

About your MR700

You can use your MR700 handset as:

- a **private mobile radio (PMR)**, for communicating with other people
- an **FM receiver**, for listening to broadcast radio stations
- a **panic alarm**
- a **stopwatch** (timer)
- a **torch**

Private mobile radio (PMR) lets you talk to as many people as you wish, as often as you like, with no need for a licence, subscription or tax payment. It's very easy to use, even for children.

Unpacking your MR700

In the box are:

- two MR700 handsets
- one dual charger pod
- one mains power lead with adapter, for the charger pod
- two hands-free headsets
- two rechargeable battery packs

If you need help ...

The **Binatone Help Line** is available from 9.00 am to 5.00 pm, Monday to Friday, on **01325 304 473**.

Emergency calls

In the event of an incident or accident, the MR700 cannot be used for contacting Emergency or Rescue services.

Quick reference

MENU button

Press (a number of times) to program the handset's settings

PTT (PUSH to TALK) button

Press and hold this while you're transmitting

MON (MONITOR) button

Press and hold to monitor the current channel

LOCK/STOP/- button

Press and hold to lock and unlock the keypad.

Press to stop the stopwatch (timer)

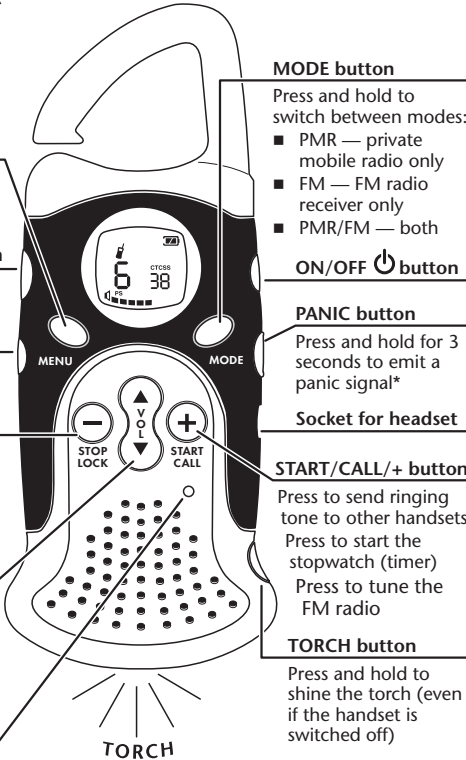
Press to tune the FM radio

VOL ▲ and ▼ buttons

Press to change the speaker volume

Press to scroll through options when using MENU functions

Microphone



MODE button

Press and hold to switch between modes:

- PMR — private mobile radio only
- FM — FM radio receiver only
- PMR/FM — both

ON/OFF button

PANIC button

Press and hold for 3 seconds to emit a panic signal*

Socket for headset

START/CALL/+ button

Press to send ringing tone to other handsets
Press to start the stopwatch (timer)
Press to tune the FM radio

TORCH button

Press and hold to shine the torch (even if the handset is switched off)

* When you press and hold the **PANIC** button for 3 seconds, the handset will emit a high-pitched tone for up to 30 seconds. You can stop the panic signal by pressing any button except the **TORCH** button.

The **PANIC** button won't work if the handset is switched off, or if you've plugged in a headset. But it will work while the handset is locked.

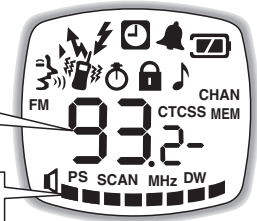
The display

The **channel number** is shown here when you're using the **PMR**.


The **FM wavelength** is shown (with **MHz**) when you're using the **radio receiver**.


Minutes and seconds are shown when you're using the **stopwatch**.

Speaker volume level



The  symbol is shown when the handset is in **PMR mode**.

 appears when you're transmitting

 appears when you're receiving a transmission from another handset user. (It appears when anyone is transmitting on the same channel, but if their **CTCSS** code is different from yours, you won't hear the transmission.)

FM

This is shown when the handset is in **FM radio receiver mode**.



This is shown when you have turned on **VOX mode**, so that your handset will transmit whenever it detects your voice.



This is the **CTCSS code** (01 to 38). If -- is shown here, the **CTCSS** function is turned off. See 'Channels and codes' for more information.




This is shown when **Auto-Power-Off (APO)** is turned on.



This is shown when you're transmitting **Call Ring tone**, or changing your **Call Ring melody**.



Battery charge level indication. When this shows  (empty), you need to recharge the battery pack or fit new batteries.



This is shown when you're turning the **stopwatch** function on and off.



This is shown when the handset's buttons are **locked**.



This is shown when the '**Roger**' beep function is turned on.



PS Power Save — this flashes when the handset is idle.



This is shown when you have activated **scanning**, so the handset will continuously scan all channels for transmissions.



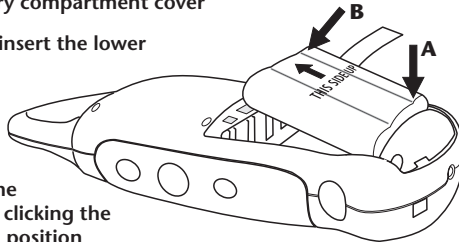
This is shown when you have activated **Dual Watch**, to monitor two channels at once.

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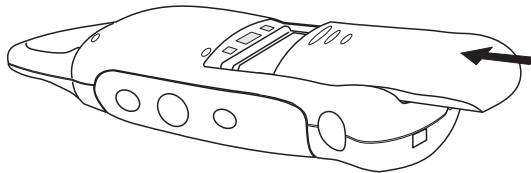
Getting ready for use

1 Fit a battery pack in each handset

- ▶ Remove the battery compartment cover
- ▶ To fit the battery, insert the lower edge first (A) ...

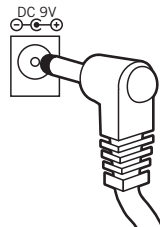


- ▶ ... then press the upper edge into the compartment (B), clicking the battery firmly into position
- ▶ Lay the ribbon across the top of the battery pack
- ▶ Replace the battery compartment cover, and firmly close the latch



2 Connect the mains power lead to the socket on the back of the charger pod

The MR700 must be used with mains adapter, part no. XX002143D, supplied with the unit. Using any other adapter will result in non-compliance with EN61554, and will invalidate any approval given to this apparatus.



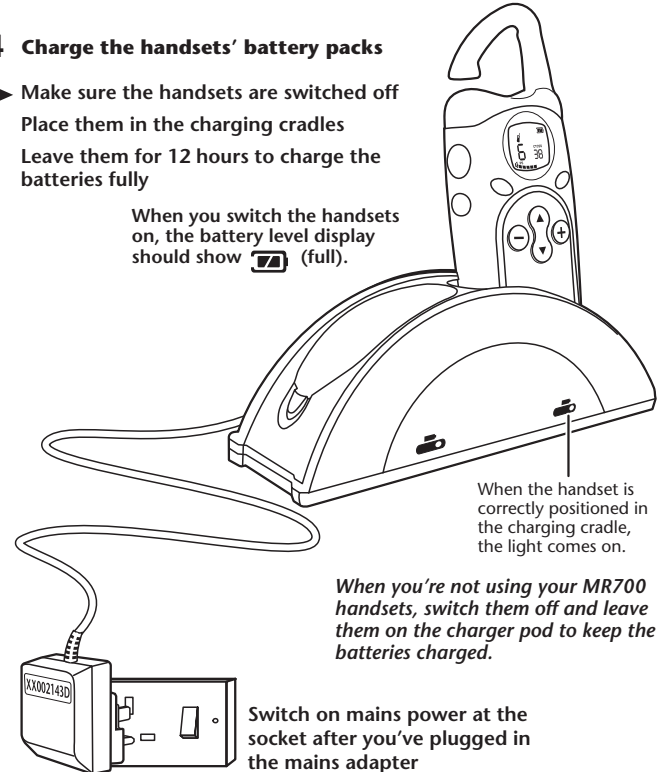
3 Connect the charger pod to the mains power supply

- ▶ Plug the mains adapter into a 230 V AC, 50 Hz mains socket, with the switch on the socket set to OFF
- ▶ Switch on mains power at the socket

4 Charge the handsets' battery packs

- ▶ Make sure the handsets are switched off
Place them in the charging cradles
Leave them for 12 hours to charge the batteries fully

When you switch the handsets on, the battery level display should show  (full).



When the handset is correctly positioned in the charging cradle, the light comes on.

When you're not using your MR700 handsets, switch them off and leave them on the charger pod to keep the batteries charged.

Switch on mains power at the socket after you've plugged in the mains adapter

Getting started

Switching on and off



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



To switch the handset OFF:
Press and hold the ON/OFF button until the display goes blank
You hear a musical tone each time to confirm.

Changing modes



To switch between modes:

- PMR — private mobile radio only
- FM — FM radio receiver only
- PMR/FM

Press and hold the **MODE** button

Refer to the diagram inside the front cover to see what's shown on the display.

In PMR/FM mode, the radio will play except when you press the **PTT** button to send or receive a PMR transmission.

Volume control



To adjust the loudspeaker volume:

Press the **▲** or **▼** buttons

The current volume level is shown by the bars on the display.

You can change the volume either while you're using your MR700 handset, or while the handset is idle (switched on but not in use).

The torch

To shine the torch, press and hold the **TORCH** button.
The torch works even when the handset is switched off.

Safety warnings

IMPORTANT —

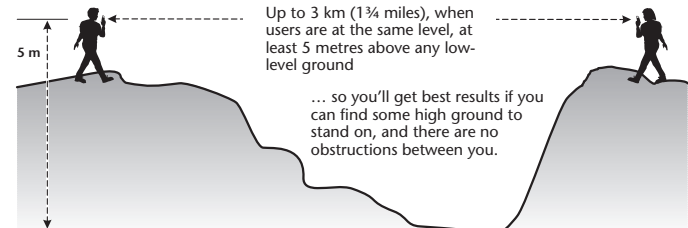
- If you are using a hands-free headset — to protect your hearing, **do not turn the volume to the highest level.**
- To reduce radio frequency exposure when you're using the MR700, **hold the handset at least 5 cm (2 inches) from your face.**
- **Never use your MR700 outdoors in a thunderstorm.**
- The MR700 is **splashproof**. But if it is likely to get very wet, carry it in a **plastic bag** — you will still be able to use it through the bag.
- If your MR700 gets very wet, turn it off and remove the batteries. Dry the battery compartment and leave the cover off for a few hours. **Do not use the handset until it is completely dry.**

The display

Whenever you press a button — except **PTT** — the display lights up for 5 seconds. It then goes dim, to save battery power.

Transmission range

The talk range depends on environment and terrain. It will be greatest (up to 3 km, or 1¾ miles) in wide open spaces, without obstructions such as hills or buildings. This diagram shows the ideal conditions.



Using the PMR

About channels and codes

PMR has **eight channels**, numbered **1 to 8**. When you select a channel, you can communicate on that channel with other PMR users within range (see page 5).




Each channel also has **38 CTCSS* codes**, letting you set up groups of users within the same channel, for more private communication. If you have set a code, you can communicate only with other users tuned to the same channel and the same code.

You can turn the CTCSS function off, by setting 'no code'. This lets you communicate with any PMR user on the same channel who has also turned off CTCSS (or whose PMR handset does not have this feature).




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

* CTCSS stands for *Continuous Tone-Coded Squelch System*.

To set the channel

-  Press the **MENU** button **ONCE**
CHAN flashes on the display and the current channel is shown.
-  Press the **▲** or **▼** button to go to the channel you want
-  Press the **PTT** button to return to normal operation
You can also use **channel scanning**, as described on page 10.

To set the CTCSS code




-  Press the **MENU** button **TWICE**
CTCSS flashes on the display and the current code is shown.
-  Press the **▲** or **▼** button to go to the code you want
OR, to turn off the CTCSS function, press the **▼** button until the display shows - -
-  Press the **PTT** button to return to normal operation

Transmitting and receiving



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

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.

To speak to another handset user




-  Press and hold the **PTT** button so that  appears on the display
-  Speak clearly into the microphone, in a normal tone — don't shout
- When you've finished speaking, release the **PTT** button

To listen to another handset user

- ▶ Make sure you are **NOT** pressing the **PTT** button
 appears on the display when the other person is speaking.
If  appears on the display but you can't hear anything, this means that someone is transmitting on the same channel but is using a different CTCSS code.

Call Ring tone You can transmit Call Ring tone to other handsets within range and tuned to the same channel, to alert them that you want to communicate with them. The MR700 gives you a choice of ten Call Ring tones.

To choose a Call Ring tone



- 1  Press the **MENU** button **THREE** times appears on the display and the current tone is played.
- 2  Press the **▲** or **▼** button to listen to each **Call Ring tone in turn**
When you've decided which one you want, and its number is shown on the display ...
- 3  Press the **PTT** button to return to normal operation

To send Call Ring tone

- ▶  Briefly press the **START/CALL/+** button

Using the VOX function With the VOX function, your handset will automatically start to transmit when it detects your voice (or other noise), without the **PTT** button pressed. It will then transmit for at least 2 seconds, even if you stop talking before then.

There are three levels of VOX sensitivity. Level 1 is the most sensitive, meaning that the handset will pick up softer noises; at Level 3, it will pick up only quite loud noises.

- 1  Press the **MENU** button **SEVEN** times  appears on the display and the current setting (1 2 3 or OFF) is shown.

- 2  Press the **▲** or **▼** button to go to the setting you want

- 3  Press the **PTT** button to return to normal operation


As long as the VOX function is switched on, the 'Vox' symbol stays on the display.

The VOX function will be temporarily disabled while you're transmitting, receiving, scanning, monitoring or programming the handset.

Monitoring the current channel

The MR700 has an **automatic squelch circuit**, which turns the speaker off when no-one's transmitting a message to you. But if a transmission is weak, this may prevent your handset picking up the signal.

So you can temporarily de-activate (turn off) the squelch and monitor all sounds on the channel —

- ▶  Press and hold the **MON** button
Your handset will pick up any signals on the current channel, including any background noise.
- ▶ **To stop monitoring, simply release the MON button**
(You can't use monitoring while you're scanning channels.)

Scanning channels

1 

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.

Press the **MENU** button **FOUR** times

SCAN flashes on the display and the current setting (*DN* or *DF*) is shown.

2 

Press the **▲** or **▼** button to change the setting

3 

Press the **PTT** button to return to normal operation

With SCAN turned on, when the handset detects an active channel, it will pause for 4 seconds. If your CTCSS code matches that of the transmitting handset, you will hear the transmission.

If you want to **communicate** on this channel:



Press and release the **PTT** button during the **4 seconds**

Your handset will now be set to this channel and you can carry on receiving and transmitting on it.

If you don't press the **PTT** button, the handset will carry on scanning.

The Dual Watch function

1 

With Dual Watch, you can monitor two channels at once.

Press the **MENU** button **SIX** times

DW flashes on the display and the current setting (*1* to *8* or *OFF*) is shown.

2 

Press the **▲** or **▼** button to select a channel or switch Dual Watch off.

Make sure the channel you select is different from the one the handset's already tuned to.

3 

Press the **PTT** button to return to normal operation

Locking the buttons




With the handset locked, all buttons except **PTT**, **MON**, **PANIC** and **TORCH** are disabled.

To lock and unlock the buttons:

Press and hold the **STOP/LOCK/-** button for **one second**


You hear a 'beep' each time.

 is shown on the display while the buttons are locked.

The 'Roger' beep function

1 

Press the **MENU** button **EIGHT** times


 flashes on the display and the current setting (**ON** or **OFF**) is shown.

2 

Press the **▲** or **▼** button to change the setting

3 

Press the **PTT** button to return to normal operation

 stays on the display while 'Roger' beep is switched on.

'Roger' is the radio signal to say you've finished transmitting and the other person can speak. With this function turned on, when you release the PTT button to stop speaking, your handset will send a confirmation beep.

Using the stopwatch

To turn the stopwatch function on and off

1

Make sure the handset is in PMR mode

2 

Press the **MENU** button **FIVE** times

 flashes on the display and the current setting (**ON** or **OFF**) is shown.

3 

Press the **▲** or **▼** button to change the setting

4 

Press the **PTT** button to return to normal operation

While the stopwatch function is activated, the lapsed time (in minutes, seconds and tenths of seconds) is shown on the display — starting at **00.00.00**.

You can still use the PMR for transmitting and receiving, as long as the stopwatch is not actually running.

To use the stopwatch

▶ 

To start the stopwatch running:

Press the **START/CALL/+** button

▶ 

To **pause** the stopwatch:

Press the **STOP/LOCK/-** button

▶ 




To **reset** the stopwatch to zero (**00.00.00**):

Press the **STOP/LOCK/-** button again






Using the FM radio

See page 4 for details of how to switch between modes.


To tune the radio

- 1  Make sure the handset is in FM or PMR/FM mode
- 2   Press the + (START/CALL) or – (STOP/LOCK) button to go to the station you want
You can either press and hold the button then release it for auto-scanning; or press the button briefly and repeatedly to go to a specific channel (manual scanning).








To store radio stations in memory

- 1  The MR700 has five memories for storing your favourite radio stations.
- 2   Make sure the handset is in FM or PMR/FM mode
- 3  Press the + (START/CALL) or – (STOP/LOCK) button to go to the station you want
- 3  Press the **MODE** button TWICE
Memory location 1 flashes on the display — for example:








- 4  Press and hold the **MODE** button for 1 second until you hear a double-beep tone
You have now stored this station in memory location 1.

To store stations in memories 2 to 5






- 1  Make sure the handset is in FM or PMR/FM mode
- 2   Press the + (START/CALL) or – (STOP/LOCK) button to go to the station you want
- 3  Press the **MODE** button TWICE
Memory location 1 flashes on the display.
- 4   Press the + (START/CALL) or – (STOP/LOCK) button to go to the memory location you want
- 5  Press and hold the **MODE** button for 1 second until you hear a double-beep tone

To select and play a stored station

- 1  Make sure the handset is in FM or PMR/FM mode
- 2  Press the **MODE** button ONCE
Memory location 1 flashes on the display and the station wavelength is shown.
- 3   Press the + (START/CALL) or – (STOP/LOCK) button to go to the memory location you want
- 4  Press the **PTT** button

Auto-Power-Off (APO)


This feature saves battery life by automatically turning the handset off if you have not pressed any button for a set time. You can set the timeout to **1, 2 or 3 hours**; or set it to **0** (zero) to turn APO off.

-  Press the **MENU** button **NINE** times
 flashes on the display and the current setting (*0HR* to *3HR*) is shown.
-  Press the **▲** or **▼** button to change the setting
-  Press the **PTT** button to return to normal operation
 is shown on the display as long as APO is turned on. It disappears if you set APO to *0HR*.

Using the hands-free kit

To connect the hands-free kit to your MR700 handset, plug it into the socket at the side of the handset.

With the hands-free kit connected, you may want to transmit using the VOX function (see page 8). If you find that this doesn't work very well, you can turn the VOX sensitivity to 0 (off) and press the **PTT** button to transmit, as normal.

-  If you use any hands-free accessories other than the kit supplied, make sure they are approved, and from a reputable supplier. Other accessories may cause damage not covered by the guarantee.

Technical details

Operating frequency 446.00625 to 446.09375 MHz (eight channels)

Channel spacing 12.5 kHz

Power source 4 × AAA rechargeable NiCad battery.
4.8 V, 300 mAh

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 MR700 conforms to the following standards:

- EN 301489 (RF testing)
- EN 300296 (EMC testing)
- EN 60065 (safety testing)

Cleaning and care

To clean your MR700, use a soft cloth dampened with water. **Do not use cleaners or solvents**, which may cause permanent damage not covered by the guarantee.

Troubleshooting

If you have problems using your MR700, check these points first. If you still have problems, **reset your handset by switching it off and removing the batteries. Then replace the batteries and switch the handset on again.**

Problem	Possible cause — things to do/check
No reception	<ul style="list-style-type: none"> ■ Handset set to wrong channel — <i>check with other user</i> ■ Handset set to wrong CTCSS code — <i>check with other user</i> ■ Other user may not be transmitting ■ Handset not switched on — <i>switch on</i> ■ Volume too low — <i>increase the volume</i> ■ Batteries flat or not fitted correctly — <i>check</i> ■ Handset not in PMR or PMR/FM mode — <i>change mode</i> ■ Other user out of range — <i>move back within range</i>
No transmission	<ul style="list-style-type: none"> ■ You are not pressing the PTT button ■ Handset not switched on — <i>switch on</i> ■ Handset not in PMR or PMR/FM mode — <i>change mode</i> ■ Batteries flat or not fitted correctly — <i>check</i>
Cannot change channel/code	<ul style="list-style-type: none"> ■ Handset may be locked — <i>unlock it</i> ■ Handset not in PMR or PMR/FM mode — <i>change mode</i>
Poor or 'noisy' reception	<ul style="list-style-type: none"> ■ Local conditions may be impairing reception — <i>try moving, preferably to a higher location</i> ■ The handset's batteries may be low — <i>charge them</i> ■ Noisy reception is more likely when using high-numbered CTCSS codes — <i>try using a lower-numbered code, agreeing this with the rest of your group first</i>

Problem	Possible cause — things to do/check
Interference from other users outside your group	<ul style="list-style-type: none"> ■ <i>Try changing to a different channel and/or code, agreeing this with the rest of your group first</i> ■ If you're not already using a CTCSS code — <i>try doing so</i> <p>Privacy cannot be guaranteed, as PMR446 is an open-licence free band.</p>
Using VOX function, the unit transmits all the time	<ul style="list-style-type: none"> ■ Ambient noise may be too high — <i>move to a quieter place or turn the VOX function off</i> ■ VOX sensitivity may be too high — <i>decrease the sensitivity</i>
Using VOX, the unit does not transmit	<ul style="list-style-type: none"> ■ Sound may be too low — <i>talk in a louder voice or hold the unit closer to your mouth</i> ■ VOX sensitivity may be too low — <i>increase the sensitivity (level 1 is the highest)</i>
Problems using VOX with a hands-free kit	<ul style="list-style-type: none"> ■ Turn off the VOX function by setting VOX sensitivity to 0 (zero), and transmit as normal by pressing the PTT button.
Cannot use the stopwatch	<ul style="list-style-type: none"> ■ Handset not in PMR mode — <i>change mode</i> ■ Handset may be locked — <i>unlock it</i> ■ Batteries flat or not fitted correctly — <i>check</i>
Cannot hear the radio	<ul style="list-style-type: none"> ■ Handset not in FM or PMR/FM mode — <i>change mode</i> ■ Volume too low — <i>increase the volume</i> ■ Batteries flat or not fitted correctly — <i>check</i>
Cannot tune the radio	<ul style="list-style-type: none"> ■ Use the +/START/CALL and -/STOP/LOCK buttons for tuning (the ▲ and ▼ buttons are for volume control) ■ If the radio isn't finding a channel using auto-scanning — try manual scanning instead

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