

TS790 / TS900 10-56 Zone Intruder Alarm Control Panels



User Manual

CE

This manual is found at www.eaglesecuritysolutions.co.uk

Quick Reference Guide

Full Set	Enter your passcode	XXXX	
Part Set	Enter your passcode	XXXX	
	Press A, B or C as required	A or B or C	
Unset	Enter your passcode	XXXX	
Silent Full Set	Enter your passcode	XXXX	
	Press 8	8	
Silent Part Set	Enter your passcode	XXXX	
	Press A, B or C as required	A or B or C	
	Press 8	8	
Bell Test	Enter your passcode	XXXX	
	Press [ENT] within 5 secs.	ENT	
	Press 1 (sounders on)	1	
	Press [ESC] when finished	ESC	
Walk Test	Enter your passcode	XXXX	
	Press [ENT] within 5 secs.	ENT	
	Press 2	2	
	Conduct Walk Test	Conduct Walk Test	
	Press [ESC] when finished	ESC	
Remote Reset	Enter your passcode	XXXX	
	Press [ENT] within 5 secs.	ENT	
	Press 3	3	
	Contact your central station c	and quote 4 digit number	
	Enter reply number	XXXX	
	Press [ENT]	ENT	
Change Passcode	Enter your passcode	XXXX	
	Press [ENT] within 5 secs.	ENT	
	Press 4	4	
	Enter new passcode	XXXX	
	Press [ENT]to accept	ENT	
	Press [ESC] when finished	ESC	

Contents

Overview

Introduction
TS700 Remote Arming Station 2
TS700 LED Remote Keypad
TS790 Starburst Remote Keypad
TS900 LCD Remote Keypad

Operating The System

	4
User Menus	4
Engineer on Site Message	4
Full Setting The System	5
Unsetting The System.	6
Part-Setting Using The Part-Set Buttons	7
Part-Setting With Part Set Passcodes	8
Silent Setting 1	0
Unsetting After An Alarm	1
Resetting After An Alarm	1
User Reset	1
Engineer Reset	2
Remote Reset	2
Setting individual Wards with Standard User Passcodes	3
Unsetting individual Wards with Standard User Passcodes	4
Setting $\tilde{\&}$ Unsetting Wards with the Code Set Group Passcodes 1	6

User Menu 1

Introduction
Bell Test - 1
Walk Test - 2
Remote Reset - 3 19
Change Passcode - 4
Enable Chime - 5
Omit 24 Hour Group - 6
Omitting Circuits - 7
Silent Set - 8
View Activity Count - 9
Full Set and Part-set - O A B C

User Menu 2

Introduction		 	 23
View Circuits - 1		 	 24
Set Clock - 2		 	 24
Set Date - <u>3</u>		 	 25
Setup Users - 4		 	 25
Alter Chime Circuits - 5]	 	 28

Alter 24Hr Group - 6	. 2	8
Print System Log -7	. 2	9
Configure Wards - 8	. 3	0
Viewing the System Log with an LCD Remote Keypad - 9	. 3	1
Viewing The Log With an LED or Starburst Remote Keypad -9	. 3	1
Remote Call Back - 0	. 3	3
Initiate Remote Service Call - A	. 3	4

Introduction
Time Switch A, B & C - 1
Selecting Time Switches - ABC
Setting The On Times - 1 2 3
Setting The Off Times - 4 5 6
Setting The Days Of Operation -7 8 9
Setting The Day - M
Manually Switching The Output -0
Part Set Groups - 2
Code Set Groups - 3
User Names (TS900 Remote Keypads Only) -4
Edit Text For Part Set Groups (TS900 Remote Keypads Only) -5 41
Edit Circuit Text (TS900 Remote Keypad Only) - 6
View Inactive Circuits - D
Text Keypad

Fault Finding

Display Messages	45
Display Messages (Cont.)	46
Glossary of Terms	47

Overview

Introduction

The TS790 and TS900 are advanced security alarm control systems using state of the art electronics to provide comprehensive but flexible protection for both domestic and commercial premises. The system comprises of a number of components linked to a central control unit which is concealed from view but accessible for maintenance. The TS790 can monitor from 10 to 16 detection circuits where as the TS900 can monitor a maximum of 56.

Both systems can be operated from up to four remote keypads which may be one of four types. Detection devices such as door contacts or movement sensors are allocated to detection circuits which are identified on the remote keypad displays. All detection circuits may then be allocated to the whole system or grouped into "Wards" (areas) so that access to certain areas can be controlled independently.

A modem can also be connected to the alarm system via the telephone line to allow remote interrogation, programming and resetting of alarms. This feature is known as "Downloading" and is normally performed by the installation company or central station.

Each alarm installation is specific to the site and its occupier and may differ from other TS790/TS900 installations. This manual describes in detail all the functions and procedures available to the user, however, not all these may be relevant to the way your system is set up. To avoid unnecessary operating errors please discuss the details of the alarm system with your installation company before attempting to use it. Also make sure that your installation company completes the system record sheets at the back of this manual and fills in the details required within the section called "Operating The System".

TS700 Remote Arming Station

The TS700 Remote Arming Station only allows setting and unsetting. The unit has two indicator LED's (Light Emitting Diodes), "POWER" and "FUNCTION". The "FUNCTION" LED may be programmed by the installation company to indicate faults or area set etc.



Figure 1 TS700 Remote Arming Station

TS700 LED Remote Keypad

The TS700 Remote Keypad has a 4 x 7 segment green Light Emitting Diode (LED) display and back-lit tactile rubber keypad. With LED Remote Keypads text cannot be programmed but all other system functions are available.



Figure 2 TS700 LED Remote Keypad

TS790 Starburst Remote Keypad

The TS790 Starburst Remote Keypad has a back-lit 8 character Starburst display and back-lit tactile rubber keypad. With Starburst Remote Keypads, text can be programmed but you are limited to 8 characters.



Figure 3 TS790 Starburst Remote Keypad

TS900 LCD Remote Keypad

The TS900 Remote Keypad has a back-lit Liquid Crystal Display (LCD) and a back-lit tactile rubber keypad. With LCD keypads the circuit text, user names and part-setting information may be custom programmed to make the system easier to operate.



Figure 4 TS900 LCD Remote Keypad

Operating The System

Introduction

Initial access to the system is gained by entering a 4 digit passcode. Every time you wish to use the the system your passcode must be entered correctly. If a passcode is repeatedly entered incorrectly a code tamper alarm will be generated.

Up to 31 separate user passcodes are available for operating the system. The master user (user 01) is the person responsible for allocating other users to the system.

Each user (02-31) may be defined for different authorisation levels. See page 25 for full details, the table below shows the code levels and their menu access:

Code level	User Menu 1	User Menu 2	User Menu 3
Master	 ✓ 	✓ *	✓ *
Standard	 ✓ 		
Holiday	 ✓ 		
Set Only	 ✓ 		
Reset Only	Options 1-9 only		
PA Code	 ✓ 		
Access		Used for access contro	
Full Set Group	Only allows se	etting and unsetting of se	elected wards
Code Set Group A			
Code Set Group B			
Code Set Group C			

* If the installation company has programmed the master user for limited access, he or she will NOT have access to "User menu 2" options 6 and 8, or any options in "User menu 3".

User Menus

In general when ever a user passcode is entered the system will enter into a 5 second function mode, if the m button is pressed during this time "User menu 1" is selected, as a reminder, a brief description of each menu option within "User menu 1" is printed underneath each button on the the remote keypads, e.g., button 1 selects the "Bell Test" option. If the m button is not pressed within 5 seconds the system will attempt to full set.

When any of the menu options are selected the user may abandon the function by pressing the ^{ESC} button. If the ^{ESC} button is repeatedly pressed whilst one of the user menus is selected, the alarm system will return to the normal "OPEN" condition.

Engineer on Site Message

When the installation engineer attends the site for routine maintenance etc. the remote keypads may show "Engineer on site" ($E \prod 9 \prod 5 I E E$), whilst this message is displayed the alarm system remains fully operational. However, before the engineer leaves the site he should ask one of the users to enter their passcode followed by E, this will clear the "Engineer on site" message and return the system to the normal "OPEN" condition.

Full Setting The System

The full setting procedure may be initiated from any remote keypad (if more than one is fitted). Before attempting to full set the alarm system ensure that all movement detectors are unobstructed and all doors, and windows are secure.

The installation company will have set-up your alarm system to full set by one of the following:

Timed Exit	-	After entering your passcode the alarm system will be full set after the pre-programmed exit timer has expired. The display at step (2) will count down the remaining exit time.
Final Exit	-	After entering your passcode the alarm system will be full set after the Final Exit door is opened and closed. The display at step (2) will show a count of 9999.
Exit Terminator	-	After entering your passcode the alarm system will be full set after the Final Exit door is opened and closed, and after pressing the Exit Terminator button (a push button normally mounted outside of the premises). The display at step (2) will show a count of 9999.
Instant	-	After entering your passcode the alarm system will be full set after 5 seconds.

If an attempt is made to full set the system whilst any circuits are active (such as a door being open) the display at step (2) will indicate the circuit(s) that are in fault and internal sounder generates an interrupted tone. The fault must be cleared before the setting procedure can be completed. If the system is set by "Timed Exit" or "Instant", and the fault is still present at the end of the exit time an internal alarm will be generated. If fitted, the external strobe light will flash indicating that the system has "Failed to set". To prevent this alarm simply re-enter your passcode before the exit timer expires.

» To full set the system proceed as follows:

1. Enter your passcode X X X. The display will show:

2. After 5 seconds the exit sounder will start and the display will show:

3. Leave via the prescribed exit route.

4. The system is set when the exit time has expired, on activation of the Final Exit circuit or pressing the Exit Terminator button, as appropriate. The exit sounder will stop and the display will show:

5. After 5 seconds the "SYSTEM SET" message will disappear and the display will show the time, (date and banner text, LCD only) e.g.,

Timed 🗌

Setting Mode:

Exit Time:





Operating The System

Unsetting The System

You can unset the alarm system from any remote keypad.

» To unset your alarm system, proceed as follows:

1. Enter the premises via the prescribed entry route and proceed directly to the remote keypad. The internal sounders generate an interrupted tone. The display will show the remaining entry time, e.g.,

2. Enter your passcode XXXX before the entry timer expires. The internal sounders will stop and the display will show:

3. After 5 seconds the "SYSTEM OPEN" message will disappear and the display will show the time, (date and banner text, LCD only) e.g.,



- If you exceed the entry time the alarm system generates a warning from the internal sounders and starts the "Second Entry" timer. If you do not unset the alarm system before the end of the "Second Entry" timer a full alarm condition will occur. If the installation company has set the "Second Entry" timer to zero the full alarm will occur when the first entry timer expires.
- If during the entry procedure the user strays from the prescribed entry route and activates a detection circuit a full alarm will occur (internal sounders and external sounders). If the alarm system is fitted with a remote signalling device such as a digicom this will also be triggered and police action will be taken. However, the alarm system may be programmed with an "Entry Abort" feature which will allow a further pre-set time delay to occur if a detection circuit is accidentally triggered during the entry procedure. This will delay the triggering of the remote signalling device and allow the user time to unset the system. The delay is normally set to 90 seconds by your installation company.

Full Set Entry Time:	 -	
Second Entry Time:	 _	
Part-set Entry Time:	 -	
Entry Abort Delay:	 -	

Operating The System

Part-Setting Using The Part-Set Buttons

The TS790 & TS900 can have up to three pre-defined part-set configurations. Each configuration allows the alarm system to set with one or more wards isolated. Each configuration is then assigned to a part-set button A, B or C, normally this will be done by the installation company at the time of commissioning. However the master user may also configure the part-set buttons, providing the installation company has programmed the alarm system to allow this facility (see "Part Set Groups on page 39).

» To part-set the alarm system, proceed as follows:

1. Enter your passcode X X X. The display will show:

2. Within 5 seconds press the required part-set button **A**, **B** or **C**, e.g., press **A** for part-set A. The display will show:

3. The exit sounder will start. If necessary leave the area via the prescribed exit route. The display will show the remaining exit time, e.g.,

4. The system will be part-set when the exit time has expired, on activation of the Final Exit circuit or by pressing the Exit Terminator button, as appropriate. When the system is part-set the display will show the wards that are set and the time, e.g.,



- The text shown on the LCD remote keypads at step (2) may be programmed by the master user (see "Edit Text for Part-Set Groups" on page 41). If the text is not programmed the display will read the default "Part Set group A" for the above example.
- If the alarm system has LED remote keypads fitted, the installation company may have programmed the the system so that the alternating displays shown at step (4) only show the time.

Part-Set A:				
Setting Mode:	Timed 🔲	Final Exit 🔲	Exit Terminator 🔲	Instant 🔲
Part-Set B:				
Setting Mode:	Timed 🔲	Final Exit 🔲	Exit Terminator 🔲	Instant 🔲
Part-Set C:				
Setting Mode:	Timed 🔲	Final Exit 🔲	Exit Terminator 🔲	Instant 🔲

Operating The System

TS790 & TS900 User Manual

Part-Setting With Part Set Passcodes

Passcode types "Code Set Group A", "Code Set Group B", "Code Set Group C", and the "Full Set Group" enable the user to set and unset only the wards assigned to their "Code Set Group". The "Code Set Groups" are configured by the master user or installation company (see "Code Set Groups" on page 40).

The following example shows how to set and unset wards A and B using the passcode type "Code Set Group A". The example first assumes that the alarm system is initially unset.

LCD

To set your area(s) using a "Code Set Group" passcode, proceed as follows: **>>**

1. Enter your "Code Set Group" passcode [X] [X] [X] [X]. The exit sounder will start. If necessary leave the area via the prescribed exit route. The display will show the remaining exit time, e.g.,

2. The system is part-set when the exit time has expired, on activation of the Final Exit circuit or by pressing the Exit Terminator button, as appropriate. When the system has part-set the display will show the wards that are set and the time e.g.,

» To unset your area(s), proceed as follows:

1. Enter the area or premises via the prescribed entry route and proceed directly to the remote keypad. The internal sounders generate an interrupted tone. The display will show the remaining entry time, e.g.,

2. Enter your "Code Set Group" passcode **XXXX** within the entry time. The internal sounders will stop and the display will show:

3. After 5 seconds the "SYSTEM OPEN" message will disappear and the display will show the time, (date and banner text, LCD only) e.g.,

LCD Starburst LED **Enter Your Code** 0025 Time left > 0025 SYSTEM OPEN | | |-' |-OPEN 08:30 Sun 28 Apr ABC SECURITY []8.3 08:30 08:30 Sun 28 Apr

The "Code Set Group" passcodes may be used when the system is fully set. When the passcode is entered only those wards assigned to the "Code Set Group" will be unset.

The following example shows how to unset wards A and B using the passcode type "Code Set Group A". The example first assumes that the alarm system is initially full set.



Starburst

LED



Part-Setting With Part Set Passcodes (Cont.)

» To unset your area(s), proceed as follows:

1. Enter the area or premises via the prescribed entry route and proceed directly to the remote keypad. The internal sounders generate an interrupted tone. The display will show how much time you have left e.g.,

2. Enter your "Code Set Group" passcode XXXX within the entry time. The internal sounders will stop and the display will show the wards that have remained set and the time, e.g.,



The system may be returned to the full set condition by re-entering the "Code Set Group" passcode and leaving the area or premises via the prescribed exit route. The system may also be fully unset at any time by entering a valid passcode (Master, Standard or Holiday).

Code Set Group A:	Sets/unsets wards	S: 🔲 A: 🛄 B: 🛄 C: 🛄
Code Set Group B:	Sets/unsets wards	S: 🛄 A: 🛄 B: 🛄 C: 🛄
Code Set Group C:	Sets/unsets wards	S: 🛄 A: 🛄 B: 🛄 C: 🛄
Full Set Group:	Sets/unsets wards	S: 🔲 A: 🛄 B: 🛄 C: 🛄

Operating The System

TS790 & TS900 User Manual

Silent Setting

The alarm system may be full or part-set such that the internal sounders are switched off during the exit procedure. However the system will give a short tone at the end of the exit procedure to indicate that the system has successfully set.

» To full set the alarm system silently, proceed as follows:

1. Enter your passcode X X X X. The display will show:

2. Within 5 seconds press **B**. The display will show:

3. Leave via the prescribed exit route.

4. The system is full set when the exit time has expired, on activation of the Final Exit circuit or by pressing the Exit Terminator button, as appropriate.

» To part-set the alarm system silently, proceed as follows:

1. Enter your passcode $\mathbf{X} \times \mathbf{X} \times \mathbf{X}$. The display will show:

2. Within 5 seconds press the required part-set button A, B or C, e.g., press A for part-set A then press B. The display will show:

3. Leave the area or premises via the prescribed exit route.

4. The system is part-set when the exit time has expired, on activation of the Final Exit circuit or by pressing the Exit Terminator button, as appropriate.





Unsetting After An Alarm

If an alarm has occurred whilst the alarm system is full or part-set, the display will indicate the detection circuit that was triggered when the system is unset. Once the cause of the alarm has been established the system must be reset (see "*Resetting after an alarm*").

1. Enter the premises or area via the prescribed entry route and proceed directly to the remote keypad. The internal sounders will generate an interrupted tone. The display will show how much time you have left, e.g.,

2. Enter your passcode X X X X within the entry time. The internal sounders will stop and the display will show the detection circuit that caused the alarm, e.g.,

3. Refer to "Resetting after an Alarm"



If "Circuit Text" has been programmed then the display on the LCD and Starburst remote keypads will alternate between the "Circuit number" and the "Circuit Text" at step (2).

Resetting After An Alarm

The installation company will have programmed the system to be either "User Reset", "Engineer Reset" or "Remote Reset", consult your installation company if you are not sure.

User Reset

From step (3) of "Unsetting After An Alarm" proceed follows:

1. Enter your passcode X X X X. The display will show:

2. Within 5 seconds press ESE. The display will show:

3. After 5 seconds the "SYSTEM OPEN" message will disappear and the display will show the time, (date and banner text, LCD only) e.g.,



Your alarm system is reset by:	User: 🛄	Engineer: 🔲	Remote Reset: 🔲

(Continued Over)

Operating The System

Engineer Reset

From step (3) of "Unsetting After An Alarm" proceed as follows:

1. The display will cycle between the detection circuit that caused the alarm and the "CALL ENGINEER TO RESET SYSTEM". The system will also "beep" every minute to indicate the system requires an engineer to reset the system. To silence the "beeps" simply enter your passcode **X X X X**.

LCD Starburst LED **ALARM 03** F1. ALARM 03 09:45.55 28/04 **Office Detector** OFFICE 09:45.55 28/04 **CALL ENGINEER TO** *CALL* |_ |-| | **RESET SYSTEM** EN ENGINEER

2. Call the installation company to attend and reset your system.

Tel No._

The display shown at step 2 is programmable and may show something different.

Remote Reset

From step (3) of "Unsetting After An Alarm" proceed as follows:

1. Follow Step (1) of the "Engineer Reset" procedure.

2. Enter your passcode X X X X. The display will show:

3. Within 5 seconds press [™]. "User Menu 1" is selected, the display will show:

4. Press 3 to select the **Remote Reset** option. The display will show a random four digit "Seed Code" e.g.,

5. Write down the "Seed Code". Telephone your central station and quote the "Seed Code". You will be asked to report the circumstances of the alarm. If an engineer is not required to attend site you will be given a unique four digit "Remote Reset" code.

Tel No.___

6. Enter the four digit "Remote Reset" code XXXX then press INT. A muti-tone beep will confirm acceptance and the display will return to "User Menu 1":

7. Press 💷 to return to the Unset condition, the display will show:

8. After 5 seconds the "SYSTEM OPEN" message will disappear and the display will show the time, (date and banner text, LCD only) e.g.,





Operating The System

Setting individual Wards with Standard User Passcodes

The installation company can enable certain standard users to have access to the "Ward Selection Menu". This feature allows the user to set individual wards.

» The following example shows how to set wards B and C.



- 2. Select the setting option as follows:
 - A Part-set A
 - B Part-set B
 - C Part-set C
 - **O** Ward Selection Menu

NOTE: If an option is not selected after 5 seconds the system will attempt to full set.

3. Press **D** to select the "Ward Selection Menu". The display will show:

- 4. Select / de-select the wards by pressing:
 - A for "Ward A"
 - B for "Ward B"
 - C for "Ward C"
 - for "Ward S"

e.g., to set wards B and C, de-select wards S and A. The display will show:

5. When the display shows the required wards, press *m*. The exit sounder will start, if required leave via the prescribed exit route. The display will show the remaining exit time:

6. When exit tone stops the display will show the wards that are set and the e.g.,



The "Ward Selection Menu" is displayed for a pre-programmed amount of time, which is programmed by the installation company. If no wards are de-selected at the end of the pre-programmed time the alarm system will attempt to full set.

Operating The System

TS790 & TS900 User Manual

Unsetting individual Wards with Standard User Passcodes

If the installation company has configured the alarm system as described on the previous page the standard and master users will be given access to the "Ward Selection Menu" when unsetting the alarm system.

» The following example shows how to unset wards A and B.

1. Enter the premises via the prescribed entry route and proceed directly to the remote keypad. The internal sounders generate an interrupted tone. The display will show the remaining entry time:

2. Enter your passcode XXXX before the entry timer expires. The display will show:

- 3. De-select the wards by pressing:
 - A for "Ward A"
 - **B** for "Ward B"
 - C for "Ward C"
 - for "Ward S"

e.g., to unset wards A and B, de-select wards S and C. The display will show:

4. When the display shows the required wards, press *m*. The entry sounder will stop and the display will show the wards that are set:

LCD	Starburst	LED
Enter Your Code Time left > 0025	0025	0025
Please Confirm Unset -: S A B C	5 <i>88C</i>	5860

Please Confirm Unset -: * A B *	-88-	- 1715, -
Wards se t[S C] 05:40 Sun 28 Apr	PRRT SET	P.SEE
	55	5 [
	05.40	05.40

» To unset further wards (assuming wards S and C are set)

1. To unset another ward enter your passcode **XXX**. The display will show:

2. Select the ward(s) you require to unset, e.g., to unset ward C, de-select ward S. The display will show:

3. When the display shows the required ward(s) press [11]. The display will show the wards that are set:



Operating The System

» To Set further Wards (assuming ward S is set)

1. To set other wards enter your passcode **X X X X**. The display will show:

2. De-select all wards so that the display shows:

3. Press ENT and the display will show:

NOTE: Ward A is not displayed as it is already set.

4. Select the ward(s) you require to set, e.g., to set wards B and C, press 0 to de-select ward S. The display will show:

5. When the display shows the required wards, press ^[MT]. The exit sounder will start, if required leave via the prescribed exit route. The display will show the remaining exit time:

6. When the system has set the display will show the wards that are set and the time:



06.00

If the system is part-set, entry of a valid passcode is assumed to unset rather than set further wards. To set further wards, it is necessary to unset nothing, the system will then assume that you require to set further wards.

Operating The System

TS790 & TS900 User Manual

Setting & Unsetting Wards with the Code Set Group Passcodes

If the installation company has enabled the "Ward Selection Menu" for your alarm system, all users defined as "Code Set Group" users will also have access to the "Ward Selection Menu". However the users can only select or de-select the wards that have been assigned to their "Code Set Group", e.g., if "Code Set Group A" is configured to have access to wards A and B, then when the "Ward Selection Menu" is displayed the user can only select or de-select wards A and B.

The following example uses "Code Set Group A" which is configured to have access to wards A and B.

» Setting ward B with "Code Set Group A" passcode (system initially unset)

1. Enter your passcode XXXX, the display will show:

2. Select the wards you require to set, e.g., to set ward B, de-select ward A:

3. When the display shows the required ward(s) press [11]. The exit sounder will start, if required leave via the prescribed exit route. The display will show the remaining exit time:

4. When the system has set the display will show the wards that are set and the time:



» Unsetting ward B with "Code Set Group A" passcode (System initially full set)

1. Enter the premises via the prescribed entry route and proceed directly to the remote keypad. The internal sounders generate an interrupted tone. The display will show the remaining entry time:

2. Enter your passcode XXXX before the entry timer expires. The display will show:

3. Select the wards you require to unset, e.g., to unset ward B, de-select ward A:

4. When the display shows the required wards, press M. The entry sounder will stop and the display will show the wards that are set:



Introduction

"User menu 1" is only available to selected users, the menu is selected by entering your passcode and pressing the [ENT] button within 5 seconds. There are thirteen menu options which can be selected in any order. To leave "User menu 1" and return to the the system to the normal unset condition simply press the ESC button.



User Menu 1

Bell Test - 1

This option allows the user to test the internal sounders, external bells and external strobe lights. When selected each device will operate in sequence for nine seconds.

1. Ensure that "User menu 1" is selected. Press 1 to select the **Bell Test** option.

2. The internal sounder(s) will operate for 9 seconds. The display will count down the remaining time. Press IM to advance to the next test or IM to end the test.

3. The external bell(s) will operate for 9 seconds. The display will count down the remaining time. Press INT to advance to the next test or INT to end the test.

4. The external strobe(s) will operate for 9 seconds. The display will count down the remaining time. Press **ESC** to end the test

5. The display will automatically return to "User menu 1" when all three tests are completed.

Walk Test - 2

This option allows the user to test the function of individual detection circuits without causing an alarm. As each circuit is activated the circuit number and status are displayed and the internal sounders generate a two tone "Chime" sound. Once the test has been completed the tested circuits can be reviewed in numerical order.

1. Ensure that "User menu 1" is selected. Press **2** to select the **Walk Test** option. The display will show:

2. Activate detection circuits in turn by opening doors with alarm contacts and walking in front of movement detectors, e.g., activate circuit 05 then circuit 03:

3. When the test has been completed, press ESE, the display will show:

4. The display will now automatically scroll through the circuits that were tested in numerical order. The current status of the circuit is also displayed. The ^[N] button can be used to scroll through the tested circuits more quickly, if desired.

5. Press 🖾 to leave the Walk Test option and return to "User menu 1".

Remote Reset - 3

This option allows the user to Reset the system after an alarm by using a "Remote Reset" code. The full procedure is explained in "Resetting After an Alarm" on page 12.

Change Passcode - 4

This option allows all users with access to "User menu 1" to change their own passcode. The master user can also add and delete user passcodes, see "Setup Users" on page 25.

Ensure that "User menu 1" is selected.
 Press 4 to select the Change Passcode option. The display will show:

2. Enter your new passcode (e.g., 1212) the display will show:

3. Press FMT to accept the new passcode, a multi-tone indicates that the new passcode has been accepted and the display will automatically return to "User menu 1". A low tone indicates that the passcode is not available. Repeat again from (1) trying a different four digit number.

Enable Chime - 5

Detection circuits that have been programmed as "Chime" by the installation company or the master user will generate a two-tone sound if activated. This menu option allows the user to select one of the five "Chime" options:

Disabled	-	Detection circuits programmed as "Chime" will NOT generate a "Chime" tone when activated.
Enabled	-	All detection circuits programmed as "Chime" will generate a "Chime" tone when activated.
Enabled in P.Set	-	All detection circuits programmed as "Chime" will generate a "Chime" tone when activated during the part-set condition.
Enabled in Unset	-	All detection circuits programmed as "Chime" will generate a "Chime" tone when activated during the unset condition.
Enabled o/p A On	-	Ask your installation company for further details on this option.
(continued over)		

TS790 & TS900 User Manual

Ensure that "User menu 1" is selected.
 Press 5 to select the Enable Chime option.
 The display will show:

 LCD
 Starburst
 LED

 Chime ccts are Enabled
 Image: Chime ccts are
 Image: Chime ccts are

- 2. Select the chime option by pressing:
 - Enabled/Disabled
 - 1 Disabled (OFF)
 - 2 Enabled (ON 1)
 - 3 Enabled in P.Set (ON 2)
 - 4 Enabled in Unset (ON 3)
 - 5 Enabled o/p A On (ON 4)
 - B Cycles through options 1 5
 - e.g., to disable the "Chime" feature press "1", the display will show:

3. When the display shows the required setting press [11] to accept. The display will automatically return to "User menu 1".

Omit 24 Hour Group - Б

The installation company or master user may group together detection circuit types 24 Hour and Auxiliary so that they can be omitted when the system is unset. This menu option allows the user to temporarily omit the circuits that have been assigned in the 24 Hour group. This will allow them access to areas protected by 24Hr and Auxiliary type detection circuits, e.g., Loading bay doors, Fire Doors, etc.

1. Ensure that "User menu 1" is selected. Press **6** to select the **Omit 24 Hour Group** option. The system remains unset and the display will show:

2. To re-reinstate the 24 hour Group repeat step (1). The display show the "SYSTEM OPEN" message.

If a low tone is generated when this menu option is selected then no detection circuits have been assigned to the "24 Hour Group"

Omitting Circuits - 7

Sometimes it may be necessary to omit detection circuits when setting or part-setting the system. This allows the user access to the omitted area(s) when the system is set or part-set. It is also possible to omit 24hr or Auxiliary circuits so that access to these areas can be obtained when the system is unset. Only detection circuits that have been programmed by the installation company as "Omit" may be selected when using this menu option.

When a user unsets the alarm system, either with a passcode or with a keyswitch, the alarm system re-instates "Night" detection circuits that were omitted.

Chime ccts are Disabled

[]FF

1. Ensure that "User menu 1" is selected. Press 7 to select the Omit Circuits option. The display will show:

2. Select the circuit by entering its number or by pressing:

A For the next circuit

C For the previous circuit

e.g., for circuit 03 enter "03". The top line of the display will show the circuit text (if programmed) and the bottom line shows whether the circuit is "Armed" or "Omitted" e.g.:

3. Press B to change between "Armed" or "Omitted". If a low tone is generated when pressing B then the selected circuit cannot be omitted.

4. When the display shows the required setting, press [11] to accept. The display will show the next circuit:

5. If required repeat from step (2) for other circuits. When finished press ^{ESE}. If 24hr or Auxiliary circuits were selected the system will return to the unset condition and the display will show:

6. If Night circuits were selected the system will return to the "User menu 1" and the display will show:

7. The system can now be full or part-set with the selected Night circuits omitted by pressing:

0 for full set

A for part-set A

B for part-set B

C for part-set C

e.g., To full set the system, press "0" and leave via the prescribed exit route. The display will show:

User Menu 1

Please Exit Now. Time left > 9999

9999

If Night circuits have been selected as omitted, the alarm system MUST be set or part-set from "User menu 1" in order to invoke the omitted circuits.

22

User Menu 1

Silent Set - 8

This menu option allows the user to full set or part-set the system silently whilst "User menu 1" is selected. This is an alternative procedure to the one described on page 10.

1. Ensure that "User menu 1" is selected. Press 8 to select the Silent Set option. The display will show:

2. The system can now be full or part-set silently by pressing:

- **0** for full set
- A for part-set A
- **B** for part-set B
- **C** for part-set C

e.g., To full set the system, press "0" and leave via the prescribed exit route. The display will show:

View Activity Count - 9

Detection circuits that have been programmed by the installation company as "Flagged" will increase the activity counter by one each time the circuit is activated when the system is unset. The counter is automatically reset to zero when the system is full or part-set and the counter is re-started when the system is unset. This counter could be used to count the number of persons entering in to a particular area, e.g. shop entrance door. To view the counter proceed as follows:

Time left > 9999

1. Ensure that "User menu 1" is selected. Press 9 to select the View Activity Count option. The display shows the count value e.g.,

2. Press ^{ESC} to abandon this option and return to "User menu 1".

Full Set and Part-set - 0 A B C

This menu option allows the user to full or part-set the system from "User menu 1" as follows:

1. Ensure that "User menu 1" is selected. The system can now be full or part-set by

pressing:

0 for full set

A for part-set A

B for part-set B

C for part-set C

e.g., To full set the system, press "0" and leave via the prescribed exit route. The display will show:

Please Exit Now. Time left > 9999

9999

Introduction

This menu is only available to the master user and is selected by pressing the IM button whilst "User menu 11" is selected. There are eleven menu options within this menu, which may be selected in any order. The master user may leave this menu and return to "User menu 11" by pressing ISE button, or advance to "User menu 3" by pressing the IM button.

Menu options 6 and 8 are only available if the installation company has programmed the master users for full access.

View Circuits - 1

Each detection circuit may be viewed to ascertain its status. The circuit status conditions are:

- Healthy (H)-The normal status of an alarm circuit.Active (A)-The status of an activated alarm circuit .
 - ctive (A) The status of an activated diarm circuit.
- Tamper (T) The status of a tampered circuit (open circuit).
- Shorted (S)
- status of circuit which is shorted. A shorted status is generated when a normally open device such as an Exit Terminator is activated.

Ensure that "User menu 2" is selected.
 Press 1 to select the View Circuits option.
 The display will show:

2. Select the circuit by entering its number or by pressing:

A To advance to the next circuit

B To move up ten circuits

C To move to the previous circuit

e.g., to view circuit 10, enter "10", the top line of the display shows the circuit text (if programmed) and the bottom line shows the status of the circuit e.g.:

3. Press 📧 to leave this option and return to "User menu 2".

Set Clock - 2

The system clock uses the 24 hour format and provides event times for the system log as well as displaying the current time when the system is set or unset. The clock is set as follows:

Front Door

CCT 10 Healthy

1. Ensure that "User menu 2" is selected. Press **2** to select the **Set Clock** option. The display will show:

2. Enter the time using the number keys, e.g., enter "1700" for 5.00 PM. The display will show:

3. Press I to update with new time setting or press I abandon this option and return to "User menu 2".

EET ID-H

Note that the clock starts from "00" seconds when you press \mathbf{ENT} .

Set Date - 3

The system date is shown in day/month format, it is used to provide event dates in the system log and is normally displayed (LCD only) when the system is set or unset. The date is set as follows:

1. Ensure that "User menu 2" is selected. Press 3 to select the **Set Date** option. The display will show:

2. Enter the date using the number keys, e.g., enter "2804" for 28 April. The display will show:

- 3. Press \mathbf{E} and the display will show:
- 4. Select the day by pressing:
 - 1 for Sunday 5 for Thursday
 - **2** for Monday **6** for Friday
 - 3 for Tuesday 7 for Saturday
 - 4 for Wednesday

e.g., to select Wednesday press **4** the display will show:

5. Press Int to update with new date setting or press Ist to abandon this option and return to "User menu 2".

Setup Users - 4

There are 31 user codes which may be assigned to one of the user types shown below. User 01 is designated as the master user and is initially set to 5678. Although user 01 can change their passcode the user type cannot be changed. Once the master user has assigned a user to the system, they may also change their passcode but they cannot change their user type. Users 2 -31 can be configured as:

Today is :-

....We....

Master	-	If the installation company has programmed the master user for full access, he or she will have access to all user menus and options. If the installation company has programmed the master user for limited access, he or she will NOT have access to "User menu 2" options 6 and 8, or any of "User menu 3".
Standard	-	This user type can only access "User menu 1".
Holiday	-	This user type allows the alarm system to be set and unset, and access to `User menu 1'. However, the passcode is automatically deleted from the system when a master user passcode is used to unset the alarm system. Normally the master user would assign this passcode type a temporary user whilst the they are away on holiday etc.

DAY WED

User Menu 2

Setup Users (Co	ont	.)
Set Only	-	This user type allows the alarm system to be set and access to "User menu 1".
Reset Only	-	This user type allows 24hr alarms to be reset and access to "User menu 1" option 1 to 9.
Duress	-	When a user keys in a duress code the alarm system sends a silent "Panic Alarm" to the central station without triggering Bell or sounders. Note that the system must be fitted with a remote signalling device connected to a telephone line. The user can set and unset the alarm system and access "User menu 1" when using the duress code.
		passcode is entered with the first two digits reversed (e.g., for a standard passcode of 2580 enter 5280 to generate a "Duress" alarm). If required, this feature can be disabled by the installation company or by making the first two digits of the passcode the same.
PA Code	-	When this user type is entered a "Panic Alarm" is transmitted to the central station via the telephone line and remote signalling device (if fitted). The external sounder(s) and strobe light(s) are also activated.
Access	-	When a user keys in this type of code the alarm system activates any output programmed as `Access' for a pre-set time. Normally this user type is used in conjunction with an electric door strike connected to the alarm system. When a user enters the passcode the alarm system operates the door strike to allow the user access into that area.
Full Set Group	-	This user type only allows wards assigned by the installation company or master user to be set and unset. This user type does not have access to any user menus.
Code Set Group A	-	This user type only allows the wards assigned by the installation company or master user to be set and unset. This user type does not have access to any user menus.
Code Set Group B	-	This user type only allows the wards assigned by the installation company or master user to be set and unset. This user type does not have access to any user menus.
Code Set Group C	-	This user type only allows the wards assigned by the installation company or master user to be set and unset. This user type does not have access to any user menus.
	-	

Note: For more information for Full Set Groups and Code Set Groups see page 40.

Setup Users (Cont.)

To setup users proceed as follows:

1. Ensure that "User menu 2" is selected. Press 4 to select the Setup users option. The display will show:

2. Enter the user number (02-31) required to be setup, e.g., to setup user 12 enter "12" followed by ENT. The display will show the current user type (Note: If the code is currently unassigned, the display will show "Not in use":

- 3. Select a new user type by pressing:
 - **2** for Standard **8** for Access 3 for Holiday **9** for Full set group
 - 4 for Set Only

1 for Master

A for Code set grp A

- 5 for Reset Only **B** for Code set grp B
- **6** for Duress **C** for Code set grp C

7 for PA Code

e.g., to select user type "Standard" press "2". The display will show:

4. When the display shows the required user type press [m] to accept. The display will show:

5. Enter a 4 digit passcode for the selected user, e.g., enter "2580". The display will show:

6. Press *int* to update with new passcode, a multi-tone will indicate that the passcode has been accepted and the display will return to step 1. A low tone indicates that the passcode is not available. Re-enter, trying a different 4 digit passcode.

7. Repeat from step 1 for other users or press [55] to return to "User menu 2".

To delete user passcodes 02-31 from the system, select the user number you wish to delete at step 2, then enter your own passcode at step 5.

Alter user type STANDARD Standard Change pass code Change pass 2580 code

LCD Starburst LED Setup users LISER User No. > --

NOT USED

Alter user type Not in use

Nati

Alter Chime Circuits - 5

This menu option allows the master users to select which detection circuits are designated as "Chime". Once programmed as "Chime" all users that have access to "User menu 1" can select one of the the six "Chime" options. See "Enable Chime" on page 19.

1. Ensure that "User menu 2" is selected. Press 5 to select the Alter Chime Circuits option. The display will show:

2. Select the circuit by entering its number or by pressing:

A To advance to the next circuit

C For the previous circuit

3. e.g., for circuit 07 enter "07", the top line of the display shows the circuit text (if programmed) and the bottom line shows whether the circuit is selected as "Chime" or "Silent" e.g.:

4. Press B to change between "Chime" and "Silent". If a low tone is generated when pressing **B** then the selected circuit cannot be programmed as "Chime".

5. Repeat from step 2 for other circuits, when finished press **ESC** to abandon this option and return "User menu 2".

Alter 24Hr Group - 6

Detection circuits types "24Hr" and "Auxiliary" can be grouped together so that if required the users can omit the group when the system is unset.

CCT 07 Chime

1. Ensure that "User menu 2" is selected. Press **b** to select the Alter 24Hr Group option. The display will show:

2. Select the circuit by entering its number or by pressing:

A To advance to the next circuit

C For the previous circuit

e.g., for circuit 10 enter "10", the top line of the display shows the circuit text (if programmed) and the bottom line shows whether the circuit is selected as "Armed" or "Omitted", e.g.:

3. Press B to toggle between "Armed" and "Omitted". If a low tone is generated when pressing **B** then the selected circuit cannot be programmed into the 24Hr group.

4. Repeat from step 2 for other circuits, when finished press **ESC** to abandon this option and return "User menu 2".

Print System Log -7

The system log stores 700 events (1800 when expanded), if a printer is connected to the system it is possible to print a selected number of events. Once the print-out has been started it can only be stopped by selecting this option again and entering "000" for the number of events.

1. Ensure that "User menu 2" is selected. Press 7 to select the **Print System Log** option. The display will show:

2. Enter the number of events to be printed 000-699 (0000-1799 if expanded), e.g., enter "150" for the last 150 events, starting with the most recent event. The display will show:

3. Press m to start printing, the display will automatically return to "User menu 2". To Cancel printing repeat from step 1 and select "000" ("0000" if expanded) events at step 2.

If the printer is left connected to the system it will print-out system events as and when they occur (real time print-out).

Configure Wards - 8

The TS790 & TS900 can be split into four wards:

- » System Ward (S)
- » Ward A
- » Ward B
- » Ward C

Each ward can be assigned to a passcode or part-set button to allow flexible part-set arrangements. See "Part Set Groups" on page 39 and "Code Set Groups" on page 40.

Only "Night", "Final Exit" and "Exit terminator" circuit types can be assigned to wards A, B and C. Circuits can be assigned to more than one ward (A, B or C) thus creating overlapping areas. Circuits assigned to more than one ward will only be armed when both or all wards are set. From the factory, all detection circuits are assigned to the system ward (i.e., they are not

assigned to wards A, B or C). Circuits that remain assigned to the system ward can also be set or unset independently. See "Part Set Groups" on page 39 and "Code Set Groups" on page 40.

Store Room PIR

CCT 02 in [

1. Ensure that "User menu 2" is selected. Press **B** to select the **Configure Wards** option. The display will show:

EET 02-

[]2-

2. Enter the circuit number, e.g., for circuit 02 enter "02". The top line of the display shows the circuit text (if programmed) and the bottom line shows the wards that the circuit are assigned to e.g.:

A for "Ward A"

B for "Ward B"

C for "Ward C"

e.g., press "A" then "B" to assign circuit 02 to wards A and B. If a low tone is generated when pressing the "A", "B" or "C", then the selected circuit cannot be programmed into wards.

4. Press Into accept and repeat from step 2 for other circuits, when finished press Is to abandon this option and return "User menu 2".

 Store Room PIR CCT 02 in [AB]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []]
 []

31

Viewing the System Log with an LCD Remote Keypad - 9

To view the log with an LCD remote keypad, proceed as follows:

1. Ensure that "User menu 2" is selected. Press 9 to select the View Log option. The display shows the most recent event. The top line shows the event description (see Table 1), and the bottom line shows the time and the date that the event occurred on e.g.:

2. Use the A or m keys to view previous events or the C key to scroll forwards through the log, e.g., enter A to scroll backwards. The display shows the previous event e.g.:

3. If the event being displayed is one that refers to a user number, e.g., "PASSCODE 01". Pressing the **B** key will toggle between the user text (name) and user number for that event.

4. If the event being displayed is one that refers to a circuit number, e.g., "ALARM 02". Pressing the **B** key will toggle between the circuit number and circuit text for that event.

5. Press [55] to leave this option and return to "User menu 2".

Viewing The Log With an LED or Starburst Remote Keypad -9

To view the log with an LED or Starburst remote keypad, proceed as follows:

1. Ensure that "User menu 2" is selected. Press 9 to select the **View Log** option. The display will show the most recent event (see Table 1), e.g.:

2. Use the A or makeys to view previous events or the C key to scroll forwards through the log, e.g., enter "A" to scroll backwards. The display shows the previous event e.g.:

3. To view the time for the selected event press **B** once. The display shows the time that the event occurred, e.g., "08.40 am":

4. To view the date for the selected event press **B** again. The display shows the date that the event occurred, e.g., "28 April":

5. To view the minutes and seconds for the selected event press **B** again. The display shows the minutes and seconds that the event occurred, e.g., "40 mins & 59 secs":

6. To view the event description again for the selected event press **B** again. The display shows the event description again, e.g.,:

7. Press **Esc** to leave this option and return to "User menu 2".

LCD

LCD	Starburst	LED	Description
ACTION ALARM	RLM SENT	AA	Alarm activated when system is part-set.
AC OFF	R.C. OFF	PF	Mains power removed.
AC RESTORED	R.C. ON	Pr	Mains power restored
ACCESS 01-31	RCC'55 01-31	Ac.0 - 3	Access user passcode (01-31) entered.
ALARM 01-56	ALARM 01–56	C A.O -56	Full alarm from circuit (01-56).
AUX/BELL TAMPER	RUX TRMP	AF	Auxiliary tamper activated.
AUXILIARY 01-56	RUX 01-56	Au0 1-56	Auxiliary circuit activated.
BATTERY FAULT	BRTT FLT	ЬF	Battery fault (voltage below 10.5V).
BELL TESTED	BELL TST	66	External bell and strobes tested.
CALL BACK No. 01-03	С. ВАСК ОІ-ОЗ	СЬО І-ОЭ	Modem making a call back to remote PC.
CCTS ISOLATED	24HR OM T	EI	24Hr group omitted during the unset condition.
CCT OMITTED	0MIT D 01-56	C 0.0 I - 56	Circuits omitted by the user at time of Setting.
CIRCUITS TESTED 01-56	TEST 0 01–56	£c.0 -56	The number of circuits tested during Walk Test.
CODE TAMPER	C.TMP OI-OY	PE.0 -04	Code tamper from keypad 01-04
COMMS ACTIVE	COM RET	c A	Plug-on digicom active.
COMMS FAILED	COMS FLT	cF	Plug-on digicom failed to communicate.
COMMS SUCCESSFUL	COMS OK	cc	Plug-on digicom communicated successfully.
DATE CHANGED	DRTE CHG	dc	System Date changed.
DEFAULT CODE	DEFLT DI	dF	User passcode (01) reset to 5678 by the engineer.
DELAY ALARM 01-56	DELAY DI-56	Ad0 1-56	Delayed alarm during a part-set condition.
DURESS 01-31	0UR'55 01–31	du.0 - 3	Duress alarm from user passcode (01-31).
ENTRY 01-56	ENTRY DI-56	En.0 1-56	Entry timer started by circuit (01-56).
ENTRY ALARM 01-56	EN.ALM DI-56	ERO 1-56	Entry timed-out alarm from circuit (01-56).
FACTORY RESTART	FRCT. RST	Fr	System "Factory Restarted".
FIRE ALARM 01-56	FIRE DI-56	FR.0 1-56	Fire alarm circuit activated.
FIRST KNOCK 01-56	FIRST DI-56	Fn:0 1-56	The first activation of a Double Knock circuit.
FUSE BLOWN 01	FUSE DI	F 6.0	Control Panel 12V Auxiliary Fuse blown.
INACTIVE CCTS 01-56	INRET DI-56	18.0 I-56	Inactive circuits during the Unset condition.
KEY POINT 01-56	KEY.SW 01-56	5a0 (-56	Key point operation from circuit (01-56).
LINE FAULT	LINE FLT	LF	Telephone line fault detected.
LINE RESTORED	LINE OK	Lr	Telephone line fault restored.
MODEM LOCK-OUT	LOEK-OUT	LO	Modem failed to communicate.
NO EVENT	NO EVENT		No log event.
NODE ADDED 01-05	N.800 01-05	NA.0 I-05	Node added to the system.
NODE FUSE 01-05	N.FUSE 01-05	NF.0 1-05	Node fuse blown.
NODE REMOVED 01-05	N.REM 01-05	Nr.0 1-05	Node removed from the system.
NODE TAMPER 01-05	N.TMP OI-OS	NE.0 1-05	Node cover removed.
ON-SITE RESTART	SITE. RST	Sr	System "On-Site" restart.
OMITS REMOVED	OMIT REM	0r	Previously omitted circuits reinstated.

Table 1a Log event codes and descriptions

LCD	Starburst	LED	Description
PA ALARM 01-56	PR.ALM DI-56	PRO 1-56	Panic Alarm circuit activated.
PA CODE 01-31	PANIC DI-56	PC.0 - 3	Panic Alarm passcode entered.
PANEL LID TAMPER	LID TAMP	LE	Control panel lid removed.
PART SET A/B/C	P.SET R/B/C	P5A/6/C	System Part-Set using one of the A, B, or C buttons.
PASSCODE 00-31	USER 00–31	Ur.00-31	User passcode entered. (00-31).
REMOTE ADDED 01-04	R. 800 01–04	F A.O. I - 04	Remote Keypad added to the system.
REMOTE RESET	REM RST	гс	System reset by "Remote Reset" passcode.
REM REMOVED 01-04	R. REM DI-DY	rr.0 -04	Remote Keypad removed from system.
REM SERVICE CALL	R.S. CALL	50	Remote service call via "Lineload" software and PC.
REM TAMPER 01-04	R. TMP 01-04	- E.0 - 04	Remote Keypad cover removed.
SERVICE CALL END	R.S. END	58	Remote service call finished.
SERVICE REQUIRED	SERVICE	-5	Service required
SET FAIL	SET FRIL	SF	System failed to Set.
SET WARD A/B/C/S	W. SET R/B/C/S	5E.860 S	Wards A, B, C or System Set.
SYSTEM OPEN	SYS OPEN	OP	System fully unset.
SYSTEM RE-ARMED	RE-ARMED	r A	System re-armed all healthy circuits.
SYSTEM SET	FULL SET	FS	System fully set.
TAMPER 01-56	TRMP'R OI-56	ER.0 I-56	Tamper alarm from circuit.
TEST CCTS OFF	TEST OFF	Eo	All circuits taken off "Test"
TEST FAIL 01-56	T. FRIL 01-56	EF.0 1-56	Circuit failed during "Test".
TIME CHANGED	TIME EHG	Ec	System time changed
UNSET WARD A/B/C/S	UNSET R/B/C/S	UnRbE S	Wards A, B, C or System Unset.
WALK TEST	WALK TST	ct	System "Walk Test" selected.

Table 1b Log event codes and descriptions

Remote Call Back - **D**

If your alarm system is fitted with a modem, the installation company can dial into the system and remotely access data from the control panel. For added security the installation company can also program your alarm system so that a master user has to authorise any write commands. When "Remote Call Back" is set to "Enabled" the installation company can dial into the system at any time and read and write data from the control panel. When "Remote Call Back" is set to "Disabled" the installation company can dial into the system at any time and only read data from the control panel. Once a master user has enabled "Remote Call Back" the system will automatically disable "Remote Call Back" after four hours.

1. Ensure that "User menu 2" is selected. Press **0** to select the **Remote Call Back** option. The display will show:

2. Press B to toggle between Enabled (Yes) and Disabled (No). Press M to update with new setting or press S abandon this option and return to "User menu 2".

Initiate Remote Service Call -A

If your alarm system is fitted with a modern, it is possible for a master user to initiate an upload sequence to a remote site (normally the alarm company or central station). Once the communication link is established, the remote site can read and write data from the control panel. This feature is only compatible with Menvier Lineload software version 2.0 or above.

Only select this option when requested by the installation company, if this option is selected without authorisation from the installation company the modern may not connect with the remote site.

To initiate a Remote Service Call, proceed as follows:

Introduction

This menu is only available to master users and is selected by pressing the M button whilst "User menu 2" is selected. There are six menu options within this menu, which may be selected in any order. The master user may leave this menu and return to "User menu 2" by pressing E button.

User menu 3 is only available if the installation company has programmed the master users for full access.

TS790 & TS900 User Manual

Time Switch A, B & C - 1

The TS790/TS900 system has three programmable Time Switch outputs A, B and C. Each output can be independently set with up to three separate on and off times and made to operate on various days of the week. These outputs may be used to control internal or external lighting, or other timed facility via a relay.

When this menu option is selected the keys function as follows:

1 First ON time	2 Second ON time	3 Third ON time
4 First OFF time	5 Second OFF time	6 Third OFF time
7 Days of operation (1st)	B Days of operation (2nd)	9 Days of operation (3rd)
ENT Set day	D Toggle output ON/OFF	ESC Escape
A Select Time Switch A	B Select Time Switch B	C Select Time Switch C

Selecting Time Switches - A B C

When the "Time Switch" option is selected "Time Switch A" is automatically selected, to select one of the other "Time Switches" proceed as follows:

1. Ensure that "User menu 3" is selected. Press 1 to select the Time Switch option. The display will show:

- LCD Starburst LED **Time Switch A** TIMER.A Select Option :-
- 2. Select the Time Switch by pressing:

A for "Time Switch A"

B for "Time Switch B"

C for "Time Switch C"

e.g., to select "Time Switch B" press **B**. The display will show the selected Time Switch, e.g.:

LED

Setting The On Times - 123

To set the first, second and third "ON" times proceed as follows:

1. Select the 1st, 2nd or 3rd "ON" time, LCD Starburst Time Switch B e.g., to select the 1st ON time press 1. The On-time 1 0000 display will show: 2. Enter the "ON" time in a 24Hr format, **Time Switch B** e.g., enter 1700 for 5.00 PM. The display will 1700 On-time 1 1700 show: 3. Press Im to accept the time setting. The Time Switch B TIMER.8-65.6 Select Option :display will show:

4. Repeat steps 2 and 3 for the second and third "ON" times as required.

LED

Setting The Off Times - 456

To set the first, second and third Off times proceed as follows:

1. Ensure that the required Time Switch is selected, e.g., Time Switch B. The display will show:

- 4 for the first OFF time
- 5 for the second OFF time
- 6 for the third OFF time
- e.g., to select the first "OFF" time press "4". The display will show:

3. Enter the "OFF" time in a 24Hr format, e.g., for 6.00 PM enter "1800". The display will show:

4. Press m to accept the time setting. The display will show:

5. Repeat steps 2, 3 and 4 for the second and third "OFF" times as required.

Setting The Days Of Operation -789

To set the days that the first, second and third On and Off times operate on, proceed as follows:

LCD

Time Switch B

Select Option :-

1. Ensure that the required Time Switch is selected, e.g., Time Switch B. The display will show:

2. Select the days of operation for the first, second or third timer by pressing:

7 for the first timer

8 for the second timer

9 for the third timer

e.g., press 7 to set the days of operation for the first ON/OFF timer. The display will show:

3. Select/de-select the days of operation using keys 1 to 7, e.g., press 1 then 2 to select the days Sunday & Monday etc. The display will show:

4. Press ent to accept the days of operation setting. The display will show:

5. Repeat steps 2, 3 and 4 for the second and third ON/OFF times as required.

Starburst

TIMER.B

Setting The Day -

For the Time Switches to operate on the correct days the system requires the current day to be entered. This will also be displayed on the bottom line of LCD remote keypads. Set the day as follows:

1. Ensure that the required Time Switch is selected, e.g., Time Switch B. The display will show:

2. Press [NT] to set the day. The display will show:

3. Select the day by using keys 1 to 7, e.g., press 4 to select the day Wednesday. The display will show:

4. Press *m* to accept the setting, the display will show:

Manually Switching The Output -0

The Time Switch output may be manually switched On and Off as follows:

1. Ensure that the required Time Switch is selected, e.g., Time Switch B. The display will show:

2. Press the **O** key. The display will show the status of the selected Time Switch e.g.,

3. Press the **O** key to toggle the selected Time Switch output "ON" and "OFF", e.g. to switch output on press "O". The display will show:

4. Press [SC] to return to step 1 and, if required, press **ESC** again to return to "User menu 3".

Select Option :-

Part Set Groups - 2

This option allows the "Part-Set buttons" A, B and C to be defined so that they can set any combination of wards (S, A, B and C), e.g., "Button A" can be defined to set wards A and B, and "Button B" defined to set only ward B. Each "Part set Group" may also have up to 32 characters of text assigned. See Edit Text For Part Set Groups on page 41.

The following example shows how to define "Part set Group A" (Button A), so that wards S,A & C are set when the button is selected by the user at time of setting:

1. Ensure that "User menu 3" is selected. Press 2 to select the **Part set Groups** option. The display will show:

2. Select the "Part set group" by pressing:

A for "Part set Group A"

B for "Part set Group B"

C for "Part set Group C"

e.g., To select "Part set Group A", press A. The display will show:

3. Select/de-select the wards that will set when the "Part set group" is selected, by pressing:

• To select/de-select "Ward S"

A To select/de-select "Ward A"

B To select/de-select "Ward B"

C To select/de-select "Ward C"

e.g., To select "Ward S" and "Ward C". Press **0**, then **C**. The display will show:

4. When the display shows the required setting press [11] to accept. The display will return to step 1. Repeat for other part set groups (B or C) or press [55] to return to "User menu 3".

Part Set Group Operation

When a "Master" or "Standard" user passcode is entered during the unset mode the alarm system will attempt to fully set after a five second delay. However, if during the five second delay one of the part-set buttons A, B or C is pressed, the display will show relevant "Part-set Text" and after a short delay the system will only set the areas (wards) that are assigned to the selected "Part set Group".

Part set Group A Will set [A]	R	
Part set Group A Will set [SA C]	5 <i>8 C</i>	580

User Menu 3

Code Set Groups - 3

This option allows the user passcode types "Code Set Group A", "Code Set Group B", "Code Set Group C" and "Full Set Group" to be defined so that each may Set or Unset any combination of Wards (A, B and C) and the System Ward. e.g., "Code Set Group A" may be defined to Set and Unset Wards A and B only and "Code Set Group B" defined to Set and Unset Wards B, C and the system etc.

Ensure that "User menu 3" is selected.
 Press 3 to select the Code Set Groups option. The display will show:

2. Select the Code set group by pressing:

A To select "Code set Group A"

B To select "Code set Group B"

C To select "Code set Group C"

D To select "Full set Group"

e.g., To select "Code set Group A", press A. The display will show:

3. Select/de-select the wards by pressing:

• To select/de-select "Ward S"

A To select/de-select "Ward A"

B To select/de-select "Ward B"

C To select/de-select "Ward C"

e.g., to add "Ward C", press C. The display will show:

4. When the display shows the required setting press [11] to accept. The display will return to step 1, repeat for the other "Code set Groups" or press [55] to return to "User menu 3".

Code Set Group Operation

When the system is unset and a "Code set Group" passcode is entered the selected areas (wards) will set after the setting procedure is followed. e.g., If "Code set Group A" is defined as above then when the passcode is entered it will set wards A and C. If the system is fully set and the passcode is entered it will unset wards A and C.

The "Code set Group" passcodes are programmed by the master user within "User menu 2" (see page 25).

LCD	Starburst	LED
Code set Group ? Enter Group >-	E.S GRP-	[59
Code set Group A Will set [A]	<u> </u>	[-]
Code set Group A Will set [A C]	R (- AC

User Names (NETLCD Remote Keypads Only) -4

This option allows the master user to assign up to seven characters of text against each user passcode. When viewing the log, users that have a name programmed appear in the event description, e.g., "PASSCODE Fred". If the user name is left blank the event description will show the user number, e.g., "PASSCODE 01".

When this menu option is selected the keypad operates in a text mode, see page 44 for full details.

To program the user names proceed as follows:

1. Ensure that "User menu 3" is selected. Press **4** to select the **User Name** option. The display will show:

2. Enter the user number 01-31, e.g., enter "01" for user 01, then press [™] . The display will show:

3. Use the keypad keys to program text (see page 44). When the display shows the required text press **ENT** to accept or press **EST** to abandon and return to step 1. Repeat for the other "User Names" or press **EST** to return to "User menu 3".

Edit Text For Part Set Groups (TS900 Remote Keypads Only) -5

When the system is being part-set using the part-set button A, B or C the display will show the default message of "Part set group A (B or C)". This message can be changed using up to 32 characters, e.g., "Part set group A" may be changed to "Setting Office area only".

When this menu option is selected the keypad operates in a text mode, see page 44. To program the part-set text name proceed as follows:

1. Ensure that "User menu 3" is selected. Press **5** to select the **Edit Text for Part Set Groups** option. The display will show:

2. Select the "Part set Group" by pressing:

A for "Part set Group A"

B for "Part set Group B"

C for "Part set Group C"

e.g., to select "Part set Group A" press A. The display will show:

3. Use the keypad keys to program text (see page 44). When the display shows the required text press ^[M] to accept. The display will return to step 1. Repeat for the other "Part set Groups" or press ^[SS] to return to "User menu 3". LCD Edit Text For Part set Group ?

^art set Group A

Edit Circuit Text (TS900 Remote Keypad Only) - 6

Each detection circuit can have up to sixteen characters of text assigned to it, e.g., circuit 01 may be programmed to "Front Door" etc.

Once the edit circuit text option is selected the keypad operates in a text mode, see page 44 for full details.

To program circuit text proceed as follows:

1. Ensure that "User menu 3" is selected. Press **6** to select the **Edit Circuit Text** option. The display will show:

2. Select the circuit by entering its number or by pressing:

A To scroll up one circuit

C To scroll down one circuit

e.g., to select circuit 04 enter "04". If the circuit has no text the display will show:

3. Press **B**, if text has already been programmed for the selected circuit it can now be edited, go to step 6. However, if the circuit has no text the display will show:

4. To program "new" text without copying, press and go to step 6. If you want to copy text from another circuit select the circuit by entering its number or by pressing:

A To scroll up one circuit

B To scroll up ten circuits

C To scroll down one circuit

e.g., to copy text from circuit 02 enter "02". The display will show the text to be copied e.g.:

5. Press at to copy the text and edit as below. The display will show the copied text, e.g.:

6. Use the keypad keys to program/edit the text (see page 44). When the display shows the required text press m to accept and repeat from step 2 or press to abandon and return to "User menu 3".

CCT 04	
001 04	

Copy Text From CCT 04

Store Room PIR CCT 02

Store Room PIR ^CT 02

View Inactive Circuits - **D**

The TS790 and TS900 have a facility to flag selected detection circuits that have not been activated whilst the system was unset. This feature would normally be used in situations where a movement detector could become obscured, for example by boxes within a store room that are stacked in front of a detector.

The system can still be full or part-set, but the display will show those detection circuits that have not been activated whilst the system was unset.

The master user can use this menu option to view the inactive detection circuits.

Only detection circuits that have been programmed as "Flagged" by the installation company will provide this feature.

To select the "View Inactive Circuits" option proceed as follows:

1. Ensure that "User menu 3" is selected. Press **1** to select the **View Inactive Circuits** option. The display will show those circuits which have not been activated whilst the system has been unset e.g.:

2. Press 💷 to abandon and return to "User menu 3".

Text Keypad

Change cursor type (Text/Number)

Figure 5. Text Keypad Overlay

In the text mode the keypad functions as follows:

Cursor Types:

^	This character is used to represent the top line text cursor.
V	This character is used to represent the bottom line text cursor.
	This character is used to represent the number cursor.

To program text Proceed as follows:

1. Text is entered by pressing one of the vowel keys and then using the \blacktriangle or \bigtriangledown keys to move up and down, e.g., to type the letter R press "5" to select U then press \bigcirc three times to scroll down to the letter R. The display will show:

2. Now use the \blacktriangleright key to move the cursor right, repeat step 1 for the next letter. Keep repeating steps 1 and 2 until the whole word is formed, e.g.:

3. Numbers may be entered by pressing key "6" then using the ▲ or ▼ keys to move up and down. A quicker way is to press B, which changes the cursor to "|" and numbers may now be entered directly using the number keys, e.g., to enter 405 first press B then enter "405". The display will show:

4. When the display shows the required text press ent to accept or press ent to abandon.

Fault Finding

Display Messages

LCD	Starburst	LED	
ALARM 05 08:30.45 28/04	ALARM OS	[8.05	Full alarm from detection circuit 05. Refer to "Resetting After an Alarm" on page 11.
AUX/BELL TAMPER 08:30.45 28/04	RUX TMP	86	Auxiliary or Bell tamper alarm. Refer to "Resetting After an Alarm" on page 11.
AUXILIARY 06 08:30.45 28/04	RUX 06	Au.06	Auxiliary alarm from detection circuit 06. Refer to "Resetting After an Alarm" on page 11.
BATTERY FAULT 08:30.45 28/04	BRTT FLT	65	The system standby Battery is faulty. Contact your installation company for further advice.
CCTS FAILED TEST 08:30.45 28/04	TEST FRILURE	6656 FR 11	One or more circuit have failed whilst on test. Use the "View Log" option to view the detection circuits that have failed. The system can still be set or part-set. Contact your installation company for further advice.
CCTS ISOLATED 08:30.45 28/04	CIRCUITS OMITTED	EEES ISOL	One or more 24 hour circuits are isolated from the system. Refer to " <i>Omit 24 Hour Group</i> " on page 20.
CODE TAMPER 01 08:30.45 28/04	E.TMP OI	PE.01	Code tamper from remote keypad 01, caused by 4 incorrect passcode entries. Refer to "Resetting After an Alarm" on page 11.
DELAY ALARM 05	DELRY OS	84.85	Delayed alarm from detection circuit 05. Refer to "Resetting After an Alarm" on page 11.
ENTRY ALARM 01 08:30.45 28/04	ENTRY OI	E A.O. I	Entry time-out alarm from detection circuit 01. Refer to "Resetting After an Alarm" on page 11.
FIRE ALARM 02 08:30.45 28/04	FIRE O2	FA.02	Fire alarm from detection circuit 02. Refer to "Resetting After an Alarm" on page 11.
FUSE BLOWN 01 08:30.45 28/04	FUSE OI	F6.0 I	The auxiliary supply fuse has blown. Contact your installation company for further advice.
NODE FUSE 01 08:30.45 28/04	N.FUSE OI	[]F.[]	The auxiliary supply fuse in Node 01 has blown. Contact your installation company for further advice.
NODE REMOVED 01 08:30.45 28/04	N. REM OI	[][]	Node 01 has been disconnected from the system or has failed. Contact your installation company for further advice.

Display Messages (Cont.)

Glossary of Ter	ms	
Auxiliary Circuit	-	A detection circuit type which is monitored at all times. When triggered it will only activate outputs that are programmed as auxiliary.
Chime	-	An optional facility which allows selected detection circuits to generate a two-tone "Chime" when triggered.
Central Station	-	A permanently manned monitoring station used to receive alarm transmissions via the telephone line from a remote signalling device such as a digicom.
Detection Circuits	-	All detection devices, e.g. magnetic contacts, movement sensors, etc. are connected to detection circuits. Each circuit is allocated a number which identifies the detection device. For example, a room protected by a movement sensor may be "Circuit 01", while a door protected by a magnetic contact may be "Circuit 02".
Digicom	-	Digital Communicator - A remote signalling device fitted to the system which will transmit alarm status data via the telephone line to a dedicated central station.
Downloading	-	A process which allows the alarm system to be remotely interrogated and programmed via a computer and modem.
Duress	-	A means of entering a passcode which generates a silent alarm via the digicom (if fitted) to a central station.
Exit/Entry route	-	The route for entering or leaving the protected premises when the system is being full or part-set.
Final Exit	-	The door or detector that is used for leaving and entering the premises.
Entry Time	-	A pre-set time delay to allow the user to enter the protected premises and reach the remote keypad without causing an alarm.
Event Log	-	A record of system activity which is stored in a non volatile memory.
Exit Time	-	A pre-set time delay to allow the user to leave the premises when the alarm system is being set by the timed exit method.
Exit Terminator	-	An external push button switch required by some police forces which is used to set the system after leaving the premises.
Full Set	-	The state of the alarm system when it is protecting all wards.
Master User	-	The user(s) who are responsible for assigning new users to the alarm system.
Modem	-	A device for transmitting and receiving data to and from a computer via the telephone line.
Night Circuit	-	A detection circuit type that will generate a full alarm when the alarm system is set. When the alarm system is unset the detection circuit may be triggered without causing an alarm.
Omit	-	To intentionally exclude the monitoring of one or more detection circuits when full or part setting the alarm system.
Part-Set	-	The state of the alarm system when it is protecting part of the premises.

Fault Finding		TS790 & TS900 User Manual
Passcode	-	A unique four digit number which must be entered before the alarm system can be operated.
P.A. (Panic Alarm)	-	Emergency push button switch used to activate an alarm. The alarm signal will also be transmitted to the central station if a remote signalling device is fitted.
Remote Keypad	-	A device located away from the main control panel that is used to operate the alarm system.
Reset	-	The action required to return the system to its normal state after an alarm.
Set	-	To arm the alarm system or wards.
System Open	-	The normal unset state of the system.
System Set	-	The full set state of the the alarm system.
Tamper	-	An alarm caused by the system being interfered with physically or by too many unauthorised keypad entries.
24 Hour Circuit	-	A circuit that is monitored at all times. When triggered in the unset condition a local alarm is generated (Internal sounders only). When triggered in full or part-set condition a full alarm is generated.
Unset	-	To disarm the alarm system or areas (wards).
Users	-	Persons allocated a passcode which allows them to operate the alarm system.
Wards	-	A group of detection circuits that may be set or unset independently of each other.

System Records

	User Record							
User	Lisso Trans	lle en Nieure e		Set/Unset Wards				
No	User Type	User Name	System	Ward A	Ward B	Ward C		
01	Master		~	~	~	~		
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

System Records

TS790 & TS900 User Manual

	Detection Circuit Record							
Circuit					Circuit i	n Wards		
No	Location	Omit	Chime	System	А	В	С	
01								
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

System Records

	Detection Circuit Record							
Circuit	l e e ettere	Onell	China		Circuit i	n Wards		
No	Location	Omit	Chime	System	A	В	С	
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								

	Service Record					
Date	Engineer	Action				

Installation Information					
Bell Delay:			Bell Duration:		
Master User Access:	Full	Limited	Remote Signalling:	Yes	No
Downloading:	Yes	No	User Authorisation:	Yes	No
Set with power off:	Yes	No	Set with Line Fault:	Yes	No
