10. Troubleshooting

Problem	Probable Reasons	Available Solutions
1. Alarm does not dial out.	• not arming • alerting phone incorrectly set • parts improperly installed • code no match • SIM card overdue	• do arming operation • re-set according to the spec. • Relocation of parts • re-code • 5. Top up the SIM card
2. cannot operate by phone	• password or SMS input incorrect	• retry password / SMS or reset password
3. no message indication when alerting	• SMS message not recorded	• record SMS message
4. remote control (keyfob) out of order	• coding un-matched with the Panel • insufficient battery power • battery has poor contact or voltage	• re-learn the remote control • change battery to correct type • contact www.boatsteward.co.uk • to change the matched remote control (keyfob)
5. infrared detector out of order	• low power	• Renew battery
6. siren without sound	• siren plug or jack in short circuit or broken-line • siren out of order • closed siren by command	• repair or change plug or jack • change the jack line • activate siren by command • use another siren to double check
7Panel not receiving detector	• a nearby emitter is sending code • Panel receiver stoppage • standby battery of the Panel insufficient	• move one detector next to panel and try again • identify the interfering source and eliminate it • check Panel power is on
8. the signal LED blinking quickly	• SIM card un-loaded • SIM card is setting PIN code • GSM signal weak	• reload SIM card • cancel PIN code of SIM • change to a place with a stronger signal

Suggested TEXT TEMPLATES for your phone;

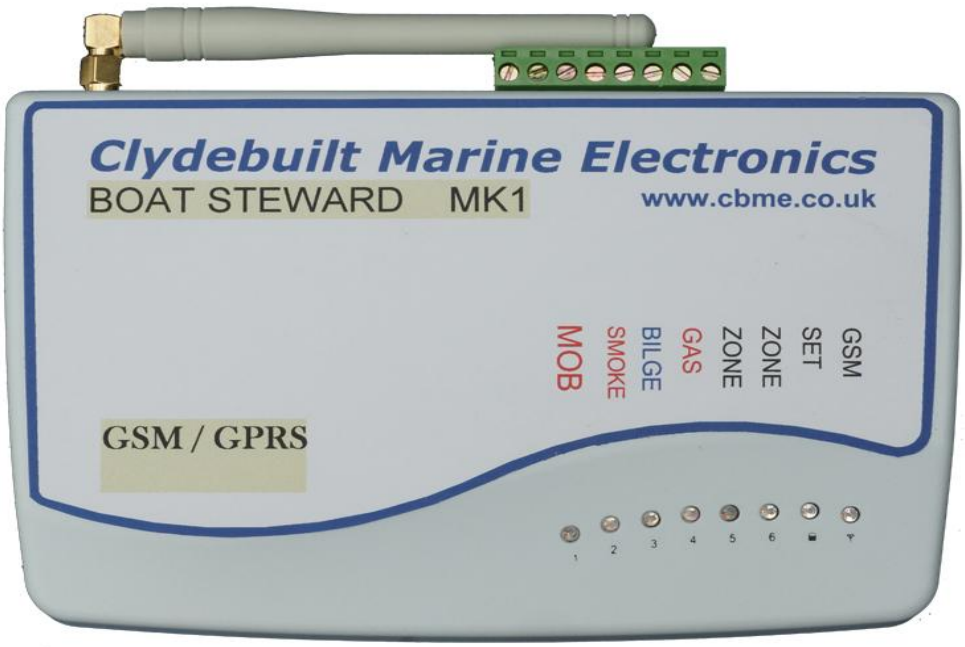
	TEXT	
Set alarm	12341# ALARM ON	
Unset Alarm	12340# ALARM OFF	
Relay On (Heating)	12343# HEATING ON	
Relay Off (Heating)	12344# HEATING OFF	
Alarm Status Enquiry	123420# ALARM STATUS	
Alert & Alerting Number	123421# ALERT/ALERTING No.	
Add Phone No1 .for SMS	123437**********#	1st SMS phone No.
Add Phone No.2 for SMS	123438**********#	2nd SMS phone No.

Clydebuilt Marine Electronics

www.cbme.co.uk

boatsteward®

User manual



1. System Foreword

This wireless GSM intelligent monitoring system is built on leading microprocessor technology with advanced GSM digital signal processing power. It is a highly integrated system of text messages, multiple mode's of wireless coding, long-distance appliances controlling, short messages identification and other technologies. When alarming, it will automatically inform of the alerting device and location through text messages. It is stable, reliable and safe. With human manipulation and telecom phone line removed, it can be comprehensively applied to places at which wire phone networks can NOT cover the protection needed. It is able to protect users property and personnel safety as well as monitoring the boat.

2. General introduction of functions

■ten zones set as normal, stay, intelligent, emergency, open or closed types, etc.;

■Using phone (cellphone) or SMS to configure & control the panel remotely.

■ Four wired zones, six wireless zones, each zone can be equipped with many accessories.

■ Three groups of phone numbers for SMS messages.

■One normally open signal output, which can be externally linked to operate heating etc.

■ Built-in short message contents. Short message content from alarming zone can be amended.

■Wireless intelligent study coding, compatible with 2,262 normal encoding and a million group encoding, convenient and flexible for adding or reducing accessories.

■Telephone long-distance telecontrol for arming, disarming, and controlling appliances.

■EEPROM information protection, information will never be lost.

■Built-in NI-Lithium battery will automatically be transferred to stand-by after outage with short message prompting.

■DC supply and(standby), twenty-four-hour normal guarding and unbroken service.

■Panel using double, triple or quadruple GSM/GPRS wireless industry module, (depending on model) which is stable and reliable.

3. Arming / Disarming Operations

3.1 Arming Arming means that all detectors are working. When something triggers the detectors, the alerting system will alarm at once. After arming operation, the **S**et light on the panel will remain on, until it has been reset by the remote control or by SMS.

Remote control operation: press the arming key in the remote-control-unit once will Set.

Phone :Send SMS 12341# and receive a confirmation TEXT

3.2. Stay arming Stay is for arming the ,Gas detector ,Smoke detector and bilge alarm (but not the PIR or Proximity switch). When armed the **S**et light on the panel will flicker.

Remote control operation: press Arming key and the Stay key in the remote-control-unit (once each) will Set.

3.3 Disarming operation Disarming means that when the panel alerts, it can stop the alerting or put the system into disarm status. After disarming, even triggering detectors can NOT make the panel alert,(except for the detectors in emergency Defense zone's i.e. MOB fob) or the emergency key in the remote-control-unit. After disarming, arming light goes out.

Remote control operation: press the disarming key in the remote-control-unit once will reset.

Phone :Send SMS 12340# and receive a confirmation TEXT

3.4 Emergency alerting

If an emergency arises, press the emergency key on the remote-control-unit or the MOB (man overboard fobs) this in turn will operate the sounder and send a text message.

8. Leaving-factory default

Password:	**1234**		
Long-distance control:	**Open**	**Ringing times:**	**once**
Siren timing:	**1 minute**	**Aural remote control siren:**	**open**
Delayed arming:	**0second**	**Delayed alerting:**	**0 second**

9. System Specification

- A 230v > 12V dc adaptor is supplied, which enables the unit to be set up at home and/or plugged into the shore power in order to monitor this supply.
- Input voltage: DC 9V – 12V
- Standby current: ＜25mA
- Alerting current: ＜450 mA
- Wireless frequency: 315/433/868/915MHZ, 2262/1.5--4.7M, EV1527/300K.
- GSM SYSTEM: supporting GSM850/900/1800/1900MHz **2G Sim Card only**
- Standby battery: NI-HI AAA*6 DC7.4V
- Siren loudness: 110dB
- Accessories parameters: this panel is compatible with PT2262 code; PT2240 code and EV1527 shorten code.

Servicing

The PIR's have an on/off switch on the side which can be switched off when onboard so as to prolong the battery life.
Although the battery life of individual detectors can vary, it is recommended that the batteries be renewed on an annual basis and be tested frequently.
The MOB fobs after prolonged immersion or for annual service (in order to maintain their integrity) should be returned to ;

CBME,
Clyde Marina
Ardrossan
Ayrshire
Scotland
KA22 8DB

Operation Commands & Programming Commands

0# DISARM	SMS Messages disarming, send SMS Messages **12340#**
1# ARM	SMS Messages arming, send SMS Messages **12341#**
2# STAY ARM	SMS Messages STAY arming, send SMS Messages **12342#**
3# RELAY ON	SMS Messages Relay closing, send SMS Messages **12343#**
4# RELAY OFF	SMS Messages Relay opening, send SMS Messages **12344#**
[20]+[#]	Find arming and disarming status. send SMS Messages **123420#**
[21]+[#]	Find alerting number and alert-receiving number configured in the panel. send SMS Messages 123421#
[80]+[#]	Used to inquire as to SMS Messages contents from all Defense zones. ● For example: send SMS Messages **123480#**
[81]+[Defense zone one, SMS Messages content]+[#]	Used to set SMS Messages content given by Panel when the first Defense zone alerts. SMS Messages content can NOT exceed twelve characters. ● For example: send SMS Messages "**123481 Man overboard #** " At that time, when the first Defense zone is triggered, the SMS Messages of "Man overboard" will be sent as a short-message to alarming number.
[82]+[Defense zone two, SMS Messages content]+[#]	Used to set SMS Messages content given by Panel when the second Defense zone alerts. ditto
[83]+[Defense zone two, SMS Messages content]+[#]	Used to set SMS Messages content given by Panel when the third Defense zone alerts. ditto
[84>89]+[Messages for Z4>Z9]+[#]	The forth to ninth Defense zone can be inferred as above.
[90]+[Defense zone ten, SMS Messages content]+[#]	Used to set SMS Messages content given by Panel when the tenth Defense zone alerts. ditto

7. Note: Difference between Defense Zone Types:

- NORMAL Defense Zone: the Panel only works on the arming status. When disarming, there is no response.
- STAY Defense zone: can be shut off solely through the remote control (keyfob) to ensure no external influence will cancel this function..
- INTELLIGENT Defense zone: if the detector in the Defense zone is triggered only once, it will not immediately alarm. But if being triggered once again within 30 seconds after the first triggering, it will alarm immediately.
- EMERGENCY Defense zone: no matter on arming or disarming status, if detector is triggered it will alert. Usually used in connection with Smoke Detectors, Gas Detectors and emergency button, etc.
- CLOSED Defense zone: no matter arming or disarming status, detectors will not alert even being triggered.

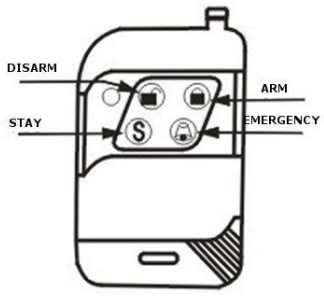
4. Installation and debugging

■host and 2G SIM card installation

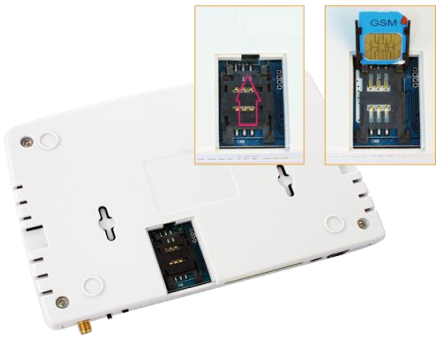
The panel should be installed in a central zone of the monitored area so as to make sure that all wireless detectors can be best received. Take care to keep away from large-scale metal objects or appliances with high-frequency interference..

The control panel :

Speaker optional for future use



Remote Control Unit



Sim Card Installation

Connection of wired sensors & relay

Relay connect NO and C between the load to be controlled			
Sensors:	**Bilge level switch**	**connect**	**Gnd. To 7**
	Gas alarm relay	**connect**	**Gnd. To 8**
	Zone 9	**connect**	**Gnd. To 9**
	Zone 10	**connect**	**Gnd . To 10**

5. The GSM host settling

First-time energization

Ensure the SIM card (**use a 2G only**), all wired sensors (if applicable) and antenna are correctly installed, then connect the DC power. Upon power up, the alarm panel will carry a self-test sequence as below:

- Six Defense Zones' LED and two Functional LED's on front panel will flash in order(once each) and end with a buzzer long "Beep".
- The GSM Signal LED flashes with one second interval for checking the GSM signal.
- If GSM network detected all right, "Beep" sound stops and Signal LED becomes flashing every three seconds, the GSM signal and SIM card are all confirmed normal, system is READY.

Now, switch the stand-by battery switch to "ON"..

■ indicating information

Buzzer	Short "Beep" once	Key-pressing indication
	Long "Beep" once	Confirm receipt of a key stroke
	Continuous short "Beep" for 2 times	Correct command received
	Continuous short "Beep" for 3 times	Error in command
	"Beep" at moderate intervals	SIM card not found
Defense Zone LED	Always lit	Defense zone alerting
	Blinking	Defense zone coming into delayed alerting
Arming LED	Always lit	Arming status
	Blinking quickly	Stay safe arming status
	Blinking slowly	Coming into delayed arming status
GSM signal LED	Blinking every 1 second	GSM signal weak, or SIM card not found
	Blinking every 3 seconds	GSM module, and SIM card working properly
	Not lit	Without electricity

Inputing SMS called number [do this now]

[37]+[user number]+[#]

Example; mobile number you wish to be sent SMS text is **07974699999**

Send text **12343707974699999#** to the SIM number in the monitor panel

Default password [1234]code no.[37]mobile number to be alerted [07974699999]+#

To change the password, follow instructions below;

[50]+[new password]+[#]	Modify user operation password ● For example : If user wants to set new user password as 4321, please send SMS message 1234504321#, or using phone input 1234#504321#

6. SMS programming

■All programming for this panel are accomplished through cell phone call to the host GSM card, and sending short messages..

On working status, and the GSM network detection is normal. Send the following TEXT commands.

1) General command pattern sent via SMS is

[password] + [command] + [parameter] + # e.g. setting SMS phone no. 1234379999999#

[37]+[user number]+[#] **This is the first (and possibly only) programming to do.**	Add (or delete) 1st group of phone number for receiving SMS messages ● Example: if the user wants to add phone number 12345678, send SMS Messages 12343712345678#, or using phone should input 1234 # 37 12345678 # ● Example: if the user wants to delete second-group number, send SMS Messages 123437#, or using phone should input 1234 # 37 #
[38]+[user number]+[#]	Add (or delete) 2nd group of phone number for receiving SMS messages
[39]+[user number]+[#]	Add (or delete) 3rd group of phone number for receiving SMS messages

SMS on setting as follow:

[12]+[0/1]+[#]	Disable and enable SMS Messages function ● 0 means not activated. ● 1 means activated ● Example: to disable SMS Messages function, send SMS Messages 1234120#, or using phone should input 1234 # 12 0 #

EASY INSTALLATION INSTRUCTIONS

1 **Mount monitor panel where indication lights can be readily seen**

2 **Mount bilge level switch in centerline of boat and above any residual bilge water.**

Waterproof Crimps 1

Insert 1 wire from the bilge level switch and one wire from the alarm cable into the two holes in the crimp and compress with pliers. This will connect the two wires and the surplus silicone grease will be expelled.(no need to strip insulation). Repeat this process with the second wire.

If using a wireless bilge switch, ensure the wireless module is mounted as high as possible to safeguard against water ingress.

3 **Mount smoke detector in cabin away from galley area**

4 **Mount PIR as high as is practical above the sole. The sensor should face the detected area at 90° for best coverage**

5 **Proximity switch; Fix magnet to locker door or washboard and fix transmitter to fixed side, maintaining 6mm or less gap between edges (see operating light on/off)**

6 **Run supply cable from the battery you wish to monitor and connect via fuse on + lead**

7 **Run alarm cable from bilge level switch and gas detector to panel 7/ gnd & 8/ gnd.**

8 **Insert SIM card and energise supply**

9 **When the panel settles with GSM light flashing every 3 seconds put panel switch ON**

10 **Operate the panel with the remote control and trigger all sensors individually**

11 **Operate panel with mobile phone and check operation**