

TTS Fire & Security Ltd.

Operating Instructions Millennium Radio Fire Alarm System

The fire alarm installed is a fully addressable radio system. Each device is individually identifiable by means of a unique unit number between 1 and 3000 inclusively. There is no wiring between units, control panels and sounders, the system communicating via VHF radio transmissions. No other radio equipment will interfere with the system and, likewise, the fire alarm will not interfere with any other radio equipment.

The operation of the system is dependent on the configuration, set by the commissioning engineer, but each installation is generally similar.

When a smoke or heat detector detects an alarm condition or a break glass unit is operated, the relevant information will be displayed on the control panel. This includes the device location, unit number and zone of alarm. The sounders will operate. The situation should be investigated for the cause, and once under control the system can be silenced.

Any subsequent alarm will operate the sounders once more and the relevant information for the new alarm being displayed on the screen.

If the system detects any faults on any of the devices or the control panels e.g. mains fail or unit removal, a fault will be displayed. A buzzer will sound on the control panel to attract someone's attention. This can be silenced until the cause of the problem is corrected.

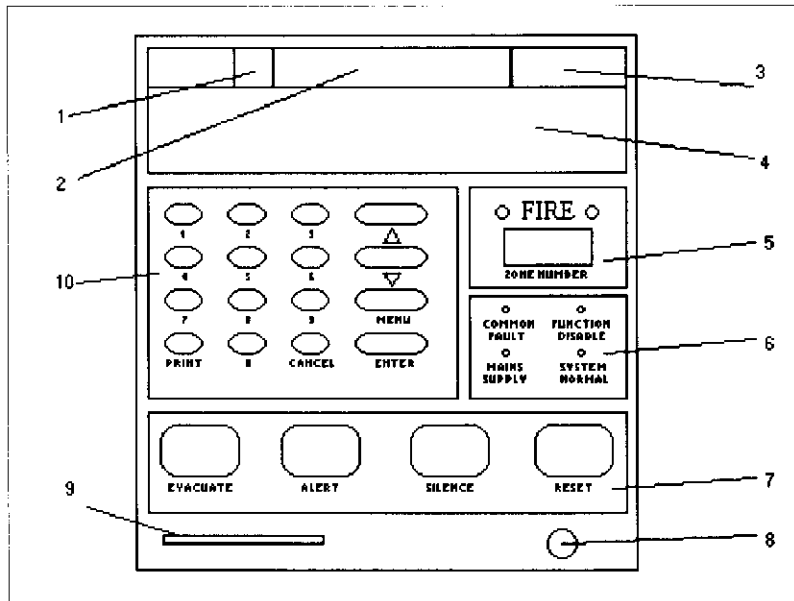
For further operation of the system refer to the remaining section of this manual.

If you have any queries on the operation of the panel, please contact TTS Fire and Security Ltd. The office number is 01279 429029 (message machine with duty engineer mobile number announced out of hours)

If a particular option is not available, a suitable message will be displayed.

Basic Operation

In order to operate the panel the front panel door will have to be unlocked.
(Note: This section describes operation of a system with standard configuration)



Panel Display and Control's

- 1) Rx/Tx
- 2) TTS Fire and Security / Zones in Alarm
- 3) Time and Date/ Alarm count/ Fault count
- 4) Main Display Area
- 5) Fire Zone Number
- 6) System Status LED's
- 7) Main Control Buttons
- 8) Engineers Computer Port
- 9) Printer Paper Output
- 10) Keypad

Normal When no faults or alarms are being displayed, the display will appear dark. The current time and date are displayed in area (3) TTS Fire and Security Ltd. and our telephone number will be displayed in area (2). Whenever a radio message is received or transmitted the appropriate Rx or Tx box (1) will flash. Nothing will be displayed in area (4). The system normal LED (6) will be illuminated. The mains supply LED will be illuminated indicating the supply is healthy.

Fault When the panel detects a fault condition the internal buzzer will sound continuously and the common fault LED will illuminate. The display back light will be switched on and the initial fault will be displayed on the first line, as shown in the example below.

The display will detail the type of fault, which device and when it occurred. If programmed, a text location will be displayed below it. Any subsequent faults will be displayed, and scroll through, on the bottom two lines of the display. Each fault is visible for a short period of time. Pressing the arrow up and the arrow down keys will cause either the previous or the next fault to be displayed. This will then continue to scroll from the event being displayed. It is possible for 300 faults to be scrolled through. Window (3) will alternate between the total fault count and the date and time. TTS Fire and Security Ltd., and our telephone number remains in area (2) of the display. In order to conserve power the LCD backlight will switch off 15 minutes after a fault occurs on any panel. If the mains supply is interrupted the fault will be indicated as above and the Mains Supply LED will be extinguished.

	Rx		14:30:35
	Tx		25/12/99
1.	Low Battery	Smoke Detector 0117	14:28 25-12-99
	Old Reception		
2.	Unit Removal	Callpoint 0074	14:29 25-12-99
	B Stage Door B3		

An alarm condition will be caused by a smoke/heat detector, a break glass unit or other sensing unit detecting a fire risk situation. All sounders will operate and the internal buzzer will sound. The display of the units in alarm is similar to that of the fault display. All alarms will override the fault display. The zone display (5) indicates the initial zone of the alarm and the fire LED's above the zone will flash. If another alarm condition occurs the zone display indicates the new zone momentarily and then reverts to initial zone of alarm. The time and date location (3) displays a fault and alarm count which indicates the number of alarms and faults presently on the system.

All zones that are in alarm are listed on the top middle portion of the display (2). See below for an example display.

	Rx	Zones in Alarm	14:40:20
	Tx	021 017	26/12/99
1.	Fire Zone	Callpoint 0046	14:37 26-12-99
	Stunts Area		
2.	Evacuate Control	001	14:38 26-12-99
	Reception		

Evacuate Pressing the evacuate button will operate the sounders, if they are not already sounding This will override an intermittent sounding alarm.

Evacuate' will be displayed on the display along with the panel number where the button was pressed. The text location for this panel and the date and time is displayed. A buzzer on the control panel sounds continuously.

Alert The alert function is designed as a warning. Pressing this button will cause the sounders to sound an intermittent tone. It will not override an evacuate or alarm tone, but will be displayed on the screen in a similar way to the Evacuate message. The buzzer sounds continuously whilst in this state.

Silence If the system is in an alarm or alert state, from either a smoke detector, break glass or panel, pressing this button will silence the sounders. A message will appear on the screen indicating the operation is taking place. It can take several seconds for the complete system to silence. An internal buzzer will now sound intermittently. A subsequent alarm condition from a different unit or pressing either Evacuate or Alert will cause the sounders to re-sound.

If a fault is being displayed operation of this button will silence the internal buzzer. Any subsequent faults will re sound the buzzer.

In both of the above situations the silence LED above the button will be illuminated. The events remain on the screen.

Reset Once the system has been silenced, whether it be a fault or alarm condition, Reset will cause the system to return to normal. The reset button is disabled for six seconds after the silence has been pressed. The display will be cleared and a message will appear indicating the system is resetting. If the alarms or faults persist they will be redisplayed and actioned upon accordingly. If there were faults prior to an alarm condition reset will cause the faults to be re-displayed.

Pressing Reset for 3 seconds in a system normal state will cause the lamps test function to operate. This will in turn flash all LED's and flash the LCD.

Print Pressing the print button will print earlier events in reverse order as previously displayed on the screen, starting with the most recent first. When the required events have printed, pressing the print button will cause the printing to cease. A message appears on the LCD whilst the printer is finishing. This will take a few seconds as printing is terminated and the paper is fed out.

3 Advanced Operation

This section details use of the menus and the functions available to a user. A password is required to perform these functions. There are two levels of access, 1) a user and 2) an engineer. The default user password for a newly supplied panel is 2222. If the password is forgotten an engineer will be required to gain access to the system to alter the user password.

3.1 Main Menu

To enter the menu system press the button labeled menu. This function is disabled if the system is in an alarm condition. The display will prompt the user to enter a four digit password. There are five attempts to enter the correct password. If after five times the password is still not correct, the menu button will be disabled for thirty minutes.

Once entered correctly the system will display momentarily that entry has been granted to a user and how many failed access attempts since the last entry. The main menu, detailed below, will now be displayed.

If the menu system is enabled and no keys are pressed for five minutes the menu will cancel.

All menus operate in the same basic manner. The highlighted bar can be moved up and down using the “up” “down” keys. Pressing enter will then select this option. The scroll bar will wrap round the screen. For example, to select Change Options press the key until Change Options is highlighted and press Enter. Alternatively the number preceding the option can be pressed for fast access.

To exit completely from the menus to the system display press cancel. To return to the previous menu press 0.

Alarms will override the menu system. New faults will cause the buzzer to sound and the appropriate LED's illuminate but will not override the menu. The buzzer can be silenced by pressing silence. The faults will be displayed when the user exits the menu.

MAIN MENU

1. Isolate/Enable
2. Test Modes & Options
3. Change Options
4. View Event Logs
0. Exit

3.2 Isolate/Enable Devices

Single units or areas of units can be disabled by using this function. For example, if some welding work was being performed that could possibly operate some detection units, then these units could be isolated. Both individual units and areas of detectors can be isolated through this menu. Only alarms are disabled through this function. All faults will be displayed as normal.

Whenever any devices are isolated the function disable LED is illuminated and the buzzer sounds.

When the system is set-up, a time limit is programmed to automatically re-enable any isolated devices or zones when the period has expired. A maximum of fifteen devices and fifteen zones can be isolated at any one time. Fifteen auxiliaries can also be isolated.

ISOLATE I ENABLE

1. Isolate Detector
2. Enable Detector
3. Isolate Zone
4. Enable Zone
5. Isolation of Aux.
0. Exit

Isolate Detector

When this function is selected a list of the currently isolated devices is displayed. The user is prompted to enter the unit number of the device to be disabled. Units 1 to 3000 can be disabled. A four digit number can be entered or a one, two or three digit number followed by enter. The unit number will be added to the isolated list of devices. All units except sounders and actuators can be isolated. To exit from this screen press cancel. Devices that do not exist on the system can not be isolated.

Enable Detector

On selecting this function a list of isolated devices is displayed, the first in the list being highlighted. To enable a device, use the “up” “down” keys to select the unit to be enabled and press enter. This unit will now be enabled and will be omitted from the list.

Isolate Zone This operates in the same way to the isolate a detector. Zones 1 to 999 can be isolated. If a zone is isolated call points will still operate but transmitters, smoke and heat detectors will be isolated.

Enable Zone This operates in the same way to enable detector.

Isolation of Aux. The auxiliary relays on panels can be isolated. Either an individual panel can be isolated or all of the panels. The user is prompted to enter a two digit number relating to the panel number to be isolated. Entering CO isolates all panels. A total of fifteen panels can be isolated at any one time. To enable the panels, press the “up” “down” keys until the required panel to be enabled is highlighted and press enter.

3.3 Test Modes and Options

The test mode facility allows the system to be tested with the minimum of disruption to the premises. The options are displayed below.

All test modes will automatically re-enable themselves after 30 minutes.

To activate any of the test modes either highlighted the option using the “up” and “down” keys and press the appropriate number. The new status will be displayed to the right hand side of the line.

TEST MODES & OPTIONS

- | | | |
|----|---------------|----------|
| 1. | Test | Off |
| 2. | Aux. | Isolated |
| 3. | Auto Silence | Off |
| 4. | Zone of Alarm | Off |
| 0. | Exit | |

Test Whenever a test is being carried out, for the system to see the event as a routine test, this option should be selected. The default is off.

Aux. This option allows the auxiliary relays on all panels to be isolated or enabled. The default is enabled.

Auto Silence With this option all sounders will silence automatically after 6 seconds. There will be a slight delay before all sounders silence.

Zone of Alarm With this option enabled only sounders in the area of testing will operate. This can be used in conjunction with the auto silence option.

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3.4 Change Option

Selection of this displays a sub-menu allowing the user to change the date, time and user password. The menu is shown below.

- | | |
|----|----------------------|
| | CHANGE OPTIONS |
| 1. | Change Date and Time |
| 2. | Change User Password |
| 0. | Exit |

Date and Time To change the date and time select option 1. Use the “up” “down” keys to highlight the figure to be changed. Press enter to select the figure and it will start to flash. Use the “up” “down” keys to change the value and press enter when finished. Once the date and time are correct press cancel to exit.

Users Password To change the users password select option 2. The user will be prompted to enter the new password and then to re-enter the new password again. If the two passwords agree the password will be changed otherwise the old password will be reverted to. Passwords are at no point visible on the system. If the password is forgotten an engineer will have to be called to set a new password.

3.5 View Event Log

The event log is the history of all operations that have taken place on the system. The 300 most recent events are stored. The information displayed includes an event number, the event type, the device number, the location, the date and the time the event occurred. By selecting this menu the following sub-menu appears. This allows you to selectively view events. If an option is not available a message will be displayed.

VIEW EVENT LOG

1. All Events
2. Test Events
3. Engineering Events
4. Real Events
0. Exit

Viewing the events, using any of the above options is essentially the same. Once selected the most recent event will be displayed as shown below. By using the “up” “down” keys, the event log can be scrolled through to examine all events. If there is no event displayed with the event number then the end of the log has been reached. Pressing cancel will return to the menu.

VIEW ALL EVENTS

- | | | | | |
|----|---|------|-------|----------|
| 1. | Low Battery Smoke Detector
3rd Floor Old Control Tower | 0025 | 12:33 | 26-12-99 |
| 2. | Unit Removal Callpoint
Wardrobe Store | 0059 | 12:35 | 26-12-99 |

All All events will be displayed including silence alarm, silence faults and resets.

Test Only events that were performed in a test mode will be displayed.

Engineering Only events that were performed by an engineer will be displayed.

Real Only real events will be displayed i.e. events that occurred whilst not in a test mode or an engineering mode.