

Text Messages to and from Remote Boat Monitoring System

Notes:- All characters in text messages can be upper or lower case. Spaces are not permitted anywhere, including at the beginning or end!

Note that a complete main box reset can be accomplished by phoning the SIM card no. instead of texting any of the below commands.

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| #(0-14)=+447860382881 | Stores phone numbers that will be accepted for incoming messages. Locations 0-14 are available to store phone numbers. Only positions 0-3 will automatically receive error messages and allow changing of settings in the system. Positions 0-14 can send messages to check data such as AC state, location position, battery voltage and temps etc. The text replies will be sent to the Phone which sent the request message. Assuming the number has been previously stored of course! Numbers must be in the international format as shown with + followed by the country code and then the number. Spaces are not allowed. |
| #(0-14)= | Normally, you can overwrite an existing number just by entering a new number at the same memory location. To delete a number from memory just send #(0-14)= but with nothing after the = sign. The maximum no. of digits including the + sign and the country code is 15. However, longer numbers may be stored but if there are more than 15 digits then 2 storage positions will be used. |
| BB{1-6} | Sending a BBx message will return a list of all the batteries in that battery box showing the overall box volts, the individual volts for each battery and the individual temperature of each battery. Any volts or temps outside the previously set limits will have a '*' indicating an error. For stored phone numbers in positions 0-3 a message will automatically be sent to all phone numbers in that range if an error occurs and texts are enabled for that type of error. At the bottom of the message the pre-set values for battery and temperature errors are shown. These are Volts Max, Volts Min, Volts Diff, Temps Max, and Temps Diff. This message can be sent from all phone locations 0-14. Remember that these pre-set limits can be different for each battery box. |
| BB{1-6}=OFFT | This message will disable any temperature errors from sending a text message to phones in stored positions 0-3. The BB{no.} is ignored here as temperature errors are disabled from all battery boxes. If the message is sent to a battery box that does not exist, then the setting is not updated and a message will be returned saying 'Box not found'. An error message will result if this message is sent from a phone no. not in locations 0-3. |
| BB{1-6}=OFFV | This message will disable any battery voltage errors from sending a text message to phones in stored positions 0-3. Same details as above. |
| BB{1-6}=ON | This message will enable all temperature and battery voltage errors for all existing battery boxes. The BB{no.} is ignored but must be sent to an existing battery box. An error message will result if this message is sent from a phone number not stored in locations 0-3. |
| BB{1-6}=OFF | This message will disable all temperature and battery voltage errors for all existing battery boxes. The BB{no.} is ignored but must be sent to an existing battery box. An error message will result if this message is sent from a phone number not stored in locations 0-3. |
| BB{1-6}="Batbox 4" | Sets names for any battery box. Limit is 8 characters. Must be upper or lowercase characters, numbers 0-9, spaces and : ; < > = ? [^] _ \ all allowed. |
| BB{1-6}=ON:vmax:vmin:vdiff:tmax:tdiff | If a : follows the ON text then the limits for errors can be set for battery volts and temperatures before an error is generated. Example:- BB1=ON:24.6:23.9:1.5:35:4 This would set max overall box volts to be 24.6v, overall min volts to be 23.9v, max difference between any 2 |

batteries to 1.5v. Max individual battery temperature to be 35degC and max difference between battery temperatures to be 4degC.
 Note that volts can be entered as 2.5 or 24.6 but must have a decimal point before the last digit. A 0 must be entered, e.g 25.0 as just 25 is not allowed. Temperatures can be entered as 1 or 2 digits i.e. 34 or 6 etc. These settings are different for each battery box. If the message is sent to a battery box which does not exist then a 'Box not found' error message will be returned. Not all values must be sent. If a : is not present after a value then only values previous to that will be updated. E.g. BB3=ON:27.3:24.1 will only update the vmax and vmin values in the system.
 Note that these settings can be confirmed by issuing just a BB{1-6} message. The max/min/diff values are displayed at the bottom of the returned message. An error message will result if this message is sent from a phone no. not in locations 0-3.

- BILGE** Returns status of all Bilge detection boxes in a single text reply.
- BILGE{=ON/OFF:failvalue}** If Bilge=OFF is sent, then text error messages to phone locations 0-3 will be disabled. Sending Bilge=ON enables text error messages to be sent automatically to phone locations stored in positions 0-3. All phones can still check the status of all bilge boxes by sending just the BILGE message. If the ON or OFF is followed by a : then the next value will set the gas concentration at which point the 'Fail' error message will be sent. The default value is set at 30, but it can be set at any value up to 255. Send 1,2 or 3 digits for the fail value i.e. 65, 125 etc.
- BG{1-6}="Bilge 6"** Sets names for any bilge box. Limit is 8 characters. Must be upper or lowercase characters, numbers 0-9, spaces and ; <=> ? [^] _ \ all allowed.
- RELAY** Displays all relays with box names and current on/off states. Note if AC power is lost then relays switch to off until power is restored.
- REL{1-6}={ON/OFF}** Relays can be set to ON or OFF by this manual command.
- REL{1-6}=TIMED** If set to TIMED then return message shows currently stored time settings for that box. Or if in Manual mode the current Manual setting for ON/OFF
- REL{1-6}="Relay 2"** Sets names for any relay box. Limit is 8 characters. Must be upper or lowercase characters, numbers 0-9, spaces and ; <=> ? [^] _ \ all allowed.
- REL{1-6}=TIMED:ofday:onhours:onmins:offday:offhours:offmins**
 If a : follows 'Timed' then following data will set the timings. Day is 1 digit from 0-7 where 0 = 'All days', 1= Sunday – 7=Saturday. All values must have 2 digits apart from Days which is 1 digit.
- LOCALTIME** This reads back the UTC time and the local day and time.
- LOCALTIME=day:hour difference** This sets the current day (1-7 for Sun to Sat) then after the : the difference between UTC and local time. If GPS(UTC) hours = 1200 then entering 02 here will make local time = 1400. Values 00 to 23 can be entered where for example, 23 will make 1400 reduce by 1 to make 1300. 2 digits must be entered for a valid result. The return message shows the UTC and new local time. The local time is used by the relay commands when setting on and off times for relays.
- INTRUDER{=ON/OFF}** Returns status of all Intruder detection boxes in a single text reply. If Intruder=OFF is sent, then text error messages to phone locations 0-3 will be disabled. Sending Intruder=ON enables text error messages to be sent automatically to phone locations stored in positions 0-3. All phones can still check the status of all Intruder boxes by sending just the INTRUDER message.
- IN{1-6}="Saloon"** Sets names for any intruder box. Limit is 8 characters. Must be upper or lowercase characters, numbers 0-9, spaces and ; <=> ? [^] _ \ all allowed.

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| LOCATION | Returns details of texts ON/OFF error message status, current boat location, No. of satellites and fix quality. The circle radius setting and distance from the centre of the circle. This can be done from any phone no. location 0-14. |
| LOCATION={ON/OFF:radius} | This sets whether alarm text messages are enabled or not. If ON is sent then this also sets the pre-set position of the boat to the centre of the circle defined by the radius setting. If an optional : follows the ON, then the radius of the alarm circle is set in meters. The radius can be 1 or 2 digits with a maximum distance of 99 meters. Can only be set by phones in locations 0-3. |
| LOCATION=radius | This sets the radius without affecting the ON/OFF status. |
| LOCATION=GPS | This returns a text message in a format recognised by Google Earth and Google Maps. Depending on your phone type, this can be copied and pasted into the search box of Google Earth or Google Maps to show the current boat position on a map. See more details on this procedure elsewhere in this handbook. This can be done from any phone no. in locations 0-14. |
| ALARM={ON/OFF} | This enables or disables all local alarms. ON enables local alarms both internal and external sounder. OFF turns off any sounding alarm and disables any future internal alarms until ON is received by text or any local alarm state is changed. Default is ON. |
| ACTEXTS=OFF/ON | This enables or disables text messages for loss/recovery of AC power to the boat. Delay before AC lost message is 60secs. AC restored delay is 30secs. |
| STATUS | Returns all error text message status on/off settings. AC power present or missing. GPRS status S/W version and serial number |
| ALLTEXTS=ON/OFF | Sending this command opens the system to receive all incoming texts which are passed on to the user's phone. This allows pin codes to be read etc. as they will come from an unknown phone no. ON allows all texts to be received and re-sent to your phone. Automatically, this goes back to normal mode after receiving the next text. OFF goes back to normal operation but only because it's the next text received! See elsewhere in this handbook for more details on this feature which is mostly used where phone company apps for seeing your balance insist on sending a text message with an access code! Wait until you've received the reply saying 'All texts allowed ON' before initiating whatever will send the unknown text to you. |
| GPRS | Returns a text message showing state of GPRS connection, domain name, APN name, connection status and operators name. |
| GPRS{=ON/OFF:timedelay} | Turns on or off the gprs data sending to the server. Timedelay can be 1,2 or 3 digits. This = minutes between data updates. Range 1 – 255 (minutes). Max is 255 minutes (4.25 hours) |
| APN="apn text from sim supplier" APN=OFF | Note " " must be around apn text. E.g. APN="wap.vodafone.co.uk". Anything other than a " after the = turns APN off. |
| RESTART | This can only be sent by phones in locations 0-3. It causes a re-boot of the software which may fix odd problems. |
| FACTORY | This can only be sent by phones in locations 0-3. It causes a complete factory re-boot re-setting all saved items back to their default values! Note that default gps preset position is not reset. |