Binatone

Latitude 250

USER GUIDE

Antenna

PTT(push to talk)
button
-press and hold
to transmit.

CALL (◄)) button
-press to send a ringing
tone to other PMR units.

UP(▲) / DOWN(▼) buttons
-press to change
channels, volume, and
to select settings
during programming.

Speaker

LCD screen
-Displays the current
Channel selection and
other radio symbols.

Power charge socket (⚡)
& Headset socket (◯)
- micro-USB socket for
charging installed batteries
- 2.5mm headset socket

MENU (✖) button
-press to program
the PMR settings.

MIC(microphone)

Power (◌) button
-press and hold to
turn the PMR
unit ON or OFF.

## 1. LCD Screen

Channel Number. Changes from 1 to
8 as selected by the user.

📶 Indicates battery charge level

SC Displays when Scan function is activated

FM	Displays with frequency when the FM radio is activated
🔒	Displays when Key Lock function is activated
TX	Displays when transmitting a signal.
RX	Displays when receiving a signal.
📶	Indicates the speaker volume level

Mon-Fri from 8.00am to 8.00pm
Sat from 8.30am to 2.00pm
**0844 557 9677 (UK only - Calls cost 7p per minute plus
your telephone company's access charge.)
/ 0818 762092 ROI or send email to us:
enquiries@binatone-support.co.uk   www.binatoneglobal.com**

2. Installation

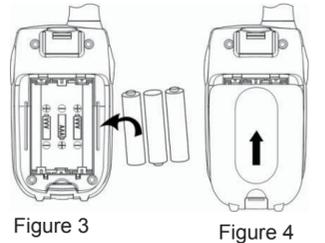### 2.1   Removing the Belt clip
a. Pull the belt clip latch
   away from the PMR.
b. While pulling the belt
   clip latch, push up
   the belt clip as
   shown in Fig. 1.
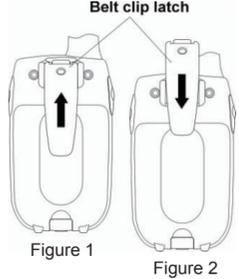
2.2   Installing the Belt clip
a. Slide the belt clip into
   the slot as shown
   in Fig. 2.
b. A "click" indicates the
   belt clip is locked into
   its position.

Belt clip latch

Figure 1

Figure 2

2.3   Installing the Batteries

Figure 3   Figure 4

a. Unclip the battery compartment cover.
b. Insert the 3xAAA batteries. Position the batteries
   according to the polarity marking
   in the battery compartment. See Fig.3
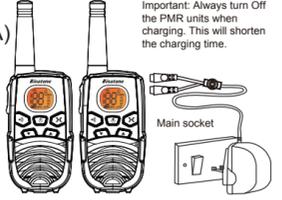c. Replace the battery cover. See Fig. 4.

Notes:
• *Use only same type and make of batteries on the PMR units.*
• *The PMR units have a built-in Power Saver (PS) for maximum
  battery life, but when not in use, turn the units OFF to save
  battery power.*
• *Remove the batteries if the units will not be used for a long period
  of time.*

2.4 Charging the batteries using Adapter
Insert the USB connector (5.0V DC/400mA)
mains adaptor into the power-in
micro-USB socket in the side of
the Radio unit. Plug the mains
USB adaptor into a suitable mains
socket with the switch on the socket
to Off, and then turn it On.

Important: Always turn Off
the PMR units when
charging. This will shorten
the charging time.

Main socket

CAUTION!
Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.
Use only AAA size Ni-MH, 1.2V, 600mAh rechargeable batteries.

The Latitude 250 must be charged using the mains USB adaptor
provided. Using any other USB adaptor will result in any non-compliance
with EN60950-1 and will invalidate the approvals and warranty.

It takes about 10 hours to fully recharge the batteries if they
completely run down. New batteries take up to 14 hours to fully charge.

Note:
➢ Do not mix battery types when using the PMR unit.
➢ The PMR unit has a built-in power saver (PS) for maximum battery
  life, but when not in use, turn the units Off to save the battery power.
➢ Remove the batteries if the unit will not be used for a long period of time.
➢ Dispose of used batteries safely at a recycling centre. NEVER put
  them anywhere they could get burnt or punctured.

Battery meter
The battery icon is located in the left corner of the LCD panel. This battery icon indicates
the battery level, and when it reaches its minimum level, the handset will emit two beep
tones and then it will automatically turn Off the power.

Battery life
The PMR has a built in power saver feature to make the batteries last longer. But when
you are not using the handset, it's better to switch off to save the battery power.

3. Operation
The talk range depends on the environment and terrain. It will reach
up to about 5km in wide open spaces, without obstructions such as
hills, buildings or trees.
Don't use two PMR units too close together otherwise you may get
loud feedback interference.

3.1   Turning the Unit ON/OFF
To Turn ON;
a. Press and hold the ◌ (Power) button. A special "beep" sound
   will be heard. The LCD screen will display the current channel.
To Turn OFF;
a. Press and hold the ◌ (Power) button. A single "beep"
   will be heard and LCD screen will turn blank.

3.2   Adjusting the speaker volume
There are 8 volume levels, the current speaker volume level
is displayed on the LCD screen.
To adjust the speaker volume level, press the ▲ button to
increase, or press the ▼ button to decrease. The LCD screen will
display the speaker volume icon bars ascending, or descending
respectively.

3.3   Receiving a Call
The unit is continuously in receive mode when the unit is turned
ON and not transmitting. When a signal is received on the current
channel, the receive signal icon "RX" will be displayed on the
LCD screen.

3.4   Transmitting (sending)
a. Press and hold the **PTT** button to transmit your voice. The
   transmit signal icon "TX" will display on the LCD screen.
b. Hold the unit in a vertical position with the Mic (Microphone)
   5 cm away from the mouth. While holding the **PTT** button,
   speak into the microphone in a normal tone of voice.
c. Release the **PTT** button when you want to finish transmitting.

Important:
• *In order for other people to receive your transmission, they must
  also be on the same channel that you are currently using. Refer
  to the "Changing Channel" section for more information.*
• *When the PTT and/or CALL buttons are continuously pressed,
  your PMR cannot receive any transmissions.*

3.5   Roger Beep
The Roger beep is a tone which is automatically transmitted
whenever the **PTT** button is released. This alerts the receiving
party that you have ended the transmission.

3.6   Changing Channels
The PMR has 8 available channels. To change channels, in
normal mode;
a. Press the ✖ (Menu) button, the channel icon "1" on the LCD
   screen will start blinking.
b. While the Channel icon is blinking, press the ▲ or ▼
   button to select the desired channel. The channel changes
   from 1 to 8, or vice versa.
c. Press the ✖ (Menu) button to confirm your setting and return
   to the standby mode.

3.7   Calling (Paging) Tone
You can use the CALL button to send a tone to other users on
the same channel. To activate this feature;
a. With the PMR in normal mode, press and release the ◄))
   button. The unit will transmit a 2-second page tone to any other
   unit/s set with the same channel within transmitting range

3.8   Channel Scan
Your radio can scan the 8 channels for any activity. This allows to
find other radios without having to manually change the channel.
To activate this feature:
a. Press and hold the ✖ and ▲ button at the same time and
   channel scanning will start immediately, with SC displayed on the
   screen and the channel number cycling through the channels.
   When a signal is detected, the unit will pause on that channel, while
   receiving the signal and for a further 3 seconds.
b. Press the **PTT** button to stop scanning and talk on that channel,
   or press the ▲ or ▼ button to manually restart the scanning.
c. To stop scanning, press the ✖ button and return to standby mode.

3.9   Monitor Feature
You can use the Monitor feature to check for weaker signals in the
current channel.
To activate this feature:
a. Press and hold the ▲ and ▼ button at the same time. The
   receiving icon "RX" appears on the display, and the speaker
   turns on and plays any signals on the current channel.
b. Press the ✖ button to stop the monitoring.

3.10 To Lock the Buttons
With the buttons lock you can still transmit (TX), or call the current
channel, but you can not change the volume. To activate this
feature;
In the standby mode, press and hold the ✖ until the 🔒
icon appears on the LCD screen.

To unlock the buttons
Press and hold again the ✖ button until the 🔒 icon
disappears on the LCD screen.

3.11 FM Radio function
While in standby mode, press and release the power button. The FM
Frequency will display in the LCD screen. Press the Up or Down
button to adjust the FM frequency channel.
You can still transmit (TX) and receive (RX) calls on your current
channel, with the FM radio being interrupted during calls.
Press and release the Power button to go back to PMR frequency
mode.

3.12 Power Saving

Your PMR unit has special circuitry designed to extend the life of your battery. When the unit is not used for 4 seconds, it will automatically switch into a low power mode. The Power saving feature does not affect the PMR ability to receive transmissions. When a signal is detected, it automatically returns to full power mode

3.13 Low Battery Meter Indicator

The PMR can detect the low battery level when the battery voltage goes low. When the battery voltage is at a low level, the empty battery symbol will appear and start to blink.
The battery icon will continue to blink until the battery is totally drained.

Note: To have good communication, when the battery is at a low level, recharge or replace the batteries with new ones.

3.14 Microphone/Earphone/Charger Jack

The Latitude 250 is equipped with an auxilliary microphone, earphone, and charge jack located at the opposite side to the **PTT** button.
Note: It requires a microphone/earphone with a 2.5mm, jack connector and this is not supplied with your Latitude 250.

3.15 Using a Hands free kit (Headset)

You can plug a hands free kit into the right side of your Latitude 250 handset.
With a headset connected, you still need to press the PTT button to transmit and talk with other radios.

4. Specifications

4.1 Channel Frequency Table

Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	446.00625	5	446.05625
2	446.01875	6	446.06875
3	446.03125	7	446.08125
4	446.04375	8	446.09375

Channels Available	8 Channels
Output Power (TX)	0.5W
Range	Up to 5km(3.1 Miles).

4.2 Effective Range

The Transmission range of the product is dependent on the environment terrain where it is being used, the following diagram attempts to guide the user on the sort of performance to expect for everyday use.
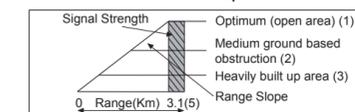
4.3 Range Check

The Transmission range will be affected as shown in the above diagram. The transmitting range typical values for different environment conditions will be (1) 5 km (2) 2.5 km (3) 1km. It should be remembered that these are only guide values as actual achieved distances will be dependent on the environment and terrain.

5. Guarantee

The Binatone Latitude 250 is fully guaranteed for 12 months from the date of purchase shown on your sales receipt. The guarantee does not cover damage by misuse or negligence, or by excessive voltage.

Please keep your sales (till) receipt - this is your guarantee. You should also keep the original packaging materials.

When unpacking your Binatone Latitude 250, check for visible damage. If you see any damage, do not use the PMR - return the whole unit to where you bought it.

If your Binatone Latitude 250 develops a fault, refer to the "Troubleshooting Guide." section of this manual. If you can't solve the problem, return the whole unit as follows;

While the unit is under guarantee
1. Pack up all the parts of your Latitude 250, using the original packaging. Remember to include the mains adaptor.
2. Return the unit to the store where you bought it, and make sure you take your sales receipt as your proof of purchase.
3. In the unlikely event that you need to return your Latitude 250 to our Repair Centre while it is under Guarantee, please include the sales receipt. There may be a handling charge for the repair of your unit under Guarantee.

Repair after the Guarantee has expired
1. If the unit is no longer covered by the Guarantee, first follow step 1 as for repair under Guarantee, Then...
2. Call our service Department on 0844 557 9677 and ask for a quotation of the repair charge, and details of where to send your Latitude 250 for repair.
3. Return your Latitude 250 to the address given by the Service Department, making sure to include your name and address, and a cheque or postal order for the value of the repair charge.

This does not affect your statutory rights.

Binatone Telecom plc operates a policy of continuous product improvement, and so reserves the right to make changes to the product and functions without prior notice.

6. Troubleshooting Guide

Symptom	Solution
No power.	• Check the batteries are installed properly. • The batteries may be weak. • Recharge the batteries or replace the old batteries with new ones.
Reception is weak.	• Press the ▲(UP) button to increase the receiver volume level. • The receiving signal may be weak and/or out of range. • If this happens, press the ▲ (UP) and ▼ (DOWN) buttons at the same time to activate the Monitor feature.
Cannot change channels.	• To change channels, press the ✕ (MENU) button once then press the ▲ (UP) or ▼ (DOWN) buttons to change the current channel. • Batteries may be weak. • Recharge the batteries or replace the old batteries with new ones.
Range is limited.	• Batteries may be weak. • Recharge the batteries or replace the old batteries with new ones. • Replace with new batteries if the battery charge level goes low quickly. (The battery low indicator ▱ flashes on the display.) • The maximum range will vary depending on terrain and environment. • Open fields provide the maximum range, while steel/concrete structures, heavy foliage, and use in buildings and in vehicles may limit the range significantly. • Wearing the radio close to the body, such as in a pocket or on a belt, will decrease range; change the location of the radio.
Sound distortion problems.	• If you are transmitting, speak in a normal tone of voice, 5 cm away from the MIC (microphone). • If you are receiving, lower the volume to a comfortable level. • Radios too close. Radios must be at least 1.5 meters apart; increase your distance. • Radios too far apart. Obstacles interfere with transmission. Talk range is up to 5 Kms in clear unobstructed conditions.
No communication	• Check the Channel setting. Both the Transmitting and Receiving PMR units should be tuned to the same Channel.

Binatone

EC Declaration of Conformity

We the manufacturer / Importer :   Binatone Telecom Plc
                                     1 Apsley Way London
                                     NW2 7HF, United Kingdom.

Declare under our sole responsibility that the following product

Type of equipment: Private Mobile Radio
Model Name: Latitude 250 Twin
Country of Origin: China
Brand: Binatone

complies with the essential protection requirements of R&TTE Directive 1999/5/EC on the approximation of the laws of the Member States relating to *Radio Spectrum Matters*, the EMC Directive (2014/30/EU) on the approximation of the laws of the Member States relating to *electromagnetic compatibility (EMC)* and Radio Equipment & Telecommunications Terminal Equipment Directive (1999/5/EC) - R&TTE, Article 3.1(a)
2014/35/EU relating to *Electrical Safety.*

RF Portion: EN 300 296-2 V1.4.1:2013

EMC: EN 301 489-5 V1.3.1:2002
                            EN 301 489-1 V1.9.2:2011
SAR Portion: EN 50566: 2013

Electrical Safety: EN 60950-1:2006/A2:2013

ErP Portion: EC 1275/2008
We hereby declare that [all essential radio test suites have been carried out and that] the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.
The product is labelled with the European Approval Marking CE as show. Any Unauthorized modification of the product voids this Declaration.

Manufacturer / Importer
(signature of authorized person)

Waste electrical products must not be disposed of with household waste. This equipment should be taken to your local recycling centre for safe treatment.

Signature: (K.H.Moeller, CTO)

London,

Signature: _____

CE

Place & Date: 29-Sep, 2016