1. Introduction

Welcome to PowerMaxExpress M@bile Connect, the wireless home security solution with onboard GSM/GPRS communication module. This kit is designed for simple installation and reporting via SMS messaging or to a central monitoring centre.

① This is a professional product and should be installed by a qualified engineer!

Before you begin you should know that this kit is supplied with the transmitters pre-enrolled and pre-programmed with the most common settings. Additionally, each transmitter is labelled with its zone or fob number on the rear plastic. Following this guide will help you make basic configuration changes, for more detailed information please refer to the full programming guide included within the kit.

Finally….we have included a trouble shooting section to this guide. BEFORE you ring the support line have a look through as most common problems are listed here.

2. Choose a Location to Mount your Control Panel, making sure it is at least 1m from any large metallic objects e.g. radiators, RF equipment or WiFi transmitters. Additionally think about the best position for a mobile network signal and ensure there is access to a mains power supply. We recommend you test the network signal and sensor strengths before mounting the panel in to its final position.

Before powering-up the PowerMax make sure the SIM card is installed in to the GSM module. Then power the panel by connecting the battery first, which clips in to the compartment on the main panel, and then connect the lead from the transformer to the VAC socket. The backup battery may take an hour to reach full capacity, during this period the panel will report “CPU Low Battery”.

① Depending on the status of the panel and accessories the display will show [READY – MEMORY] or [NOT READY – MEMORY]. At any time you can press the status button on the keyfob, or repeatedly press + to review the faults/memory conditions that are outstanding.

SIM CARD INFORMATION – (UK Customer Only)

Within this kit a Pay as You Go SIM pack is provided complete with £5.00 of credit available. Details on managing and topping up this SIM card are within the pack.

We recommend that the SIM is only used for SMS applications and is managed by the end user on completion/handover of the system. Installations connected to a central monitoring centre should use a contract SIM provided by your Central Station, Distributor or Network provider.
3. **To Access the Installer Mode** press \(\text{ until the display shows “Installer Mode”, then press } \) and enter the installer code 9999.

Whilst in any of the menus (user or installer) the following keys will help you navigate the systems:-

- \( \) - Away - returns you to the start of the main menu
- \( \) - Home - takes you back to the previous menu
- \( \) - Next - scrolls forward in the menu
- \( \) - Back - scrolls back in the menu
- \( \) - takes you in to a menu or press twice to confirm changes

4. **Before you Install the Accessories** we recommend that you carry out a diagnostic check which is in section 7 of this guide.

Each device is labelled with its zone number. Make sure you note this before installing.

Additionally, each sensor supplied in this kit is pre-programmed for the following:

- Zone 1 - Front Door Contact. ‘Delay 1’ to start the Entry timer
- Zone 2 - Hall PIR. ‘Home Delay’ to allow user to walk through during entry time to disarm
- Zone 3 - Living Room PIR ‘Perimeter’ which will trigger the alarm once armed

**PIR motion sensors** are supplied with pet-tolerant lens already fitted. Within the kit a standard lens is supplied which should be used in non-pet-tolerant environments. **PIR’s** should be sited to ensure that they do not face into direct sunlight, windows, strong sources of heat and cold (i.e. heaters, radiators, cold drafts or ventilators).

They should also be mounted at the correct height (between 1.8 – 2.4m) in a position. For PET sensor applications ensure the unit is not facing stairs and that animals can not move within 1M of the device.

To install, remove the cover, unclip the PCB, drill and fit in to position being careful not to over tighten the screw and distort the backplate. Then refit the PCB in to the back plate ensuring the back tamper switch sits on to the metal spring.

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**Next PIR**

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**MCT-320 Door Contact** has a built in reed switch, for use with the magnet supplied.

To install the main transmitter to the door or window frame, ensuring that the curved edge is facing the opening section. The magnet should be installed on the opening section no more than 5mm from the transmitter.

![MCT-320 Door Contact](image)

① If the gap between the MCT-320 and magnet is too great use the 7mm plastic spacer, provided within the kit, to increase the height of the magnet.

5. **Enrol Additional Devices** by first removing them from their packaging and opening the cases near the PowerMax. Then, whilst in installer mode (see 3. Accessing the Installer mode) press \( \) until ‘Enrolling’ is shown, press \( \) then:

For PIR Movement sensors, Door Contact, Glassbreaks, Shock Sensors etc.:

- Press \( \) until [Enrol Sensors] is show on the screen. Press \( \). At [Set Sensitivity] press \( \), then \( \) again.
- Press \( \) until you get to the next available zone (as default this will be zone 4) which will be indicated by having no black marker on the right of the screen.
- Press \( \) ‘Transmit now’ will be on screen.
- Add the battery supplied to the sensor you wish to enrol to this zone.
- Trigger a tamper on the sensor, trigger the input (for universal or aux input on door contacts) or press button (for hand held devices) to initiate a transmission.
- Remove battery from transmitter, press \( \), then \( \) to enrol an additional device.

① If a sensor has already been enrolled in another zone a long error tone will be heard and the sensor will not be accepted again.

① **PIR’s** have back tampers which require both the front and back tamper switch to be pressed simultaneously during enrolling.

Up to two MCS Sirens can be enrolled. Within the enrolling menu:

- Press \( \) until [Enrol Siren] is show on the screen. Press \( \). Enter the siren number to enrol (1 or 2) then press \( \)
- At the siren ensure the battery is connected then press the self test button until the unit emits a short tone from the piezo and flashed.
- The panel LCD will now show the siren number with a black mark right hand side. Enrolment is complete. Press HOME to escape back to the previous menu/s.

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① Wireless PIR’s have a two minute sleep timer to save battery life – On initial power up the unit will go through a self test (LED flashing) then enter a walk test mode. If the PIR has gone into sleep mode vacate the room for two minutes, or open and close, the lid before carrying out the walk test.
Note a programmable output (PGM) is available for hardwiring an additional internal siren. It is not possible to connect a SCB/SAB type system to the PowerMaxExpress.

6. Defining the Zone Types will allow you to program what happens when alarm sensors are triggered in the armed Away & Home modes, whilst also being able to allocate a zone name and chime setting.

You should be in the installer mode, press until [3. Define Zones] is shown. Press , and enter the zone number you need to program followed by again.

At the screen Zone Type press and the existing setting will be shown, press to scroll to the next option then press and again once you find the zone type required.

- Interior—This zone will be turned off during the Home set (ideal for Landing and bedroom detectors).
- Interior Follower—This zone will allow access in the delay mode (without triggering the alarm), and will also be turned off during the Home set mode (ideal for Hall sensors that need to be off during the night).
- Perimeter—This zone will trigger during the Away and Home mode (ideal for Living rooms, Kitchens etc).
- Perimeter Follower—Same as above but allows access through the detector during the delay mode (ideal for Hallways).
- Home Delay – This zone incorporates the same attributes as Perimeter Follower in Away mode but will start the entry/exit beeps in Home mode (great for hallways where an interior zone is upstairs).
- Delay 1 & 2—These zones will start an entry timer when activated during the Away or Home mode (ideal for the front and back door which are being used as entry and exit points).

There are many more zone types. Please refer to the installation manual for more information.

The next screen allows you to pick the [Zone Name]. As previously, press to enter the menu then press to scroll through the library until you find the name required then press and again to confirm.

Finally, press to enter the chime option and select whether you would like this to be Off or Melody type.

7. The Diagnostic Testing Feature is a useful tool for determining the signal strength from the sensors deployed on site. This should be carried out before and after you have installed the system.

Whilst in installer mode main menu :-

- Press until the screen shows ‘Diagnostics’, then press .
- Press again (to test sensors) and ‘Diag. Testing’ will be on screen.
- Now walk around the premises and trigger the sensors (see note below).
- Once completed use the key to cycle through the zone and check that all signals are either ‘Good’ or ‘Strong’. If any sensors show ‘poor’ re-site to a better position.

If a wireless siren is on the system then you can perform a remote diagnostic check by selecting [WL Siren Test] in the Diagnostic menu and pressing twice.

If you find a sensor is out of range consider using a MCX-600/610 repeater. When powered via 12VDC this will boost signals received from transmitters.

Express Communications

8. GPRS/SMS reporting allows your customers to be notified in the event of an activation via a monitoring centre or SMS text message. First decide what type of reporting you need to enable then follow the relevant section below.

SMS Reporting

- Within the installer mode press until you see ‘Define Comm’ then press .
- Press until the display shows ‘4. Private Reporting’ then press .
- Press at the first option ‘Report to PRVT’ and select the ‘all (–op/cl)’ option. Then press , .
- Press , , then to enter the SMS phone number menu. Enter the SMS numbers here as required then press , , . Note that these numbers can also be changed in the User menu.

GPRS Only Reporting

Note that GPRS reporting can only be setup with Visonic enabled Central Stations. Please refer to the list below or check with your preferred monitoring centre.

- Within the installer mode press until you see ‘Define Comm’ then press .
- Press until 2.GPRS/BB is shown then press .
- Press then press to ‘Enable’ GPRS report. Press , .
- Press until display shows ‘GPRS APN’ then press .

Enter the Network APN address provided by your SIM provider, or use the table below, via the keys:-

- Key 2 – moves backward in the alphabet/symbol library
- Key 5 – changes case
- Key 8 – moves forward in alphabet/symbol library
- Next – moves to next letter
- Back – move back in the field
- 0 – space or deletes a letter
- OFF – deletes all the field
9. Testing the GPRS Communications

To test the GPRS status ensure you are in the installer mode then press \[ \text{ok} \] until you see ‘10.Diagnostics’ then press \[ \text{up}, \text{ok} \] and \[ \text{ok} \] to enter GPRS connection test. The screen will show, ‘Please wait…’. Once completed a message will be displayed:

- SIM fail – the SIM is not enabled for GPRS, there no is credit on the account or is not installed properly
- Denied by Server – The Panel ID has not been registered on the IP server. Contact the CS and advise them of the panel ID
- Srvr unavailable – check SIM has credit available
- Unit \[ \text{ok} \] – The test is successful

To see the network signal strength exit the installer mode. In the ‘Ready’ or ‘Not Ready mode’ press \[ \text{ok} \] until the screen shows ‘RSSI xxxx’. The xxxx will be replaced by Strong, Good or Poor.

On powering up the system or turning on the GSM/GPRS options it may take 2-3 minutes to connect to the network and the RSSI strength to be shown.

Testing the communications to the central station or user can only be achieved by arming and triggering the system as per real operation.

10. Trouble Shooting

Q – Display - The system display shows [NOT READY] or [NOT READY - TROUBLE]

A – There is a fault outstanding, press the status button on any keyfob or press the \[ \text{ok} \] button repeatedly and read to each message shown. Any “…Alarm” messages i.e. “Hall Tamper Alarm” can be ignored however, zone and tamper open messages need to be addressed i.e. “Hall Tamper OPEN”.

Q – Display - How do I clear the [READY - MEMORY] message?

A – Press the status button on the Keyfob or press \[ \text{ok} \] repeatedly to review the memory condition. Start the ARMING process then disarm the system. The memory prompt should be cleared.

Q – RSSI strength poor – The network signal strength is low and signals are not being sent to the CS.

A – Connect the optional external antenna if it is not being used. If the network signal is still poor then consider relocating the control panel or switching to a different network provider

Q – Communication – RSSI strength is Good but still I do not get SMS or messages at the centre.

A – Check the SIM still has credit available. SMS the SIM phone number with the message ‘ST 1111’ where ‘1111’ is changed to the user code. If there is no reply, and credit available go back and check each programming step especially the reporting options.

Q – Panic – I am pressing the keyfob or panel panic buttons but nothing happens.

A – You need to enable this facility to operate. In installer mode press \[ \text{up}, \text{ok} \] until you see [Define Panel] then press \[ \text{ok} \]. Press \[ \text{up} \] until [12: Panic Alarm] then press \[ \text{ok} \], then press \[ \text{up} \] to select the type (Silent or Audible) pressing \[ \text{ok}, \text{ok} \] to confirm.

Q – Diagnostics – When I test the devices the diagnostic screen says certain devices are [NOT OK]

A – Each time you enter the Diagnostic menu the previous readings are cleared and the system needs to see a new signal from the device. Simply repeat the test but make sure the device is triggered (tamper or alarm)

Q – SMS house identification – When the text message arrives it starts with ‘PowerMax’, can I change this?

A – The house identification can be changed by sending the panel the example message ‘HN [user code] Visonic Office’. The house name can be up to 16 characters

11. User Setting and Operation. Within the user settings you can add/delete keyfobs, set time and date, program phone numbers etc. To select any of these options enter the user menu by pressing \[ \text{ok} \] until [User Settings] is shown, then \[ \text{ok} \] followed by the use code. Pressing ‘Next’ then \[ \text{ok} \], whilst in the menu will allow you to access the programming option. Remember if you are changing a setting you need to press the \[ \text{ok} \] key twice.

User operation is via the keypad or keyfob (supplied).

NEED HELP? Trade customer only call Visonic Product Support on 0870 7300830 or email productsupport.uk@visonic.com. End users should contact their place of purchase.
Quick Reference Guide

Network APN User Name Password
O2 mobile.o2.co.uk Web Web
Vodafone pp.vodafone.co.uk Web Web
Orange orangewap Orange Multimedia
Orange orangeinternet User Pass
T Mobile general.t-mobile.uk User or wapuser Wap

1. The APN’s above are provided by the network provider for public use. Visonic is not responsible for network availability at any time.

• Press \[\text{OK}, \text{OK}\] when finished then press \[\text{OK}, \text{OK}\] and repeat for the user name.

• Press \[\text{OK}, \text{OK}\] when finished then press \[\text{OK}, \text{OK}\] and repeat for the GPRS password.

• Press HOME then \[\text{OK}, \text{OK}\] and the display shows ‘3. C.S. Reporting’ press \[\text{OK}\].

At ‘Report Event’ press \[\text{OK}\] then press \[\text{OK}\] to select either ‘All * Backup’ or ‘All (-op/oc)*backup’ if open close signals are not required. Press \[\text{OK}, \text{OK}\] to confirm.

• Press \[\text{OK}\] until ‘Receiver 1 account’ is shown then press \[\text{OK}\]. Enter your account number here with prefix of ‘00’ for 4 digit accounts. Press \[\text{OK}, \text{OK}\].

Press \[\text{OK}\] and repeat for the second account number if applicable.

• Press \[\text{OK}\] until ‘IP RCVR’ is displayed, then press \[\text{OK}\]. Enter the IP address of the central station using the table below or by contacting the central station directly. Note that the IP address must be entered in long format i.e. 81.3.124.1 should be entered as 081.003.124.001. Press \[\text{OK}\].

• Press \[\text{OK}\] and repeat for ‘IP RCVR 2’ if applicable.

• Press \[\text{OK}\] until ‘PSTN/GSM Receiver 1’ then press \[\text{OK}\]. Enter the full central station telephone number including any prefix for an outside line and STD code. Press \[\text{OK}, \text{OK}\].

Press \[\text{OK}\] and repeat for PSTN/GSM Receiver 2 if applicable.

• GSM setup is now complete.

GSM Reporting to Central Station

- Within the installer mode press \[\text{OK}, \text{OK}\] until you see ‘Define Comm’ then press \[\text{OK}\].

- Press \[\text{OK}\] until 2.GPRS/BB is shown then press \[\text{OK}\].

- Press \[\text{OK}\] until ‘GSM report’ then press \[\text{OK}\].

- Press \[\text{OK}\] until ‘GSM report enable’ then \[\text{OK}, \text{OK}\].

- Press HOME then \[\text{OK}\] and the display shows ‘3. C.S. Reporting’ press \[\text{OK}\].

At ‘Report Event’ press \[\text{OK}\] then press \[\text{OK}\] to select either ‘All * Backup’ or ‘All (-op/oc)*Backup’ if open close signals are not required. Press \[\text{OK}, \text{OK}\] to confirm.

- Press \[\text{OK}\] until Receiver 1 account is shown then press \[\text{OK}\]. Enter your account number here with prefix of ‘00’ for 4 digit accounts. Press \[\text{OK}, \text{OK}\].

• Press \[\text{OK}\] and repeat for the second account number if applicable.

- Press \[\text{OK}\] until PSTN/GSM Receiver 1 then press \[\text{OK}\]. Enter the full central station telephone number including any prefix for an outside line and STD code. Press \[\text{OK}, \text{OK}\].

• Press \[\text{OK}\] and repeat for PSTN/GSM Receiver 2 if applicable.

• GSM setup is now complete.

 Configuring Dual-path Reporting

PowerMaxExpress can be configured as dual or even triple path reporting to comply with insurance requirements. Initially you will need to configure each path:-

- GPRS / GSM - follow the instructions above to enable the communications paths

- PSTN (standard phone line) - ensure the account numbers and PSTN receiver numbers are entered as per the instructions in GSM reporting. You must also enable the PSTN line fault option in Define Comm – 3.CS Reporting (see manual for more details)

Reporting paths are enabled in the Define Comm menu. Once there:-

- Press \[\text{OK}\] until 3.CS Reporting then press \[\text{OK}\].

- Press \[\text{OK}\] until 1st Report Method press \[\text{OK}\].

- Press \[\text{OK}\] to select the first reporting path i.e. PSTN or Cellular (GSM/GPRS) press \[\text{OK}, \text{OK}\].

- Press \[\text{OK}\] and repeat for the second report method

- Press \[\text{OK}\] and repeat for the third method if required.

When selecting Cellular the PowerMax will always choose GPRS first provided it is configured and available.

1. For GPRS / GSM reporting you must ensure the SIM card is configured for voice and data access.

PowerMaxExpress can also communicate using broadband/ADSL using a Powerlink module. Ask your distributor or a Visonic representative for more details.

<table>
<thead>
<tr>
<th>Network</th>
<th>APN</th>
<th>User Name</th>
<th>Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>082.003.050.121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Station</td>
<td>081.134.193.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMCS</td>
<td>0844 80 99980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4S</td>
<td>0872 246 0080 for information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locked Up</td>
<td>081.142.93.91</td>
<td></td>
<td></td>
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<tr>
<td>Monitoring</td>
<td>01642 236990</td>
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<tr>
<td>Monitoring</td>
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<tr>
<td>Southern</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>0844 871 2223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visonic UK Test</td>
<td>087.254.016.010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GSM Reporting to Central Station

- Within the installer mode press \[\text{OK}, \text{OK}\] until you see ‘Define Comm’ then press \[\text{OK}\].

- Press \[\text{OK}\] until 2.GPRS/BB is shown then press \[\text{OK}\].

- Press \[\text{OK}\] until ‘GSM report’ then press \[\text{OK}\].

- Press \[\text{OK}\] until ‘GSM report enable’ then \[\text{OK}, \text{OK}\].

- Press HOME then \[\text{OK}\] and the display shows ‘3. C.S. Reporting’ press \[\text{OK}\].

At ‘Report Event’ press \[\text{OK}\] then press \[\text{OK}\] to select either ‘All * Backup’ or ‘All (-op/oc)*backup’ if open close signals are not required. Press \[\text{OK}, \text{OK}\] to confirm.

- Press \[\text{OK}\] until Receiver 1 account is shown then press \[\text{OK}\]. Enter your account number here with prefix of ‘00’ for 4 digit accounts. Press \[\text{OK}, \text{OK}\].

- Press \[\text{OK}\] and repeat for the second account number if applicable.

- Press \[\text{OK}\] until PSTN/GSM Receiver 1 then press \[\text{OK}\]. Enter the full central station telephone number including any prefix for an outside line and STD code. Press \[\text{OK}, \text{OK}\].

- Press \[\text{OK}\] and repeat for PSTN/GSM Receiver 2 if applicable.

- GSM setup is now complete.

 Configuring Dual-path Reporting

PowerMaxExpress can be configured as dual or even triple path reporting to comply with insurance requirements. Initially you will need to configure each path:-

- GPRS / GSM - follow the instructions above to enable the communications paths

- PSTN (standard phone line) - ensure the account numbers and PSTN receiver numbers are entered as per the instructions in GSM reporting. You must also enable the PSTN line fault option in Define Comm – 3.CS Reporting (see manual for more details)

Reporting paths are enabled in the Define Comm menu. Once there:-

- Press \[\text{OK}\] until 3.CS Reporting then press \[\text{OK}\].

- Press \[\text{OK}\] until 1st Report Method press \[\text{OK}\].

- Press \[\text{OK}\] to select the first reporting path i.e. PSTN or Cellular (GSM/GPRS) press \[\text{OK}, \text{OK}\].

- Press \[\text{OK}\] and repeat for the second report method

- Press \[\text{OK}\] and repeat for the third method if required.

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1. For GPRS / GSM reporting you must ensure the SIM card is configured for voice and data access.

PowerMaxExpress can also communicate using broadband/ADSL using a Powerlink module. Ask your distributor or a Visonic representative for more details.
Kit Contents:

- **Control panel**
  28 zone wireless panel with onboard GSM/GPRS module

- **MCT-237**
  Two-way LCD keyfob with panic facility

- **MCT-320**
  Entry/Exit door contact

- **GSM/GPRS Antenna**
  Optional for environments with poor network coverage

- **Next K-985 PIR**
  85lb pet-tolerant sensor

- **Next PIR Cover**
  Converts pet PIR’s in to standard versions

- **SIM Card**
  Pay as You Go SIM card with £5 credit available.

Other products in the Visonic range:

- **MCT-220** – Single push button
  ideal for panic or emergency applications

- **MCT-550 Flood Sensor**
  detects early signs of flooding within the home

- **MCT-442 CO sensor**
  with inbuilt sounder, a must for every home

- **MCT-426 Optical smoke detector**
  EN 14604, EN 54-5 approved

- **MCM-140**
  Single way keypad

- **MKP-151**
  Two-way LCD keypad

- **MCT-124** – Double push handheld panic button

- **TOWER-20AM MCW**
  Wireless External detector

Also available:

- PowerMaxComplete QuickFit Kit