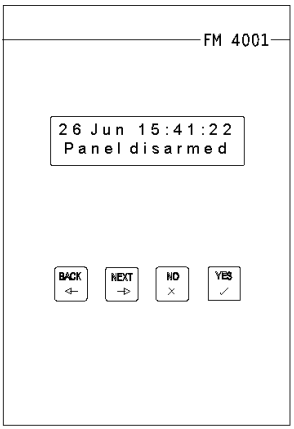
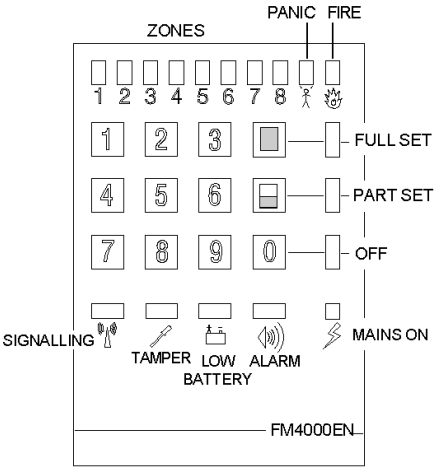
FM4000EN and FM4001
CONTROL PANEL

INSTALLATION INSTRUCTIONS





CI-232 iSS 3

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EN 50131 & PD6662 Compliance

The FM4000EN & FM4001 control panel operation has changed in the following ways making our products suitable for use in systems designed to comply with PD6662:2010.

1. The panel will only show the mains status at all times, all other status settings may only show on system arm/disarm or for 30 seconds after the user code has been entered, dependant upon programming.

2. To enter engineering mode the user code must first be entered followed by zero, the engineers code must then be entered within the next 30 seconds. Once the engineers code has been entered, the engineer can go in and out of engineering as many times as required, until the next time the system is armed.

3. There is now a 30 seconds delay on entry before the external sounder(s) and communications (unconfirmed intruder) are activated, unless 2 or more detection devices off the entry route have been activated.

4 On grade 1 systems, the FM4000EN may be used alone with installations up to 8 detection devices. On Grade 2X systems the FM4001 must be fitted.

5. The display on the FM4001 is only active when in use, the display will go blank at the end of menu or 15 seconds after the last button press in Manager mode, or when no message needs to be displayed in normal use.

System Programming for systems designed to comply with PD6662:2010

To comply with PD6662:2010 a door contact (4650-GB) must be fitted on the final exit door, the exit time must be programmed as infinate on full set and final exit set must be programmed. See options 12,20 & 51 below.
The following settings (or ranges of settings) should be used on systems which are designed to comply with the above requirements.

Option 12 - Select **8**
Option 14 - Entry time, must not exceed 45 seconds, Select options **1,2,3,4 or 5.**
Option 15 - Bell time must be between 1min 30 secs & 15 minutes, Select options **3,4,5 or 6**.
Option 20 - Select Entry Zone as appropriate
Option 37 - Dialler & Entry Delay,
Select option **3, 30 seconds**
Option 40 - Supervisory, checking devices are polling every 20 mins. Select option **1**
(NOTE select 0 on Grade 1 panels)
Option 42 - Engineer reset, and remote reset enabled. Select option **1**
Option 51 - Select **1**
Option 59 - Display should be masked, option 1, 2 or 3.

Other requirements for ensuring compliance with the above requirements include:-

1. On systems which need to meet Grade 2X requirements, ensure the FM4001 expansion panel is fitted, If the 4001 is not fitted the panel only meets Security Grade 1 requirements.

For systems which do not need to meet the above requirements, any available setting may be used to meet your operational requirements.

CONNECTIONS (RIGHT HAND SIDE)

1-4 12V Auxiliary supply output. Maximum load current 500mA

5 Tamper -ve return. If connecting a Self Actuating Bell (SAB) then connect the -ve tamper return to this terminal. If not fitting a SAB this terminal must be connected to -ve Aux..

6. This terminal provides a +ve output on alarm which is reset next time the panel is armed. It is provided for use with hard wired detectors that have a latching LED facility.

7. -ve to trigger Siren. Goes from open circuit to 0v to operate a bell or siren. Max 500mA. Resets after the bell time set in engineer program.

8. -ve Strobe. Goes from open circuit to 0v in alarm to operate a strobe. Remains on until the system is disarmed.

9. Dialler trigger output. Is provided for triggering an autodialler. This output goes to 0v on alarm. Once triggered it remains until the panel is disarmed so as not to trigger any more until the system is turned off.

CONNECTIONS ALONG BOTTOM EDGE

RECEIVED SIGNAL STRENGTH INDICATION (RSSI)
For connection to a digital voltmeter to indicate the Signal Strength of a transmission received from a detector. (Refer to section on using the RSSI output).

FM4001 CONNECTIONS (When fitted)
The FM4000 LCD unit is supplied with a connecting lead which plugs into the FM4000EN expansion port connector.
Mount the LCD display at a suitable level. so that the display can be viewed correctly.
Mount the FM4000X directly below the LCD unit and plug in the connecting lead.

12v SUPPLY TO THE FM4001
Connect to the 12v aux output of the FM4000X

TAMPER OUTPUT.
Clean contact normally closed output. Tamper return from the siren can be routed via this contact. If the tamper is operated a tamper alarm will occur.

STAND-BY BATTERY
Connections are provided for an additional stand-by battery inside the FM4001. This needs to be fitted to achieve the required standby time in addition to the one in the FM4000EN

INSTALLATION
The factory defaults for the user and engineer codes are:-
USER CODE = 1 2 3 4
ENG CODE = 4 6 7 9
Note, the customers code and zero must be entered, before the engineers code will be accepted.
The recommended installation procedure is as follows:

1. Label detectors.
Label each detector with its zone number for reference during installation and for later service reference.

2. Complete the User Record
The back pages of the user instruction booklet should be completed and left with the operator for their reference. It gives them information about the zones etc.

3. Complete a system record sheet
System record sheets should be completed before commencing programming. This acts as a reference when programming and can form part of the installation records.

4. Locate the control panel
For maximum radio coverage the control panel should be located at a central point in the building.
The higher it is the better for radio reception.
(Do not mount at floor level on a ground floor or below ground floor level, unless ALL devices are at this level.)

Metal objects cause radio reflections which oppose the signal being received from the detector with a resultant reduction in the received signal strength. Metalwork close by can result in complete cancellation, therefore do not site the control panel or detectors near to large metal objects, metal piping, girders, concentrations of mains cabling, fuse boxes etc.

Consider the ease of wiring to the external siren and communications (if required) when making your choice.

The Panel may be temporarily sited whilst a test is carried out to verify the reception from distant detectors. Check the received signal strengthunless previously proved using the FM test kit. (See RSSI page 4)

The panels must be fixed using the three fixing points provided. Ensure that the LCD display on the FM4001 is located for ease of viewing and that the FM4000X is mounted directly below it. For larger installations a remote tamper protected antenna is available.

Mains supply to the control panel must be provided by a competent electrician to the current issue of the IEE regulations.

A 12v sealed lead acid standby battery should be connected after all wiring has been completed and tested. 12v 2.3AH is recommended.

5. Program detectors onto the panel

Each detector has an internal "Learn" jumper or a push switch on the front of the pir.
To add a detector to the system:
Go into the engineer program. Select the zone and device number. Short out the learn jumper on the detector. Remove the learn jumper after programming.
The detector transmits its identity together with a learn bit. The panel stores the detectors identity code and adds it to the chosen zone.
(Refer to engineer programming section)

6. Carry out range test

If you keep a 4173-GB remote control for testing, you can program this onto the system and then go to each detector location in turn and verify that the control can be armed and disarmed from all detector locations.

7. Mount the detectors

Refer to the detector instructions for recommended mounting positions.
As reflections from metalwork act to cancel the transmission, avoid siting near to any metalwork.
Reflections like this can often be overcome by a small movement in position of 15 to 20cm.

8. Making panel program changes.

Complete a system record sheet before making any changes.
Once programmed the program is stored in none volatile memory, so data will remain stored even in the event of complete power failure.

9. Radio test using the RSSI output

To measure the signal strength received from a detector.
i) Connect a Voltmeter to the RSSI output terminals.
ii) Press the reset button next to the RSSI terminals. The voltmeter should now read zero volts.
iii) Go to the detector and operate the learn jumper or press the light guide.
iv) Return to the panel. The voltmeter now displays a voltage representing the strength of the transmission received.
It will ignore any other transmissions and
only respond to the learn message or a Panic or Off message from a remote control or panic button.
The voltage reading should be a minimum of 1.0v.
The readings for each detector can be recorded on the system record sheet for future reference.

10. Full system test

A walk test facility is provided in the Operating instructions. This may be used to test all of the devices on the system.
Once the sounders and dialler have been connected and the installation completed a full test with remote signalling should be carried out.

PROGRAMMING

1. Enter Users code followed by 0 & then the engineers code 4 6 7 9
The Alarm led will flash slowly to indicate thatyou are in the program mode.

2. Key in the two digit program number. (The zone led's indicate which option is set.)

3. Key in the option required (The zone led's indicate your choice)

4. Press the Full Set key to exit that program step.

5. When finished with programming key in 48 to exit engineer mode.

ERROR CORRECTION VIA PART SET KEY
If you accidentally enter an engineer program number and change an option value, you can undo the change by pressing the Part Set key before exiting the program step via the Full Set key.

EXAMPLE: To set the Full set exit timer to 1 minute.
Key in 4 6 7 9 The alarm indicator will illuminate to indicate that you are now in engineer program mode

Key in 1 2 To select Full set exit time (program No. 12.)

Key in 6 To select the 1 minute option. Zone 6 LED indicates your choice

Press the Full Set button to exit program step.

Note: The Full Set button must be pressed to exit from each program step.
Until the Full Set button is pressed any key press just changes your choice of option.

Key in the next program Number you wish to change.

When all programming is complete Key in 48 to exit engineer mode

DETECTOR PROGRAMMING

LEARNING DEVICES
When installing the system you may find it easier to label each detector with its zone number and learn them into the panel before installation. Once programmed into the panel's memory, the information will not be lost even when power is removed from the panel.

01 PROGRAM DEVICES ONTO ZONE 1
Select program number 01. The LCD display will show "LEARN ZONE 1 DEVICE ?

The LEDs 1 to 8 indicate which of the 8 devices are already programmed onto zone 1.

Use keys 1 to 8 to select the device number. Short out the learn jumper on the detector and **ensure that the learn pins are not left permanently shorted.**
The panel will emit 2 short blips to indicate that it has learnt the detector.
The corresponding LED will illuminate and the LCD will display the unique 5 digit identity code of the device with the message LEARNT OK.
If the device was already programmed on the system at a different location the message will say MOVED FROM xx (where xx is the old zone and device number).
If a device was already programmed in the location the LCD will show the message ALREADY STORED and the new device will overwrite it automatically deleting the old one.

Press the Full Set key to exit.

DELETING DEVICES FROM ZONE 1

Select program number 01.
The LCD display will show
"LEARN ZONE 1 DEVICE ?"

The LEDs 1 to 8 indicate which of the 8 devices are already programmed onto zone 1.
. Use keys 1 to 8 to select the device number to be deleted.If a device did exist at that location the LCD will show ALREADY STORED

To delete the device press PART SET and OFF keys together.
The LCD will show that the device has been deleted.

Press the Full Set key to exit

02 PROGRAM DEVICES ONTO ZONE 2

03 PROGRAM DEVICES ONTO ZONE 3

04 PROGRAM DEVICES ONTO ZONE 4

05 PROGRAM DEVICES ONTO ZONE 5

06 PROGRAM DEVICES ONTO ZONE 6

07 PROGRAM DEVICES ONTO ZONE 7

08 PROGRAM DEVICES ONTO ZONE 8

09 RADIO PANIC BUTTONS
Key in 091 to program the first PA button onto the system. The Panic button is operated and the device will learn onto the control panel.
Up to 8 Panic buttons can be programmed onto the PA zone, i.e. devices 091 to 098.
The LCD display will refer to the panic buttons as P1 to P8.
Press the Full Set key to exit.

10 FIRE ALARM DEVICES
Key in 101 to program the first Fire detector onto the system. Short out the learn jumper.
(Ensure learn jumper is removed after programming).
Up to 8 Fire detectors can be programmed onto the Fire zone, i.e. devices 101 to 108.
The LCD display will refer to the Fire detectors as F1 to F8.
Press the Full Set key to exit.

11 REMOTE CONTROLS
Key in 111 to program the first Remote Control onto the system. The Panic button is operated and the device will learn onto the control panel. Up to 8 Remote Controls can be programmed onto the system, i.e. devices 111 to 118. The LCD display will refer to the remote controls as R1 to R8.
Press the Full Set key to exit.

EXIT ENTRY

12 FULL SET EXIT TIME
1= 2 secs 2= 1O secs 3= 2O secs* 4= 3O secs 5= 45 secs 6= 1 min. 7= 2 mins. 8= Infinite
Press Full Set to exit

13 PART SET EXIT TIME
1= 2 secs 2= 5 secs 3= 1O secs* 4= 15 secs 5= 20 secs 6= 30 secs 7= 1 mins. 8= As full set exit time. Press Full Set to exit

14 ENTRY TIME
1 = 1 sec 2 =10 secs 3 = 20 secs 4 = 30 secs* 5 = 45 secs
Press Full Set to exit

00 INVERT SIREN OUTPUT
Normally -ve applied in alarm. (0v in alarm) 0 = -ve applied in alarm* 1 = -ve removed in alarm

15 BELL DURATION
1 = Silent 2 = 15 secs 3 = 90 secs.4 = 2 mins. 5 =3 mins. 6 = 10 mins. 7 = 15 mins.* 8= Continuous Note:- duration must not exceed 15 mins. to meet EN50131- PD6662 requirements.
Press Full Set to exit

16 BELL DELAY
1 = 0 mins.* 2 = 1 mins. 3 = 3 mins. 4 = 4 mins. 5 = 5 mins. 6 = 6 mins 7 =7 mins 8 = 10 mins

Note: In the event of a line fault, bell delay will become 0 mins.
Press Full Set to exit

ZONE PROGRAMMING

IMPORTANT: Remember that all devices on a particular zone will respond to the zone option selected. So if zone 1 has final exit detectors, all detectors on zone 1 must also be final exit.

17 FULL SET ZONES
The factory default is all zones active. The zone LED's indicate which zones are active in full set.
Use the keys 1 to 8 to select or deselect zones. The 0 key deletes all.
Press the full set key to exit.

18 PART SET ZONES
The factory default is zones 1 to 4 active. The zone LED's indicate which zones are active in part set.
Use the keys 1 to 8 to select or deselect zones. The 0 key deletes all.
Press the full set key to exit.

19 OMIT PERMIT ZONES
(The zones that the user is allowed to omit) The factory default is all zones allowed to be omitted except zone 1. The zone LED's indicate which zones are allowed to be omitted.
Use the keys 1 to 8 to select or deselect zones. The 0 key deletes all.
Press the full set key to exit.

2O FINAL EXIT ZONES
(Zones that start the entry time) The factory default is zone 1 only. The zone LED's indicate which zones will start the entry timer.
Use the keys 1 to 8 to select or deselect zones. The 0 key deletes all.
Press the full set key to exit.

21 WALK THROUGH ZONES
The factory default is none.
The zone LED's indicate which zones are walk through during entry.
Use the keys 1 to 8 to select or deselect walk through zones. The 0 key deletes all.
Press the full set key to exit.

22 IGNORE ZONE IF FIRST TO ALARM
(Double Knock)
Alarm only if two zones are triggered. The factory default is none.
The zone LED's indicate which zones are double knock. Use the keys 1 to 8 to select or deselect double knock zones.
The 0 key deletes all.
Press the full set key to exit.

23 AUXILIARY ZONES
Technical alarm. i.e.. Freezer giving internal audible on control panel.
The factory default is none. The zone LED's indicate which zones are auxiliary zones.
Use the keys 1 to 8 to select or deselect aux. zones.
The 0 key deletes all.
Press the full set key to exit.

24 24 HOUR ZONES
The factory default is none. The zone LED's indicate which zones are 24 hour.
Use the keys 1 to 8 to select or deselect 24 hour zones.
The 0 key deletes all.
Press the full set key to exit.

NOTE: If you do not want a 24 hour zone to be omitted, remove the zone from omit permit via program No.19.

25 SOAK TEST ZONES
The factory default is none. The zone LED's indicate which zones are on soak test.
Use the keys 1 to 8 to select or deselect soak test
zones.
The 0 key deletes all.
Press the full set key to exit.

26 CHIME ZONES
The factory default is none. The zone LED's indicate which zones are on chime.
Use the keys 1 to 8 to select or deselect chime zones. The 0 key deletes all.
Press the full set key to exit.

OTHER PROGRAMS

27 P.A. SILENT / AUDIBLE
The factory default is audible. 1= Silent O= Audible *
Press the full set key to exit.

28 DOUBLE BUTTON P.A.
On early remote contols both PA & unset buttons need to be pressed to generate a PA
1= Double O= Single*
Press the full set key to exit.

29 SILENT PART SET
1= Silent O= Audible*
Press the full set key to exit.

30 UPSTAIRS / DOWNSTAIRS
This option tells the panel to accept part set button as a separate alarm system.) e.g.. The Part Set button becomes the alarm system in the flat & the Full set button is a separate alarm system in the office. In this mode the user can set either one or the other, or both systems by selection when arming.

1 = Select Upstairs/Downstairs mode. O= Normal Part / Full set mode.*
Press the full set key to exit.

31 8 SECOND STROBE WHEN FINAL SET AND UNSET
If selected the strobe output operates for 8 seconds at the moment the panel is full set. i.e. when the exit timer terminates.
The strobe also operates for 8 seconds when the panel is Unset from Full Set.

1 = 8 sec. Strobe 0 = No 8 second strobe*
Press the full set key to exit.

32 COURTESY STROBE IN FULL SET ENTRY / EXIT
If selected the strobe output terminal 8 operates when Full setting the panel. The strobe output also operates for the entry time when unsetting from Full Set.
(If a mains relay is connected via this output a mains courtesy light could be switched on by disarming from outside with a remote control.)

1= Courtesy strobe on O=off*
Press the full set key to exit.

33 WALK THROUGH ZONES BECOME FINAL EXIT IN PART SET
To prevent false alarms in part set it is often useful to make walk through zones initiate the entry timer.

1= Yes O= No*
Press the full set key to exit.

34 JAMMING
1 = Jamming generates a full alarm when set O= indicator only*
Press the full set key to exit.
(Jamming is signalled to the dialler outputs.)

35 MAINS FAILURE & PANEL LOW BATTERY PREVENTS ARMING
1 = Prevents arming. O = Does not prevent arming*
Press the full set key to exit

36 REMOTE CONTROL UNSETS ONLY IN ENTRY
1 = Full operation. Unset at time.* 2 = Unset only during Full set entry time.
3 = No disarm in Full set. Will disarm in part set.
Press the full set key to exit.

37 DIALLER & ENTRY DELAY PERIOD
1 = None* 2 = 20s 3 = 30s 4 = 1 min 5 = 2 min
Press the full set key to exit

38 NO EXTERNAL BELL OR DIALLER IN PART SET (Internal bells only in Part Set).
1 = Internal sounder only in Part Set. O = Dialler and siren In both full or part set*
Press the full set key to exit

39 LINE FAULT IN DAYTIME AUDIBLE
1 = Audible and visual 0 = visual only*
Press the full set key to exit.

40 SUPERVISORY
Do not select supervisory unless all your detectors are 4600 series.
Do not select supervisory if using zoned Panic buttons.
1= Supervision O = No supervision*
Press the full set key to exit.

41 SUPERVISORY FAULT
1 = Full alarm O = Indication only*
Press the full set key to exit

42 ENGINEER RESET
1 = Engineer reset O = No*
Press the full set key to exit.

43 REARMING
1 = none 2 = once 3 = twice 4 = always*
Press the full set key to exit

44 RESTORE ENTIRE NV RAM TO FACTORY DEFAULT VALUES
Short out the MEM link while keying in 44.
All zone LED's will come on, the panel will emit a long bleep and will go out of engineering mode into the day state.
WARNING: This will delete all detectors from the system.

45 AUDIBLE RECEIVE MODE
The output from the receiver can be heard on the panel loudspeaker.
Press the full set key to exit.

46 DISPLAY ENGINEERS LOG
Press keys 1 to 8 to view the last 8 events. Most recent is displayed on key 1. Key 9 shows the last "First to Alarm"
Press the full set key to exit.

47 CHANGE ENGINEERS ACCESS CODE
Key in a 4 digit code twice.

48 LEAVE ENGINEER MODE
If any devices have their tampers open, the display shows which zones are tampered and will generate an error beep. The tampers must be restored before leaving engineer mode by pressing 48 again.

49. DIALLER OUTPUT FOR PA
1 = PA Triggers PA dialler output 0 = PA Triggers PA and ALARM dialler outputs*
Press the full set key to exit.

50. HARD WIRED PA ON ZONE 2
1 = Zone2 is a PA zone 0 = Zone2 is a standard zone*
Press the full set key to exit.

This feature enables hardwired PA buttons to be connected to the panel via the zone 2 hardwire input.

CAUTION: Radio devices including PIRS and contacts programmed onto zone 2 will also trigger a PA alarm if this option is selected.

51 FINAL EXIT SET
1 = Yes 0 = No*
If yes the exit time will terminate when the final exit door is closed.

52 REMOTE CONTROL FULL SET EXIT TIME
1=2s 2=10s* 3=20s 4=30s 5=45s 6=1min 7=2min 8=infinite
This applies to remote control and remote keypad only. The exit time when armed from the panel keypad (option 12) is not affected.

53 REMOTE CONTROL PART SET EXIT TIME
Enables the exit time to be set for part set via the remote control / keypad. The exit time set by option 13 still applies when arming from the panel keypad.
1=2s 2=5s 3=10s* 4=15s 5=20s 6=30s 7=1min 8=as full set

54 CONFIRMATION OPERATION
1 = No confirmation* (If eng reset is progd it will be req'd)
2 = Basic confirmation - BS DD 243:1999 (Entry timer expiring counts as one alarm)
3 = Confirmation - BS DD 243:2004 (All activations during entry ignored for confirmation purposes, until end of entry time and 30 seconds delay.)

55 DETECTOR ISOLATION
0 - No isolation* 1 - Isolate the zone which caused an unconfirmed alarm and operate the reinstatement output when required.

Press the Full Set key to exit

56 DIALLER TEST
(This option is available, but serves no function on the FM4000EN panel)
Key in 56 followed by a number key to operate a dialler channel. The number selected will be displayed.
1= Fire 2= Panic 3= Intruder Alarm 4= Open / Closed 5= Reinstatement 6= Fault 7= Confirmed Intruder 8= Tamper
Press full set key when test is completed.

57. DIALLER TRIGGER INVERT
(This option is available, but serves no function on the FM4000EN panel)
All the dialler outputs are positive removed as the default setting, but can be inverted to Negative removed if required. To invert an output key in 57 followed by the required output to be inverted, using the same list as used for the dialler test.

Press full set key when outputs have been selected, outputs will change to the selected settings when the full set key is pressed.

58. DISPLAY SOFTWARE ISSUE.
Displays the software issue of the 4000X panel, press full set to exit.

59. DISPLAY SET STATUS
1 = 5s 2 = 15s 3 = 30s* 4 = continuous
The panel set status is only available for the selected timed period after the customer code has been entered, unless continuous is selected.

Press the Full Set key to exit

61. REPORT TAMPER
(This option is available, but serves no function on the FM4000EN panel)
Select when the tamper should be reported to the Alarm Receiving Centre
1. Never 2. Always 3. Only when armed.

Press the Full Set key to exit

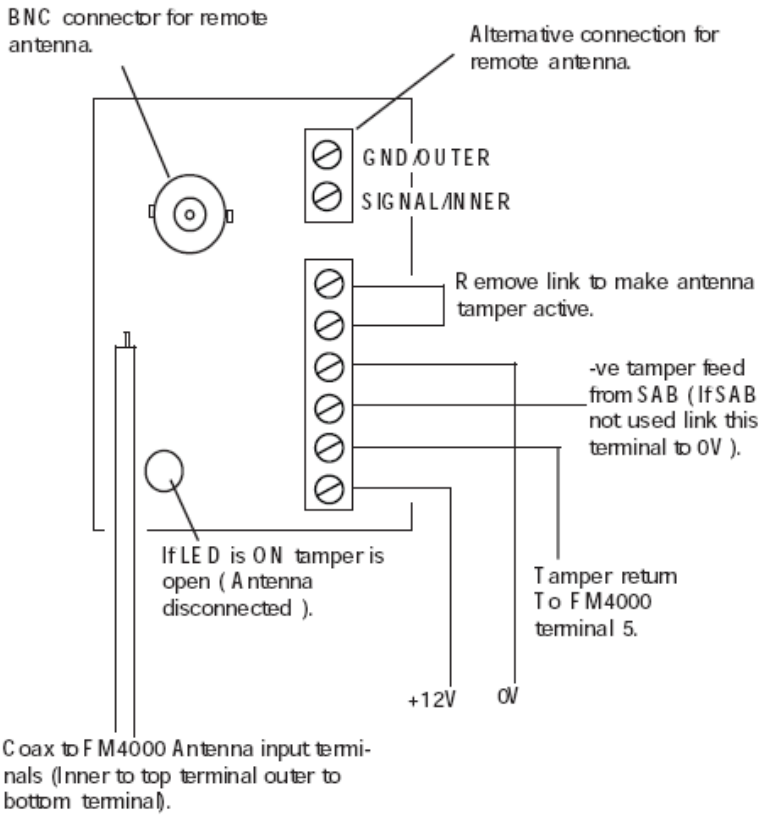
REMOTE ENGINEER RESET FACILITY
When an alarm occurs which requires an engineer reset, the user can call the Alarm Receiving Centre and obtain the access code number to key in to the panel.
The panel zone LED's will illuminate randomly.
From the LED's the Central Station operator can refer to a reference table and instruct the user what code to enter to perform an engineer reset.

Next time the alarm operates the reset code number will have changed.

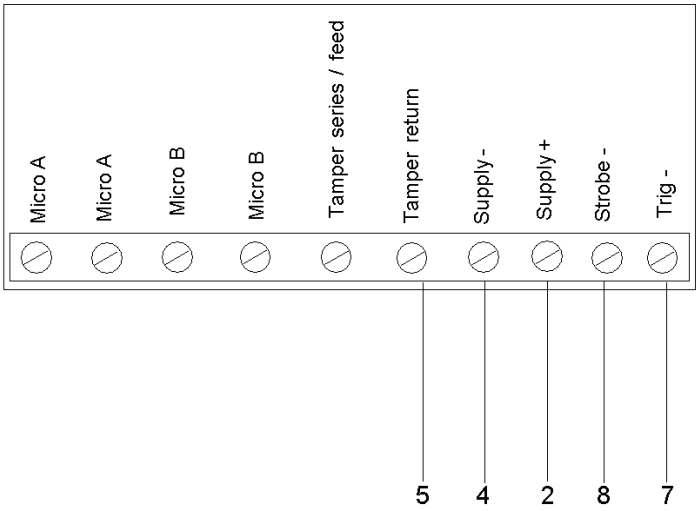
4005 ANTENNA TAMPER MODULE

The 4005 is for use with tampered remote antennas.
When fitted into the FM4000 panel the -ve tamper return from an external siren is connected to this module as shown below.

Mount the module to the right hand side of the transformer in the FM4000 with the single screw supplied.

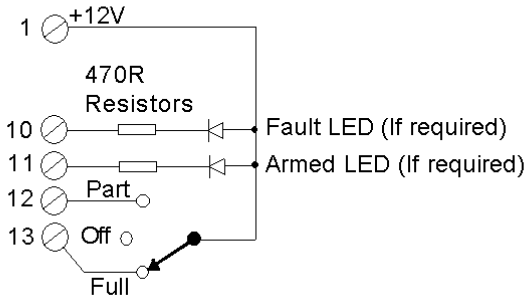


SAB CONNECTION TO THE FM4000

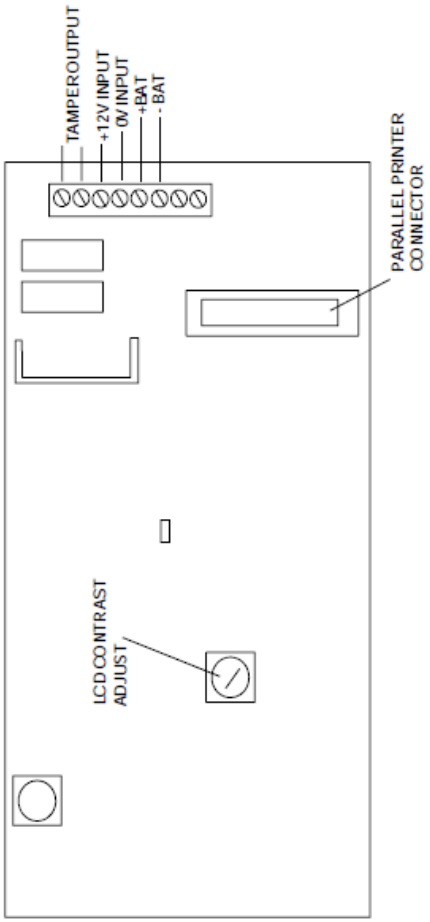


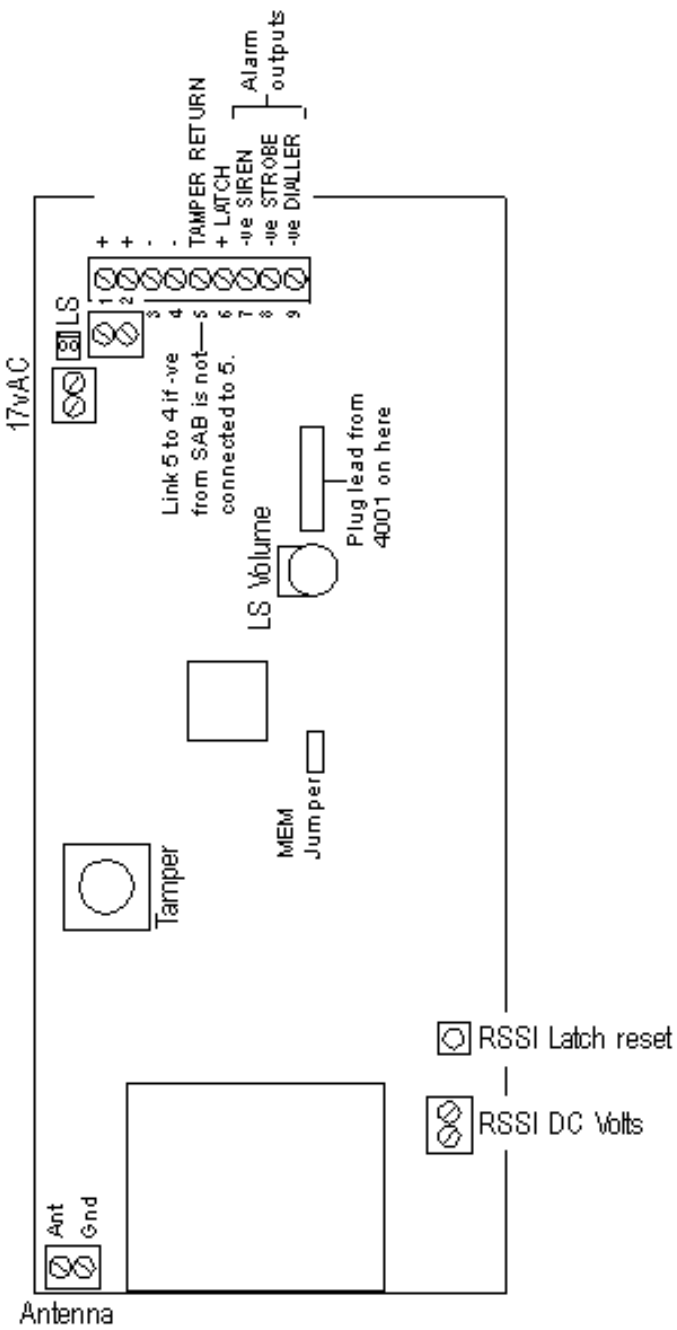
Connections on the FM4000 main board

WIRED KEYPAD / KEYSWITCH ARMING



FM4001 LCD DISPLAY




17vAC
LS
+
+
-
TAMPER RETURN
+ LATCH
-ve SIREN
-ve STROBE
-ve DIALLER
Alarm outputs
1
2
3
4
5
6
7
8
9
Link 5 to 4 if -ve from SAB is not connected to 5.
LS Volume
Plug lead from 4001 on here
MEM Jumper
Tamper
RSSI Latch reset
RSSI DC Volts
Ant
Gnd
Antenna

FAULT FINDING GUIDE

CUSTOMER HAD AN ALARM Ask them to press the Full set button and tell you what indicators are on.
The LED's indicate the cause of the alarm and also the setting status at the time.

MAINS LED FLASHING Mains failure (Restore supply)

ZONE LED FLASHING (in exit) Check that doors and windows are closed.
Flashing with tamper LED. (A detector has an open tamper).
Flashing with battery LED. (The detectors batteries need replacing).

ALARM LED ON Full alarm. The LEDs indicate what caused the alarm.
If Engineer reset is programmed into the panel an engineer reset will be required before the system can be re-armed.

FLASHING WITH ZONE LED A detector on soak test has triggered whilst the system was armed.

FLASHING WITHOUT A ZONE LED An engineer reset is required.

BATTERY LED ON The control panel's battery is disconnected or needs replacement.
FLASHING: Detector has a low battery. The zone LED will flash to indicate which one.

SIGNALLING LED ON The system is being blocked by a continuous transmission.
FLASHING If flashing on its own, an external line monitor has signalled that the telephone line is at fault.

Flashing together with a zone indicator. The system is set as a supervised system and the detector indicated by the flashing zone LED has failed to report in. (Re-site the detector where there is good radio reception.) Use the RSSI output to check.

CONTACT TRANSMITTER NOT WORKING Check the magnetic contact is operating correctly. Open lid and check what zone it should be on. Go into the panel engineer mode and check if it has been programmed onto the correct zone.
Note: the panel will not allow you to program a detector onto two zones. When programmed onto a zone any previous zone allocation will be deleted.

PIR NOT WORKING The detector needs 6 minutes to 'settle' on power up or when the batteries are replaced..
Ensure the device is programmed into the control panel.
Set the control into operator walk test mode and walk test the detector after pressing 'LED Guide'. Pressing the 'light guide' button overrides the 2 minute inhibit timer.
Opening the cover should trigger a 'Tamper' at the control panel.

CUSTOMER HAS FORGOTTEN THEIR CODE Open the panel and short out the MEM jumper. The user and engineer codes will be restored to the factory defaults 1234 & 4679. No other programming is affected.