Cordless DT590

Cordless Telephone for MD Evolution

User Guide

AASTRA

EN/LZTBS 102 1964 R2A

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Welcome

Welcome to the User Guide for the cordless telephone DT590 of the MD Evolution Communication Platform.

The User Guide describes the facilities of the MD Evolution Communication Platform and the phone DT590 with a default programming. There may be some differences in the way your phone is programmed. Please consult your system administrator if you need further information.

The latest version of this User Guide can also be downloaded from: http://www.aastra.com

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Declaration of Conformity

Hereby, Aastra Telecom Sweden AB, SE-126 37 Hägersten, declares that this telephone is in conformity with the essential requirements and other relevant provisions of the R&TTE directive 1999/5/EC.

Details to be found at: http://www.aastra.com/sdoc

CE

FCC Statement

FCC 15.105 Information to the user of a Class B device:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Privacy of communications may not be ensured when using this phone. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device complies with FCC SAR limit of 1.6 W/kg. The highest SAR value measured when used at the ear is 0.081 W/kg. This device must not be collocated or operating in conjunction with any other antenna or transmitter.

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the rear side, underneath the battery of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

REN is N/A as this product is intended to be connected behind a FCC Part 68 compliant PBX system. It is not intended for direct connection to telephone network.

If this equipment cause harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact your Aastra business partner: http://www.aastra.com/solutions/enterprise/contacts/us.shtml. This equipment is not intended to be repaired by the customer (user). If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment that it does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or qualified installer.

This equipment is hearing aid compatible (HAC).

- Electrical Safety Advisory:
  Electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources. Customer is thus recommended to use a surge arrestor for the equipment that requires AC power.

Important

This section describes the information that is important to know before you use the DT590 phone, battery, charger and the functions described.

> **Note:** *This User guide describes the supported MD Evolution Communication Platform functions together with the most commonly used telephone specific functions. All telephone specific functions are listed in the menu structure, see section "Menu structure" on page 162.*

Before using the DT590 the first time you have to charge and connect the battery, see section "Installation" on page 141.

Numbering Plan

In this User Guide, the listed prefixes and suffixes to access services, are those of the standard configuration of the MD Evolution Communication Platform. Prefixes and suffixes may, however, have been modified by your system administrator.

Suffixes are not dependant of the country, the services prefixes for the different countries are listed in the table "MD Evolution Standard Services Prefixes" on page 137.

> **Note:** *Using the services offered by your DT590 extension is usually carried out by dialling the access prefixes assigned to the corresponding services. Most of the time, you will have a list of the prefixes applicable to your facility that was provided by your system administrator, if the list has been modified. If necessary, ask your attendants for additional information. Through their attendant's position, the attendants generally have access to an internal dialling plan in effect for your facility*

Guidelines, Warnings and Precautions

Safety instructions

Save these instructions.

Read these safety instructions before use!

Recommendations

- Save this user guide. It includes important safety information and operating instructions. Save all instructions for future reference.
- Before using the telephone, please follow the operating instructions and adhere to all warnings and safety precautions located on the product and in the user guide.
- Always keep and handle your products with care and keep them in a clean and dust-free place. Proper use and care will prolong the products life. Use a soft absorbent tissue or cloth to remove dust, dirt or moisture.
- Always ensure that the phone, battery and charger are used and operated in the intended environment for which they are designed.
- Operate the phone in temperatures between 0°C to +40°C (32°F to 104°F).

- Do not expose your products to liquid, moisture, humidity, solvents, strong sunlight, harsh environments or extreme temperatures, never above +60°C (+140°F), unless the product has been specifically designed and officially approved for such environments.

- Exposure to heat may cause batteries to leak, overheat or explode, resulting in fire, burns or other injuries.
- Do not put the product in the microwave oven: this may cause damage to either the oven or the product.

- Do not attempt to disassemble or alter any part of the phone, the charger(s) or the battery-pack. Disassembly or alteration may result in electrical shock or irreversible damage to the equipment. Only a qualified service personnel or an authorized Aastra partner should conduct internal inspections, alterations and repairs.
- Do not expose your product to open flames or lit tobacco products.

- Do not drop, throw or bend your products. This may cause malfunction or electric shock.
- Do not paint your product.
- Do not use your product in an area where a potentially explosive atmosphere exists, unless the product has been specifically designed and officially approved for such environments.
- To avoid hearing impairment, accept the call before holding your product (or portable handsfree device) to your ear.
- Do not allow heavy objects to fall on the telephone.
- Do not use auxiliary equipment with the telephone which is not exclusively recommended by the manufacturer. The use of any auxiliary equipment not recommended by the manufacturer may result in fire, electric shock, or injury, and will void the warranty.
- Connect AC (power supply) to the desktop battery charger only to designated power sources as marked on the product.
- Clean the batteries using ethanol and isopropyl alcohol
- Do not allow children to play with the product packaging material. Product packaging material is often small and may present a choking hazard.
- Do not allow children to play with your telephone. It is not a toy. Children could hurt themselves or others. Children could also damage the telephone.

Disposing of the product

- Your product should not be placed in municipal waste. Please check local regulations for disposal of electronic products.

Potentially Explosive Atmospheres

Turn the cordless telephone off when in an area with a potentially explosive atmosphere. It is rare, but the telephone or its accessories could generate sparks. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked. They include fueling areas, (such as gas stations), below deck on boats, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles (such as grain, dust, or metal powders).

Do not transport or store flammable gas, liquid, or explosives in any compartment of a vehicle which also contains the telephone and accessories.

In the U.S., vehicles powered by liquid petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this standard, contact the National Fire Protection Association, One Battery march Park, Quince, Massachusetts 02269, Attention: Publication Sales Division.

Power supply

- Connect the AC power adapter of the charging unit only to the designated power sources as marked on the charger.
- Make sure the cord is positioned so that it will not be subjected to damage or stress.
- To reduce risk of electrical shock, unplug the chargers from any power source before attempting to clean or move it.
- The AC power adapters must not be used outdoors or in damp areas.
- Never modify the cord or plug. If the plug will not fit into the outlet, have a proper outlet installed by a qualified electrician.
- Limit the distance between the mains socket and the cordless telephone when charging for easy accessibility.
- As an energy saving measure, disconnect the charger from the main socket after charging.
- When unplugging the mains adapter from the power outlet, make sure that your hands are dry and ensure that you hold the solid portion of the mains adapter.
- Do not pull on cables.

Charging and batteries

Please read carefully the following important precautions before the first time use of the batteries. Make sure to understand and observe all cautionary instructions stated, so as to avoid any possible safety hazards that are caused by any misuse, misapplication or damage to batteries.

- Only use batteries, mains adapters or desk and rack chargers designed for use with your product.
- Use of power sources not explicitly recommended may lead to overheating, reduced battery performance, distortion of the equipment and fire or other damages.

- cordless telephones are equipped with Nickel Metal Hydride (NiMH) batteries or Lithium Ion Lion batteries. In a complex infrastructure, the talk- and standby time may differ, due to the consequence of the increase in signaling.
- The battery must always be completely charged (minimal 4 hours) before first time use.
- The battery in your product is designed to withstand many charge cycles.
- Use only the recommended charging equipment.
- Improper charging can cause heat damage or even high pressure rupture.
- Observe proper charging polarity.
- Do not solder lead wires directly onto the battery.
- Do not allow water to come into contact with the battery.
- The initial charging of a NiMH battery will cause the battery to become warm. This is a normal effect of charging NiMH batteries.
- The batteries are replaceable, however it is not the intention to do this frequently.
- Only charge the batteries when placed in the phone.
- Use only the specified battery-packs for your product.
- Never heat or dispose of the battery into a fire, which, or else, may cause leakage, burst or fire.
- Remove the carrying case from the product while in charger.
- Do not cover the product while being charged. Do not charge the phone in a closed cabinet or drawer. The charging of the battery is a chemical process and causes the battery to become warm during charging. Make sure the environment in which the phone is charged, is well vented.
- The cordless telephone can be charged either when switched on or off.
- Do not connect the battery's positive and negative leads altogether in any case.
- Do not strike or drop the battery. It may cause damage to the battery.

- Do not charge the battery under the temperature of +5°C (+41°F). Be sure to charge the battery between the temperatures of +5°C and +45°C (+41°F and 113°F). Charging beyond these conditions may impair the battery performance and shorten the life cycle.

- Do not use battery packs from different types, brands or of different capacities.
- The battery is to be stored in a dry cool place, with the ambient temperature around of +25°C (+77°F) for best performance.
- The battery continues to discharge a minimal portion of its power, even if the product is switched off or the battery is removed.
- Dispose the battery in accordance with all local regulations, applicable in your country.
- Do not allow the metal contacts on the battery to touch another metal object. This could short-circuit and damage the battery.
- Do not attempt to take a battery apart.
- Do not disconnect the battery unless it needs to be replaced.
- Do power the telephone off before removing the battery.

Warnings

- Smoke or fumes
  Stop operating the products and turn off immediately in case of smoke or fumes. Unplug the mains adapter and remove the batteries from the phone immediately. Continued operation may result in fire or electrical shock.
- LCD
  If the liquid crystal display breaks, avoid injury by not allowing the liquid crystal to come into contact with eyes, skin or mouth. Prevent the liquid crystal from leaking out of the broken glass.

Preventing malfunction

- Never place the equipment in close proximity of electric motors, welding equipment or other devices generating strong (electro) magnetic fields. Exposure to strong (electro) magnetic fields may cause malfunction and corrupt the communication.
- Moving the equipment rapidly between warm and cold temperatures may cause condensation (water droplets) to form on its internal and external surfaces. Water droplets may cause malfunction of the equipment and corrupt or end communication or damage the equipment. When condensation is noticed, stop using the equipment. Switch off the phone, remove the battery and unplug the mains adapter from the power outlet. Wait until the moisture evaporates from the equipment before putting it in operation again.

- Avoid accidental drop of the phone. Use the clip, security clip or carrying case specified for carrying purposes of the phone.
- Avoid the phone being squeezed between furniture and your body when carrying the phone in your pocket or attached to clothing.

Exposure to Radio Frequency Signals (SA)

A cordless telephone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limit for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the US government and Canada. 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 both US and international standard bodies. These standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standards for cordless telephones employs a unit of measure known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC and Canada is 1.6W/kg averaged over one gram of tissue.

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 operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels. 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 government-adopted requirement for safe exposure. The tests are performed in positions and locations (for example, at the ear and worn on the body) as required by the FCC for each model.

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 approved accessories. When carrying the telephone while it is on, use only the specific belt clip that has been tested for compliance.

Use of non-approved accessories may violate the FCC RF exposure guidelines and should be avoided.

This device 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 had been tested in accordance with the measurement procedures specified in FCC/OET Bulletin 65 Supplement C (2001) and IEEE Std. 1528- 2003 (December 2003).

Most modern electronic equipment (for example, equipment in hospitals and cars) is shielded from RF energy. However, RF energy from cordless telephones may affect some electronic equipment.

Chemical Resistance

The alpha and numeric characters printed on the exterior of the cordless telephone have been tested and found resistant to chipping, fading or wearing off when the telephone is treated with common cleaners and disinfectants or perspiration.

The following chemicals have shown no harmful effect:

- 3% Hydrochloric Acid
- M-alcohol (70% Methylated Ethanol)
- 60% Chlorhexidin 0.5mg/ml

> **Important:** *Acetone can be damaging to the plastic casing of the cordless telephone and should not be used.*

The cordless telephone is one of the most innovative products ever developed. With it, you can maintain connectivity to traditional telephone services while remaining mobile around the work environment. For the safe and efficient operation of your telephone, observe the guidelines in this manual. Your cordless telephone is a radio transmitter and receiver. When it is on it receives and sends out radio frequency (RF) energy. The telephone operates in the frequency range of 1921.5 to 1928.5 MHz and employs commonly used modulation techniques.

> **Note:** *Read this information before using your cordless telephone.*

Operation Procedures

In the U.S, cordless telephones are subject to the rules and regulations of the FCC. Following these rules will help to eliminate confusion, ensure the most efficient use of the existing frequencies, and result in a smoothly functioning radio network.

The following offenses are punishable by fine, imprisonment, or both:

- Use of profane, indecent, or obscene language.
- Transmission of a false distress signaler call.
- Willful or malicious interference with any other radio communications.
- Refusal to yield a channel or radio frequency when informed that it is needed for an emergency call. Emergency calls have priority over all messages.
- Adjustment of the equipment by anyone other than a qualified licensed technician.

IC Requirements

The term “IC:” before the radio certification number only signifies that Industry of Canada technical specifications were met.

Warranty Notification

Do not disassemble the telephone. Disassembling the telephone voids the warranty. The cordless telephone consists of no consumer serviceable components. Service should be performed only by Authorized Service center.

Modifications

Modifications not expressly approved by Aastra could void the user's authority to operate the equipment.

Intrinsic Safety

The DT590 phone is not specified as intrinsically safe, so do not use it in areas with a danger of explosion.

Preparing for Use

Before using the DT590 the first time you have to charge and connect the battery, see section “Installation” on page 141.

> **Note:** *Place the phone in the charger and charge it for at least one hour before using it the first time.*

Coverage Area

Your organization’s premises are covered by a number of cells which form the coverage area. You can make and answer calls anywhere within this area, outside the area you will lose contact with the system.

Company coverage:

PIN Code

Your phone is not provided with a preset PIN code. You should enter a personal PIN code to prevent misuse.

To change the PIN code

Route: *Menu » Toolbox » Locks » Phone lock » On*

Press.

Select the “Toolbox” tab.

Select the menu item “Locks” and confirm.

Select the menu item “Phone lock” and confirm.
The following options are available:
On/Off

Confirm the selected the menu item “On”.

Press.
Old code:
New code(1):
New code(2):
is displayed.

When using the phone for the first time, enter the New code(2) and confirm.

For changing the code, enter the current code (Old code) and confirm.

Enter the four digits of the new code (New Code(1)) and confirm.

Enter the new code (New Code(2)) again and confirm.
Either the new code is accepted or “Wrong Code!” is displayed. If “Wrong Code!” is displayed, you have entered a number that does not match the current code.

Note the new code for future use.

Note: *If you enter an incorrect new code three times in a row, your phone leaves this menu option. To continue the operation, you have to enter the correct PIN code when "Authenticate - Enter PIN Code" is displayed.*

In other situations, if you enter an incorrect code three times in a row, your phone is blocked and "Authenticate - Enter IPEI Code" is displayed. See section "IPEI Code" on page 150 to unblock your phone.

IPEI Code

The IPEI code is a unique code which has been assigned to your phone (International Portable part Equipment Identity).

If your phone is blocked because an incorrect PIN code has been entered three times, you can unblock it with the IPEI code.

The IPEI code of the cordless telephone may be needed also to enable telephone network subscription.

Read out the IPEI code

*#06#

Press.
A message box with "IPEI" is displayed followed by the IPEI number.

Note: *Write down the IPEI code for future use. If you cannot retrieve the IPEI code, please contact your system administrator. Keep the IPEI code secret to prevent misuse of your phone.*

Unblock the DT590

Enter the IPEI code and confirm.
The phone returns to the menu.

Your phone is switched off.

Network (submenu option)

The submenu option Network should only be used for administration purposes by Aastra service staff. Using this menu option may cause a logout from the DECT/GAP network, and no further calls will be possible.

> **Note:** *In case of a network unsubscription, the phone must be logged on again by a service technician.*

DT590 General Description

1 Volume Up
This button is used for increasing the ear piece volume and the loudspeaker volume in handsfree mode. See section “Adjust ear piece volume” on page 252 and section “Adjust loudspeaker volume for handsfree speaking” on page 252.

2 Volume Down
This button is used for decreasing the ear piece volume and the loudspeaker volume in handsfree mode. See section “Adjust ear piece volume” on page 252 and section “Adjust loudspeaker volume for handsfree speaking” on page 252.

3 Loudspeaker
The loudspeaker is placed on the rear side of the handset. See section “Adjust loudspeaker volume for handsfree speaking” on page 252.

4 Off hook / Yes
This button is used for connecting calls, pressing briefly once in standby mode will open the call list. Always press this button to confirm choices when working in menu mode.

5 C (Clear) / Mute
Pressing this button in standby mode will mute the ringer signal, pressing it during a call will mute the microphone.

6 Microphone
Note that the microphone is placed on the bottom side of the handset, close to the charging connectors. (The three small holes to the left of the message key is a matter of design and has no functionality.)

7 Charger connectors
See section “Installation” on page 141.

8 R / Message key
With this key you put a call on hold (inquiry) and retake a call put on hold. Pressing this key in standby mode will result in an outgoing call to a specific extension number. If the “voice message” icon appears, you can enter your mailbox system to retrieve the voice message.

9 Handsfree key
Press the handsfree key to turn on the loudspeaker. See sections “Incoming Calls” on page 167, “Outgoing Calls” on page 171 and “During Calls” on page 180.

10 Keypad

In idle and number input mode:
In standby mode, pressing the keypad briefly enters the digits 0 to 9 and the characters * and #. Pressing and holding the *-key will add a pause represented by a “-”.

In text input mode:
When writing text messages and adding/editing names in the Phone Book, pressing keys 0 to 9, *, or # displays the first available character on that specific key. The marked character is selected after a time-out (3 seconds) or when another key is pressed. Pressing key 1 adds space between the characters and pressing the *-key switches between upper and lower case. The first character entered in a message, or when adding/editing a name in the Phone Book, will be an upper level character followed by lower level characters unless the *-key is pressed before entering the character.

11 Menu key

Pressing the menu key in standby mode will open the (integrated) “Phonebook” menu. During a call it will open the “3rd party” menu. If the key has been used to leave the menu mode, the last used menu will be opened.

12 Navigation key

Use this key to navigate in the menu and text modes. When the left navigation key is pressed in standby mode and during a call, the left-most menu tab is highlighted. When the right navigation key is pressed, the right-most menu tab is highlighted. Navigation key up and navigation key down is used for navigating up/down in the menu.

13 On/Off / On hook / No

This button is used for disconnecting calls and returning to the previous screen. Pressing the button for more than 3 seconds will switch the handset on/off.

14 Headset connector

The headset connector is used for connecting a headset and can also be used for connecting a data cable for downloading software and other data to the handset.

15 Display

The full graphic type display is 101 pixels wide and 80 pixels high with white backlighting that can be switched on/off or set to automatic. It is also possible to change the display contrast. See sections “Display Backlight” on page 259, “Display Contrast” on page 260.

16 Ear piece

Please note: *The phone may retain small magnetic pieces around the ear piece region.*

17 LED
Ringing, message waiting, battery low, exit cover area.

Case
The case is made of durable PC/ABS plastic.

Antenna
The antenna is integrated into the handset.

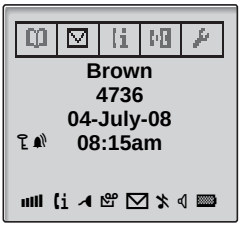
Clip
The clip on the back of the handset is used for fastening the handset to a belt or similar.

Battery
The battery is a rechargeable Li-Ion battery placed under a battery cover and connected to the handset in such a way that improper contact is not possible. By placing the handset in the charger, an empty battery can be charged within four hours.

Display Info

The display gives you visual feedback on all actions that you perform, and also textual warnings. In standby mode, the display normally shows the owner identity.

The DT590 display



Menu tabs

User identity (name)
User identity (number)

Date
Key lock, Alarm icon, and current time

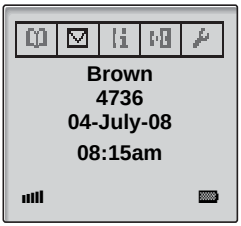
Info row (icons)

The following display examples show the different states of your phone:

Idle phone

Depending on the status and settings of your phone, different information can be shown.

Normal



“Brown” is the programmed name in your network. The second row shows your extension number. The third and fourth row show the current date and time. The icons for key lock and alarm would appear on the fourth row. The fifth row (info row) shows icons for signal strength, messages, battery status, etc.

Outgoing call

Normal outgoing call:

When you make an outgoing call, both the traffic state and the dialled number or name are displayed:

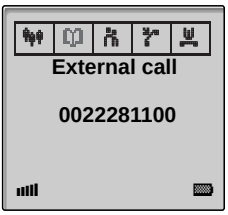
When the outgoing call is answered:

Duration time

Incoming call

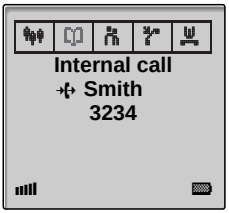
Normal incoming call:

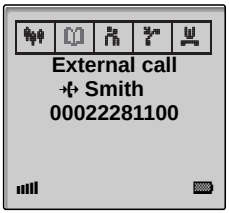
If available, the number or the name of the caller is displayed.



Diverted call:

A diversion indicator before the number or name informs you that the call is diverted to your phone. For example, the display shows that the number of Mr. Smith was dialled, but the call was diverted to you:





System connection messages

No system **Out of coverage**
The phone is not in contact with any system. Please ask your system administrator to log on the phone.

> **Note:** *When reentering the coverage area, it can take a couple of minutes before the phone has automatically registered into the system.*

No access **Access indication**
Your phone has contact with a system, calling is not allowed.

Menu tabs

Phonebook
The “Phonebook” menu contains all names/numbers in the integrated Phone Book.

Message
The “Message” menu contains all message handling such as listening, reading, writing, and sending messages.

Call info
The “Call info” menu contains call lists and call time.

Call service
The “Call service” menu contains absent handling and diversion of calls.

Toolbox
The “Toolbox” menu contains a calculator, alarm clock, and personal handset settings such as changing the ringer volume, selecting the language etc.

3rd party
The “3rd party” menu contains all functions for calls where a third (or more) party is involved.

Ongoing call
The “Ongoing call” menu contains shortcuts to the message menu and to the call list, and possibility to change to DTMF signalling mode etc.

User busy
In the “User busy” menu, camp-on for PBX internal calls can be initiated if the called person is busy, or callback when the called line is no longer busy.

Call waiting
In the “Call waiting” menu information of the caller (if available) can be found if camp on is initiated by another party. A call waiting can also be picked up on another line while maintaining the first connection.

Display icons

Signal strength
The Signal strength indicator is on when your phone is connected to the system. The bars indicate reception quality.

Alarm clock
The Alarm clock icon is visible when the alarm clock is set.

Ring signal muted
The Ring signal muted icon is on when the mute button is pressed and “Mute ringer?” is selected.

Battery
The battery icon is always shown in the display in standby mode. When the level is low it is time to charge the battery.

Low battery
The low battery icon is shown when the battery has 10% of its capacity left. The icon is flashing when the battery capacity is equal to or lower than 5%.

Handsfree speaking
The handsfree speaking icon is shown when the handsfree operation is activated.

Voice message
The voice message icon indicates that a new voice message has arrived. The icon remains in the display until all new messages in the inbox are heard.

Text message
The text message icon indicates that a new text message has arrived. The icon remains in the display until all new messages in the inbox are read.

Key lock
Keys are locked.

Headset
The headset icon indicates that a headset is connected to the phone.

Microphone muted
The microphone muted icon indicates a muted microphone.

Redirected call
The redirected call icon indicates that the incoming call is redirected from another phone.

Call info
The call info icon indicates that there are new missed calls in the call list. The icon remains in the display until the calls are checked and either answered or rejected.

Search Phonebook
The search Phonebook icon is visible when it is possible to press the navigation key up/down and search for a name/number in the integrated Phone Book.

Diversion indicator
When the diversion indicator is displayed before a name or number it indicates that the phone is diverted to another extension.

Answered call

Outgoing call

Missed call

Menu pointer
The menu pointers are visible when it is possible to press the navigation key up/down to access more options or information.

Radio button
The radio button icon is visible when you can select an option.

Radio button selected
The radio button selected icon indicates a selected option.

Ringer volume
The ringer volume icon shows the selected ringer volume.

Menu structure

The available phone-specific functions and network functions can be accessed via the DT590 menus.

Press to access the “on hook” menu when in idle mode or to access the “off hook” menu during a call (see below).

Menu structure

Options available when “on hook”

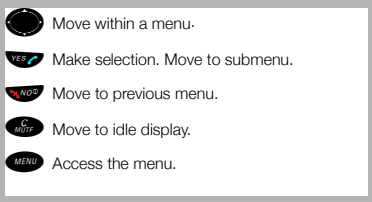
Phonebook
- Call
- Add contact
- Edit contact
- Delete contact
- Open central*

Message
- Voice
- Inbox*
- Send*

Call info
- Missed calls
- Call list
- Call time

Call service
- Absence***
- Divert***

Toolbox
- Alarm clock
- Calculator
- Sound & Alerts
- Display
- Network
- Time & Date
- Locks
- Answering mode
- Language
- In charger mode
- Master reset



Options available when “off hook”

3rd party
- Call 3rd party***
- Switch call***
- Transfer***
- Add to conf.***
- End new call***

Phonebook
- Call
- Add contact
- Edit contact
- Delete contact
- Open central*

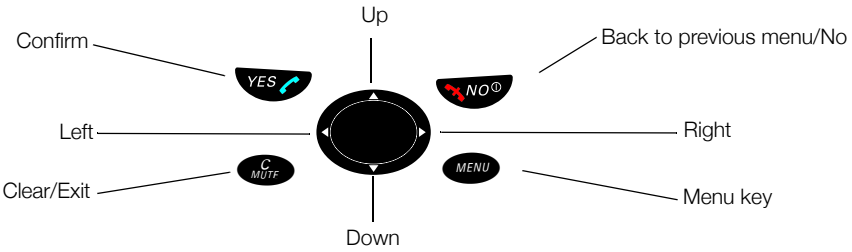
Ongoing call
- Audio transfer***
- Message
- Call list
- Long DTMF
- Short DTMF
- Send pause

User busy
- Call waiting***
- Call back***

Call waiting
- Info***
- Switch***

Note:
** Optional, only applicable in conjunction with the Integrated Messaging Server,*
****This feature is not supported.*

Navigation keys



Phonebook tab

Phonebook	Call	
	Add contact	New From call list
	Edit contact	
	Delete contact	
	Open central*	Entries in the Central Phonebook

Note: ** Optional, only applicable in conjunction with the Integrated Messaging Server*

Message tab

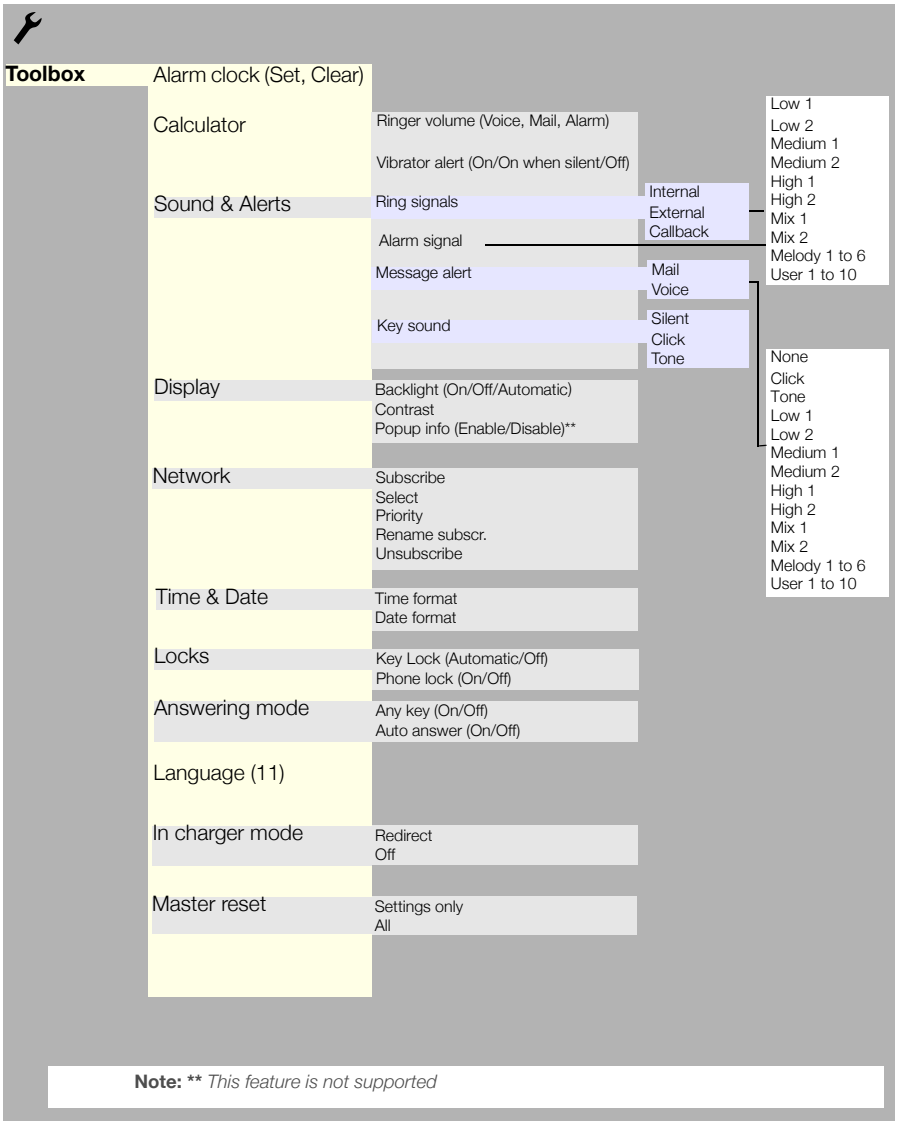
Message	Voice	(Access to your voice mailbox)
	Inbox*	(The last 10 received messages)
	Send*	Unsent New Outbox

Note: ** Optional, only applicable in conjunction with the Integrated Messaging Server*

Call info tab

(i	**Call info**	Missed calls	(Missed calls in separate list)
		Call list	(The last 20 calls - dialled, incoming, missed)
		Call time	(Accumulated outgoing call time and for the last call)

Toolbox tab



Note: ** *This feature is not supported*

Ongoing call tab

Ongoing call*	Message	Voice Inbox Send
	Call list Long DTMF Short DTMF Send pause	

Note: * *Depends on the programming of your phone*

DT590 Switching On/Off

Switch on

Press and hold at least 3 seconds until the display lights up.
If the phone does not switch on or the battery icon starts flashing, the battery is low. Charge the battery.

Note: *If the signal strength icon is off and the message "No system" or "Searching" is displayed, you cannot make or answer calls.*

Switch off

Note: *During calls, you cannot switch off your phone.*

Press and hold at least 3 seconds until the display turns blank.

Incoming Calls

A ringing signal indicates an incoming internal or external call. You can also see who has called you in the Call list.

Answering Calls

The ringing type tells you whether the call is an internal, external or callback call and the display indicates the number of the incoming call.

If the number is stored in the integrated Phone Book, the associated name is shown instead.

Press to answer.
If you do not answer the call, the number is stored as a missed call in the Call info/Missed calls and you are asked “Check Who Called?”. See section “Call Info” on page 169.

> **Note:** *Calls can be answered at any time, whether you are programming, keying in a number, etc.*

Handsfree

Press to answer the call in handsfree speaking mode.
You are connected to the caller via the loudspeaker and microphone.

End the call

Press.

Mute ringing sound temporarily

If the phone rings or a warning sounds at an inconvenient moment, you can temporarily suppress the sound:

Press to turn off the ringing for the moment.
The ring off icon appears.

All alert signals will silence for this specific call. But even with the sound off, you can still answer the call. The warning light keeps flashing. If you do not answer the call, the number is stored as a missed call in the Call info/Missed calls. To turn off the ringing sound permanently, see section “Volume Control” on page 252.

Change answering mode

The phone can be set to answer a call automatically or by pressing any key.

> **Note:** *The auto answer mode is only useful when a headset is connected.*
>
> **Route:** *Menu » Toolbox » Answering mode*

Press.

Select the “Toolbox” tab.

Select the menu item “Answering mode” and confirm.
The following options are available:

- Any key (press any key to answer the call)
- Auto answer (the call is automatically connected when the headset is in use)

Select “Any key” or “Auto answer” and confirm.

Select “On” or “Off”and confirm.

Call Info

The Call info gives you information about missed calls, the call list and the call time.

Missed calls

The last 10 incoming and missed calls are stored in the Missed calls list.

The calls are marked with the following icon:

Missed call

Call list

The last 20 calls (10 dialled and 10 incoming/missed calls) are stored in the Call list.

The different call types in the Call list are marked with the following icons:

Incoming call

Outgoing call

Missed call

When there are new unanswered calls, the call info icon is displayed and the display shows: “Check Who Called?”.

Press if you do not want to return a call.

To return an unanswered call

Press briefly.
The Missed calls list with the dialling numbers or, if available, with the names from the integrated Phone Book appears.

Scroll until you have the correct number or name.

Press to call the selected number.

Tip: *If you press the C/Mute key instead of the Yes key, you can remove the number from the list.*

To return any call

The last 20 calls (10 dialled and 10 incoming/missed calls) are stored in the Call list. You can access the Call list via the Call info menu.

Route: *Menu » Call info » Call list*

Press.

Select the “Call info” tab.

Select the menu item “Call list” and confirm.
The Call list is displayed.

Scroll until you have the correct number or name.

Press to call the selected number.

You can permanently store the numbers from your Call list in your integrated Phone Book. See section “Add Numbers from Call List” on page 193.

Call Pick-Up Individual

When your extension is idle, you may also answer a call that is ringing for another extension, without having to change extensions.

1 3

Dial the prefix “13” for the call pick-up service.

Next, directly dial the directory number that is ringing

Press to call the selected number.

Note: *Certain extensions (such as yours) may possibly be equipped with permanent protection against call pick-up. If this is the case, this service will obviously be refused on these extensions (and vice-versa).*

Outgoing Calls

Sometimes you make a call but the person is not available. These functions will help you in your attempts to establish contact with the called party.

You can also make a call via the Phone Book, see section “Local Phonebook” on page 187 and “Central Phonebook” on page 196.

Making Calls

Enter the desired number.
The number is displayed.

Press when the number is correct.
Your phone will go off hook and dial the number. The name of the called party is displayed if connecting line information is available.

Notes:
Correct a wrong entry by pressing the C/Mute key.

If you decide not to make the call while keying in the number, press the NO key to stop.

If you receive a call while keying in the number, simply press the Yes key to answer.

You can make your calls faster by using abbreviated numbers or dial-by-name. See section “Abbreviated Numbers” on page 173.

Handsfree

While you are waiting for a connection, dial tone or during the call:

Press to switch the call to handsfree speaking mode.
You are connected to the caller via the loudspeaker and microphone.

To end calls

Press to end the call.
The duration of the call is displayed.

Redial Last External Number

When you initiate an external call, the system automatically stores all dialled digits, irrespective of whether the call was successful or not.

1 1

Press to redial the last dialled external number.
The display will show the dialled number.

Redial Call List Number

The last 20 dialled, received, and missed numbers are stored in the Call list. If a number occurs more than once, the last time stamp is shown. You can dial one of these numbers by selecting the number from the Call list.

Press.
The Call list appears.

Scroll until you have the correct number or name.

Press to call the selected number.

> **Tip:** *If you press the C/Mute key instead of the Yes key, you can remove the number from the list.*

You can also access the Call list via the Call info menu.

Route: *Menu » Call info » Call list*

You can permanently store the numbers from your Call list in your integrated Phone Book. See section “Add Numbers from Call List” on page 193.

For more information about the Call list, see section “Call Info” on page 169.

Abbreviated Numbers

By using abbreviated numbers, you can make calls simply by pressing a few keys. Frequently used external numbers are stored as *common abbreviated numbers* in the exchange.

External numbers are stored centrally in your MD Evolution Communication Platform. Common abbreviated numbers can be dialled from every extension that has the authority to do so

Usually, you will have access to a general list of abbreviated numbers valid for all users in your facility.

Additionally, based on your user rights, you may also have access to a personal list of 20 abbreviated numbers that are either personal, or shared among a restricted group of users.

All of these abbreviated numbers are managed by your system administrator or possibly your facility's attendants. Contact them as needed.

To contact an external party using abbreviated numbers:

Enter the abbreviated number
Please refer to your telephone directory.

Press to make the call
The call is then established just as if you had manually dialled the external party's number.

Notes:
A personal abbreviated number accepts values from 00 to 19. An abbreviated number on the general list is usually from 200 to xxx.

An abbreviated number is generally complete. It may also be incomplete, in which case you will need to complete the number by dialling the rest manually. This may, for example, allow you to access a series of numbers using just one abbreviated number

Outgoing Calls, Busy/No-Answer

Sometimes you make a call but the person is not available. These functions will help you in your attempts to establish contact with the called party.

You can also make a call via the Phone Book, see section “Local Phonebook” on page 187 and “Central Phonebook” on page 196.

Automatic Callback

You call an extension and receive busy tone or get no answer. This can also be used if no external line is free:

1 **Press.**
Verification tone.

Press.
You are called back if the extension finishes the ongoing call or the next time the extension finishes a new call. You have to answer within eight seconds; otherwise the Callback service is cancelled.

Busy Extension

You call an extension and receive busy tone.

Intrusion

You can intrude on an ongoing call on a busy extension (if this function is allowed).

3 **Press to intrude.**
Intrusion tone is heard and a three-party call is established. When the called extension replaces the handset and you keep off hook, the called extension will be recalled automatically.

> **Note:** *If you still hear the busy tone, then your extension does not have the authority to intrude or the desired extension is protected against Intrusion.*

Call with Temporary Protection

When you place either an internal or external call that you deem particularly important, you may choose to activate phonic protection.

This protection, available on a call by call basis, prevents any phonic intervention during your communication.

More particularly, this service protects you from any intrusion or offer that could take place during your conversation, most specifically from an attendant. These services are then refused in light of your conversation in progress.

7 4 **Dial the prefix "74" to access to the temporary call protection service.**

Next, directly dial the desired number.
You may do so according to any of the methods available for dialling an internal or external number.

Press to make the call

> **Note:** *Certain extensions (such as yours) may possibly be equipped with permanent phonic protection. The above-described service is therefore applied to all calls that are placed, without requiring any particular action on your part.*

Call in Substitution or with Signature

You can also place an external call in substitution or with signature. This concerns the exceptional use of a third party set, to place an external call, just as if you were using your own extension.

The main advantage of this feature is that the call is charged to your own extension. Another advantage is that on the substituted third party set, you have all of your extension's customary services, most especially dialling discriminations relating to various external numbers applicable for your extension.

This service is valid on a call-by-call basis. It is automatically cancelled at the end of each call processed using this service.

75 **Dial the prefix "75", to access to the call in substitution service.**

Then dial your own extension number.
This is necessary in order to sign on to the third party set.

Press.

Next, dial your user password.
By default, your user password is “1234”, however you may have modified it. (See section “Password Programming” on page 244).

Press in order to terminate access to this service.
You may now proceed with placing your external call in substitution from the previous extension.

Simply dial the desired external number.
You may do so according to one of the methods on this extension for dialling an external number. Your call is then established normally.

Press to make the call.

DTMF End-to-End Dialling

At times, you may need to call external servers, such as a reservation centre server, when you are required to communicate interactively through the online transmission of various dialling codes.

Your extension makes this option available to you through the DTMF end-to-end dialling service. With this service, you can directly exchange dialling codes with a remote server, without your dialling being interpreted by your local facility.

This is processed through the exchange of DTMF codes, from which the service's name is derived.

To use this service when placing an external call:

✳ **Dial the "*" code to access to the DTMF end-to-end dialling service.**
Everything that is dialled thereafter is then directly transmitted to the remote server.

> **Note:** *When you interact with the voice mail system, or the automated attendant possibly integrated in your facility, the aforementioned operations are not required. DTMF end-to-end dialling is automatic. See also section "DTMF End-to-End Dialling" on page 178 and section "Voice Mail Services" on page 207.*

Ending Calls

You may, at any time, end an ongoing call, or an outgoing call that is being established.

This is done in the same way as with an incoming call:

Press.
Your extension returns to idle status.

Toll Restriction and Least Cost Routing

Usually, you have access rights to the public network and all private networks to which your facility is connected. You also usually have the authorization to dial any type of external number, most particularly a public number.

In terms of the facility programming dictated by your system administrator, there may be certain external numbers that are discriminated.

Most particularly, this may apply to numbers for service provided by the public network, or certain international destinations. An attempt to dial these numbers would be automatically refused.

Moreover, your facility will also most often be equipped with a Least Cost Routing (LCR) service for external calls, especially if your facility is connected to private networks or different public network operators.

The LCR service therefore automatically ensures that the routing of external numbers you dial will be processed with the least possible cost, or managed according to the most optimal calling route.

> **Note:** *The numbers dialled using abbreviated dialling are never subjected to any type of discrimination. If you have a specific need or question concerning discriminated numbers, you may ask your system administrator or facility attendants that the numbers in questions be added to the list of abbreviated dialling numbers.*

During Calls

The MD Evolution Communication Platform allows you to handle calls in many different ways. You can make an inquiry, transfer the call or create a conference, mute the microphone and ringer, change the dial mode or put the call on hold to perform other tasks.

Handsfree Speaking

You can switch to handsfree speaking (and back to standard speaking procedure) at any time during a call.

Press to switch handsfree speaking on or off.
During handsfree speaking, you are connected to the caller via the loudspeaker and microphone.

Mute Microphone

To mute the microphone, during an ongoing conversation:

Press.
The caller will not hear the conversation in your room. A signal and the microphone muted icon indicate that the microphone is off.

Press again to turn the microphone on.

> **Note:** *It is recommended to use this feature instead of putting a call on hold. A call on hold may be diverted to your operator, directly or after some time.*

Call Waiting

If you hear the Call Waiting tone during an ongoing conversation, another person is trying to contact you.

To terminate the ongoing call and answer the waiting call

Press to finish the ongoing call.
The waiting call is signalled on your phone.

Press to answer the new call.

Transfer and Inquiry

You have an ongoing internal or external conversation and you want to transfer an ongoing call:

Press to put the current call on hold.
You hear the dial tone and R is displayed.

Call the third party.
When the third party answers, you can switch between the calls, Create a Conference, and end one of the calls.

> **Note:** *Make sure that you are connected to the desired party. Please read the notes and warnings in section "Useful Hints" on page 139.*

Press to transfer the call.

Or:

R + *1*

Press to return to the first call.

Transfer to a busy extension

You can even transfer calls to busy extensions. The other party will hear a muted signal (call waiting tone), and the call will be extended as soon as the ongoing call is terminated (if Camp-on is allowed).

Callback

You are called back if you have transferred an external call and the other extension has not answered the call within a certain time. Your phone will ring again.

During an ongoing conversation you want to make an inquiry to an internal or external party:

Press to put the current call on hold.
You hear the dial tone and R is displayed.

Enter the number of the third party.
When the third party answers, you can switch between the calls, create a conference and end one of the calls.

Refer back

You can switch between the connected parties.

R + *2* **Press to switch between the calls.**

R + *1* **Press to terminate.**
The ongoing call is terminated. The other call is connected.

Conference

You have an ongoing conversation and you want to establish a telephone conference.

Press.
Dial tone.

Enter the number of the third party.
Wait until the third party answers.

3

Press to establish a three party conference.
Now you have established a three party conference. To indicate the conference, all conference members will hear a periodical conference tone.

Repeat the procedure to include other persons in the conference.
In this way, you can include up to six parties in a conversation. How many of them can be external callers depends on the programming of the system.

Press to leave the conference.

Call Parking and Retrieving

When you are carrying on a single conversation, you may park the current call, in order to subsequently retrieve it on a different extension. For example, this would allow you to change offices without losing your call.

To do so:

.

Press to put the current call on hold
Dial tone.

1 0

Dial the prefix “10” to access to the call parking service.

Dial the identification code for the call you wish to park.
This call identification code will be requested later when you retrieve the parked call. This code is unrestricted, and may consist of 1 or 2 digits, according to your facility's configuration (usually 2 digits).

Press to end the service.
You may then move about freely, then return to the parked call on any other extension.

Typically, the duration of validity is 3 minutes. If the parked call is not retrieved within this time frame, it will be disconnected if it is an internal call or re-directed to an attendant if it is an external incoming call.

To retrieve a parked call from your extension or a similar idle extension:

1 0 **Dial the prefix “10” to access to the call parking service.**

Dial the 1 or 2 digit identification code for the parked call.

Press to return to your conversation.

Notes:
When an external call is either placed on hold or is parked, the party is then connected to on-hold music, usually provided by your facility.

The parked call retrieving service may be activated by dialling the following, from any extension, using the same sequence: 10 <ID. CODE>.

Of course, your calls may also be subject to parking by a third party set.

Conversation Recording

If your telephone system is equipped with “Integrated Voice Mail”, and you have a “Mailbox”, the conversation recording service allows you to record any telephone conversation so that you may then subsequently be able to listen to it from your “Mailbox”.

The recorded conversation is then processed just as any voice message left in your mailbox.(See section “Voice Mail Services” on page 207).

To begin recording a conversation, after informing your caller:

\# **Simply dial the suffix “#”, assigned to the conversation recording service.**
Your conversation recording is started; recording time is not limited. According to the configuration of your telephone system, an intrusion tone may periodically sound, reminding the user that the conversation is still being recorded.

Notes:
Recording a conversation without your caller's prior consent may be illegal, as may be sending this recording to a third party.

The initiator must absolutely request the caller's consent prior to beginning the recording, at the conclusion of the recording, and for any subsequent use of the recording. Compliance with the law is the exclusive responsibility of the user; any violation may be subject to legal action. Neither the manufacturer nor the distributor may be held responsible for any abusive use of this function by the user, or by any other damage that may result.

You may stop the current recording and then re-start it by re-starting the entire procedure This service is available for a single call in progress, as well as a broker's call, in which case you may record each portion of the conversation with one or all of your calling parties.

Non-IP Hand-Over Service

If your telephone system is integrated within a QSIG-MD private network, and your calls are routed over your company's Intranet network, which managed according to the IP-Trunking technique, you may also have access to a non-IP hand-over service.

The quality of communications established over the Internet network is generally good, mostly thanks to the implementation of a system that gives voice calls priority over data transmitted on the IP network.

However, occasions may arise where the quality of the voice transmission of calls over the IP network is reduced. The non-IP hand-over service allows you to request that your current call be switched to a possible private digital tie line, or the public network (depending on availability).

To activate this service during an ongoing call established over your company's IP network:

7 **Dial the suffix “7” to access to the Non-IP hand-over service.** Your call on the IP network is switched over to the non-IP network immediately, without interrupting your call.

> **Note:** *This service is only available when your call has been established on the IP network. The non-IP hand-over service is not available for QSIG-MD private networks using an Intranet network managed according to the IP-Networking technique.*

Local Phonebook

Your DT590 is equipped with an integrated Phone Book where you read in up to 100 entries (names and numbers). You can consult and change the Phone Book via the Phone Book menu option. In addition, a company Phone Book with up to 1000 entries can be downloaded to the phone.

The Phone Book lists all names in alphabetical order. You can freely add, delete, and edit names and numbers to the Phone Book. The company names and numbers cannot be edited or deleted by the user; they have a “Keys locked” icon in front of the name.

Note:

Phone Book numbers have a maximum of 24 digits.

Phone Book names have a maximum of 12 characters.

Please ask your system administrator if a company Phone Book is available.

Phone Book Access

Access the names and numbers of the Phone Book.

Access the Phonebook.

Use the navigation keys to select the desired option.

Making Calls with Phone Book

You can search for a name and number in the Phone Book. When you have accessed the Phone Book:

Route: *Menu » Phonebook » Call*

Press.
The Phone Book menu is available.

Press to confirm the selected menu item “Call”.
A list of all entries in the Phone Book is displayed.

The names in the Phone Book are shown in alphabetical order (alternating with the associated numbers).

Or:

“Phonebook is empty” is displayed.

Scroll down until you find the desired name.

Or:

Enter the first letters of the name.
The first name beginning with those letters is displayed.

For information on how to write text, see section “Write Text” on page 194.

Scroll down until you find the desired name.

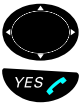
Press to initiate a call.
The number is dialled and “Calling” is displayed.

Note: *For information on how to make calls via the Call List, see sections “Call Info” on page 169 and “Redial Call List Number” on page 172.*

You can also make a quick call by a name in the Phone Book.

Press and hold the key that contains the first letter of the name you want to call.

Press the same key briefly.
You can choose between the characters.



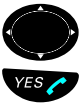
Scroll down until you find the desired name.

Press to initiate a call.
The number is dialled and “Calling” is displayed.

Example (to select the name “Eva”):

3 **Press and hold this key.**
The name list that appears starts with “D”.

3 **Press the same key briefly.**
The first name that starts with “E” is displayed.



Scroll down until you find the name “Eva”.

Press to initiate a call.

Add Names or Numbers

You can use the “Add contact” » “New” option to enter names and numbers in the Phone Book. When you have accessed the Phone Book:

Route: *Menu » Phonebook » Add contact » New*

Press.
The Phone Book menu is available.

Select the menu item “Add contact” and confirm.
The following options are available:

- New
- From call list

Press to confirm the selected menu item “New”.
Name:

No.:

is displayed.

Enter a name.
For information on how to write text, see section “Write Text” on page 194.

Press to confirm.

Enter the phone number.

If you have to wait for a second dial tone, press until “-” appears on the display.

Press to confirm.
“Added” is displayed.

The name and number are stored in the Phone Book.

Change Names or Numbers

With the “Edit contact” option, you can change the names and numbers in the Phone Book. When you have accessed the Phone Book:

Route: *Menu » Phonebook » Edit contact*

Press.
The Phone Book menu is available.

Select the menu item “Edit contact” and confirm.
A list of all entries in the Phone Book is displayed.

The names in the Phone Book are shown in alphabetical order (alternating with the associated numbers).

Scroll down until you find the desired name.

Or:

Enter the first letters of the name.
The first name beginning with those letters is displayed.

Scroll down until you find the desired name.

Press once to change a name.

Note: *Press the YES key twice to change a number.*

Correct the name or number.

Press to confirm.

Delete Names and Numbers

You can also delete names and associated numbers from the Phone Book. When you have accessed the Phone Book:

Route: *Menu » Phonebook » Delete contact*

Press.
The Phone Book menu is available.

Select the menu item “Delete contact” and confirm.
A list of all entries in the Phone Book is displayed.

The names in the Phone Book are shown in alphabetical order (alternating with the associated numbers).

Scroll down until you find the desired name.

Or:

Enter the first letters of the name.
The first name beginning with those letters is displayed.

Scroll down until you find the desired name.

Press.
“Delete?” is displayed.

Press to confirm.
The selected name and the associated number are deleted from the Phone Book.

Add Numbers from Call List

Up to 20 numbers (dialled, answered and missed) can remain stored in the Call info of your phone. You can use the “Add contact” » “From call list” option to add these numbers to the Phone Book.

The menu option “Add contact” » “From call list” appears only if names or numbers are available for redial. When you have accessed the Phone Book:

Route: *Menu » Phonebook » Add contact » From call list*

Press.
The Phone Book menu is available.

Select the menu item “Add contact” and confirm.
The following options are available:

- New
- From call list

Select the menu item “From call list” and confirm.
A list of numbers is displayed.

Scroll through the list of numbers until you have the number you want to store.

Press.
Name:

No.:

is displayed.

Enter a name.
For information on how to write text, see section “Write Text” on page 194.

Press.
“No.:” and the number to be added is displayed.

Edit the number if necessary.

Press to confirm.
“Added” is displayed. The name and number are stored in the Phone Book.

Write Text

When writing text messages and adding/editing or searching for names in the Phone Book, the keys 0 to 9, *, or # can be used. The first character entered will be an upper level character followed by lower level characters unless the *-key is pressed before entering the character. When pressing a key, the first available character on that specific key is displayed. To get the following characters, press the key repeatedly. Key 0 and 1 contain special characters. The marked character is selected after a time-out (3 seconds) or when another key is pressed. Pressing key 1 adds space between the characters and pressing the *-key switches between upper and lower case. The first character entered in a message, or when adding/editing a name in the Phone Book, will be an upper level character followed by lower level characters unless the *-key is pressed before entering the character.

Example (to write Smith):

7 7 7 7 **Press for S.**

6 **Press for m.**

4 4 4 **Press for i.**

8 **Press for t.**

4 4 **Press for h.**

Control keys

While entering a name or a number, you can use the following keys for control and navigation:

Press the left navigation key to move to the left.

Note: *Moves to the beginning of the text if held longer.*

Press the right navigation key to move to the right.

Note: *Moves to the end of the text if held longer.*

******* **Press to switch between upper and lower case.**

Note: *Pressed for more than one second will add a dial tone pause.*

1 **Press to enter a space.**

Press to correct a wrong entry.

Special characters

See the table below on how to find a special character.

Phone key	Number of times to press the key														
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
1	Space	-	?	!	,	.	:	“	´	(	)	1			
2	A	B	C	Å	Ä	Æ	À	Á	Â	Ã	Ç	2	Ά	β	Γ
3	D	E	F	È	É	Ê	Ë	3	Δ	ε	Φ				
4	G	H	I	Ğ	I	Ì	Í	Î	ï	4	η	ι			
5	J	K	L	5	K	Λ									
6	M	N	O	Ñ	Ö	Ø	Ò	Ó	Ô	Õ	6	μ	ς		
7	P	Q	R	S	ß	Ş	7	π	ρ	Σ					
8	T	U	V	Ü	Ù	Ú	Û	8	τ						
9	W	X	Y	Z	Ý	Ÿ	9	ζ	υ	ξ					
0	0	+	&	@	/	$	%	£	Θ	Ξ	Ψ	Ω			
#	#														

Note: *Depending on the selected menu language, not all characters might be available, which means that the character order may differ from the table above.*

Example for special characters:

8 **To enter Ü press 8 (four times).**
1 time result T
2 times result U
3 times result V
4 times result Ü

Press to confirm your edit and exit the menu.

Central Phonebook

The MD Evolution PBX system provides a central phonebook, which you access via the Dial-by-name feature.

Dial-By-Name

The dial-by-name feature allows you to access the central phonebook, enabling you to call any centrally stored contact.

To access the central phonebook contacts, do the following:

* 8 #

Press to access the central phonebook.

Press and wait for a dial tone.

A

Dial the first letter of the name of the contact you wish to call, followed by "*". The database search returns the first name starting with that letter. The following options are now available:

- To scroll forward, press 0
- To scroll backward, press *
- To call the name displayed, press #

Press to end the session.

Call Forwarding Services

Your extension also offers you various call forwarding services that enable you to direct incoming calls to another internal or external destination, whenever you are absent and/or busy, travelling, or when you simply would rather not be disturbed.

The following different types of services are available:

- **Call forward on no-answer condition**:
  Your calling parties will be re-directed to the pre-defined call forward recipient, whenever you do not answer their calls, typically after a 20-second delay.
- **Call forward on busy condition**:
  Your calling parties are immediately re-directed to the pre-defined call forward recipient whenever your extension is busy.
- **Call forward on no-answer and busy conditions**:
  Your calling parties are re-directed to the pre-defined call forward recipient in both cases.
- **Immediate call forward**:
  All incoming calls are immediately re-directed to the pre-defined call forward recipient. Typically, this could be your secretary's internal number, or your external mobile phone number when you are travelling.
- **Do not disturb call forward**:
  Your extension is unavailable, and no call forwarding services were activated. Your internal party's calls are immediately disconnected, and your “Do not disturb” status is displayed on extensions that feature a display screen. Calls from your external parties are immediately re-directed to your facility's attendants.
- **Call forward on mini-message**:
  Your extension is unavailable, and no call forwarding services were activated. Your internal and external parties receive an “Absent” message that you have pre-recorded.

The number to which a call forward may be directed could be an internal party's individual extension, a hunt group, another user's personal group, or even the access number for an integrated voice mail system that your facility may use. (See section “Voice Mail Services” on page 207).

It may also consist of an external number containing up to 18 digits, including the network access prefix. This may be an external number that is accessible through abbreviated dialling.

You may use fixed call forward defined by your system administrator. This may consist of a call forward on no-answer condition, a call forward on busy condition, or a call forward on no-answer and busy conditions.

This fixed call forward is applied by default whenever you do not define a variable call forward for your calls. This is often the case when your facility uses the integrated voice mail service, which - by default - receives your calls encountering a no-answer or busy condition.

You may define all of the types of call forwards listed above, on your own. This is referred to as a variable call forward that takes precedence over a possible fixed call forward.

In any case, only one call forward applies at any given moment. Defining a new variable call forward automatically cancels any definition that previously existed.

A variable call forward is defined on a case by case basis before you leave your extension. If you forget to define the call forward, you may ask the attendants to remotely define it for you. You may also define your call forward from an internal extension other than your DT590 that will be the recipient of your call forwards. This is the “Follow me” service.

Notes:
When any type of call forward is defined on your extension, you still have the option of placing calls and activating any type of service from your extension.

When you have defined any type of call forward to an internal recipient, the latter has the option of calling you without any restrictions.

When a call forward on busy condition is defined on your extension, no more incoming calls will be presented to you when you have an ongoing call. In the same way, the services of consulting and answering a new call are de-activated.

For any call forward defined to be directed to an external recipient, forwarding of calls issued from external parties may take place either through your facility's resources or directly at the ISDN network level, according to your facility's configuration.

You may program a call forward from your extension to itself. This enables you to bypass any fixed call forward that is applicable to your extension. Your extension is therefore available normally.

Serial call forwards between different users are authorized.

Your extension may also be subject to call forwarding from third party sets. Certain extensions (such as yours) may possibly be equipped with permanent protection against receiving call forwards from third party sets. Obviously, this service will be denied on these extensions (and vice versa).

Variable Call Forwarding

Defining a variable call forwarding on a case-by-case basis is carried out within the framework of your extension's service programming functions.

When your extension is idle:

Dial the prefix that corresponds to the desired type of call forward.

Usually, you will dial one of the following:

6 1 To activate an immediate call forwarding.

6 2 To activate a call forwarding on no-answer condition.

6 3 To activate a call forwarding on busy condition

6 9 To activate a call forwarding on no-answer condition and busy condition.

6 4 To activate a do not disturb call forwarding.

For the first four cases:

Then dial the internal or external number that will be the recipient of your call forwards.
As previously indicated, the recipient's number may contain up to 18 digits, including the network access prefix. An external number may be one that is accessible through abbreviated dialling.

> **Note:** *An external number is composed of the external access prefix "0" followed by the actual external Directory number.*

**To Dial only in case of an external Directory number.**
Needed to mark the end of an external Directory number.

For every case:

Press to confirm

Wait for the Service Acceptance Tone

Press to finish the procedure
Your extension returns to idle status.

The variable call forward that you have just defined is effective immediately.

Call Forwarding Cancellation

6 0 **Dial prefix “60” for Call Forward Cancellation**

Press

Wait for the Service Acceptance Tone

Press to finish the procedure

Call Forwarding on Mini-Message

An alternative to all other available variable call forwarding services (referred to above), you may also re-direct your extension to a mini-messaging or call forward on absence service.

Mini-Messages are predefined messages, they are usable for your incoming calls in case of No Answer or Busy conditions to inform the callers. This does not consist of a call forward in its truest sense your incoming calls are not re-directed. Rather, the absence message that you selected when defining the call forward will be automatically transmitted to all internal and external parties who are trying to reach you, in the form of an ISDN mini-message, as long as that party's phone is compatible with the service. His/her call will be disconnected once the message has been played.

By default, the messages available for each circumstance are the following messages, identified by the corresponding number:

	Predefined Text	*Completing Information*
0	HAS CALLED YOU BACK	
1	WILL CALL YOU BACK	
2	WOULD LIKE TO SEE YOU	
3	IN A MEETING UP TO	HH MM (hour, minute
4	ABSENT UNTIL	MM DD (month, day)
5	IN CASE OF EMERGENCY CALL	NNNN (phone number)
6	PLEASE CALL BACK IN A FEW MINUTES	
8	BUSY - RETURN TIME	**: **
9	ABSENT - RETURN DATE	** - **

Note: *The table lists the Mini-Messages provided by MD Evolution system. The number and contents of the Mini-Messages can be modified by the system administrator. Please ask your system administrator for the available Mini-Messages.*

Some of the predefined messages include time information to be completed. If you are not in the office for a certain period of time (e.g. meeting, vacation, lunch, illness), this feature allows you to inform your callers when you will be back.

To define a call forward on absence on your extension, from your idle extension:

***6 1*✳#** **Dial the activation prefix “61” for an immediate call forward, followed by the characters * and #.**

Dial the number of the Mini-Message.

If needed, enter the numerical information (such as the hour and minutes, date and time, or telephone number) to complete the message.

✳ **Press.**

Press

Wait for the Service Acceptance Tone

Press to finish the procedure

Internal callers will receive the information on the display (or as spoken information to callers without display phone). External callers will be routed to the operator who also has access to your absent info.

An internal party who attempts to contact you from an extension capable of receiving mini-messages will immediately receive your absence message.

This may also be the case for an external ISDN party that is compatible with the mini-messaging service, assuming that he/she is in fact an ISDN network user, and that he/she also uses an ISDN terminal that is compatible with the mini-messaging service. This also assumes that your extension is not specifically and permanently protected against the use of this call forward on absence service for external parties.

In the opposite case, a call issued from an incompatible external party will be redirected to your facility's attendants, who will see your message that is automatically displayed on their extension, and will be able to accurately inform your external calling parties.

> **Note:** *A call forward on mini-message is cancelled in the same manner as any other type of variable call forward.*

Mini-Message sending Example:
"IN A MEETING UP TO 16:30"

61 **Press**

* **Press.**

\# **Press.**

3 **Enter the Mini-Message number**

1630 **Enter hours and minutes**

* **Press.**

Press

Wait for the Service Acceptance Tone

Press to finish the procedure

Follow-Me Service

In the case where you may have forgotten to define your variable call forward before leaving your extension, you may ask the attendants to define it for your account. This refers to the third party call forward service that is reserved specifically for them.

As the case may dictate, you may also remotely define your call forward recipient from his/her internal extension. This is the “Follow me” service.

The call forward remotely defined is always an “immediate” call forward.

If your DT590 phone is not available, you can still answer your calls by forwarding them from an other DT590 phone. The call forwarding can be done to the phone (only internal position) from which you activate the “Follow-me” service or to an other phone (internal or external position).

Activating Follow-Me from the DT590 phone the calls are forwarded to

This is activated as described below, from an idle, remote extension, which will be your call forward recipient:

6 5 **Dial the prefix “65”, assigned to the Follow me service.**

Dial your own extension number.

Press.

Enter your user password
By default, your user password is “1234”, however you may have modified it. (See section “Password Programming” on page 244).

Deactivating Follow-Me service from the DT590 it was activated

6 6 **Dial the prefix “66”, assigned to cancel the Follow me service.**

Dial your own extension number.

Press.

Enter your user password.

Activating Follow-Me from a DT590 phone the calls are not forwarded to

6 5 ✳ **Dial.**

Dial your number.

✳ **Dial.**

Dial the new number to where incoming calls should be diverted.

Press.

Enter a Password.

Voice Mail Services

Depending on its configuration, your facility may have an integrated voice mail system, which may or may not be associated with an automated attendant service.

If this is the case, you then have normal access to a personal mailbox.

You may then program your extension to forward your calls to this mailbox when you do not answer, if you are busy, or if you are temporarily absent.

According to the operating mode attributed to your mailbox, your parties will simply be informed of your absence, and then you will have the option of either leaving a voice message for you, or having their call redirected to an assistant or any other extension you may have defined.

Whenever a new voice message is left in your mailbox, you will be automatically notified by an icon displayed on your extension. You may also program the system to notify an external number as well.

Calling the integrated voice mail service then permits you to consult each new voice message that was left, and then you may either delete it or archive it, as you deem necessary. You may consult your mailbox from your extension, from any other extension in the facility, or from an external network.

You also have mailbox management options, such as recording a personalized greeting, programming an external notification upon reception of voice mail, or programming an assistant's number, as the case may dictate.

If you are part of (a) hunt group(s) (see section “Group Services” on page 227.), you will also receive voice mail that may be left for the hunt group in general when no one answers, if the group is congested or when it is closed. These messages may also be consulted directly from your individual mailbox.

Besides your individual mailbox, you may also be assigned to a common mailbox for distribution purposes, which may also be shared between different extensions in your facility.

This then allows calling parties, or even you, to leave a voice message in this common mailbox that will then be distributed to all of the members who share this mailbox.

> **Note:** *This is also true, of course, of all the other extensions in your facility. Everyone then, has the liberty of leaving voice mail in any available individual or common mailbox.*

Voice Mailbox Modes

Your individual mailbox may be managed according to one of the following three operating modes:

- In **answering** mode: Your mailbox only plays an absence message that you may manage yourself. Calling parties who are directed to your mailbox hear your message, however they are not able to leave a message for you.
- In **recording** mode: Your mailbox plays a greeting that you may manage yourself. Then, calling parties who are directed to your mailbox hear your message, and then may leave a voice message for you that you may subsequently consult.
- In **personal assistant** mode: Your mailbox plays a greeting that you may manage yourself. Then, calling parties who are directed to your mailbox may either leave a voice message, or if they so desire, be redirected to your assistant, to another extension you previously designated, or to your facility's attendants.

The selection of an operating mode for each mailbox is usually overseen by your system administrator. The mode usually used is the recording mode (which is assumed in the rest of this guide).

Call Forwarding to Voice Mailbox

Forwarding calls to your individual mailbox may be effective according to one of the following types of call forwards:

- **Call forward on no-answer condition**: Your calling parties will be re-directed to your mailbox, whenever you do not answer, typically after a 20-second delay.
- **Call forward on busy condition**: Your calling parties are immediately re-directed to your mailbox whenever your extension is busy.
- **Call forward on no-answer and busy conditions**: Your calling parties are re-directed to your mailbox when there is no answer and when your extension is busy.
- **Immediate call forward**: All calls are immediately re-directed to your mailbox.

This may consist of a fixed call forward on no-answer condition, on busy condition, or a call forward on no-answer and busy conditions that was defined by your system administrator. This is applied by default whenever you do not define a variable call forward for your calls. This is often the case when a facility uses as an integrated voice mail service, which - by default - receives your calls encountering a no-answer or busy condition.

You may also program the call forwarding to your mailbox yourself. This variable call forward takes precedence over a possible fixed call forwards.

The operating modes for these different services are identical to the other call forwarding services - See section “Call Forwarding Services” on page 197.

Simply put, the recipient number for your call forward is the internal access number for your facility's integrated voice mail system.

For Call Forwarding to your Voice Mailbox when your extension is idle:

Dial the prefix that corresponds to the desired type of call forward.
Usually, you will dial one of the following:

61 To activate an immediate call forward.

62 To activate a call forward on no-answer condition.

63 To activate a call forward on busy condition

69 To activate a call forward on no-answer condition and busy condition.

Dial 884
This is the usual access number for a system's integrated voice mail system. If you need more information, contact your system administrator.

Press to activate the service.

Wait for the Service Acceptance Tone

Press to finish the procedure

Voice Mailbox Greeting Messages

Once a call forward to your mailbox has been programmed, parties directed to your mailbox will first receive a greeting message.

By default, the greeting message is: “Welcome in the called extension mailbox”. In the case where the call forward is on busy condition, it is preceded by the following system message: “The requested extension is busy”.

You may personalize this greeting as you wish. Until you have personalized the greeting, the system will offer you this option whenever you consult your mailbox.

A new system message then prompts the party to leave a voice message after the “beep” (except in cases of where the mailbox is set to answering mode only).

The standard configuration allows a voice message to last up to 30 minutes, with up to a total of 100 messages that may be saved in your mailbox, depending on the voice mail system's capacity.

Notes:
Messages lasting less than 3 seconds are not taken into account. An 8-second silence will automatically terminate a voice message.

This is also the case when you are directed to your calling party's mailbox.

Voice Mailbox Messages Internal Notification

Whenever a new message is left in your mailbox, you will be immediately notified by an icon displayed on your extension.

Voice message
Voice message received and unread.

This notification status remains until you have consulted the new message, or if there are any unread messages in your mailbox

Received messages are divided into the following three categories:

- New messages (not heard); indicated by a vocal message and a special dial tone.
- Stored messages; not indicated.

Voice Mailbox Messages External Notification

You may also program your extension to automatically notify you at an external number whenever a new voice message is left in your mailbox.

Typically, this number could be your GSM mobile phone when you are out of the office.

When a new message is left in your mailbox, a call is then automatically emitted to each external number that you have defined.

If you answer this automatic call, you will be transferred directly to your mailbox. You will then be prompted to enter your user password in order to consult your new voice message.

If you do not answer within a certain time frame (typically, 30 seconds), the automatic call process will be repeated with up to 5 consecutive attempts, executed at 45-minute intervals (typical values).

> **Note:** *External notifications of new voice messages left in your mailbox is usually restricted to business hours between 9 a.m. and 6 p.m., based on your facility's local time.*

Voice Mailbox Internal Access

Access the mailbox from your own extension

Enter the voicemail number.

Press.

Enter your user password.
By default, your user password is “1234”, however you may have modified it. (See section “Password Programming” on page 244).

Voice Mailbox External Access

Normally, it is also possible for you to access your voice mail from a DTMF analogue extension or a GSM mobile phone that supports DTMF end-to-end dialling mode on an external network.

Access is then gained through the automated attendant usually implemented and associated with a system's integrated voice mail, even when an automated attendant's functions are not effectively used.

Access is gained as follows:

Dial the DID number for your company's automated attendant (AA).
Usually, the internal number for the automated attendant is 885. This is associated with DID numbers relating to your facility. Contact your system administrator for more information.

You are then connected to the automated attendant's voice menu.

Dial "*" in order for your call to be transferred to voice mail.
"*" is the code used by default to consult voice mail through the automated attendant. It may have been replaced by "#".

You are then connected to the voice mail system and are prompted to dial the mailbox number you wish to access.

Dial your extension number, which is also your mailbox number.
As with internal consultation, a system message prompts you to enter your user password.

Enter your user password.
By default, your user password is "1234", however you may have modified it. (See section "Password Programming" on page 244).

You are now connected to your mailbox's consultation menu.

Notes:
Interaction with the voice mail system or automated attendant is carried out through the exchange of DTMF codes. For an internal call, the transition to DTMF end-to-end dialling is automatic. It is also the default from an external analogue DTMF extension. From a GSM mobile phone, transition to DTMF end-to-end dialling may necessitate a specific operation, depending on the GSM mobile phone involved.

The above method is also applicable for consulting your voice mail from a third party set within your facility. Simply begin by dialling the internal number - typically 885 - for the automated attendant.

An alternative solution for accessing your mailbox from outside your facility is dialling your DID number. If your extension is successfully connected to the voice mail system, the rest of the procedure is identical to that described.

Voice Mailbox Managing

Whether you consult your voice mailbox from your own extension, from a third party set, or from an external network, once you are connected to your mailbox's consultation menu, the services offered to you for processing your messages are always the same.

This also is true of the personalization services for your mailbox, accessed in the same manner.

Initially, your mailbox will indicate how many voice messages were recorded, according to one of the following two system message forms:

- “You have X new messages and Y old messages”.
- “You have no message. Please hang-up or dial * to customize your mailbox”.

The voice mail system distinguishes new messages that have not been heard from those that have already been heard and that were subsequently automatically archived, unless you specifically erased them.

These are organized into two distinct lists, where each type of message is sorted in chronological order from the oldest to the newest.

They are consulted beginning with new messages, from the oldest to the newest, then continue with the archived messages, from the oldest to the newest.

Next, the consultation menu will indicate the various services that are available for managing your messages. You may listen to it in its entirety, or interrupt it at any time by dialling a service code.

> **Note:** *The consultation menu is repeated up to 3 times if you do not execute an action when it is being played. It is also automatically repeated when a service has been successfully completed.*

The services available for listening to voice messages are as follows:

Dial “3” to listen to the next message.
Initially, you will hear the oldest “new” message, and then each following message, in the chronological order described above

Dial "1" to listen to the previous message.
You then will hear the messages in the opposite chronological order of the one described above.

Dial “2” to listen to the previously selected message.
The message is repeated from the beginning.

Dial “4” to rewind within the current message.
The message is rewound to the point 10 seconds prior to the current point.

Dial “5” to listen to pause or restart the current message.
Pressing the pause code the first time will suspend the play of the message at the current point. Pressing the same code a second time restarts the message from this same point; play will be automatically restarted after a 15-second pause.

Dial “6” to listen to fast-forward within the current message.
The message is fast-forwarded to the point 10 seconds past to the current point.

You may also request the date and time stamping for the message to which you are currently listening. To do so:

Dial “7” to obtain the date and time stamping for the current message.
Depending on whether the message was left on that same day or a previous day, the day/month (DDMM) and hour/minute (HHMM) data concerning when your message was left are transmitted vocally on your extension (according to one of the forms described below), and then your current message is restarted.

- “Message received at HHMM today”.
- “Message received at HHMM on DDMM”.

Once you have listened to your messages in whole or in part, you may then individually erase each message, or request that your entire mailbox be erased. To do so:

Dial “8” to listen erase the current message.
This can be carried out immediately following the message, or while it is being played.

Dial “8 #” to erase all of the messages in your mailbox.
This pertains to both new and archived messages in your mailbox, even if the former have not been heard.

In either case, a system message will prompt you to confirm erasing the current message or all of your mailbox messages.

At any time, you may exit the voice mail system. To do so:

Dial “9” to end your call
Pressing the pause code the first time will suspend the play of the message at the current point. Pressing the same code a second time restarts the message from this same point; play will be automatically restarted after a 15-second pause.

Press to end this service.
Your extension returns to idle status.

The non-consulted messages remain classified as new messages, while consulted messages are automatically archived.

The icon indicating new messages will still be displayed on your extension if any non-consulted voice messages remain. On the other hand, if you have consulted all of your mailbox messages, your extension is automatically un-notified.

> **Note:** *Typically, new messages are saved for a period of 30 days. Archived messages are typically saved for 7 days, after which they are automatically erased*

Automatic Call-Back from Voice Mailbox Message

When you are consulting a voice message, you also have the option of automatically calling the number that the system automatically saved when the caller left the message.

This may consist of an internal or external calling party, according to his/her identification provided by the ISDN network (or equivalent).

To do this, while listening to a message:

Simply dial “0”.
The person who left the message is then automatically called and the call is established just as if you had manually dialled the internal or external party's number.

Additional Personal Assistant Services

If your mailbox is set to personal assistant mode, you offer your calling parties the option of leaving voice messages that you may subsequently process as previously described.

They also have the option of being directed to the personal assistant you designated - typically your secretary's extension or your facility's attendants.

To do so, after your greeting is played, the system message is played and prompts each caller to leave a voice message after a “beep”, and also offers them the following alternative options:

Dial “0” to be connected to your personal assistant.
The call is then directly connected to the designated internal extension, or by default - if you had not defined it - to the attendants.

Dial "9" to be connected to the attendants.
The call is directly routed to the attendants.

If neither of the two preceding codes is dialled within a 3-second delay, the call is directed to your mailbox, by default

> **Notes:**
> *The number for a personal assistant may possibly be an external number.*
>
> *This is also the case when you are directed to you calling party's mailbox that is set to personal assistant mode.*

Voice Mailbox Personalization Services

Whether you consult your voice mailbox from your own extension, a third party set, or from an external network, once you are connected to your mailbox's consultation menu, the services offered to you for personalizing your mailbox are always the same.

To do so, while listening to your mailbox consultation menu:

Begin by dialling “*”.
You will then hear the personalization menu for your mailbox.

This menu will present the various services that are available for personalizing your mailbox. You may listen to it in its entirety, or interrupt it at any time by dialling a service code.

> **Note:** *The personalization menu is repeated up to 3 times if you do not execute an action when it is being played. It is also automatically repeated when a service has been successfully completed.*

The services available for personalizing your mailbox are as follows:

Dial “1” to manage your greeting message.
This applies no matter what operating mode your mailbox is set to, and allows you to manage the first message that callers who are directed to your mailbox will hear.

A new menu is therefore played, which prompts you to:

- Dial “1” to listen to the greeting that is currently saved.
- Dial “2” to record your new greeting. The maximum length for a greeting is 3 minutes. You may end the recording by dialling any code, or by remaining silent for 8 seconds.
- Dial “3” to erase the greeting that is currently saved. It is then replaced by the default greeting proposed by the voice mail system, until you record a new one.
- Dial “9” to return to the main mailbox personalization menu

Dial “5” to manage your answering message.
This especially applies if your mailbox is managed in answering mode. If that is the case, this command enables you to manage the message that is typically an absence message played after your greeting message for callers directed to your mailbox.

A new menu is then played, offering you the same services as for recording your greeting message, as described above.

Dial “6” to manage your personal assistant service.
This especially applies if your mailbox is managed in personal assistant mode.

A new menu is therefore played, which prompts you to:

- Dial “1” to hear the number currently saved for your personal assistant. This information is played back for you through voice synthesis, one digit at a time
- Dial the sequence: “2 <Personal assistant number> #” to save your personal assistant's number. It may consist of an internal or external number, containing up to 18 digits, including the external network access prefix.

- Dial “4” to erase the number currently saved for your personal assistant. It is then replaced by a number for a facility attendant.
- Dial “9” to return to the main mailbox personalization menu.

Dial “2” to manage a possible external notification for messages left in your mailbox.
This especially applies if your mailbox is managed in recording or personal assistant mode.

A new menu is therefore played, which prompts you to:

- Dial “1” to hear the number currently saved for external notification. This information is played back for you through voice synthesis, one digit at a time.
- Dial the sequence: “2 <External recipient number> #” to save your external notification recipient number. It may contain up to 18 digits, including the network access prefix.
- Dial “3” to activate or de-activate the external notification service. If the service was initially inactive, it will be activated, and vice versa. Deactivating the service has no impact on the recipient number for the service that is reputed and remains programmed.
- Dial “4” to erase the number currently saved for external notification.
- Dial “9” to return to the main mailbox personalization menu.

Dial “4” to manage your user password.
Your user password is the some as the one to access your mailbox and activate or deactivate certain services from your extension. (See section “Password Programming” on page 244).

By default, it is set to “1234”. You may replace it with any other 4-digit code.

Dial “3” to protect your extension from calls sent from an automated attendant (AA).
If the service was initially inactive, it will be activated, and vice versa.

This is only applicable if your facility is equipped with an automated attendant that enables the general directing of calls to be managed in lieu of your facility's attendants.

In this case, you may usually be contacted through this automated attendant. This service is to prevent any calls from being presented on your extension by the automated attendant. An internal or external calling party trying to contact you through the automated attendant is then automatically directed to your mailbox.

Once the personalization of your mailbox is completed:

Dial “9” to end personalization.
You will then be returned to your mailbox consultation menu

Notes:
Each time something new is programmed, the system will provide confirmation. If a service is activated or deactivated, the confirmation clearly states that “the service is activated” or “the service is deactivated”, as the case may be.

In relation to your user password, it is very important that you modify it, to ensure the confidentiality of your mailbox. If you ever forget your password, you can request that it be re-initialized, either by a system attendant, or by the system administrator.

Voice Mailbox for Hunt Group

If you are part of a hunt group with the purpose of distributing calls, a common mailbox may be associated with the group.

This common mailbox may then receive calls from parties requesting the group when their calls remain unanswered from the group member allocated to each call, or when their calls encounter a “congested” or “closed” hunt group status.

Callers may then leave a voice message that is, in this case, distributed and notified to each member of the hunt group, in usual fashion.

You may consult this voice message from your individual mailbox. This is carried out in the same way as you would access a message destined for you personally, with the same processing services available. There is no distinction in your mailbox between individual messages and group messages.

A voice message left for a group is automatically un-notified on your extension, as soon as you consult it, just as it would for an individual message.

The only particularity is that a global notification of a “common” message of this type will only take place after each member of the hunt group has consulted it.

Voice Mailbox for Mailing List

Independent of any hunt group notion, you or your internal calling parties may be assigned to a common mailbox for a mailing list in addition to your (their) individual mailbox.

This enables a user to initiate a voluntary distribution of a voice message to the members associated with the common mailbox for a mailing list.

For example, a common mailbox associated with a department would enable the department manager, any other member of the department, or even a third party to voluntarily distribute a voice message to all department members, to, for example, call a meeting.

Access to this type of common mailbox for a mailing list is gained through the automated attendant usually implemented and associated with a system's integrated voice mail system, even when an automated attendant's functions are not effectively used.

Access is gained as follows:

Dial the number for your company's automated attendant (AA).
Usually, the internal number for the automated attendant is 885. If you need more information, contact your system administrator.

Press

Wait for the Service Acceptance Tone
You are then connected to the automated attendant's voice menu

Dial “8” in order for your call to be transferred to voice mail.
“8” is the code used to access the area for leaving voice mail through the automated attendant.

Dial the number for the common mailbox for a mailing list you wish to access.
Always beginning with a “0”, the number for a common mailbox may vary from 0002 to 0999.

You may then leave your message before ending your call.

As with a message addressed to a hunt group, this message will then be distributed and notification will be sent to all of the members associated with the common mailbox for a mailing list, in usual fashion.

Each member may then consult it through his/her individual mailbox. This is carried out in the same way as for an individual message, with the same processing services available.

There is no distinction in your mailbox between individual messages and mailing list messages.

A mailing list voice message is automatically un-notified on each extension, as soon as each member consults it, just as with an individual message.

Once again, the only particularity is that a global notification of a “mailing list” message of this type will only take place after each member of the common mailbox has consulted it.

Notes:
On a standard system, there may be up to 16 common mailboxes, each with the capacity to include up to 32 members or individual mailboxes. One individual internal user may be associated with several common mailboxes.

The procedure is applicable from an external network; instead of dialling 885, you would dial the DID number for the automated attendant. It is also applicable for leaving a message in an individual mailbox, without having to call the party.

Voice Mailbox for Attendants

Your facility's attendants also have a common mailbox dedicated specifically to them, which they share.

Its purpose is to receive - when the attendants are absent - call forwards of general calls that are ordinarily processed by the attendants, typically when your facility is set to night mode.

This common mailbox is also accessible voluntarily. Its number is 0001.

This common mailbox is distinct due to the fact that when a voice message is left, all of the attendants' extensions are notified; however, when one of them consults the message, all of the extensions are globally un-notified.

Integrated Web Server and Unified Messaging

According to the configuration of your telephone facility, you may also have access to three PC applications that offer even more user-friendly management of your integrated voice mail services.

- The first application, called **Integrated Web Server**, opens the integrated voice messaging system for your telephone installation within your company's IT network.

  In practice, this enables you to consult the messages left in your mailbox directly from your Multimedia desktop PC. The characteristics for each voice mail left are displayed in real time.

  You may also listen to each voice message using your Multimedia PC sound card, and then erase the voice message after you've listened to it.

  You also have access to all of your mailbox's personalization services directly from your desktop PC, including its general operating mode. All of this is carried out completely interactively with the integrated voice mail system.

  > **Note:** *Access to your Integrated Web Server is controlled by entering your extension number and user password.*

- The second additional application is called **Unified Messaging**. Its purpose is to merge your facility's integrated voice mail system with the e-mail system that is usually present within your company's IT network.

  In practice, this application provides an e-mail notification to your desktop PC each time a voice message is left in your mailbox, in addition to the usual notification methods on your telephone extension.

  With this application as well, you may listen to a voice message through your Multimedia desktop PC sound card.

  You may also use your PC to control your telephone extension to process each voice message, or even to return a call to someone who left you a voice message.

  You then have access to all of the methods available for personalizing your use of Unified Messaging. Most notably, you may manage the voice message e-mail notification address, which on occasion could be a laptop remotely connected through the Internet.

- The third additional application is **Click Dialling**.This application may offer you access to the internal and external directories for your company, through your desktop PC. With just one click of the mouse, you can place calls to anyone.

Note: *Click Dialling is not supported by IP DECT.*

To perform Click Dialing from the web server:

Select Information.

Select Address Book.

Select the wanted name.

Click to distant: your DECT terminal is ringing

On your DT590:

Press to make the call

Note:
Whenever necessary, contact your system administrator for more information concerning the availability of one or both of these applications for your telephone facility.

SMS Text Messages (optional)

You can send and receive messages, also known as SMS (Short Message Service), to and from other phones in your system.

> **Note:** *Text messages can only be received and sent if the Aastra Integrated Messaging Server is installed in your system. Please contact your system administrator.*

Receive text messages (SMS)

When a text message is received, the LED starts flashing and a message tone sounds.

If the message is received during a call, a beep notifies the user.

The message is stored in the message list. The “New message” icon is shown in the display. The icon will remain in the display until all new messages are opened.

Route: *Menu » Message » Inbox*

Press.

Select the “Message” tab.
The following options are available:

- Voice
- Inbox
- Send

Select the menu item “Inbox” and confirm.
The message list is displayed.

Scroll to find the message.
The selected message is highlighted.

Press to read the message.
The message text is displayed followed by “Proceed?”.

Press to delete the message.

Or:

Press to proceed to the next menu.
This menu gives you additional options, such as Remove or Forward the message, to Call (Numbers in the text) or to Read next message.

Send text messages (SMS)

Route: *Menu » Message » Send*

Press.

Select the “Message” tab.
The following options are available:

- Voice
- Inbox
- Send

Select the menu item “Send” and confirm.
The following options are available:

- Unsent
- New
- Outbox

Select the menu item “New” and confirm.

Enter your message and confirm.
For information on how to write text, see section “Write Text” on page 194.

Enter the phone number.

Press to send the message.

Group Services

Most of the time, you will be working as a team - within a department, for example. Your extension offers you different additional services designed specifically for working as a team.

First of all, it provides the option of supervising your colleagues' extensions, thus ensuring comprehensive call coverage. You may also call a colleague or intercept calls for each other.

Secondly, your extension may also be part of a hunt group - within your department or another department - that calling parties may call whenever they need to, not just to contact you personally, but to contact someone within your department.

Your extension provides a simplified call pick-up service within a hunt group. It also offers you the option of managing your own participation in this service within the group. This is also referred to as the In/Out status management within a group.

If you have been designated as the supervisor of a hunt group, you have the ability to open and close the hunt group according to your department's business hours.

Finally, while it's not really a group service, you also have access to a personal group, which is designed for grouping various extensions that may be assigned to you - for example, your DT590 extension, and another phone. It could be your Mobile Extension (See section “Mobile Extension Service” on page 233). Different services are then provided for you to process your calls as efficiently as possible within a personal group.

Hunt Groups

Your extension may be part of a hunt group for which the purpose is to distribute calls among the members of your department or other group.

A call received on your hunt group number will then be automatically directed to an extension within the group that is free - such as your own - according to predefined distribution criteria. Generally, this criteria is established to ensure even distribution of calls between the various members of the group.

The presentation of an incoming call for your group is therefore carried out just as it would for an individual call presented on your extension. (See section “Incoming Calls” on page 167).

As a result, you have access to all the same processing services as you would for your personal calls.

If you do not answer your hunt group call within a typical 30-second time frame, it may be presented to a different extension in your group that is free. The call may also be directed to a third party set or other overflow group, such as your facility's attendants. Depending on the definition for each hunt group, the call may also be re-directed to a dissuasion message.

If all of your hunt group's members are busy, a call that is presented, as the case dictates, may be directed to a third party set or other overflow group, such as your facility's attendants. Alternatively, depending on the definition of each group, the call may be placed in a call waiting queue to await a member of the group to be free, or directed to a dissuasion message.

This extension, overflow group or dissuasion message may also be solicited when your group is closed.

In practice, you may be part of several hunt groups. One hunt group is then established as your primary group, while the others are considered to be secondary.

You primary group has a processing priority feature. Therefore, when there are several different calls presented on the various groups of which you are a part, those for your primary group will take precedence.

The calls presented on your secondary groups are also automatically managed by the system, but without any particular priority.

Notes:
It is your system administrator's job to define how each hunt group will operate. It is also the system administrator's responsibility to define to which hunt group(s) you will be assigned, and which one will be your primary group.

Your facility may contain up to 16 hunt groups.

Call Pick-Up in Hunt Group

When you belong to one or several hunt group(s), you have access to the same call processing services for calls bound for these groups as you would for managing your personal calls.

Your extension also offers a simplified call pick-up service within each hunt group, which enables you to answer any call that is ringing on an extension that belongs to one of your groups, without having to move to that extension or dial its extension number.

14 **Dial the prefix “14” to pick up a call presented on your primary group.**

Or,

Dial the appropriate prefix to pick up a call presented on any of your secondary groups

Press
In either case, you are now directly connected to the party calling the other extension.

Notes:
The simplified call pick-up described above applies only if the call that is picked up is for the group involved, or a personal call for a member of the involved group.

If several calls are ringing within the same group, the oldest call will be automatically selected. If several calls are ringing within different secondary groups, the call that is picked up will be automatically selected by the system.

Your extension may also be subject to call pick-up from third party sets that belong to the same group as you.

The call pick-up access prefix within secondary groups differs from one facility to another.

Standby Status in Hunt Group

When you belong to one or several hunt groups, you may also manage your availability for answering calls that are directed to your group(s).

This standby service enables you to temporarily withdraw from a hunt group. Therefore, you would only receive personal calls, or those that are directed to the groups from which you have not withdrawn.

Once again, the system distinguishes your position in relation to your primary group as well as your secondary groups.

To manage your group standby status, from an idle extension:

6 8 **Dial the prefix "68" to proceed to standby within your primary group.**

Press

Wait for the Service Acceptance Tone

If your extension was active within your primary group, it will now be on standby. On the other hand, if your extension was on standby, it will now be active within your primary group.

In relation to your secondary groups, your extension's active or inactive status is changed for all of them at the same time.

In either case the service acceptance tone is played.

Press to finish the procedure
Your extension returns to idle status.

Notes:
The prefix for accessing the standby service within secondary groups differs from one facility to another.

You may place your extension on standby at any time, even if you are the last active member of a group. Your status is managed completely independently from the opening and closing of traffic for a specific group, which is the sole responsibility of the hunt group supervisor.

Hunt Group Opening / Closing

You may be designated as a supervisor for one or several hunt groups, regardless of whether or not you are a member of it (them). This is established by a right that is assigned specifically to you by your system administrator.

In relation to this (these) hunt group(s) for which you are in charge, it is your responsibility to open and close traffic for each one, according to its members' business hours.

To open or close traffic to a hunt group, from an idle extension:

Dial the prefix to open/close hunt groups.

This varies from one facility to another.

Next, dial the internal number for the involved hunt group

Press

Wait for the Service Acceptance Tone

Press to end this service

If the hunt group was previously open to traffic, it then progresses to a closed status, and will no longer accept calls.

Calls to this group will then be directed to an overflow extension or group, or a dissuasion message that may be pre-defined in terms of each group's configuration.

On the other hand, if the hunt group was previously closed to traffic, it then progresses to an open status, and will now accept calls.

> **Note:** *Only a supervisor may manage this open or closed group status.*

Personal Group Services

While it's not really a group service, you also have access to a personal group, which is designed for grouping various extensions that may be assigned to you (up to 5 extensions).

The specific services offered to you are as follows:

- You can be contacted through just one number, common to your entire personal group.
- When you place a call to any party, you are identified by your personal group number, no matter what extension you use to place your call.
- An incoming call is presented on all of your personal group's extensions, allowing you to answer it on any of them. If all extensions in your personal group are free, they will all ring simultaneously. If you have an ongoing call on any given extension, the call is presented to you on that extension in the usual way (call waiting tone, etc.) On each of the other extensions - when it is possible - the call will be presented with silent ringing, and the usual call information will be displayed on the screen.
- You have the option of carrying out a simplified call transfer between extensions within your personal group (other than from your DT590 extension). To do so, simply place your current call on hold and hang up. The call is then represented on all of your personal group extensions; therefore you may pick it up on any of them.

> **Note:**
> *It is your system administrator's responsibility to define your personal group. Contact him/her as needed.*

Mobile Extension Service

If you frequently travel outside the office, you will generally have a GSM mobile phone in addition to your DT590 extension.

Once again, without truly being a group service, the Mobile Extension service may be of use to you. Its purpose is to allow external users of GSM mobile phones most particularly to access your company's network, and thus be able to use the system as if they were internal users.

In practice, a Mobile Extension terminal is managed in the same way as a dummy internal user associated with the external GSM mobile number.

To process these calls, the GSM mobile telephone connects to a specific DID number for the facility, which accesses the Mobile Extension server.

By connecting through the public ISDN network, the GSM mobile telephone is then automatically authenticated by its external calling number. By default, authentication can be carried out by manually dialling the dummy internal number associated as well as the corresponding user's password.

Once authenticated, the GSM mobile telephone user may call any internal or external number, just as if he/she were dialling from the internal dummy extension. The user's identity that is transmitted to the called parties is the information for the internal dummy extension.

The mobile GSM telephone user may, in the same way, gain access to all telephone services to which the internal dummy extension has authorization to access.

The GSM mobile telephone may also be directly called through the number associated with the internal dummy extension. This may be used in conjunction with a personal group. However, the GSM mobile telephone will still retain its regular number.

> **Note:** *The Mobile Extension service is also totally applicable to your residential extension connected to the pubic ISDN network. Whenever necessary, contact your system administrator for more information concerning the availability of this specific service for your telephone facility.*

More Features on your Extension

Depending either on the rights assigned to your extension or on your facility's configuration, your extension also offers or may offer other different services with the purpose of improving your productivity, or making it even more enjoyable to use your telephone.

One of the main features is the Appointment Reminder service, where you can ask the system to remind you of a meeting or other appointment at a specific time.

Your extension may also provide you with the means to control how your external ISDN call costs are allocated.

Appointment Reminder

The appointment reminder service enables you to ask the system to automatically remind you at a specified time that you define within 24-hours of your appointment.

To activate an appointment reminder, from an idle extension

The phone can be set to remind you at any time within the next 24 hours (multiple settings are allowed).

Activate Reminder Service

7 1 **Dial the prefix “71” assigned to the appointment reminder service.**

Next, enter the hour (00-23) and minutes (00-59) for your appointment reminder.

Press to confirm.

Wait for the Service Acceptance Tone

Press to finish the procedure
Your extension returns to idle status.

> **Note:** *If you receive busy tone, your extension does not have the authority to set a Reminder.*

At the set time for your reminder, your extension will automatically ring:

Press to answer this call in the usual manner.
A confirmation voice message is then heard. By default it is: “It's time for your appointment”.

> **Notes:**
> *You have 30 seconds to answer the appointment reminder. After this time frame, the reminder will be automatically cancelled. If your line is busy when the appointment reminder comes through, it is presented to you just as a normal call would be, or if that is not possible, it is automatically cancelled.*
>
> *An appointment reminder automatically overrides any call forward on your extension.*

Verify Reminder Service

You may verify whether or not an appointment is currently programmed on your extension by dialling the following sequence:

7 1 8 **Dial the prefix “718” assigned to the appointment reminder verify service.**

Next, enter the hour (00-23) and minutes (00-59) for your appointment.

Press.
If the time you specified is indeed scheduled as an appointment reminder, you will hear the service acceptance tone; if it is not, you will hear the busy tone.

Cancel Reminder Service

719 **Dial the prefix “719” assigned to the appointment reminder service.**

Press
All settings are cancelled.

Wait for the Service Acceptance Tone

Press to finish the procedure

Alarm Clock

The phone can be set to remind you at any time within the next 24 hours.

Set Alarm clock

Route: *Menu » Toolbox » Alarm clock*

Press.

Select the “Toolbox” tab.

Select the menu item “Alarm clock” and confirm.
The following options are available:

- Set
- Clear

Confirm the selected menu item “Set”.

Enter the time the alarm is to be started and confirm.
(HH:MM)

> **Note:** *Use the navigation keys to switch between am and pm. When your phone displays the time in 24h-format, you do not have to switch between am and pm.*

The alarm clock is now set and the alarm clock icon in the display indicates that the alarm clock is activated.

Receive an Alarm clock call

"Alarm clock HH:MM" is displayed and the red LED flashes when the alarm sounds.

Press.
"Cancel alarm?" is displayed.

Press to remove the alarm clock setting.

> **Note:** *If you do not answer the alarm clock, the alarm clock icon in the display keeps flashing and the alarm will sound again after some minutes.*

Cancel Alarm clock

> **Route:** *Menu » Toolbox » Alarm clock*

Press.

Select the "Toolbox" tab.

Select the menu item "Alarm clock" and confirm.
The following options are available:

- Set
- Clear

Select the menu item "Clear" and confirm.
The alarm clock icon disappears.

Calls Re-Routing to Attendants Protection

Usually, your external calling parties can contact you from external network(s), directly through your direct calling numbers, or DID numbers (Direct Inward Dialling).

They may also contact you through your facility's general number. In this case, your incoming external calls are directed through your facility's attendants.

An external call is presented to you whether your extension is free or busy. If it is busy, it will usually be automatically placed on camp-on for your extension (unless your extension is equipped with specific protection against such).

If you do not respond to an external call, after a typical delay of 30 seconds, the call is directed (or returned) to your facility's attendants for processing.

Following the specific rights assigned to your extension, you may have access to protection against your external calls being directed to your facility's attendants.

This protection may be manifested by:

- **Restricted protection on no-answer condition**: external calls presented on your extension when its status is “free” will then ring continuously, without a time limit, until you answer it, or the caller ends the call.
- **Restricted protection on busy condition**: external calls presented on your extension when its status is “busy” will remained on camp-on, without a time limit, until you answer it, or the caller ends the call.
- **Extended protection**: this combines the two previous cases.

In all cases, this protection against the re-direction of your calls to the automated attendant is never dependant upon any action on your part.

Secret of Identity

When your facility is connected to the ISDN network, your identity is usually transmitted to your external calling parties, and vice versa.

According to the specific right assigned to your extension, it is possible that your identity not be divulged to your external ISDN network calling parties.

This is therefore systematically valid for all of your outgoing ISDN network calls, without any specific action on your part.

Your identity is divulged, however, for your internal calls, and you still receive the information concerning your external incoming calling parties.

Account Codes

When a call is placed on the public ISDN network, the network transmits the charges for the current call, which are then accounted to a charge counter associated with your extension.

According to your working mode, you may wish to impute the cost of your external calls to different accounts. Your telephone system can do this through account codes that you simply enter when placing outgoing external calls.

To establish an outgoing external call using an account code:

First, dial the network access prefix adapted to this service.
Generally, this consists of a network access prefix that is reserved for placing outgoing external calls that are subject to account codes. Ask your system administrator for this prefix.

Then, directly dial the account code to which your external call should be imputed.
Account code formats are a fixed length. All account codes are typically 4 digits, however they may reach up to 15 digits in length. Generally, they end with “#”, which acts as a separator. In all cases, account codes are defined by your system administrator.

Next, dial the desired external phone number.

Press
Your outgoing external call is then transmitted over the public network, just as an external call without an account code would be.

Thus, the call detailed record will not only contain the date, time, number called, length, and cost of the call, but also the account code that you entered. This then can be used to invoice your clients.

Notes:
The implementation of this specific service assumes that your facility uses the Least Cost Routing (LCR) method for external calls. It also assumes that, at the very least, these outgoing calls are subjected to call detailed records that are managed within an external charging server. Contact your system administrator for more information. He/she will also provide you with the accepted account code format.

As indicated, your extension is equipped with a charge counter that accrues a cumulative total of the charges for your outgoing calls. Your system administrator or facility's attendants have the ability to consult any charge counter. If necessary, contact them for more details

Your extension may also be subject to call detailed records. This usually involves your outgoing external calls, however they may also refer to your internal and incoming calls. These records save the details for each involved call: number called, date and time, length, etc. These records are generally used by your system administrator to monitor your telephone facility's invoicing. If necessary, contact your system administrator for more details.

Key Lock

If you carry the phone in your pocket, you might accidentally press the keys and make a call. To prevent this, you can have them locked by using the Automatic Key lock option.

To lock the keypad

Route: *Menu » Toolbox » Locks » Key lock*

Press.

Select the “Toolbox” tab.

Select the menu item “Locks” and confirm.

Press to confirm the selected menu item “Key lock”.
The following options are available:

- Automatic
- Off

The current setting is indicated.

Select the menu item“Automatic” and confirm.

> **Note:** *After enabling the Keylock function, do not press a key for 20 seconds. If the enabling time has expired, the keys are blocked and a key symbol is displayed.*

Appears on the display
During Keylock the keys are locked, so you cannot use your phone. If a key is pressed, the message “Press * to unlock keypad” is displayed.

If you have locked the keys and you receive a call, you can answer the call as usual without switching Keylock off. When the call is ended, the keys are locked again after 20 seconds.

To unlock the keypad

Press.
“Unlock keypad?” is displayed.

Press to switch off the Keylock.
The key symbol disappears; the keys are enabled again.

Phone Lock

You can protect your phone against unauthorized use or against adding or deleting telephone network subscriptions. Both security features are off by default. See also section “PIN Code” on page 149.

Securing against unauthorized use

You can set the phone so that the PIN code must be entered after switching on.

Route: *Menu » Toolbox » Locks » Phone lock*

Press.

Select the “Toolbox”.

Select the menu item “Locks” and confirm.
The following options are available:

- Key Lock (Automatic/Off)
- Phone lock (On/Off)

Select the menu item “Phone lock” and confirm.
The following options are available:

- On
- Off

Select the menu item “On” and confirm.

When using the phone for the first time, enter the New code(2) and confirm.

For changing the code, enter the current code (Old code) and confirm.

Enter the digits of the new code (New Code(1)) and confirm.

Enter the new code (New Code(2)) again and confirm.
Either the new code is accepted or “Wrong Code!” is displayed if you have entered a number that does not match the current code. When the new code is accepted, the phone lock is enabled.
Note the new code for future use.

Access Lock

By using the “Lock Prefix” you can lock access in order to prevent unauthorized external calls. You can still make internal calls and you can also receive incoming calls.

78 YES **Press to lock access.**

Wait for the verification tone.

NO **Press to finish the procedure.**

Unlock Access

78 **Press.**

Enter your password.

> **Note:** *To change your password see chapter“Password Programming” on page 244*

YES **Press to reopen.**

Wait for the verification tone.

NO **Press to finish the procedure.**

Password Programming

You will be prompted to enter your user password when accessing certain services, most particularly:

- When placing a call in substitution or with signature from your extension or a third party set.
- When activating/deactivating a call forward from your extension or a third party set (follow me service).
- When consulting or personalizing your mailbox within your facility's integrated voice mail system, when applicable.

By default, your user password is “1234”. It is strongly recommended that you change it to any other 4 digit code including the * or # key - to ensure that use of the aforementioned services is as secure as possible, and to preserve the confidentiality of your mailbox, when applicable.

To do so, from your idle extension:

7 9 **Dial the prefix “79” assigned to the user password management service.**

Next, enter your current user password.

Then, enter your new user password.

Press to confirm

Wait for the Service Acceptance Tone

Press to finish the procedure
Your extension returns to idle status.

Notes:
If you ever forget your password, you can request it be re-initialized, either by a facility attendant, or by the system administrator. It will then be reset to “1234” until you change it once again.

Call Statistics

Your phone can tell you the duration of your last call and display the total time of all calls.

To see the time spent on your last call and on all outgoing calls

Route: *Menu » Call info » Call time*

Press.

Select the “Call info” tab.
The following options are available:

- Missed calls
- Call list
- Call time

Select the menu item ”Call time” and confirm.
The length of the last call but also the duration of all calls is displayed in hours, minutes and seconds.

To see the call time

Route: *Menu » Call info » Call time*

Press.

Select the “Call info” tab.
The following options are available:

- Missed calls
- Call list
- Call time

Select the menu item ”Call time” and confirm.

Press to delete the call time.

Confirm the delete process.

Secondary Attendant Services

Besides the services that are accessible or that may be assigned to a DT590 extension, additional services are also available for the system's attendants.

Within this context, the following services are offered:

- **General calls acceptance**: This service enables attendants to control their active or inactive status for processing a system's general calls, in relation to their shifts.
- **Door phone service**: Your facility may be equipped with a door phone; calls from this extension are usually processed by the attendants.
- **Call pick-up for general ringing calls**: Your facility may be equipped with a common bell that receives general calls when the attendants' lines are congested, or when they are absent.

According to the specific rights assigned to your extension, you may also have access to these attendant-based services.

Attendants also have access to the following services:

- **Call offer or intrusion**: This service allows attendants to interrupt an ongoing call to present an urgent call.
- **Do not disturb override service**: Similarly, this service allows the attendant to override the “Do not disturb” status to present an urgent call.
- **Complete third party call forward service**: This service allows attendants to program any type of call forward for a user's account, without restrictions.

General Call Acceptance

The general call acceptance service is usually used by your facility's attendants who are in charge of processing your system's general calls - most often the external calls received on your facility's general phone number, or external calls redirected when the internal users do not answer or are busy.

Similar to the standby status that is available when you belong to hunt groups, the general calls acceptance service enables attendants to control their active or inactive status for processing a system's general calls, in relation to their vacation periods.

According to the rights assigned to your extension, you may also have access to the general calls acceptance service. This is generally the case. When necessary, this allows you to assist the attendants by answering calls when their lines are congested or when they are temporarily absent.

When you activate this general calls acceptance service on your extension, not only will you receive your personal calls, but also your facility's general calls.

These will be presented to you in the same way as usual, with the external calling party's information displayed on your screen. (See section “Incoming Calls” on page 167).

You may then process each call just as you would one of your personal calls.

To activate or deactivate the general calls acceptance service on your extension, from an idle extension:

6 7 **Dial the prefix “67”, assigned to the general calls acceptance service.**

YES **Press to confirm**

Wait for the Service Acceptance Tone
If your extension was inactive in relation to the general calls acceptance service, it now becomes active.

The opposite is also true - if your general calls acceptance status was previously active, it will become inactive. Your extension will then only receive your personal calls.

NO **Press to end the management of this service.**
Your extension returns to idle status.

Note:
Your rights to the general calls acceptance service depend on your facility's different private and public networks.

Door Phone Service

Your telephone facility may be equipped with a door phone, the calls from which are usually processed by the attendants, just as the general calls are for your facility.

According to a right assigned to your extension, you may be allowed to answer calls from a door phone. This is generally the case.

The general calls acceptance service previously described, also manages your ability to assist the attendants by accepting or declining door phone calls.

A door phone call is presented exactly as any other incoming call would be.

Notes:
The presentation of a door phone call usually lasts no more than 30 seconds. After this time frame, the door phone call will be automatically disconnected. A door phone call may not be placed on hold, nor may it be transferred.

The door phone is usually logged on by an electrical mechanism independent from your telephone facility.

Call Pick-up for General Ringing Call

Your telephone installation may feature a common bell that will be heard when your facility's general calls are not answered by an attendant, within a specified time frame.

Typically, this delay is 60 seconds when attendants are present, or 1 second in night mode, when the attendants are absent.

If you wish, you may pick-up a general call on your extension.

To do so, from an idle extension:

1 5 **Dial the prefix “15” to pick up a call ringing on the common bell.**

Press to confirm

Wait for the Service Acceptance Tone

The service acceptance tone will be played.

You are now directly connected to the party who placed the general call.

> **Note:** *If several general calls are ringing simultaneously, the oldest call will be automatically selected.*

Other Secondary Attendant Services

As indicated, your facility's attendants may establish you as the target for any of the following services:

- **Call offer or intrusion**: When you are in the middle of an ongoing call, this service enables them to interrupt your call to present an urgent call for you.

  When the attendant activates a call intrusion, you may find yourself in a 3-person conference call with your first caller and the attendant. Usually, a warning tone is heard at a regular frequency during this conference call to remind the parties that they are still under call intrusion status.

  The attendant may then speak to you, but not privately

- **Do not disturb override service**: When your extension has a "Do not disturb" status, (see section "Call Forwarding Services" on page 197), this service also enables the attendants to override the "Do not disturb" status in order to present an urgent call for you. When the Do not disturb status is overridden by the attendant, his/her call is presented just as a normal call would be, and which you may answer normally.

  > **Notes:**
  > *Certain extensions (such as yours) may possibly be equipped with permanent protection against call intrusion.*
  >
  > *Depending on the configuration for your facility defined by your system administrator, these services may be used from specific extensions that are duly authorized, without any warning tones being emitted. This refers to the Silent call monitoring service.*

Automated Attendant

The Automated Attendant feature sends voice instructions to external and internal callers, informing them of all possible options they can choose. Voice instructions lead the callers step by step to the desired destination.

Enter the Automated Attendant directory number.
Please ask your system administrator for the automated attendant directory number.

Press and follow the voice instructions.

Calculator

The DT590 has a calculator that supports general arithmetic functions such as addition, subtraction, multiplication, and division.

Route: *Menu » Toolbox » Calculator*

Press.

Select the "Toolbox" tab.

Select the menu item "Calculator" and confirm.

Enter digits.

\#

Enter for addition.

Or:

\#\#

Enter for subtraction.

Or:

\#\#\#

Enter for multiplication.

Or:

\#\#\#\#

Enter for division.

Enter digits.

Press to get the results.

DT590 Adjustments

This section describes how to set and adjust a personal volume, how to change indication of incoming calls, how to adjust the display, how to change the language and how to revert all DT590 settings to their defaults.

Volume Control

You can adjust the volume in the ear piece, of the loudspeaker for handsfree speaking and the volume of the ringer. Use the volume keys to adjust the volume, see section "DT590 General Description" on page 152 for the location of the volume controls.

To turn the microphone, ringing sound and warning sound on or off during a call, see section "During Calls" on page 180.

Adjust loudspeaker volume for handsfree speaking

Press to adjust the volume during a call.

Adjust ear piece volume

Press to adjust the volume during a call.
The phone will now store and keep the new volume level.

Adjust ringer volume

Route: *Menu » Toolbox » Sound & Alerts » Ringer volume*

Press.

Select the “Toolbox” tab.

Select the menu item “Sound & Alerts” and confirm.

Press to confirm the selected menu item “Ringer volume”.
The following options are available:

- Voice
- Mail
- Alarm clock

Select the desired option and confirm.

A volume level bar is displayed.

Press (← →) to turn the volume up or down.

Press to confirm and save the settings.

To turn off the ringing sound permanently

Press when the phone is idle.
“Mute ringer?” is displayed.

Press.
The ring off icon appears.

> **Note:** *If the ringer sound is permanently off and you have set the vibrator alert to “On when silent”, the vibrator turns on when the phone is ringing, see section “Vibrating Alert” on page 254.*

To turn the ringing sound on again:

Press.
“Unmute ringer?” is displayed.

Press.
The ring off icon disappears.

Vibrating Alert

If you do not want to be disturbed by the ringing of your phone, but still get the call indication, or if you are in a noisy environment, you can activate the Vibrator alert.

Route: *Menu » Toolbox » Sound & Alerts » Vibrator alert*

Press.

Select the “Toolbox” tab.

Select the menu item “Sound & Alerts” and confirm.

Select the menu item “Vibrator alert” and confirm.
The following options are available:

- “On”
  for Vibrator alert.
- “On when silent”
  for Vibrator alert when the ringer is permanently off. See section “Adjust ringer volume” on page 252.
- “Off”
  for no Vibrator alert.

Select the desired option and press to confirm

Ringer Tones or Melodies

Different signals for internal calls, external calls and callback can be set. By default, there are 14 different signals in the telephone, and additional signals can be downloaded to the handset.

Note: *Ask your system administrator on how to download additional signals to your phone.*

To set the sound for a ringing type

Route: *Menu » Toolbox » Sound & Alerts » Ring signals » Internal/External/Callback*

Press.

Select the “Toolbox” tab.

Select the menu item “Sound & Alerts” and confirm.

Select the menu item “Ring signals” and confirm.

Select the ringing signal type: Internal, External, or Callback and confirm.
The following options are available:

- Low 1 and Low 2
- Medium 1 and Medium 2
- Mix 1 and Mix 2
- Melody 1 -6
- User 1 -10

Melody	*Name*
1	Aastra soundmark
2	The Black Bear
3	J.S. Bach - Partita no 3 for violin
4	Boccherini - Menuet
5	Rimsky-Korsakov - Flight of the Bumble Bee
6	J.S. Bach - Badinerie - BWV 1067 Suite no 2

Select the desired sound.
The selected sound is played. The menu options “Low”, “Medium”, “High” and “Mix” refer to the pitch of the ringing tone.

Press to confirm and save the settings.
The table below lists the names of the melodies.

Alarm Signal

You can set the signal for the alarm. By default, there are 14 different signals in the telephone, and additional signals can be downloaded to the handset.

To set the sound for Alarm Signal

Route: *Menu » Toolbox » Sound & Alerts » Alarm signal*

Press.

Select the “Toolbox” tab.

Select the menu item “Sound & Alerts” and confirm.

Select the menu item “Alarm signal” and confirm.
The following options are available:

- Low 1 and Low 2
- Medium 1 and Medium 2
- Mix 1 and Mix 2
- Melody 1 -6 *)

*) for further details about melodies see chapter “Ringer Tones or Melodies” on page 254

Select the desired sound.
The selected sound is played. The menu options “Low”, “Medium”, “High” and “Mix” refer to the pitch of the ringing tone.

Press to confirm and save the settings.

Message Alert

You can select different signals for mail and voice messages. By default, there are 16 different signals in the telephone, and additional signals can be downloaded to the handset.

To set the sound for Message Alert

Route: *Menu » Toolbox » Sound & Alerts » Message alert*

Press.

Select the “Toolbox”.

Select the menu item “Sound & Alerts” and confirm.

Select the menu item “Message alert” and confirm.

Select the message alert type: Mail or Voice

Press.
The following options are available:

- None
- Click
- Low 1 and Low 2
- Medium 1 and Medium 2
- Mix 1 and Mix 2
- Melody 1 -6 *)

*) for further details about melodies see chapter “Ringer Tones or Melodies” on page 254

Select the desired sound.
The selected sound is played. The menu options “Low”, “Medium”, “High” and “Mix” refer to the pitch of the ringing tone.

Press to confirm and save the settings.

Key Sound

Key sound is the sound you hear each time you press a key. This feature can be enabled and disabled.

Route: *Menu » Toolbox » Sound & Alerts » Key sound*

Press.

Select the “Toolbox” tab.

Select the menu item “Sound & Alerts” and confirm.

Select the menu item “Key sound” and confirm.
The following options are available:

- Silent
- Click
- Tone

The current setting is indicated.

Select one of the following options:
- “Silent” for no Key sound.
- “Click” to have a Key sound with each key press.
- “Tone” to have a Key sound with each key press.

Press to confirm and save the settings.

Display Backlight

Your phone has a display which is illuminated when a key is pressed. The illumination automatically goes off after a while, unless you press a key.

Route: *Menu » Toolbox » Display » Backlight*

Press.

Select the “Toolbox” tab.

Select the menu item “Display” and confirm.

Select the menu item “Backlight” and confirm.
The following options are available:

- On
- Off
- Automatic

The current setting is indicated.

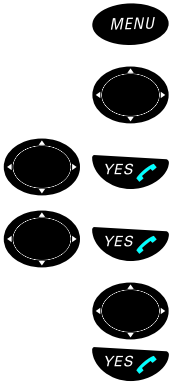
Select one of the following options:
- “On” for illuminating the display always.
- “Off” for no illumination of the display.
- “Automatic” to activate illumination of the display when a key is pressed.

Press to confirm and save the settings.

Display Contrast

You can adjust the contrast of the display to one of eight levels to make it easier to read.

Route: *Menu » Toolbox » Display » Contrast*



Press.

Select the “Toolbox” tab.

Select the menu item “Display” and confirm.

Select the menu item “Contrast” and confirm.
The contrast level bar appears.

Press (← →) to adjust the contrast.

Press to confirm and save the setting.

Language

The default menu language is English. To select another language, use the Language option. Please note that the menu options stay in English until you confirm your language choice.

Route: *Menu » Toolbox » Language*

Press.

Select the “Toolbox” tab.

Select the menu item “Language” and confirm.
All available languages are displayed. The current language is indicated.

The available languages are Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Portuguese, Spanish, and Swedish. One additional language can be downloaded to the phone.

Select the desired language and confirm.
The language has now been changed.

Time and Date Settings

The time and date information is updated automatically by the system.

Set time format

Route: *Menu » Toolbox » Time & Date*

Press.

Select the “Toolbox” tab.

Select the menu item “Time & Date” and confirm.

Press to confirm the selected menu item “Time format”.
The following options are available:

- 24 hour
- 12 hour

Select the desired option and confirm.

Set date format

Route: *Menu » Toolbox » Time & Date*

Press.

Select the “Toolbox” tab.

Select the menu item “Time & Date” and confirm.

Select the menu item “Date format” and confirm.
The following options are available:

- DD-MMM-YY
- MM/DD/YY
- DD-MM-YY
- YYMMDD

Select the desired option and confirm.

Reset the DT590 Settings

The phone settings can be reset to their default values. Either only reset the user settings such as ringer volume, vibrator alert etc., or all settings/information which includes all user settings, SMS messages, voice call list, and all entries in the integrated Phone Book.

Route: *Menu » Toolbox » Master reset*

Press.

Select the “Toolbox” tab.

Select the menu item “Master reset” and confirm.
The following options are available:

- Settings Only
- All

Select the desired option and confirm

If the phone lock is activated, the phone will ask for your PIN code. Enter the PIN code and confirm.
See section “PIN Code” on page 149.

“Proceed?” is displayed.

Press to confirm.
All DT590 settings revert to their default values.

Audible Signals

Over and above visual information displayed on your extension's screen and LED, there are also various tones, voice announcements and ring tones that signal the status of your extension, or certain associated services.

The tones heard are applicable under the following conditions and with the following timing and frequency:

Internal Dial tone
Heard each time the handset is picked up from your extension (excluding all activated special services)

330 Hz, Continuous

Ring back tone
Heard when you call an extension that is free.

424 Hz, 1.5 sec. On / 3.5 sec. Off

Call on-hold or Call camp-on tone
Heard when you call an extension that is busy and your call has been placed on automatic camp-on, or when your call is placed on-hold by a third party set.

424 Hz, 2 consecutive beeps, repeated every 5 seconds.

Busy tone
Heard when you call an extension that is busy, but automatic camp-on is not possible for your call, or when a service request on your extension is refused.

424 Hz, 0.5 sec. On / 0.5 sec. Off

Call Waiting Presentation tone
Heard when you receive a new call, when your extension is already busy.

Only 1 ring signal, not repeated

Intrusion or Call Offer tone
Heard when a third party - typically an attendant - intervenes during your current call.

424 Hz, 2 consecutive beeps, repeated every 1.4 seconds.

Service Acceptance tone
Heard when a request for service is accepted on your extension.

Multi-toned melody, continuous

Appointment Reminder notification
Heard following your response to an appointment reminder, this announcement indicates the nature of this automatic system call.
See section “More Features on your Extension” on page 234

Message: “It’s time for your appointment.”.

MD Evolution Standard Services Prefixes

Prefix Description	Austria	EBN	Italy	Norway	UK	US	Standard	
Abbreviated Numbers	6	**6	6	#2	**6	6	2	
Appointment Reminder Activate	*32		*32#	#71		*32	71	
Appointment Reminder Verify	*328		*32#8	#718		*328	718	
Appointment Reminder Cancel	*329		*32#9	#719		*329	719	
Call Forward Immediate	*21	*21*	*21#	#61	*21*	*2*	61	
Call Forward No-Answer	*22	*211	*22#	#62	*211	*21	62	
Call Forward Busy	*23	*212	*23#	#63	*212	*22	63	
Call Forward No-Answer and Busy	*26		*26#	#69		*26	69	
Call Forward Do Not Disturb	*24	*27*	*24#	#64	*27*	*24	64	
Call Forward Cancel	#21	#21#	#21#	#60	#21#	#21	60	
Follow-Me Activate	*25	*5*	*25#	#65	*5*	*25	65	
Follow-Me Cancel	#25		#25#	#66		#25	66	
Call Parking	*10		*10#	#10		*10	10	
Call Pick-Up General Ringing	*88	*88	*73*	#15	*88	*88	15	
Call Pick-Up Hunt Group	2		2	#14		2	14	
Call Pick-Up Individual	*8*	*8*	*8*	#13	*8*	*8*	13	
Call Substitution	*75	*75*	*75*	#75	*75*	*75	75	
Call Temporary Protection	*74		*74#	#74		*74	74	
General Call Acceptance Status	*9#	*9#	*9#	#67	*9#	*9#	67	
Access Locking	*72	*76*	*72#	#78	*76*	*72	78	
Access Unlocking	#72	#76#	#72#	#78	#76#	#72	78	
Password Programming	*73	*74*	#*72	#79	*74*	*73	79	
Redial Last External Number	**	***	***	#11	***	**	11	
Standby Status in Hunt Group	*91		*91#	#68		*91	68	

Useful Hints

Connections between external lines

With your MD Evolution Communication Platform, you can establish an external call diversion or a conference with more than one external party or transfer an external call to another external destination (e.g. a mobile phone). These features are very useful for everyday business life.

> **Note:** *When these features are used, your MD Evolution Communication Platform will occupy at least two external lines.*

However, there may be disadvantages in connecting to several external lines. We would therefore like to draw your attention to the following:

- **Please do not transfer external calls to an external mailbox, to information systems or to external parties before they have answered.**
- **If you are connected to two external lines, cancel one call by pressing “R” and “1”.**

If the external parties are not persons (mailbox, automated information or attendant systems, etc.), connections on external lines can last a long time, which can be costly. Moreover, such calls may occupy two of your system’s external lines. You can restrict connections between the external lines by reprogramming your system.

Please ask your system administrator or contact our service center for more information.

Installation

This chapter describes the battery (how to connect and charge) and how to connect the clip to the back of your phone.

Check for completeness

Make sure that all the parts are present. If anything is missing, please contact your system administrator or supplier.

The set contains:

1 Cordless telephone

2 Battery

3 Clip

4 Assembly card

> **Note:** *It is important to make a note of the IPEI code. The IPEI code may be needed for unblocking the phone if an incorrect PIN code has been entered three times. See section "IPEI Code" on page 20 for further details.*

Battery

The battery compartment with the Li-Ion battery is placed on the rear side of the handset.

Charging the battery

The battery requires charging when the ***Battery*** icon in the display indicates low level.

Place the phone in the charger. The charging status is shown by the ***Battery*** icon in the display. An empty battery is fully charged after approximately 4 hours, indicated by a filled ***Battery*** icon.

Replacing the battery

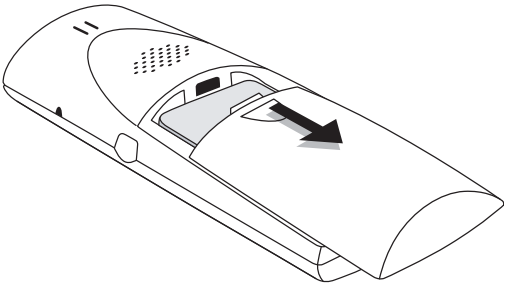
If the standby time for the phone becomes too low, the battery should be replaced by a new one. Please contact your system administrator or your certified Aastra Sales partner for more information.

After replacing the battery with a new one, the Battery icon can indicate an empty battery even though it is fully charged. Placing the phone in the charger for a while will remove the problem.

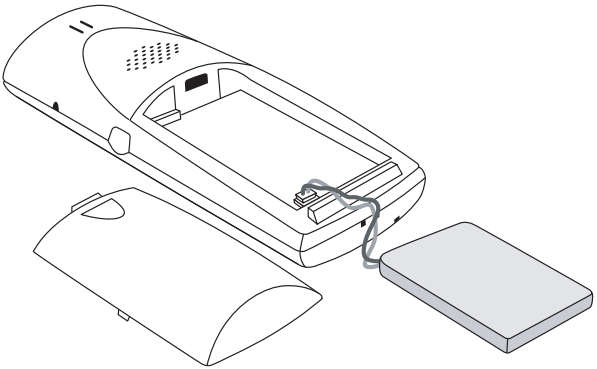
> **Note:** *To avoid fatigue of the phone's battery connector, use the charger instead of repeatedly replacing an empty battery with a new one.*

To replace the battery:

Open the battery compartment and remove the battery.



Disconnect the battery cable, and replace with a new battery.



Chargers

Desktop charger

The desktop charger is used for charging your phone, but also for storing it when you are continually at one location, for example at your desk.

The tilted design facilitates the use of handsfree operation, i.e. in loudspeaking mode. The charger is delivered with a plug-in power supply and is connected to an ordinary wall socket.

Note:
Do not use the charger outside the temperature range of +5 - +40 °C.

Do not use other power supplies than originally delivered (see "Power adapters" on page 145).

Power adapters

Article number

- NTM/DPYNB 301 07/01 (EU)
- NTM/DPYNB 301 07/02 (UK)
- NTM/DPYNB 301 07/06 (110V)

Headset

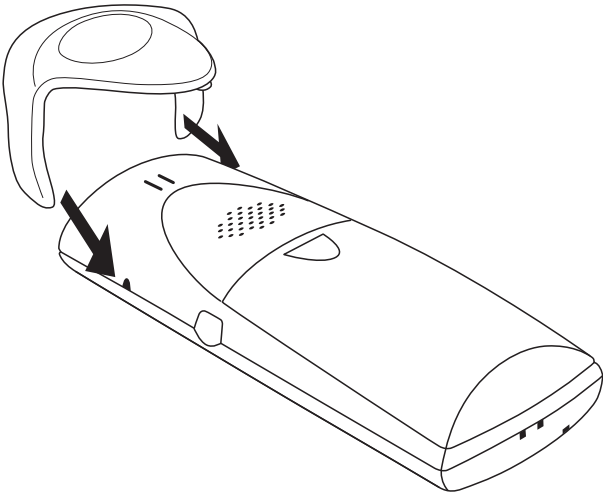
A headset is recommended if you frequently use the phone, and/or want to have both hands free. The phone has a special headset connector.

Belt clip

The clip on the back of the phone helps you fasten it to a belt or similar.

To attach or remove the clip:

Spread the clip slightly.
The ends of the clip fit into the holes on the sides of your phone.



Reference

This section describes the terminology used on the display, the phone communication signals, guidelines, technical specifications, spare parts and accessories.

Terminology

The list below explains the terms which may appear on the display.

Terminology used on display

Term	*Meaning*
DTMF	Dual Tone Multi Frequency or touch tone, for dialling.
IPEI	International Portable part Equipment Identity, unique identity assigned to your phone by the manufacturer.
PIN	Personal Identification Number for security.

Phone signals

The phone signals certain events audibly and visually as described below.

Signal	*Meaning*
Red warning light	Incoming call. Message waiting. Battery almost empty. Phone out of range or not connected.

The phone also generates audible ringing signals, alarm signals and warning tones, and key clicks.

Sound	*Meaning*
Ringing signal	Incoming call.
Alarm signal	4 short beeps every 30 seconds: battery almost empty. 4 short beeps every 2 minutes: Phone out of range or not connected.
Key click	You hear this each time you press a key (when selected).
Warning tone	You have pressed a key which has no function.

Maintenance

Consider these suggestions and guidelines to keep your phone in good shape and working properly.

> **Note:** *The phone does not contain user serviceable parts. If your phone requires service, you should return it to the supplier or retailer from whom it was bought.*

Intrinsic safety

Do not use the phone and charger in conditions where there is a danger of electrically ignited explosions.

Battery disposal

Defective batteries must be returned to a collection point for chemical waste disposal.

Treatment

Do not expose the phone and charger to direct sunlight for long periods. Keep the phone and charger away from excessive heat and moisture.

Cleaning

Clean your phone with a soft cloth moistened with water only. The use of soap and other cleaning products can discolor and damage the phone. Clean the battery contacts using ethanol or isopropyl alcohol.

Technical specifications

DECT GAP/CAP

The Phone has the unique advantages of DECT GAP/CAP (Digital Enhanced Cordless Telecommunications Generic Access Profile/ CTM Access Profile). This means that no one can eavesdrop on your calls and that the quality of speech is as good as that of conventional fixed telephones. DECT GAP/CAP enables interoperability with other manufacturers' products.

Cordless telephone

Power supply

Battery	850 mAh (Li-Ion)

Standards and regulations

CE regulations	73/23/EEC, 89/336/EEC, 99/5/EC
CE marking	CE 0344
DECT standards	EN 301 406, TBR10, TBR22
Safety standards	EN 60950
EMC standards	EN 301 489, -6
Low Voltage Directive	EN 60950
SAR standards	EN 50360 (Europe), ACA 2003 (Australia)

Maximum environmental values during use

Operating temperature	0 to +40 °C
Storage temperature	–20 to +55 °C
Relative air humidity	less or equal to 95% RH (25 to 45 °C) non-condensing

Dimensions and weight

L x W x H	143 x 53 x 26 mm (excluding clip)
Weight	131 g

Performance

Stand-by time	up to 140 hours
Speech time	up to 20 hours
Charge time	4 hours maximum

Headset specifications

Microphone level range	From -43dB/Pa to -36dB/Pa
DC resistance	1.5 to 5 kOhm at microphone bias voltage 1.5V via 2.2 kOhm
Speaker impedance	> 30 Ohm

Note: *If a headset with a hook toggle switch is used, the microphone will be short-circuited when the switch is pressed.*

Volume

Ringing signal	Nine-step adjustable volume
Earpiece	Ten-step adjustable volume

Ringing signals (defaults)

External call	0.4 s on, 0.2 s off, 0.4 s on, 5 s off
Internal call	1 s on, 5 s off
Callback	0.32 s on, 0.2 s off

Phonebook

Maximum name length	12 characters
Maximum number length	24 digits
Entries	max. 100 in the personal phonebook

External interfaces

Radio connection	DECT GAP/CAP, 1880-1900 MHz (standard), 1900-1920 MHz (China), 1910-1930 MHz (Latin America), up to 250 mW radiated power during 1 of the 24 time slots
User interface	Display with two lines of 12 alphanumeric characters and 7 icons, keys with text, volume keys on the side.
Accessory connector	For battery charging.

Spare parts and accessories

Use only approved spare parts and accessories. The operation of non-approved parts cannot be guaranteed and may even cause damage. Contact your supplier for more information.

- Clip for phone
- Li-Ion battery for phone
- Battery door for phone
- Security clip for phone
- Carrying case for phone

Troubleshooting

This section contains information on how to solve common operational problems.

Go through the following list if you encounter any problems. If this check list does not solve the problem, contact your system administrator. If others have similar problems, there may be a system error.

Fault check list

Fault	Probable cause	Action or comment
No display	Battery low or phone defect	Charge battery
“Connect battery” is displayed	Battery not properly fit or defect	Check battery or contact system administrator
No ringing	Ringer off icon on or phone defect	Off icon on: Adjust volume
Signal strength icon off	Out of coverage area, system or phone defect	Enter coverage area or contact system administrator
Low battery icon on	Battery capacity equal to 10%	Charge battery
Low battery icon flashes	Battery capacity equal to or lower than 5%	Charge battery
4 short beeps every 2 minutes	Out of coverage area or not connected	Enter coverage area or contact system administrator

Fault	Probable cause	Action or comment
“Phonebook Full” is displayed	Phonebook full, you cannot add names or numbers	Delete a name and a number
“Enter XXX” is displayed (where XXX=IPEI or PIN)	IPEI code or PIN code	Enter required IPEI code or PIN code
“No access” is displayed	Network in range, but no access rights	Select another network or resubscribe
“NO NETWORK” is displayed	Cannot connect to selected network or out of range	Select another network, subscribe, get back within range or contact system administrator
“PIN Blocked Unblock?” is displayed	Phone blocked, wrong PIN code entered three times	See section “IPEI Code” on page 20

Contact your system administrator if one of these error messages is displayed:

- System List Error
- Buzzer Data Error
- User Data Error
- User Phonebook Error
- Error xx (where xx = any number)

Glossary

Abbreviated number
Short number. Initiating a call to a pre-programmed number by dialling a code or pressing a key. See section "Abbreviated Numbers" on page 43.

Conference
If you have an ongoing conversation you can include other persons and establish a telephone conference.

DECT/GAP
Digital Enhanced Cordless Telecommunication/ Generic Access Profile. This means that no one can eavesdrop on your calls and that the quality of speech is as good as that of conventional fixed telephones. DECT/GAP enables interoperability with other manufacturers' products.

Directory number
Number with 1-8 digits which is assigned to an extension or external line or as a common abbreviated number.

DTMF tone
Dual Tone Multi Frequency or touch tone, for dialling.

Extension number
All telephones connected to the PBX have a unique internal number (up to 8 digits). You can see your number on the display.

Idle mode
The state your phone is in when nothing is activated.

IP call
Internal call sent via an internal data network (LAN or WAN).

IPEI Code
International Portable part Equipment Identity, a unique identity assigned to your phone by the manufacturer.

ISDN
Integrated Services Digital Network. Provides your system with supplementary services from the public net.

Least Cost Routing
A function that automatically selects the cheapest way to connect your external call.

PBX
Private Branch Exchange. Your telephone switching system (e.g. MD Evolution Communication Platform).

PIN Code
Personal Identification Number for security.

Tandem configuration
The tandem configuration is a unit consisting of two phones using the same directory number.

Third party
A third connection (person), which can be included in an ongoing two person conversation. The connection can be internal or external. See section "During Calls" on page 50.

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