EliteX Feature Support (Recommended Firmware Version)
Inception	Any Version	V1.3.5 or later
Integrity/Infiniti	Any Version	V17 or later
Concept 3k/4k †	Any Version	Not supported.

\* Special features (features 1 to 4 above) are not supported in this mode.  
† The 'Concept' product range was available in AU, NZ, SE Asia & Europe and is now obsolete.

### Parts List

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

## Electrical Specifications

Power Supply Input:	11V to 14V DC
Operational Current@13.7VDC.	NOTE: Current will increase slightly if supply voltage at the EliteX Terminal LAN+/0V terminals is lower. i.e. When on a long cable run.
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.
With SIFER Reader option fitted.	
Typical idle current (Display dimmed).	SIFER only: 48mA                      Multi-format: 71mA
Minimum:	46mA (Backlight & LEDs OFF)
Maximum:	186mA (Card read + Backlight & LEDs max brightness)
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
Electrical compliance:	RCM & CE.

## Physical Specifications

Dimensions:	Height: 168mm. Width: 88mm Depth: 19mm
Enclosure material:	Polycarbonate
Installation environment:	0° to 49° Celsius (32° to 120° F) @15% to 85% relative humidity (non condensing). For Indoor use only.
Environmental compliance:	ROHS & W.E.E.E.

## Installation

1. Choose an appropriate mounting location with a solid, flat, vertical surface.  
Ensure the keypad & display will be at a suitable height for the intended users.  
If the SIFER Reader option is fitted, a non-metallic surface or suitable mounting block is recommended.  
If two SIFER products are installed back to back on either side of a Door, mount them at different heights to minimize interference.
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 7.
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 3 to 5 for details.*  
NOTE: The EliteX Terminal 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.

- ## Zone Inputs

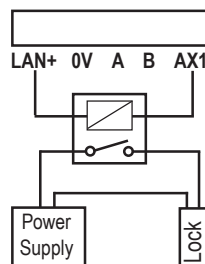
Tnn:Z02      ZN2 Zone Input 2. e.g. REX button, PIR, etc.

EOL not used. (Closed=Seal / Open=Alarm)

*Refer to relevant Controller Installation Manual for EOL Input wiring details.*

## Auxiliary Outputs

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.



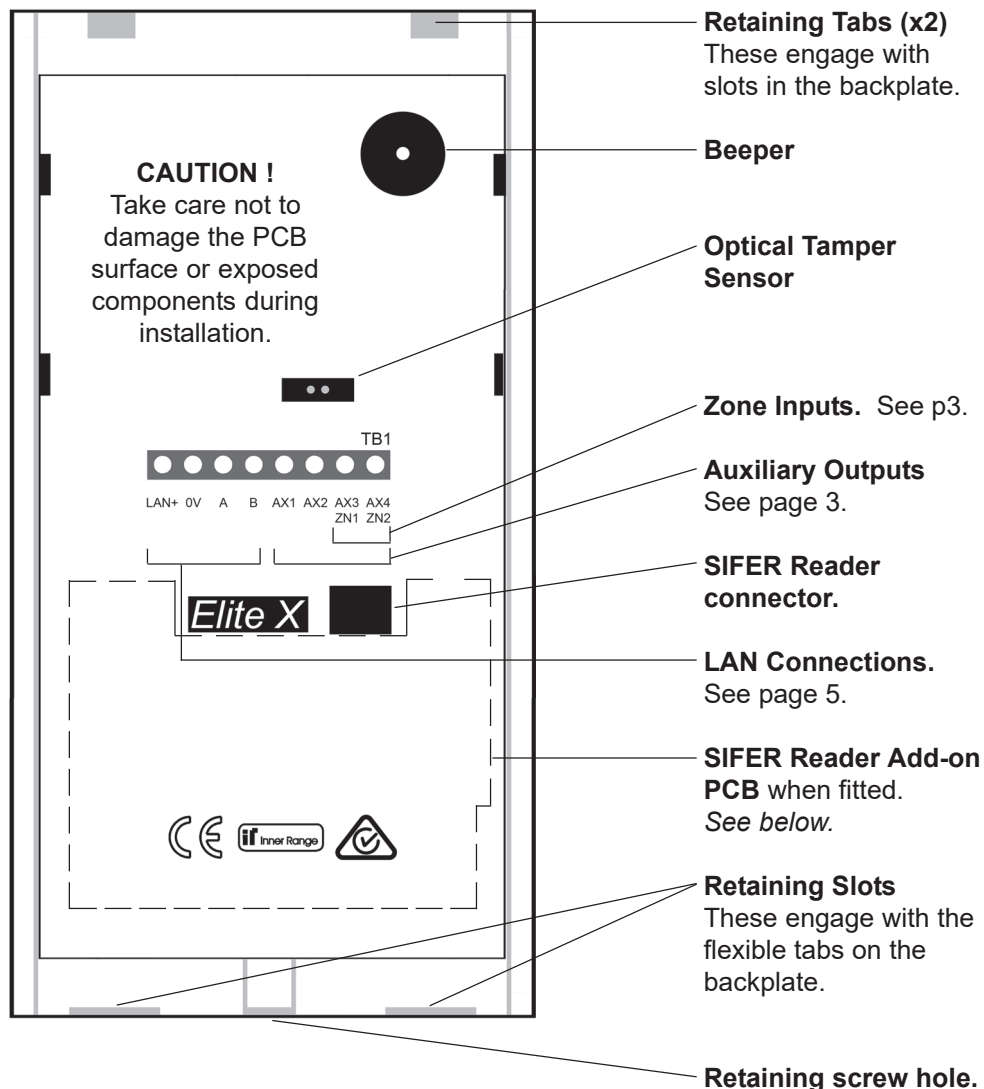
**Auxiliaries\* and LEDs**      \* See important note above.

Auxiliaries will perform the ‘Default Function’ listed in the table below. If the ‘LED Mode’ programming option is set to “Auxiliary Array” (Integriti/Infiniti V17.0 or later), the Auxiliaries will control the 8 LEDs and the 4 Aux outputs as shown in the third column.

AUX.	Default Function (Integrity/Infiniti/C3k/C4k)	Aux Array Opt.
Tnn:X01	AX1 Open Collector Output*. e.g. Switch a relay, lamp, sounder, etc.	LED 1 and AX1
Tnn:X02	AX2 Open Collector Output* or LED 4 control. <i>See p6.</i>	LED 2 and AX2
Tnn:X03	AX3 Open Collector Output* or Zone 1 Input.	LED 3 and AX3
Tnn:X04	AX4 Open Collector Output* or Zone 2 Input or Internal Beeper control (Pulsing tone). <i>See p6.</i>	LED 4 and AX4
Tnn:X05	Internal Beeper control (Continuous tone).	LED 5
Tnn:X06	LED 1	LED 6
Tnn:X07	LED 2	LED 7
Tnn:X08	LED 3	LED 8

The Open Collector output (AX1) and the Zone Inputs (ZN1/ZN2) are supported. The functions of each of the 8 Status LEDs are individually programmed.

## Internal layout and connection terminals



## EliteX-SIFER Terminal installation notes.

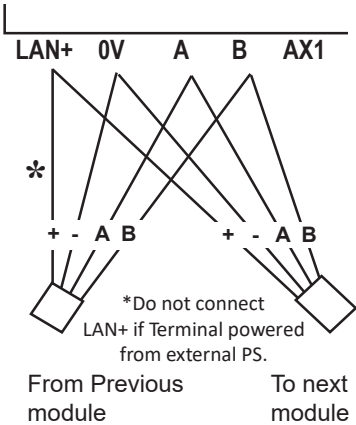
If the optional SIFER Reader kit (P/N: 994721PCB&K) is fitted, please note the following:

- 1. MOUNTING SURFACE.** A non-metallic surface is recommended. A metallic surface will cause a small decrease in the read range. To extend the read range when mounted on a metallic surface, a non-metallic mounting block may be used.
- 2. IN/OUT READERS.** If two SIFER products are installed back to back on either side of a Door, mount the Readers at different heights to minimize interference.

LAN Wiring

The LAN is connected using twisted pair cable. LAN A & LAN B uses one pair; LAN+ & 0V another pair. A & B must be on the same pair. Over longer distances, use heavy duty Fig. 8 cable for LAN+ & 0V, or a separate local power supply. Cabling distance should be no more than 1500m (4900ft) from the Control Module or from the RS485 LAN port on an Inner Range LAN extending product. e.g. LAN Isolator, Fibre Modem, CLOE or LAN Ethernet Bridge. (Availability may vary depending on your region)

*Refer to the relevant Controller Installation Manual for LAN power cabling limits & full LAN wiring details. i.e. The ISC, IAC, Inception or C3/4k Control Module installation manual.*



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 is avoided by enabling the ‘Force Elite Mode’ option prior to connecting. *See step 9.*

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

- There is a LAN cabling and/or connection problem
- There is already an EliteX Terminal, Elite LCD Terminal or Membrane Terminal with the same Module Number.
- The module number is too high.

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.

2. Terminal Number.

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

Display message:

EliteX Vn.n.nn  
No Rx.

Module Exists  
Change No.: 1

Module Too Big.  
go to step 1.

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

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 20.

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

**5. Maximum keypad backlight & display level.**  
Use the ‘^’ & ‘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 EliteX to behave like an Elite Terminal (disables features 1-4 listed on p1). May be required if Integriti or Inception system has older firmware or when replacing an Elite Terminal. <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/Alarm

**Language:**  
1 Eng  
2 Czech/Austrian  
3 NEuro (Den./Swe./Iceland/Nor./Fin.)  
4 Estonian  
5 CEuro (Italy/Holland/Portugal/Spain/France/Germany)  
6 Latvian  
7 Lithuanian  
8 Polish  
9 Turkish  
10 Slovak  
11 Hungarian  
12 Croatian

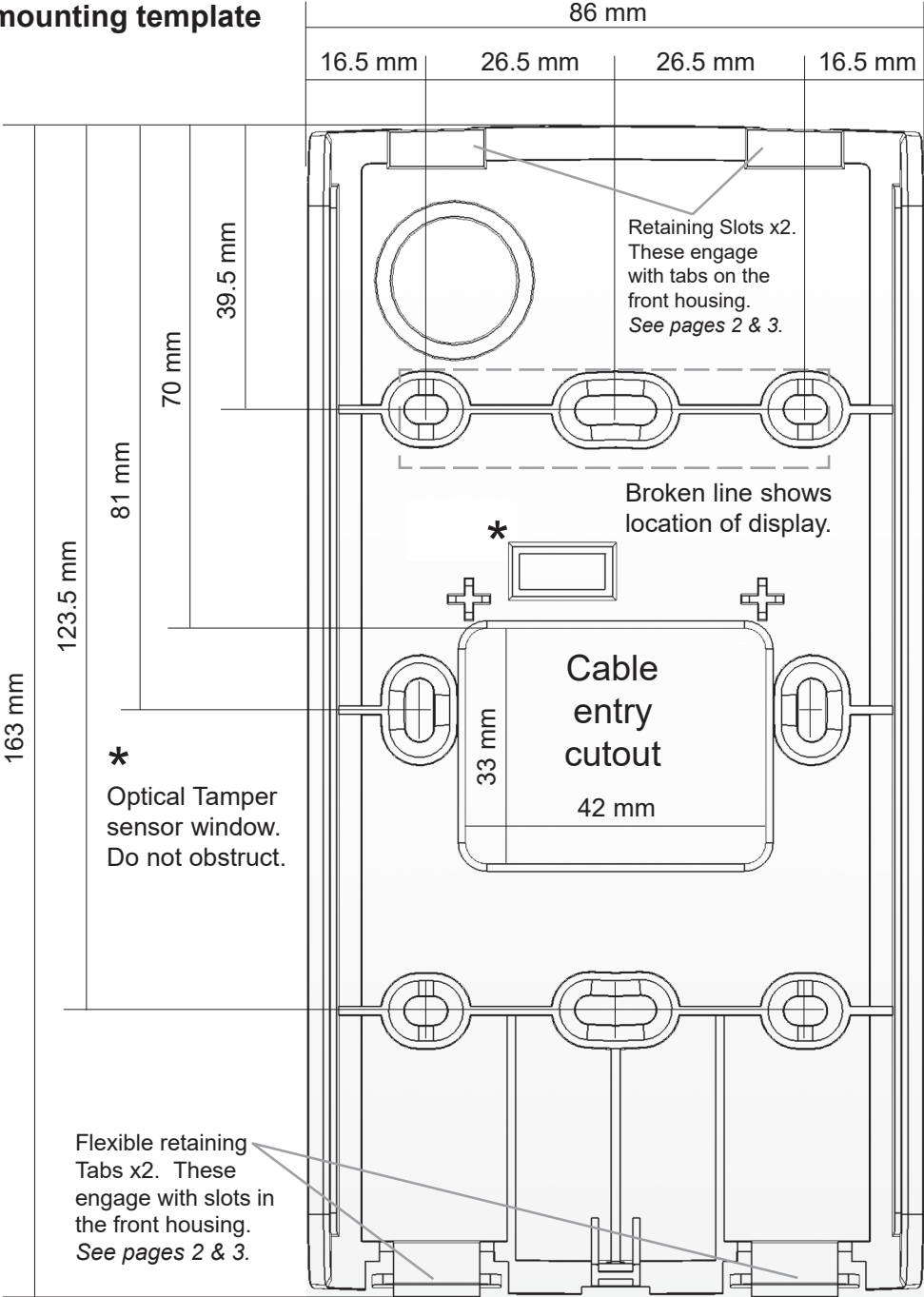
**11. LAN Encryption Key.**  
Infiniti/Integriti systems with encrypted LAN only. e.g. Infiniti Class 5. If required to be entered manually, the LAN encryption key is entered here in hex format.

**LAN Key:**

**12. OLED Screen-saver options (Idle display).**  
Use the ‘^’ and ‘v’ keys to select a screen saver option.  
12Hr invert: Display colours inverted when time is PM.  
Display Off: Display turns off.  
Dim (min<=10): No screen-saver. Display is dimmed to ‘10’ or the ‘Min OLED Brightness’ level if less than 10.

**Screen Saver:**  
12Hr Invert

Backplate  
mounting template



## REGULATORY INFORMATION - UL294 Requirements (North America)

- Wiring methods shall be in accordance with the National Electrical Code (ANSI NFPA70), local codes, and the authorities having jurisdiction.
- This product is acceptable for indoor use only & must be installed within the protected premises.
- If a separate power supply is utilized for ancillary power (e.g. For electric locks), the power supply must be a UL Listed Access Control or Burglar Alarm, Power-Limited, power source capable of a minimum of 4 hours standby power.
- All cabling must be UL Listed and/or Recognized wire.
- All interconnecting devices must be UL Listed.

## FCC Statement (North America)

Information to the user (FCC Part 15.105)

### Class B Product:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Any changes or modifications not expressly approved by Inner Range Pty Ltd could void the user's authority to operate the equipment.

## ISED (Canada)

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (B) / NMB-3(B)

## Disclaimer

1. The manufacturer &/or its agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the correct or incorrect use of the system or its peripherals. The purchaser assumes all responsibility in the use of the system and its peripherals.
2. 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.