



Beacon Monitor

Operator's Manual

for model:

FBM200A

Version 1.00

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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:

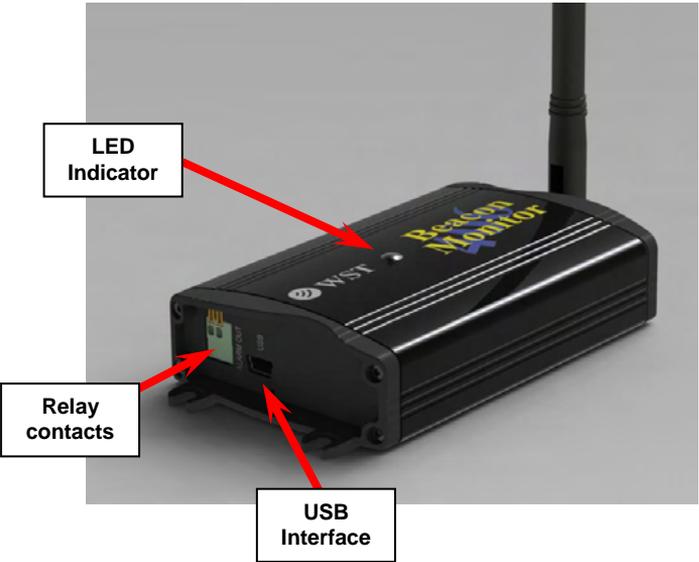
- Outdoor Antenna
- Antenna Extension cable
 - 25' (7.6m)
 - 50' (15m)
 - 75' (23m)
 - 100' (30m)
- Antenna mounting hardware
- Certificate of Calibration (optional)

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:



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

Go to www.wst.ca and download the latest version of the Beacon Monitor software. The following message will appear.



Click **Run** to have the application installed 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.



SETTING UP THE APPLICATION

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



The Connection Status in the Status section shows a red X, indicating the receiver is not connected.

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 unit. 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 two main viewing modes:

1. Monitor Mode
2. Setup Mode

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

Monitor Mode:

Full Screen button

Monitor button

Setup button

Status section

Beacon burst log area

Beacon burst decode area

Index	Date Received (yy-mm-dd)	15 Hex ID	Country	Frequency (Hz)	Level (dBm)
64	2012-04-26 09:25:36	278DE95FAF40D33	Canada	406029455	-39
63	2012-04-24 09:08:12	A1A65CEEC739241	Switzerland	406029041	-51
62	2012-04-24 09:07:39	A1A65CEEC739241	Switzerland	406029041	-52
61	2012-04-24 09:06:08	278DE95FAF40D33	Canada	406029041	-49
60	2012-04-24 08:40:59	278DE95FAF40D33	Canada	406029041	-50
59	2012-04-23 17:20:27	Z79C000000F8F91	Canada	406029240	-49
58	2012-04-23 15:56:15	278DE95FAF40D33	Canada	406029041	-48
57	2012-04-23 15:30:01	A78D014ED540401	Canada	406027937	-29
56	2012-04-23 15:12:08	A1A65CEEC739241	Switzerland	406029041	-44
55	2012-04-23 15:11:51	A1A65CEEC739241	Switzerland	406029041	-49
54	2012-04-23 15:11:36	A1A65CEEC739241	Switzerland	406029041	-49
53	2012-04-23 15:09:15	A1A65CEEC739241	Switzerland	406029041	-46
52	2012-04-23 14:57:42	A78D014ED540401	Canada	406027930	-27
51	2012-04-23 14:03:18	A78D014ED540401	Canada	406027930	-35
50	2012-04-23 14:03:09	A1A65CEEC739241	Switzerland	406029041	-45

Index: 50
Date: 2012-04-23 15:56:15
15 Hex ID: 278DE95FAF40D33
Full Hex Code: F17E2F0C0F44F70E09C5B0AF600000000
Protocol: EPBD Serial SLP Protocol
Country: Canada (316)
Burst Mode: Normal Mode (Long)
C/S Approval #: 978
Serial Number: 12295
Position Source: Internal GPS
Auxiliary Radio: None
Site ID: Default
Latitude: N 38° 45'00"
Longitude: W 76° 45'00"

Monitor button

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

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 Computer Status, and the Receiver Status.

Single click on each heading in the Status section to collapse or expand the section under each heading.

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 is sortable by clicking on the header of the column that you wish to sort.

Double 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.

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.

Single click on each heading in the Setup menu to collapse or expand the section under each heading.

Setup panel

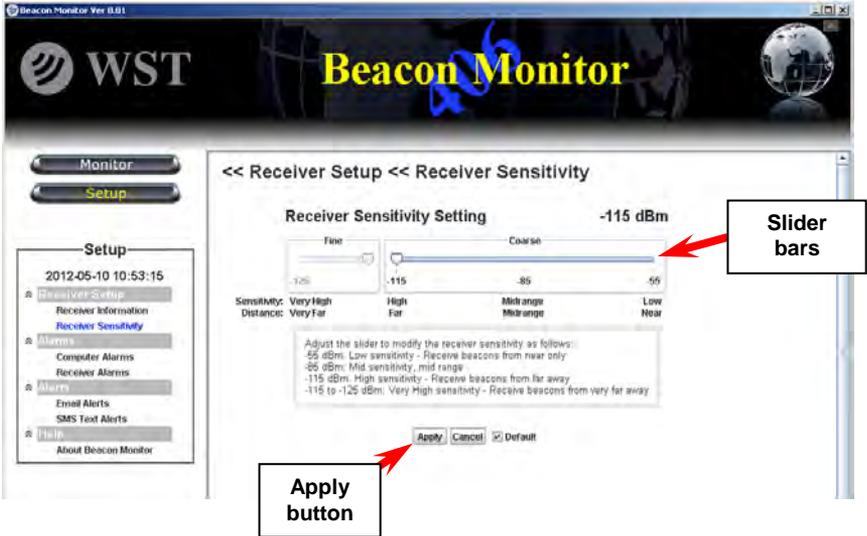
The Setup panel is the information or setup area for each item in the Setup menu.

Receiver Setup

Receiver Information

This screen shows Receiver Information including model number, serial number, Receiver firmware version, and internal temperature.

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.

To monitor the ratio of interference events versus valid burst events, go to the Receiver Information screen in Setup Mode. The Burst Counter will show the number of invalid bursts, the number of valid bursts, and the elapsed time in minutes. The Burst Counter numbers are reset each time the Beacon Monitor application is started.

Click on the Apply button whenever a change is made.

Alarms

Computer Alarms



There are three alarm notification methods on the computer; Visual Alarm, Alarm Pop-up, and Audio Alarm. When an alarm notification is triggered by a received burst, an Alarm Reset button appears below the Setup button. To clear the alarm, click on the **Alarm Reset** button.

Visual Alarm

A red "ALERT" will flash at the top of the screen.



This alarm is reset using the Alarm Reset button.

Alarm Pop-up

A pop-up notification will appear in front of any application running on the computer.



The Pop-up notification is closed by clicking on the X.

Audio Alarm

An Audio Alarm will sound through the computer audio system. This alarm is reset using the **Alarm Reset** button.

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 23 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.

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

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 the changes.

Alerts

E-Mail Alerts

Email alerts can be automatically sent to 2 email addresses. Check or un-check the boxes on the E-mail Alerts setup page to suit your requirements.

The screenshot shows the 'Beacon Monitor Ver 0.01' application window. The title bar includes the WST logo and the text 'Beacon Monitor'. The main window has a dark background with a globe and the text 'Beacon Monitor' in yellow. On the left, there is a navigation pane with buttons for 'Monitor' and 'Setup'. The 'Setup' section is expanded, showing a tree view with 'Receiver Setup', 'Alarms', 'Alerts', and 'Email Alerts'. The 'Email Alerts' section is selected, displaying the following configuration options:

- Send Email alerts:** Normal Mode (Live Burst), Self Test Mode, Test Protocol
- Sender Information:** Company Name: ABC Co. Ltd, Email Address: usen@domain.com
- Server Information:** Outgoing (SMTP) Mail Server: mail.mailserver.com, Outgoing Mail Server Port (default 25): 25
- Email Recipient:** Email Address #1: usen@mycompany.com, Email Address #2: other_user@mycompany.com
- Add Message:** No added message.

At the bottom of the form are buttons for 'Test', 'Apply', and 'Cancel'.

In the Sender Information section enter your Company Name. This information will appear on the email report. Enter the Email Address. This will be the email address the email will show originating from.

Enter Server Information for your outgoing mail server. Contact your network administrator for this information.

Enter the email addresses for up to two recipients. If only one is required ensure the second field is blank.

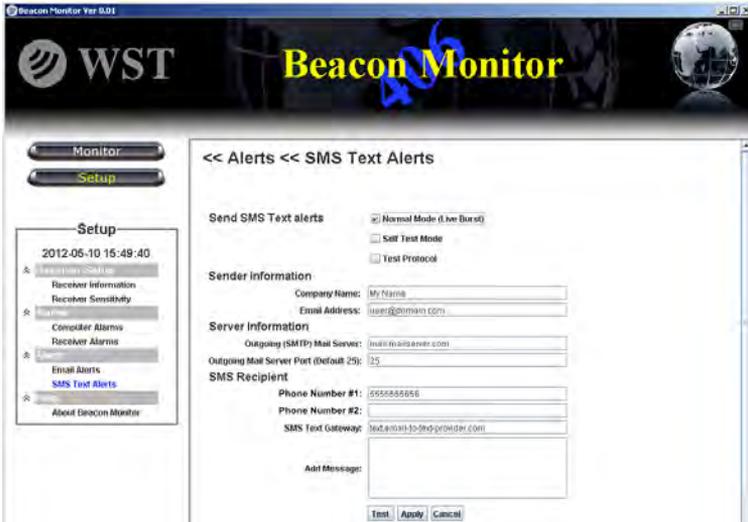
Enter any addition information desired in the message field.

Click **Apply** to save the changes.

Click **Test** to send a test email.

SMS Alerts

SMS Text Messaging alerts can be automatically sent to two numbers. Check or un-check the boxes on the SMS Alerts setup page to suit your requirements.



The screenshot shows the 'Beacon Monitor Ver 0.01' application window. The title bar includes the WST logo and the text 'Beacon Monitor'. The main window has a dark header with the WST logo and 'Beacon Monitor' text. Below the header, there are two buttons: 'Monitor' and 'Setup'. The 'Setup' button is highlighted. On the left side, there is a 'Setup' panel with a timestamp '2012-05-10 15:49:40' and a tree view containing: Receiver Status, Receiver Information, Receiver Sensitivity, Consider Alarms, Receiver Alarms, Email Alerts, SMS Text Alerts (highlighted), and Alert Beacon Monitor. The main content area is titled '<< Alerts << SMS Text Alerts'. It contains several sections: 'Send SMS Text alerts' with three checkboxes: 'Normal Mode (Use Burst)' (checked), 'Self Test Mode', and 'Test Protocol'; 'Sender information' with fields for 'Company Name' (My Name) and 'Email Address' (users@domain.com); 'Server information' with fields for 'Outgoing (SMTP) Mail Server' (mail.beaconmonitor.com) and 'Outgoing Mail Server Port (Default: 25)' (25); 'SMS Recipient' with fields for 'Phone Number #1' (5555555555), 'Phone Number #2', and 'SMS Text Gateway' (text.entrust-to-ops.provider.com); and an 'Add Message:' text area. At the bottom right of the form are three buttons: 'Test', 'Apply', and 'Cancel'.

In the Sender Information section enter your Company Name. This information will appear on the email report. Enter the Email Address.

Enter Server Information for your outgoing mail server. Contact your network administrator for this information.

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. Refer to the example below:

Example: My phone number is (250) 555-1234 and the carrier is Telus Mobility. From the Wikipedia website the Mail-to-SMS Gateway is number@msg.telus.com. Enter your phone number in the Phone Number field. Enter the address to the right of the @ sign in the SMS Text Gateway field.

Sender Information

Company Name: ABC Co. Ltd
Email Address: user@domain.com

Server Information

Outgoing (SMTP) Mail Server: mail.mailserver.com
Outgoing Mail Server Port (Default 25): 25

SMS Recipient

Phone Number #1: 2505551234
Phone Number #2:
SMS Text Gateway: rmsg.telus.com

Enter any addition information desired in the Message field.

Click **Apply** to save the changes.

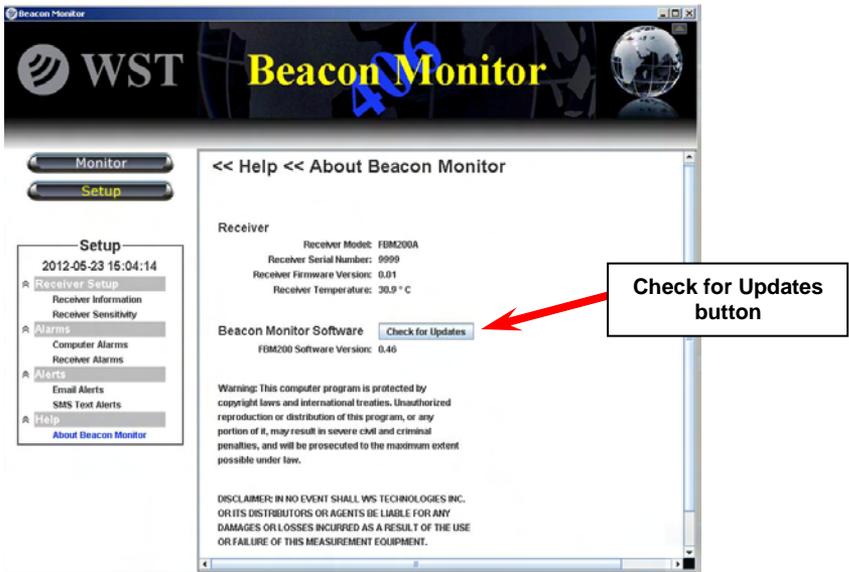
Click **Test** to send a SMS message.

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

Help

About Beacon Monitor

The About Beacon Monitor screen shows Receiver Information including model number, serial number, Receiver firmware version, and internal temperature, and Beacon Monitor Software revision.



Check for Updates

The Beacon Monitor software will check for updates automatically. When a software update is available a pop-up notification will prompt you through the update.

Alternatively, you can manually check for any available software update by clicking on the *Check for Updates* button. If a software update is available a pop-up notice will advise you.

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 entire line item will be highlighted in red (see Index item #7 below). If another Normal Mode burst is received it will be highlighted in red and the previous burst highlight will change to pink.

Visual Alarm

Normal Mode (Live Burst) reception

Beacon Monitor Ver 0.01

WST

Monitor
Setup
Alarm Reset

Status
2012-05-14 10:42:49

- Connection Status
 - Receiver Connected
- Computer Status
 - Visual Alarm On
 - Alarm Popup Off
 - Audio Alarm Off
 - E-mail Alerts Off
 - SMS Alerts Off
- Receiver Status
 - LED/Relay Alarm On
 - Audio Alarm Off
 - Sensitivity: 55 dbm

Index	Date Received (yy-mm-dd)	15 Hex ID	Country	Frequency (Hz)	Level (dBm)	Comments
7	2012-05-14 10:42:27	278DE95FFA40033	Canada	406028662	-32	
6	2012-05-14 10:42:00	278DE95FFA40033	Canada	406028662	-32	
5	2012-05-14 10:41:53	278DE95FFA40033	Canada	406028662	-31	
4	2012-05-14 10:41:30	A1A65CEEC739241	Switzerland	406028662	-32	
3	2012-05-14 10:41:23	BEEE4099A00022D	Australia	406028662	-32	
2	2012-05-14 10:40:57	278DE95FFA40033	Canada	406028662	-33	
1	2012-05-14 10:39:28	A1A65CEEC739241	Switzerland	406028662	-37	

Index: 7
Date: 2012-05-14 10:42:27
15 Hex ID: 278DE95FFA40033
Full Hex Code: FFE29F0C0F445F020E95C56A0F600003D0
Protocol: EPIRB Serial SLP Protocol
Country: Canada (316)
Burst Mode: Normal Mode (L ong)
C.S. Approval #: 978
Serial Number: 12285
Position Source: Internal GPS
Auxiliary Radio: None
Bits 107-110: Default
Latitude: N 39° 45'00"
Longitude: W 76° 45'00"

Once the user clicks on the burst, the pink or red highlight disappears and the 15 HEX ID will remain in red.

FREQUENTLY ASKED QUESTIONS

Q: How do I manually check for software updates?

A: Go to Setup > About Beacon Tester. Click on the **Check for Updates** button.

Q: Do I need internet access to run Beacon Monitor?

A: Internet access is required to download and install the Beacon Monitor application; for the program to determine if software updates are available; 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 10°C 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.

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		○
GPS Active Antenna (5 m cable length)		
Certificate of Calibration		○
Operator's Manual		•
User Interface Software		•
○ = optional		
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		•

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

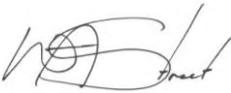
Conforms to the following normative European and International Standards

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.



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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) 7271104	(34.928) 7271107
Thailand	bkkrrcc@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

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Text Number: _____

SMS Text Gateway: _____

Contacts

Supervisor Contact: _____

Phone Number: _____

MCC Contact Name: _____

Phone Number: _____

Email Address: _____