



## **Medial Alert Phone for The Visually Impaired with Emergency Call and Fall Detection**



# 1 Overview

## 1.1 Description of the Device buttons



## Call Button

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### **Long Press** (Press and Hold)

What will it do? It will trigger the Help Call sequence

### **Short Press** (Press and Release)

What will it do?

It will hang up an active call, Incoming call hangup,

And various other functions according to voice assistant announcements

***Pressing the Call Button will make the LED Ring RED and Vibrate***



## Side-Keys

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### **Short Press either side button:**

What will it do?

In idle state: activate phone book.

During a call: increase volume (booster)



### **Press and Hold Both Side Buttons:**

What will it do?

Switch OFF Device

⇒ Note: To turn ON the device place on the Charging Disk

## Status LED

### GREEN

1 flash per second- range and battery good



### RED

1 flash per second-one or both functions beyond limit.

No connection to base station  
Battery not sufficiently charged.  
(Plus, the Device will beep every 20 seconds)



## Ring LED

### GREEN

solid

flashing

active telephone connection  
incoming phone call

on charging disk

Red Solid

fully charged.



### Yellow

solid

USB connection to PC A  
Registration in progress  
The device fell to the ground.

on charging disk

Yellow Solid

Battery sufficiently charged.



### RED

Solid

Telephone calling for help.

Flashing

Dialing telephone number

on charging disk

Red Solid

Battery not sufficiently charged.  
Smoke Alarm detected.



## 1.2 General information

### Language Assistant (Advanced User Manual Function)

When you set up the device, you also specify the language of the language assistant. It reads names from the phone book when you receive a call or when you want to call someone. It gives you valuable advice in various operational situations. In the event of a fall alarm, it will automatically call for you and speak your contact information.

### Fall Detector (Advanced User Manual Function)

The device has state-of-the-art fall detection. This is activated at the factory and does not have to be set. In the event of a fall alarm, the call for help sequence is started automatically.

### Smoke Alarm Detector (Advanced User Manual Function)

The Device detects the smoke alarm of all smoke detectors on the market. This function is activated at the factory and does not need to be set. In the event of a smoke alarm, the device will automatically call your emergency contact. The smoke alarm is Only activated automatically when Device is on the charging disc (usually at night or when you are not at home)

### Manual Call for Help

Just press the button anytime you feel you need assistance, and it will automatically call your help list, until an active contact has been found.

### Phone Book (Advanced User Manual Function)

Up to 100 contacts can be entered with numbers and names. There are 3 methods for dialing: Quick Dial, Standard Dial and Read Aloud. The phone book also generates "missed calls" and "caller list".

### Reminder Function (Advanced User Manual Function)

Up to 5 time-controlled reminders (e.g., "*please take medication*") can be set.

### Clock Function

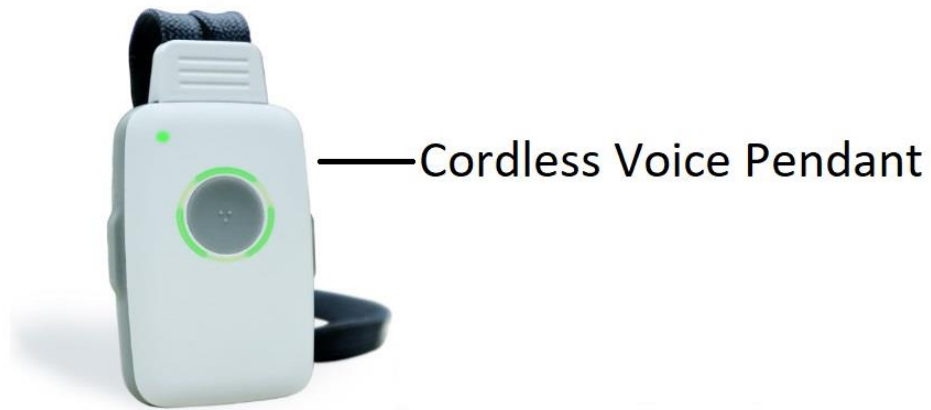
The current time is announced at the push of a button.  
Time will get lost if both Base and Device are switched off.  
Configure Time with PC APP or with Remote Configuration (see chapter 3.9.1)

### Room Monitoring (Advanced User Manual Function)

You can define telephone numbers that force your device to immediately ANSWER when they call you.

### 1.3 Check package contents.

The packaging contains the following items:



### 3.6 Telephoning

The device has a high-quality hands-free facility. Device does not need to be picked up when making a phone call. It should hang freely around the neck or lie on the table. The user can then make calls without losing stability (Hands-free. If Device is always around the neck, the user can reach it immediately.)



*If Device is held in the hand during the conversation, the openings for speakers can (left in the rubber) and microphone (right in Rubber) may inadvertently be covered with the fingers. In this case the volume is then significantly muted.*



*If the small microphone opening is dirty, the called party can no longer hear the conversation (loudly). In this case, carefully clean the small microphone hole (right side, above the side button) with a toothpick or a straightened paper clip.*



#### 3.6.1 Accept an incoming phone call.

When a call comes, it rings with the set ringtone.

If the name of the caller is stored in the phone book, the name is announced.

**"Hubert is calling"**

Otherwise, the calling **number** is announced.

Call will be accepted by pressing the **call button**.

The call is always stored in the Register *Caller List*.



#### 3.7.1 1 incoming call when Device is on the charging disc.



*If Device is now removed from the charging disc, the call will be accepted automatically. The »Cancel Call« function (press call button) is deactivated for a few seconds to prevent the call from being accidentally canceled.*



*In case the call is not accepted, it will be stored in the Register »Missed calls«.*

#### 3.6.5 Missed calls.

If Device is on the charging disc and an incoming call is not accepted, this call is automatically filed under a Register "**missed calls**".

If Device is removed from the charging disc, it reports the number of missed calls.

The register "**missed calls**" is after the last telephone directory out.

*An entry in the »missed calls« list is automatically deleted if*

- a) this number is called back.*
- b) the entry has been read out.*

### 3. 7 .2 Calling a **contact from the phone book**

#### 3. 7 .2.1 Selection of registers / names **via side keys**

This is a quick way to select a desired contact from the phone book.

It is may not be suitable for those with hand dexterity issues or severely disabled people (see 3.8. 2 Reading aloud)

A) First select the phone book by pressing a side key:

» **Phonebook activated** «



B) Then select the desired register.

To do this, use the same side key.

If you wait, you will be asked to choose a register.

» **Please select register** «



C) Once you have found the register you want,

press the side button on the opposite side to select the contact.

side key 2

#### **Remark**

If you wait for 1.5 seconds, you will be asked to choose a name.

» **Please choose name** «

In this case you can use the same side key 1 for selecting the Name



D) If the desired name is found, press the call button.

E) If you wait, you will be asked to choose a name.

» **Press the call button** «

The call is initiated.



#### **Brief description:**

1 Press the side key and select "Phonebook."

2 Press the other key to select the register.

3 Press the other side key to select name.

4 Press the call button »*Hubert will be called*



select phone book / register



select name



make a call



**Speed dialing (only for experienced):** You want to call Hubert.

Hubert is stored in the **3rd** register in the **5th** position.

You press quickly without waiting for an announcement:

(SK = side key)

1 time SK *left* (phone book) **3** times SK *left* (register) **5** times SK *right* (name)

Then Call button      *»Hubert will be called«*



*Any attempt of dialing can be cancelled by briefly pressing the call button.*

### 3. 7 .2 Calling a contact from the phone book

#### 3. 7 .2.2 Selection of registers / names by reading out loud

In case of visual impairment or severe disabilities, this method offers a way to call family and friends. With the help of the voice assistant, all contacts are read out in the order in which they are stored. If the desired name is announced, press the call button to call to this contact.

- 1 Press the side key and select "Phonebook."
- 2 Press call button and start Voice Assistant to read names
- 3 Press call button »Hubert will be called«



*Any attempt of dialing can be cancelled by briefly pressing the call button.*



*Reading can be cancelled by pressing and holding the call button for 2 seconds.*

#### 3. 7. 4 Increase the volume during the call.

During an ongoing call, pressing the side button will increase the call volume.



### 3. 8. 1 Difference between the help number and the emergency number

Up to **three help numbers** are set to be repeatedly called 3 times. These are the first 3 numbers of the SOS sequence. If a valid contact is found, the SOS sequence is ended.

#### 3. 9. 1.1 >Help Call Checker< of iCM intelligent Call Manager

Determination of a "valid contact" is carried out by the unit.

The Device is therefore very strict in assessing whether a valid help contact has been made.

The Unit can recognize many use cases with automatic calling systems. In case of uncertainty the Device rates the call as "invalid" in order not to end the SOS sequence incorrectly.

**The following calls are rated as " no valid connection to a contact ":**

- Ringing time exceeded (if rings more than 15 seconds)
- Call acceptance with a duration of less than 2 seconds
- Call acceptance without ringing (someone answered call before a ring)
- Answer after ringing but possible answering machine announcement detected.



*In very few individual cases, your telephone system (VoIP router) may generate tones in the audible audio band (usable band) while the call is being put through. The device could then erroneously assume an IVR system and cancel the call.*

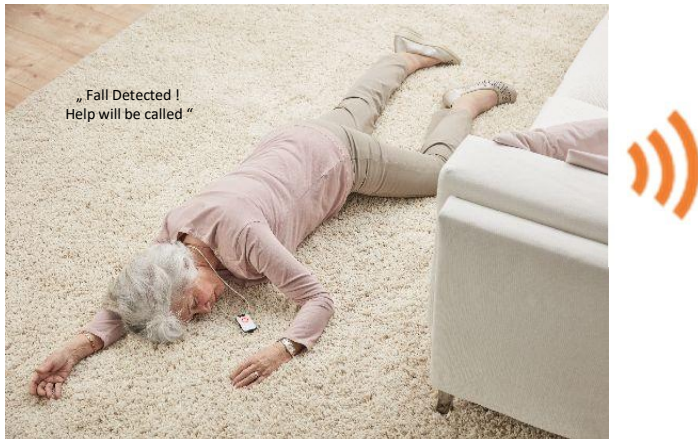
#### 3.8.1.2 the Emergency Call Number

In case of no contact with help call numbers have been achieved, the unit can call a designated **Emergency Number** for safety reasons.

(The system is factory set to 911)

## 4 Special Notes

### 4.1 Fall detection and automatic call for help.



Fall Detection is preset at the factory and is activated automatically when the Device is removed from the charging disc. Fall Detection is interrupted when Device is connected to a calling party, i.e., the user is on the phone.

The voice assistant informs the connected person with “This is a fall emergency call, please take action” and provides the location data and the special instructions.

The hands-free connection is activated so that the person who has fallen can be consulted about the severity of the fall. If a conversation is no longer possible, quick help is often vital. The special instructions (see Section 3.3) should provide information on access to the location of the user.

Fall detection cannot interpret all incidents as falls. However, reliability is very high, typically > 85%. The false alarm rate is typically < 2%.

If Device falls to the ground and the user no longer picks it up, a call for help sequence is also triggered after several instructions from the voice assistant.

This **function** is preconfigured **at the** factory. It is very difficult to ‘fake’ a fall to test.

## 4 Special Notes

### 4.2 Smoke alarm detection and automatic call



The smoke alarm detection is activated automatically when Device is placed on the charging disc. This usually happens at night or when you are away from home. This safety function is particularly valuable.

The smoke alarm detection works with all commercially available smoke detectors, heat detectors and carbon monoxide detectors.

If Device detects a smoke alarm, it automatically calls the stored telephone numbers with an announcement from the voice assistant: "**Smoke alarm detected, please take action**" as well as the location data and the special instructions (see Section 3.3). This information is repeated 5 times. A smoke alarm must last more than 30 seconds, to be classified as a real smoke alarm. This is to prevent false messages, for example when testing the system.

If a call for help is accepted, Device waits 30 minutes and checks whether the smoke alarm has been switched off. If the smoke alarm is still activated, Device starts the call for help sequence **again**.

The smoke alarm call sequence is ended immediately if

- The smoke alarm has been switched off.
- The device has been removed from the loading disc.

Test the smoke alarm detection by pressing the test alarm on the smoke detector.

=> After 2 seconds the ring LED signals **RED**; the smoke alarm was recognized.

If the smoke alarm remains active for several seconds, the smoke alarm sequence is carried out.

## 5 Important Information

### 5 .1 Help for troubleshooting

#### 5 .1.1 Status LED flashes red

Either the battery is too weak (there is a risk of shutdown!) Or Device has no radio connection to the base station. To do this, place Device briefly on the loading disc and then off the loading disc. After 7 seconds, the voice assistant reports the faulty function (s),

either

a) the battery is not sufficiently charged.

Remedy: Place Device on the charging disc and charge Device for at least 2 hours

b) Device is not connected to the base.

Remedy: Check whether the base station is switched on. Switching the base station off and on often helps to reset the unit.

## 5 Important Information

### 5 .1.3 Announcement "Device is not ready for operation."

Possible sources of error:

a) Device is not registered with the base station

Remedy: Register to Base Station (see advanced user manual chapter 2.3)

b) Device is not connected to the base station

Remedy: Check the distance to the base station.

Check base station; switched off?  
it often helps to switch the base station off and on

c) Device is not sufficiently charged

Remedy: Charge Device for at least 2 hours.

d) No help numbers entered.

Remedy: (without PC APP): Call the Device; this calling number will be used as help call number

Remedy: (with PC APP): Enter the help numbers (see advanced user guide)

### 5 .1.4 Device does not charge.

a) Check whether the charging disc is connected to power.

If the charging disk is connected to power, the ring LED of charging disc lights up briefly.

b) Place Device according to the marking on the charging disc

c) Use the positioning aids (bumpons). It guarantees an exact placement of Device on the charging disc and prevents it from accidentally slipping from correct position.

## 5 Important Information

### 5.2 Charging Device (switch on Device)

Use only the supplied USB cable for the charging disc and the plug-in power supply. The power supply may only be provided with cables in accordance with Device specifications. Always place the charging disc on a flat, non-slip surface. Device heats up during charging. This is normal and not a fault. You can use several charging disks (e.g., the living room and bedroom). Contact ATS to purchase additional charging discs.



*The device can only be switched on by placing it on the charging disc. However, never switch OFF Device, even if you are away for a long time, for example. If you place Device on the charging disc, the smoke alarm detection is also activated.*

### 5.3 Speakerphone

The device has a hands-free facility with a considerable volume. Therefore, never hold Device to your ear to avoid hearing damage.

### 5.5 Protection against environmental influences

Protect Device from direct sunlight, dust, moisture, and vapor. Do not expose Device to extreme temperatures or strong electromagnetic fields. The device is protected against dust and splash water in accordance with IP65. As a result, you can use Device while showering, but not while bathing.

### 5.6 Cleaning

Use a slightly damp cloth for cleaning. Do not use liquid detergents directly on Device. The device is splash-proof. Do not switch on Device if it comes into contact with liquid. Hold Device vertically and gently shake it. Pat Device dry and let it sit for at least 24 hours. Then place Device on the charging disc for two hours in order to achieve residual drying through the heat.

### 5.7 Repair

Never try to maintain or repair Device yourself. Do not open the case under any circumstances. This could lead to destruction and damage to the Li-ion battery. Damage to the Li-ion Batteries can lead to intense heat. You will lose your warranty.

## 5.9 Warranty

ATS provides a guarantee for the quality of material and manufacturing. There will be a limited warranty on Li-Ion-Battery of max 6 months.

In the event of a defect, the buyer is entitled to supplementary performance. The supplementary performance includes either the repair or the delivery of a replacement product. The buyer must notify ATS immediately of any defects found. Proof of the warranty claim is to be provided by a proper purchase confirmation (purchase receipt). Damage caused by improper handling, operation, storage as well as force majeure or other external influences are not covered by the guarantee.

## 5.10 CE Declaration of Conformity

This Device fulfills the requirements of the EU directives: DIRECTIVE 2014/53 / EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of April 16, 2014 on the harmonization of the laws of the member states regarding the making available on the market of radio equipment and on the repeal of directive 1999 / 5 / EG. Conformity with the above directives is confirmed by the CE mark.

## 5.11 Technical Service

You can obtain additional advisory services from ATS by calling 615-562-0043 or emailing Questions@AtsCares.com.

# 6 Technical data

<b>Default</b>	DECT GAP according to ETSI standard 300 444 DECT EU, US
<b>Frequency range</b>	EU: 1880 MHz to 1900 MHz US: 1920MHz to 1930 MHz
<b>Duplex process</b>	FDMA / TDMA TDD
<b>Modulation</b>	GFSK
<b>Transmission power</b>	10 mW - thermal power per channel NTP 250 mW
<b>Radio range</b>	up to 980 feet outdoors, up to 164 feet indoors
<b>Plug-in power supply</b>	100-240V AC, 50 / 60Hz, power plug: Euro type, USB
<b>Battery</b>	Li Polymer 450mAh standby time max 2.5 days
<b>operating temperature</b>	32°F to +113°F
<b>Protection class</b>	IP65
<b>Dimensions</b>	70 * 42 * 14mm
<b>Weight</b>	1.5 ounces