Using the PMR, *continued*

Scanning channels

When the SCAN function is turned on, the handset will continuously scan through all eight channels until it finds one on which another user is transmitting.

1 📖 **Press the MENU button TWICE**

   SCAN flashes on the display.

2 ▲▼ **Press the ▲ or ▼ button to start or stop scanning**

   When the handset detects an active channel, it will pause on that channel.

3 **Press EITHER**

   ENTER ▶ the **ENTER** button to set this as the current channel

   TALK ▶ the **TALK** button to transmit on this channel

   ▲▼ ▶ the **▲** or **▼** button to continue scanning

Monitoring two channels at once (Dual Watch)

1 📖 **Press the MENU button THREE times**

   DW appears on the display, as well as the currently selected channel.

2 ▲▼ **Press the ▲ or ▼ button to select a second channel**

   The display switches backwards and forwards between the two selected channels. If the handset detects a signal on either channel, it will stop and receive it.

   OR, to monitor for weak signals on the channel currently shown:

3 MONI **Press the MONI button; to stop monitoring, press the MONI button again**

   To end Dual Watch mode

4 TALK **Press the TALK, CALL or ENTER button**
   CALL
   ENTER

Locking the buttons

With the buttons locked, you can transmit (**TALK**), receive or monitor (**MONI**) the current channel. But you can't change the volume (▲▼) or use the **MENU** button.

   To lock the buttons:

▶ ENTER **Press and hold the ENTER button until ⛔ appears on the display**

   To unlock the buttons:

▶ ENTER **Press and hold the ENTER button until ⛔ disappears from the display**

6 Using the seconds counter

The MR300 seconds counter (stopwatch) can count up to 99 seconds.

1 📖 **Press the MENU button FIVE times**

   00 flashes on the display.

2 ▲ **To start the counter, press the ▲ button**

   The counter starts running. If it reaches *99* it goes back to *00* and starts again.

3 ▼ **To pause the counter, press the ▼ button**

   The counter flashes on the display. You can press the ▲ button again to restart it; or …

4 ENTER **To reset the counter to *00* press the ENTER button while the display is flashing**

   When you've finished …

5 📖 **Press the MENU button once to return to normal operation**

   If the handset detects a signal on the current channel while the seconds counter is running, it will automatically switch to normal operation and receive the transmission

7 Cleaning and care

To clean your MR300, use a soft cloth dampened with water. **Do not use cleaners or solvents**, which may cause damage not covered by the guarantee.

8 Technical specification

Operating frequency   446.00625 to 446.09375 MHz (eight channels)

Channel spacing   12.5 KHz

Output power   0.5 W

Mains power adapter (battery charger)   input 230 V AC / 50 Hz; output 6 V AC, 200 mA (dual connector)

Battery life (from fully charged to run down)   typically 30 hours

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

Declaration of conformity

The Binatone MR300 conforms to the following standards:
- EN 300296 (RF testing)
- EN 300279 (EMC testing)
- EN 60065 (safety testing)

9 Troubleshooting

Problem	Possible cause — solution
No power	■ Batteries are low or not fitted correctly — **check; replace batteries if necessary** ■ Handset is not switched on — **check**
Weak reception/ no reception/ 'noisy' reception	■ Batteries are low or not fitted correctly ■ Other user is not within range — **check** ■ Handsets are not tuned to the same channel — **check** ■ Volume level is too low — **increase the volume** ■ — **Speak in a normal voice, 5–8 cm (2–3 inches) away from the microphone** ■ Local conditions are impairing reception — **move to a different location**, away from obstructions and as high as possible ■ You're wearing the handset too close to your body — **move the handset** ■ Other user is not transmitting — **check** ■ Other user is too close — **check** ■ There's interference from other users on the same channel — **agree to use a different channel**
Cannot change channels	■ Handset is locked — **check** ■ Batteries are low or not fitted correctly
In VOX mode, the handset transmits all the time	■ Background noise is high — **move to a quieter place** ■ VOX sensitivity is too high — **set it to a lower level**
In VOX mode, the handset doesn't transmit	■ VOX sensitivity is too low — **set it to a higher level** ■ Voice not loud enough — **speak in a louder voice, nearer to the microphone**
Cannot charge the batteries	■ Make sure the jack connector is firmly plugged into the handset; and that mains power is switched on at the socket. ■ Use only **1.2 V NiCd batteries**, as supplied with the unit. You may need to replace the batteries with new ones after many hours of use.

10 Guarantee and service

The Binatone MR300 is fully guaranteed for 12 months from the date of purchase. The guarantee does not cover damage by misuse or negligence, or by excessive voltages.
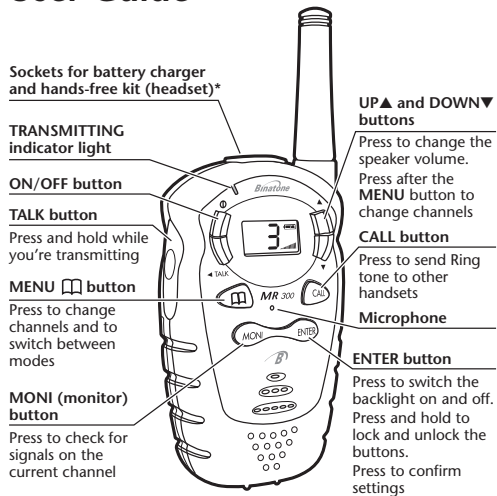
When you first unpack your Binatone MR300, check for visible damage. If you see any damage, don't use the handsets — return the whole system to where you bought it.

If your Binatone MR300 develops a fault, first check the points above. If you can't solve the problem, return the whole system to where you bought it.

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

Binatone   MR300

User Guide

Sockets for battery charger and hands-free kit (headset)*

TRANSMITTING indicator light

ON/OFF button

TALK button
Press and hold while you're transmitting

MENU 📖 button
Press to change channels and to switch between modes

MONI (monitor) button
Press to check for signals on the current channel

UP▲ and DOWN▼ buttons
Press to change the speaker volume. Press after the **MENU** button to change channels

CALL button
Press to send Ring tone to other handsets

Microphone

ENTER button
Press to switch the backlight on and off. Press and hold to lock and unlock the buttons. Press to confirm settings

* A hands-free kit is not supplied as standard

What's on the display

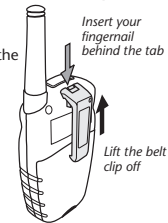|	
	Channel number (1 to 8)
🔋	**Battery charge level** — when this shows 🔋 (low), recharge the batteries.
DW	**Dual Watch** — shown when you're monitoring two channels at once.
⛔	Shown when the buttons are locked.
BUSY	Shown when you're receiving a signal.
SCAN	Shown when the handset is scanning all channels.
VOX	Shown when the handset is in VOX (voice-activated) mode.
▁▂▃▅▆	**Volume level**

1 Getting the handsets ready for use

To remove the belt clip

It's easier to fit the batteries without the belt clip in place.

Insert your fingernail behind the tab

Pull the tab forward (away from the handset) to release the belt clip. Then lift the belt clip off
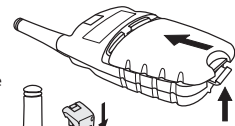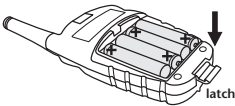
Lift the belt clip off

To fit the batteries

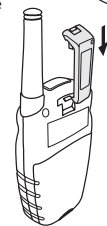1 **Open the locking latch and slide off the battery compartment cover**
2 **Insert the four NiCd batteries, clicking them firmly into place**
   Make sure the + (positive) and – (negative) ends of the batteries are positioned as shown.

latch

3 **Replace the cover and close the latch to lock the cover into place**

To replace the belt clip

Slide the belt clip down into the slot until it clicks into place

2 Getting started

Switching on and off

To switch the handset ON:
▶ (ON/OFF) **Press and hold the ON/OFF button until the display comes on**

To switch the handset OFF:
▶ (ON/OFF) **Press and hold the ON/OFF button until the display goes blank**

You hear a musical tone each time to confirm.

To switch the display's BACKLIGHT on and off:
▶ (ENTER) **Briefly press the ENTER button**

Volume control

To adjust the loudspeaker volume:
▶ (▲▼) **Press the ▲ or ▼ button**

The volume level is shown by the bars on the display. You can change the volume while you're using the handset, or while the handset is idle (switched on but not in use).

3 Safety warnings — important

■ **If you are using a hands-free headset** — to protect your hearing, **do not turn the volume to the highest level**.
■ To reduce radio frequency exposure when you're using your MR300, **hold the handset at least 5 cm (2 inches) from your face**.
■ **Never use your MR300 outdoors in a thunderstorm**.
■ The MR300 is **splashproof**. But if it is likely to get very wet, carry it in a **plastic bag** — you'll still be able to use it through the bag.
■ **If your MR300 gets very wet**, switch it off and remove the batteries. Dry the battery compartment and leave the cover off for a few hours. **Don't use the handset until it is completely dry**.

4 Charging the batteries

The battery charging lead has two connectors, so you can charge both handsets' batteries at once.
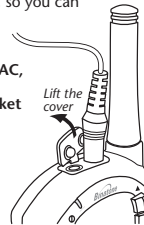
1 **Switch the handset OFF**
2 **Plug the mains power adapter into a 230 V AC, 50 Hz mains socket, with the switch on the socket set to OFF. Then switch on at the socket**

Lift the cover

3 **Plug the jack connector into the socket marked MIC CHG, as shown**

While the batteries are being charged, the charge level symbol blinks.

To check the charge level, disconnect the jack connector from the handset, switch on and check the display.

It takes about **6 hours** to recharge the batteries fully if they've become completely run down. New batteries can take up to 14 hours to charge fully.

The MR300 must be used with mains adapter, part no. **XX002126D**, supplied with the unit. Using any other adapter will result in non-compliance with EN60065, and will invalidate any approval given to this apparatus.

Battery safety warnings

■ **Make sure the battery compartment cover is securely locked in place when you're charging the batteries.**
■ **Don't try to recharge alkaline batteries**; only the NiCd ones as supplied.
■ **Dispose of used batteries safely** — never try to burn them or put them anywhere they could get burnt or punctured.
■ When you're not going to use your MR300 for a few weeks, **take the batteries out** so they don't leak corrosive substances.

Battery life

The MR300 has a built-in **Power Saver** feature to keep the batteries charged for longer. But when you're not using the handset, it's best to switch it off to save battery power. You'll also find that the batteries stay charged for longer if you keep the backlight switched off when you don't need it.

5 Using the Personal Mobile Radio (PMR)

Transmission range

The talk range depends on environment and terrain. It will be greatest (up to about 3 km, or 1¾ miles) in wide open spaces, without obstructions such as hills or buildings. Don't try to use two PMR handsets which are less than 1.5 m (5 feet) apart. If you do, you may get interference.

❗ **PMR446 is an open-licence band — always identify yourself when transmitting, as other people may be communicating on the same channel.**

Changing channels

PMR has **eight channels**, numbered **1** to **8**. To communicate with other PMR users within range, you must all have your handsets tuned to the same channel.

1 (MENU) **Press the MENU button ONCE**
   The current channel number flashes on the display.
2 (▲▼) **Press the ▲ or ▼ button to go to the channel you want**
3 (ENTER) **Press the ENTER button to confirm**

Transmitting and receiving

❗ **Note: PMR transmission is 'one-way-at-a-time' — while you are speaking, you cannot receive a transmission.**

To speak to another handset user

1 (TALK) **Press and hold the TALK button so that the TRANSMITTING light comes on**
2 **Speak clearly into the microphone, in a normal tone — don't shout**
3 **When you've finished speaking, release the TALK button**

To listen to another handset user

▶ **Make sure you are NOT pressing the TALK button**

BUSY is shown on the display when the other person is speaking. Don't try to transmit until they have finished.

Monitoring the current channel

Normally, the MR300 will not pick up very weak signals. But you can monitor the current channel for all sounds.

▶ (MONI) **Press and release the MONI button**
   Your handset will pick up any signals on the current channel, including background noise. It will carry on monitoring for about 20 seconds, unless you press and release the **MONI** button again to stop it.

Ring tone

You can send Ring tone to other handsets within range and tuned to the same channel, to alert them you want to communicate with them.

▶ (CALL) **Press and release the CALL button**
   You'll hear Ring tone for about 3 seconds, while the TRANSMITTING light is on.

   Any other handset within range and tuned to the same channel will hear Ring tone, and may decide to transmit to you.

   You can also use Ring tone at the end of a transmission to signal that you've finished speaking.

VOX (voice-activated transmission) mode

In VOX mode, your handset will transmit whenever it detects your voice (or other noise), without the **TALK** button pressed. It will transmit for at least 2 seconds, even if you stop talking. You may wish to use VOX mode if you're using a hands-free kit (see overleaf).

The level of VOX sensitivity is shown by bars on the display. At the highest level (most bars), the handset will pick up softer noises (including background noise); at the lowest level, it will pick up only quite loud noises.

To turn VOX mode on and off:

1 (MENU) **Press the MENU button FOUR times**
   VOX flashes on the display, and the current level of VOX sensitivity is shown.
2 (▲▼) **Press the ▲ or ▼ button to set the level of VOX sensitivity**
   If you press the ▼ button repeatedly until the 'sensitivity' bars disappear altogether, you turn VOX mode **off**, and **VOX** disappears from the display.
3 (ENTER) **Press the ENTER button to confirm the setting**
   As long as the handset is in VOX mode, **VOX** is shown steadily on the display.

Using a hands-free kit (headset)

You can plug a hands-free kit (not supplied as standard) into the socket on the top of your MR300 handset. With a hands-free kit, you may wish to transmit in VOX mode; but if you find that this doesn't work very well, you can turn the VOX sensitivity off and press the **TALK** button to transmit, as normal.

If you'd like to buy the optional hands-free kit, phone the Binatone Help Line on 01325 304 473.