ELITE SUITE

# ELT-KLCD

## EliteSuite LCD Keypad

## Installation Manual

**PUBLICATION INFORMATION**

First Publication
- Draft Document Release Only
- Updated fire zone information

Second Publication
- Option Menu Navigation Updated
- Card Reader Interface Options Added

Third Publication
- Slave Keypad Options Added
- Slave mode Zone Wiring Diagrams Added

Fourth Publication
- Tamper Monitor Option Added
- Slave mode Zone Numbering and Wiring Updated

Fifth Publication
- Slave mode Combination Wiring Updated
- Smoke Reset PGM Added

# CONTENTS

# INTRODUCTION

This document details the wiring configuration of the EliteSuite condominium control keypad and installer programming functions.

## Hardware Compatibility

**This manual is written for hardware verison 208-4010-030 or higher and covers firmware application 1.34. This firmware communicates with a EliteSuite enabled Protégé System Controller firmware version 1.07 or above.**

# WIRING CONFIGURATION

## Introduction

The wiring structure of the EliteSuite keypad uses an encrypted RS485 communication interface. Connections should be made in a daisy chain configuration, avoiding star and stub connections.

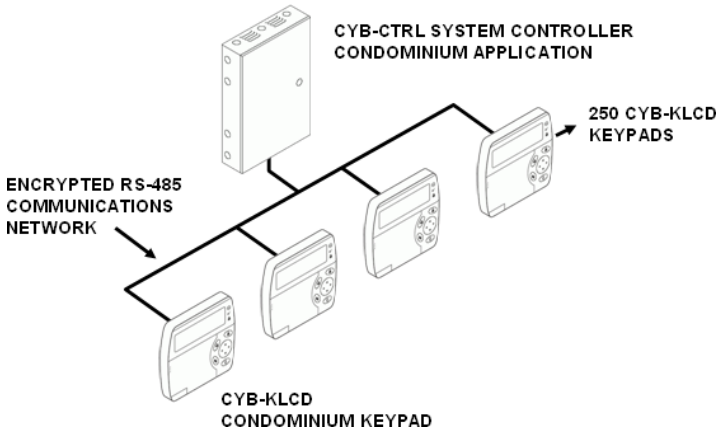


***Figure 1 - Condominium Keypad Communication***

## Keypad Wire Loom Colour Coding

The condominium keypads are supplied with a wire loom attachment and are connected using a keyed 10 position snap lock connector. The 10 way wiring loom connection uses the following colour coding.

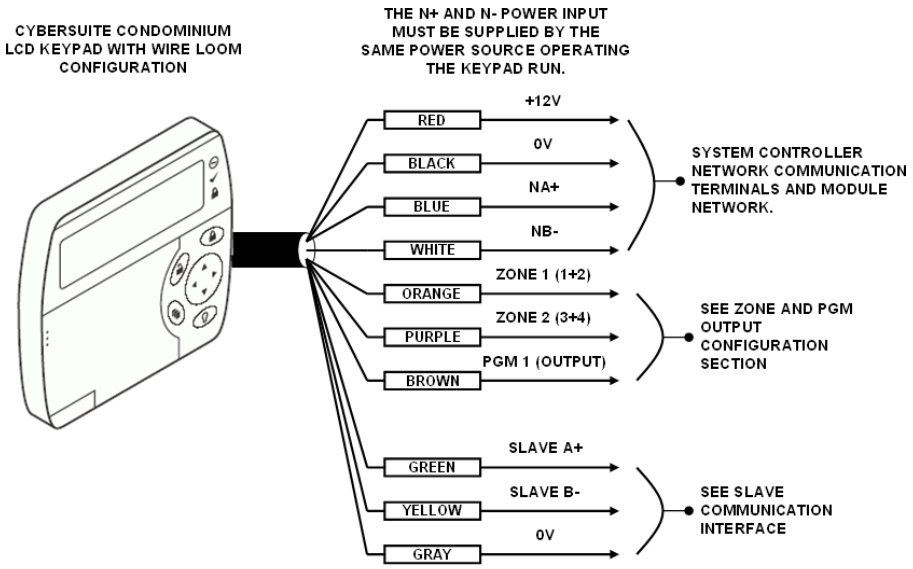


***Figure 2 - Wire Loom Colour Coding and Function***

# Communication Connection

Support for up to 250 keypads per condominium controller is provided, connection to the system controller uses the network communication RS-485 interface. This interface is an isolated interface and requires power to be supplied to the N+ and N- terminals.

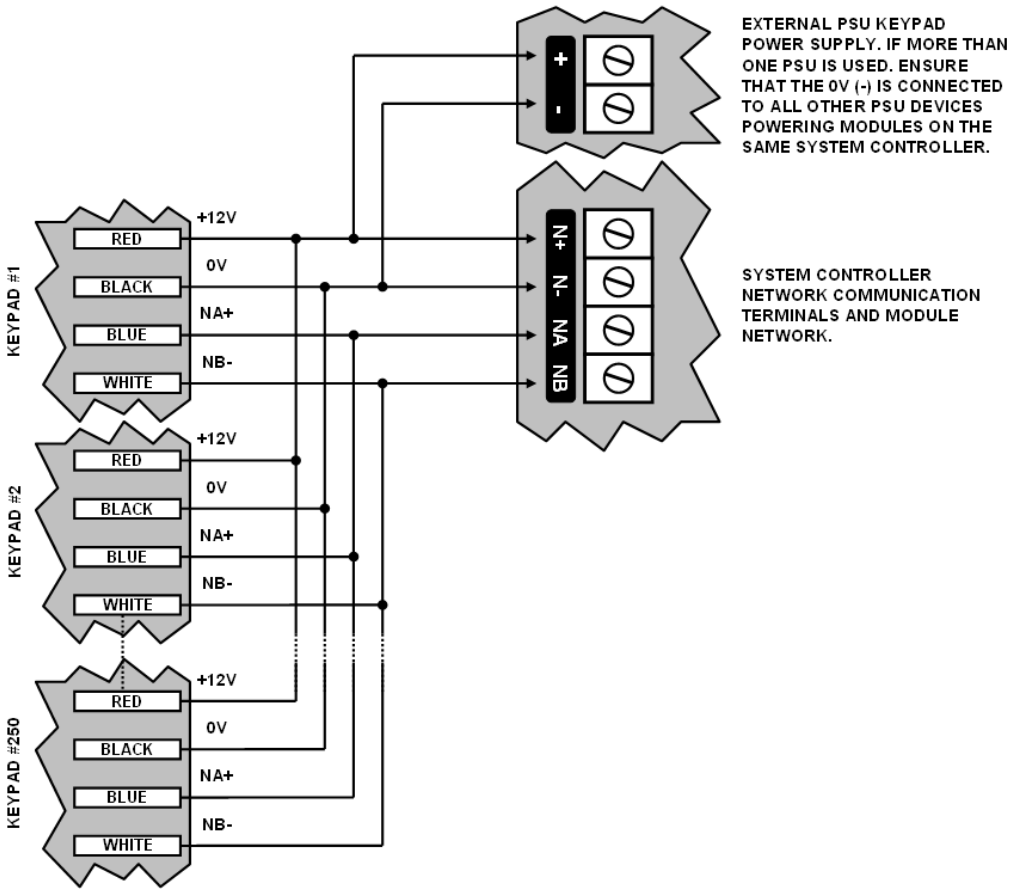


***Figure 3 - Wire Loom Colour Coding and Function***

**When using more than one PSU to supply multiple wiring runs of condominium keypads only connect the +12 output of ONE power supply unit to the N+ and N- terminals of the controller. Each PSU unit should have the common (0V or -) connected together to ensure a common 0V.**

# Zone Input Wiring

The EliteSuite LCD Keypad is capable of connecting to 4 zone inputs, each zone input can then be programmed to perform the required function in the system.

The following diagrams show each of the zone wiring configuration settings that are possible. The programmed zone configuration for the EliteSuite LCD Keypad is made in the option settings. Refer to the *General Options Section* on Page 16 for the programming of the zone configuration.

**When using a tamper input on a device the tamper contacts must be normally closed and wired in series.**

**All resistors required to wire the zone configurations are provided with the EliteSuite LCD Keypad in the accessory bag.**

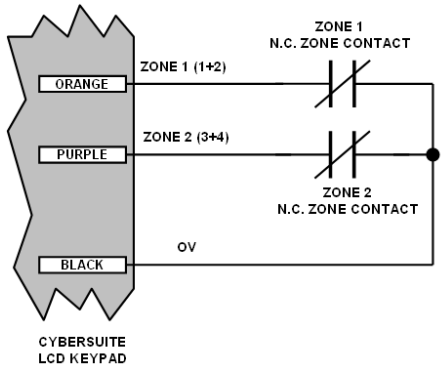


***Figure 4 - 2 Zone Input (No Resistors)***

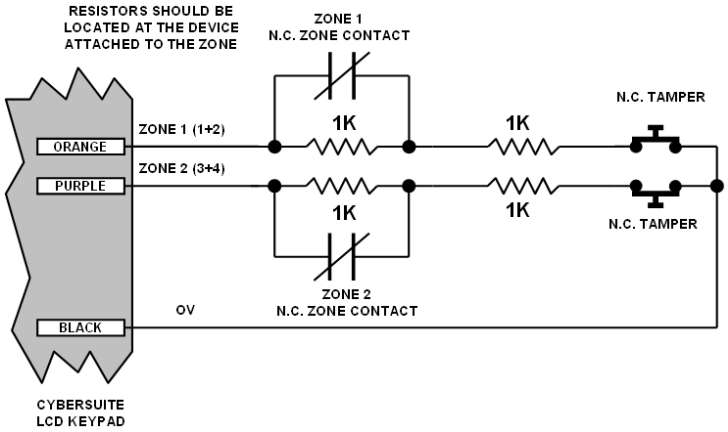


***Figure 5 - 2 Zone Input (1K and 1K)***

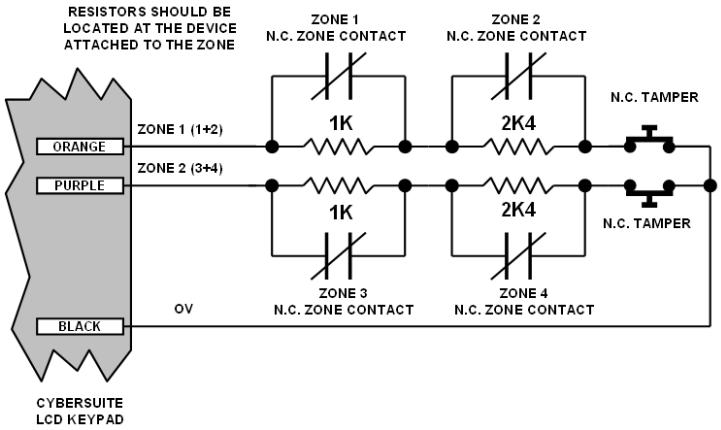


***Figure 6 - 4 Zone Input Duplex Mode (1K and 2K4)***

# Fire Zone Input Wiring

When wiring a zone to be a fire zone input the current programmed zone options will determine what resistors and configuration is required, refer to the *General Options Section* on Page 16 and the zone configuration diagrams in the *Zone Input Wiring Configuration* on Page 3.

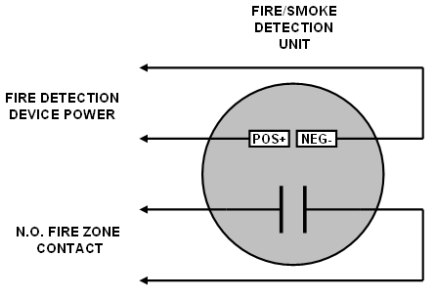


***Figure 7 - Fire/Smoke Detection Input***

**When a fire zone is connected to a zone input that is used in the duplex zone configuration a fire zone fault will NOT BE shown when the fire zone has a shorted condition as this is shown as all zones closed. A Fire Loop trouble will be shown when the zone is tampered.**

**Fire zones that are installed in duplex mode operation are not recommended. Fire zones should ALWAYS be connected using the EOL resistor method (2R) as this provides both open and short circuit monitoring.**

# Slave Keypad Zone Wiring

With one or more slave keypads connected, extra zones beyond the normal 4 are available on the suite system.

There are 2 options for wiring the zones:

- Duplex mode enabled, **16** zones in total available. This setup is shown in ***Figure 8***.
- Standard wiring mode, **8** zones in total available. This setup is shown in ***Figure 9***.

The choice between the two wiring options will be dependent on the physical configuration of the sensors and wiring in each installation. See General Options (Menu 2, 1) on page **16** for enabling duplex zones.

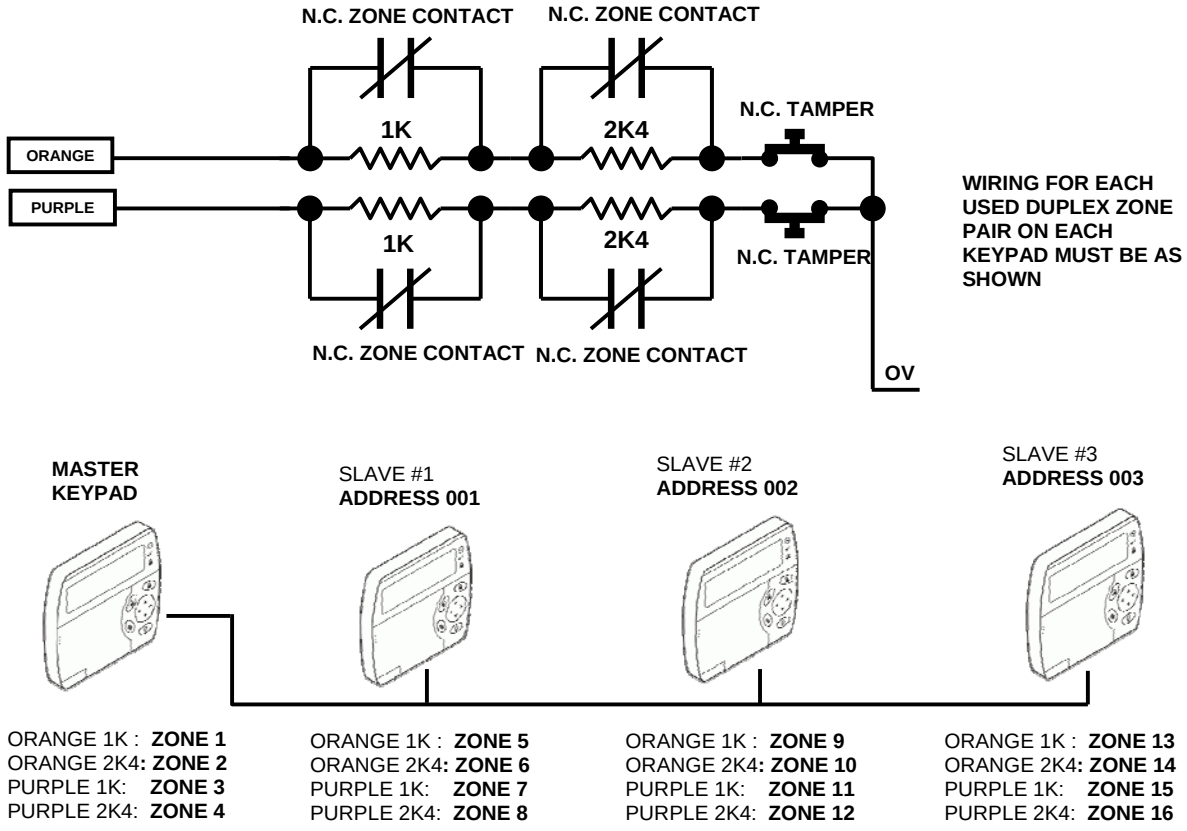


***Figure 8 - Slave Keypad Duplex Zone Wiring and System Numbering***

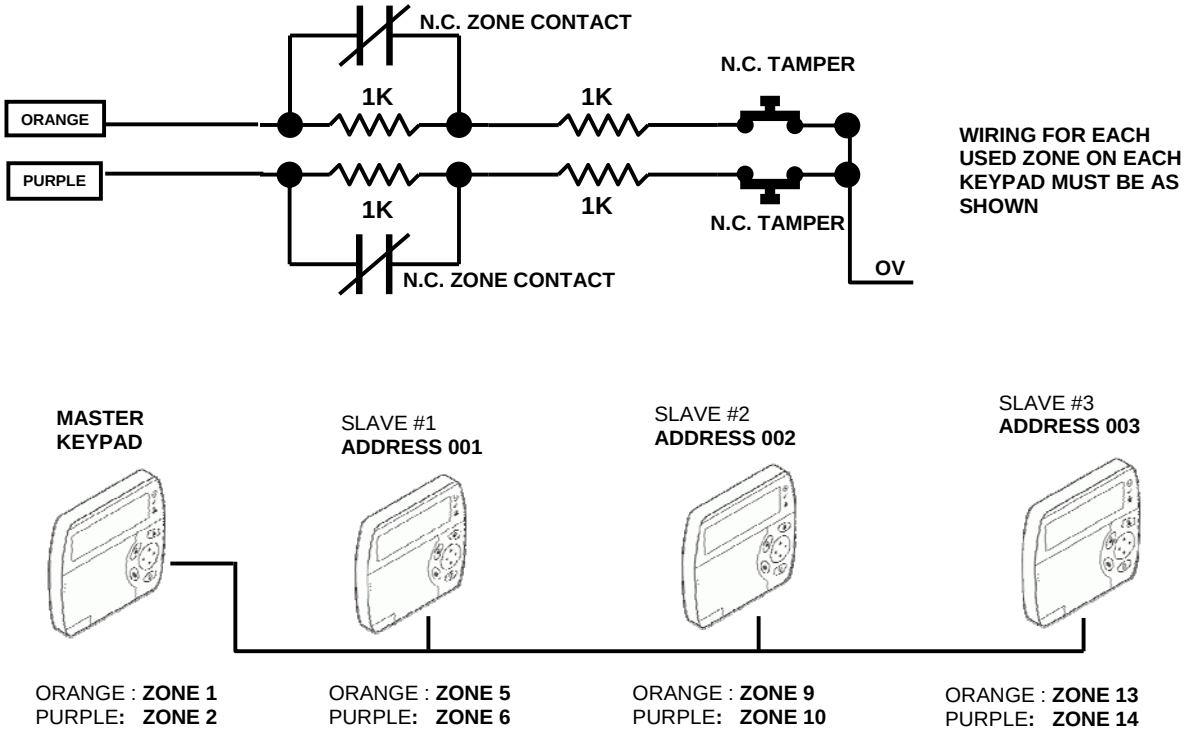


***Figure 9 - Slave Keypad Standard Zone Wiring and Numbering***

# PGM (Programmable Output)

The EliteSuite LCD Keypad uses a programmable output (PGM) that will activate during an alarm condition. This output can be programmed to either:

- Follow the status of the alarm siren time or the fire alarm setting
- Follow the armed / disarmed status of the keypad.

Connect a relay or other interface device to this open collector output for activation of ancillary devices. The behaviour of this output can also be inverted in the programming, see the General Options section 0 for details on PGM programming.

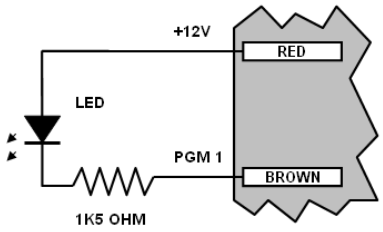


***Figure 10 - LED Indicator Output***

# Slave Network

The EliteSuite LCD Keypad is capable of controlling a slave network of up to 3 other EliteSuite Keypads in Slave Mode (see Device Options for configuration), along with up to 4 proximity card reader devices from the following range:

- PRX-NANO Nano Prox Small Form Factor Proximity Card Reader
- PRX-VARIO Vario Prox Flush Mount Proximity Card Reader

The slave devices of either type must all be connected to the Slave 485 network connections of the master keypad in a daisy chain configuration with each other. The wiring diagrams for connection to the slave 485 network for each device type are shown in ***Figure 11*** and ***Figure 12***.

Each slave reader device communicates with the keypad via a PRX-SAM Standalone Module Board. This module also allows control of an electronic lock device with the onboard relay.

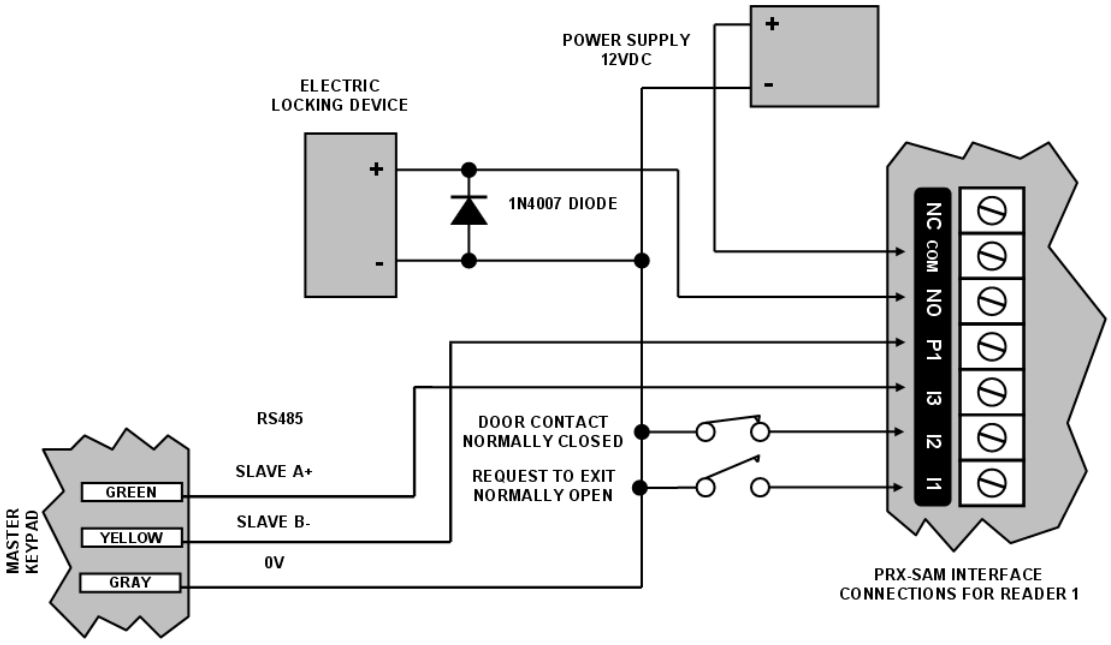


***Figure 11 - Slave Reader Network Wiring To PRX-SAM Module***

For further information regarding wiring of the Reader device and the Stand Alone Modules, please refer to the PRX-SAM Stand Alone Module Installation Manual, provided with your PRX-SAM board or from www.integratedcontroltechnology.com.

Each slave keypad device communicates with the master keypad via connection of their primary network lines to the secondary network lines of the master keypad.

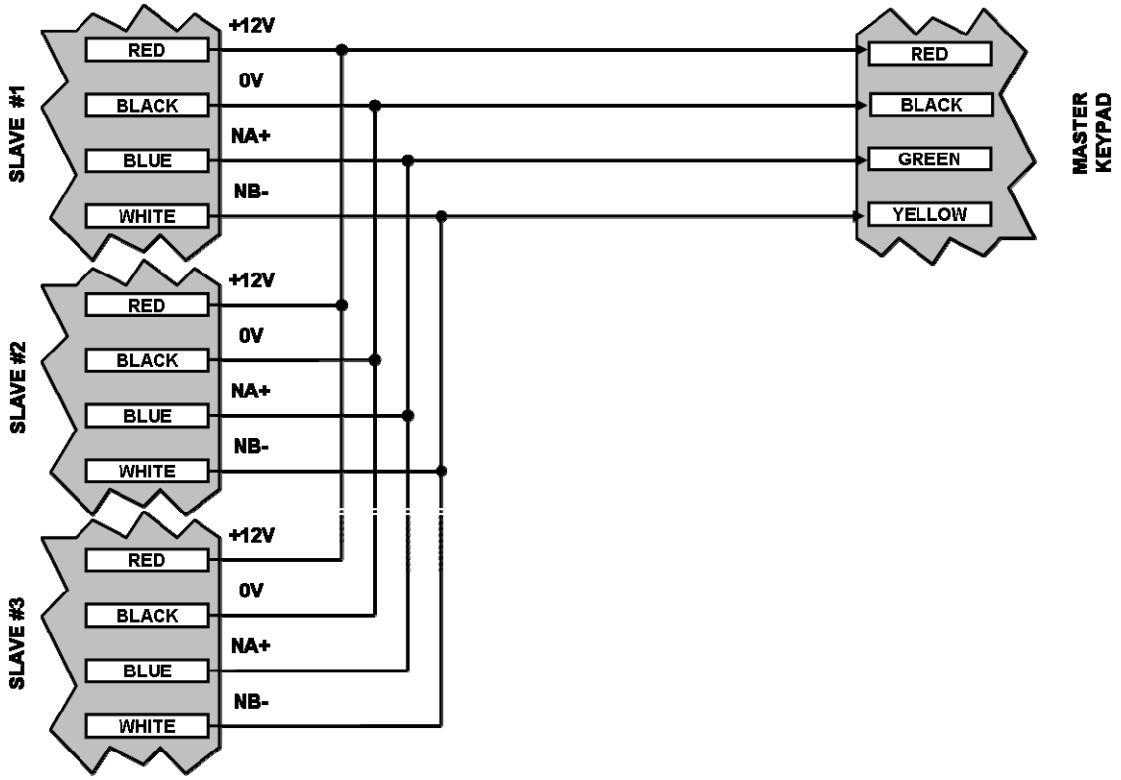


***Figure 12 – Slave Keypad Wiring to Master Keypad***

# DEVICE CONFIGURATION

## Introduction

Before the EliteSuite LCD Keypad module will communicate it must be assigned an address and programmed with specific options as to how it will operate. This is achieved by accessing the device configuration menu.

To gain access to the device configuration menu, apply power to the device, when the screen displays the device model and version information, press the [CLEAR] key. A prompt will be presented asking you to press the [ENTER] key to setup the keypad. Pressing [ENTER] will be display a menu for the address configuration, contrast, version information and device defaulting.

**The device configuration menu can only be accessed when the device powers up. It is not able to be accessed when the system is operational.**

## Address Selection (Device Config Menu 1)

The address selection sets the address of the EliteSuite LCD Keypad, this address must be a unique address on the system from 1 to 250.

```
Enter device
address: 256
```

Use the numerical keys from 0 to 9 to program the address and press [ENTER] to save the setting. To exit without making changes press the [MENU] key.

## Device Options (Device Config Menu 2)

The address selection sets the address of the EliteSuite LCD Keypad, this address must be a unique address on the system from 1 to 250.

```
  Device Options
    [--------]
```

The device options set options that relate to the mode of operation of the EliteSuite keypad. To toggle options press the keys [**1**] to [**8**] ,

the letter '**Y**' will be displayed when the option is on. Pressing the [**ENTER**] key will save the options.

Option 1 – Slave Keypad

If this option is used, be sure to address the keypad as slave 1,2,3 or 4.

☑ Enabled Slave mode is entered on start up

☒ Disabled Master mode is entered on start up

Option 2 – Device Tamper

☑ Enabled the Device tamper switch is monitored.

☒ Disabled the Device tamper switch is not monitored.

**Option 3 to 8 – Reserved**

## Display Contrast (Device Config Menu 3)

By default the contrast of the EliteSuite LCD Keypad is set to the optimal viewing and performance level, however should adjustment be required a contrast adjustment is provided.

```
   Contrast
[*******    ]
```

Use the left and right arrow keys to adjust the contrast (display will change as the contrast is adjusted) and press [ENTER] to save configuration. To exit without making changes press the [MENU] key.

## Version Info (Device Config Menu 4)

The EliteSuite LCD Keypad contains the build and version information of the software application it is currently operating. This is presented in 2 screens that show the following:

```
   EliteSuite
LCD Keypad V1.21
```

The display will automatically scroll to the next screen and then return back to the menu.

```
Built 09:50:00
on 24 Apr 2004
```

The information that relates to the built and version details may vary from what is presented in the display screens shown above. For the latest firmware release versions and change notifications please visit the Integrated Control Technology website at www.integratedcontroltechnology.com.

## Device Default (Device Config Menu 5)

To default the EliteSuite LCD Keypad to factory defaults select the offline menu option 3, this will reset all programming to the default settings.

```
Press [ENTER] to
default keypad.
```

Pressing the [ENTER] key will continue with the operation and default the keypad, pressing the [MENU] key will not default the keypad and return to the Offline Menu.

# LOCAL INSTALLER LOGIN

## Introduction

The default local installer code is [**0000**]. To access the local installation menu press the [**ENTER**] key followed by [**0000**], a menu that can be scrolled using the [↑] and [↓] keys will be shown. Pressing [**ENTER**] or the menu number will select the menu item.

If a module update has been performed on the system controller and the user code at system controller user location 3 (UN00003) has been changed. The code that is entered in this setting is now the local installer code. This code is programmed system wide when an update is performed.

To disable the Installer Code on ALL EliteSuite keypads (Recommended) delete the code for User UN00003 by following the instructions in the EliteSuite System Reference Manual for deleting a user pin code.

**You can not access the installer menu if the EliteSuite system is armed. Disarm the EliteSuite system before attempting to login with the installer code.**

**It is recommended that all installer modifications are completed and downloaded using the Protege System Management Suite (PRT-SMGT). Ensure a module update command is executed when modifications are being made.**

# TIMING (MENU 1)

## Entry Delay Timer (Menu 1, 1)

The entry delay timer is programmable from 0 to 255 seconds (Default 30 Seconds). The cursor will flash on the digit you are currently modifying, entering a number or pressing the [**RIGHT**] or [**LEFT**] arrows will move the cursor to another digit.

```
Entry delay
time: 030 secs
```

Programming the entry delay timer to 0 will result in no entry delay operation for any zone that has been assigned the entry delay zone type.

## Exit Delay Timer (Menu 1, 2)

The exit timer is programmable from 0 to 255 seconds (Default 30 Seconds). The cursor will flash on the digit you are currently modifying, entering a number or pressing the [**RIGHT**] or [**LEFT**] arrows will move the cursor to another digit.

```
Exit delay
time: 030 secs
```

Programming the exit delay timer to 0 will result in no exit delay, the system will immediately arm the EliteSuite System.

## Alarm/Siren (Menu 1, 3)

The siren/alarm timer is programmed from 0 to 250 minutes (Default 4 minutes). The cursor will flash on the digit you are currently modifying, entering a number or pressing the [**RIGHT**] or [**LEFT**] arrows will move the cursor to another digit.

```
Alarm siren
time: 004 mins
```

Programming a siren time of 0 will result in the siren not being activated.

## Reader Pre-Alarm Timer (Menu 1, 4)

The Reader Pre-Alarm Timer is programmable from 0 to 255 seconds (Default 30 Seconds). This is only used when the Reader Slave Network is enabled.
The cursor will flash on the digit you are currently modifying, entering a number or pressing the [**RIGHT**] or [**LEFT**] arrows will move the cursor to another digit.

```
Reader Pre-Alarm
time: 030 secs
```

The minimum Pre-Alarm Time is 5 seconds, any number lower than 5 seconds entered will be automatically increased to 5 seconds to ensure correct reader operation.

## Reader Left Open Timer (Menu 1, 5)

The Reader Left Open Timer is programmable from 0 to 255 seconds (Default 45 Seconds). This is only used when the Reader Slave Network is enabled.
The cursor will flash on the digit you are currently modifying, entering a number or pressing the [**RIGHT**] or [**LEFT**] arrows will move the cursor to another digit.

```
Reader Left Open
time: 045 secs
```

The minimum Left Open Time is 5 seconds, any number lower than 5 seconds entered will be automatically increased to 5 seconds to ensure correct reader operation.

# OPTIONS (MENU 2)

## General Options (Menu 2, 1)

The general options set options that relate to the general operation of the EliteSuite keypad. The options shown in the screen shots below are the default option configuration.

To modify options press the keys [**1**] or [**2**] to toggle the option on or off. Pressing the [**ENTER**] key will save the options. Press the [**UP**] or [**DOWN**] arrows to scroll through the available options.

```
Non-Duplex Zone
EOL enabled: N
```

Option 1 - Zone Type Option 1

If duplex zone (Option 2) is not enabled then Option 1 will set the zone input configuration (EOL or NO EOL). EOL requires the use of 2 X 1K resistors to provide, Short, Alarm, Closed and Tamper Monitoring. NO EOL provides Alarm and Closed monitoring.

☑ Enabled EOL resistors are used (2R Mode) (2 Zones).

☒ Disabled NO EOL resistors are used (2 Zones).

```
Duplex Zone
Mode enabled: N
```

Option 2 - Duplex Zone Operation

If Option 2 is set Option 1 does not have any function. When option 2 is set the zones will use a 1K and 2K4 resistor and provide monitoring for 2 zones.

☑ Enabled Duplex Zone Mode (4 Zones).

☒ Disabled Option 1 sets the zone configuration.

```
Beep on Trouble
Condition: Y
```

Option 3 - Beep On Trouble Condition

☑ Enabled the beeper will emit 4 beeps every 5 minutes if a trouble condition is present, to silence the trouble beep, view the trouble condition.

☒ Disabled no trouble beep will be generated.

```
Disarmed on
Power up: N
```

Option 4 - Device Power Up Disarmed

☑ Enabled the system will power up disarmed regardless of the system status at the time power was lost.

☒ Disabled the system will power up in an exit delay condition if the power to the EliteSuite device was turned off during an exit delay cycle or if the system was in alarm or armed.

```
Smoke Reset
PGM Enabled: N
```

Option 5 – Smoke Reset PGM

☑ Enabled the PGM Output will be activated for 5 Seconds after the CLEAR and ENTER keys are held down simultaneously for 3 seconds.

☒ Disabled holding down the CLEAR and ENTER keys simultaneously has no effect on the PGM output.

```
PGM Follows
Alarm Status: Y
```

Option 6 – PGM Output Follows Alarm Status

☑ Enabled the PGM Output will be enabled with the alarm siren time activation or fire alarm activation.

☒ Disabled the PGM Output will not change state regardless of the alarm status.

```
PGM Follows
Area Status: N
```

Option 7 – PGM Output Follows Area Status

☑ Enabled the PGM Output will be enabled when the EliteSuite system is armed, and disabled when the system is disarmed.

☒ Disabled the PGM Output will not change state regardless of the area status.

```
PGM Output
Inverted: N
```

Option 8 – PGM Output Inversion

☑ Enabled the PGM Output will follow the operation programmed by options 6 and 7, but the output will be opposite to the behaviour described in those functions.

☒ Disabled the PGM Output will follow the programmed output behaviour of options 6 and 7.

# Display Options (Menu 2, 2)

The display options set functions that relate to the display of information on the EliteSuite LCD keypad. The options shown in the screen shots below are the default option configuration.

To modify options press the keys [**1**] or [**2**] to toggle the option on or off. Pressing the [**ENTER**] key will save the options. Press the [**UP**] or [**DOWN**] arrows to scroll through the available options.

**Changes to the Display Option settings require the keypad to be restarted before the changes take effect.**

```
Show Open Zone
Messages: N
```

Option 1 - Show Zone(s) Open

☑ Enabled the display will show the messages Zone(s) Open in place of the time when a zone is open or not secure.

☒ Disabled the time will always be shown when the suite name is displayed.

```
24HR Time
Formatting: N
```

Option 2 - Show 24HR Time

☑ Enabled the display will show the time in 24HR military format.

☒ Disabled the time will be shown in standard 12HR am/pm format.

Option 3, 4, 5, 6, 7 and 8 - Reserved

# Arming Options (Menu 2, 3)

The arming options set functions that relate to the arming of the EliteSuite system. The options shown in the screen shot below are the default option configuration.
To modify options press the keys [**1**] or [**2**] to toggle the option on or off. Pressing the [**ENTER**] key will save the options. Press the [**UP**] or [**DOWN**] arrows to scroll through the available options.

```
Fast Arming
Enabled: Y
```

Option 1 - Allow Fast Regular Arming

- ☑ Enabled the system can be FAST ARMED by pressing and holding the closed padlock key.
- ☒ Disabled FAST ARMING is disabled.

```
Fast Stay Arming
Enabled: Y
```

Option 2 - Allow Fast Stay Arming

- ☑ Enabled the system can be FAST STAY by pressing and holding the [STAY] key.
- ☒ Disabled FAST STAY arming is disabled.

```
Instant Stay Arm
Enabled: Y
```

Option 3 - Allow Instant Arming During Stay Exit Delay

- ☑ Enabled the system will allow the stay key to be pressed and held during the exit delay of a stay arming cycle to allow the stay arming to be changed to an instant stay arm.
- ☒ Disabled pressing the stay key during the stay exit delay will have no function.

```
Fast Force Arm
Enabled: Y
```

Option 4 - Allow Fast Force Arming

☑ Enabled the system can be FAST FORCE armed by pressing and holding the [FORCE] key.

☒ Disabled FAST FORCE arming is disabled.

Option 5, 6, 7 and 8 - Reserved

☑ Reserved.
☒ Reserved.

Do not modify the reserved options configuration.

# Reporting Options (Menu 2, 4)

The reporting options are a set of functions that relate to the reporting of information to the on site monitoring application or offsite central station. The system can further be configured for each reportable event to go to monitoring station and the local on site monitoring.

The options shown in the screen shots below are the default option configuration.

To modify options press the keys [**1**] or [**2**] to toggle the option on or off. Pressing the [**ENTER**] key will save the options. Press the [**UP**] or [**DOWN**] arrows to scroll through the available options.

```
Report Arming
and Disarming: Y
```

Option 1 - Report Arming and Disarming

- ☑ Enabled the EliteSuite keypad will send a message to the system controller when the system is armed or disarmed. If this option is disabled the current status of the EliteSuite keypad will not be valid. It is recommended this and the Report Alarm options are always enabled.

- ☒ Disabled no message will be sent.

```
Report All
Alarm Events: Y
```

Option 2 - Report Alarms (Fire and Normal)

- ☑ Enabled the EliteSuite keypad will send a message when an alarm occurs on the EliteSuite system. This also enables the sending of the alarm silenced and alarm timed out messages.

- ☒ Disabled no message will be sent for an alarm event.

```
Report Zone
Bypassing: N
```

Option 3 - Report Zone Bypass

☑ Enabled the system will report when the EliteSuite system is armed with zones that have been bypassed.

☒ Disabled no message will be sent when the user arms the system with zone(s) bypassed.

```
Report Zone
Faults: N
```

Option 4 - Report Zone Fault

☑ Enabled the system will report any zone fault trouble condition to the system controller. This will not indicate the zone that has the fault as this will be shown on the local keypad and in the trouble view menu.

☒ Disabled no zone fault message will be sent.

```
Report User Menu
Access: N
```

Option 5 - Report User Menu Access

☑ Enabled the system will report when the master user has accessed the main menu.

☒ Disabled no message will be sent when the master access's the main menu.

```
Report Installer
Local Login: N
```

Option 6 - Report Local Installer Access

- ☑ Enabled the system will report when the local installer code is used to gain access to the local installation options.
- ☒ Disabled no message will be sent when the installer access's the installer menu.

```
Report Extended
System Info: N
```

Option 7 - Report Extended Information

- ☑ Enabled the system will report extending information such as the device tamper and fire loop trouble conditions. These conditions do not generate an alarm in the system locally but can be used to generate an event at the local monitoring or remote monitoring center alerting the operator to a potential problem.
- ☒ Disabled no message will be sent when the extended functions are triggered.

Option 8 - Reserved

- ☑ Reserved.
- ☒ Reserved.

It is recommended not to enable/disable or modify the settings of reserved options.

# Panic Options (Menu 2, 5)

The panic options set functions that relate to the panic processing of the EliteSuite system. The options shown in the screen shots below are the default option configuration.

To modify options press the keys [**1**] or [**2**] to toggle the option on or off. Pressing the [**ENTER**] key will save the options. Press the [**UP**] or [**DOWN**] arrows to scroll through the available options.

```
1+3 Silent Panic
Enabled: N
```

Option 1 - 1+3 Silent Panic

- ☑ Enabled the system will send a silent panic alarm to the front desk when the 1+3 keys are held for a period of 2 seconds. No message will be displayed on the screen or alarm generated.
- ☒ Disabled the 1+3 will not cause any alarm.

```
4+6 Medic Alarm
Enabled: N
```

Option 2 - 4+6 Medical Alarm

- ☑ Enabled the system will send a medical panic alarm to the front desk when the 4+6 keys are held for a period of 2 seconds. No message will be displayed on the screen or alarm generated.
- ☒ Disabled the 4+6 keys will not cause any alarm.

```
7+9 Fire Alarm
Enabled: N
```

Option 3 - 7+9 Fire Alarm

- ☑ Enabled the system will generate a local fire alarm on the EliteSuite keypad and also alert the central station and on site monitoring.
- ☒ Disabled the 7+9 keys will not cause any alarm.

```
User 8 Duress
Enabled: N
```

Option 4 - User 8 Duress Code Enabled

- ☑ Enabled the system will enable user code 8 to be a duress code user and on login will send a duress code to the central station or on site monitoring system.
- ☒ Disabled user code 8 will operate as a standard user.

Option 5, 6, 7 and 8 - Reserved

- ☑ Reserved.
- ☒ Reserved.

Do not modify the reserved options configuration.

# ZONES (MENU 3)

## Selecting a Zone

To select a zone to modify use the [🡅] and [🡇] keys to scroll through the available zones. Press the [ENTER] key to move to the next configuration screen for the selected zone.

```
Select zone to
modify [01]
```

## Zone Name

The next configuration screen for the zone will show the zone name for the zone that you have selected.

```
Zone Name
Zone 1
```

The cursor will be flashing on the first character. To edit the text press the keys [**1**] to [**0**], the display will change the character displayed in the same way you enter text on a mobile phone. To clear the text display press the [**FORCE**] key. To move to the next configuration screen press the [**ENTER**] key.

To move the cursor press the [🡄] and [🡆] keys.

## Zone Type

The zone type configuration sets how the zone will function within the system.

```
Zone Type
Delay
```

To select a zone type use the [🡅] and [🡇] keys, the zone type will change. To disable the zone and remove it from the ready display select the Disabled Option. To move to the next configuration screen press the [**ENTER**] key. To move the cursor press the [🡄] and [🡆] keys.

Zone Types

*Disabled* Zone is disabled, does not function in the system.

*Delay* Zone will have an entry delay when a user enters.
*Follow* Zone will not cause an alarm if the entry delay has started otherwise the zone will be an instant zone. Use this to set the zone type for a motion detector that is located in an entrance area.

*Instant* Zone will cause an alarm immediately.
*24HR* Zone will always cause an alarm immediately.
*Fire* Zone is a fire zone and will generate an instant alarm.

*Fire Delay* Zone is a delayed fire zone and will generate the fire delay beeping and require the user to follow the delay fire zone procedures to prevent a full fire alarm from being activated.

# Zone Options

The zone options select functions that relate to the operation of bypassing, force arming and stay arming. The options shown in the screen shot below are the default zone configuration options.

To modify options press the keys [**1**] or [**2**] to toggle the option on or off. Pressing the [**ENTER**] key will save the options. Press the [**UP**] or [**DOWN**] arrows to scroll through the available options.

```
Zone Bypassing
Enabled: Y
```

Option 1 - Bypass Allowed

☑ Enabled the zone can be bypassed. A fire zone can never be bypassed regardless of the bypass setting.

☒ Disabled zone can not be bypassed.

```
Zone is a Stay
Zone: Y
```

Option 2 - Stay Zone

☑ Enabled the zone is set as a stay zone. When the system is armed in stay mode this zone will not generate an alarm.

☒ Disabled the zone is not a stay zone.

```
Force Arming on
Zone Allowed: Y
```

Option 3 - Force Zone

☑ Enabled the zone can be force armed when it is not ready to be armed. A force armed zone will automatically be included in the alarm processing when the zone restores from the not ready condition.

☒ Disabled the zone is not able to be force armed.

Option 4, 5, 6, 7 and 8 - Reserved

☑ Reserved.
☒ Reserved.

It is recommended not to enable/disable or modify the settings of reserved options.

# Contact

Integrated Control Technology welcomes all feedback. Please go to our website or use the information below.

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