

*Tunstall
Security*

TS600 ALARM CONTROL SYSTEM

USER GUIDE

TS600 USER GUIDE

The Tunstall Security TS600 Alarm Control System gives your property a high degree of protection and is designed to be very easy to use, giving you reassurance at every stage of operation. Before you use your alarm system, read through this User Guide so that you get the best out of your TS600 right from the start.

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- 4.6 **Random Timing?**
 Press YES if you would like the circuit to switch on and off at random during the On time you have programmed into the timer. The display will read:
Max Time
 Key in the maximum period that the circuit will remain either on or off before changing (see Note 2). The Display will read:
Confirm MM
 Press YES to move on to the next step, or NO to key in a different maximum period.
 The Display will read:
Min time
 Key in the minimum period that the circuit will remain either on or off before changing (see Note 2). The Display will read:
Confirm MM
 Press YES to move on to the next step, or NO to key in a different minimum period.
- 4.7 **On with Sounder?**
 Press YES and the timed circuit will also operate with the Sounder (ie during the Entry/Exit times or an alarm condition). You might use this, for example, to illuminate the entrance hall whenever someone was Setting or Unsetting the alarm system (see Notes 3 and 4).
 The display will read:
ONLY WHEN SET?
 Press YES and the timed circuit will also operate with the Sounder but only when the alarm system is Set - for example, during the Entry time but not the Exit time (see Note 3).
- 4.8 **Notes on timed event circuits**
1. Remember to use a 24-hour clock in the form HHMM: for example,
 7.15am = 0715
 10.35pm = 2235
 2. Enter a two digit number of minutes in the form MM: for example,
 5 minutes = 05
 99 minutes = 99
 3. You can make the circuit come on with the sounder without also having it under the control of the timer. To do this, key in the same time for both the On time and the Off time (perhaps 00:00).
 4. When the timed circuit operates with the Sounder, it stays on for a further minute after you have Unset the system. This gives you time to put other lights on, for example, before the timed light goes out.

- 3.7.2 Press any key to finish the Walk Test. The Display will read:
BELL TEST?
 Press YES and the Sounder and Bell should both work properly.
 The Display will read:
 Any key to end
 Press any key and the Sounder and Bell will stop.
- 4 Timed event circuits
- 4.1 Method
 The Keypads of your TS600 alarm system can be programmed to switch other equipment on and off at certain times. This can give the impression that the building is occupied while you are out by turning lights on and off, either at the same time every day or at random. A special relay connects the Keypad to the other equipment and this should be fitted by the installation engineer. The following is a guide to programming the timed event circuits. Each Keypad can have a different timed event program. To select or change the timer options, press YES and NO together. You are then prompted to answer YES or NO to the options. Answering NO leads you to the next question. Answering YES either selects the option or leads you into further choices, as described below.
- 4.2 Change On Time
 Press YES and the Display will read:
 On time
 Key in the time you want the circuit to switch on (see Note 1). The Display will read:
 Confirm HH:MM
 Press YES to move on to the next step, or NO to key in a different time.
- 4.3 Change Off Time
 Press YES and the Display will read:
 Off Time
 Key in the time you want the circuit to switch off (see Note 1). The Display will read:
 Confirm HH:MM
 Press YES to move on to the next step, or NO to key in a different time.
- 4.4 Select days on?
 Press YES and the Display will read:
 Every? (Yes/No)
 Press YES for the timed circuit to come on every day. To select only certain days, press NO and the Display will read:
 Mon? (Yes/No)
 Press YES for the timed circuit to come on every Monday or NO for the Display to move on to Tuesday. Repeat for each day of the week (more than one day can be selected).
- 4.5 Only when Set?
 Press YES and the timed circuit will operate only when the system is Set (ie when the alarm is on guard during the On/Off period you have chosen).

TS600 ALARM CONTROL SYSTEM

1. Using the Alarm System

1.1 Terms Used

The following terms are used in this User Guide:

Keypads and Displays

The TS600 Alarm Control System is operated from up to four Keypads, each with a clear Display window where messages keep users informed about the alarm system and help them to use it.

Codes and Users

A Code is a four-digit number which allows a User to operate the alarm system. The Master User is the person, nominated to be in charge of the alarm system, who has access to the programming functions described in Section 3.

Set and Unset

When the alarm system is Set, this means it is switched on and is on guard; Unset means the alarm is no longer on guard, although certain functions are still monitored. The alarm system should always be Set when the building is unattended.

Zones and Part-Set

The TS600 allows you to define a number of discrete areas, or Zones, to be protected. The alarm system can be Part-Set, with only some of the Zones being put on guard. This is especially useful during the night when everyone is in one room.

Bells, Buzzers, Sounders and Strobes

Your alarm system may include a bell, siren or other electronic sounder, which are referred to in this User Guide by the term Bell. A Sounder refers to the warning sound inside the building made by the Keypads and any internal loudspeakers. The term Strobe means a flashing light that comes on with the Bell.

Tamper

A Tamper circuit senses if anyone attempts to cut any wires or sabotage the alarm system, whether or not the system is Set.

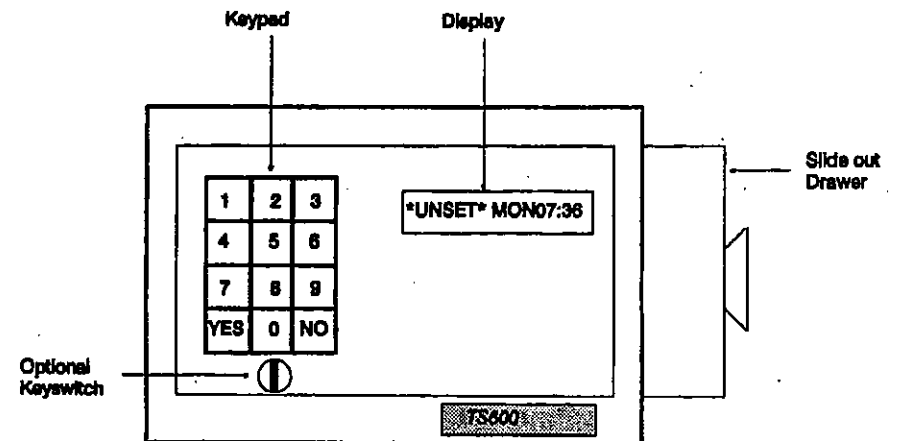


Fig 1 Keypad and Display Unit

1.2 The Controls

1.2.1 The alarm system is operated from any of up to four Keypads, sited around the premises. The main control box is silent and has no lights, keypad or display and will normally be installed out of sight. When a key is pressed the Keypad and Display light up.

1.2.2 When the Keypad is not in use, the Display reads either:

SET DayHH:MM

or:

UNSET DayHH:MM

where Day is the day of the week and HH:MM is the 24-hour time.

1.3 User Codes

1.3.1 To operate the TS600, there are three priority levels of User Codes.

- (1) The User 1 Code is given to the Master User, who can then use all the Setting functions and Master User facilities (see Section 3). When the system is first installed, the User 1 Code is 5878.
- (2) The User 2 Code allows authorised people to Set and Unset the system. The optional keyswitch that can be fitted to any Keypad is equivalent to User 2 status.
- (3) The lowest priority Code, User 3, lets people Set the system when they leave the building but does not allow them to Unset it to get back in.

A Durees Code is a special kind of Code which is described in Section 2.5.

1.3.2 The Master User should select the User 1, User 2, User 3 and Durees Codes as soon as possible after installation (see Section 3.5). Once this has been done, only someone using the new User Codes can Unset the system. Even the installation engineer will then not be able to Unset the system without a User.

1.4 Protected Zones

1.4.1 Setting the system puts all the zones on guard. Part-Setting the system (see Section 1.6) allows you to put some of the Zones on guard. When the system is Part-Set and someone triggers a Zone, the Sounder beeps and the Entry sequence starts (see Section 1.7).

1.4.2 A special Zone covers the Entry/Exit routes used to enter and leave the building, which need to be agreed when the system is installed. The Entry/Exit Zone gives time to get in or out of the building when the alarm system is Set or is being Set. Both front and back door can be programmed as Entry/Exit routes, provided you can get from the door to a Keypad in time.

1.5 Setting the system

1.5.1 Make sure that all doors and windows are closed. The Display should read:

UNSET DayHH:MM

Key in your User Code (see Notes 1 and 2). The Display will read:

SET SYSTEM?

Press YES - a tone will sound (see Notes 3 and 4) and the Display will read:

Setting DayHH:MM

Follow the Exit procedure (see Note 5). When the Sounder stops, the alarm system has been Set.

3.5.2 Notes on the system clock

1 For quick selection, hold down the NO key and the numbers will scroll very quickly. When you are close to the required number, use individual key presses to select the exact number.

2 Remember to use a 24-hour clock: eg 22 hours 07 mins.

3.6 Programming User Codes

3.6.1 Apart from your initial choice of User Codes, you may wish to change User Codes from time to time. Key in your User 1 Code and answer NO to all questions until the Display reads:

SET USER 1 CODE?

Press YES and the Display will read:

CODE =

Key in your new User 1 Code (see Note 1) and press YES to store your choice. The Display will read:

SET USER 2 CODE?

To select the User 2, User 3 and Durees Codes, repeat the same procedure (see Notes 2 and 3).

3.6.2 Notes on programming User Codes

1 If the User Code you have selected has already been stored as a different User Code, the Display will again read:

CODE =

You must now key in a different Code number.

2 User 2 and User 3 Codes can be cancelled if they are not necessary. Simply press NO when prompted to set the Code.

3 The optional keyswitch is equivalent to User 2 Code status. Temporarily cancelling the User 2 Code is a useful way to disable any keyswitches until the lock and keys are changed if a key is lost.

3.7 Testing the system

3.7.1 From time to time, you should test that all detectors, wiring, Keypads, Sounders and Bells are working properly (remember to warn neighbours about tests involving the Bell). The following procedure is used to Walk Test the system.

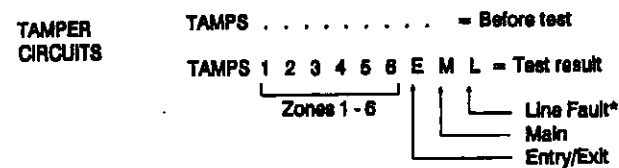
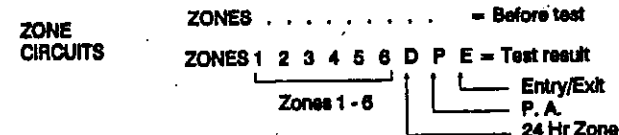
Key in your User 1 Code and answer NO to all questions until the Display reads:

WALK TEST?

Press YES and the Display will alternate between:

ZONESand TAMPS

You or an assistant can now walk through your premises to test the detectors. The Sounder should emit a pulsed tone as each Zone is triggered, and the Display will identify that Zone (see below). If any Zone fails to be identified, it is faulty and you should inform the installation engineer. The Tamper (Tamps) circuits will normally not be identified unless the system is interfered with in some way.



* = When fitted with Digital Communicator

- 3.2 Programming Part-Set Zones**
- 3.2.1** This facility allows you to select which particular Zones are included (on guard) or excluded (off guard) every time the system is Part-Set (see Section 1.6). Key in your User 1 Code. The Display will read:
SET SYSTEM?
 Press NO and the Display will read:
SET P/SET ZONES?
 Press YES. The Display will show the status of each Zone in turn.
 For example:
ZONE 1 = INCLUDE
 To include this Zone, press YES. To exclude it, press NO and the Display will read:
ZONE 1 = EXCLUDE
 Press YES and the Display will move on to Zone 2.
- 3.2.2** Once in this facility, you must select each Zone in this way, ending with the Entry/Exit Zone (displayed as F/EXT). Pressing 0 does not escape from the Master User facilities until you have done this. When Zone 6 is programmed as a fire alarm (see Section 2.2), it is Set (on guard) all the time. It therefore cannot be excluded and the Display will go from Zone 5 to the Entry/Exit Zone (displayed as F/EXT). If the Entry/Exit Zone is excluded, it can still be used normally to Set the system.
- 3.3 Chime facility**
 When selected, the Chime facility causes the Keypads to chime (beep) when anyone uses an Entry/Exit route while the system is Unset.
 Key in your User 1 Code and answer NO to all questions until the Display reads:
CHIME ON?
 Press YES to select or NO to cancel.
 When accessing other Master User facilities, remember that answering NO at this point will cancel the chime.
- 3.4 Memory Log**
- 3.4.1** The alarm system keeps a log of the last 30 events, along with the day, time and, where applicable, the User Code involved. Key in your User 1 Code and answer NO to all questions until the Display reads:
SEE LOG?
 Continue to press the YES key and the log of events will be seen, scrolling back to the oldest event retained by the memory. At the end of the stored records, the Display will read:
LOG END
 Pressing 0 at any point takes you back to the beginning of the log. Pressing NO takes you on to the next facility - System clock.
- 3.5 System Clock**
- 3.5.1** The following procedure is used to change the day or the time on the clock. Key in your User 1 Code and answer NO to all questions until the Display reads:
SET CLOCK?
 Press YES and the Display will read:
DAY OK? DayHH:MM
 Press NO until the correct day is shown and then press YES. The Display will read:
HRS OK? DayHH:MM
 Press NO until the correct hour is shown (see Notes 1 and 2) and then press YES. The Display will read:
Min OK? DayHH:MM
 Press NO until the correct minutes are shown (see Note 1) and then press YES.
 The correct day and time have now been selected.

- 1.6 Part-Setting the system**
- 1.6.1** The combination of Zones that will be on guard when the system is Part-Set must first be programmed by the Master User (see section 3.1). Make sure that all doors and windows are closed. The Display should read:
***UNSET* DayHH:MM**
 Key in your User Code (see Notes 1 and 2). The Display will read:
SET SYSTEM?
 Press YES. The Display will read:
PART SET?
 Press YES - a tone will sound (see Note 4) and the Display will read:
 Setting DayHH:MM
 Follow the Exit procedure (see Note 5). When the Sounder stops, the alarm system has been Part-Set.
- 1.7 Unsetting the system**
- 1.7.1** As you enter the building (by the Entry/Exit door), the entry timer will start, the Sounder will beep (see Note 6) and the Keypad and Display will light up (see Note 7). Key in your User Code (see Notes 2 and 8). The Sounder will stop and the Display will read:
***UNSET* DayHH:MM**
 The system is no longer on guard.
- 1.8 Notes on Setting, Part-Setting and Unsetting the system:**
- As you press each of the four User Code figures, an arrow will appear on the Display and you will hear a beep as the digit is accepted. If you press an incorrect number, simply wait for the Display to return to:
***UNSET* DayHH:MM**
 and re-enter your User Code. Should you key in the wrong number more than three times in succession, the system will register a Keypad Tamper, shown as:
KPD TMP DayHH:MM
 and the Sounder will beep until the correct Code is entered.
 - If your Keypad has the optional keyswitch, just turn the key.
 - If your alarm system has been programmed to include the Part-Set option (see Section 1.6), the Display will now read:
PART SET?
 Press NO and the alarm will then start the Setting sequence.
 - If you have left a door or window open, or if you trigger any of the detectors as you leave the building, the steady tone will change to a pulsed tone, warning you that the system cannot Set. The Display will show which Zone must be cleared in order to Set the system.
 - The installer will tell you which of four Exit procedures he has programmed for you:
 - the alarm Sets after a fixed period of time.
 - the alarm Sets as you close the Entry/Exit door behind you.
 - the alarm Sets once you press a button on the outside of the premises.
 - the alarm Sets after you have closed the Entry/Exit door and then pressed the button on the outside of the premises.
 - You will normally have a Keypad installed close to the Entry/Exit door and the installer will tell you how long he has programmed the entry timer to last.
 - Your TS600 can also be programmed to switch on lights as you enter the building (Sect 4). If you fail to key in your User Code within the time limit, the entry timer starts again and the Sounder beeps louder and more insistent. You are then given a second opportunity to key in your User Code. If you fail again, the system will go into full-alarm and the Display will indicate entry time-out alarm, by reading:
ENT T/O DayHH:MM
 -

1.9 Cancelling an alarm condition

1.9.1 When a Zone which is Set is triggered, the alarm is raised by the Bell ringing and the Strobe flashing (see Note 1).

1.9.2 To cancel any alarm key in your User Code (see Note 2). The Bell will stop and the Display will show the Zone that was first triggered and when. For example:

ZONE 1 Mon14:35

Check that this Zone is clear. Key in your User Code again (see Notes 2 & 3). The Display will read:

SET SYSTEM?

Press NO to Unset the system or YES to Set the system again (see Sections 1.5 and 1.6). The Master User can review the sequence of events involved when the alarm was raised by keying in the User 1 Code and examining the Memory Log (see Section 3.4).

1.10 Notes on cancelling an alarm condition

1. Due to the Auto Re-arm feature (see Section 2.7) the Bell may not be ringing although the alarm system has been triggered. You can tell that this has happened if the Strobe is flashing and if a ZONE message appears when you key in your User Code.

2. If your Keypad has the optional keyswitch, just turn the key.

3. If the Display reads:

SYSTEM NOT RESET

either some PA or fire alarm contacts are still open or, when your alarm system was installed, you opted for an alarm condition to be dealt with by the engineer (for example, if a Digital Communicator is fitted).

1.11 Fault messages

The alarm system makes its own diagnosis of any unusual circumstances. If the Display shows any message other than those referred to in this guide, contact the installation engineer immediately.

2. System features

2.1 Tamper circuits

2.1.1 The TS600 is continuously fully protected from possible sabotage by seven Tamper circuits. Each of the six Zones protecting your premises has its own Tamper circuit, and there is also a Main Tamper circuit monitoring the condition of the entire alarm system. Should anyone attempt to cut the wires or sabotage any other part of the system, a Tamper circuit will be triggered. If the system is Unset, the Sounder will beep until the User Code is keyed in. If the system is Set, the Tamper will cause a full alarm and the Bell will sound.

See Section 1.9 for what to do when the alarm has been triggered.

An attempted sabotage of a Keypad disables the keyswitch option and so prevents any attempt to short-circuit the key contacts.

2.2 Fire alarm Zone

2.2.1 Zone 6 of the TS600 can be designated as a fire alarm, monitoring smoke and heat detectors throughout the premises. If a fire is detected, it will trigger the alarm with a distinctive pulsed ringing that is quite different from the continuous ringing of the intruder alarm. Where a Digital Communicator is fitted (see Section 2.6), a fire alarm message is sent automatically to the monitoring centre.

2.3 24 Hour Zone

For any area that is generally not in use but needs to be guarded round the clock you can use the special 24-hour Zone. This works like any other Zone when the alarm system is switched on but in addition uses the internal Sounders to alert you if anyone goes into that area when the system is Unset.

2.4 Personal Attack

The installation engineer will normally include at least one Personal Attack (PA) button, perhaps just inside the front door. When this is pressed, it raises an immediate alarm whether or not the system is Set. Before you can reset the alarm (see Section 1.9), most PA buttons have to be reset with a key.

2.5 Durees Code

2.5.1 Used in conjunction with a Digital Communicator (see Section 2.6), this is a special Code number that will raise a silent alarm should you be forced against your will to Set or Unset the alarm system. The Durees Code will appear to Set or Unset the system quite normally, but will actually send a silent Personal Attack signal to the monitoring centre. Initially set as 5555, the Durees Code can be changed by the Master User (see Section 3.6).

2.6 Digital Communicator

2.6.1 The main control box of the TS600 is designed to take a Digital Communicator, either at the outset or as a later addition. The Digital Communicator can monitor the intruder alarm, fire alarm, Personal Attack and Set/Unset status of the alarm system, relaying this information via your telephone line to a monitoring centre, where trained operators can summon the Police or Fire Brigade with the minimum of delay.

2.6.2 In the case of an intruder alarm, the TS600 with a Digital Communicator can be programmed by the installation engineer to delay sounding the Bell, improving the chances of the Police catching a burglar "red-handed".

2.6.3 After an alarm has been triggered, alarm systems fitted with a Digital Communicator have to be reset by the installation engineer, though the alarm can be cancelled (see Section 1.9).

2.7 Auto Re-arm

2.7.1 When a Zone which is Set is triggered, the alarm is raised by the Bell ringing and the Strobe flashing. At installation the engineer will have selected a time, normally 15 to 20 minutes, after which the Bell will stop ringing. The alarm system then Sets itself again automatically, so that it continues to protect the premises. This is known as Auto Re-arm. If any Zone has damaged detectors or open contacts as a result of the break-in, the system will automatically exclude that Zone as it Sets the system. If a Strobe is fitted, it will continue to flash until you cancel the alarm condition (see Section 1.9).

2.8 Battery back-up

2.8.1 If there is a power cut, the alarm system is protected for eight hours by its back-up battery (which is kept constantly charged when the mains power is on). The Display will read:

AC FAIL

When a Digital Communicator is fitted (see Section 2.6), a message is sent to the monitoring centre before the battery runs down completely. Should the battery eventually fail, the Bell will raise the alarm. Even without power, the alarm system will remember all the details of your particular program, except for the Clock, (see Section 3.5) and will carry on exactly as before when the mains power returns.

3. Master User facilities

3.1 Master User

Only the Master User can program the following facilities into your alarm system. The User 1 Code (initially 5678) grants access, at any time, to each of the Master User facilities which are selected in turn as you answer YES or NO. If, having changed the options on one facility, you wish to escape from the menu of Master User facilities, press 0.