



# *Freeway FM*

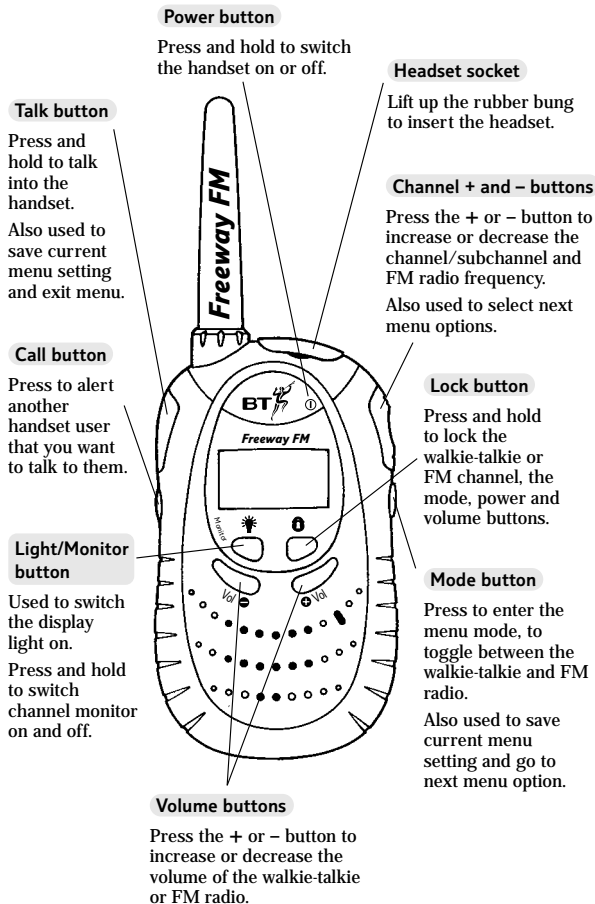
Personal Mobile Radio  
and Charger

**User  
Guide**

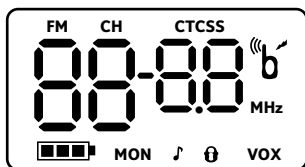
**Please open this page for an 'at a glance'  
guide to your Freeway FM**



# At a glance



# *Explanation of the display icons*



Indicates that the key lock is switched on.



Indicates that the handset is receiving a call.




Indicates that the handset is transmitting.



Displayed when the power is on to indicate signal standby.



Indicates the status of the battery.

<b>VOX</b>	Displayed when voice operation is switched on.
<b>FM</b>	The FM radio station number is shown below.
<b>CH</b>	The walkie-talkie (PMR) channel number shown below.
<b>CTCSS</b>	The subchannel number is shown below. (CTSS = Continuous Tone Coded Squelch System).
<b>MON</b>	Indicates that channel monitor mode is switched on.
	Indicates that the key beeps are switched on.
<b>MHz</b>	Displays the FM radio frequency.

# Introduction

## Unpacking

If anything is missing, please contact your place of purchase immediately.

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Two BT Freeway FM Walkie-Talkie handsets



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Two belt clips  
(attached to back of handset)



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Two Ni-MH rechargeable battery packs



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One dual handset charger



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One power supply unit for the charger



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Two Freeway FM VOX headsets



## **For your records**

Date of purchase:

Place of purchase:

Serial number:

For guarantee purposes proof of purchase is required so please keep your receipt.

# *Safety instructions*

## **General**

Do not open the handset.

Never dispose of batteries in a fire. There is a serious risk of explosion and/or the release of highly toxic chemicals.

Radio signals transmitted between handsets may cause interference to hearing aids.

Switch off the radio when near medical equipment.

This product should not be used by people with pacemakers.

Do not use the radio when driving a vehicle or operating machinery.

Do not use your radio when on board an aircraft.

Do not use your radio if it has a damaged antenna.

Do not operate the radio in hazardous environments, explosion or fire may result. Examples of typical hazardous environments include petrol stations and areas where explosive products are used.

Do not expose your product to direct sunlight, extreme cold or place it near heating appliances.

Do not submerge any part of your product in water and do not use it in damp, humid or wet conditions.

Do not expose your product to fire, explosive or other hazardous conditions.

Do not operate the radio whilst driving.



## Cleaning

Simply clean with a damp (not wet) cloth, or an anti-static wipe. Never use household polish as this will damage the product. Never use a dry cloth as this may cause a static shock.

## Note

In the event of an accident this product cannot be used to contact the emergency services.

The range of your Freeway FM handsets can be impaired when there is no clear sight between the handsets. For example, buildings and thick stone walls can severely affect the range.

# Setting up

## 1 Installing the battery pack

Your Freeway FM handset is supplied with a Freeway rechargeable Ni-MH battery pack. Your handset will also operate with 4 x AAA alkaline batteries if required. (Not supplied.)

### Note

*Please note that alkaline batteries will require replacing and can **NOT** be used with the Freeway charger. New alkaline batteries must be inserted within 5 minutes of the old ones being removed.*

### Freeway accessories

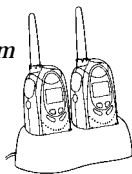
*You can purchase additional Freeway rechargeable battery packs or Freeway chargers, by calling **0870 240 5522**.*

*Or visit: [www.withandwithoutwires.com](http://www.withandwithoutwires.com)*



*Freeway charger item code: 003743.*

*Freeway rechargeable battery pack item code: 004194.*

*Freeway FM VOX headset item code: 008687*



### Battery low indicator

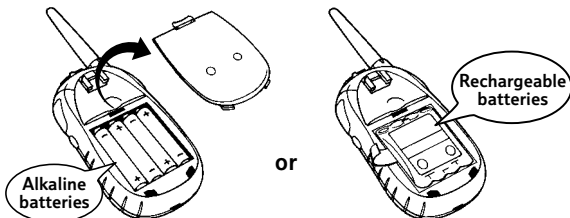
*When the batteries are fully charged the display will show the  icon. When the battery power becomes low the  icon will flash to indicate that the batteries need replacing or recharging (if the battery pack is fitted). If alkaline batteries are being used then you should replace all the batteries, do not mix new and old batteries and ensure that you use all the same type of batteries.*

### WARNING

*Under some conditions although the battery might show full the battery will become discharged when the talk button is pressed, this is normal operation. In these circumstances either replace the Alkaline batteries or recharge the rechargeable batteries.*

If the belt clip is attached you will need to remove it first, *please see step 3 on page 11.*

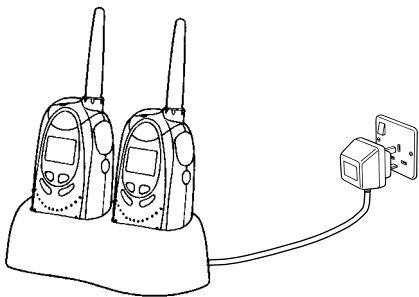
Pull back the battery cover tab and lift the cover off.



Insert 4 x AAA (alkaline) batteries **or** the Freeway rechargeable battery pack, ensuring that the + and –

on the batteries match up with those marked inside the battery compartment. Replace the battery cover and make sure that the tab locks back into place.

## 2 Planning the location of your Freeway charger



You must ensure that you plan the location of your charger. It should be near the mains power supply and be easily accessed. Plug the power supply cable into the back of the charger and the plug into the mains power socket.

The only way to disconnect the product from the power supply is to remove the adaptor from the mains power socket.

Make sure it is one metre away from other electrical products to avoid interference.

### Note

*The Freeway FM handset can be charged when it is switched on or off, however, it will take longer to fully charge the battery pack if the handset is left switched on.*

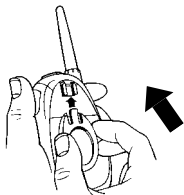
*To fully charge the battery pack, from a fully discharged state takes around 14 to 16 hours.*

*The lights on the Freeway charger will stay lit even when the battery pack is fully charged.*

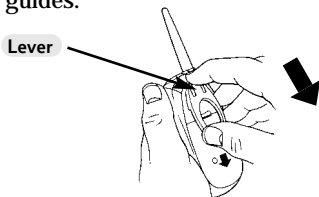
### 3 Attaching and removing the belt clip

To attach the belt clip you need to align the belt clip tabs up with the guides on the back of your handset as shown in the diagram below.

Then slide the belt clip up towards the guides until it locks into place.



If you want to remove the belt clip, pull back the lever on the top of the belt clip and slide the clip down out of the guides.

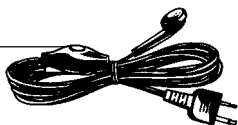


#### 4 Installing and removing the Freeway FM VOX headset

To purchase additional Freeway FM VOX headsets please call **0870 240 5522** or visit [www.withandwithoutwires.com](http://www.withandwithoutwires.com)

Freeway FM VOX headset item code: 008687.

PTT button

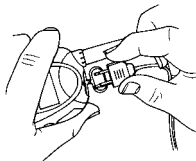


#### Note

*You must always switch the power OFF before installing or removing the headset. We recommend initially you set the volume to a LOW level.*

Open the tab on the top of the handset.

Insert the headset plug firmly into the holes on the top of the handset.



#### **WARNING**

*Please keep the rubber bung away from small children as it is a possible choking hazard.*

If you remove the headset from the handset you should cover the holes with the attached tab to make sure dust and dirt is kept away from the contacts.

#### **Using the Freeway FM VOX headset if VOX is disabled.**

Press the PTT (Press To Talk) switch on the headset to transmit and release it to receive a call. You can also adjust the volume level by using the volume buttons on your Freeway handset.

#### **Using the Freeway FM VOX headset if VOX is enabled.**

There is no need to press the PTT (Press To Talk) switch on the headset as your voice will be transmitted wherever you talk (so long as VOX sensitivity level is correctly chosen, *see page 25*).

You can still adjust the volume level by using the **VOLUME** buttons on your handset.

# Using your Freeway FM handsets

To switch the Freeway FM handset power ON or OFF



Press *and hold* the **POWER** button for 1 second.

You will hear a tone to indicate that the handset has been switched ON (or OFF).

To select a channel



Press the **CHANNEL +** or **-** button to select a channel from **1** to **8**. To keep scrolling through the channels you can press *and hold* the **+** or **-** button and then *release* it when you reach the channel you want.

The selected channel will be shown on the display.

## WARNING

*Your Freeway FM works on PMR446 which is a European Standard. To check which countries and channels you can use your Freeway FM handsets on, please refer to the following website [www.ero.dk/EROWEB/WGRR/PMR\\_446.HTM](http://www.ero.dk/EROWEB/WGRR/PMR_446.HTM)*



## To reduce interference from unwanted calls by selecting a subchannel (CTCSS)

If the subchannel (CTCSS) is set to 00 then you will hear calls from everyone within range who is using the same channel as you. To reduce this interference from unwanted calls you should select a subchannel between 01 and 38.

## To change the subchannel (CTCSS)

Mode

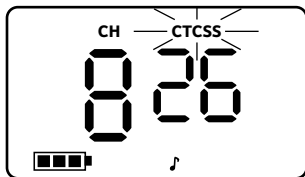
Press the **MODE** button. The **CTCSS** icon will flash and the current setting will be shown below it.

+  
Channel  
-

Press *and hold* the **CHANNEL +** or **-** button to scroll through the codes until you *release* the button.

Talk

Press the **TALK** button to confirm your selection.



### Note

*It is important that you inform all members of your group the channel and subchannel you have selected so you can talk to and hear each other.*

It is advisable to lock the keys once you have selected your channel to ensure it does not change, *see below*.

### Note

*To reduce the risk of interference we strongly recommend you use the subchannels.*

## To switch the key lock ON or OFF

You can lock the **CHANNEL + or –**, **MODE**, **POWER** and **VOLUME + or –** buttons to prevent you from accidentally changing your settings or from switching the handset off.



Press *and hold* the **LOCK** button for more than 1 second to switch the key lock ON.

The key lock icon will appear on the display. (You can continue to use the **TALK**, **CALL** and **LIGHT** buttons.)

You can lock the handset in either walkie-talkie or FM radio mode.



To switch the key lock OFF, press *and hold* the **LOCK** button again for more than 1 second.

#### Note

*Your handsets have a range of up to 3 km (2 miles). However, the range can be affected by the environment or terrain in which it is being used. To obtain maximum range use in flat open spaces. Obstruction between the radios (e.g. buildings) will greatly affect the range achieved.*

### Standby reception

Your Freeway FM handset is always in standby reception when the **TALK** button is not pressed and you are not changing any of the features.

To listen to another handset user when in standby reception mode your Freeway FM handset must be on the same channel and subchannel as your callers.

## To talk to another handset

To talk or call others, all radios in your group must be set to the same channel and subchannel number.

Talk

Press *and hold* the **TALK** button. Hold the handset about 2 inches (7.5cm) from your mouth and speak into the microphone. The ☎ icon will be shown on the display.

Talk

*Release* the **TALK** button when you have finished speaking. Your listener will hear an audible tone (called a roger tone) to confirm you have finished speaking.

You can disable the roger tone if required.

## To call another handset

Call

Once you have selected a channel and subchannel, press *and release* the **CALL** button to alert the other handset user that you want to communicate with them.

(The other handset user will hear a 2 second ringing tone (call tone) to alert them to your call.

### Note

*If you do not release the **TALK** button after you finish speaking, you will not be able to receive any calls. Also, if you press the **TALK** button for extended periods you will reduce the battery power.*

*Please note that this function will not work when listening to the FM radio.*

### To change the call tone selection

The handset allows you to select any one of 5 different call tones.



Keep pressing the **MODE** button until the display shows  $\square R$ .




Press the **CHANNEL +** or **-** button to listen to each of the 5 settings.



When you reach the requested tone, press the **TALK** button to confirm your selection.

### To listen to another handset user

If another handset user is calling, you will hear a 2 second ringing tone to alert you that they are going to speak.

You will then hear them speaking to you. The  icon will be shown on the display to indicate that you are receiving a call. (You may need to adjust the volume, *see below*).

When the other handset user has finished speaking you can respond to the call.

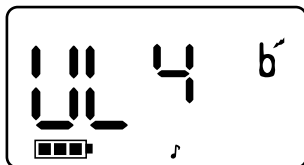
### To adjust the volume of incoming calls and FM radio reception



Press the **VOLUME +** or **-** button to increase or decrease the volume of incoming calls. The volume levels range from **1-8**.

You can also press *and hold* the **VOLUME +** or **-** button to keep increasing or decreasing the volume until you reach the required level or until you reach the handset's maximum or minimum level.

The volume level (**1-8**) will be shown on the display for about 3 seconds, the display will then return to the channel number.



### To switch the handset display light ON or OFF



Press the **LIGHT** button. The display will light up for approximately 10 seconds.

Each time you press the **VOLUME +** or **-**, **CHANNEL +** or **-**, **CALL**, **MODE** or **LOCK** buttons while the display light is switched on, the 10 second timer will reset so that it will stay on for a further 10 seconds.



To switch the display light OFF, press the **LIGHT** button.

### To switch the channel monitor ON or OFF

When you are not receiving a call your handset automatically mutes the speaker so that you will not hear weak signals or background noise. You can switch this feature off temporarily or for longer periods of time. By switching channel monitor ON you can hear transmissions on your selected channel that you would not hear under normal circumstances as the signal is too weak.

**Note**

*When channel monitor is ON you will hear a hiss and a lot of background noise.*



**To switch channel monitor ON temporarily:**

Press *and hold* the **LIGHT** button for at least 1 second.

You will hear an audible tone and the **MON** icon will be shown on the display.



*Release* the **LIGHT** button to switch the channel monitor OFF.



**To switch channel monitor ON for longer periods of time:**

Press *and hold* the **LIGHT** button for more than 5 seconds.

You will hear a beep to indicate that the channel monitor is ON and you will now hear any background noise.



*Release* the **LIGHT** button and then operate on the channel as usual.




To switch the channel monitor OFF, press the **CHANNEL +** or **-** button, or press the **LIGHT** button again for more than 1 second.



## To switch the key beeps on and off

When the key beeps are switched on your handset will emit a tone whenever a button is pressed (except the **TALK** button).

 Mode

Press the **MODE** button until the  icon flashes and  appears on the display.

 Channel

Press the **CHANNEL +** or **-** button to switch between ON or OFF.


 Talk

Press the **TALK** button to confirm.

## To switch the roger tone on and off

The roger tone that your listener will hear after you have finished speaking can be switched on and off.

 Mode

Press the **MODE** button until  appears on the display.

 Channel

Press the **CHANNEL +** or **-** button to switch between ON and OFF.

 Talk

Press the **TALK** button to confirm.


## VOX operation

VOX allows you to have a fully handsfree conversation. Your voice is detected and transmitted by the radio without the need to press the **TALK** button.



VOX operates through either the handset or the headset if connected.

### To switch VOX operation on and off

Mode

Press the **MODE** button until the **VOX** icon flashes and  appears on the display.

+  
Channel  
-

Press the **CHANNEL +** or **-** button to switch between  (to switch ON) or  (to switch off).

Talk

Press the **TALK** button to confirm.

The **VOX** icon will be displayed whenever VOX operation is switched ON.

## To adjust the VOX operation sensitivity level

You can adjust the VOX sensitivity level to avoid your handset transmitting accidentally due to background noise in different environments.

The levels range from 1-5 where 1 is the least sensitive and 5 is the most sensitive.



Press the **MODE** button until the **VOX** icon flashes and **1** appears on the display.



Press the **CHANNEL +** or **-** button to select from level 1-5.



Press the **TALK** button to confirm.

### Note

*We recommend that the VOX function is disabled when the handsets are left on when placed in the charger. This will stop them interacting with each other and causing interference.*

## FM radio operation

You can use your Freeway FM handset to tune in and listen to FM radio stations. You will need to switch from walkie-talkie (PMR) mode to FM radio reception mode.

### Note

*Please note that when you use the FM radio, the PMR walkie talkie will not break in unless you have programmed it to do so.*

### To switch between walkie-talkie mode and FM radio reception

Mode

To switch to FM radio reception mode, press the **MODE** button for 1 second. The **FM** icon will be displayed and the radio will play at the current radio frequency shown on the display.

Mode

To switch back to walkie-talkie mode, press the **MODE** again for 1 second.

## To tune the FM radio



Once you are in FM radio mode, press the **CHANNEL +** or **-** button for 1 second. The radio will scan for an active (strong) FM station.

When a station is found the scanning will stop and the handset will return to standby listening mode.



You can use the **VOL +** and **-** buttons to adjust the volume.

## To program in a radio station

You can program in 10 FM radio stations so you do not have to tune in the radio each time you use it.

Tune the radio in, as described on page 26, to the station you want.



Press the **MODE** button. The **CH** icon will flash and the display will show **CH**.



Press the **CHANNEL +** or **-** button to select a channel number that you want to store the programmed radio station under from 1-10.



Press the **TALK** button to confirm. The frequency display will return.

Repeat the process to program in further stations.

## To select a programmed radio station

A circular icon with the word "Call" inside.

Press *and hold* the **CALL** button for 1 second. The **CH** icon will be displayed.

A circular icon with a plus sign at the top, the word "Channel" in the middle, and a minus sign at the bottom.

Press the **CHANNEL +** or **-** button to scroll to the channel number under which you programmed the radio station. The channel frequency will be displayed after 1 second.

To choose another station repeat the above process.

## To switch walkie-talkie reception break in on and off

You can set your Freeway FM handset to allow other handset users to call you while you are listening to the radio. Your handset will automatically switch to walkie-talkie mode if another handset user tries to contact you.

**Mode**

While in FM radio mode, press the **MODE** button until the **FM** icon flashes and **br** is shown on the display.

**+**  
Channel  
**-**

Press the **CHANNEL +** or **-** button to switch between on and off.

**Talk**

Press the **TALK** button to confirm.

### WARNING

*When using the FM radio the PMR walkie talkie will not break in unless you have programmed it to do so.*

# General information

## Guarantee

Your BT Freeway FM is guaranteed for a period of 12 months from the date of purchase.

**The conditions of this guarantee are:**

- The guarantee shall only apply to defects that occur within the 12 month guarantee period.
- Proof of purchase is provided.
- The equipment is returned to BT or its agent as instructed.
- This guarantee does not cover any faults or defects caused by accidents, misuse, fair wear and tear, neglect, tampering with the equipment, or any attempt at adjustment or repair other than through approved agents.
- This guarantee does not affect your statutory rights.

**If you have to return your product:**

Pack the handsets securely, preferably in the original packaging. All parts must be returned, including belt clips and original batteries.

**Outside of Guarantee:**

If your product needs repair outside of the guarantee we recommend that you call **01672 564 444** for details of our recommended repair agents.



## **RTTE**

This equipment complies with the Essential Requirements and Provisions of the Radio Equipment and Telecommunications Terminal Equipment Directive 1999/5/EC.

In demonstration of conformance with the Essential Requirements for Electrical Safety, Electro-Magnetic Compatibility and Radio Spectrum matters covered by the following standards:

EN 60065 (1998) + CORRIGENDUM (1999)

### **Electrical Safety**

EN 301 489-5 (2000)

EN 55013 (2001)

### **EMC**

EN 300 296-2 (2001)

### **Radio Spectrum**

A copy of the original manufacturers Declaration of Conformity can be obtained by calling 01473 605893 or alternatively by e-mail from the following address [COMMPROD@btuk02.bt.com](mailto:COMMPROD@btuk02.bt.com)

## Technical information

### Walkie-talkie channel frequency

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

### FM radio frequency

Lower limit (MHz)	Upper limit (MHz)
87.5	108.0

**Note:** tuning step size = 100KHz.

# Help

Problem	Solution
Will not switch on.	Recharge batteries or replace if alkaline.
No transmission.	<p><b>TALK</b> button not pressed.</p> <p>If VOX is active adjust level of sensitivity.</p>
No reception.	<p>Out of range.</p> <p>Confirm radios have same channel and subchannel settings.</p> <p><b>TALK</b> button is accidentally being pressed.</p>
Buttons not functioning.	Is lock switched on?
Your speech sounds distorted at receiving end.	Make sure you are not talking too closely to the microphone.
Poor reception.	The range is dependant on environment and terrain.
Interference from other users.	Change your channel or subchannel.
Your settings have been lost.	New alkaline batteries must be inserted within 5 minutes of the old ones being removed.



## Offices worldwide

The telecommunications services described in this publication are subject to availability and may be modified from time to time. Services and equipment are provided subject to British Telecommunications plc's respective standard conditions of contract. Nothing in this publication forms any part of any contract.

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