Beacon Monitor
Operator's Manual

for model:

FBM200A

Version 2.00

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INTRODUCTION

Thank you for choosing the FBM200 Beacon Monitor. This Operator's Manual describes the installation and operation of the Beacon Monitor.

UNPACKING

Lift up on the inner fold on the right side of the Beacon Monitor box and remove the Beacon Monitor from the underside. The accessories are in the box on the right. Be sure to keep the accessories box for handy storage of the Beacon Monitor Operator's Manual and accessories when not in use.

Please verify the contents of your package. It should contain:

- Beacon Monitor
- Operator's Manual
- Antenna
- USB Cable 10' (3m)

Optional items include:

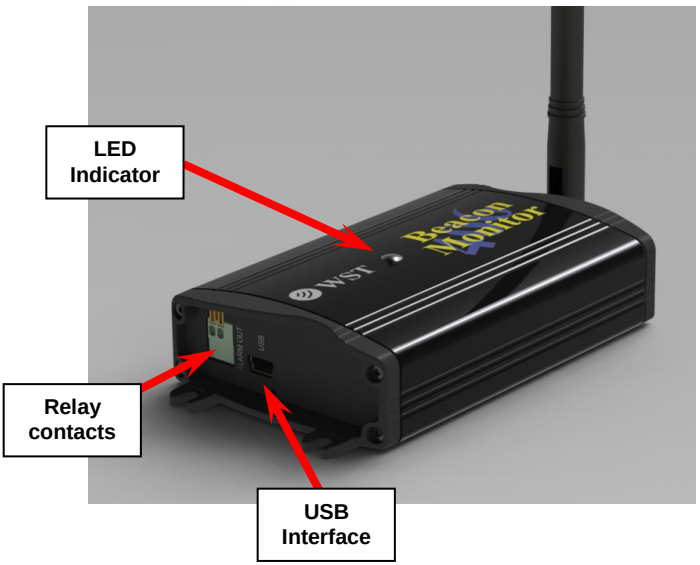
- Outdoor Antenna
- Antenna Extension cable
  - 25' (7.6m)
  - 50' (15m)
  - 75' (23m)
  - 100' (30m)
- Antenna mounting hardware
- Certificate of Calibration (optional)

NOTICE!

Install the Beacon Monitor software before connecting the device to the USB port.

BEACON MONITOR

Please read this Operator's Manual to become familiar with the operation of the Beacon Monitor.



Antenna Connection:

Connect the 406 MHz antenna to the front panel RF IN connector.

Optional Outdoor Antenna Installation:

Alternatively, if you have purchased the optional outdoor antenna, install the outdoor antenna following the mounting instructions included with the antenna. The U-bolts will fit a mast from approximately 1.25” to 2.50” in diameter. Connect the Antenna Extension cable between the antenna and the RF IN connector on the Beacon Monitor.

Installing the Application:

NOTICE!
Install the Beacon Monitor software before connecting the device to the USB port.

The Beacon Monitor application must be installed on your computer prior to connecting the device.

Go to www.wst.ca/beacon_monitor.html and install the latest version of the Beacon Monitor software. The following message will appear.

Click ***Run*** to install the application on the computer.

The Beacon Monitor Setup screen will appear.

Click ***Next.***

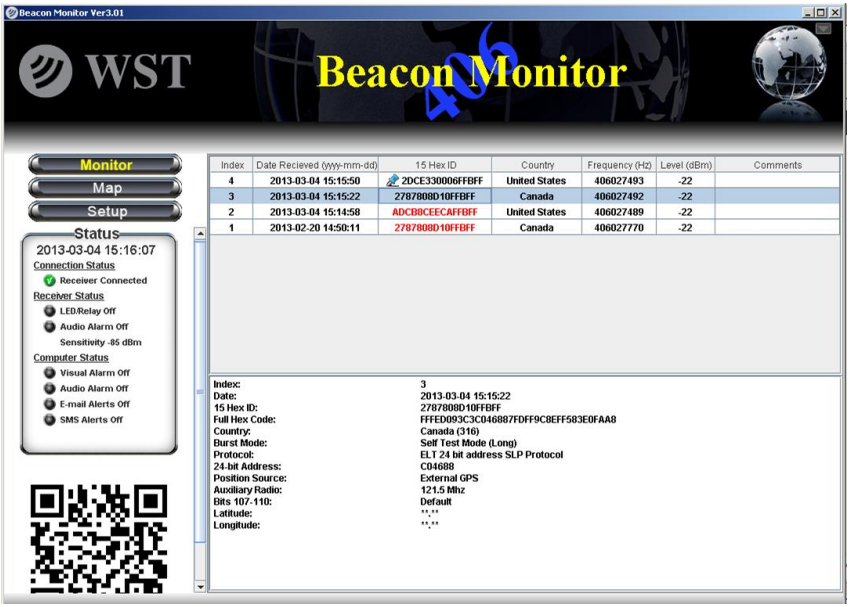
If Java™ is not installed on your computer, you will be prompted to install it. Follow all on-screen instructions.

Once completed click ***Finish***.

The Beacon Monitor icon will appear on your computer desktop.

SETTING UP THE APPLICATION

Click on the Beacon Monitor icon. The Beacon Monitor application will start and the following screen will be displayed:



Connect the FBM200 receiver to a USB port on the computer using the supplied USB cable. This connection is both the power supply and the communication link to the receiver. When the FBM200 receiver is located, the Connection Status in the Status section will show ***Connected***.

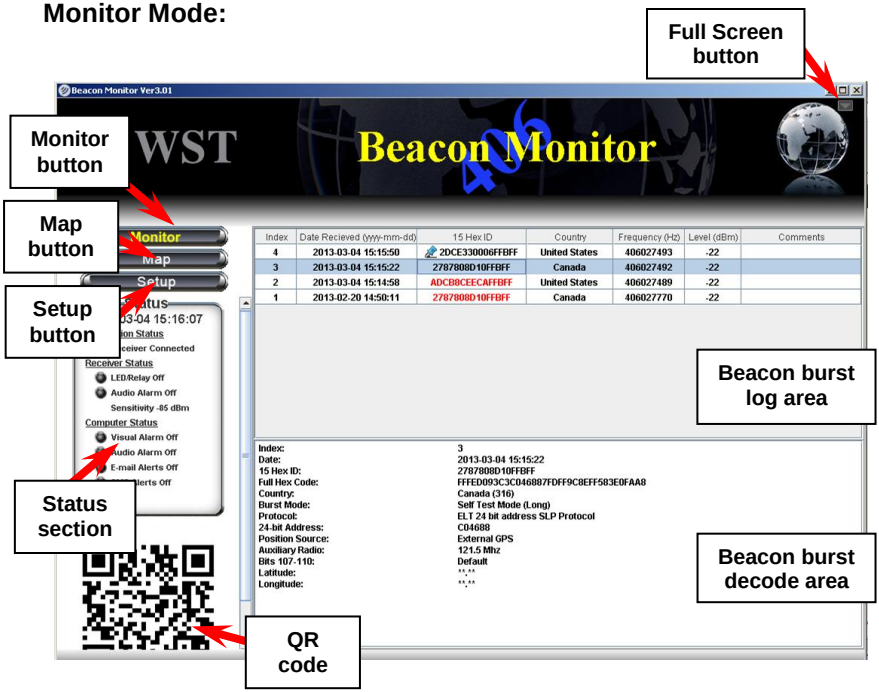
The LED Indicator on the top of the unit will glow red when first plugged in, then will flash green when operating normally.

There are three main viewing modes:

1. Monitor Mode
2. Map Mode
3. Setup Mode

The following sections will discuss the setup and operation of the software and hardware.

Monitor Mode:



Monitor button

The Monitor button will switch the screen to the Monitor mode. This is the normal mode for monitoring beacon burst activity.

Map Button

The Map button will switch the screen to the Map mode. This mode allows the user to view actual locations of beacons and the receiver.

Setup button

The Setup button will switch the screen to the Setup mode. This mode allows the user to setup the application and receiver as needed.

Status section

The Status section displays the status of the Receiver Connection, the Receiver Status, and the Computer Status.

Beacon Burst log area

The Beacon Burst log area will automatically record and log all received 406 MHz beacon bursts. The information in this section includes date and time of beacon burst, beacon 15 Hex ID, country code, beacon transmit frequency, receive level of beacon signal, and a comments field.

All of the information can be sorted by clicking on the header of the column that you wish to sort. When a new beacon burst is received, all of the information will be automatically un-sorted.

Click in the comments field to add or modify a comment.

Beacon Decode area

The Beacon Decode area shows the decoded message details for any selected burst.

Full Screen button

To maximize the Beacon Monitor screen click the Full Screen button. To un-maximize the screen press it again.

Deleting records

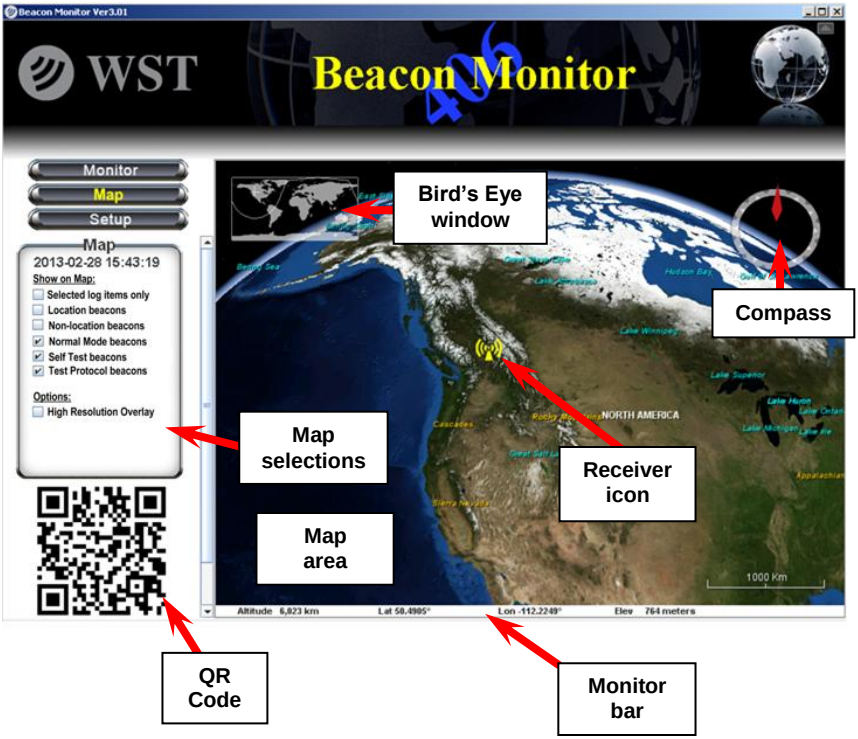
To delete records, select a record and right click the mouse, then click ***Delete record***.
To delete multiple records, select individual records while holding down the control button on your keyboard, right click and delete.
To delete a range of records select the first record, hold down the shift key and select the last record. Right click and delete.

QR Code

The selected beacon burst will have a QR Code displayed below the Map Selections area. This QR Code contains information about the burst including location data if present. It can easily be read by a smart phone to make these details portable and for use in other mapping applications.

Map Mode:

Clicking on the Map button will take you to the Map mode.



Map Selections

This section lets the user control what beacons are shown on the map.

Selected Log Items Only
Check the box when you want only the items selected in the Log Area (Monitor Mode) to be viewed on the map.

Location Beacons
The user can check this box to show all location protocol beacons on the map.

Non-Location Beacons
The user can check this box to show all non-location protocol beacons on the map. All non-location beacon icons will be placed in a vertical column below the Receiver icon.

Normal Mode, Self Test, Test Protocol
The user can further filter which beacons will be displayed on the map. Check or uncheck as needed.

High Resolution Overlay
The user can check this box if a high resolution image of the area is desired.

QR Code
The selected beacon burst will have a QR Code displayed below the Map Selections area. This QR Code contains information about the burst including location data if present. It can easily be read by a smart phone to make these details portable and for use in other mapping applications.

Map Area

The Map Area will show the Receiver icon and all of the received beacon bursts as selected by the user.

Icons
If the decoded beacon includes location data, the beacon icon will be at that location. If the decoded beacon burst does not show location data or if the beacon is a non-location protocol, the beacon icon will be shown below the Receiver icon.

Each beacon burst is represented on the map. ELTs are represented by an Airplane, EPIRBs are represented by a ship, PLBs are represented by a person.

A red icon represents a Normal Mode (Live Burst) and a green icon represents Self-Test burst. A Test Protocol burst is represented by a green question mark icon.

Mouse over any beacon icon will show the Index number so the user can reference the same beacon on the Monitor page. Note that the index number will change when items are deleted from the Log Area on the Monitor page.

Clicking on a beacon icon will display the beacon's decode details. This balloon can be resized as appropriate by grabbing a corner and dragging.

The map display can be controlled by the user.

Zoom
Use the mouse wheel to zoom in or out as desired.
Double click on the Receiver icon to zoom in automatically.

Pan
Left click and drag left, right, up, or down; or use the keyboard arrow keys.

Rotate or Tilt
Right click and drag left or right to rotate.
Right click and drag up or down to tilt.

Bird's Eye View

This shows a bird's eye view of the current map display.

Monitor Bar

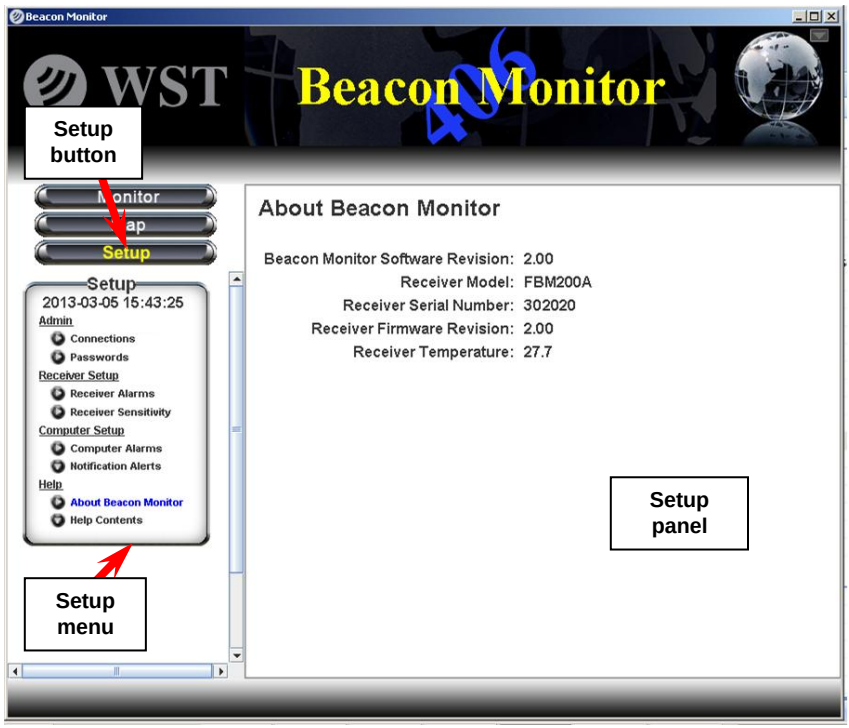
The monitor bar shows the altitude, the mouse position latitude, longitude (in decimal degrees), and elevation.

Compass

The compass points to true North.

Setup Mode:

Clicking on the Setup button will take you to the Setup mode.



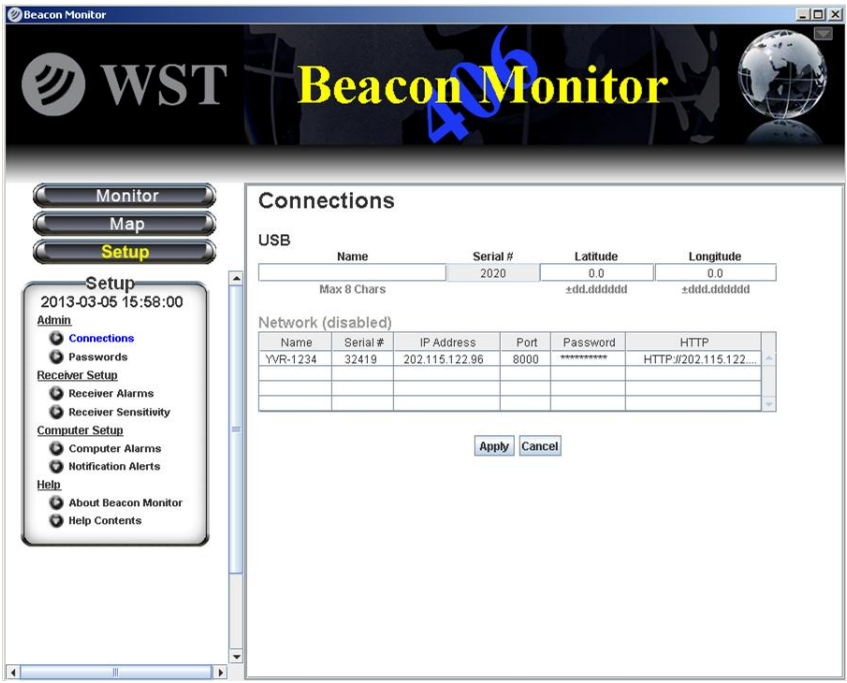
Setup Menu

The setup menu has a selection of items. See details of each section in the Setup Items section below.

Setup Panel

The Setup panel is the information or setup area for each item in the Setup menu.

Admin - Connections



Select a name for the connected receiver (maximum 8 characters).

The latitude and longitude of the receiver must be entered for the receiver to show on the map. Use decimal degrees format.

Click ***Apply*** to save any changes.

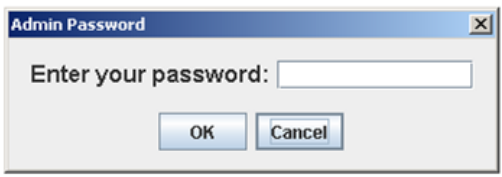
Admin – Passwords

Passwords – Setup

If you wish to prevent an unauthorized person from making changes to the Beacon Monitor setup, then the password protection must be enabled. Click the Enable password protection box and enter the desired password (4 to 12 characters).Then re-type the password and click ***Apply.***

Passwords – Login

Enter your password and click ***OK*** to login.



Logout
If the Beacon Monitor program is password protected, a Login/Logout button will appear in the top right area of the screen. For security, be sure to click ***Logout*** once you are finished changing items in the Setup mode, otherwise you will automatically be logged out after 10 minutes.

Password Reset
If you forget your password, the password protection can be reset. Disconnect the unit from the Computer. Press and hold the reset button on the FBM200 while connecting the USB cable to the unit. If you wish to reinstate password protection then enter a new password.

Alarms

All 406 MHz beacon bursts are encoded as either:

1. Normal Mode (Live Burst)
2. Self Test mode
3. Test Protocol

The user has the option to set each alarm notification method based on the mode of the received beacon burst. It is advised to always be alerted when a Normal Mode (Live Burst) is detected so that the user can take action and notify the authorities of a potential false alert.

NOTICE!

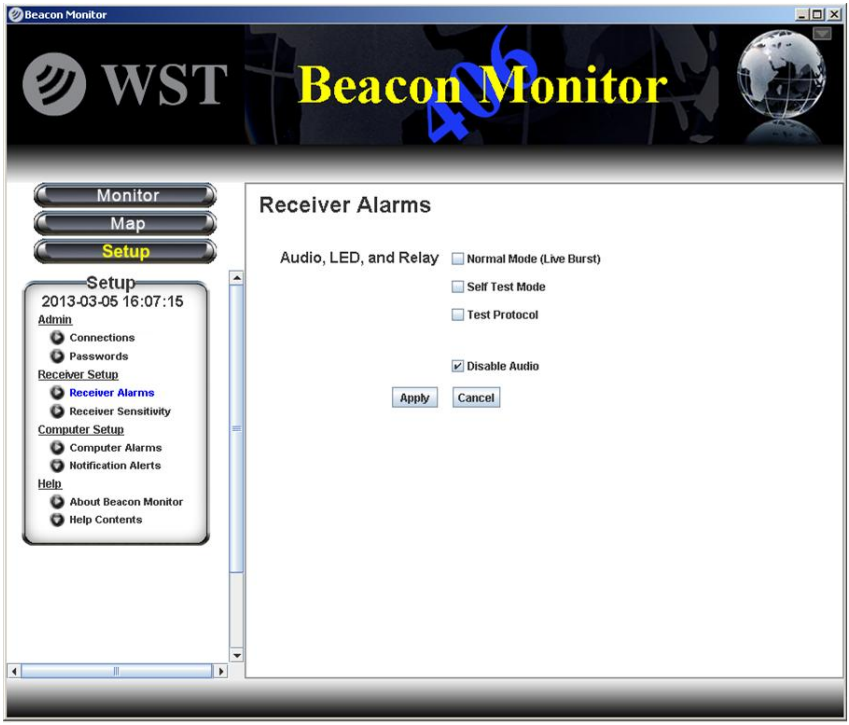
All Normal Mode bursts have the potential of being received by the satellites causing a false alert. If you are confident that a Normal Mode burst is definitely a false alert and has sufficient power to be received by the satellites, then contact your local Mission Control Center (MCC). Refer to the MCC list on page 32 of this Manual.

Check or un-check the boxes on the Receiver Alarms and Computer Alarms setup pages to suit your requirements.

Click ***Apply*** to save the changes.

Note that all beacon bursts, regardless of burst mode, will be recorded and logged. The user can delete unwanted records.

Receiver Setup – Receiver Alarms



Audio/LED/Relay Alarm

The receiver audio alert will sound, the LED Indicator will flash red, and the relay contacts will close when a burst is received. The user has the option to set each receiver alarm notification method based on the mode of the received beacon burst. Check or un-check the boxes on the Receiver Alarms setup page to suit your requirements.

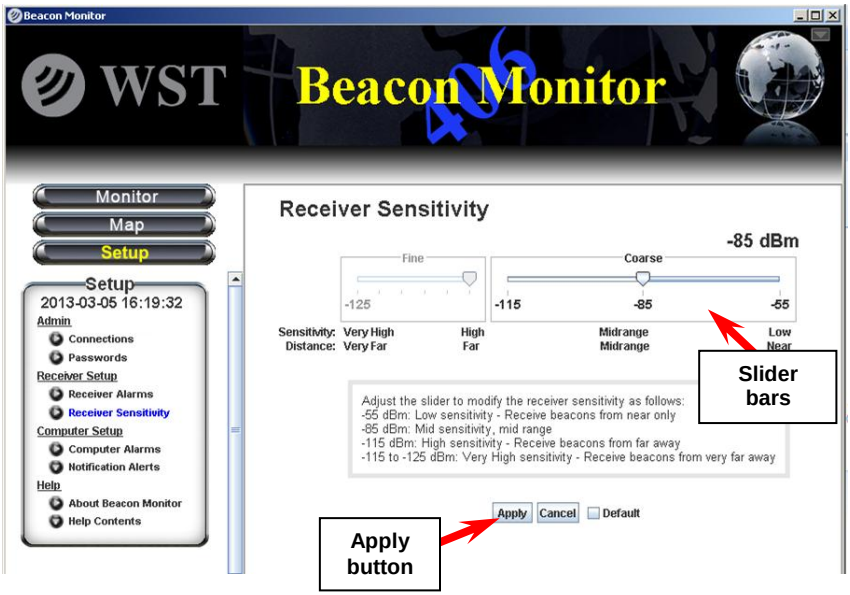
These alarms are reset by clicking the ***Alarm Reset*** button on the application or pressing the Reset button on the receiver.

Audio Disable

To deactivate the receiver audio alarm, check the ***Disable Audio*** box.

Click ***Apply*** to save any changes.

Receiver Setup – Receiver Sensitivity



The receiver sensitivity can be adjusted for each application. To receive beacon bursts from far away, set the sensitivity to the highest level of -125 dBm. This setting will receive bursts from near also.

To receive only the beacons that are near, set the sensitivity to the lowest level of -55 dBm.

The default sensitivity level is -115 dBm.

The Beacon Monitor has sophisticated algorithms for preventing false triggering. However, burst reception may be hindered when operating the Beacon Monitor in an electrically noisy environment. You may need to remove the source of interference or reduce the sensitivity of the Beacon Monitor.

Click ***Apply*** to save any changes.

Computer Setup – Computer Alarms

All 406 MHz beacon bursts are encoded as either:

1. Normal Mode (Live Burst)
2. Self Test Mode
3. Test Protocol

The user has the option to set each alarm notification method based on the mode of the received beacon burst. It is advised to always be alerted when a Normal Mode (Live Burst) is detected so that the user can take action or notify the authorities of a potential false alert.

There are two alarm notification methods on the computer; Visual Alarm and Audio Alarm. When an alarm notification is triggered by a received burst, an Alarm Reset button appears below the Map button.

NOTICE!

All Normal Mode bursts have the potential of being received by the satellites causing a false alert. If you are confident that a Normal Mode burst is definitely a false alert and has sufficient power to be received by the satellites, then contact your local Mission Control Center (MCC). Refer to the MCC list on page 32 of this Manual.

Check or un-check the boxes on the Computer Alarms setup page to suit your requirements. Click ***Apply*** to save the changes.

Visual Alarm

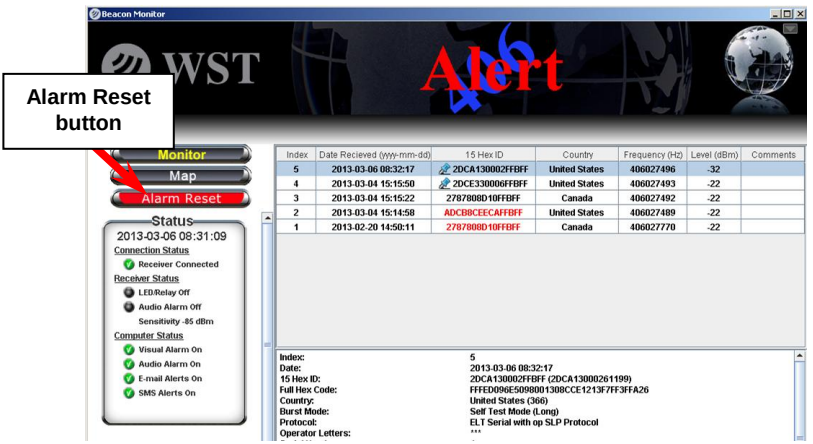
For the Visual Alarm a red “ALERT” will flash at the top of the screen.

Audio Alarm

For the Audio Alarm an audio alarm will sound through the computer audio system.

Resetting Alarms

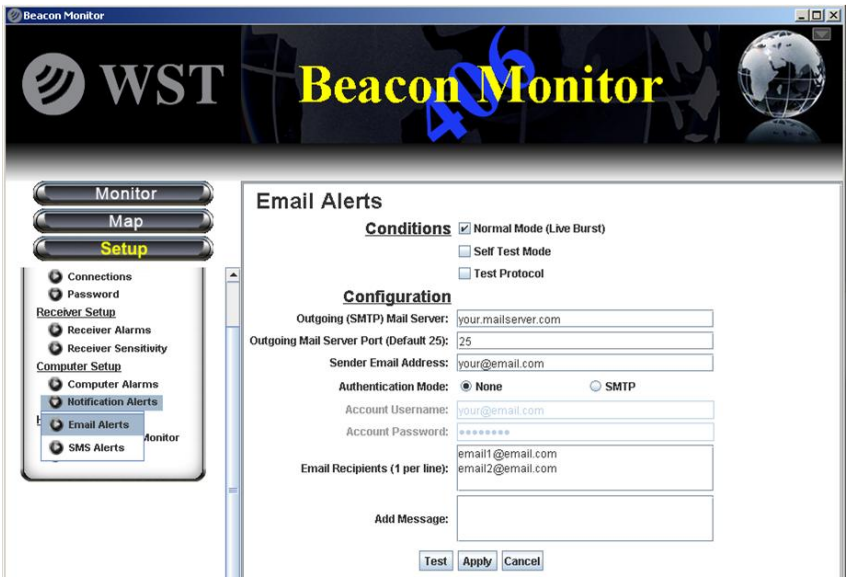
To clear the alarms, click on the ***Alarm Reset*** button.



Email Alerts

Email alerts can be automatically sent to many email addresses.

Email – Conditions
Check or un-check the boxes to suit your requirements so that the email notifications are sent for the corresponding beacon mode.



Email - Configuration

Enter the SMTP Mail server information for your outgoing mail server. Contact your network administrator for this information.

Enter your email address. This will be the senders email.

If your outgoing mail server requires authentication select SMTP. Enter the account username and account password.

Enter the email address for each recipient.

If you wish to have a message accompany each email then enter this in the Add Message box.

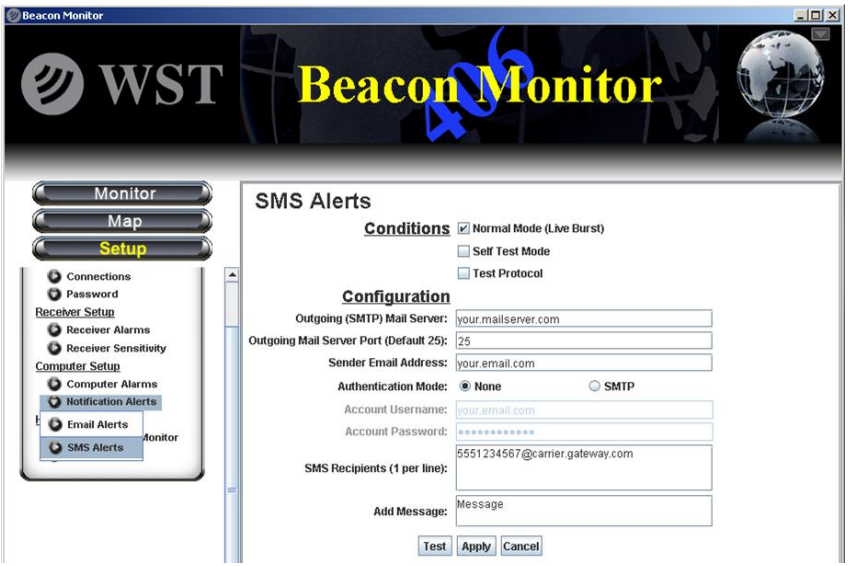
Click ***Apply*** to save the changes.
Click ***Test*** to send a test email.

The email sent for each burst will contain a complete report.

SMS Alerts

SMS Text Messaging alerts can be automatically sent to many SMS recipients.

SMS – Conditions
Check or un-check the boxes to suit your requirements so that the SMS notifications are sent for the corresponding beacon mode.



SMS - Configuration

Enter the SMTP Mail server information for your outgoing mail server. Contact your network administrator for this information.

Enter your email address. This will be the senders email.

If your outgoing mail server requires authentication select SMTP. Enter the account username and account password.

Enter the phone number and the gateway server information. Refer to the website: http://en.wikipedia.org/wiki/List_of_SMS_gateways for the format information for the number and your specific carrier gateway address.

If you wish to have a message accompany each message then enter this in the Add Message box.

Click ***Apply*** to save the changes.
Click ***Test*** to send a SMS message.

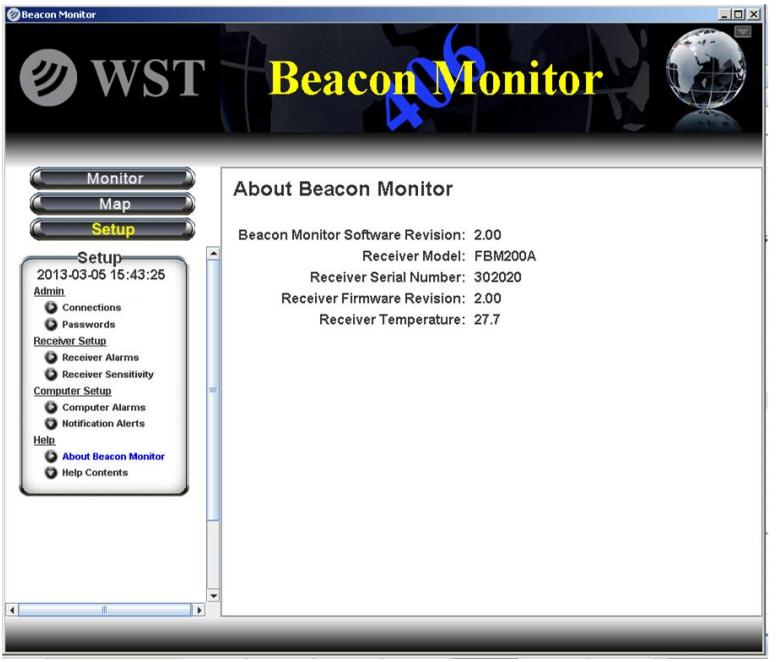
NOTE: You are responsible for any charges incurred relating to SMS messages.

Customized Notifications

Customizing the email and SMS notifications to include additional data is possible. For instance, perhaps your company database has a name and contact number associated with a particular Beacon ID that you want to include with the email or SMS message.

Please contact support@wst.ca for details.

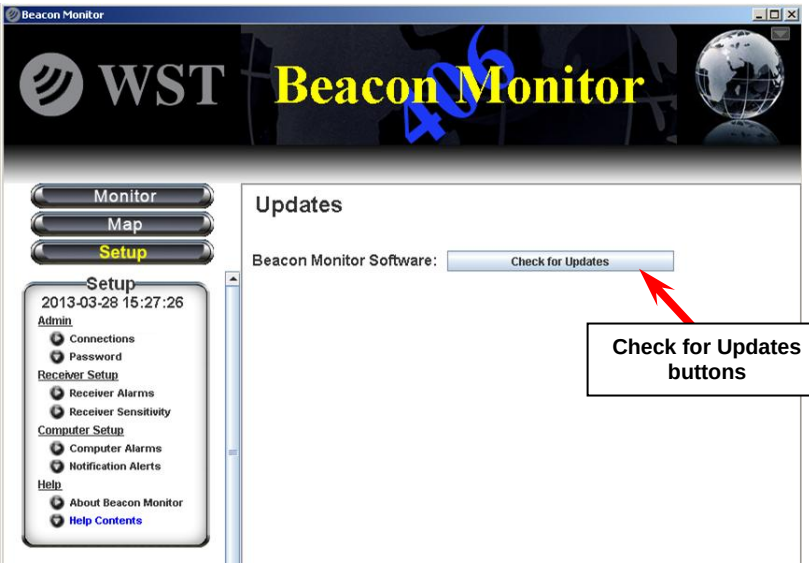
Help – About Beacon Monitor



The About Beacon Monitor screen shows the Beacon Monitor Software Revision and Receiver Information including Receiver Model, Receiver Serial Number, Receiver Firmware Version, and internal Receiver Temperature.

Help Contents - Updates

The application will automatically check for Software updates and, if available prompt you to complete the update.



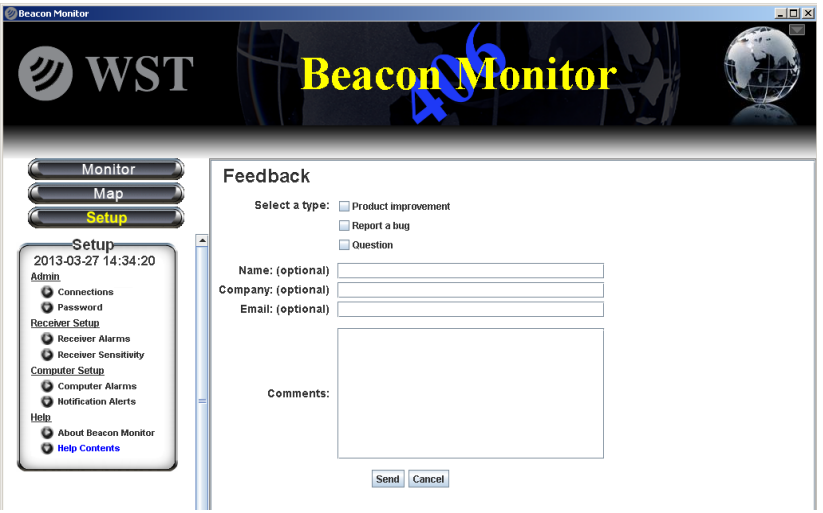
You can also manually check for software updates by clicking on the ***Check for Updates*** buttons. If an update is available a pop-up notice will advise you.

Help Contents - Frequently Asked Questions

This page will show a list of FAQs.

Help Contents – Feedback

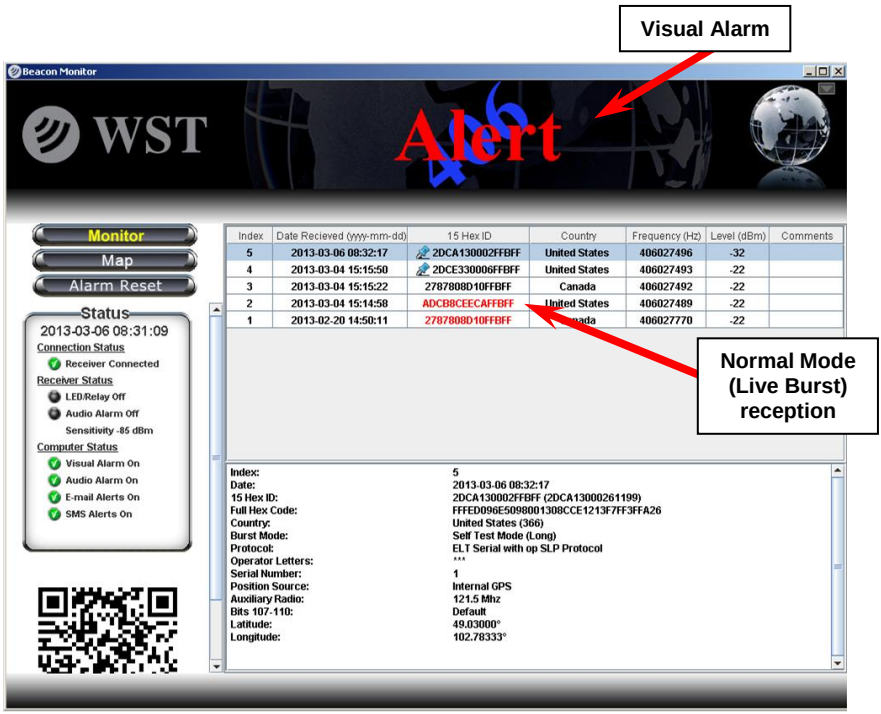
In order to help us to continually improve our product, please send us your feedback. If you wish to receive a response please include your name and email address. All information received is kept confidential.



RECEIVING BURSTS

Once your system is setup you should always verify reception by transmitting a self test burst from a 406 MHz beacon.

All bursts that are received are logged and recorded. When a burst is a Normal Mode (Live Burst) the 15 Hex ID will be shown in red (see Index item #2 below).



NOTICE!

All Normal Mode bursts have the potential of being received by the satellites causing a false alert. If you are confident that a Normal Mode burst is definitely a false alert and has sufficient power to be received by the satellites, then contact your local Mission Control Center (MCC). Refer to the MCC list on page 32 of this Manual.

Data Files and Log Files:

XML Files

Each burst will produce an XML file located in Program Files>WS Technologies Inc>Beacon Monitor>Bursts. When the user deletes records from the log area on the Monitor page, the corresponding xml file will automatically be deleted.

Log File

Each burst will be added to a log file named Burstlog1.csv, located in Program Files>WS Technologies Inc>Beacon Monitor>Log. This file is semi-colon delimited and contains the following information for each burst: Date; Self Test Flag; Default Hex ID; 30 Hex; Power (dBm); Frequency; Country; Identifier; Position Flag; Latitude; Longitude; Beacon Type; Test Protocol Flag; Decode Full details; Receiver Name; Serial Number; User Latitude; User Longitude; Temperature; Firmware revision; Software revision.

This file will not be altered when deleting files from the log area on the Monitor page.

Note: The file must not be kept in use by another application. If the file is in use by another application (i.e. Excel), when a beacon burst is received a new file will be generated named Burstlog2.csv. This ensures data will never be lost.

FREQUENTLY ASKED QUESTIONS

Q: How do I manually check for software updates?
A: Go to Setup>Help Contents>Updates. Click on the ***Check for Updates*** button.

Q: The computer connected to the Beacon Monitor does not have internet access. How do I update the software?
A: You can use a different computer to save the software updates to an external memory device (USB drive, memory card, disk, etc.), so that you can facilitate the software updates on the target computer. Go to the Beacon Monitor product page at www.wst.ca/beacon_monitor.html and click on the FBM200 Software button.

Q: Do I need internet access to run Beacon Monitor?
A: No, however, internet access is required to download and install the Beacon Monitor application and to send Email or SMS messaging notifications.

Q: Why does Java need to be installed on my machine?
A: The Beacon Monitor application is written in Java programming language. The application will not function unless Java is installed.

Q: Why does the temperature of the FBM200 read higher than the temperature in the room?
A: The temperature reading shows the temperature of the receiver module inside the Beacon Monitor. It is normal for this temperature to be about 10ºC above room temperature.

Q: Can I mount the FBM200 outdoors?
A: No. The FBM200 is designed for indoor installation. An optional outdoor antenna is available.

Q: Why do I not receive any emails (or SMS messages) when I click Test?
A: If your mail server requires authentication, then you must enter the account username and password. This applies to both emails and SMS messaging.

Q: Why doesn't my receiver show on the map?
A: Go to Setup>Connections and enter the latitude and longitude of the receiver.

Q: Can I send emails or SMS messages to more than one recipient?
A: Yes, the number of email and SMS recipients is unlimited.

Q: I maintain my own database. Can I retrieve the burst information so I can select the data I want?
A: Yes, there is a log file of all bursts received. This is the BurstLog1.csv file located in Program Files/WS Technologies Inc/Beacon Monitor/Log.

Q: Where is the best location to place my receiver?
A: You should place the receiver as far away as possible from away from sources of electrical noise such as computers, electrical equipment, etc.

Q: I don't want other users to be able to change settings. Can I prevent this?
A: Yes. Go to Setup>Admin-Password>Setup and enable password protection. Other users will see all of the settings but will not be able to alter the settings.

SPECIFICATIONS

BEACON MONITOR
SPECIFICATIONS

		FBM200A
SPECIFICATIONS		•
406 MHz Receiver Sensitivity	-125 dBm	•
Out of Band Rejection (<400 MHz, >413 MHz)	>145 dB	•
Harmonic Image Rejection	>95 dB	•
406 MHz Input Frequency	406.0 – 406.1 MHz	•
406 MHz RF Input VSWR	1.20:1	•
406 Input Impedance	50Ω	•
406 Input Connector	SMA-female RP	•
Receiver power requirements (from USB port)	+5V @ <500 mA	•
Operating Temperature Range	-40°C to +85°C	•
Storage Temperature Range	-55°C to +85°C	•
Dimensions:	108 x 63 x 26 mm 4.3 x 2.5 x 1.0 inches	•
Weight:	0.230 kg 0.5 lbs	•
INCLUDED		
USB Cable – (3 m length)		•
AC to USB Adapter		
Ethernet cable (3 m length)		
Molded 406 MHz Monopole Antenna		•
Outdoor 406 MHz Antenna		O
GPS Active Antenna (5 m cable length)		
Certificate of Calibration		O
Operator's Manual		•
User Interface Software		•
FEATURES		
Receive all Cospas-Sarsat Frequency channels		•
Decode all Cospas-Sarsat Protocols		•
Measure 406 MHz Frequency		•
Measure 406 MHz Receive Power		•
Adjustable Receiver Sensitivity		•
USB Interface		•
Ethernet Interface		
GPS Receiver		
GPS Antenna		
GIS Mapping		•
Audio and LED Alarms		•
Alarm Output – relay contacts		•

O = optional

Minimum Requirements
Windows XP SP3, USB 1.1, Java 7.

REGULATORY INFORMATION

CANADA

This Class B digital apparatus complies with Canadian ICES-003.

USA

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This equipment may not cause harmful interference.
2. This equipment must accept any interference that may cause undesired operation.

EUROPEAN UNION

DECLARATION OF CONFORMITY

Supplier Name: WS Technologies Inc.

Supplier Address: #2 – 215 Neave Road
Kelowna, B.C.
Canada V1V 2L9

Declares under our sole responsibility that the following product

Product Name: 406 Beacon Monitor
Model FBM200

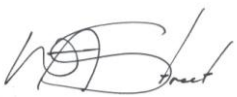
Conforms to the following normative European and International Standards

Normative: EN 301 489-1 V1.9.2 (2011-09)
Standards: EN 55022:2006
EN 61000-4-2:2008
EN 61000-4-3:2008
EN 61000-4-4:2004
EN 61000-4-5:2005
EN 61000-4-6:2008
EN 61000-4-11:2004

Following the provisions of the normative European Council Directive 2004/108/EC EMC Directive.

Product conformance to cited product specifications is based on sample (type) testing, evaluation or assessment at Celltech Labs, Inc. located in Kelowna, British Columbia, Canada.

Supplementary Information: This product was tested and complies with all the requirements for the CE Mark.



W.A. Street
President
WS Technologies Inc.
#2 – 215 Neave Road
Kelowna, BC
Canada V1V 2L9
Phone: (250) 765-7583
FAX: (250) 765-1652

WARRANTY INFORMATION

WS Technologies Inc. (WST) warrants the products manufactured by WST to be free from defects in material and workmanship for one year from the date of shipment. Liability of WST under the foregoing warranty is limited to the replacement or repair, at the option of WST, of any products which show defective workmanship or materials within one year from the date of shipment, which replacement shall be made FOB WST's facility in Kelowna, BC, CANADA, upon proof satisfactory to WST of the defect claimed. Except for the foregoing warranty, WST makes no other warranty, express or implied, as to the merchantability or fitness for a particular purpose of products shipped or the performance thereof, and does not make any warranty to the purchaser's customers or agents.

CALIBRATION

The Calibration of the FBM200 Beacon Monitor is optional. If required, the calibration date appears on the Calibration Certificate supplied with the Beacon Monitor and the Cal Due date appears on the side of the Beacon Monitor housing.

Before returning a unit for calibration, email **returns@wst.ca** to obtain an RMA (Return Materials Authorization) number and shipping instructions. Once calibrated a new Cal Due date label will be placed on the unit and a new Calibration Certificate will be issued.

RETURNS

An RMA (Return Materials Authorization) number must be obtained by emailing **returns@wst.ca** . If the unit being returned is not covered under warranty, a minimum repair charge will apply. If damage is severe or the products have been tampered with, there may be additional charges.

MISSION CONTROL CENTER (MCC) CONTACT INFORMATION

In the event that you believe a Normal Mode (Live Burst) has been transmitted with sufficient power to cause a false alert, the nearest Mission Control Centre (MCC) should be contacted. Please refer to the following list for the MCC in your country.

Country/Region	E-mail	Phone	Fax
Algeria	mcc_alger@mdn.dz	(213.2) 1491647	(213.2) 1491648
Argentina	armcc@sass.gov.ar	(54.11) 44802486	(54.11) 44802486
Australia	rccaus@amsa.gov.au	(61.2) 62306820	(61.2) 62306868
Brazil	brmcc@cindacta1.aer.mil.br	(55.61) 33652964	(55.61) 33652964
Canada	cmcc2@sarnet.dnd.ca	(1.613) 9657265	(1.613) 9657494
Chile	chmcc@fach.cl	(56.2) 9764042	(56.2) 9764043
China	cnmcc@mail.eastnet.com.cn	(86.10) 65293298	(86.10) 65293296
Chinese Taipei	tamcc@ms23.hinet.net	(886.2) 87703661	(886.2) 25450234
France	fmcc@cnes.fr	(33.5) 61254382	(33.5) 61274878
Greece	grmcc@hcg.gr	(30.210) 4191395	(30.210) 4082870
Hong Kong, China	hkmrcc@mardep.gov.hk	(852) 22337999	(852) 25417714
India	inmcc@istrac.org	(91.80) 28094546	(91.80) 28371857
Indonesia	indonesia_mcc@yahoo.com	(62.21) 5501449	(62.21) 5501513
Italy	itmcc247@cospas-sarsat-italy.it	(39.080) 5341571	(39.080) 5342145
Japan	jamcc@kaiho.mlit.go.jp	(81.3) 35916106	(81.3) 35916107
Korea (Republic of)	komcc2@kornet.net	(82.32) 8352594	(82.32) 8352895
Nigeria	mcc@nema.gov.ng	(234) 94134341	(234) 94131749
Norway	mailto@jrcc-bodoe.no	(47) 75559000	(47) 75524200
Pakistan	sckhi@suparco.gov.pk	(92.21) 34690793	(92.21) 34690797
Peru	pemcc@dicapi.mil.pe	(51.1) 4202020	(51.1) 4291547
Russian Federation	cmc@marsat.ru	(7.495) 6261215	(7.495) 6269375
Saudi Arabia	sar-samcc@gaca.gov.sa	(966.2) 6150170	(966.2) 6150171
Singapore	CAAS_RCC@caas.gov.sg	(65) 65425024	(65) 65422548
South Africa	maritimeradio@ixmail.co.za	(27.21) 5529752	(27.21) 5513760
Spain	spmcc@inta.es	(34.928) 727104	(34.928) 727107
Thailand	bkkrcc@aviation.go.th	(66.2) 2860506	(66.2) 2873186
Turkey	trmcc@denizcilik.gov.tr	(90.312) 2313374	(90.312) 2312902
United Arab Emirates	aemcc@uae-jrcc.ae	(971.2) 4056144	(971.2) 4496844
United Kingdom	ukmcc@atlas.co.uk	(44.1309) 616204	(44.1309) 678309
United Kingdom (alt)	-	(44.1309) 678304	(44.1309) 678309
United States	usmcc@noaa.gov	(1.301) 8174576	(1.301) 8174568
Vietnam	vnmcc@vishipel.com.vn	(84.31) 3822181	(84.31) 3842979

NOTES

Enter important data here for future reference.

Product data
FBM200A serial number: _____
Date Purchased: _____

Email data
Outgoing Mail Server: _____
Outgoing Mail Server Port: _____
SMTP Username: _____
SMTP Password: _____

SMS data
SMS Mail Server: _____
SMS Mail Sever Port: _____
SMTP Username: _____
SMTP Password: _____

Contacts
Supervisor Contact: _____
Phone Number: _____

MCC Contact Name: _____
Phone Number: _____
Email Address: _____

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