

# TS700

## Installation & User Guide



### Compatible Equipment

NETLED - Remote Keypad	LEC 6 - 6 Zone Expander
NETSTAR - Remote Keypad	DC54/58 - Digital Communicators
NETARM - Remote Keypad	CPA6 OM - Output Module
TS700.LEC - 2 Zone Expander	9040 - Loudspeaker
	NIB - Linedriver

# Overview

## Introduction

The TS700 intruder alarm control system is provided for domestic and commercial intruder alarm systems conforming to BS4737: part 1: 1986. The system consists of a control panel and at least one remote keypad.

## Control Panel

The control panel is the controlling unit for the alarm system with its own power supply and an internal battery (supplied separately) for use during a mains failure.

It has the following facilities:

- Eight programmable detection circuits
- Bell and strobe output
- Four programmable high current outputs
- Eight programmable digicom outputs
- Connection for a plug-on digicom
- Extension loudspeaker output (16 Ohms)
- 1.5 Amp power supply
- All system data stored in a Non-Volatile memory (NVM)

## Remote Keypads and LECs

The TS700 system will accept three types of remote keypads: The NETLED remote keypad has a 4 x 7 segment LED display and a power indicator. The NETSTAR remote keypad has a 8 character LCD display and a power indicator. The NETARM remote arming keypad has a power indicator and a programmable function LED. The Local Expansion Card (TS700.LEC) provides the means of adding two detection circuits without the need of using a remote keypad. All device types can be used on the same system, providing the total does not exceed four. Each device provides the following facilities:

- Two programmable detection circuits
- A programmable output

## Options

Additional equipment may be connected to the TS700:

- A plug-on digital communicator type DC54 or DC58 can be fitted inside the control panel to transfer panel status information to a dedicated alarm receiving centre via the BT network
- Other types of digital communicators, RedCARE STU or Paknet interface card can be connected to the control panel to transfer panel status information to a dedicated alarm receiving centre via the BT network
- A printer type CPA6.P (obsolete) or a standard RS232 serial printer via a Menvier Security Printer Adaptor (MPA/DCI) can be connected to provide a printout of the 200 log events and system parameters.
- An output module type CPA6.OM can be connected to provide an output to a set of LEDs/relays to indicate circuit activation. Each module will provide up to eight circuit indications and two modules can be "daisy chained" to provide up to sixteen outputs.

## Specifications

Input Voltage:	230V +/-10% 50Hz
Control Panel:	110mA (normal) 190mA (alarm with extension speaker)
Power Supply Rating:	1.5 Amp
NETSTAR Remote Keypad:	50mA (normal) 60mA (alarm)
NETLED Remote Keypad:	60mA (normal) 70mA (alarm)
NETARM Arming Keypad:	30mA (normal) 40mA (alarm)
Battery:	12V 7Ah Sealed Lead Acid type
Zones with tamper loops:	10 - 16
Panel dimensions:	383(w) x 312(h) x 95(d) mm
Panel weight (w/o battery):	4.4kg
Remote Keypad dim.:	150(w) x 100(h) x 30(d) mm
Remote Keypad weight:	280g
Environment:	0 - 55 °C

## System Configuration

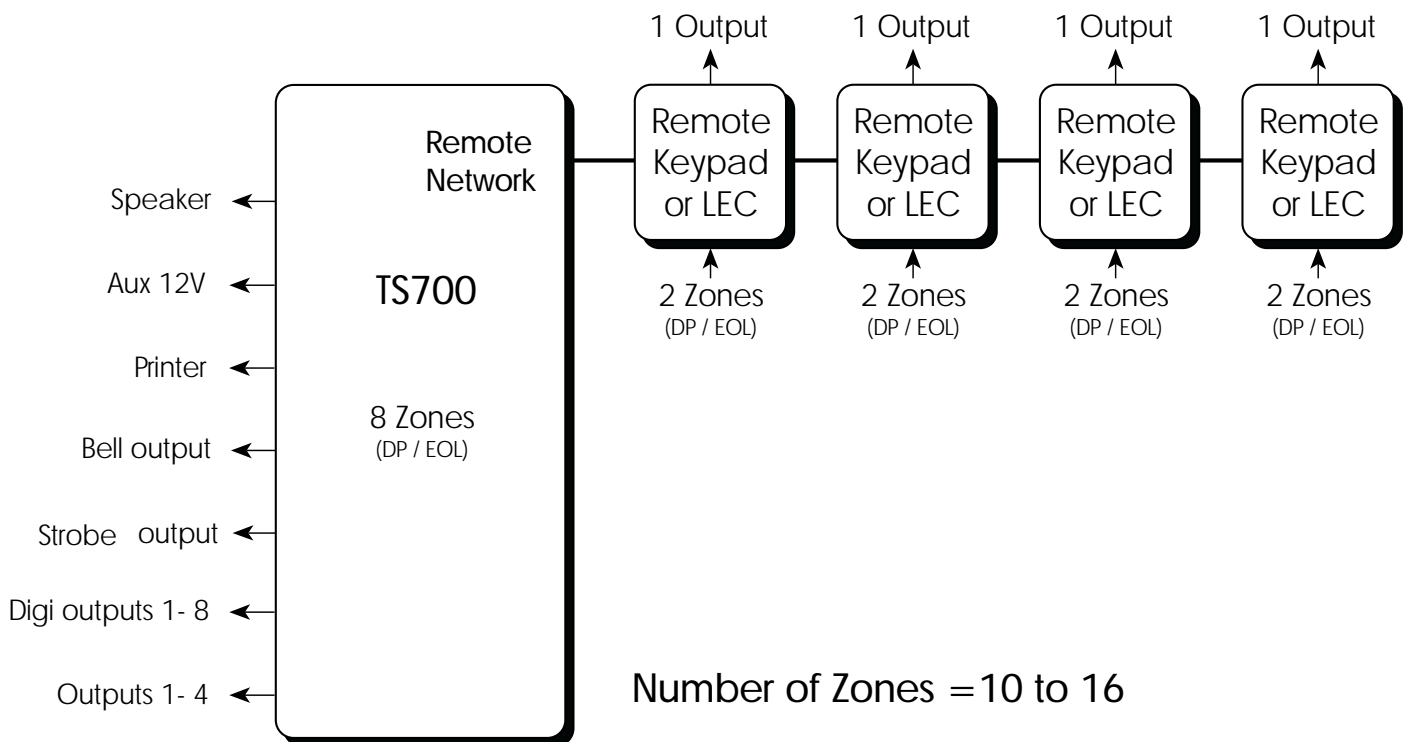


Figure 1. TS700 System Configuration

# Wiring Remote Devices

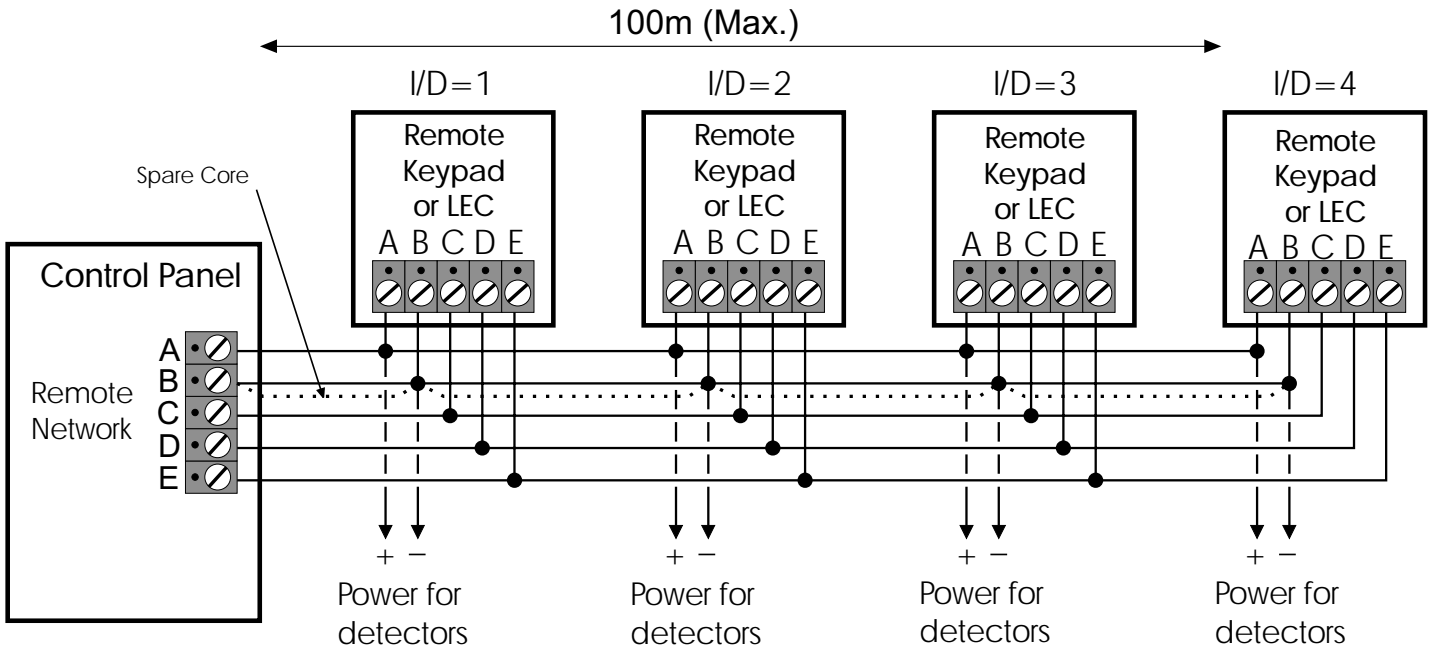
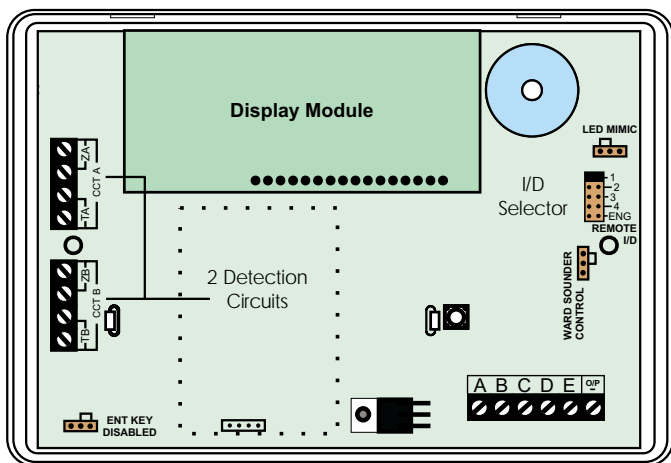


Figure 2. Remote Keypad & LEC Connections

# Wiring Detection Circuits

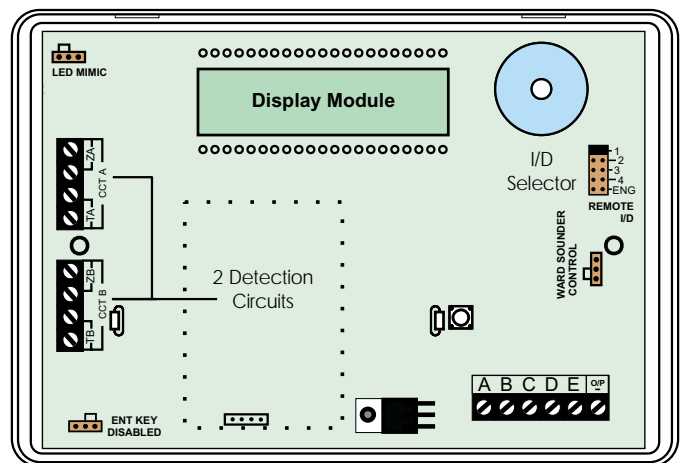
All detection circuits may be wired as "End of Line" (EOL) or "Double Pole" (DP). Both methods can be used on the same equipment. Please refer to Network Devices Wiring Section for more details.

## NETARM / NETLED Remote Keypad



Remote network connections  
 Programmable output switched -ve @100mA

## NETSTAR Remote Keypad



Remote network connections  
 Programmable output switched -ve @100mA

Figure 3. NETARM, NETLED, NETSTAR Remote Keypads

# System Installation

## PCB Layout

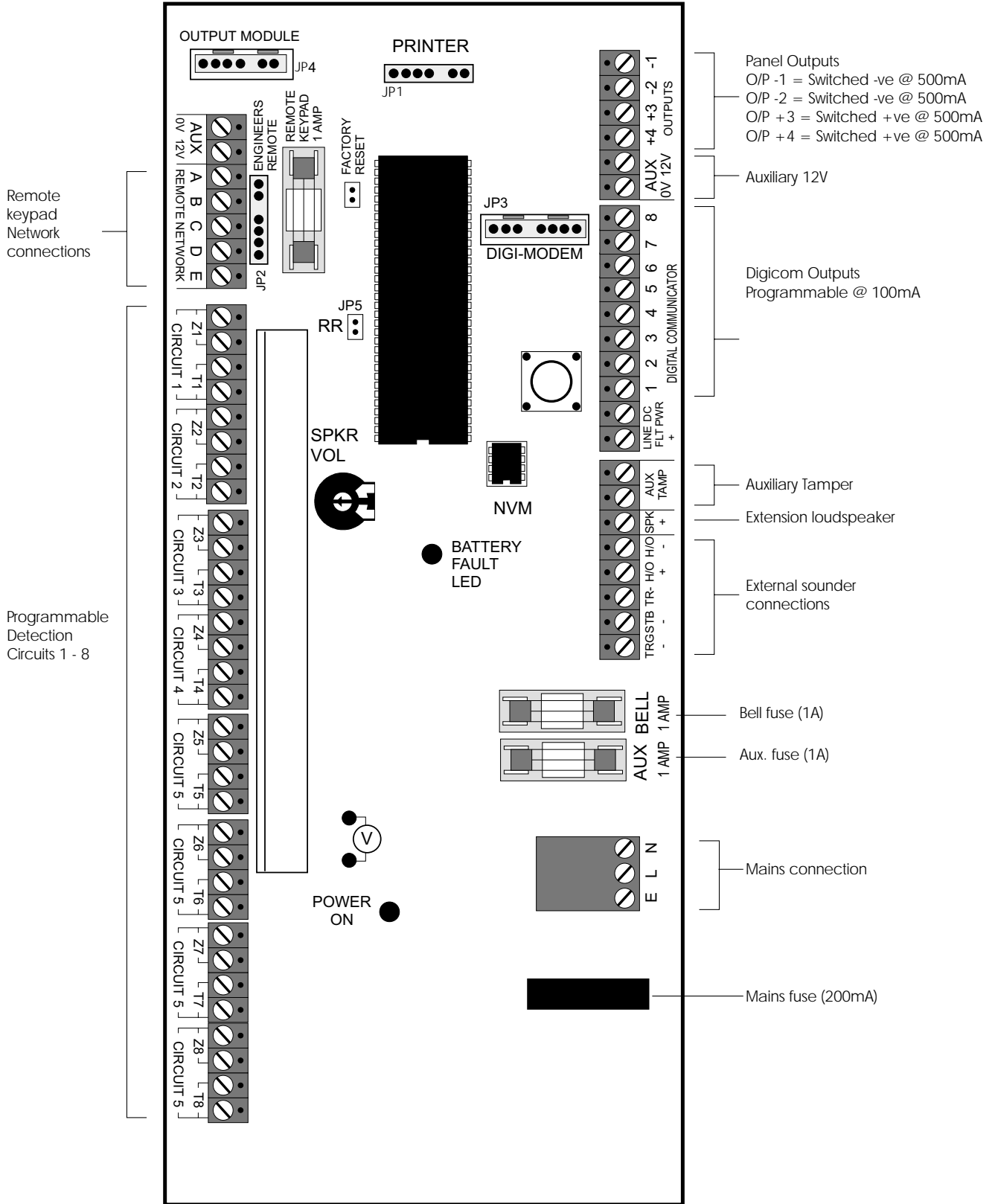


Figure 4. TS700 Main PCB Layout

## Factory Default Parameters

Engineer's code	1234							
Master User code	5678							
Panel and Remote Outputs	1	2	3	4	5	6	7	8
	Walk Test	Courtesy Light	Switched 12V	Detector Reset	Code Accepted	Code Accepted	Code Accepted	Code Accepted
Digicom Outputs & Channels	1	2	3	4	5	6	7	8
	Fire	PA	Alarm	Set	Eng on Site	Bell On	Tamper	Second Alarm
Detection Circuits	01: Final Exit		02: Night (access)		03-06: Night		07: Exit Terminator	
	08: PA Audible		09: Final Exit		10: PA Audible		11-16: Not Used	
System Timers	0		1		2		3	
	ACPO Delay 0 seconds		No Re-arms 0		Settling Time 07 seconds		Digicom Delay 0 Seconds	
	4		5		6		7	
	Exit Time 30 Seconds		Entry Time 30 Seconds		Bell Duration 20 Minutes		Bell Delay 0 Minutes	
	8		9					
	Double Knock 0 Seconds		Test Time 14 Days					
Setting Modes	Full Set Final Exit		Part Set A Timed Exit		Part Set B Timed Exit		Part Set C Timed Exit	
Reset Algorithm	004							
System Configuration	0		1		2		3	
	Bell output is SAB		User 1 has access to all user menus		Fire signalled at all times		24 Hour circuits are audible	
	4		5		6		7	
	Bell is delayed for 30 seconds in part set		Alarm output is cleared on reset		Setting with line fault or mains failure is allowed		System reset by user	
	8		9					
	Continuous entry and exit tones		Engineer code only for access to engineer menus					

*Table 1. Factory Default Parameters*


## Event log Codes

<i>AA</i>	Action Alarm (Alarm output activated)	<i>Lt</i>	Lid Tamper or SAB tamper
<i>Ac**</i>	Access Passcode (User code ** entered with the last two digits reversed)	<i>OP</i>	System Open (unset)
<i>Ad**</i>	Alarm Delayed (the system is part set and circuit ** was activated)	<i>Or</i>	Omits Removed
<i>Au**</i>	Auxiliary Alarm (circuit number ** activated)	<i>PA.**</i>	PA Alarm (from circuit number **)
<i>bF</i>	Battery Fault (battery voltage below 10.5V)	<i>PF</i>	Power Failure (remote power LED flashes)
<i>bT</i>	Bell Test	<i>Pr</i>	Power Restored
<i>CA.**</i>	Circuit Alarm (from circuit number **)	<i>PS.*</i>	Part Set (area *)
<i>cc</i>	Communication Complete (Plug-on only)	<i>PT.**</i>	Code Tamper (from remote keypad **)
<i>cF</i>	Communication Failed (plug-on only)	<i>rA</i>	System re-armed
<i>CI</i>	Circuits Isolated (24 hour circuits)	<i>rc</i>	System reset by REMOTE CODE RESET
<i>CO.**</i>	Circuits Omitted (circuit number ** omitted)	<i>rr.**</i>	Remote Keypad ** removed
<i>dc</i>	Date Changed	<i>rt.**</i>	Remote Keypad ** case tamper
<i>dF</i>	Default User code 1 to 5678	<i>SF</i>	System Failed to Set
<i>du.**</i>	Duress Alarm (from User code **)	<i>sr</i>	System on-site reset (LK1 open on power up)
<i>EA.**</i>	Entry Alarm (from circuit number **)	<i>St.*</i>	Area * Set (using area setting codes)
<i>En.**</i>	Entry (from circuit number **)	<i>So.**</i>	Part set keyswitch ** operated
<i>FA.**</i>	Fire Alarm (from circuit number **)	<i>tA.**</i>	Tamper Alarm (from circuit number **)
<i>Fb.**</i>	Fuse Blown (fuse number **)	<i>tc</i>	Time Changed
<i>Fn.**</i>	First Knock (from circuit number **)	<i>tF.**</i>	Circuit ** failed test
<i>Fr</i>	Factory Reset (LK1 closed on power up)	<i>to</i>	All Test circuits removed from test
<i>FS</i>	Full Set	<i>Un.*</i>	Area * unset (using area setting codes)
<i>Lb</i>	Low Battery	<i>Ur.**</i>	User Code ** entered
<i>LF</i>	Telephone line fault	- -	No event
<i>Lr</i>	Telephone line restored		

# Key Functions

---

## Engineer's Reset

1. Key in engineer code default 1234. Display shows "Engineer's Menu 1".
2. Press  display shows "*ENG ONSITE*".

This message will be cleared the next time a valid user passcode is entered.

## Loading Defaults

Note: To return panel to factory defaults

1. Power down panel
2. Short factory restart pins
3. Power up battery & mains
4. Remove short
5. Enter 1234 to silence sounders
6. Replace the control panel cover. At the remote keypad enter 1234. The display will show "Engineer's menu 1".

## Reset User Code 1

This option allows the engineer to reset the master user passcode back to the factory default code '5678'. This feature is useful when the master user has forgotten their passcode or has inadvertently changed it.

1. Ensure that "Engineer Menu 2" is selected.
2. Press  to Reset User 1.

## Bell Test/Walk Test

Please refer to User Menu 1, No's 1 & 2 respectively.



# Programming

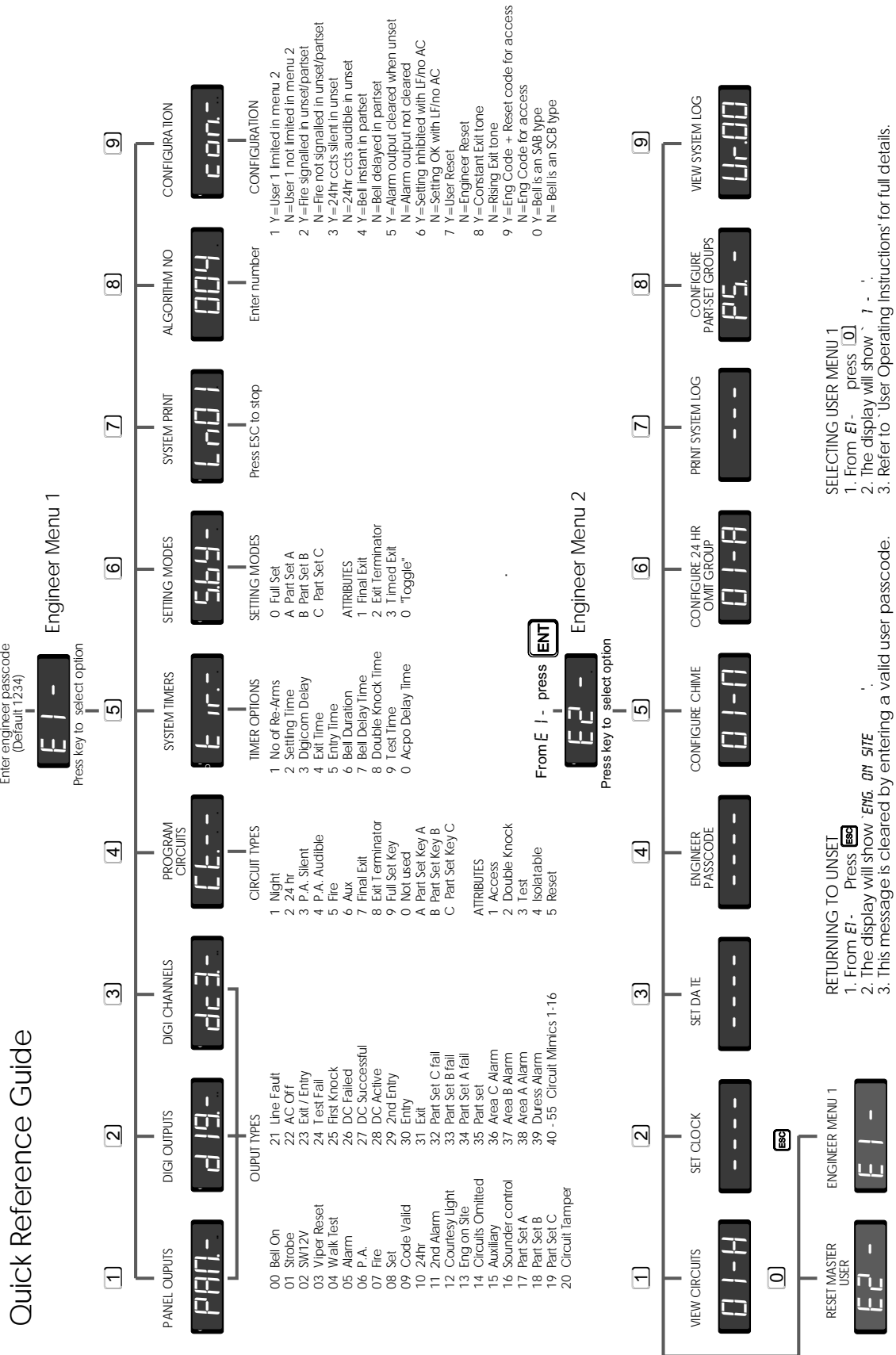


Figure 5 Quick Reference Guide

## User Menus Quick Reference



The system is unset, the display shows the current time.  
Enter user passcode.



The display shows "Function" Press **ENT** within 5 seconds to select "User Menu 1".



"User Menu 1" selected.

**ESC** Return To Open

- Abandons "User Menu 1" and returns the systems to the unset (OPEN) condition.

**1** Bell Test

- Allows the internal sounders, external sounder and strobe to be tested

**2** Walk Test

- Allows all detection circuits to be tested without generating an alarm.

**3** Remote Reset

- Reset the system by exchange of 4 digit codes.

**4** Change Passcode

- Change your passcode.

**5** Enable Chime

- Enable or disable the chime option.

**6** Omit 24 Hour Group

- Omit a pre-defined group of 24 Hour circuits.

**7** Omit Circuits

- Select circuits to be omitted before setting the system.

**8** Silent set

- Select "silent " full set or part set.

**9** Full-set

- Full set the system.

**0** Part-set Group A

- Part set the system with group A omitted.

**A** Part-set Group B

- Part set the system with group B omitted.

**B** Part-set Group C

- Part set the system with group C omitted.

**ENT** User Menu 2

- Select "User Menu 2" (master user only).



"User Menu 2" selected.

**1** View Circuits

- View the status of all detection circuits.

**2** Change Time

- Set the system clock.

**3** Change Date

- Set the system date.

**4** Define User Passcodes

- Define, delete user passcodes.

**5** Change Chime Circuits

- Select circuits that will chime.

**6** Change 24hr Group

- Setup a group of 24 Hour circuits that can be omitted.

**7** Print System Log

- Print the contents of the system log (200 events).

**8** Configure Part-set Groups

- Configure part-set groups A, B & C.

**9** View System Log

- View the contents of the system log.

**ESC** User Menu 1

- Return to "User Menu 1".

 *Options 4, 5, 6, 7, 8 & 9 in 'User Menu 2' are only available if programmed by the installation company.*