

## User guide



**MobilAlarm** 

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#### Introduction

The Tunstall MobilAlarm is intended for use by anyone who may need to summon assistance whilst away from a fixed location. It uses mobile telephone (GSM) technology to allow voice communication with a 24 hour Monitoring Centre from locations with GSM coverage, and uses a satellite Global Positioning System (GPS) to identify the position of the unit when help is needed.

The MobilAlarm has a number of advantages over a normal mobile telephone:

- Simple activation
- It calls to a dedicated 24 hour Monitoring Centre
- The Monitoring Centre operator will know who you are and be able to best coordinate help even if you are unable to speak
- It can identify your location so minimising the time for help to arrive even if you are unsure of your location or unable to speak
- It will automatically keep re-trying to connect if it is unable to do so first time, or a connection is lost before a call is ended

Please read the following sections of this guide to familiarise yourself with the MobilAlarm unit before using it.

#### What's in the box?

The following items should be included in the MobilAlarm box;

- User Guide (this document)
- MobilAlarm
- Charging Base
- Charger transformer and cable
- Quick Reference Card

#### Your MobilAlarm

The illustration below shows the main features of the MobilAlarm. Please refer to this when reading the following sections of the manual.



## Setting up the MobilAlarm

**IMPORTANT:** Your MobilAlarm will normally have already been set up by the organisation providing your Monitoring Centre service. If this is not the case please contact the Monitoring Centre or refer to the separately available Programming Guide for further assistance

## Charging the battery

Firstly plug the power cord into the charging base ensuring that the plug is pushed completely into the base. Then plug the transformer into the wall socket and switch the socket on.

Place the MobilAlarm device into the charging base as shown.

The battery status indicator will glow red. Leave the unit to charge until the red indicator goes out.

A charge usually takes 3 to 4 hours depending on the room temperature and how discharged the battery has become. In exceptional circumstances it may take up to 8 hours.



**NOTE:** If the MobilAlarm is properly seated in the charging base and the red indicator does not glow, then the unit may have been fully charged before being supplied to you.

## **Using the MobilAlarm**

## Switching on

The MobilAlarm is switched on by pressing and holding the red cancel/power key for 3 seconds. The unit will give a single short bleep and the network indicator will give a long green flash.

The indicator will continue to give a short flash every 4 seconds. Whilst the unit is registering with the mobile phone network the flash will be coloured red. When the phone is able to make calls then the colour will change to flash green.

The MobilAlarm can be left on most of the time and should normally only be switched off in places where mobile phones are not permitted such as hospitals or aircraft.

**NOTE:** After switching the MobilAlarm on, it may need to have a clear and wide view of the sky for a few minutes before it will be able to report an accurate location.

## Switching off

If the unit needs to be switched off, then simply press and hold the red cancel/power key for 3 seconds (same as switching on). The unit will then bleep and the network indicator will give a single long red flash. The unit is switched off when the network indicator stops flashing.

# Making an emergency call to the Monitoring Centre

To make an emergency call to the Monitoring Centre, squeeze the sides of the unit thus pressing and holding both emergency keys for 1 second. The unit will give a single short high pitched bleep\* to confirm that an alarm has been activated.



\*NOTE: In some circumstances, units may optionally be configured for silent operation in which case no sounds will be heard from the device, though the operator will still be able to hear sounds from around the MobilAlarm. It is also possible for units to be optionally configured to give a continuous "siren" tone until contact with the Monitoring Centre is made. This is intended to attract attention and help.

For best performance the MobilAlarm should always be held "face-up" as shown in the photograph as this helps provide the best signal reception.

You will then hear regular low pitched bleeps which indicate that the MobilAlarm is dialling to the Monitoring Centre. If the connection does not succeed for any reason, then the MobilAlarm will try again.

Other bleep patterns will be heard whilst the MobilAlarm exchanges information with the Monitoring Centre to inform them who and where the emergency call is originating from. This usually takes between 30 and 60 seconds depending on the mobile phone network conditions and satellite signal strength. During this period, the MobilAlarm will attempt to calculate its current location and inform the Monitoring Centre. If this is not possible (eg if calling from a position with no clear view of the sky) then the last known location and the time at which it was obtained will be provided instead. Once the connection is made, the Monitoring Centre operator will speak to you. Simply talk with them like a normal conversation.

The Monitoring Centre operator will clear the call when it is finished. If the connection fails before the call is cleared by the operator, then the MobilAlarm will try to re-connect with the Monitoring Centre.

**NOTE:** The MobilAlarm is designed to be held in front of the mouth like a walkie-talkie. It should not be held close to the ear as the loud-speaking volume could damage hearing. Avoid covering the microphone or loudspeaker areas.

Once an emergency call has been activated it cannot be cancelled by the user – but do not worry if the call is made by mistake as the Monitoring Centre will be pleased to confirm that the MobilAlarm is active and working.

## Making a 999/112 Public Emergency Service Call

The MobilAlarm is capable of making calls to the public emergency services using the 999/112 number. This should be considered as a backup to the Monitoring Centre service described in the previous section as the 999/112 operator will not be able to help you as effectively. This is because unlike the Monitoring Centre they will not know who you are, or precisely where you are. Normally a Monitoring Centre operator will coordinate any necessary public emergency service requirements on your behalf.

If your MobilAlarm does not have a normal network connection (the network indicator will flash red), or it has been unable to contact the Monitoring Centre (perhaps due to network congestion), then a 999/112 can be attempted – however be prepared to explain who and where

you are to the emergency operator.

To start a 999/112 call press the green call key at the same time as both side emergency keys and hold for 1 second. You will then hear a confirmation bleep.

The MobilAlarm will use any available mobile network to make a prioritised call to the public emergency service operator. The

emergency call can be cleared by pressing and holding the red cancel key for 1 second.

## Making a non emergency call

Your MobilAlarm may have been configured with the ability to make calls to a pre-set non-emergency number. If this feature is enabled then calls to the number can be started by pressing and holding the green call key button for 1 second. The call is terminated by pressing and holding the red cancel key for 1 second. Your Monitoring Centre will advise if this feature is available.

**NOTE:** During non-emergency calls the MobilAlarm remains able to make an emergency call in the normal manner described in the previous sections. In this case the non-emergency call is automatically terminated.

## **Answering incoming calls**

The MobilAlarm is able to receive normal telephone calls. Contact your Monitoring Centre if you need to know your MobilAssist's telephone number to pass to friends, family or colleagues. Record this number below to help you remember it:



When a call is received, the MobilAlarm will make a telephone ringing sound. The call can be answered by simply pressing the green call key. You can now speak with the caller.

To hang-up after speaking, or to reject a ringing call without answering, press the red cancel key.

## **Battery status & recharge information**

Under normal circumstances the MobilAlarm should operate for a period of around 2 days before it runs out of battery power. The actual duration depends on a number of factors such as the strength of the signals from the mobile phone and satellite positioning systems, the ambient temperature and duration of any calls.

In order to ensure that the unit is always available for use, it is strongly recommended that it is re-charged daily and kept on the charging base overnight and when not in use. This will also prevent the MobilAlarm's low battery reminder bleeps from generating a disturbance, for example during the night.

The MobilAlarm will give a battery low indication when it has around 60% of the battery capacity remaining. This would normally occur after around one day of use, thus prompting the unit to be stored on the charger. It is important to note that there is still plenty of reserve battery capacity available at this time, so if it is not convenient to charge the unit immediately it is not necessary to do so.

The battery low indication takes the form of a flashing red battery status indicator and a set of three short bleeps repeated at 5 minute intervals. The bleeps can be stopped by depressing the red cancel key for 1 second (a confirmation bleep will be heard) after which the visual low battery reminder will continue.

Optionally, the MobilAlarm can be configured to provide only the visual low battery indication in which case the audible bleeps will not occur. Your Monitoring Centre or the separately available programming guide can provide more information.

When the unit has around 40% of battery capacity remaining, it will make an automatic battery low reporting call to the

Monitoring Centre. This will allow the Monitoring Centre to contact and assist you if necessary. The automatic low-battery call occurs silently and may be handled automatically by the Monitoring Centre so that you are not disturbed (eg at night).

## Carrying the unit

Your MobilAlarm unit is designed to be carried in an outside pocket. It can also be used in conjunction with a suitable lanyard or wrist strap using the attachment point shown.



Remember to keep the unit available so that it can easily be reached in an emergency.

NOTE: The ability of the MobilAlarm to work with weak satellite or mobile phone network signals may be impaired by some materials, especially metals. The MobilAlarm's antennae are located under the loudspeaker grill area. For best location performance this area should be kept clear of obstruction and given a clear view of the sky.

Protect the keys from being accidentally pressed which could result in false calls.

## Where will the unit work?

Your MobilAlarm unit relies upon the mobile phone network to communicate with the Monitoring Centre, and the GPS Satellite system for determining its location. Because both these systems depend on radio waves for operation, unfortunately the service cannot be guaranteed everywhere.

Mobile phone networks typically cover the areas where 99% of the UK population live. The service may not extend to particularly remote areas or places shielded from the radio signals by some building constuctions or landforms.

As you move from place to place, it is important to periodically check that the MobilAlarm has a phone network signal (indicator is flashing green), especially if you feel there is a particular risk that you may need to use the MobilAlarm. If the indicator is flashing red then the MobilAlarm is unlikely to operate successfully (a 112/999 call is most likely to succeed) and you should not rely on it in that location.

The GPS receiver in your MobilAlarm receives radio signals from satellites orbiting the earth. Because these satellites are very far away, the radio waves are very weak when they reach the ground and are not usually able to penetrate inside buildings or through solid objects. This means that your MobilAlarm will only be able to provide an accurate location if it is outside with a clear view of the sky. However, in the event that an emergency call is made to the Monitoring Centre when the MobilAlarm cannot receive the GPS satellite signals it will report a "last known position". Whilst it is able to receive GPS signals the MobilAlarm regularly updates and memorises its position. In the event that a "last known position" has to be used, it is usually very near to the position from which the alarm is actually raised.

#### **Updating a memorised location manually**

Your MobilAlarm may have optionally been configured to allow the memorised "last known position" to be updated on request. For example this will allow you to be satisfied that a position is registered just before entering a building. This facility is particularly important for people who use the MobilAlarm whilst working alone and may be about to enter a risk environment.

A position update is started by pressing only the right side emergency key for 1 second. A short confirmation bleep will be heard and the MobilAlarm will begin searching for satellite

signals and calculating its position. If the signals are available and the position is memorised then the MobilAlarm will give one short confirmation bleep and the network indicator will give a long green flash. If a position cannot be calculated then three bleeps will be heard and the network indicator will give a sequence of 5 short repeating red flashes



NOTE: The unit will try to find satellite signals for up to 1 minute.

## Frequently asked questions

#### Can I be tracked?

The unit is not a "tracking" device and does not memorise where it has been except for the single "last known position". The MobilAlarm only reports its position (using a mobile phone call) to the Monitoring Centre which occurs after the emergency call is activated by pressing the side buttons.

The unit calculates its own position after receiving the signals continuously transmitted by GPS satellites orbiting the Earth. Contrary to the belief of many people, the GPS satellites are not capable of knowing where the receiving equipment (in this case the MobilAlarm) is.

Exceptionally, it is possible for the Monitoring Centre to contact the MobilAlarm and request its location. This would result in an automatic emergency call being made to the Monitoring Centre and would usually be audible to the user.

## Important advisory notices

#### General

The MobilAlarm provides a significant additional capability to summon help in an emergency situation. However due to its reliance on the externally controlled mobile telephone network and GPS system, it cannot be guaranteed to operate in all locations at all times.

#### Caring for your MobilAlarm

- Do not keep the MobilAlarm in places with high humidity, strong direct sunlight or high temperatures.
- The unit may be damaged if dropped, crushed or otherwise exposed to excessive mechanical forces.
- Protect from water. The unit is not waterproof.
- Clean only with a damp cloth and dry afterwards. Use of solvents such as those containing alcohol or benzene may discolour, deform or otherwise damage the unit.

#### **Battery Information**

The MobilAlarm contains a Lithium-ion rechargeable battery. The battery can be charged and discharged approximately 500 times before its fully charged capacity is reduced to approximately 60% of its initial capability at which time you should contact your supplier to obtain a replacement. The battery should be charged at least once a month even if the unit is switched off. If the battery is left discharged for an extended period of time then the ability to re-charge may be impaired.

#### Safety

- The unit is designed for use held in front of the face. Hearing damage may occur if used whilst held close to the ear.
- The unit contains no user serviceable parts. Opening the unit may expose the user to danger.
- Switch off or remove the unit if it interferes with sensitive external systems such as fire or gas detection, automatic doors, vehicle control systems.

- The MobilAlarm must be switched off in areas where the use of mobile telephones is restricted such as aircraft, hospitals and areas with potentially explosive atmospheres.
- The operation of cardiac pacemakers, other implanted medical devices and hearing aids can be affected by interference from mobile telephone equipment such as the MobilAlarm. If in doubt about potential danger, contact the physician or manufacturer of the medical device to verify that the equipment is properly shielded. Pacemaker users are advised to keep the MobilAlarm away from the pacemaker whilst it is on.
- Pacemaker manufacturers recommend that a minimum separation of 22cm (approx 8 1/2 ") be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker.
- Use only the supplied charging unit and power supply transformer.
- Do not use charger if the power cord becomes damaged.
- Do not use whilst driving.

#### **Technical details**

#### **Specifications**

Standby time: Up to 48 hours
Talk time: Up to 180 minutes
Charging time: Up to 8 hours

Weight: 90g including battery

Operating temperature: -5 to +50 degC Charging temperature: 0 to +40 degC Storage temperature: -10 to +40 degC

Humidity: <95% (non-condensing)

#### Regulatory notices

#### **Disposal**

This product should be disposed of in accordance with the latest legislation.

#### SAR

European Union (RTTE) and International (ICNIRP)
Information on RF exposure / Specific Absorption Rate (SAR)

This model meets international guidelines for exposure to radio waves.

Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for the exposure to radio frequency (RF) recommended by international guidelines. These guidelines were developed by the independent scientific organisation and include safety margins designed to assure the protection of all persons regardless of age and health.

The guidelines use a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit for mobile devices is 2 W/kg and was adopted into the European Standard EN50360 and into other national standards. The CE mark demonstrates that the EU requirements are met.

The highest SAR value for this device when tested in accordance with international guidelines at the ear was **0.840W/kg**. As mobile devices offer a range of functions, they can be used in positions other than the head, such as on the body. In this case, at data transfer (GPRS) a separation distance of 2.0cm is required.

As SAR is measured utilising the device's highest transmitting power, the actual SAR of this device while operating is typically below that indicated above. This is due to automatic changes to the power level of the device to ensure it only uses the minimum level required to reach the network.

The World Health Organisation has stated that present scientific information does not indicate the need for any special precautions for the use of mobile devices. They note that if you nevertheless want to reduce your exposure you can do so by limiting the length of calls.

#### Compliant with:

3GPP TS51.010 EN60950 ETSI EN301511 EN50 360/361

3GPP TS11.10-4 FCC part 24 (Only in consideration of EN301 489-1/-7 international roaming in the United States)



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