Identicom®

IDENTICOM - USER GUIDE

May 2014

Revision 0.2

This guide applies to Identicom models 977,
with software versions 007.002.003 or later.

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About Identicom

Identicom is a communication device in the form of an identity card holder. It enables vulnerable lone workers to communicate discreetly with their monitoring service in potentially hazardous situations.

About This Guide

This user guide provides all the information you need to set up, operate and take care of your Identicom.

Note: If you are a technical systems integrator, further information is available from Connexion2 (please email info@connexion2.com) for people who deploy and manage the system and run the monitoring services.

Identicom Limited Warranty

Thank you for buying this Connexion2 product. Please read this user manual before attempting to use it. To avoid damaging the Identicom, do not:

- Expose it to extremes of temperature or humidity;
- Subject it to hard knocks or excessive force;
- Immerse it in liquid; or
- Use volatile or corrosive substances when cleaning it, as damage caused in any of these ways is not covered by this warranty.

If you have any difficulty using your Identicom, consult the user manual to check you are using it correctly.

If within 12 months of the date of purchase this Identicom does not function substantially as described in the user manual because of defective materials or workmanship, Connexion2 Limited will repair it free of charge, subject to the following conditions:

Where the fault is the result of misuse, unusual external effects, accidental damage, normal wear and tear, or unauthorised repair, Connexion2 Limited may charge you for the repair and retain this product until you have paid that charge in full.

You must produce proof of purchase, showing the date of purchase of this Connexion2 product, to have a repair carried out free of charge under this warranty, so please keep your receipt/invoice safe. To have this Connexion2 product repaired under this warranty, you first need to contact Connexion2 for a Returns Number. Either return it personally or send it by registered post/courier, together with your Returns Number and sales receipt, to your supplier or to Connexion2 Ltd, at the address shown in this user manual. Please ensure that it is properly and securely packed. Please note that we will not be liable for damage to or loss of this Connexion2 product while it is in transit to Connexion2 or your supplier; check that your insurance covers the relevant risks. Service is only available in countries where Connexion2 Limited officially distributes the product.

In the event of Connexion2 being unable to correct or replace the Identicom, Connexion2's liability to you shall not exceed the purchase price of the Identicom. In no event will Connexion2 be liable for direct, indirect, special, incidental or consequential loss of profits or loss of data arising out of use or misuse of the Identicom. Nothing in this warranty shall limit or restrict Connexion2's liability for death or personal injury caused by its negligence.

Camera Usage Note:

Use of the camera function in Identicom should also include consideration by the user/employer as to whether or not proactive publicity about such visual evidence capture needs to be in place. As with CCTV systems and depending on the set-up of the Identicom, the user/employer may legally need to publicise to its clients that such evidence may be captured. In the event that such publicity is required then Connexion2 would suggest that the design of the user's ID card fitted into Identicom includes an appropriate statement to that effect. Connexion2 accepts no liability for any misuse of this feature and would encourage the user/client to seek independent legal advice on the use of such evidence in the county/state of use.

Contents

Identicom Models

This manual covers Identicom model 977, with its features in the table below:

Feature	977
Discreet Audio Capture	●
Man Down	●
GPS	●
Lanyard Rip Cord Plug	●
Red Alert	●
Amber Alert	●
Status Button	●
Network Signal Indicator	●
Power Signal Indicator	●
GPS Indicator	●
Lanyard and Lapel/Belt Clip	●
USB Charging	●
Temperature Sensor	●
GSM/GPRS	●
Selectable One or Two-Way Audio	●
Multifunction Buttons	●

GSM/GPRS Global System for Mobile communications

GPS Global Positioning System – user location with GPS fix transmitted at user's request or as part of an alert and option for regular device location logging.

Man Down Ability of the unit to detect when the user is incapacitated and alarm appropriately.

1 Introduction

The Identicom has the appearance of a simple ID card holder. It holds your ID card and also discreetly functions as a communication device to help ensure your personal safety.

In the plastic body behind the ID card, the Identicom contains a mobile phone technology, a SIM card, microphone and speaker, together with controls and indicators that allow you to operate the device. There is also a vibration motor that can indicate confirmation of your actions by giving recognisable periods of silent vibration.

The organisation that employs you, together with a service provider, are responsible for configuring your Identicom so that it operates in the way best suited to your needs. This configuration process includes setting up conditions called "Amber Alerts" and "Red Alerts" and defining standard text messages that will be sent to particular phone numbers in a specific range of situations.

In this guide, where you see the symbol shown on the left, it indicates that the mode of operation or feature being described is configurable; that is, it may or may not have been enabled on your device. Check with your manager, or the supplier of your Identicom, for details of how your unit has been configured.

The main functions of the Identicom are:

- Before entering a potentially dangerous situation, you can check the Identicom's battery level and the signal strength (to make sure that it will be able to operate effectively if needed).
- You can start an **Amber Alert** before you begin every visit. This sends standard text messages, allows you to send a brief voice message and can alert your monitoring services to check your situation if you haven't cancelled the Amber Alert within a set time.
- You can start a **Red Alert** with a discreet press of a button while you are in a hazardous situation, or at any time when required. This sends standard text messages to the designated phone numbers and also opens a voice link to allow the call centre to hear.
- A **Red Alert** can also be activated when the lanyard rip plug is pulled out, either by someone trying to seize the device or at any time when operating the button is not possible.
- Identicoms with **Man Down** functionality can automatically initiate a Red Alert if the unit detects symptoms that suggest that the user has become incapacitated. (These symptoms are configurable to suit each user's needs.) The user can be warned by a Pre-Alert vibration before the Red Alert is initiated.
- Identicom model 977 has an integrated Global Positioning System (GPS) to assist with determining your exact location in the event of an incident, or to log to a reporting platform for daily location monitoring.

The front of the Identicom is shown below. With the ID card slid out, you can see the multifunction user buttons.

The rear of the Identicom is shown below.

You can attach the lanyard at **points A and B** for a landscape ID card, or at **points A and C** for a portrait ID card. Alternatively, you can attach a lapel clip at **point D** instead of the lanyard.

The **Status** button (near **point A**) allows you to check the status of the battery and the phone signal strength and to check whether an Amber or Red Alert has been started. The status LEDs and symbols are visible on the LCD near **point D**.

Press the **Amber Alert** button (near **point C**) to start or cancel an Amber Alert.

Press the **Red Alert** button (triangle symbol) to start or cancel a Red Alert.

2 Initial Setup

This section describes how to prepare the Identicom for use, covering installation of the lanyard or lapel clip, insertion of the ID card, charging, care and maintenance and switching the device on and off. The box containing your Identicom includes the following items:

- The Identicom
- Easy Reference Guide
- Lanyard and Lanyard rip plug pin
- Lapel clip
- Charger (including your country's adapter)

Installing the Lanyard or Lapel Clip

Configurable Option

You install the lanyard at corners A and B (see the illustration on the previous page) for a landscape ID card, or at corners A and C for a portrait ID card. The attachment at corner A is by way of a plastic pin which fits tightly in its socket but which will pull out if tugged firmly. The Identicom can be configured so that pulling the lanyard pin out of its socket will cause a Red Alert. This is designed to help you in case a person tries to remove the Identicom from you by force. A Red Alert caused in this manner is referred to as a **Rip Alarm Alert**.

The figure shows the clear pin in its socket at corner A.

The pin provided with the Identicom fits in the socket one way only. The pin is held in place by a magnet and pip and the pin will 'click' into its correct location in the socket.

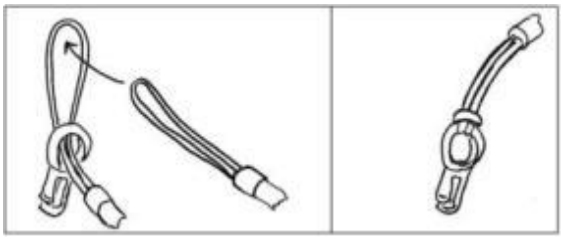
If you do not want to use the lanyard, you can attach a lapel clip at point D (see the illustration on page 6). If you are not using the lanyard, you must still insert the pin into the socket at corner A to prevent dust or dirt from entering the socket and to ensure the Rip Alert is not activated.

Note:	*You must either attach the lanyard, or just insert a pin, before you attempt to charge or switch on the Identicom.*

Note:	*There is no Rip Alarm switch at the lapel clip attachment point. The Rip Alarm function can be enabled with the lapel clip by using the **lapel clip lanyard accessory** sold separately.*

Use the following procedure to attach the lanyard.

1. The lanyard is made of one long piece and one short piece joined by a clip. The lanyard pin must be attached to the long piece. Thread the fine loop at one end of the lanyard part way through the attachment hole in the pin.
2. Thread the other end of the lanyard through the loop of cord that has passed through the hole in the pin. Pull the lanyard tight so that the loop of cord is snug around the pin.



3. Repeat this procedure with the other end of the lanyard at the chosen attachment point (B for landscape or C for portrait), feeding from the outside to the inside. Pull the lanyard tight so that the loop of cord is snug around the attachment point.
4. Insert the lanyard pin into its socket at corner A. The lanyard is now attached.

Inserting your ID Card

Fit your ID card into the slot at the right side of the Identicom (as you look at the front) and slide it in until it is fully inserted. To remove your card, slide the ID card towards the exit slot. You may initially feel a slight resistance until the card starts to slide out.

Charging

The Identicom must be fully charged before you attempt to use it in order to condition the battery fully. We recommend leaving the device on charge for a minimum of six hours the first time it is charged.

To make sure that the battery is fully charged when you need to use the Identicom, always charge the device for at least two hours in between uses.

To charge the Identicom, plug in and switch on the charger, then connect the charging cable to the Identicom charge connection point.

When the Identicom is connected to the charger, the Battery Symbol on the display is active (the display is on the back of the device, next to the Red Alert button). As the battery charges, the battery symbol shows more cells and the LEDs change colour from flashing red, to flashing amber. When the battery is fully charged, the LEDs change to constant green. If the battery colour remains red for a long period of time, the Identicom requires a service.

Note:	*Placing the Identicom "on charge" automatically switches the device on. When taken off charge, the device remains switched on and ready to use.*

Switching the Device On and Off

- To check the Identicom is on, look for the power symbol in the left of the display. You can also press the **Status** button for 2 seconds. If the LCD and LEDs do not start flashing, the Identicom is off.
- To switch the Identicom on, press the **Status** and **Amber** buttons together until the LCD and LEDs start flashing. The device vibrates once briefly to confirm it has turned on, and then will go through its bootup sequence which also includes 5 further buzzes as well as displaying all the LED colours and all the LCD symbols. You will also here beeps out of the speaker.
- To switch the Identicom off, press the **Status** and **Amber** buttons together until the device vibrates twice.

When the Identicom is on, it registers with the mobile phone network and is ready to communicate an Amber or Red Alert. If you go out of coverage for more than 30 minutes, the Identicom switches to a sleep mode to preserve battery power. This does not stop the Identicom from working, but when you press any of the buttons it will take slightly longer to connect the call or report the status.

Care and Maintenance

The Identicom is purposely designed so that you do not need to perform any routine maintenance procedures. However, you should note the following points about cleaning and general care:

Cleaning

Use a damp cloth (not wet) to remove any dirt from the Identicom. Be very careful not to allow water into the unit.

Do not use any alcohol or chemical cleaning agents of any type.

Moisture Resistance

The Identicom is not waterproof and you should take care not to expose the unit to liquids of any kind, including water, rain, steam and extreme humidity.

Impact Damage

The Identicom is made from a tough ABS plastic case. It is designed to resist a certain amount of damage caused by general use, but will not withstand heavy impacts.

3 Status Checking

You can check the Identicom's battery level and the phone signal strength before a visit, so that you can make sure that it will be able to operate effectively if needed. Your Identicom can be configured so that this status information is also sent as a text message to your administrator or monitoring centre.

Battery and Signal Status Checking

Press and hold the **Status** button until the display and LEDs start to flash. After a short while, the display will show the battery symbol and a colour, and then the signal symbol and a colour:

Battery	Symbol	Colour	State
Good	3 cells	**Green**	>75%
Normal	2 cells	**Amber**	>35%
Low	1 cell	**Amber**	<35%
Poor	1 cell (Flash)	**Red**	<1 hour
Critical	0 cells (Flash)	**Red (Flash)**	<15 mins

Signal	Symbol	Colour
Strong	4 bars	**Green**
Good	3 bars	**Amber**
Medium	2 bars	**Amber**
Low	1 bar	**Red**
Critical	0 bars	**Red**

If either of the LED colours are red, you should not rely on the Identicom in an emergency.

When the battery symbol has only one cell remaining (and has an Amber LED colour), you should recharge the Identicom as soon as possible.

Refer to the Technical Specifications in "Section 10 Technical Specifications" in this guide for expected battery life when charged.

Identicom offers the facility of using vibration patterns to indicate activation of the Status Check and to confirm that neither the network coverage nor battery strength LED is red. This function aids the use of Identicom by the visually impaired. The vibration patterns are described in the table in "Section 9 Identicom Indicators -> Vibration Patterns" in this guide.

There is another configurable option to display if the Identicom has a current GPS location fix as part of the Status Check. See "Section 8 GPS Operation " in this guide for further details.

Ending the Status Display

When both the battery/signal symbols and LEDs have displayed their respective status for five seconds, the symbols and LEDs are turned off and the device is ready for use.

Note:	*If you press the status button when the unit is out of coverage, the status is displayed to you, but the unit waits until it is back in coverage before attempting to send any text messages.*

SIM Card Faults

If no SIM card is fitted, or there is a fault with the SIM card, the Identicom battery and signal symbols flash red alternately for a few seconds and then switches itself into the 'power off' state. Please contact Connexion2 or your supplier for further assistance if this condition is present on your Identicom.

Red and Amber Alert Status

If the Identicom is in an Amber Alert* state or a Red Alert state when the Status button is pressed, the LEDs change to Amber or Red for two seconds to give an indication of the state:

- Constant amber for two seconds indicates an Amber Alert is in progress.
- Constant red for two seconds indicates a Red Alert is in progress – the Alert symbol will be on the display throughout the alert.

*Amber Alert is known as a 'Yellow Alert' in USA and Canada

4 Amber Alerts

An Amber Alert is an advance warning to your monitoring service that you are about to enter a potentially dangerous situation. Typically, you would start an Amber Alert before you enter the situation, such as in the street or your car before entering a house. This gives you the privacy to send a brief voice message describing the situation and/or details of your location.

Your Identicom can be configured so that the Amber Alert lasts for a set period. If you take no action at the end of this Amber Alert period, the device automatically escalates into a Red Alert to advise your back-up services that a problem has been encountered.


Configurable Option

Most of the options described below for Amber Alerts are configurable. Check with your manager, or the supplier of your Identicom, for details of how your unit has been configured.

Starting an Amber Alert

Press the **Amber Alert** button for at least 1.5 seconds to start an Amber Alert. The Identicom gives three short bursts of vibration to confirm the state.

The Identicom will open a voice call to the designated number, so that you can send a voice message to describe the situation. The LEDs show constant amber while the call is being connected and then turn to flashing amber when the connection has been made. The flashing amber LEDs are the prompt to start the voice message. The device will vibrate once when the LEDs switch from constant to flashing to aid indication that the call is now connected.

The time allowed for you to send the voice message is set at 24 seconds. Ten seconds before the end of this call period, the LEDs change back to constant amber to warn you that the call period is soon ending. When the voice call period ends, the LEDs go out. There is the option of having a timer period initiated after the voice call period ends. This is detailed later in this section.

When you start the Amber Alert, the Identicom attempts to dial, to allow your voice message to be left. If the voice call cannot be connected, it will retry connecting the call the configured number of times.

The length of time allowed for an Amber Alert Timer period, initiated after the voice call period ends, is typically set at 30 minutes but can be configured for each Identicom to be anything between 1 and 120 minutes.

If you press the **Status** button during an Amber Alert Timer period, the LED shows amber to confirm the Amber Alert state.

At the end of the Amber Alert Timer period, the Identicom gives five long bursts of vibration to remind you to take action. There is then a one minute period for you to decide what action to take. The options at the end of this Amber Alert Timer period are explained in the next section.

Your Identicom can be configured to use Amber Alerts without any timer period. In this mode of operation, there is no automatic escalation from Amber Alert to Red Alert.

Options When in an Amber Alert Timer Period

Your options when in an Amber Alert Timer period are to cancel it, to extend the period, or to allow it to escalate into a Red Alert.

- You can press the **Amber Alert** button for more than 1.5 seconds to cancel the Amber Alert Timer period. This signifies that the potential danger did not arise, or that you are now away from the hazardous situation. The Identicom signals confirmation by giving two short vibrations. The pre-configured Amber Alert cancelled text message is sent to the designated numbers.
- You can quickly press the **Amber Alert** button for less than 1.5 seconds to extend the Amber Alert Timer period. The duration of the extension is typically 15 minutes, but is configurable between 1 and 60 minutes. The Identicom gives a short burst of vibration to confirm the extension. The end of the extension period is signalled in the same way as the original Amber Alert Timer period and you can continue to extend repeatedly, for as long as you need. Your Identicom can also be configured to send a text message when you choose to extend the Amber Alert Timer period.
- If you do nothing when the Amber Alert Timer period ends, with the implication that you were not able to take any action, the Identicom enters the Red Alert state. (This is described in Section 5 of this guide.)

You do not have to wait for the signalled end of the Amber Alert Timer period to cancel it or extend it. Pressing the **Amber Alert** button for more or less than 1.5 seconds at any time during the Amber Alert Timer period will cancel or extend the period, as described above.

5 Red Alerts

A Red Alert is an emergency state. It is not necessarily a violent situation: it could be a case of verbal abuse which you want your back-up services to listen to and record.

Note:	*The legality of recording such events varies from country to country. Please check with your service provider.*

Most of the options described below for Red Alerts are configurable. Check with your manager or the supplier of your Identicom for details of how your unit has been configured.

Starting a Red Alert

There are four ways of starting a Red Alert:

- Press the **Red Alert** button for more than 2.5 seconds (the unit will vibrate) followed by a second press of the Red Alert button to activate the call (within 15 seconds). If you don't press the button again within 15 seconds the unit will vibrate to inform you that Red Alert did not occur.
    - *If configured without double button press, simply press the **Red Alert** button for more than 2.5 seconds. The duration of the press of the Red Alert button to activate Red Alerts can be pre-configured between 0.2 and 3 seconds.*
- Allow an Amber Alert Timer period to expire and escalate into a Red Alert.
- If your Identicom is configured to do so, and your lanyard is fitted, forcible removal of the lanyard plug will also start a Red Alert. This type of Red Alert is also referred to as a Rip Alarm Alert.
- For models with the **Man Down** function enabled, the unit can detect symptoms that suggest that you have become incapacitated. (These symptoms are configurable to suit each user's needs.) You are warned by a Pre-Alert vibration and beeps/tones from the speaker before the Man Down Red Alert is initiated.

When a Red Alert is started, the Identicom gives three short bursts of vibration to confirm the state. The Identicom opens a voice call to the designated number and enables the microphone, so that your monitoring service can listen to and/or record the situation. Also, the pre-configured Red Alert text messages are sent to the designated numbers. Your Identicom can be configured to send different messages to the primary and secondary telephone numbers.

Caution:	*The three bursts of vibration confirm the start of the Red Alert period, but there is normally a brief delay while the mobile phone network makes the connection. This can take several seconds, so do not assume that everything is being recorded from the point where the three bursts of vibration are made.*

If you initiate a Red Alert when your unit is out of coverage, the Identicom will not be able to send the Red Alert messages, so it gives a single long vibration pulse instead of the three short pulses. This indicates that the Red Alert has not been successfully transmitted.

When a Red Alert is started, the Identicom attempts to dial the voice call number. If the voice call cannot be connected, it will retry connecting the call the configured number of times (between 0 and 9). Your Identicom can also be configured to keep trying to make the voice call connection continuously, with no limit to the number of retries.

The call length of a Red Alert can be configured for each Identicom to be anything between 1 and 120 minutes. The Red Alert ends only when it is cleared by you, or, if your Identicom is configured to do so, remotely by your service provider.

Voice Call Connection Confirmation

Your Identicom can be configured to give a confirmation buzz (five short buzzes) when a voice call connection is successfully made by your monitoring service. This is designed to give reassurance that the Red Alert situation is now being monitored.

Additionally, the monitoring service will be able to talk to you via the loudspeaker in your device. The monitoring service will only communicate with you if you make a verbal request to them instructing them to talk. At all other times the monitoring service will not speak to maintain the discreet and covert nature of your Identicom.

Heartbeat Pulse

During an active Red Alert call, your Identicom can be configured so that it will periodically vibrate like a heartbeat (two short pulses, repeated – the repeat time is configurable). This is to provide reassurance to you that the call is active and open, and that someone is listening to and/or recording events.

In a Man Down Red Alert, the heartbeat function delivers three short pulses rather than two, to enable the monitoring service to establish the type of Red Alert.

Rip Alarm Alerts

If your lanyard is fitted (see Section 2 of this guide), your Identicom can be configured to enable Rip Alarm Alerts. These occur if the lanyard plug is forcibly removed from its socket – such as if someone tries to take the device from you. Once started, a Rip Alarm Alert is handled in exactly the same way as any other Red Alert.

Note:	*Rip Alarm Alerts cannot be triggered by the lapel clip unless the lapel clip lanyard accessory is utilised.*

Man Down Red Alerts

The way in which the **Man Down** functionality can detect symptoms that suggest that you have become incapacitated can be configured to take account of the type of work you do and the risks you may encounter.


Configurable Option

The **Man Down** detection feature is configurable. Check with your manager, or the supplier of your Identicom, for details of how your unit has been configured.

There are three aspects of Man Down detection that can be configured:

1. Change in orientation. The unit detects a change in angle from the vertical (a degree of tilt) and measures the period for which the tilt continues. For example, if your working habits are such that you (and your Identicom) are normally upright and you have a fall or are knocked over, the unit could detect if you remain in a horizontal position.
2. Period of non-movement. The unit has a movement sensor and a threshold time value can be set so that the unit detects when you have remained immobile for longer than this time. The unit can be configured so that a Man Down alert is raised when **either** a change in orientation **or** a period of non-movement is detected, or so that a Man Down alert is raised only when **both** conditions are detected.
3. Sudden, rapid movement. The unit's movement sensor can detect a sudden, rapid movement, such as might be caused by an impact or being knocked over. The unit can also be configured so that the period of non-movement is much shorter following a detected impact, than it would be under normal circumstances. For example, the period of non-movement could be set at three minutes before an alarm was raised in normal circumstances, but this could be reduced to 30 seconds of non-movement in the event of a sudden impact.

Your employer will have determined the most appropriate settings for configuring your device.

Man Down detection can be configured so that it is active at all times or so that it is active only when you are in an Amber Alert state and the Amber Alert timer is running.

Man Down detection is always disabled when the unit is on its charger or switched off.

Man Down Pre-Alert

To avoid raising a Man Down Red Alert simply because of a naturally occurring period of non-movement or change in orientation, the device can be configured to enter a Pre-Alert period before initiating the Red Alert. If the device detects what could be a Man Down situation (based on your configured profile), it will first raise a Pre-Alert. The Pre-Alert period can be configured for any time up to four minutes. During this period, the Identicom will attempt to alert you to the imminent Man Down condition by means of a vibration pattern, and also by playing a beep/tone out the speaker. Any movement of the Identicom will cancel the Man Down condition, as it can now detect that you are capable of normal movement.

If you do not cancel the Man Down condition (by moving your Identicom), a Man Down Red Alert will be raised at the end of the Pre-Alert period. You will hear your Identicom make a phone call to your monitoring service and you will then be able to talk to the operator via the loudspeaker within the unit.

During a Man Down Red Alert, the Heartbeat function repeatedly vibrates with three short pulses, repeated every defined period (the repeat time is configurable) to provide reassurance to you that the call is active and open. You can clear a Man Down Red Alert in the same way as any other Red Alert (see below).

Clearing a Red Alert

Press the **Red Alert** button for more than 1.5 seconds to clear the alert. The duration of the press of the Red Alert button to deactivate Red Alerts can be pre-configured between 0.2 and 3 seconds.

This signifies that the dangerous situation has eased. The Identicom signals confirmation by giving two longer vibrations. The pre-configured Red Alert cleared text messages are sent to the designated numbers. Also, the voice call link is terminated. Your Identicom can be configured to send different messages to the primary and secondary telephone numbers.

There are two ways that your Identicom can be configured to clear Red Alerts:

- A Red Alert can be cleared only by you pressing the **Red Alert** button for more than 1.5 seconds.
- A Red Alert can be cleared either by you pressing the **Red Alert** button for more than 1.5 seconds or remotely by the service provider terminating the call.

Your managers or the service providers will be able to tell you how your Identicom is configured.

To cancel a Rip Alarm Alert, you must first re-insert the lanyard plug, and then press the **Red Alert** button for more than 1.5 seconds. This applies whether it was a genuine Rip Alarm, or whether the lanyard was detached accidentally.

7 Multifunction User Buttons

Your Identicom can be configured so that 3 buttons underneath the ID card can be used to:

- Make a phone call when you press a button
- Send a SMS
- Log your status to the management platform
- Receive a phone call

Making a Call

Identicom can have a phone number assigned to each of the buttons. When you press and hold the button for more than 1.5 seconds, the Identicom will call the assigned button and you will hear the Identicom dialling and ringing the called number.

When the called phone answers, a two way conversation can be held in speakerphone mode.

During the call the blue LEDs on the display will be lit to show that the call is active.

The call can be finished in three ways: the called party can hang up; you may end the call by pressing one of the user buttons; or if configured, the Identicom can end the call after a timer has elapsed.

8 GPS Operation

Identicom model 977 can be configured so that a GPS location request is made in any or all of the following situations:

- When you press any of the Identicom buttons
- When you check the status of your Identicom
- When you enter an Amber Alert state
- When you enter a Red Alert state
- On a regular basis to report to a management platform


Configurable Option

The GPS operation features are configurable. Check with your manager or the supplier of your Identicom for details of how your unit has been configured.

In the event of a serious incident, transmission of your exact location coordinates will help to ensure a speedier response in sending you assistance.

When your Identicom is configured so that GPS location information is logged at a much higher frequency, it is transmitted via GPRS to the management platform, which offers further benefits:

- Using GPS data for device tracking
- Uploading the data log via GPRS
- Detecting when the device enters or exits a geo-fence zone. (Up to 100 such zones can be defined.)


Configurable Option

The advanced GPS operation features are configurable. Check with your manager or the supplier of your Identicom for details of how your unit has been configured.

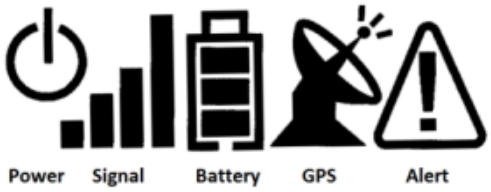
One of the configurable options is to display the current GPS location fix status at the end of a Status Check. If configured, the Signal LED flashes blue for up to two minutes if the device is searching for a GPS fix and displays a steady blue for five seconds if the latest GPS location fix gave a valid location. The steady blue “valid GPS fix” indication can be accompanied by a single short vibration, if required.

You should always perform a status check and get a GPS location fix after turning your Identicom on or moving outside from indoors.

GPS requires a clear line of site to the sky, not obstructed by buildings or other obstacles. The GPS location operation will not work whilst the unit is indoors.

9 Identicom Indicators

The following tables summarise the indications given by Identicom, both by the LCD/LEDs and by the different patterns of vibration.



LCD/LED indications

Device state	Symbol	LED	Meaning
On charge	1 battery cell (flash)	**Red (flash)**	Trickle charging
	2 or 3 battery cells (1 cell flashing)	**Amber (flash)**	Charging
	3 battery cells	**Green**	Charging complete
	Battery Outer Only	**Purple**	Charging Fault Occurred
Status checking	Battery (flash) Signal (flash)	**Red (flash)**	Indicates start of status display
	3 battery cells	**Green**	Battery condition good (>75%)
	2 battery cells	**Amber**	Battery condition normal (<75%)
	1 battery cell	**Amber**	Battery condition low (<35%)
	1 battery cell (Flash)	**Red**	Battery condition poor (<1 hour)
	0 battery cells (Flash)	**Red (Flash)**	Battery condition critical (<15 mins)
	4 signal bars	**Green**	Signal quality strong
	3 signal bars	**Amber**	Signal quality good
	2 signal bars	**Amber**	Signal quality medium
	1 signal bar	**Red**	Signal quality low
	0 signal bars	**Red**	Signal quality – none or critical
	Alert	**Amber (2 secs)**	An Amber Alert is in progress
	Alert	**Red (2 secs)**	A Red Alert is in progress
	GPS	**Blue (flash)**	Searching for a valid GPS location fix
	GPS	**Blue (5 secs)**	A valid GPS location fix was found
Amber Alert	Alert	**Amber**	Call being connected, and then also for last 10 seconds of call
	Alert	**Amber (flash)**	Call connected (until last 10 seconds)
Red Alert	Alert	None	Red alert active
At power on	All symbols, then battery/signal (flash)	Cycle through colours, then **Red (flash)**	Boot sequence, then network acquisition
	battery/signal (alternate flash)	**Red (alternate flash)**, then device power off	SIM card fault, or no SIM card present

Vibration Patterns


Configurable Option

Some of the vibration patterns described below are configurable. Check with your manager, or the supplier of your Identicom, for details of how your unit has been configured.

Identicom Action	Vibration pattern
Confirmation of switch to Power Off mode	Two short pulses
Confirmation of switch to Power On mode	Single short pulse
Confirmation of start of Amber or Red Alert	Three short pulses
End of Amber Alert period – action required or a Red Alert will follow	Five long pulses
Red Alert requested but out of coverage – unable to send messages	Single long pulse
Confirmation of extension of Amber Alert period	Single short pulse
Confirmation of termination of Amber Alert	Two short pulses
'Heartbeat' confirmation of Red Alert call still active	Two short pulses (at configured interval)
'Heartbeat' confirmation of Man Down Red Alert call still active	Three short pulses (at configured interval)
Confirmation that a voice call connection has been made	Five short pulses
Man Down Pre-Alert warning	Continual long pulses for the duration of the Pre-Alert period
Confirmation of start of Status Check (if this vibration function is enabled on the Status Check) *	Three short pulses
Confirmation that neither the network coverage or battery strength are red (if this vibration function is enabled on the Status Check) *	Single short pulse
Confirmation that the latest GPS location fix gave a valid location (if this vibration function is enabled on the Status Check) *	Single short pulse
Confirmation to commence voice message on Amber Alert (if this vibration function is enabled on Amber Alerts) *	Single short pulse
Confirmation of termination of Red Alert	Two longer pulses

* Identicom offers the facility of using vibration patterns to indicate activation of the Status Check, confirmation that neither the network coverage nor battery strength LED is red, and confirmation that a valid GPS location fix was obtained. This function aids the use of Identicom to the visually impaired.

10 Technical Specifications

Dimensions	95 x 65 x 12 mm
Overall weight	65g (not including lanyard)
Operating temperature range	-10°C to +40°C
Operating humidity range	0-95% non-condensing
Communication system	Quad-band GSM
GSM frequency – Dual-band	850 MHz, MHz and 1900 MHz
Battery life – standby	977 - 24 hours (estimated)
Battery life – talk time	2.5 hours (estimated)
Case	ABS plastic
SAR level (see below)	1.55 W/kg
FCC ID	977: VTJS10977U
Industry Canada	7467A-S10977U

Specific Absorption Rate (SAR)

The Identicom, as for all Global System Mobile communication (GSM) based products, emits low frequency signals in the form of Radio Frequency Electromagnetic Energy (RFEE). The absorption of RFEE is measured by the Specific Absorption Rate (SAR) in units of Watts per kilogram (W/kg). It is defined as the rate at which RFEE is absorbed per unit mass of a biological body.

The maximum SAR values for a 977 Identicoms are below the maximum value stipulated. The European R&TTE Directive quotes a maximum SAR value of 2 W/kg. This value includes a substantial margin of safety. The Identicoms are therefore below this limit and actual Identicom SAR values during normal operation are often further below their maximum stated values.

Risks Associated with Pacemakers

Due to the maximum SAR values, Identicoms should not impair the performance of implanted pacemakers. However, the general recommendation is to maintain at least 15 centimetres between a GSM-based device and a pacemaker. If you are in any doubt, seek advice and clarification from your physician and/or the manufacturer of your specific pacemaker.

Use of Identicom in Restricted Areas

Use of Identicom, as with mobile phones, should be in accordance with regulations, protocols and stipulations relating to the specific environment. Where the use of mobile phones is prohibited, the Identicom should be turned off. There may be risks associated with interference with equipment sensitive to RFEE (such as aircraft, hospitals and healthcare facilities) or potentially explosive environments (such as petrol stations and chemical plants).

Disposal and Recycling Information

This product must not be disposed of as unsorted municipal waste. Please dispose of this product in accordance with local environmental laws and guidelines, by returning it to your point of sale or to your municipal collection point for recycling. Note that this product contains a battery that cannot be removed by the customer. For advice on disposal, please contact Connexion2.

FCC Compliance Statement and RF Exposure Statement (977)

The 977 device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. SAR has been evaluated with a maximum SAR value reported of 1.55W/kg. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IC Compliance Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The S10977U has been designed to comply with safety requirements for exposure to radio waves (SAR). SAR testing has been performed in accordance with RSS-102, with the S10977U transmitting at its highest certified power level in all used frequency bands. The highest SAR value for the S10977U when tested was 1.55W/Kg. Please follow the instructions included in the user guide for product installation and use.

Le S10977U est conçu pour se conformer aux exigences de sécurité pour l'exposition aux ondes radio (SAR). Tests SAR a été effectué conformément à la norme RSS-102, avec le S10977U à son niveau de puissance maximum certifié dans toutes les bandes de fréquences utilisées. La valeur SAR maximale pour le S10977U lorsqu'il est testé était 1.55W/Kg. S'il vous plaît suivez les instructions incluses dans le guide utilisateur pour l'installation du produit et son utilisation.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Module: Compliance with FCC and IC Rules and Regulations

The Equipment Authorization Certification for the Wireless Modules reference application will be registered under the following identifiers:

FCC Identifier: VTJS10977U

Industry Canada Certification Number: 7467A-S10977U

Granted to Connexion2 Ltd

Manufacturers of mobile or fixed devices incorporating S10977U modules are authorized to use the FCC Grants and Industry Canada Certificates of the S10977U modules for their own final products according to the conditions referenced in these documents. In this case, an FCC/IC label of the module shall be visible from the outside, or the host device shall bear a second label stating "Contains FCC ID VTJS10977U", and accordingly “Contains IC 7467A-S10977U“.

The integration is limited to fixed or mobile categorised host devices, where a separation distance between the antenna and any person of min. 20cm can be assured during normal operating conditions. For mobile and fixed operation configurations the antenna gain, including cable loss, must not exceed the limits 3.10 dBi (850 MHz) and 2.50 dBi (1900 MHz).

IMPORTANT:

Manufacturers of portable applications incorporating S10977U modules are required to have their final product certified and apply for their own FCC Grant and Industry Canada Certificate related to the specific portable mobile. This is mandatory to meet the SAR requirements for portable mobiles.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The S10977U has been approved for portable use in the Identicom model 977. Use in any other portable host is not approved.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

If Canadian approval is requested for devices incorporating EHS5-US modules the above note will have to be provided in the English and French language in the final user documentation.

Manufacturers/OEM Integrators must ensure that the final user documentation does not contain any information on how to install or remove the module from the final product.

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