

User Manual

v1.03

Handset M70/M80/M90

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Important information

Please read the instructions on safety and disposal and on how to set up and use the device before using it and also give them to other users to read or inform those users of their contents. Save this manual and do not give the device to third parties without it.

Intended use

This telephone is designed for use with a Snom M-series base. Any other use is considered unintended use. Any modification or reconstruction not described in the user manual is considered unintended use.

Safety instructions

Follow the instructions in this manual and other applicable documentation of the device.

- Use only the power converter (AC/DC adapter) delivered with the phone or a power supply expressly recommended by Snom. Other power power supplies may damage or even destroy the device, affect its behavior, or induce noise.
- Use only the rechargeable battery delivered with the handset or a rechargeable battery expressly recommended by Snom.
- Avoid placing the device's cord where people may trip over them. Avoid placing the cord where it may be exposed to mechanical pressure as this may damage it. If the power supply cord or the plug is damaged, disconnect the device and contact qualified service personnel.
- Charger, power adapter, and cord are for indoor installation only. Not for outdoor installation!
- This device is for indoor use only! NOT FOR OUTDOOR USE!
- Do not install the device in rooms with high humidity (for example, in bathrooms, laundry rooms, damp basements). Do not immerse the device in water and do not spill or pour liquids of any kind onto or into the device.
- Do not install the device in surroundings at risk for explosions (paint shops, for example). Do not use the device if you smell gas or other potentially explosive fumes.
- Do not use the device during thunderstorms. Lightning striking the power grid may cause electric shocks and damage or destroy the device. We recommend using overvoltage and surge protection.
- **Warning:** The handset contains a magnet, and its earpiece may attract small dangerous objects such as needles or pins. Please ensure before each use that no such objects are present.
- The operational temperature for the handset is between -10 °C and + 55 °C (14 °F and 131 °F).
- The charging temperature is between +5 °C and +45 °C (41 °F and 113 °F).
- Medical devices might be adversely affected. Please consider the technical ramifications when installing the devices in a doctor's office, for example.
- FOR THE USA: Do not use near medical equipment or if you have a pacemaker.

- **If you have an implanted pacemaker:**

- Do not use if you have an implanted pacemaker unless the pacemaker manufacturer's directions expressly permit the use of devices emitting pulsating radio frequency signals. Always follow the manufacturer's directions!
- Recommended MINIMUM distance to the handset: 20 cm (7").
- Do not carry the handset in a breast pocket.
- Hold the handset to the ear opposite the medical device to minimize the potential for interference. Turn the handset off immediately if there is any reason to suspect that interference is taking place.
- FOR THE USA: Do not use if you have a pacemaker.

- **Other health risks**

Do not hold the loudspeaker at the back of the handset against your ear when the phone is ringing or when speakerphone is switched on. Danger of serious, irreversible damage to your hearing!

- **If you are wearing a hearing aid**

Please note that the handset may cause an annoying background noise.

Additional safety information

- **Small children**

Your device and its enhancements may contain small parts. Keep them out of the reach of small children.

- **Operating environment**

Remember to follow any special regulations in force in any area, and always switch off your device when its use is prohibited or when it may cause interference or danger. Use the device only in its normal operating positions. Do not place credit cards or other magnetic storage media near the device, because information stored on them may be erased.

- **Medical devices**

Operation of any equipment emitting radio frequency signals may interfere with the functionality of inadequately shielded medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external radio frequency (RF) energy or if you have any other questions concerning this topic. Switch off your device in health care facilities when signs posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

- **Implanted medical devices**

Manufacturers of medical devices recommend that a minimum distance should be maintained between a wireless device and an implanted medical device, such as pacemakers or cardioverter defibrillators, to avoid potential interference with the medical device. Persons who have such devices should:

- Always keep the wireless device more than 20 centimeters (7.8 inches) from the medical device when the wireless device is turned on.
- Not carry the wireless device in a breast pocket.
- Hold the wireless device to the ear opposite the medical device to minimize the potential for interference.
- Turn the wireless device off immediately if there is any reason to suspect that interference is taking place.

- Read and follow the directions of the medical device's manufacturer.

If you have any questions about using your wireless device with an implanted medical device, consult your health care provider.

SELV (Safety Extra Low Voltage) compliance

Safety status of Input/Output connections comply with SELV requirements.

Potentially explosive environments

Switch off your device when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Switch off the device at refuelling points such as near gas pumps at service stations. Observe restrictions on the use of radio equipment in fuel depots, storage, and distribution areas; chemical plants; or where blasting operations are in progress. Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas, and areas where the air contains chemicals or particles such as grain dust or metal powders.

Sensitive Electronic Equipment

The current state of research concludes that operational DECT phones normally do not adversely affect electronic equipment. Nevertheless, you should take some precautions if you want to operate DECT phones in the immediate vicinity of such equipment like sensitive laboratory equipment. Always keep a minimum distance of 10 cm (3.94") to the equipment even when the phone is in standby.

Electrical Surges

We recommend the installment of an AC surge arrester in the AC outlet to which this device is connected to avoid damage to the equipment caused by local strikes of lightning or other electrical surges.

Important Battery Information

This product uses a rechargeable Lithium-Ion battery 3.7V, 1100 mAh. Only use the battery that came with the handset or the replacement battery, Snom PN 00003932.

Do not use any other type of battery since this may lead to leakage, fire, explosion, or other dangerous situations. Never disassemble, alter, or short-circuit batteries or use them for purposes other than the intended one. Charge battery only within the handset placed in the charger that came with the product.

Charging and Discharging, Storage

- The full performance of a new battery is achieved only after two or three complete charge and discharge cycles.
- The battery can be charged and discharged hundreds of times, but it will eventually wear out. Use only Snom Technology GmbH approved batteries.

- If left unused, a fully charged battery will lose its charge over time. If the battery is completely discharged, it may take a few minutes before the charging indicator appears on the display.
- Use the battery only for its intended purpose. Do not short-circuit the battery. Short-circuiting the terminals may damage the battery or the connecting object. Do not use a damaged charger or battery. Using a damaged battery may cause it to explode.
- Do not place or store the battery, inside or outside the handset, in the immediate vicinity of open fire or other heat sources.
- Leaving the battery in hot or cold places will reduce its capacity and lifetime. Charge batteries within an ambient temperature range of 5° C to 40° C (41° F to 104° F). A device with a hot or cold battery may not work temporarily, even when the battery is fully charged.
- Avoid overcharging. Repeated overcharging can lead to deterioration in battery performance. Never attempt charging the battery with reversed polarity as this may cause the gas pressure inside the battery to rise and lead to leakages.
- Remove battery if storing phone for more than 1 month.
- Store battery/batteries in a cool, dry place without corrosive gases. Temperature range for storage up to 3 months: -20° C to 35° C (-4° F to 95° F). Storage up to 6 months: Charge battery/batteries to 30% to 70% of capacity and store at +5° C and +25° C (41° F to 77° F), relative humidity 50%.
- Battery Disposal. Defective or exhausted batteries should never be disposed of as municipal waste. Return old batteries to the battery supplier, a licensed battery dealer or a designated collection facility. Do not incinerate batteries.

Disposal

Handset, Charger, and Power Supply



This product is subject to European Directive 2012/19/EC and may not be disposed of with general household garbage. If you do not know where you may dispose of the device at the end of its lifespan, contact your municipality, your local waste management provider, or your seller..

If you do not know where you may dispose of the device at the end of its lifespan, contact your municipality, your local waste management provider, or your seller.

For countries outside the European Union

Disposal of electrical and electronic products in countries outside the European Union should be done in line with local regulations. Please contact local authorities for further information.

Battery



The battery/batteries provided with this product is/are subject to European Directive 2006/66/EC and may not be disposed of with general household garbage.

If you do not know where you may dispose of the battery/batteries at the end of its/their lifespan, contact your municipality, your local waste management provider, or your seller.

For countries outside the European Union

Disposal of batteries in countries outside the European Union should be done in line with local regulations. Please contact local authorities for further information. In the US and Canada, you can contact the consumer helpline 1-800-8-BATTERY.

Cleaning

To clean the device, use an anti-static cloth. Please avoid cleaning liquids as they might damage the surface or internal electronics of the device.

Standards conformance

CE This device complies with the essential health, safety, and environmental requirements of all relevant European directives. This phone is FCC certified and meets US and Canadian health, safety, and environmental standards.

The declaration of conformity is available for download at www.snom.com/Conformity.

Unauthorized opening, changing, or modifying the device will cause the warranty to lapse and may also result in the loss of CE conformity and IC FCC certification. In case of malfunction contact authorized service personnel, your seller, or Snom.

Technical specifications

Safety	IEC 62368-1
Frequency band	1880–1900MHz (EU), 1910–1930 MHz (LATAM), 1920–1930 MHz (US), 1920–1930MHz (Brazil)
Bluetooth	Bluetooth LE interface (for positioning)
Battery type	Lithium-Ion 1100mAh, 3.7 V, 4.1 W (included in delivery)
Charger	5V DC 2000mA with non-detachable USB cable, USB type A (included in delivery)
Power	SMPS power adapter Ten Pao S008ACM0500200, input 100-240 VAC, output 5V DC 2000 mA, interchangeable EU and US clips (included in delivery)
Talk time WB	Approx. 12 hours
Talk time NB	Approx. 17 hours
Standby time	Approx. 200 hours
Charging time	From empty to full 6 hours
Connector	3.5 mm standard phone jack for wired headsets
Ingress protection	M70: IP50 at LCD area. M80: IP65 compliant M90: IP65 compliant
Ruggedization	M70, M80: Ruggedized design M90: Ruggedized design with antibacterial coating
Drop height (max.)	2m on concrete floor
Tumble test	1000 x 0.5m
Weight	M70: 86g M80: 95g M90: 95g

Additional Important Information USA

FCC ID: T7HCT8631

Intended Use

This telephone is designed for use with a Snom M-series base. Any other use, modification or reconstruction of the product is considered unintended use.

Important Safety Information

Follow all instructions and warnings in the user manual, and on the equipment to prevent accidents.

WARNING

Fire, electric shock, or other injury may result if you do not observe the following safety precautions:

- Do not use in or near a bathtub, sink, swimming pool, wet basement, or other water.
- Do not use this or any cordless telephone in the vicinity of a gas leak.
- Do not use in environments subject to explosion hazards, such as auto paint shops.
- Do not use near medical equipment or if you have a pacemaker.
- Unplug from wall outlet before cleaning.
- To prevent overheating, do not block slots and openings in the cabinet or the back or bottom of equipment. Do not place equipment on beds, sofas, rugs, or other surfaces that generate fibers.
- To prevent overheating, do not place near or over a radiator or in a cabinet without proper ventilation.
- To reduce the risk of fire, use only 26 AWG or larger UL-listed or CSA-certified telecommunication line cord.
- Operate using the power source indicated on the marking label. If you are unsure about the type of power supply to your home or business, consult your power company.
- Do not place objects on the power cord. Do not step on the power cord.
- To prevent exposure to dangerous voltage, do not push objects through cabinet slots.
- To reduce the risk of electric shock, do not disassemble equipment or open parts other than specified access doors. Opening or removing parts may expose you to dangerous voltage or other risks. Incorrect reassembly can cause electric shock when equipment is subsequently used.
- Do not overload wall outlets and extension cords.
- Unplug equipment and contact qualified service if any of the following has occurred:
 - Power supply cord or plug has been damaged or frayed.
 - Liquid has been spilled on or in the equipment.
 - Equipment has been exposed to rain or water.
 - Equipment does not work normally even when the operating instructions are followed. Adjust only those controls referred to in the operating instructions. Improper adjustment of other controls may result in damage and may require extensive work by an authorized service center.

- Equipment has been dropped and damaged.
- Equipment has exhibited a distinct change in performance.
- Do not put the handset of the telephone next to your ear when the handset is not in normal talk mode.
- Radio signals transmitted between the handset and base may cause interference with hearing aids.
- **WARNING:** The handset contains magnets and the earpiece or mouthpiece may attract and hold small dangerous objects such as pins. Please ensure no such objects are present before each use.
- The cords contain lead, a chemical known to the State of California to cause birth defects or other reproductive harm. Wash hands after handling.

Installation Guidelines

- Follow all warnings and instructions.
- Do not install equipment near a bath tub, sink, or shower.
- Operate the equipment using only the power source indicated on the marking label. If you are unsure of the power supply to your home or business, consult with your power company.
- To avoid interference to nearby appliances, do not place base of the phone on or near a television, VCR, or microwave oven.
- Do not expose the equipment to direct sunlight.
- Do not place equipment on an unstable cart, stand, or table.
- Adjust only those controls referred to in the operating instructions. Improper adjustment of other controls may result in damage and may require extensive work to restore equipment to normal operation.
- The equipment may get warm when batteries are being charged. To avoid damage, it is recommended that the product not be placed on antique or veneered wood.
- The location of the base unit of the phone should be close to a phone jack, a personal computer, and a continuous power outlet (an AC outlet that does not have a switch to interrupt power).
- Keep base and handset away from sources of electrical noise such as motors or fluorescent lighting.

Cleaning

Do not clean with liquid or aerosol cleaners, household polish, chemicals, or cleaning agents. To avoid static shock, do not clean with a dry cloth. Clean with only a damp (not wet) cloth.

NOTICE

To avoid damage to the equipment, observe the following precautions:

- Do not expose to water, rain, or moisture.
- Place securely on a stable surface.
- To avoid damage during an electrical storm, equipment should be plugged into a surge protector.

Battery Safety Precautions

The handsets contain a rechargeable Li-ion battery.

WARNING

Fire or injury may result if you do not observe the following safety precautions:

- Use only the rechargeable battery or batteries specified in the manual.
- Do not use other batteries or conventional alkaline batteries.
- To avoid explosion, do not dispose of battery in a fire.
- Review battery package insert for disposal instructions. Batteries must be disposed of properly and may need to be recycled. Contact your local recycling center for proper disposal methods.
- Do not open or mutilate battery. Released electrolyte is corrosive and may damage eyes and skin and may be toxic if swallowed.
- Battery may overheat and cause burns if placed into contact with conducting materials such as rings, bracelets, and keys.

CAUTION

- Charge battery only in accordance with the instructions and limitations specified in the user manual.
- Observe proper polarity orientation between battery and battery charger.
- Remove battery if storing phone for more than 30 days.
- Disconnect and remove batteries before shipment. Any batteries transported with the equipment must be separately secured and cushioned with any exposed terminals covered to prevent breakage, leakage, movement within packaging, or short circuits. Failure to follow recommendations may be against U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA), or International Maritime Organization (IMO) regulations.
- Rechargeable battery must be recycled or disposed of properly. At the end of its useful life, under various state and local laws it may be illegal to dispose of a battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.
- Please call 1-800-8-BATTERY for information on how to recycle the battery.

Cordless telephone privacy

Cordless telephones are radio devices. Communications between the handset and base of your cordless telephone are accomplished by means of radio waves which are broadcast over the open airways. Because of the inherent physical properties of radio waves, your communications can be received by radio receiving devices other than your own cordless telephone unit. Consequently, any communications using your cordless telephone may not be private.

Emergency calling service

(i.e., 911, 999, etc.) with VoIP typically functions the same as that of traditional phone service companies. However, you are strongly advised to consult your VoIP provider to ensure that emergency service via VoIP is available in your area. In addition, you will likely be asked to register your physical address with your VoIP service provider to ensure that an emergency response team is able to locate the origin of the emergency call. Also note that it may take several days for the registration of your address to take effect.

In order to better ensure your safety, please be aware of certain circumstances in which emergency calling service may be either unavailable or limited in comparison to traditional emergency calling services.

- During an electrical power outage, an internet service outage, or a service disruption due to non-payment, your emergency calling service may not function properly.
- If at any point in time your broadband phone or adapter fails, emergency calling service may not function properly.
- The relocation of your base station to a physical address other than that provided upon signup, or the use of a number outside your normal area code or exchange may cause incorrect emergency calling information to be provided to your local emergency response center.

Please contact your VoIP service provider for more information.

Please be advised that emergency calling services generally do not recommend programming emergency numbers into the phone's speed dial as this may lead to accidental dialing. If you dialed an emergency number in error, do not terminate the call. Stay on the phone and explain to the dispatcher that you dialed by accident and that you do not have an emergency.

FCC and other information

This equipment complies with Parts 68 of the FCC rules and the requirements adopted by the Administrative Council for Terminal Attachments (ACTA).

This 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. Privacy of communications may not be ensured when using this phone.

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 and 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 or on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF exposure warning

To insure the safety of users, the FCC has established criteria for the amount of radio frequency energy various products may produce depending on their intended usage. This product has been tested and found to comply with the FCC's exposure criteria. For body worn operation, the FCC RF exposure guidelines were also met when used with the accessories supplied or designed for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines and should be avoided.

Caution: To maintain compliance with the FCC's RF exposure guidelines, the internal antennas used for this mobile transmitter (Base unit) must provide a separation distance of at least 20 cm from all persons. Base and Handset must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

Hearing aid compatibility

This equipment is hearing aid compatible as defined by the FCC in 47 CFR Section 68.316.

Health and safety information FCC

Exposure to Radio Frequency (RF) Signals

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S.

Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards previously set by both U.S. and international standards bodies:

This product has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE Std. C95.1-1992 and has been tested in accordance with the measurement procedures specified in FCC/OET Bulletin 65 Supplement C (2001) and IEEE Std. 1528-2003 (December 2003).

RF exposure FCC

Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operation can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required

by the FCC for each model. Body-worn measurements may differ among phone models, depending upon available accessories and FCC requirements. The highest SAR value for this phone when tested for use at the ear is 0.41 W/kg. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

For body worn operation, to maintain compliance with FCC RF exposure guidelines, use only accessories that contain no metallic components and provide a separation distance of 15mm (0.6 inches) to the body. Use of other accessories may violate FCC RF exposure guidelines and should be avoided.

Regulatory Information Canada

IC ID: 4979B-CT8631

Industry Canada

This Class B digital apparatus complies with Canadian requirements: CAN ICES-3 (B). This product meets the applicable Industry Canada technical specifications.

Interference information

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.

Privacy of communications may not be ensured when using this equipment.

Exposure to Radio Frequency (RF) Signals

This product is a radio transmitter and receiver. It is designed and manufactured not to exceed this emission limit for exposure to radio frequency (RF) energy set by the Ministry of Health (Canada), Safety Code 6. These limits are part of comprehensive guidelines and established permitted levels of RF energy for the general population. These guidelines are based on the safety standards previously set by international standard bodies. These standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

This device and its antenna must not be colocated or operating in conjunction with any other antenna or transmitter.

This device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environmental / general public exposure limits specific in ANSI/IEEE C95.1-1992 and had been tested in accordance with the measurement procedures specified in IEEE 1528-2003.

Industrie Canada

CET appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.

Renseignements sur le brouillage

L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage; (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement..

La confidentialité des communications ne peut pas être garantie avec cet équipement.

Exposure to Radio Frequency (RF) Signals

Ce produit est un émetteur et un récepteur radio. Il est conçu et fabriqué de manière à ne pas dépasser la limite d'émission d'exposition à l'énergie de radiofréquence établie par Santé Canada au Code de sécurité 6. Ces limites font partie de lignes directrices détaillées et des niveaux autorisés d'énergie RF population générale. Ces directives sont basées sur les normes de sécurité précédemment définies par les organismes de normalisation internationaux. Ces normes incluent une marge de sécurité importante conçue pour assurer la sécurité de toutes les personnes, indépendamment de leur âge et de leur santé.

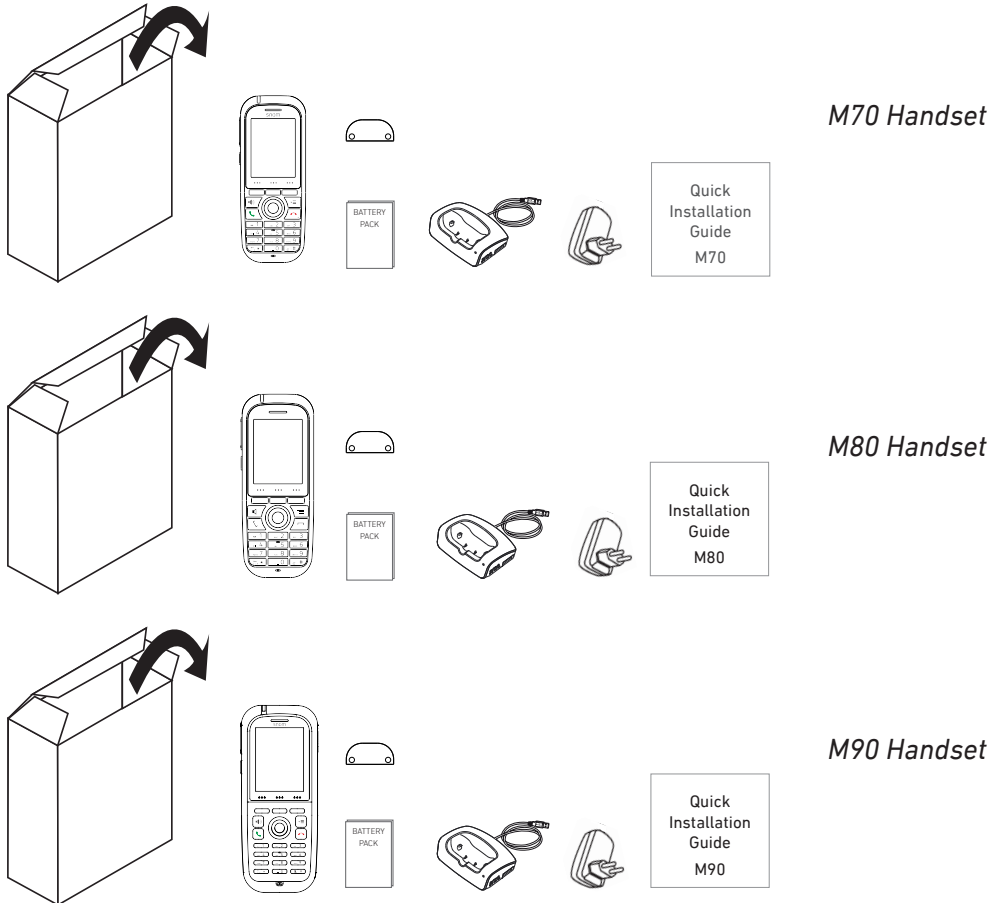
Cet appareil et son antenne ne doivent pas être installés dans un même lieu ni fonctionner avec une autre antenne ou un autre émetteur.

Il a été démontré que cet appareil était capable de respecter le taux d'absorption spécifique localisé pour les limites d'exposition non contrôlées pour l'environnement / le grand public spécifiques de la norme ANSI / IEEE C95.1-1992 et avait été testé conformément aux procédures de mesure spécifiées dans la norme IEEE 1528. -2003.

Setting up the phone

Setting up the hardware

Delivery content



Content of each box

- Handset with attached beltclip
- Spare beltclip mount
- 3.7 V 1100mAH Li-ion battery
- Charger 5 VDC with nonremovable USB cable, USB type A
- Power adapter 5 V with exchangeable plug clips for EU and US
- Quick Start Guide
- 6 information sheets (security, standards) in English, German, French, Italian, Spanish

Charging the battery

The handset is delivered with the battery inserted. Before first use, remove the protective tab and charge the battery fully. Depending on its charge status, charging the battery to maximum capacity can take up to 6 hours.

1. Unlock the battery cover on the back of the handset by pushing the lever counterclockwise onto the open lock symbol (Fig. 1).

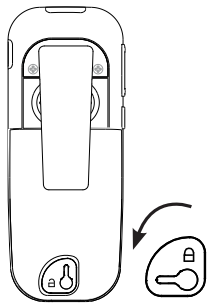


Fig. 1

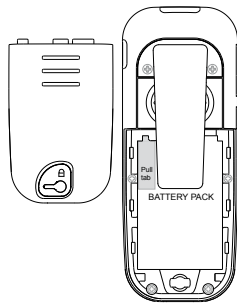


Fig. 2

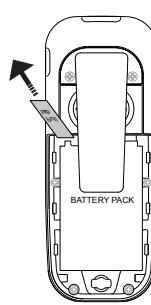


Fig. 3

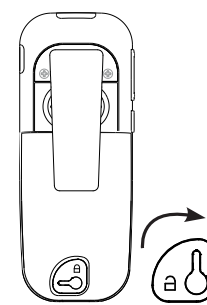


Fig. 4

2. Remove the battery cover from the back of the handset (Fig. 2).
3. Pull the tab away from the handset at a 90 degree angle until it is free of the battery (Fig. 3).
4. Put the cover on the battery compartment.
5. To lock the battery compartment, push the lever clockwise onto the closed lock symbol (Fig. 4).
6. Plug the USB cable of the charger into the USB port of the power adapter (Fig. 5).

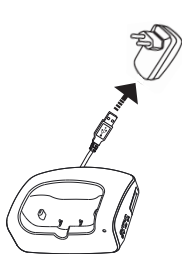


Fig. 5

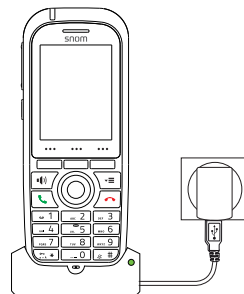



Fig. 6



7. Plug the power adapter into a wall outlet.
8. Place the handset into the charger (Fig. 6). The green LED on the charger lights up, indicating that the handset is charging.

Registering the handset at the base station

To be able to register the handset at a base station, an extension must have been set up for it on that base station. Please refer to the manual of the base station on how to set up extensions.

1. Press the menu key . The top menu opens; the symbol highlighted in blue is the one currently selected (Fig. 1).

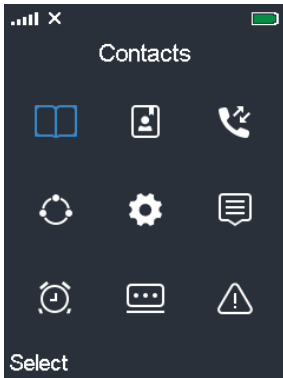


Fig. 1

2. Press the lower rim of the navigation key  once to scroll down to  **Connectivity** (Fig. 2).

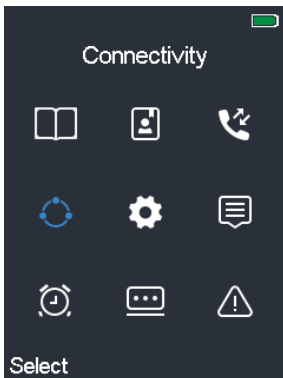



Fig. 2

3. Press **Select** or the OK key in the center of the navigation key . The **Connectivity** menu opens (Fig. 3). The blue bar highlighting one of the list items indicates that this is the currently selected one. To register the handset at the base station, **Register** must be selected.

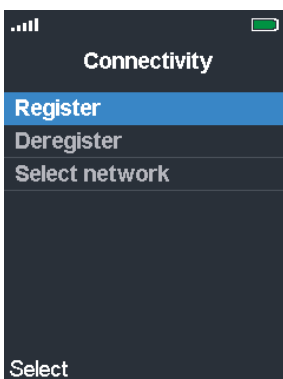


Fig. 3

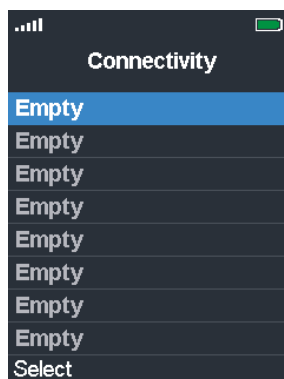





Fig. 4

4. Press  to open the line menu (Fig. 4).
5. Select the first line with the word "Empty" line and press . The text field for entering the access code opens (Fig. 5).

Note: The default access code is 0000.

6. Enter the access code and press . The display indicates that the handset is registering (Fig. 6). Once registration has been completed, the display shows the account/extension and the date and time of the base station (Fig. 7). Your handset is now ready to be used.

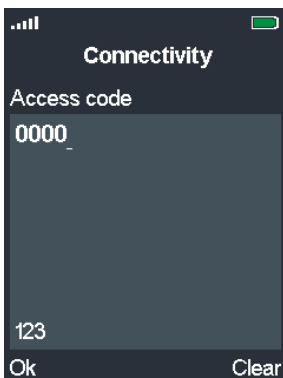


Fig. 5

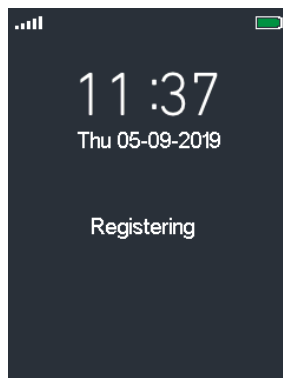


Fig. 6

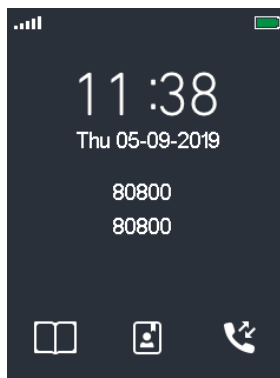




Fig. 7

NOTE: The **access code for registering** the handset at the base station is set on the base station. The **PIN that is needed to deregister** the handset from the base station and to reset the handset to factory values is set on the handset itself. The default code for the PIN is also 0000.

Turning the handset on and off

- The handset is turned on automatically when it is placed in the charger. Alternatively, press the cancel key  briefly.
- To turn the handset off, press the cancel key  for three (3) seconds.

Getting to know your phone

M70 / M80 at a glance

LED indicators (MWI, missed call, low battery)

Signal strength

Function key line for context-sensitive function keys

Context-sensitive function keys

Speakerphone (on/off) with LED

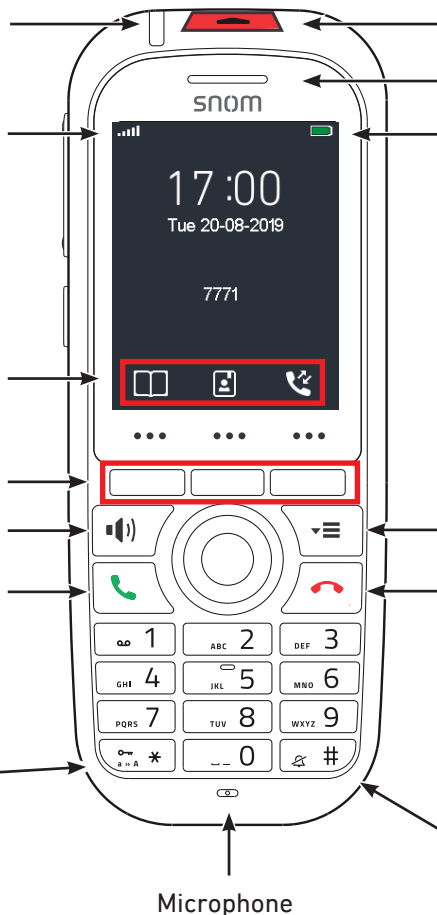
Call key (green key):

- Accepting incoming calls
- Starting to dial numbers
- From idle screen: Call lists, redialing call from call lists

Star key:

- In editing modes:
 - Letter mode: Press for one second to change input mode (lower case > upper case > v.v.)
 - Numeral mode: Press briefly to type *
- On idle screen: Press for 3 seconds to lock/unlock the keypad

Navigation keys: Press top, bottom, left, or right of outer rim to navigate in the respective direction on the display



Emergency alarm button

Loudspeaker

Battery charging status

Settings menu

Cancel key (red key):

- Ending calls
- Canceling actions & input, returning to previous screen
- Press for at least 3 seconds to turn handset off; press briefly to turn handset on

Pound/hash key

Microphone

OK key (confirming actions and settings): Press center

Note: The settings for the **emergency alarm** are configured on the base station where the handset is registered. They cannot be set or changed on the handset. Please, ask your administrator for more information on which type of emergency alarm, if any, pressing the alarm button will initiate.

M90 at a glance

LED indicators (MWI, missed call, low battery)

Signal strength

Function key line for context-sensitive function keys

Context-sensitive function keys

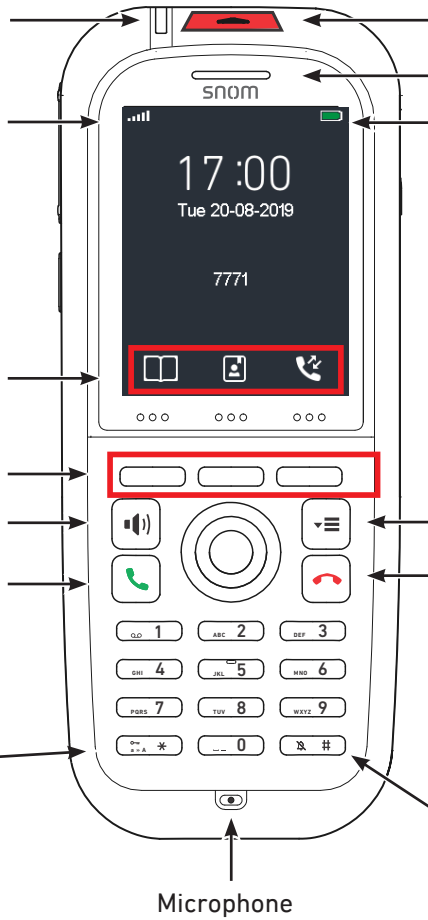
Speakerphone (on/off) with LED

Call key (green key):

- Accepting incoming calls
- Starting to dial numbers
- From idle screen: Call lists, redialing call from call lists

Star key:

- In editing modes:
 - Letter mode: Press for one second to change input mode (lower case > upper case > v.v.)
 - Numeral mode: Press briefly to type *
- On idle screen: Press for 3 seconds to lock/unlock the keypad



Emergency alarm button

Loudspeaker

Battery charging status

Settings menu

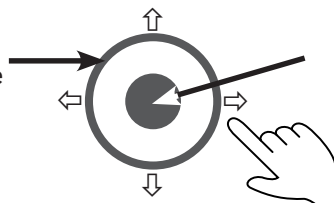
Cancel key (red key):

- Ending calls
- Canceling actions & input, returning to previous screen
- Press for at least 3 seconds to turn handset off; press briefly to turn handset on

Pound/hash key

Microphone

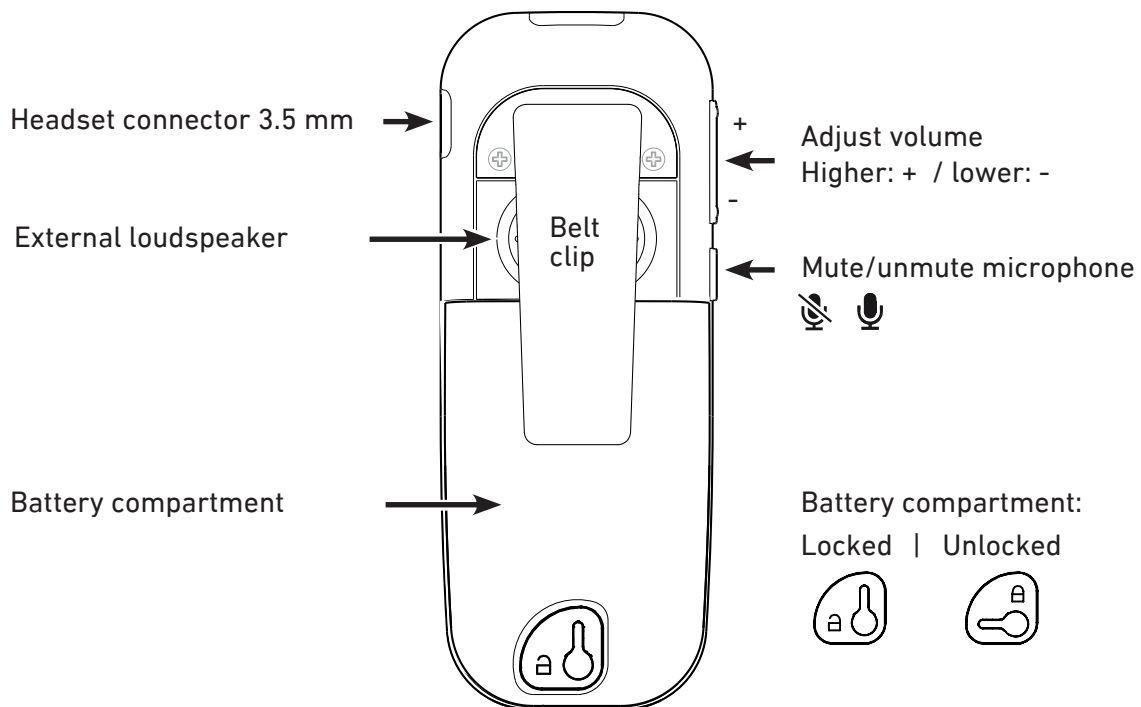
Navigation keys: Press top, bottom, left, or right of outer rim to navigate in the respective direction on the display



OK key (confirming actions and settings): Press center

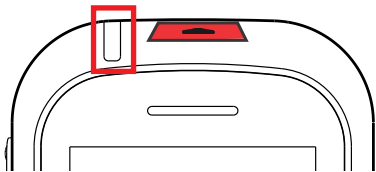
Note: The settings for the **emergency alarm** are configured on the base station where the handset is registered. They cannot be set or changed on the handset. Please, ask your administrator for more information on which type of emergency alarm, if any, pressing the alarm button will initiate.

Handset back at a glance



LED indications




Missed calls, message waiting (MWI), low battery



The LED indicator for MWI, missed calls, and low battery can signal information in three colors. The default settings are:

- Missed call: 2 quick red flashes.

Note: Opening the **All calls** menu and viewing the missed call(s) will turn off the missed call indicator. For more information, see "Call history (call lists)" on page 43 .

1. Press the function key underneath the "Calls" symbol .
2. Select the list of missed calls .
3. Press the cancel key  to return to the idle screen.

- Voice message: Green LED.
- Low battery: Yellow LED.

Changing the settings:

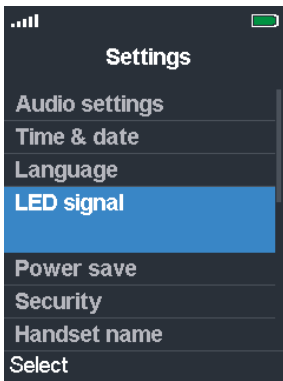


Fig. 1

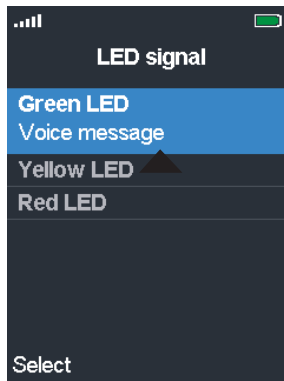


Fig. 2

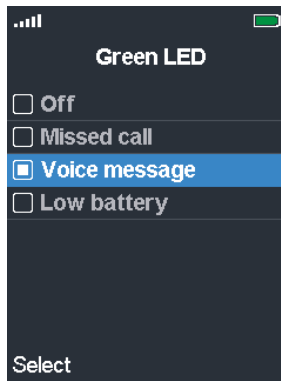




Fig. 3

1. Press the menu key  to open the top menu (Fig. 1 on page 22).
2. Use the navigation key to navigate to the **Settings** menu  and press the OK key (see "Navigation and "OK" keys" on page 28).
3. In the settings menu, select **LED signal** (Fig. 1, above).
4. Select a color (Fig. 2).
5. Select one of the three options **Voice message**, **Missed call**, or **Low battery** for each color, or select **Off** to disable the LED for the selected color.

Speakerphone key LED

The speakerphone key has a red LED that lights up  when speakerphone is turned on during a call. Press the speakerphone key again to turn off speakerphone and the red LED.

Hard keys

Keypad illumination

The keypad is illuminated. The LEDs will light up when any key on the keypad is touched. When the keypad is not touched for the number of seconds specified in the **Power save** setting (see "Power save" on page 51), the LEDs will be turned off; the default setting is 60 seconds.



M70 / M80






M90

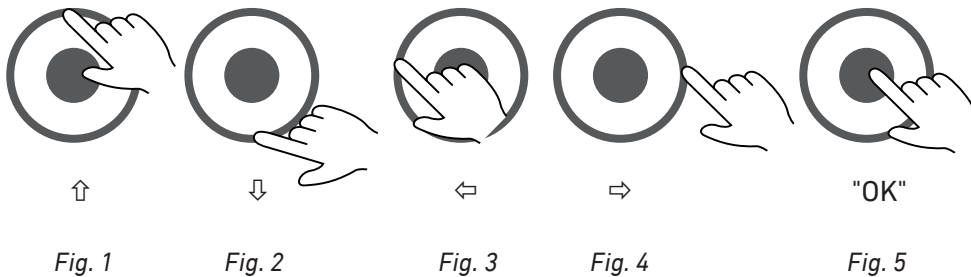
Context-sensitive function keys





The three keys above the navigation key are context-sensitive function keys.



- When the phone is idle, they are shortcuts to directories and call lists.
 - Left key, symbol . Personal contacts stored on the handset only.
 - Center key, symbol . The central directory on the base station or a server directory, depending on the setting on the base station. If neither is available, the symbol is not displayed.
 - Right key, symbol . The four call lists (all, received, dialed, and missed calls) .
- During calls or when you are editing settings, contacts etc., the function key line on the display directly above the context-sensitive function keys shows the functions available at that particular moment (hold, transfer, etc.).


Navigation and "OK" keys



- Outer ring: Navigation keys. Press the top (Fig. 1), bottom (Fig. 2), left (Fig. 3) or right (Fig. 4) of the outer ring to navigate up , down , left , or right , respectively, on the display.
- Center: OK key for confirming actions and settings. Press the center key (Fig. 5) to confirm actions and settings.

Speakerphone key

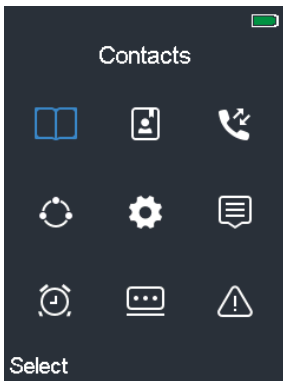


- During a call, press the speakerphone key to turn on speakerphone. The speakerphone symbol appears on the display. The key's bright-red LED will light up  and remain illuminated as long as speakerphone is on.
- Press the key again to turn off speakerphone. The speakerphone symbol disappears from the display. The key's red LED goes out.

Menu key



Press the menu key to bring the top menu on-screen. For further information on the phone's menus, see "Menus" on page 35.




Call keys



M70/M80

M90

Green key

Depending on the context, the green key  serves to:

- accept incoming calls;
- start dialing the number typed on the keypad or selected from your contacts or the global directory.
- From the idle screen, the key can be used for redialing calls. Please note that it will open the list of **all** calls (Fig. 1, below), so your last dialed call may not be at the top of the list. You can either scroll down to your last dialed call or switch to the list of dialed calls where the last dialed call is at the top of the list (Fig. 2). For more information, see "Call history (call lists)" on page 43.

Press the green key to redial the selected (i.e., highlighted) number (Fig. 1 and 2).

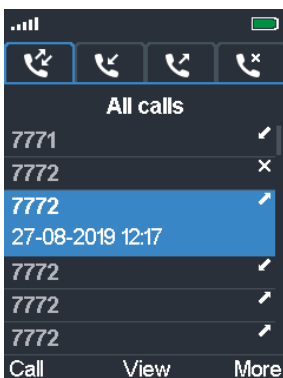


Fig. 1

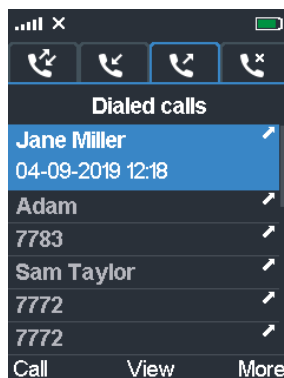



Fig. 2

Red key


Depending on the context, the red key  serves to:

- end calls;
- cancel actions & input;
- return the display to the previous screen.
- The key is also used to turn the handset on and off.
 - Press the key for at least 3 seconds to turn the handset off.
 - Press the key briefly to turn the handset on.

Star key



The star key serves three different purposes:

- When entering numerals, pressing the key briefly will enter the asterisk *.
- When editing in letter mode, the key is used to manually switch the input mode between upper and lower-case letters.
- On idle screen: Locking and unlocking the keypad. To prevent accidental dialing, press the key for 3 seconds to lock the keypad. You will briefly see the **Keylock** screen (Fig. 1) before the display returns to the idle screen with the **keyboard locked** symbol  next to the signal strength indicator in the upper left corner (Fig. 2).

On a locked keyboard, pressing any key briefly brings the **Keylock** message on-screen (Fig. 1); pressing the star key for 3 seconds unlocks the keypad.

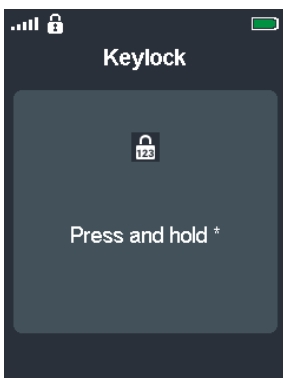


Fig. 1

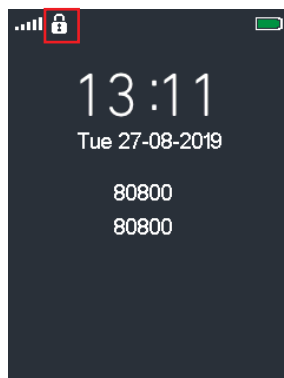
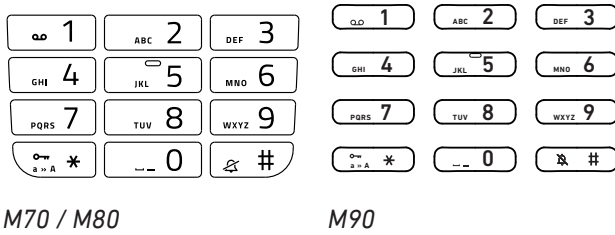


Fig. 2

Alphanumeric keys



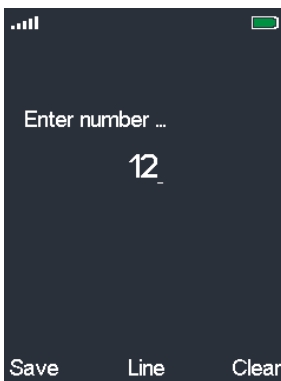
The alphanumeric keys are used to enter numerals and letters.

- When entering characters in letter mode, pause briefly after each character until the cursor has moved forward. Pausing is not necessary when entering numerals in numeral mode.
- Press the function key underneath **Clear** to delete the character to the left of the cursor.
- Keys 2 to 9 can also be used to speed dial contacts. For more information, see "Assigning speed dial key to contact" on page 40 and "Speed dialing a contact" on page 66.

Entering phone numbers (numeral mode)

When you are entering numbers, whether dialing or editing the phone numbers of one of your contacts, only the numerals 1-9 and 0 and the asterisk * and the pound/hash # symbols will be accepted by the phone. Letters, special symbols, and spaces are not available.

- Pausing between characters is not necessary when entering numerals in numeral mode. The cursor will move forward without delay.
- Press the function key underneath **Clear** to delete the character to the left of the cursor.



Letter modes

In letter mode, i.e., when editing the names in your contacts, pause briefly after each character until the cursor has moved forward (Fig. 2). When you are done editing the name, press the function key underneath **Save** or the center of the navigation key.

The default setting in letter mode is "name mode", i.e., the first letter is upper-case, followed by lower-case letters, eliminating the need to toggle between upper and lower-case letter modes.

- A capital letter will automatically be used at the beginning of the name (Fig. 1) and after a space (Fig. 3), as indicated by the letters **Abc** in the lower left corner of the text field.

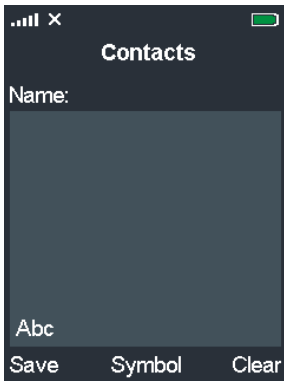


Fig. 1

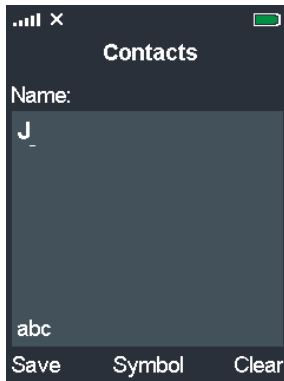


Fig. 2

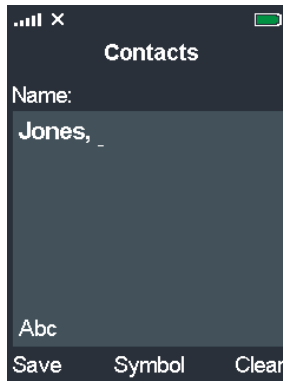


Fig. 3

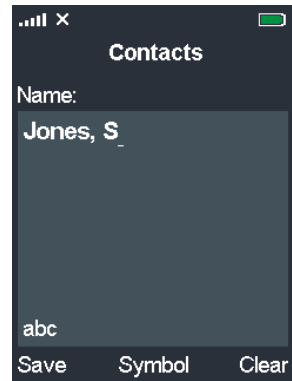



Fig. 4

- When you have typed the first letter (Fig. 2 and 4), letter mode will switch to lower-case letters, as indicated by the letters **abc** in the lower left corner of the text field.

Note: Unless you want to type in all upper or lower-case letters, it is not necessary to switch back and forth between upper and lower-case letter modes. To switch manually between modes, press the star key .

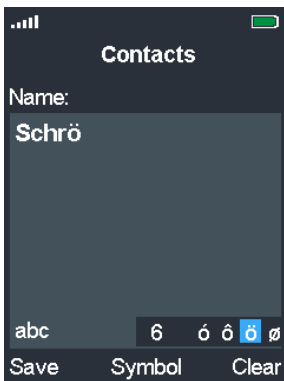


Fig. 5

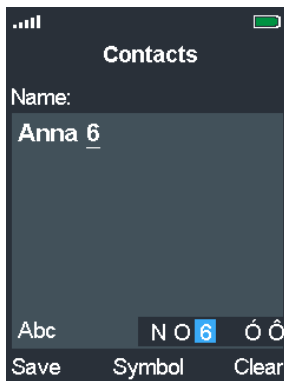









Fig. 6

- To type one of the letters printed on a key, press the key one, two, three, or four times quickly to type the first, second, third, or fourth letter printed on the key. In small letter mode, for example, as indicated by **abc** in the lower left corner of the editing text field (Fig. 5), press key  once to type an **m**, twice to type an **n**, and three times to type an **o**.

Pressing the key quickly more often than 4 or 5 times will produce any available letters with accents and umlauts. For example: Press key  with the vowel **o** seven times to type the French **ô**, eight times to type the German umlaut **ö**.

- Typing the number or symbol on the key:
 - If there are three letters printed on the key, press the key 4 times quickly to type the number; if there are four letters, press the key 5 times. For example, to type **6**, press key  four times (Fig. 6).
 - Press the key
 -  once to type the characters ;
 -  once to type the asterisk *;
 -  once to type the pound/hash symbol #.

- Press the key  once to enter a space, twice quickly to type the character **0**.
- Adding punctuation and special symbols like @. In all letter modes, punctuation marks and special symbols are available from the symbols screen.
 - With the cursor in the position where you want to add the symbol, press the function key underneath **Symbol** (Fig. 7) to display the table of symbols.
 - Use the navigation keys to navigate to the symbol (the comma, in our example, Fig. 8) and press **Select** or the center of the navigation key to add the symbol to the text.

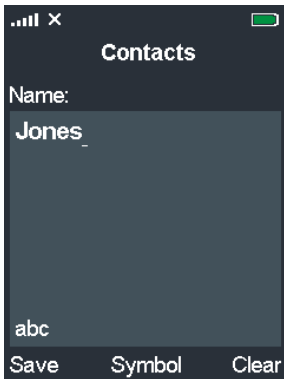


Fig. 7

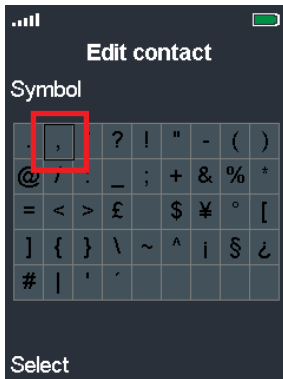



Fig. 8

Alternatively, you can also press  quickly until the desired symbol is on-screen, then pause briefly until the cursor has moved forward.

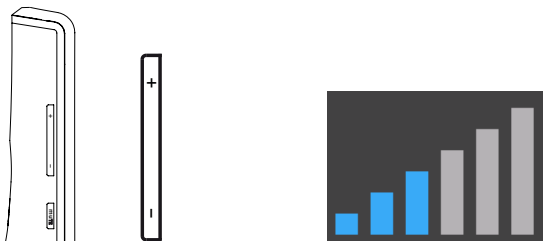
- Press the function key underneath **Clear** to delete the character to the left of the cursor.

Volume key


The volume key is the upper key on the left side of the handset. When in a call, press:

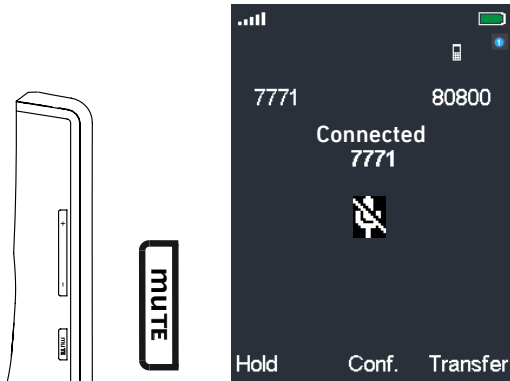
- the upper end of the key (marked +) to increase the volume of the loudspeaker one bar at a time.
- the lower end of the key (marked -) to lower the volume of the loudspeaker one bar at a time.

Note: To adjust the volume of the ringer, open **Ring volume** in the **Audio settings** menu (see "Ring volume" on page 48).

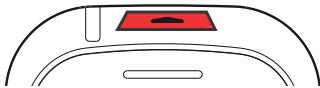


Mute key

The mute key is the lower key on the left side of the handset. Press the key to mute the microphone during a call, as indicated by the  symbol on the screen. Press the key again to unmute the microphone.



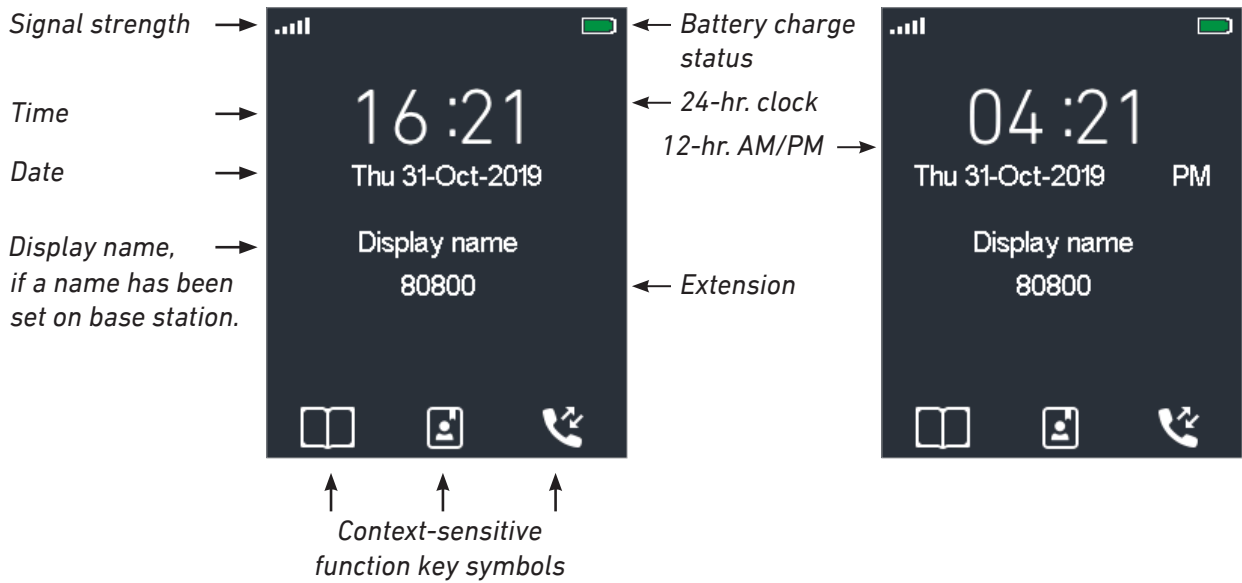
Emergency alarm button



The emergency alarm settings are configured on the base station where the handset is registered. Please, ask your administrator for more information on which type of emergency alarm will be triggered when you press the alarm button and whether it is possible to terminate the alarm from the handset.


Press the red button at the top of the handset for at least 3 seconds to set off the emergency alarm.

Idle screen layout



Menus

The menus are arranged a bit differently from the ones you may be used to from Snom desk phones.

1. Press the menu key  to open the top menu. The screen will open with the **Contacts** symbol selected, i.e., highlighted in blue (Fig. 1).

Note: The three symbols in the top row of the main menu are also accessible on the idle screen by pressing the function key underneath the respective symbol.

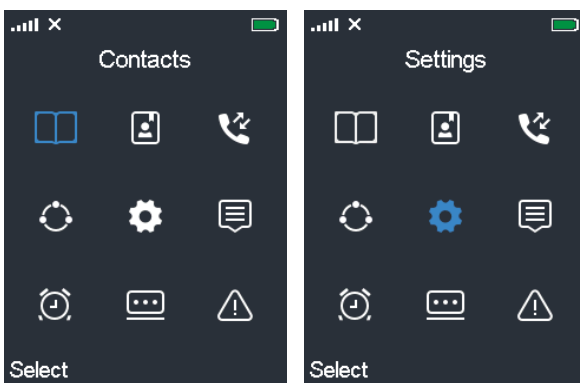



Fig. 1










Fig. 2



2. Use the navigation keys to select a different symbol and press the OK key to open the selected submenu (see "Navigation and "OK" keys" on page 28). The selected item will turn blue (Fig. 2).
3. Press the center of the navigation key or the function key underneath **Select** to open the selected submenu.



Press the red cancel key  to return to the previous screen or go back one step.

	Contacts. Contains the personal contacts available only on the handset where they have been entered and saved and the list of speed dial numbers for keys 2 to 9. See "Contacts" on page 36.
	Central directory. This is a list of phone numbers accessible from all handsets registered at the same base station or to a base station in the same multicell installation. This could be a phone list downloaded to the base or an external source like the company LDAP register. For further information, see "Central directory" on page 42 .
	Call history. The call history contains four call lists: All calls, answered calls, dialed calls, and missed calls. For further information, see "Call history (call lists)" on page 43.
	Connectivity. In this submenu you can register and deregister the handset and select a network, if more than one is available. For further information, see "Connectivity" on page 45.
	Settings. Contains the options for personalizing the settings of your handset (language, time and date formats, LED signaling, audio settings, etc.), call settings like call forwarding, auto answer, DND, hiding your number, etc., and the status information of the handset and the base station it is registered to. For further information, see "Settings" on page 46.
	Messages. Your text messages (received, drafts, sent).
	Alarm clock. There are three alarm clock settings: Non-recurring alarm, recurring alarm, snooze time. For further information, see "Alarm clock settings" on page 60.
	F-keys. Another list for contacts (one number per name only).
	Alarms list.

Contacts

These are the personal contacts that are available only on the handset where they have been entered and saved. You can open your contacts either via the menu (see Fig. 1 on page 35) or by pressing the function key underneath the contacts symbol on the idle screen (Fig. 1). Your list of personal contacts opens in alphabetical order (Fig. 2).

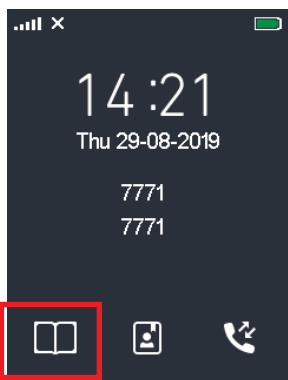


Fig. 1

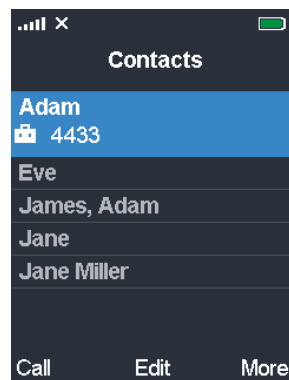



Fig. 2

- **Finding a contact.** Use the navigation keys to scroll up and down (see "Navigation and "OK" keys" on page 28) or enter the first letter of the contact you want to dial to go to the first contact beginning with that letter, then scroll down if it is not the contact you are looking for.
- **Calling the contact.** If the default phone number underneath the name is the number you want to dial, press the function key underneath **Call** or the green key . The arrow on the right side of the contact (Fig. 3) indicates that there is at least one other name associated with the name. If you

want to dial one of the other numbers press the right rim of the navigation key to scroll to it (Fig. 4–6), then dial.

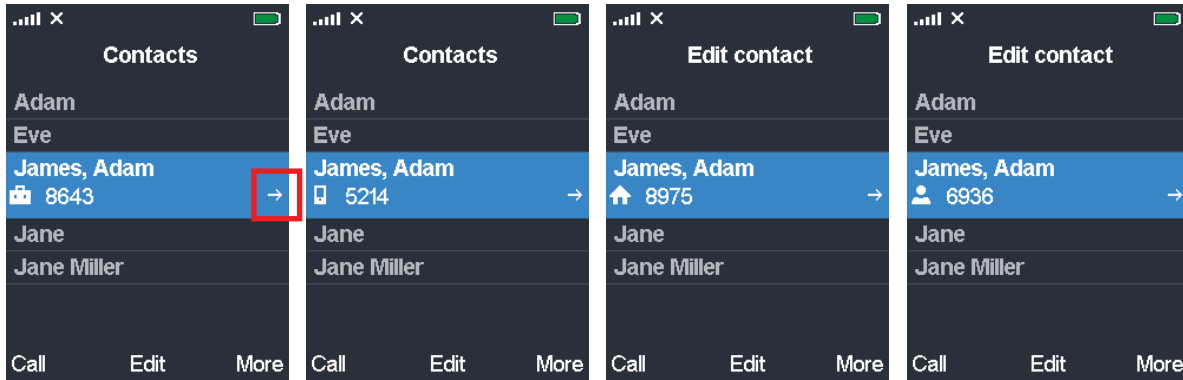






Fig. 3

Fig. 4

Fig. 5

Fig. 6

- **Each contact must have a name and at least one phone number.** Up to four phone numbers per contact are possible: Work (Fig. 3), mobile (Fig. 4), home (Fig. 5), other (Fig. 6). If there is more than one phone number associated with a contact, the "work" number is the default number presented by the phone when you select the contact. If there is no office number, the mobile number is the default number.

	Work number (default number)
	Mobile number (default number if there is no work number)
	Home phone number (default number if there are no work or mobile numbers)
	Other phone number (default number if there are no other numbers)

- **Assigning a ringtone to the contact.** Twenty (20) ringtones are available and can be set for calls in general and individually to announce ringing calls from the respective contact. The default is melody 1. For assigning ringtones to contacts, see "Editing contacts" on page 39. For the general settings, see "Ring melody" on page 49.
- **Assigning a speed dial key to the contact.** The keys 2 to 9 can be assigned for speed dialing one each of your contacts. If the contact has more than one phone number, the speed dial function is assigned to the default number (see table on page 36). For assigning speed dial keys, see "Assigning speed dial key to contact" on page 40.

Adding contacts

See "Letter modes" on page 31 and "Entering phone numbers (numeral mode)" on page 31 on how to enter names and numbers.

1. Open the contacts menu and press the function key underneath **More** (Fig. 7) to open the **Options** menu (Fig. 8).

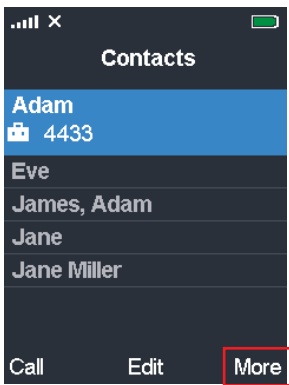


Fig. 7

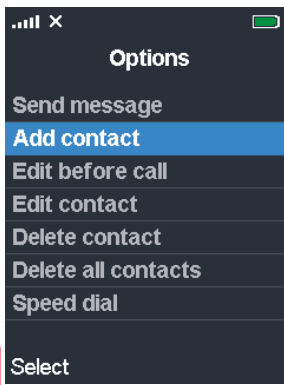


Fig. 8

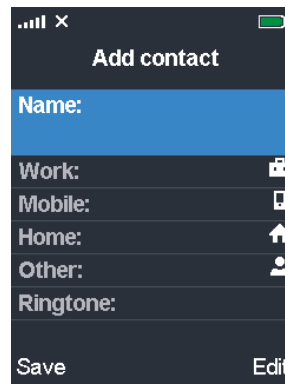


Fig. 9

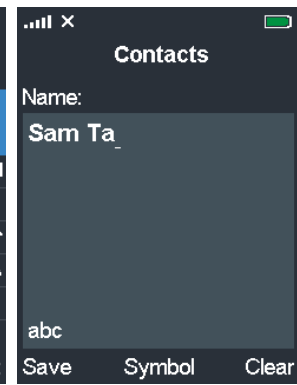


Fig. 10

2. Scroll to **Add contact** and press the function key underneath **Select**. The **Add contact** screen opens (Fig. 9).
3. With **Name** highlighted, press the function key underneath **Edit**. The blank editing field for **Name** appears (Fig. 10).
4. Enter the name and press the function key underneath **Save**. The name has been added to the **Edit contact** menu (Fig. 11).

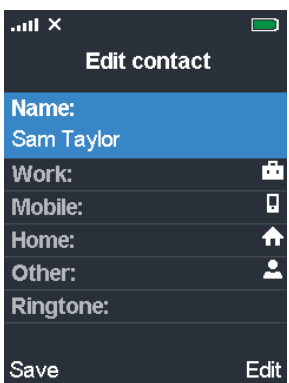


Fig. 11

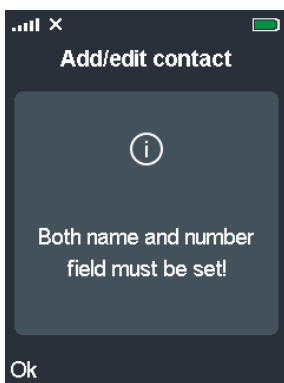


Fig. 12

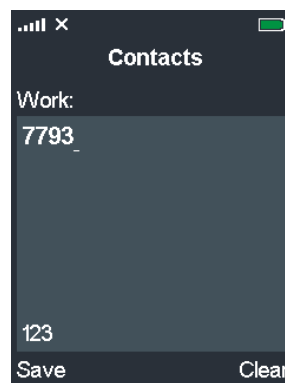


Fig. 13

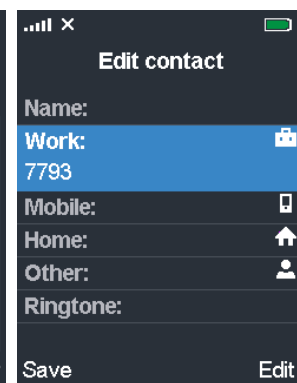


Fig. 14

Note: The name is stored only temporarily. If you try saving the contact with just a name or a number, you will receive an error message (Fig. 12). If you leave the **Edit contact** menu without pressing the function key underneath **Save**, the contact and/or any edits you have made will not be saved.

5. Scroll to **Work** (or one of the other numbers) and press the function key underneath **Edit**. The blank editing field for the type of number opens (Fig. 13).
6. Enter the number and press the function key underneath **Save**. The number is stored temporarily in the **Edit contact** menu (Fig. 14).
7. Press **Save**. You will be asked whether you want to save the contact in the local contacts on the handset (Fig. 15).

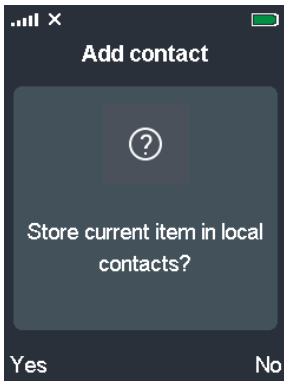


Fig. 15

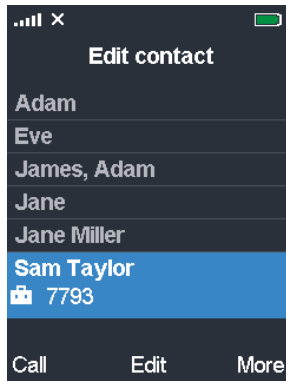



Fig. 16

- Press the function key underneath **Yes** if you do. The contact has been added to the handset's contacts (Fig. 16).

Note: If you don't want to save the contact press the function key underneath **No** to return to the **Edit contact** menu (Fig.14), and then press the red cancel key  to return to the **Contacts** directory (Fig. 7).

Editing contacts

- Scroll to the contact with the navigation key (Fig. 16, above).
- Press the function key underneath **Edit**. The **Edit contact** screen opens. In our example we want to add a cellphone number to the contact and select a different ringtone.
- Scroll to **Mobile** (Fig. 17).
- Press **Edit**. The **Contacts** screen opens (Fig. 18).

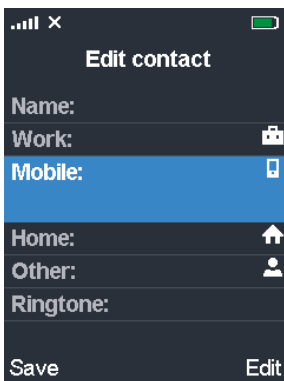


Fig. 17

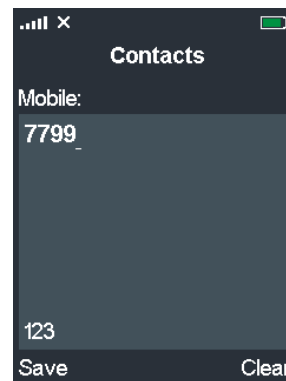


Fig. 18

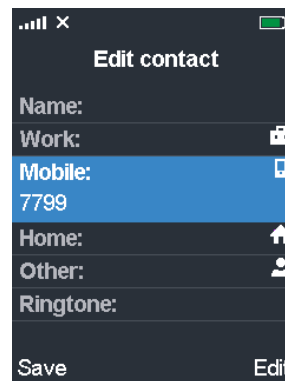


Fig. 19

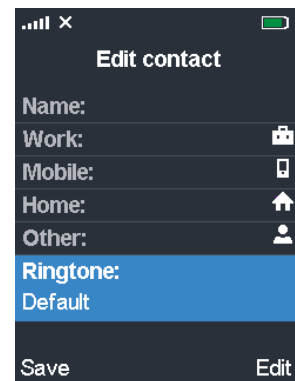


Fig. 20

- Enter the number and press **Save**. The **Edit contact** menu appears (Fig. 19).
- Scroll to **Ringtone** and press **Edit** (Fig. 20). The default setting is melody 1.

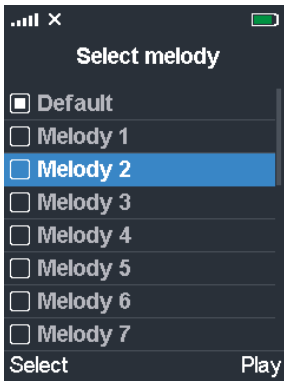


Fig. 21

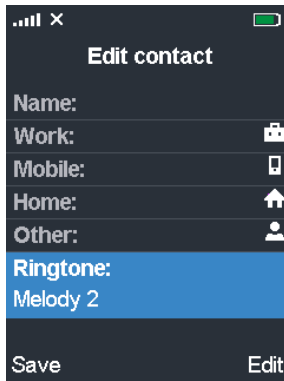



Fig. 22

7. Scroll to another melody (Fig. 21).
 - Press **Play** to play the highlighted melody.
 - Press **Save** to save the highlighted melody. The **Edit contact** screen appears (Fig. 22).
8. Press **Save**. You will be asked whether you want to save the contact in the local contacts on the handset (Fig. 15).

Note: Up to this point, the changes have been stored only temporarily. If you leave the edit menu at any time before the final confirmation, the changes will not be saved.
9. Press the function key underneath **Yes** if you want to save your edit(s) and return to the **Edit contact** screen.

Note: If you don't want to save the changes press the function key underneath **No** to return to the **Edit contact** menu (Fig. 22), and then press the red cancel key  to return to the **Contact** directory (Fig. 16).

Assigning speed dial key to contact

The keys 2 to 9 can be assigned for speed dialing one each of your contacts. If the contact has more than one phone number, the speed dial function is assigned to the default number (see table on page 36). Reassigning an assigned key to a different contact: See "Reassigning speed dial key to a different contact" on page 41.

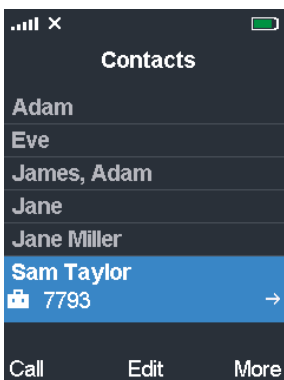


Fig. 23

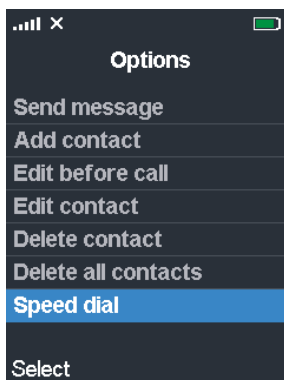


Fig. 24

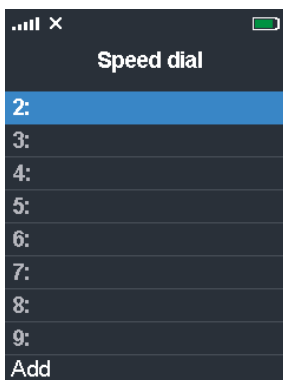


Fig. 25

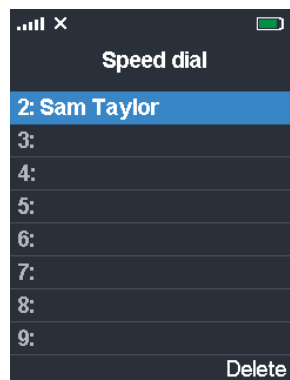



Fig. 26

1. Select the contact and press the function key underneath **More** (Fig. 23).
2. Scroll to **Speed dial** and press the function key underneath **Select** (Fig. 24).

3. Select one of the empty list items and press the function key underneath **Add** (Fig. 25). The contact is added to the line (Fig. 26).
4. Press the red cancel key  to return to the **Options** screen.

To view the list of assigned speed dial numbers, open the main contact menu (see page 36, Fig. 6), select any of your contacts, press the function key underneath **More**, and select **Speed Dial**.

To speed dial a contact, long-press the key for approx. 3 seconds from the idle screen.

Reassigning speed dial key to a different contact

1. To reassign an assigned speed dial key, scroll to the contact (Jane Miller, in our example) you want to dial by pressing the speed dial key and press the function key underneath **More** (Fig. 27).
2. In the **Options** menu, scroll to **Speed dial** and press the function key underneath **Select** (Fig. 24).

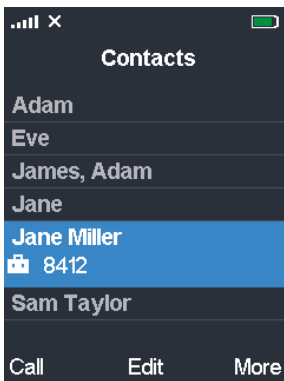


Fig. 27

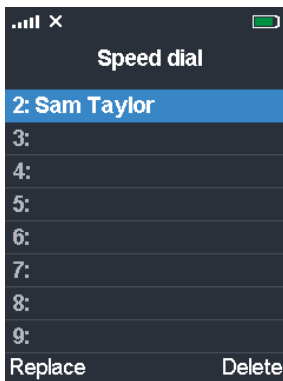


Fig. 28

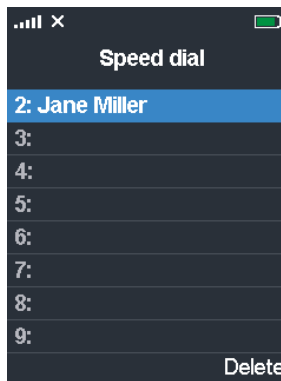




Fig. 29

3. Select the assigned speed dial key you want to reassign to this contact and press the function key underneath **Replace** (Fig. 28) to save and return to the **Options** menu. The speed dial key is reassigned (Fig. 29).
4. Press the red cancel key  to return to the **Options** menu.

Central directory

The central directory is accessible from all handsets registered at the same base or in the same multicell installation. Depending on the setting of the base, this could be a phone list downloaded to the base or an external source like the company LDAP register. It is not possible to add or delete entries or to edit existing entries on the handset.

You can open the central directory pressing the key underneath the central directory symbol  on the idle screen (Fig. 1) or by selecting the symbol in the main menu (Fig. 2) and pressing **Select**.

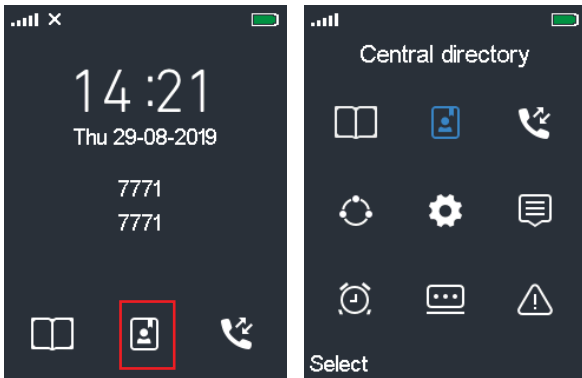


Fig. 1

Fig. 2

Finding a name

Use one of the following methods:

- **Scrolling.** Use the navigation keys to scroll up and down (see "Navigation and "OK" keys" on page 28) until you find the name you are looking for.
- **Combining the search function and scrolling.**
 1. Press the function key underneath **Search** (Fig. 3). The **Search** text field appears.

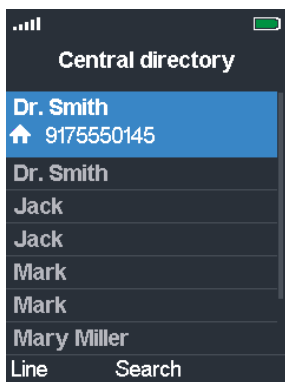


Fig. 3

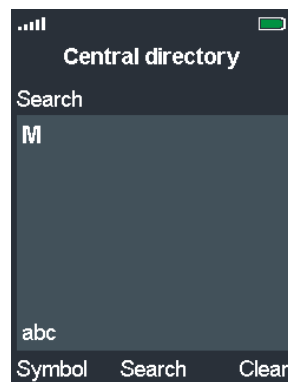


Fig. 4

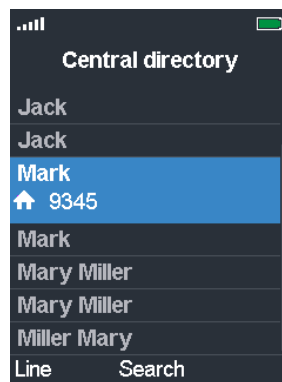


Fig. 5

2. Type the first letter of the name you are looking for into the text field (Fig. 4), for example, the letter **M**.
3. Press the function key underneath **Search**. The central directory menu appears with the first name beginning with the letter **M** highlighted (Fig. 5).
4. Use the navigation key to scroll down to the name you are looking for.

• **Using the search function.**

1. Press the function key underneath **Search** (Fig. 3). The **Search** text field appears.
2. Enter the name you are looking for or several letters of it into the text field (Fig. 6).
3. Press the function underneath **Search**. The search results are narrowed down to the name or names beginning with the letter(s) will be displayed in alphabetical order (Fig. 7). If the directory does not contain the string, the search is discontinued at the entry where it would have been located (Fig. 8 and 9).

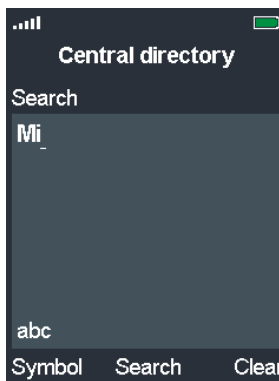


Fig. 6

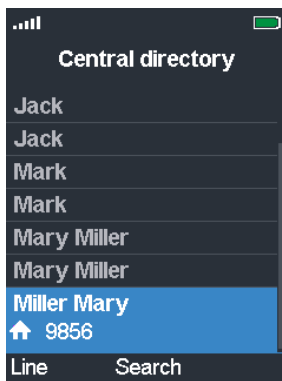


Fig. 7

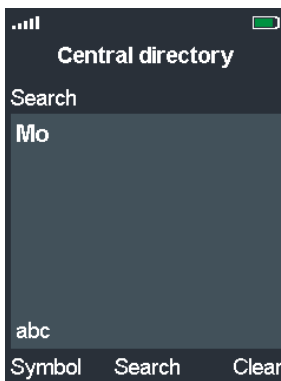


Fig. 8

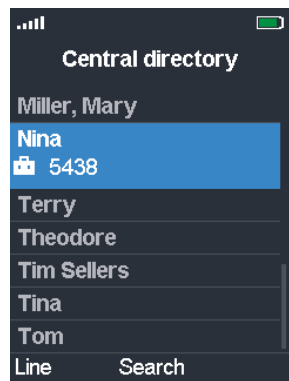




Fig. 9

Calling a number from the central directory

1. Find the name as described in "Finding a name" on page 42.
2. If the number underneath the name is the number you want to dial, press the green key .
3. If it is not the number you want and if there is an arrow on the right side of the line indicating more than one number associated with the name (Fig. 10), press the right side of the navigation key to scroll right until you find the number you want (Fig. 11), then press the green key .

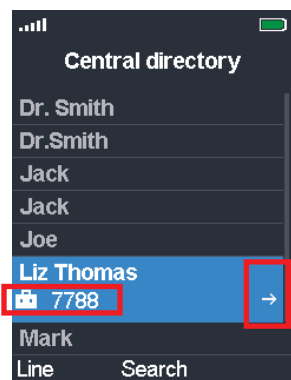


Abb. 10

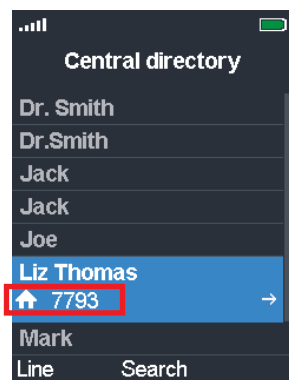


Abb. 11

Call history (call lists)

There are four call history lists. The most recent call is at the top of each respective list. When the available memory is full, the oldest call on the list will be overwritten by the latest call. The list will show the name of the caller or callee, respectively, if available (either because it is in your contacts or because it was transmitted to the phone); if not, the phone number will be shown. The selected (i.e., highlighted) call expands to also show the date and time of the call.

Accessing the call history

1. Press the function key underneath the **Calls** shortcut  on the idle screen (Fig. 1) or select the symbol in the main menu (Fig. 2) and press **Select**. The **All calls** screen opens (Fig. 3).

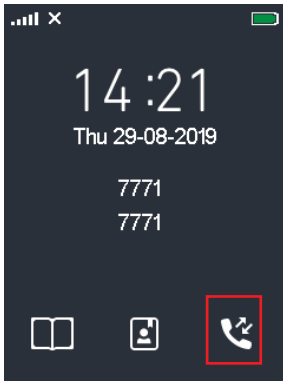


Fig. 1

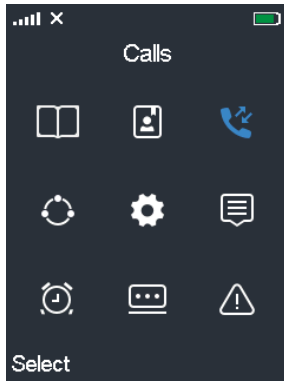


Fig. 2

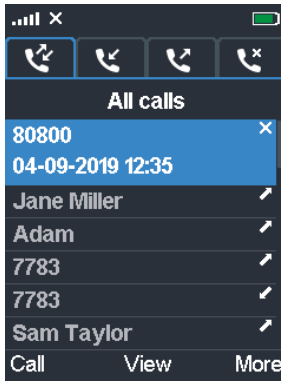


Fig. 3

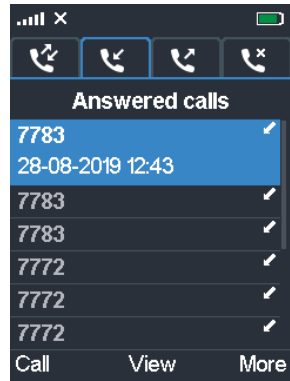


Fig. 4



Fig. 5

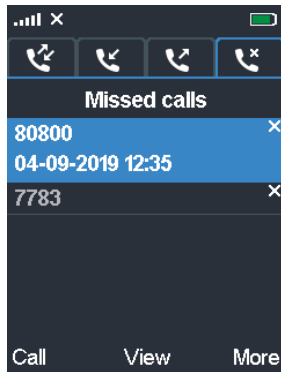


Fig. 6

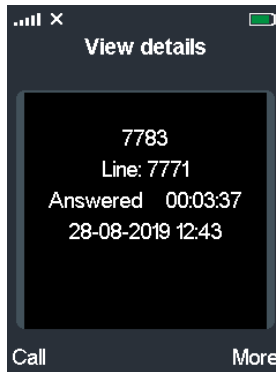


Fig. 7

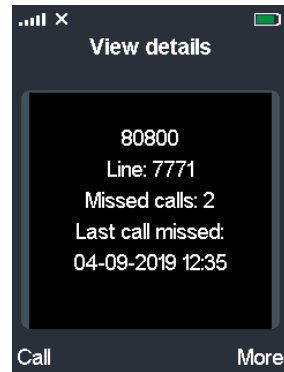









Fig. 8

2. Use the navigation key to scroll through the list of all calls (Fig. 3). Alternatively, you can view the individual lists of received (Fig. 4), dialed (Fig. 5), or missed calls (Fig. 6) by selecting them with the navigation key. The frame around the selected list's symbol turns bright blue.

Call list menu symbols:	
	All calls received or missed by or made from the phone (Fig. 1, 2, and 3)
	Received (answered) calls (Fig. 4)
	Dialed calls (Fig. 5)
	Missed calls (Fig. 6)
List item symbols. Each call is represented by one line on the list. The line contains the name, if available, or the number of the caller and a symbol on the right side of each line indicating whether the call was received, dialed, or missed.	
	Received (answered) calls
	Dialed calls
	Missed calls.

Viewing the details of a call

You can view the details of calls on all lists:

1. Scroll to the call. The selected call is highlighted in blue and expands to show the time and date of the call (Fig. 3–6, above).
2. Press the function key underneath **View** to view the details of the highlighted call: the caller or callee, your account, and the date and time of the call. Additionally, the details of received and dialed calls also contain the duration of the call (Fig. 7) while the details of missed calls contain the total number of missed calls (Fig. 8).

Calling a number from a call list

You can return calls and call numbers from all lists:

1. Open the call list, for example the list of missed calls (Fig. 6) and scroll to a call. The selected call is highlighted.
2. Press the function key underneath **Call** to dial the number.

Connectivity

This submenu is where you register and deregister the handset at the base station and where you can select the network, if more than one is available.

To be able to register the handset at a base station, an extension must have been set up for it on that base station. Please refer to the manual of the base station on how to set up extensions.

Registering

See "Registering the handset at the base station" on page 22.

Deregistering

The handset with all extensions is deregistered from the base station. The settings are not removed from the base station; you can use them again by registering in the **Connectivity** menu of the handset. You may also have to **Start SIP registration(s)** for the extension on the base station's **Extension** page.

1. Select **Deregister** (Fig. 1).

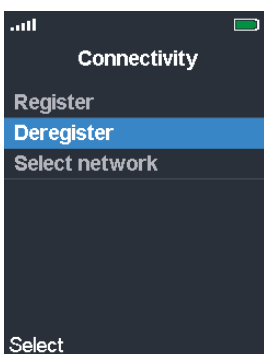


Fig. 1

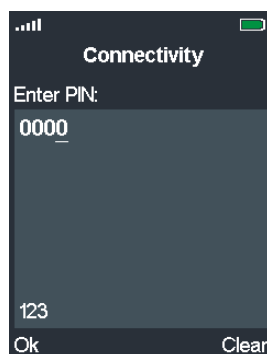


Fig. 2

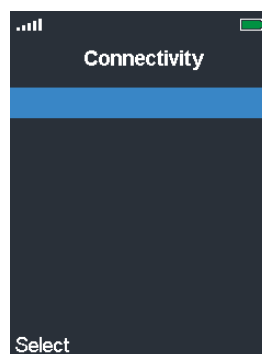


Fig. 3

2. Enter the PIN and press the function key underneath **Ok** (Fig. 2). The default PIN is 0000.

3. Press the function key underneath **Select** (Fig. 3).
4. You will be asked whether you want to deregister. If you do, press the function key underneath **Yes** (Fig. 4). The handset is deregistered (Fig. 5), and the line's status reverts to **Empty** (Fig. 6).

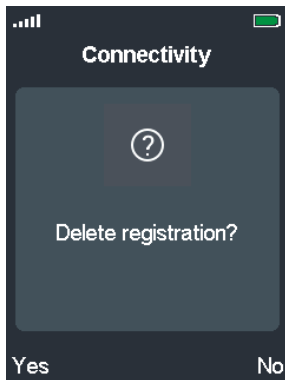


Fig. 4

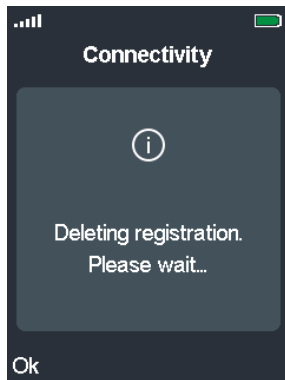


Fig. 5

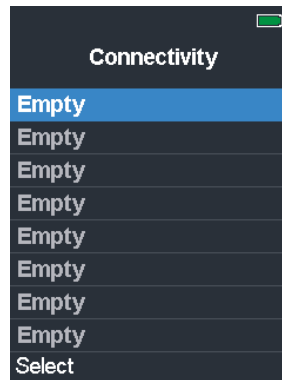


Fig. 6

Note: The access code for registering the handset at the base station is set on the base station. The PIN that is needed to deregister the handset from the base station and to reset the handset to factory values is set on the handset itself (see "Change PIN" on page 52). The default code for both is 0000.

Selecting the network

The default setting is **Auto select**.

Settings

This submenu contains a variety of settings that determine the handset language, time and date formats, call forwarding, etc.

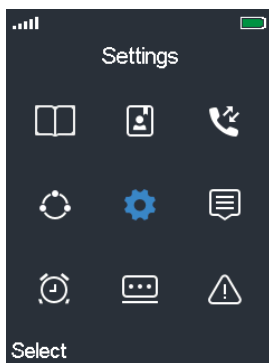


Fig. 1

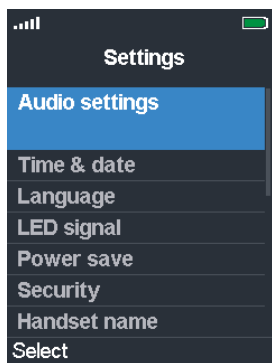
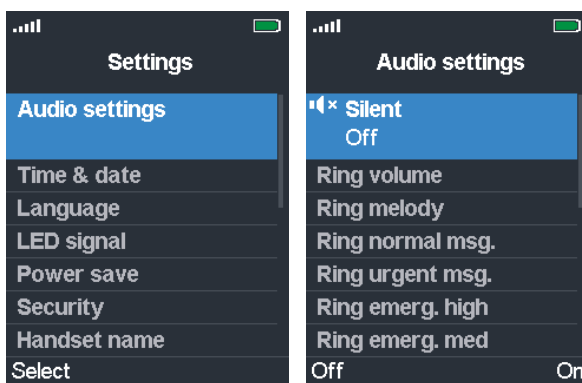


Fig. 2

Audio settings	Ringer and alert tones and their volume settings, various other sounds, and vibrator settings. See "Audio settings" on page 47.
Time & date	See "Time and date settings" on page 49.
Language	List of languages available for the handset. The default is English; scroll to a different language and press the function key underneath Select to change the setting to the selected language.
LED signal	See "LED indications" on page 26.

Power Save	Determines how many seconds after the last activity on the handset the display illumination will turn off. See "Power save" on page 51.
Security	Settings for automatically locking the keypad and for changing the handset PIN. See "Security" on page 51.
Handset name	Here you can enter a name to be displayed below the account/extension number on the display. The default is blank.
Line	Selecting the default SIP extension/account for outgoing calls, if more than one is available. See "Line" on page 53.
Reset settings	Press the function key underneath Yes to reset the handset settings. NOTE: Resetting the handset will not clear the DECT registration. Removing the registration: See "Deregistering" on page 45.
Status	View IP & MAC addresses, SW & HW versions of base station and handset, IPEI, etc. See "Status" on page 54.
Auto answer	Determines how incoming calls can be accepted. See "Auto answer" on page 54.
Silent charging	Determines whether the phone will ring when the battery is charging or not. The default is Off (phone rings).
Do not disturb	See "Do not disturb (DND)" on page 55.
Hide number	Determines whether your phone number will be sent to callers/callees. You can hide your number for the next call, always, or never. The default is Off (your phone number will be sent).
Call forward	See "Call forwarding" on page 56.
Idle screen saver	Will dim display illumination before turning it off completely as set in "Power Save".
Bluetooth	Using the handset with a BT headset. See "Bluetooth" on page 57.
Push2Talk	Starting with firmware 500.1, the push-to-talk functionality is available on our handsets M65, M70, M80, M85 and M90. It allows the handset to be used like a handheld transceiver (walkie-talkie) between handsets registered at the same base station or in the same multicell system. See "Push-to-talk" on page 59.

Audio settings

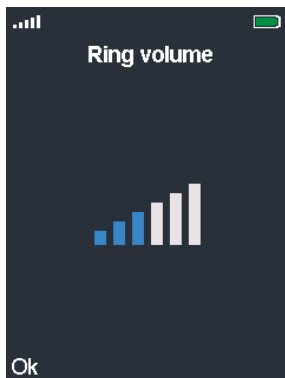


The audio settings contain the available ringer and alert tones and their volume settings, various other sounds like key and confirmation sounds, etc., and the vibrator settings.

Silent	This setting determines whether incoming calls will be announced visually only or visually and acoustically. The options are on and off . When set to "on", incoming calls will be announced visually only. The default is off . It is possible to add the vibrator to the visual announcement.
Ring volume	Setting the ringer volume. See "Ring volume" on page 48
Ring melody	Selecting a ringer. See "Ring melody" on page 49
Ring normal msg.	Selecting a ringer for normal and urgent calls and for emergency calls with high , medium , and low priority. The settings are done the same way as Ring melody . Ring emergency: This is the ringer played during the pre-alarm delay, if available and configured (see chapter "Emergency alarm" in the "M900 Admin and Installation Guide" or ask your administrator).
Ring urgent msg.	
Ring emerg. high	
Ring emerg. med	
Ring emerg. low	
Alert volume	Setting the volume for the alarm clock tones (single alarm and recurrent alarm). See Ring volume on how to increase and lower the volume.
Alert tone	Selecting the ringtone for the alarm clock (one-time-only alarm and recurrent alarm). See Ring melody on how to do the selection.
Vibrator	Having the phone indicate incoming calls by vibration with or without ringer. See "Vibrator" on page 49.
Key sound	Determines whether pressing a key will result in a Click or beeping Tone or no sound. The default is Silent .
Confirmation sound	Determines whether the handset will emit a beep when a setting is changed. Select On or Off . The default is On .
Coverage warning	Determines whether the handset will emit a warning tone when it is getting close to the coverage limit of the base station or multicell installation. The default setting is Off .
Charger warning	Determines whether the handset will emit a beep when it is placed in the charger. Select On or Off . The default is On .
Speakerphone profiles	Options: Balanced (default) and Loud
Noise cancel mode	Reducing unwanted sound. Options: Off (default), Low , High

Ring volume

Increase/lower the volume of the ringer by pressing the right or left rim of the navigation key. When you navigate to a different volume bar, the ringtone is played at the new volume. Press the function key underneath **OK** to set and save the current volume and return to the previous screen.



Ring melody

Twenty (20) ringtones are available. Please note that these ringtones can be set for calls in general and for individual contacts to announce ringing calls from selected phonebook entries.



Fig. 1



Fig. 2



Fig. 3

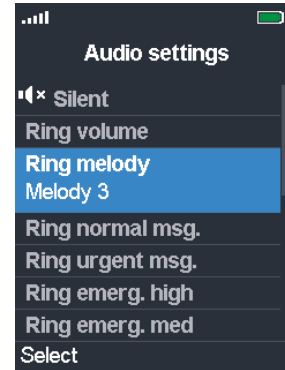
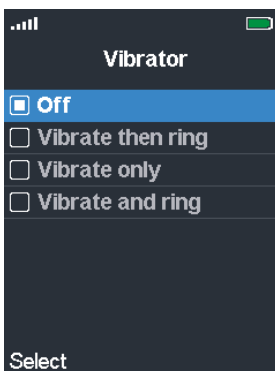


Fig. 4

- Scroll to a ringtone and press the function key underneath **Play** to listen to the ringtone (Fig. 2). The text above the key changes to **Stop** (Fig. 3). Press the key to stop the playing of the ringtone.
- Press the function key underneath **Select** to set the highlighted ringtone and return to the **Audio settings** menu (Fig. 4).

Vibrator

Three vibration settings and the **Off** setting are available.



- **Off**
- **Vibrate then ring**: The handset will vibrate four times, then start ringing.
- **Vibrate only**
- **Vibrate and ring**: The handset will simultaneously ring and vibrate.

The default setting is **Off**. To change the setting, scroll to a different one, and press the function key underneath **Select**.

Time and date settings

Available time formats are 24 hours and 12 hours AM/PM. There are six available date formats. The time and the date are received from and synchronized the base station where the handset is registered, so normally it is not necessary or advisable to adjust them manually.

Time format

1. In the **Settings** menu select **Time & date** (Fig. 1).

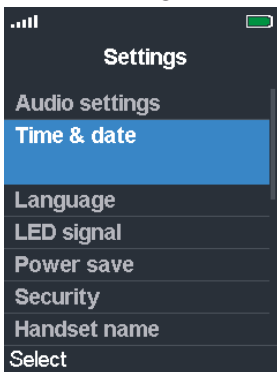


Fig. 1

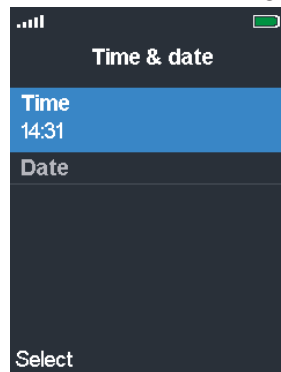


Fig. 2

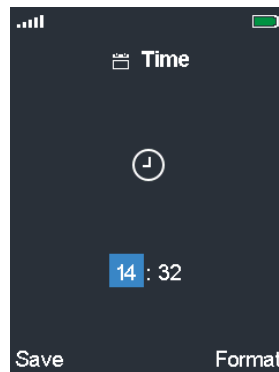


Fig. 3

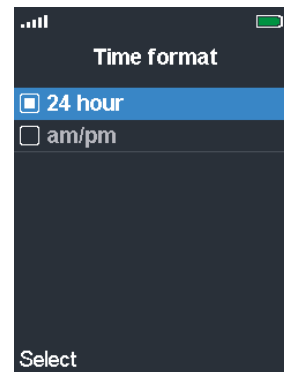



Fig. 4

2. In the **Time & date** menu, select **Time** (Fig 2).
3. The time is transmitted from the base station. You can enter a different hour and minute setting on the handset's keypad (Fig. 3) but the clock will be reset to the time setting of the base station when the handset is rebooted.
4. Select **Format**.
5. Select **24 hour** or **am/pm** (Fig. 4).
6. Press the function key underneath **Select** to select and return to the **Time** screen (Fig. 2).
7. Press **Save** to save and return to the **Time & date** menu.
8. Press the red cancel key  to return to the **Settings** menu.

Date format

1. In the **Time & date** menu, select **Date** (Fig 5).

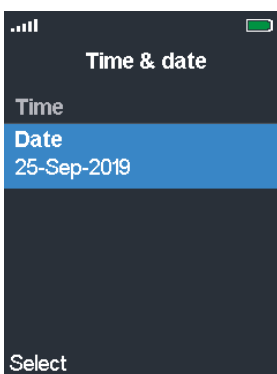


Fig. 5

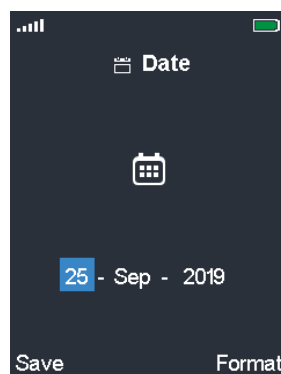


Fig. 6

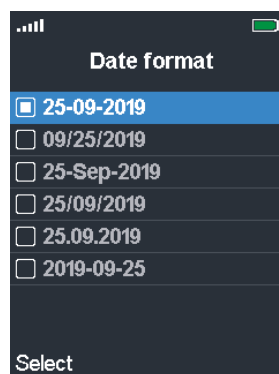



Fig. 7

2. The date is transmitted from the base station. You can enter a different date setting on the handset's keypad and the navigation key (Fig. 6) but the date will be reset to the date setting of the base station when the handset is rebooted.
3. Select **Format**.
4. Scroll to one of the formats (Fig. 7):

Day · month · year, separated by hyphens:	25-01-2019
Month · Day · year, separated by slashes:	09/25/2019

Day · month · year, separated by hyphens:	25-Sep-2019
Day · month · year, separated by slashes:	25/09/2019
Day · month · year, separated by periods:	25.09.2019
Year · month · Day, separated by hyphens:	2019-09-25

- Press the function key underneath **Select** to select and return to the **Date** screen (Fig. 5).
- Press **Save** to save and return to the **Time & date** menu.
- Press the red cancel key  to return to the Settings menu..

Power save

This setting specifies how many seconds after the last activity on the handset the display illumination will turn off. The default is 60 seconds.

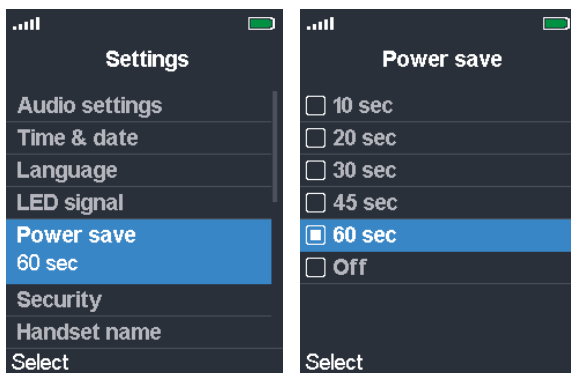


Fig. 1

Fig. 2



- In the **Settings** menu (Fig. 1), select **Power save**.
- Scroll to the number of seconds you want to select or to **Off** if you do not want the illumination to be turned off in periods of inactivity.
- Press the function key underneath **Select** or the center of the navigation key to save your selection and return to the **Settings** menu.

Security

This menu contains the settings for automatically locking the keypad after a specified period of inactivity and for changing the handset PIN for deregistering the handset from the base station.

Automatic keylock

To prevent unintentional dialing, the keypad can be locked manually by pressing the star key for at least 3 seconds (see "Star key" on page 30). The handset can also be programmed to lock automatically after a specified period of inactivity.

NOTE: When the keypad is locked, incoming calls will still ring on your phone. You can accept them by pressing the green key  or the speakerphone key , put them on hold, and transfer them. The keypad remains locked for other outgoing calls.

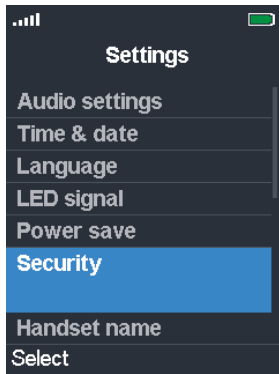


Fig. 1

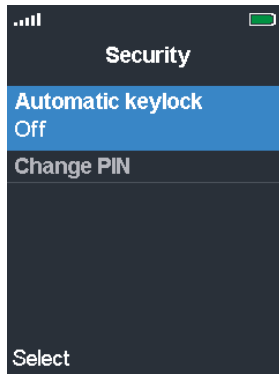


Fig. 2

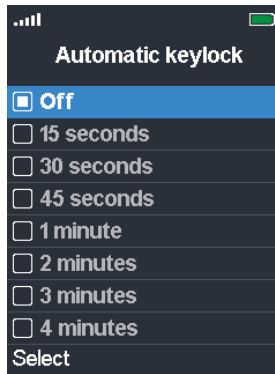



Fig. 3

Setting:


1. In the **Settings** menu, select **Security** (Fig. 1).
2. In the **Security** menu, select **Automatic keylock** (Fig. 2). The default is **Off**.
3. If you select a period of inactivity in seconds (15, 30, or 45) or minutes (1–5), the keyboard will be locked automatically when the period has elapsed (Fig. 3).
4. Press **Select** to save and return to the **Security** menu.
5. Press the red key  to return to the **Settings** menu.

Unlocking the keypad

To unlock the keypad after it has been locked manually or automatically, press the star key until the lock symbol disappears.

Change PIN

This is the PIN that is required for deregistering the handset from the base and to reset it to factory values. The default is 0000.

1. In the **Settings** menu, select **Security** (Fig. 1).
2. In the **Security** menu (Fig. 4), select **Change PIN**.
3. **Enter the current PIN** in the text field (Fig. 5), and press **OK**.
4. **Enter the new PIN** in the text field (Fig. 6), and press **OK** to save and return to the **Security** menu.
5. Press the red key  to return to the **Settings** menu.

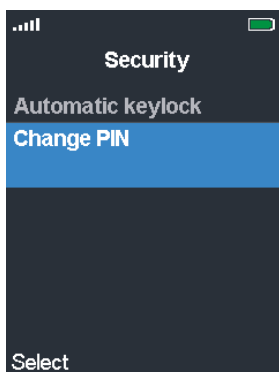


Fig. 4

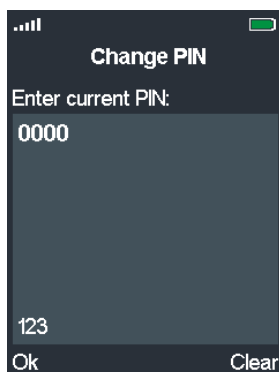


Fig. 5

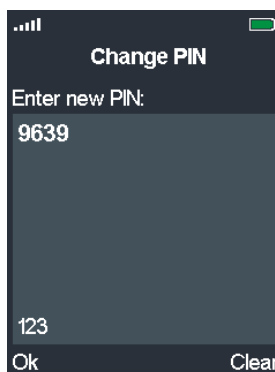


Fig. 6

Line

The handset supports up to ten extensions (accounts/phone numbers). On corded Snom deskphones they are called "identities".

In the **Line** menu (Fig. 1), you select the identity (and thus the SIP server, i.e., "phone line", where it is set up) that will be your default identity when making calls. This identity is shown on the display (see Fig. 1 on page 51).

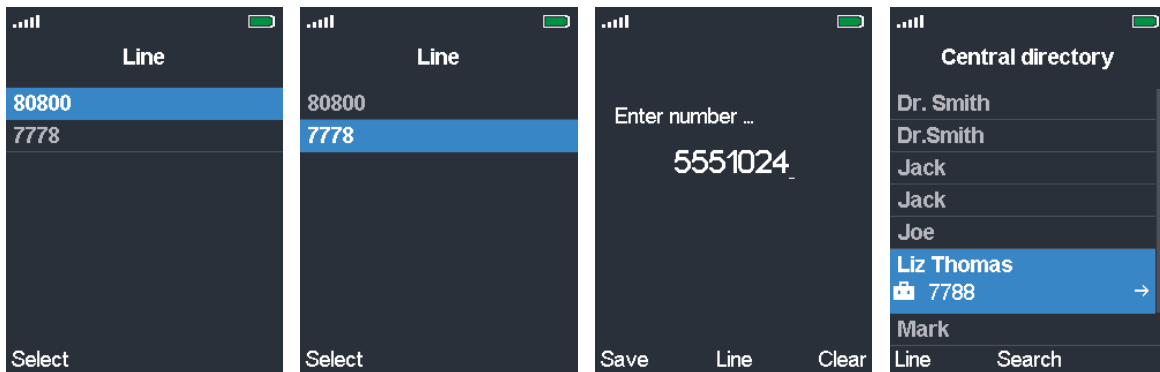




Fig. 1

Fig. 2

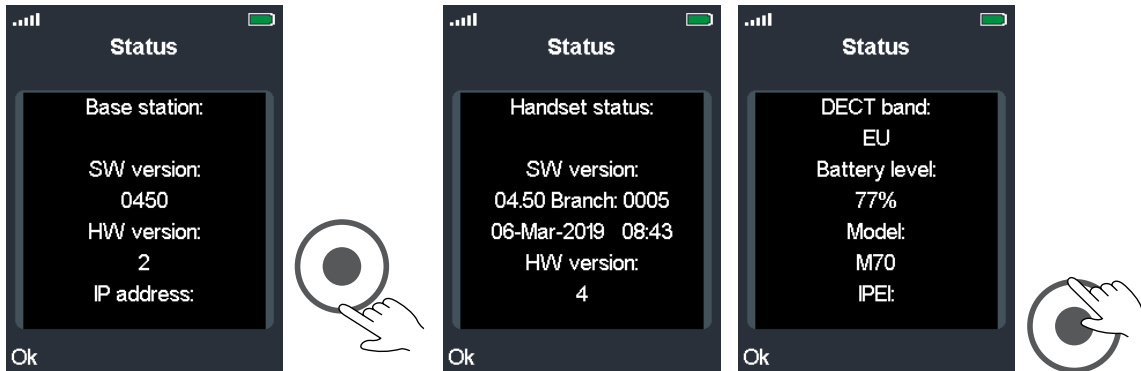
Fig. 3

Fig. 4

- **Selecting the default identity for outgoing calls.**
 1. Use the up/down arrows on the navigation key to select the extension.
 2. Press the OK key or the function key underneath **Select** to save (Fig. 1 and 2). This is the identity that is shown on your display.
- **Changing the identity for the current outgoing call.** The default identity will not be changed.
 1. **Before** pressing the green key  to dial a number, press the function key underneath **Line** (Fig. 3).
 - When dialing manually: You can do this at any time while or after entering the digits on the keypad manually.
 - When calling a number from the global phonebook, select the contact, then press the function key underneath **Line** (Fig. 4).
 2. Select the extension to be used for the next outgoing call and press the function key underneath **Select** (Fig. 1 and 2).
 3. When dialing manually, the display will return to the **Enter number** screen (Fig. 3) where you can enter any remaining digits, if necessary. When dialing a number from the central directory, the display will return to the directory page with the number you want to dial (Fig. 4).
 4. Press the green key  to dial.

Status

The status screen contains software and hardware information on the handset and on the base station the handset is registered at. Scroll down and back up to view all the information.



Base station information

- Software version (firmware version)
- Hardware version
- IP address
- MAC address
- System name*

* This is the name entered in the text field of **Base Station Name** on the **Management Settings** page of the web interface of the base station. The default name is the base station type, i.e., M900, M700, etc.

Handset information

- Software version (firmware version)
- Hardware version
- DECT band (i.e., DECT frequency EU, US, etc.)
- Battery level
- Model
- IPEI
- Bluetooth (MAC address of handset's Bluetooth module)

Auto answer

This setting determines how you can accept incoming calls on the handset. The default is **Normal**.

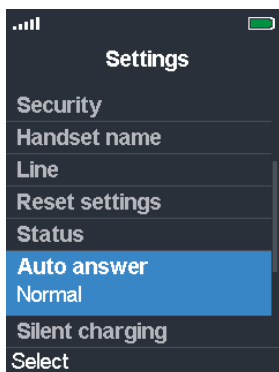


Fig. 1

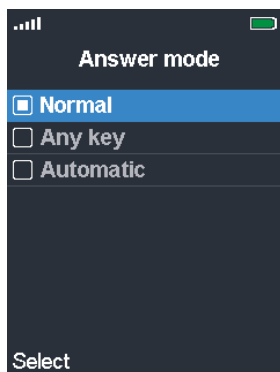


Fig. 2

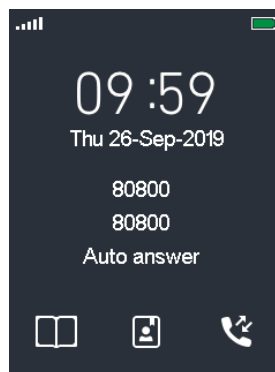







Fig. 3

- **Normal:** Calls are accepted by pressing the green key  or the speakerphone key .
 - **Any key:** Calls are accepted by pressing any key - with the exception of the red cancel key  - on the keypad.
 - Exception:** Pressing the red cancel key  will reject the ringing call; the caller hears the busy signal.
 - **Automatic:** Calls are accepted automatically, as indicated by the line **Auto answer** on the idle screen (Fig. 3). The handset will announce the incoming call once in accordance with its audio settings (see "Audio settings" on page 47) and then accept the call.
 - Exception:** Calls waiting when you are in a call will not be accepted automatically but continue to be announced visually and/or acoustically.
1. In the **Settings** menu, select **Auto answer**.
 2. Scroll up or down to the setting you want to select.
 3. Press **Select** or the center of the navigation key to save and return to the **Settings** menu.

Do not disturb (DND)

When this setting is activated, as indicated by the symbol  to the right of the signal strength indication in the upper left corner of the display (Fig. 1), incoming calls will be rejected and callers hear the "busy" signal.

Turning DND on:

1. In the **Settings** menu, select **Do not disturb**.
2. Scroll down to **Enabled** (Fig. 2).
3. Press **Select** or the center of the navigation key to save and return to the **Settings** menu.

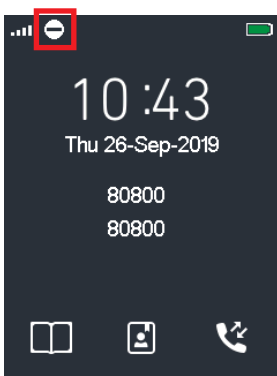


Fig. 1

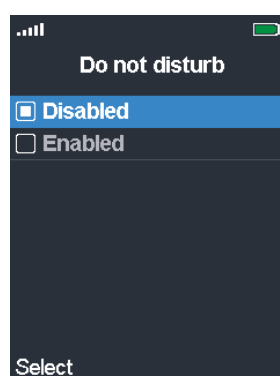


Fig. 2

Turning DND off:

1. In the **Settings** menu, select **Do not disturb**.
2. Scroll up to **Disabled**.
3. Press **Select** or the center of the navigation key to save and return to the **Settings** menu.

Call forwarding

The phone can be set to forward incoming calls, either always or under certain conditions:

- Forward Unconditionally (Fig. 2): **Forwarding all incoming calls** to the number of the phone, extension, or mailbox specified as this function's target.
- Forward Busy: **Forwarding calls ringing when the phone is busy** to the number of the phone, extension, or mailbox specified as this function's target.
- Forward No Answer (Fig. 4): **Forwarding ringing calls that have not been accepted within the specified number of seconds** to the number of the phone, extension, or mailbox specified as this function's target.

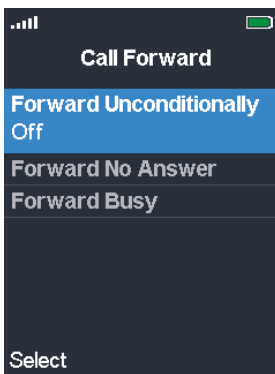


Fig. 1

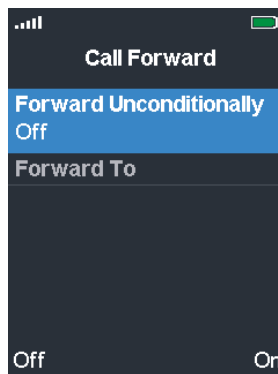


Fig. 2

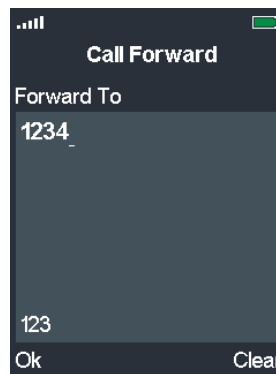


Fig. 3

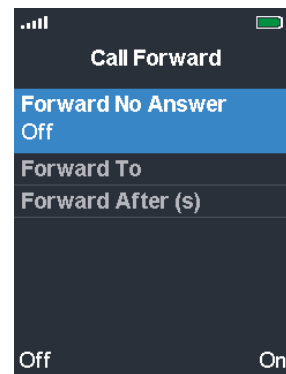




Fig. 4

Turning call forwarding on

1. In the **Settings** menu, select **Call Forward**.
2. In the **Call Forward** menu (Fig. 1), select one of the three call forwarding options.
3. To turn the respective forwarding function on, press the function key underneath **On** (e.g., Fig. 2 and 4).
4. Scroll down to **Forward to** and press **Select** or the center of the navigation key.
5. Enter the phone number the call is to be forwarded to in the text field of **Forward to** (Fig. 3).
6. Press the function key underneath **OK** to save and return to the menu of the call forward event (e.g., Fig. 2 and 4).
7. **Forward No Answer only** (Fig. 4). When the time period in seconds has elapsed without the call having been accepted, the call is forwarded to the number set in **Forward to**.
 - a. Scroll down to **Forward after (s)** and press **Select** or the center of the navigation key.
 - b. Enter the number of seconds in the text field of **Forward after (s)** and press **OK** or the center of the navigation key to save and return to the call forward menu.
8. Press the red cancel key  once to return to the call forward menu, twice to return to the **Settings** menu.

Turning call forwarding off


1. In the **Settings** menu, select **Call Forward**.
2. In the **Call Forward** menu (Fig. 1), select the call forwarding event

- Press the function key underneath **Off** (e.g., Fig. 2 and 4).
- Press the red cancel key  once to return to the call forward menu, twice to return to the **Settings** menu.

Bluetooth

The handset can be used with a Bluetooth headset which must be paired with the handset first. When the headset has been paired, it is added to the list of **Paired Devices**. The connection to the headsets on this list can be disconnected and reestablished with one key press without having to go through the entire pairing process again.

In the default setting, Bluetooth is disabled to save battery power and avoid unnecessary radiation, however minimal. To be able to use Bluetooth, the function must be enabled; we recommend turning it off when it is not being used.

When Bluetooth is enabled, the Bluetooth logo  is shown to the right of the signal strength indicator in the top line of the display. You can usually use the headset to accept and terminate calls ringing on the handset; any further functions (hold, swap, transfer call) depend on the headset and its interoperability with the handset.

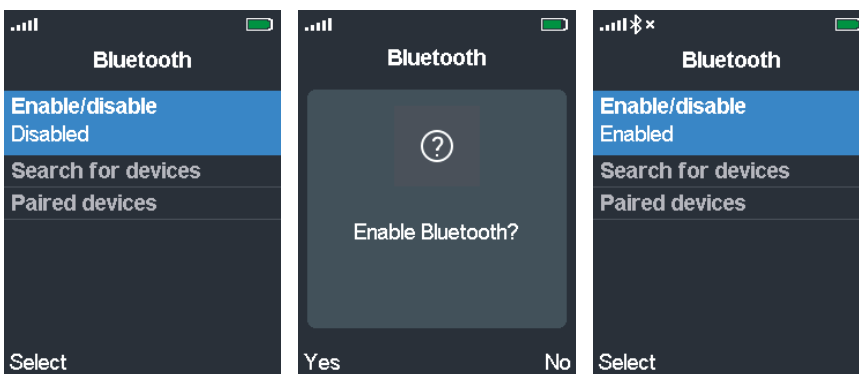



Fig. 1

Fig. 2

Fig. 3

Enabling and disabling Bluetooth

- Open the **Settings** menu and press  to go directly to **Bluetooth** at the bottom of the menu.
- Press **Select** or the center of the navigation key to select **Enable/Disable** (Fig. 1). You will be asked whether to enable or disable Bluetooth, depending on its current status (Fig. 2).
- Press **Yes** or **No** to save changing or keeping the current status and to return to the **Bluetooth** menu (Fig. 3).

Pairing

- Make sure that Bluetooth is enabled.
- Scroll to **Search for devices** and press **Select** or the center of the navigation key.
- Put the headset into pairing mode as described in your headset's user guide. The display shows the message "Searching" (Fig. 4) and then presents the detected headsets (Fig. 5).
- If there is more one, select the one you want to pair with the handset.

5. Press the function key underneath **Pair**.

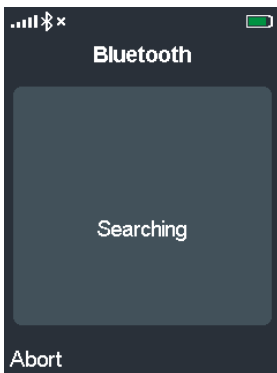


Fig. 4

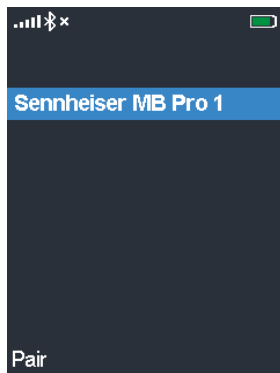


Fig. 5

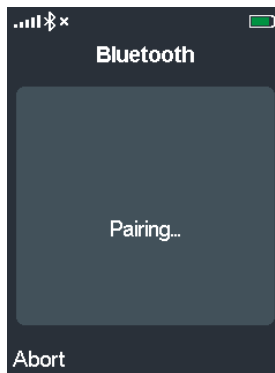


Fig. 6

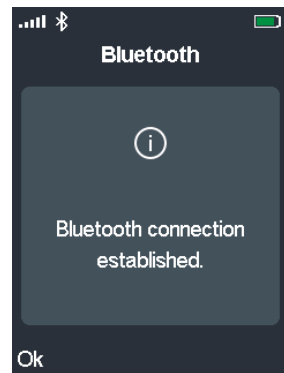



Fig. 7

6. The display shows the message "Pairing" (Fig. 6).

7. If pairing was successful, you will see the message "Bluetooth connection established" (Fig. 4).

Managing paired headsets

1. Open the **Settings** menu and press  to go directly to **Bluetooth** at the bottom of the menu.
2. Select **Paired Devices**.
3. If there is more than one paired device, select the device.

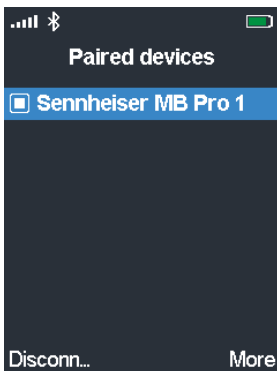


Fig. 8

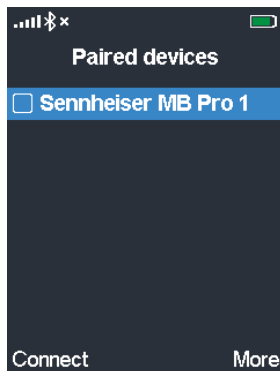


Fig. 9

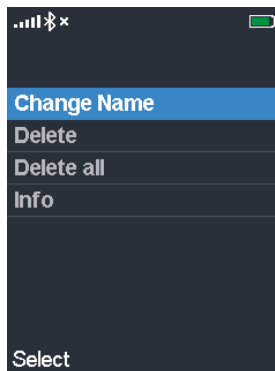


Fig. 10

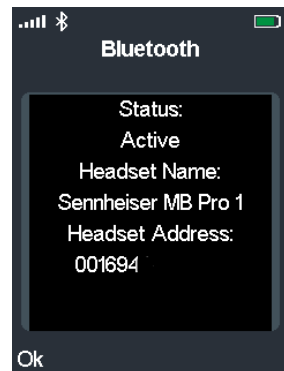


Fig. 11

- If the headset is connected to the handset, the function key label in the left lower corner says **Disconn** (Fig. 8); when it is not connected, the label says **Connect** (Fig. 9).
 - If the label says **Disconn**, press the function key underneath it to change the device's current status from connected to disconnected;
 - if it says **Connect**, press the function key underneath it to change the device's current status from disconnected to connected.
- Press the function key underneath **More** to open the submenu (Fig. 10) where you can change the name of the device, delete the selected device, delete all devices, or view the Info screen with the product's name and Bluetooth MAC (Fig. 11).

Push-to-talk

Starting with firmware 500.1, the push-to-talk functionality is available on our handsets M65, M70, M80, M85 and M90. It allows the handset to be used like a handheld transceiver (walkie-talkie) between handsets registered at the same base station or in the same multicell system. The function must be enabled on each handset, and the handset must be idle to transmit or received push-to-talk calls. Only one person can speak at a time.

Note 1: When the push-to-talk feature is enabled on one handset on a system of base stations, only six calls can be ongoing at the same time from any base station which has the handset connected.

Note 2: When a handset is in an active call, it will not receive a push-to-talk call.

In the default setting, the feature is off. It must be enabled for each handset individually, either on each individual handset or on the base station web interface.

Enabling the function in the handset menu

1. Press the menu key.
2. In the main menu, select **Settings**.
3. In the settings menu, select **Push To Talk** to enable the function for this handset.
4. Select **On**.


Enabling the function on the base station's web interface (from firmware 530B2)

1. In the menu on the left side, click **Extensions**.
2. In the table on the **Extensions** page, click the **IPEI** of the handset whose push-to-talk function you want to enable.
3. On the **Handset** page, select **Enabled** from the drop-down list of **Push-to-Talk**.
4. Click **Save**.
5. Repeat step 2 and 3 for each handset you want to be able to use the function.

Using the function

1. To initiate a call to all handsets in the system that have enabled the push-to-talk function, press and hold the mute button. The handset will open a direct communication channel to the other handsets. **Note:** push-to-talk calls will only be received by idle handsets.
2. Release the mute button to end the call.
3. Now another person can press and hold the mute button on their handset to respond. **Note:** Only one person can speak at a time.

Alarm clock settings

The phone has two alarm clock settings, for a one-time alarm and for a recurring alarm at the same time on specified days of the week; it also has a snooze setting that applies to both. The clock symbol  in the top line to the right of the signal strength symbol indicates that an alarm setting is active (Fig. 1).

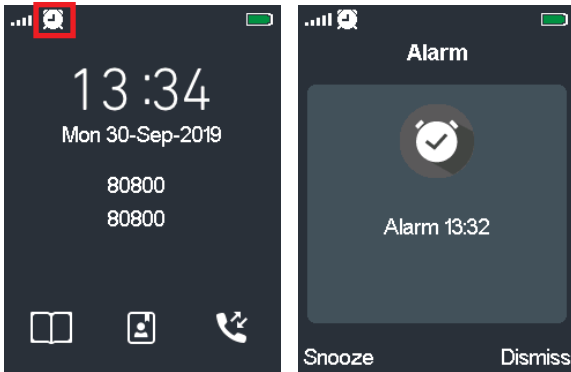


Fig. 1

Fig. 2

- When the alarm goes off, the display indicates the time the alarm is set for (Fig. 2).
- You can turn the alarm off by pressing the function key underneath **Dismiss**.
- Press the function key underneath **Snooze** to turn on the snooze function so that the alarm will go off again after the specified snooze time period in minutes has elapsed.

Alarm

The one-time alarm will go off at the specified time every day when it is set.

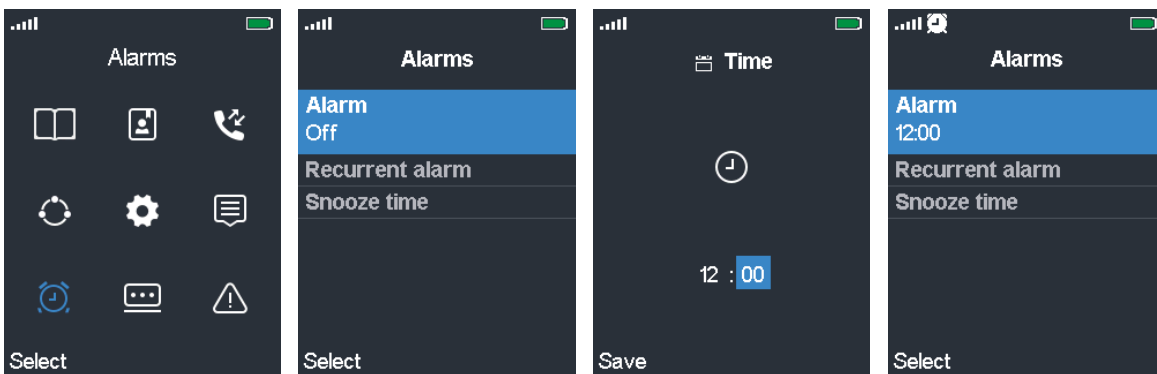


Fig. 3

Fig. 4

Fig. 5

Fig. 6

Setting the alarm

1. In the main menu, scroll to the **Alarms** symbol (Fig. 3) and press the function key underneath **Select**.
2. In the **Alarms** menu, select **Alarm** and press the function key underneath **Select** (Fig. 4).
3. If you want to change the time setting, use the navigation key to select hour and minutes, respectively, then enter the digits on the keypad (Fig. 5).
4. Press the function key underneath **Save** to save the setting and return to the **Alarms** menu (Fig. 6).

Turning the alarm off

You can turn the setting off in the **Alarms** menu. Pressing the function key underneath **Dismiss** when the alarm goes off will also turn it off.

1. In the main menu, scroll to the **Alarms** symbol (Fig. 3) and press the function key underneath **Select**.
2. In the **Alarms** menu, select **Alarm** and press the function key underneath **Select** (Fig. 7).

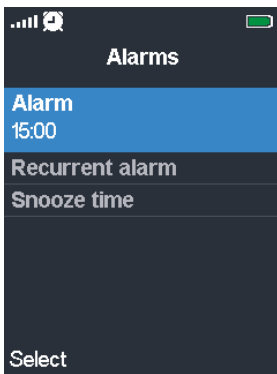


Fig. 7

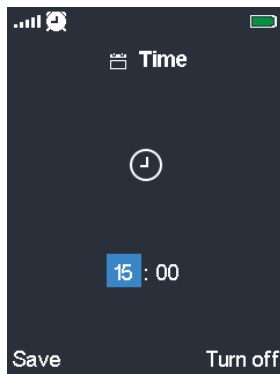


Fig. 8

3. Press the function key underneath **Turn off** (Fig. 8) to turn the alarm and return to the **Alarms** menu (Fig. 4).

Recurring alarm

This alarm will ring at the specified time on the selected days of the week. It isn't possible to set a different time for different days of the week.

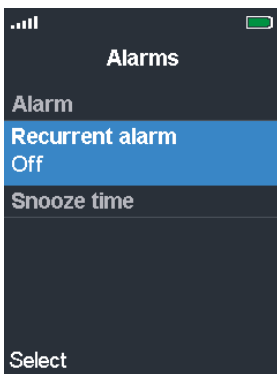


Fig. 9

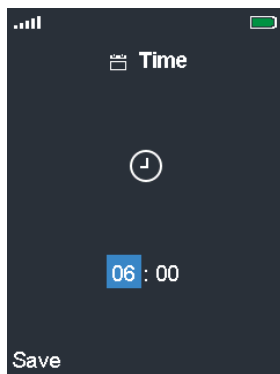


Fig. 10

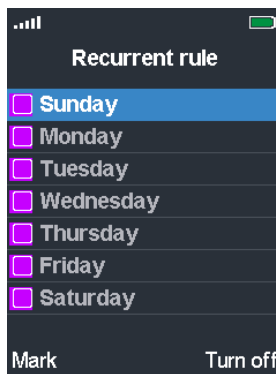


Fig. 11

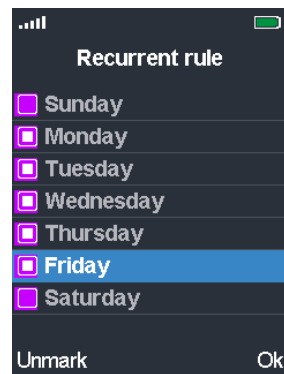


Fig. 12

Setting the alarm

1. In the main menu, scroll to the **Alarms** symbol (Fig. 3) and press the function key underneath **Select**.
2. In the **Alarms** menu, scroll to **Recurrent alarm** and press the function key underneath **Select** (Fig. 9).
3. To set the time, use the navigation key to select hour and minute, respectively; use the keypad keys to enter the digits (Fig. 10).

4. Press **Save** to save the time setting and open the **Recurrent rule** screen (Fig. 11).
5. Scroll to each day of the week on which you want the alarm to go off and press the function key underneath **Mark** for each one.

Note: To turn off the alarm for one of the checkmarked days, scroll to it and press the function key underneath **Unmark** (Fig. 12).

6. Press the function key underneath **Ok** to save the settings and return to the **Alarms** menu (Fig. 13).

Turning the alarm off

1. In the main menu, scroll to the **Alarms** symbol (Fig. 3) and press the function key underneath **Select**.
2. In the **Alarms** menu, scroll to **Recurrent alarm** and press the function key underneath **Select** (Fig. 14).

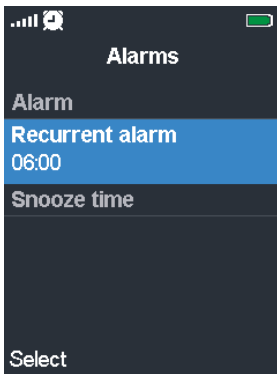


Fig. 14

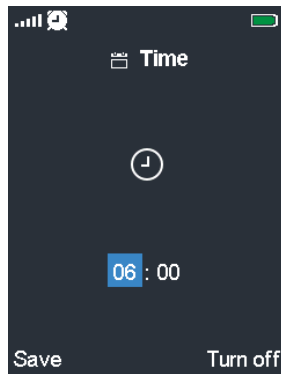


Fig. 15

3. Press the function key underneath **Turn off** (Fig. 15) to save the setting and return to the **Alarms** menu.

Snooze time

Snooze time applies to all alarm settings and can be set from 1 to 10 minutes. The default is 10 minutes.

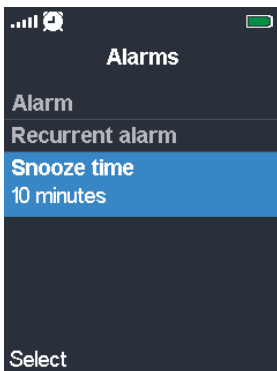


Fig. 16

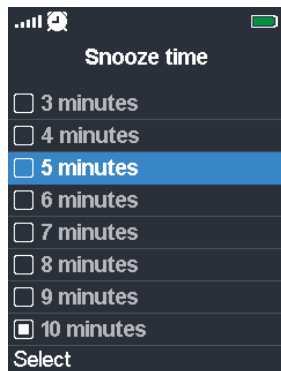


Fig. 17

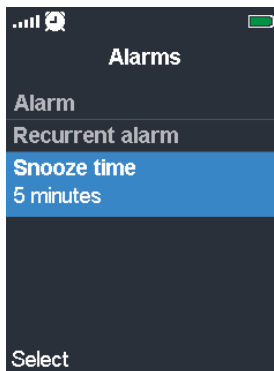


Fig. 18

Setting snooze time

1. In the main menu, scroll to the **Alarms** symbol (Fig. 3) and press the function key underneath **Select**.

2. In the **Alarms** menu, scroll to **Snooze time** and press the function key underneath **Select**.
3. Scroll to the minute setting and press the function key underneath **Select** (Fig. 17) to save the setting and return to the **Alarms** menu.

Using snooze time

When the alarm goes off, press the function key underneath **Snooze** (see "Alarm clock settings" on page 60, Fig 2). If snooze time is 10 minutes, for example, the alarm will go off again 10 minutes later, showing the time of the original alarm setting on the display.

Using the handset

This section describes the use of the phone with the default settings. If your phone was installed and/or set up by someone else, the default settings may have been changed. Please check with that person or company if the phone does not react as described in this manual.

Making calls

See "Alphanumeric keys" on page 31 for information on input modes and entering letters, numerals, and special characters.

Selecting an identity for the outgoing call

The identity (extension) displayed on the idle screen of your handset (Fig. 1) is the default identity for outgoing calls. For more information, see "Line" on page 53. If the handset has more identities and you do not want to use the one on the display for the next outgoing call, you can select a different one just for this call without changing the settings.

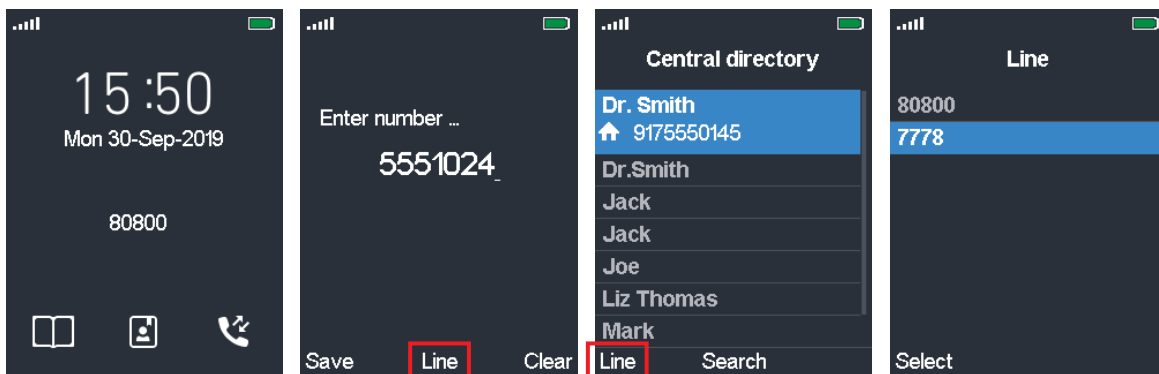



Fig. 1

Fig. 2

Fig. 3

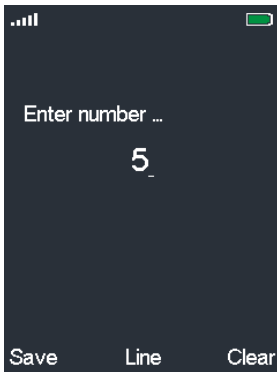
Fig. 4

1. Before pressing the green key to dial a number, press the function key underneath **Line**.
 - When dialing manually, you can select a different outgoing identity at any time while or after entering the digits on the keypad (Fig. 2).
 - When calling a number from the global phonebook, select the name, then press the function key underneath **Line** (Fig. 3).
2. Select the identity to be used for the next outgoing call with the up/down arrows on the navigation key and press the function key underneath **Select** (Fig. 4).
 - If dialing manually: The display will return to the **Enter number** screen where you can enter any remaining digits, if necessary (Fig. 2).
 - If dialing from the central directory: The display will return to the directory (Fig. 3).
3. Press the green key  to dial.

Using different dialing methods


Entering the number manually

1. Press a number key on the keypad to open the **Enter number** screen.



2. Enter the number and press the green key  to dial.

Redialing

To redial the last number dialed, press the green key or the function key underneath  to open the call history to the default list **All calls**.




- Either scroll to the uppermost line with the up arrow  (Fig. 1) and press the green key  to dial,
- or navigate to the dialed calls list  (Fig. 2) and press the green key.




Fig. 1



Fig. 2

Calling a contact

See "Contacts" on page 36 for information on finding, adding, and editing contacts.

1. From the idle screen, press the function key underneath the **Contacts** symbol .
2. Select a contact by scrolling to it or by entering the first or more letters of the name.

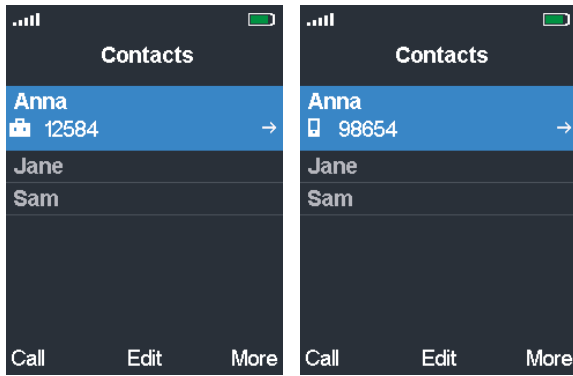







Fig. 1

Fig. 2



	Work number
	Mobile number
	Home phone number
	Other phone number

- If the contact has more than one number, as indicated by the arrow at the left edge of the contact's line (Fig. 1), and the number on the display is not the one you want to dial, use the navigation key to select a different one (Fig. 2).
- Press the green key  to dial the number of the highlighted contact.


Speed dialing a contact

For information on assigning keys 2 to 9 for speed dialing contacts, see "Assigning speed dial key to contact" on page 40.

To speed dial a contact, long-press the assigned speed dial key for approx. 3 seconds. To view the list of assigned speed dial numbers, open the main contact menu (see page 36, Fig. 2), select any of your contacts, and press the function key underneath **More**.

Calling a number from the Central Directory

See "Central directory" on page 42 for more information on this directory.

- From the idle screen, press the function key underneath the Central Directory symbol  to open the Central Directory (Fig. 1).
- Select a name by scrolling to it or by entering the first letter of the name, or by pressing the function key underneath **Search** (Fig. 1), entering the name (Fig. 2), and pressing the function key underneath **Search** again.

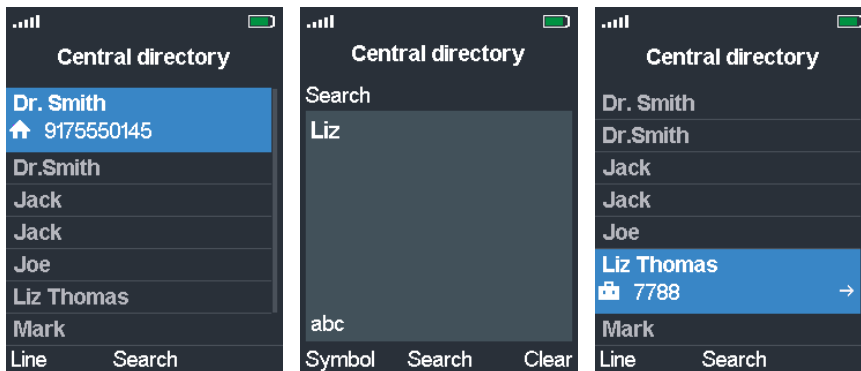






Fig. 1


Fig. 2

Fig. 3

	Work number
	Mobile number
	Home phone number
	Other phone number




- If there is more than one number assigned to a name, as indicated by the arrow at the left edge of the entry's line (Fig. 3), and the number on the display is not the one you want to dial, use the navigation key to select a different one.

4. Press the green key  to dial the number of the highlighted name.

Calling emergency alarm number

The alarm profiles are configured on the **Alarm** page of the base station. One emergency alarm profile can be assigned to each individual handset on the respective handset page of the base station.

To trigger the alarm, press the red button on top of the handset for **three seconds** to dial the number. If the ability to stop the emergency call on the handset is enabled and a trigger delay period is set, the call can be cancelled by pressing  before the delay period has elapsed.

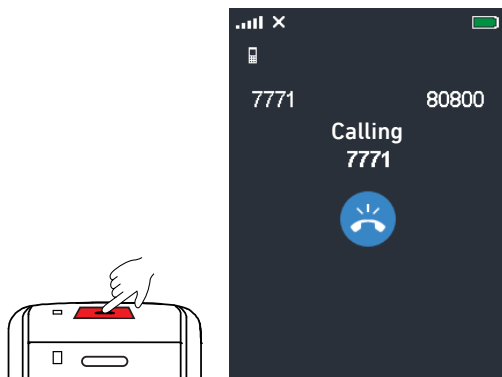


Fig. 1

If the pre-alarm delay in seconds is set, pressing the red emergency key will initially trigger the pre-alarm delay. If the ability to cancel the pre-alarm from the handset is enabled, you can cancel the alarm before the pre-alarm delay has elapsed by pressing the function key underneath **Cancel** (Fig. 2).

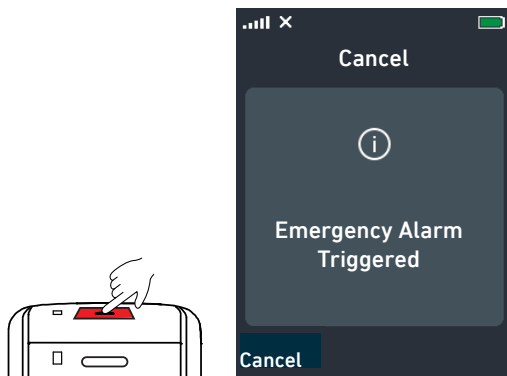




Fig. 2

Calling a number from call history (all, missed, received, dialed calls)

See "Call history (call lists)" on page 43 for more information on these lists.

1. From the idle screen, press the function key underneath the call history symbol  and select a list.
2. Select a call.

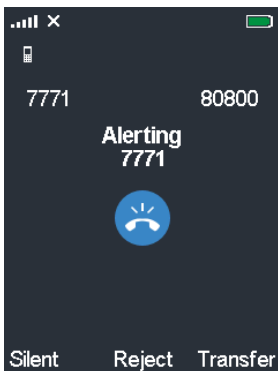


3. Press the green key  to dial the number of the highlighted item.

Accepting calls


Accepting a ringing call

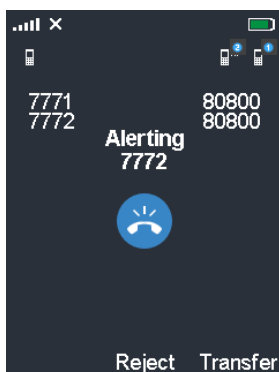
Press the green call key  or the speakerphone key  to accept the call.





- Press the function key underneath **Reject** to reject the call; the caller is informed that the number is busy.
- Press the function key underneath **Silent** to turn off the ringer.

Call waiting

When you are in a call, a second call will be announced visually by the "phone ringing" symbol  and acoustically by the sound of a beep; you will also see the caller ID on-screen if it is being transmitted.

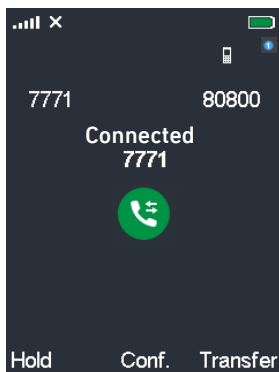


- Press the green call key  or the speakerphone key  to accept the waiting call and put the first call on hold.
- Press the function key underneath **Reject** to reject the waiting call; the caller is informed that the number is busy.
- If you have set call forwarding when busy, the call will be forwarded to the phone number set as target.

Active calls

The handset supports two simultaneous connections. When you are in a call, you can:

- transfer the call to a third party;
- put the call on hold and call a third party to make inquiries or to initiate a conference with both parties;
- accept or reject a second call (see "Call waiting" on page 68);
- switch between two calls (see "Swapping calls" on page 70).



Hold

When you are in a call, press the function key underneath **Hold** to put the call on hold (Fig. 1). Press the function key underneath **Retrieve** to resume the call (Fig. 2).

With the call on hold you can call another number to confer with that party (Fig. 3), for example, if you want to transfer the held call or if you want to initiate a conference with both parties.

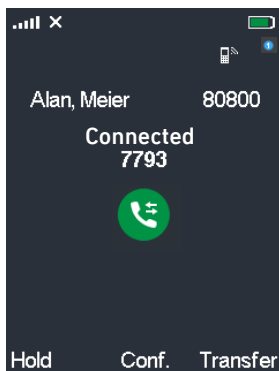


Fig. 1

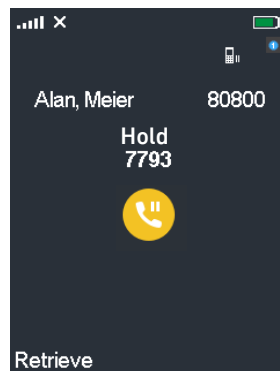


Fig. 2

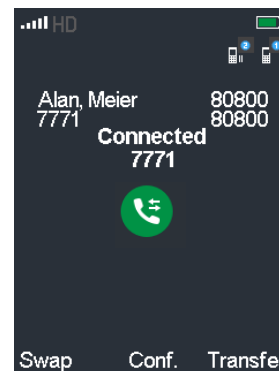


Fig. 3

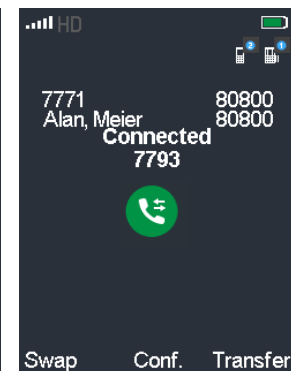


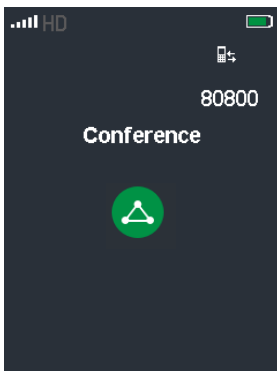
Fig. 4


Swapping calls

When you have one call on hold and you are connected to a second call, press the function key underneath **Swap** to connect to the held call and put the connected call on hold (Fig. 4, above).

Conference

When you are connected to two parties, one on hold and one on the line, press the function key underneath **Conf.** (Fig. 3 and 4, above) to start the conference.



Press the red key  to terminate the conference and the connection to both parties.

Transferring calls

Active calls can be transferred manually to a third party either with prior announcement (attended transfer) or without prior announcement (blind/unattended transfer). Ringing calls can be transferred manually to a third party without prior announcement (blind transfer).

For automatic call forwarding, see "Call forwarding" on page 56.

Attended transfer

1. With a call on the line, press the function key underneath **Hold** to put the call on hold (Fig. 1).

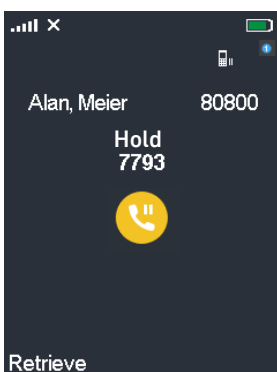


Fig. 1

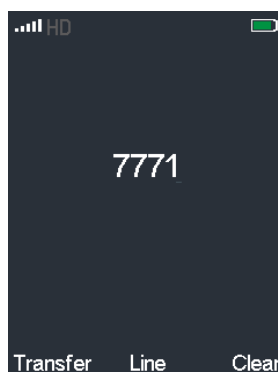


Fig. 2

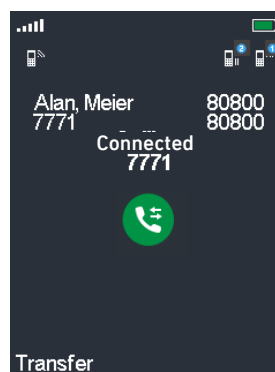


Fig. 3

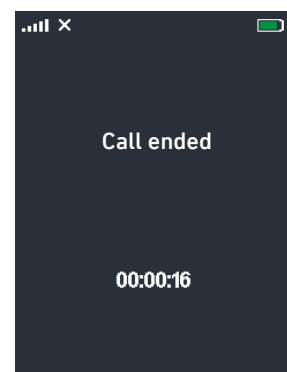



Fig. 4

2. Enter the number of the party to whom you want to transfer the call (Fig. 2).

3. Press the green key  to dial the number.
4. If the party agrees to accept the call, press the function key underneath **Transfer** (Fig. 3). The two parties are instantly connected, and your handset briefly displays the message "Call ended" before returning to the idle screen.

Blind transfer (unattended transfer)

- Blind transfer of active call.
 1. With a call on the line, press the function key underneath **Transfer** (Fig. 5). The call is placed on hold (Fig. 6).
 2. Enter the number of the party to whom you want to transfer the call on the keypad. The **Hold** screen is replaced by the dial screen (Fig. 7).

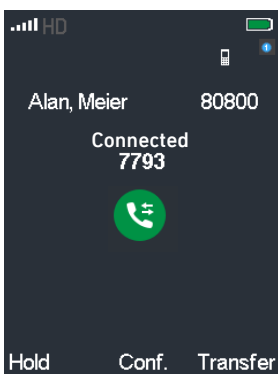


Fig. 5

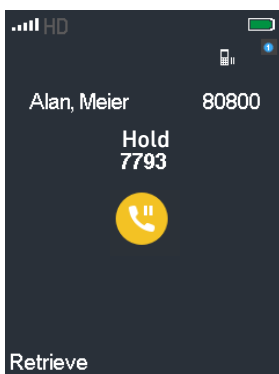


Fig. 6

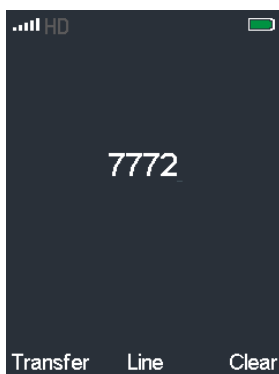


Fig. 7

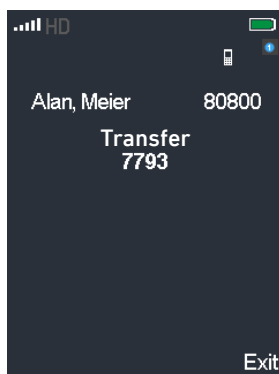


Fig. 8

3. Press the function key underneath **Transfer** to dial the number. The call is transferred immediately and starts ringing on the third party phone (Fig. 8).
4. Press the function key underneath **Exit** to return your handset to the idle screen. Do **not** press **Exit** if you want to know whether the call has been answered. If it has, your display will announce that your call has ended; if not it will be returned to your phone and automatically placed back on hold (Fig. 6).

- **Blind transfer of ringing call.**

1. With a call ringing, press the function key underneath **Transfer** (Fig. 9). The dial screen appears (Fig. 10).

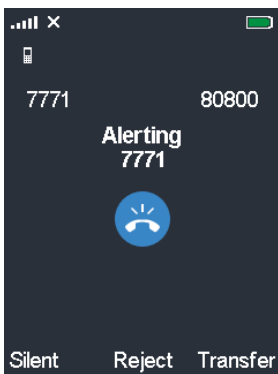


Fig. 9

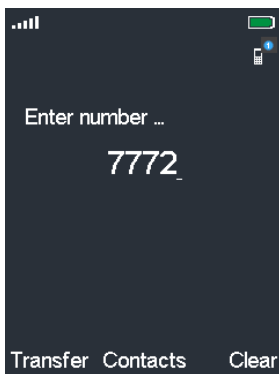


Fig. 10

2. Enter the number of the party to whom you want to transfer the call.

3. Press the function key underneath **Transfer**. The phone of the third party begins to ring, and your handset briefly displays the message "Call ended" before returning to the idle screen (Fig. 4).

Push to talk

Available with firmware 500.1 and higher for M65, M70, M80, M, and M90. In the default setting the function is disabled. It must be enabled individually for each handset, either on each individual handset or on the web interface of the basis station. See "Push-to-talk" on page 59 for the instructions to enable the function.


1. To initiate a call to all handsets in the system that have enabled the push-to-talk function and are not busy with a call, press and hold the mute button. The handset will open a direct communication channel to the other handsets. **Push-to-Talk calls are transmitted to idle handsets only.** They will not interrupt active calls.
2. Release the mute button to end the call.
3. Now another person can press and hold the mute button on their handset to respond.
Note: Only one person can speak at a time.



Appendix 1 - Using the handset to set up the base

In many cases, expensive tools and expert help will not be necessary to set up the M-series DECT system. The handset has a built-in RSSI meter that indicates the strength of the signal received from the base; this feature can be used to determine the ideal and/or necessary locations for base stations in single-cell or multicell installations. For more information, see the respective base station admin guides and the multicell set-up guide.

Finding the IP address of the base

1. Press the menu key  on the handset. The main menu is shown on-screen (Fig. 1).
2. Type ***47*** on the handset's keypad.
3. The handset will detect all base stations within range and show their MAC addresses on the display (Fig. 2). If the handset has detected more than one base, compare them with the MAC address on the type label of your base station to identify and select the right one.

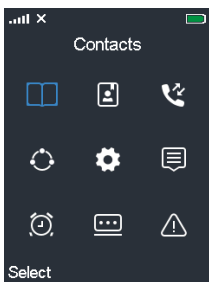


Fig. 1

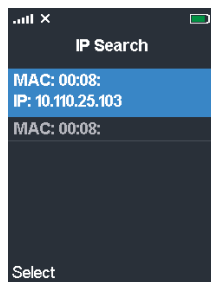


Fig. 2

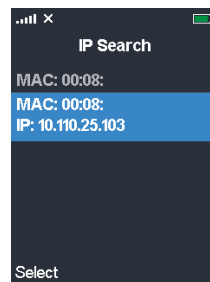


Fig. 3



Fig. 4



Fig. 5


4. If necessary, scroll to the MAC address of your base station. The selected item is highlighted in blue and expands to also show the IP address of the base station (Fig. 2 and 3).



Finding RSSI and RFPI

5. Press the function key underneath "Select" (Fig. 2 and 3). The selected base station's RFPI and RSSI are shown on the display (Fig. 4).
 - RFPI: The Radio Fixed Part Identity is a unique identifier frequently transmitted by the base station.
 - RSSI: The Radio Signal Strength Indicator measures the received signal strength in dBm (decibel milliwatts)

Testing the audio signal

6. Press the green key  to establish an audio loopback connection to the base station, as indicated by the message <<HOOK OFF>> (Fig. 5). You can now speak into the microphone of the handset to hear the echo of your voice in the front loudspeaker.