Dialog 4420 IP Basic

IP Telephone for MX-ONE™ and MD110

User Guide





Table of Contents

Welcome	4
Important User Information	6
Start the Phone	
Incoming Calls	14
Outgoing Calls	19
During Calls	26
Call Forwarding	30
Absence Information (optional)	40
Messages	42
Group Features	47
Other Useful Features	49
Settings	54
Accessories	56
Web Server	57
Installation	62
Troubleshooting	68
Glossary	
Index	70

Welcome

Welcome to the user guide for the *Dialog 4420 IP Basic* IP telephone that conforms to the H.323 standard.

This guide describes the available features of the telephone when it is connected to **MX-ONE™** or **MD110**.

The functions and features available with this telephone are designed for easy use in all different telephone handling situations.

The user guide describes the functions and features of the *Dialog 4420 IP Basic* as it is programmed at delivery from the factory. There may be some differences in the way your phone is programmed. Please consult your system administrator if you need further information.

Some markets use differing codes for some features. In this guide they are described using the most common code.

The latest version of the user guide can be downloaded from: www.aastra.com

Copyright

All rights reserved. No parts of this publication may be reproduced, stored in retrieval systems, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the publisher except in accordance with the following terms.

When this publication is made available on Aastra media, Aastra gives its consent to downloading and printing copies of the content provided in this file only for private use and not for redistribution. No parts of this publication may be subject to alteration, modification or commercial use. Aastra will not be liable for any damages arising from use of an illegal modified or altered publication.

Aastra is a registered trademark of Aastra Technologies Limited. All other trademarks mentioned herein are the property of their respective owners.

Warranty

AASTRA MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Aastra shall not be liable for errors contained herein nor for incidental or consequential damages in connection with the furnishing, performance or use of this material.

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.



Important User Information

Safety instructions



Save these instructions.

Read these safety instructions before use!

Note: When using your telephone or connected equipment, the following basic safety precautions should always be followed to reduce risk of fire, electrical shock and other personal injury.

- Follow instructions in the equipment's user guide or other documentation.
- Always install equipment in a location and environment for which it is designed.
- For mains powered telephones: Only operate with the mains power voltage indicated. If you are uncertain of the type of power supplied to the building, consult property management or your local power company.
- For mains powered telephones: Avoid placing the telephone's power cable where it can be exposed to mechanical pressure as this may damage the cable. If the power supply cord or plug is damaged, disconnect the product and contact qualified service personnel.
- Headsets used with this equipment must comply with EN/IEC 60950-1 and for Australia AS/NZS 60950:1-2003.
- Do not make any changes or modifications to equipment without seeking approval from the party responsible for compliance. Unauthorized changes or modifications could void the user's authority to operate the equipment.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- Do not spill liquid of any kind on the product or use the equipment near water, for example, near a bathtub, washbowl, and kitchen sink, in a wet basement or near a swimming pool.
- Do not insert any object into equipment slots that is not part of the product or auxiliary product.
- Do not disassemble the product. Contact a qualified service agency when service or repair work is required.
- Do not use a telephone (other than cordless type) during an electrical storm.

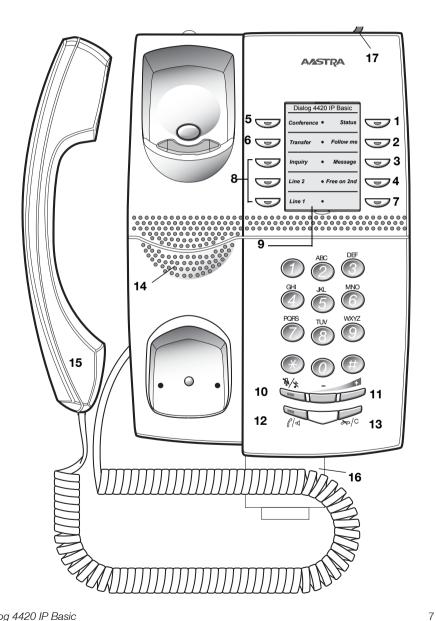


6

Disposal of the product

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

Description



8

1 Status

Monitoring the network link. Three different status are indicated:

- 1 Steady light Telephone is ready to be used.
- 2 Flashing slowly Telephone is not ready to be used.
- 3 Double flash Telephone has no network connection.

Keys 2-6 Preprogrammed keys / Function keys / Monitoring keys

The keys are programmed with the specified default features (see below). The features can be moved to any other programmable function key by the system administrator.

The features can also be removed from the keys (by your system administrator). In this case you can program frequently used features and phone numbers on the keys.

The keys can also be used as Monitoring keys or for assigning the features Callback, Call Pick up, Call Waiting and Intrusion.

See section "Web Server" on page 57 and "Key Monitoring" on page 51.

2 Follow-me

Indicate activation/deactivation of Follow-me. See section "Call Forwarding" on page 30.

3 Message

Message indication key. When the key lamp is on, press the key to retrieve the message. See section "Messages" on page 42.

4 Free on 2nd

Allow a second call to be received when you already have an active call. See section "Answer a second call during an ongoing call" on page 16.

5 Conference

Establish a conference. See section "Conference" on page 28.

6 Transfer

Transfer calls. See section "Transfer" on page 28.

7 Function key / Monitoring key

- a) Program frequently used features and phone numbers on the key. See section "Web Server" on page 57.
- b) Can also be used as Monitoring key or for assigning the features Call Pick up, Call Waiting and Intrusion. See section "Key Monitoring" on page 51.

8 Triple Access Line

Handle calls. Line 1 and Line 2 are available both for incoming and outgoing calls. Inquiry can only be used for outgoing calls.

9 Designation card

Use the DCM (Designation Card Manager) to make and print your own designation cards. DCM is included on the Enterprise Telephone Toolbox CD or it can be downloaded from: http://www.aastra.com

For more information, please contact your Aastra Certified Sales Partner.

10 Mute

Pressing the **Mute** key during a call prevents the connected party from hearing you. Pressing the key in idle or ringing state activates silent ringing. Pressing any key deactivates silent ringing.

- a) Switch the microphone on or off during a call. See section "Mute" on page 26.
- Switch off the ring signal in idle mode or when ringing. See sections "Mute ring signal" on page 54 and "Silent Ringing" on page 55.

11 Volume control keys

The **Volume** keys controls the volume for incoming speech (handset and loudspeaker) and the ringing volume. The + key increases the level and the - key decreases the level. Adjust the volume. See section "Settings" on page 54.

12 Loudspeaker key

The **Speaker** key is used for monitoring a connection. To activate monitoring during a call. See section "Monitoring" on page 26.

13 Clear key

Disconnect calls or exit a feature. Can always be pressed instead of replacing the handset

14 Loudspeaker

15 Handset

Supplied with hearing aid feature as standard.

Please note: The handset can attract and trap small metal objects in the earcap region.

16 Pull-out leaf for easy guide (optional)

See section "Pull-out leaf (optional)" on page 56.

17 Power adapter connection

See section "Start the Phone" on page 13.

Lamp indications

Extinguished lamp	The feature is not active.
Steady light	The feature is active or the multiple represented line is busy.
Slowly flashing lamp	The line (or feature) is put on hold.
Rapidly flashing lamp	An incoming call.
Light with short breaks	Ongoing call.

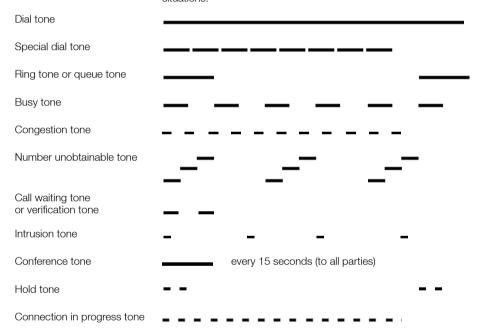
Note: Special lamp indications are used for the Status lamp, see description of Status lamp on page 8.

Tones and signals

The following different tones and signals are sent from the exchange to your phone.

Tone characteristics

The tones shown in this section are the most used tones worldwide. Many markets use a differing tone for one or more situations.



Ring signals

Three different ring signals inform you about the type of the incoming call. The signals shown in this section are the most used signals worldwide. Many markets use signals that are adapted for the local standards. If you get a signal that is not described or you cannot identify, ask your system administrator.



Start the Phone

Startup procedure

Connect the required cables.

See section "Installation" on page 62.

When the phone is connected to the network, your phone initiates the startup procedure automatically when connected to the mains.

Note: The phone does not work when a power failure occurs. After a power failure the phone will restart automatically.

After a short while the Mute key lamp is lit for a few seconds. The phone is connecting to the server and software is loading. After a self test, the phone is ready for log on. The startup procedure normally takes about one minute. When the phone is ready to be used the Status lamp is turned on.

Notes:

When the startup procedure is ready and the Status lamp is extinguished or flashing the phone is not ready to be used, see section "Troubleshooting" on page 68 to solve the problem.

The phone is always logged on with a default number. You cannot log on or off.

Reset the phone

If your phone does not work properly, you can use the following procedure to reset the phone. After the procedure the startup procedure is initiated again.

Press all keys simultaneously for at least one second.



Incoming Calls

Answer calls

A ring signal and a flashing lamp indicate an incoming call.

Note: If the feature Parallel Ringing is activated, the call will ring on more than one phone, see section "Parallel Ringing" on page 17.

On Line 1



Normally you will receive calls on Line 1.

Lift the handset.



On Line 2 or Monitoring key



Lift the handset.



Press the flashing Line 2 key,

If you have an ongoing call (Line 1), the first call is put on hold.

or



Press the flashing Monitoring key.

If you have an ongoing call (Line 1), the first call is put on hold.

Note: If a tone is heard, wait for the tone to stop before starting the conversation.

On another extension



You can answer a call to another extension:

Lift the handset and call the ringing extension. Busy tone.

8 Press.

Note: France, press 4; Sweden, press 6

Answer a second call during an ongoing call

You can receive another call, when Free on 2nd is activated.





Press to activate/deactivate.

When Free on 2nd access is active, the lamp is on.

When you have an ongoing call on Line 1, and Line 2 flashes to indicate a new incoming call:



Press to answer.

The first call is put on hold.



Press to switch back to the first call.

The second call is put on hold. You are connected to the first caller.

Press to terminate the connected call.

Call Waiting

If the calling party has activated Call Waiting, you can receive a second call even if Free on 2nd is not activated.



To answer the waiting call:

Press to terminate the connected call.

Your phone will ring to announce the waiting call.



Press the flashing Line key to receive the new call.

Parallel Ringing

Note: This feature is only available in newer versions of the exchange.

The Parallel Ringing feature makes it possible for an incoming call to ring several phones simultaneously and for the call to be answered on any of the phones. The main advantage of this feature is that you do not risk losing any calls.

The feature requires all the phones involved to be defined in a *Parallel Ringing list*, which must be configured and initiated by your system administrator. Because only calls to a main extension will be distributed among the phones in the list, this main extension also needs to be defined.

A call to a specific extension will not be distributed to other phones in the list, and will only ring that specific extension's phone.

Parallell Ringing can be temporarily disabled by the phone user using the feature "Internal Follow-me". See also section "Internal Follow-me" on page 30.

Note:

If an extension part of a parallel ringing list tries to activate/ deactivate one of the features below, the procedure is only performed on the main directory number not on the extensions own number.

- Call diversion for non-generic extension
- Do not disturb
- External Follow-me
- Follow-me
- General Cancellation
- Individual Repeated Distribution or Personal Number
- Message Diversion

To disable Parallel Ringing temporarily



Dial, enter the extension number and press.

If you want to disable Parallel Ringing for all phones defined in the list, follow the procedure for disabling the feature from the phone with the main extension number and enter the number of the answering position.

If you want to disable Parallel Ringing for one specific phone in the list only, follow the procedure for disabling the feature from this phone and enter its extension number.

Notes:

U.K., dial X 2 X Number #.

The Follow-me key cannot be used to disable Parallel Ringing.



Press.

The Follow-me key lamp is now on.

#21# /C

To restore Parallel Ringing

Dial and press.

The Follow-me key lamp is off.

Notes:

U.K., dial # 2 #.

If you want to restore Parallel Ringing for all phones defined in the list, follow the procedure for restoring the feature from the phone with the main extension number and enter the number of the answering position.

If you want to restore Parallel Ringing for one specific phone in the list only, follow the procedure for restoring the feature from this phone and enter its extension number.

The Follow-me key cannot be used to restore Parallel Ringing.

Outgoing Calls

Make calls

Note: You can dial your calls faster by using common Speed Dialing numbers and by using your own programmed function keys or preprogrammed Monitoring keys. See section "Speed Dialing" on page 25.



How to make internal and external calls:





Lift the handset and proceed depending on call type:

Internal calls

000 000 000

Dial the extension number.

External calls

0

Dial the digit or digits to get an external line.

Dial tone.

Note: The particular digit or digits used in your office, e.g. **0** or **00**.

000 000 000

Dial the external number.



Replace the handset or press to end the call.

Monitoring

You can monitor the progress of an outgoing call.

With the handset on hook:

000 000 000

Dial the number.

When the other party answers:



Lift the handset.



Press to terminate a monitor call.

SOS calls (Emergency calls)

Note: The number for SOS calls might vary between countries.



Dial the SOS number.

If this feature is enabled it is still possible to make an emergency call even if the status lamp is lit. If a dialtone is heard it is possible to make the call.

Individual External Line

To make a call on a specific external line:



Lift the handset.

Dial, enter the Individual External Line number and press.

000 000 000

Dial the digit or digits to get an external line and the external number.

Last External Number Redial

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



Lift the handset.

**

Dial to repeat the stored number.

The last external number is automatically redialed.

Note: Finland and Sweden, dial X X 0

Number Presentation Restriction

If you do not want your name and number to be displayed to the person you are calling, use the following procedure.

Notes:

This feature is only available in newer versions of the exchange, and it might be blocked for use on your extension (programmed by your system administrator).

The Number Presentation Restriction is only valid for the ongoing call, i.e. the procedure has to be repeated the next time you want to use it.



Lift the handset.

 $\times 42 \pm$ Dial and wait for a new dial tone.

000 000 000

Dial the number.

Instead of your name and number, the display on the called phone shows **Anonymous**.

When you receive a busy tone

If you call an extension and receive a busy tone, or get no answer, or all external lines are busy, you can use any of the following methods:

Callback

If a called extension is busy or there is no answer:

6 Press.

It can take several seconds before the procedure is executed. A confirmation tone is heard

Note: France, Finland and Sweden, press 5



Replace the handset to finish the procedure.

You are called back (recall ring signal) when the ongoing call is finished or the next time a new call is finished. You have to answer within eight seconds, otherwise the Callback service is cancelled. While waiting for the Callback, you can make and receive calls as usual.



Lift the handset when you are called back.

The system calls the extension.

Note: Callbacks can be activated on several extensions at the same time.

If all external lines are busy (after dialing the digit or digits to get a line):

6 Press.

Note: France, Finland and Sweden, press 5



Dial the external number and press.



Replace the handset to finish the procedure.

When an external line becomes free, you will be called back (recall ring signal). You have to answer within eight seconds, otherwise the Callback service is cancelled. While waiting for the Callback, you can make and receive calls as usual.



Lift the handset when you are called back.

The system calls the external number.

Note: Only one Callback can be activated on a busy external line

Cancel any single Callback

#37* 000 #

Dial, enter the extension number and press.

Note: To cancel a single Callback on a specific external line, dial the digit or digits to get a line instead of the extension number.



Press.

Cancel all Callbacks

#37#

Dial.



Press.

Activate Call Waiting

If you urgently wish to contact a busy extension or external line, you can notify by a Call Waiting signal.

5 Press.

Note: France and Finland, press 6; Sweden, press 4

Keep handset off hook. When the called extension or the external line becomes free, it will be called automatically.

Note: The Call Waiting feature might be blocked for use on your extension (programmed by your system administrator). If Call Waiting is not allowed, you will continue to receive a busy tone.

Intrusion on a busy extension

You can intrude on an ongoing call on a busy extension.

4 Press

Before the intrusion is executed, a warning tone is sent to the parties in the ongoing call. A three party call is established and a warning tone is heard.

Notes:

France and Sweden, press 8

The warning tone might be disabled for your system. The Intrusion feature might be blocked for use on your extension (programmed by your system administrator). If Intrusion is not allowed, you will continue to receive a busy tone.

Bypass

If this feature is allowed from your extension, you can bypass an; activated Diversion, activated Follow-me or activated Absence Information on a specific extension.



Lift the handset.

Dial, enter the extension number and press.

Wait for answer.

Speed Dialing

Common Speed Dialing Numbers

By using common Speed Dialing numbers, you can make calls simply by pressing a few keys. The common Speed Dialing numbers consist of 1–5 digits and are stored in the exchange (by your system administrator).



Lift the handset and dial the common Speed Dialing number.

Dial by a function key

Both features and phone numbers can be programmed on a function key. To program a key, see section "Web Server" on page 57.



Lift the handset.

Press the function key.

This function key is preprogrammed by you.







Lift the handset and press the Monitoring key.

This key is preprogrammed by your system administrator.

During Calls



Mute

Press to switch the microphone on or off.

When the lamp is on, the person on the line cannot hear what is being said near to your phone.

Monitoring

This feature lets you listen to the loudspeaker while the handset is on hook, e.g. while waiting for a called busy person to become free or passive listening to an ongoing telephone conference, etc.





Press to switch the loudspeaker on.



Replace the handset.

When the Speaker key lamp is on, you monitor the call via the loudspeaker. The handset (including the microphone) is disconnected. Also the Mute key lamp is on to inform that there is no microphone connected.

Note: You can adjust the volume, see section "Settings" on page 54.



Press to end the call.



From Monitoring to handset

Lift the handset.

Continue your conversation via the handset.

Hold

You can temporarily put the ongoing call on hold.



Press the ongoing call Line key.

The key lamp flashes slowly.

Note: If you replace the handset, the call is terminated.



Press the flashing Line key again to resume the call.

Inquiry

You have a voice connection on Line 1 and want to make an Inquiry to an internal or external party.



Press.

The first call is put on hold (Line 1 flashes slowly).

Note: You can also press Line 2.



Call the third party.

When the other party answers, you can switch between the calls (Refer Back), Transfer the call, create a Conference or end one of the calls.



Press to end the Inquiry call.

The third party is disconnected.



フ Line 1

Press to return to the first call.

Refer Back

The Line key lamp flashes for the call put on hold.



Press to put the third party on hold.

First call is connected.



Press to put the first call on hold.

Third party is connected.

Note: You can also press Line 2 if you have initiated the Inquiry on Line 2.



Press to terminate the connected call.

Transfer

You have an ongoing call and you want to transfer the call to another extension.



Transfer

Press.

Note: You can also press Inquiry or a free Line key.



Call the third party.



Transfer

Press before or after answer.

The ongoing call is transferred.

Note: If you have put more than one call on hold, the last call that was put on hold will be transferred. If the dialed extension is busy or Transfer is not allowed, your phone will ring again.

Conference

With this procedure you can include up to seven parties in a conference. Only the conference leader (i.e. the person initiating the conference) can admit participants. The conference tone will be heard every 15 seconds during the conference. The tone is also heard each time a participant enters or leaves the conference.

Note: The conference tone might be disabled for your system.

You have an ongoing conversation (Line 1) and want to establish a phone conference. You will become the conference leader.



Conference

Press.

Note: You can also press Inquiry or Line 2.



Call the third party.

Wait for answer.



Press to establish a conference.

Repeat the procedure to add more conference members.



Replace the handset to leave the conference.

Note: When the conference leader leaves the conference, the conference will continue with the other included parties. The conversation is changed back to a normal two party connection when there are only two parties left.

Call Forwarding

Internal Follow-me

All calls to your extension are diverted to another extension of your choice (within the private network). The Follow-me lamp indicates that you have activated Follow-me. During Follow-me, your phone can still be used for outgoing calls and you will hear a special dial tone when you lift the handset.

Note: The Follow-me key is only used as a Follow-me indicator. Nothing happens when the key is pressed.

Order from your own extension

*21*********

Dial, enter the answering position number and press.

Note: U.K., dial * 2 * No #.



Press.

Cancel from your own extension

#21#

Note: U.K., dial # 2 #.



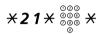
Press.

Dial.

Redirect from answering position

If you move from one answering position to another answering position, you can redirect Follow-me from that new position.

Note: Internal Follow-me must be ordered from your own extension before you can redirect from answering position.



Dial, enter your own extension number and press.

Note: U.K., dial X 2 X No X.

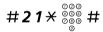
Enter the answering position number.



Press to redirect.

Calls are diverted to the new answering position.

Cancel from answering position



Dial, enter your own extension number and press.

Note: U.K., dial # 2 * No #.



Press.

External Follow-me

If external Follow-me is allowed, you can have all calls to your extension diverted to an external number of your choice. The Follow-me lamp indicates that you have activated Follow-me. During Follow-me, your phone can still be used for outgoing calls and you will hear a special dial tone when you lift the handset.

Note: The Follow-me key is only used as a Follow-me indicator. Nothing happens when the key is pressed.

	<u>Order</u>
*22 # 000 000	Dial and enter the digit or digits to get an external line.
000 000 000 #	Enter the external number and press.
≥ /c	Press.
	Cancel
#22#	Dial.
₩/c	Press.

Personal Number

With this feature you can be reached on your normal office phone number even if you are out of the office, at home, etc.

Depending on the functionality of your office exchange, you can have either one individual single search profile (standard) or you can choose between five individual search profiles (optional).

A search profile can be designed to fit the situation, i.e. in the office, traveling, at home, etc. Both internal or external phone numbers can be used in a profile.

Your search profile is programmed or modified by your system administrator. See section "To design and order your search profiles" on page 36.

When the feature is activated, incoming calls are transferred to your selected phones or back-up services in the order that you choose. If an answering position in the profile is busy, the call can be transferred to another predefined position in the profile, i.e. Voice Mail or a colleague.

You can handle the profiles from your own office phone. How to do this is described here (an operator can also assist you).

You can also use any of the Personal Assistant applications, if available. Contact your system administrator for more information.

When out of the office, the feature Direct Inward System Access (DISA) can be used, if available in your system. How to use DISA is described in this section

To activate or change to another profile from your office phone

10

Dial.

(1-5)#

Enter the search profile digit and press.



Press.

Note: When another party is included in the activated profile, a colleague or an operator, etc., always remember to inform them about your absence. If Voice Mail is included in the activated profile, always update your greeting with Absence Information.

To cancel from your office phone

#10#

Dial.



Press.

To activate or change to another profile from an external phone

The external phone must be of push button type provided with pound key (#) and star key (X) or a mobile phone adapted for dial tone pulses (DTMF).

000 000 000 0	Call the DISA feature at your office. Dial tone.
*75 *	Dial.
000 000 * 000 *	Enter the Authorization Code and press.
000 000 000 000 #	Dial your own extension number and press. Dial tone.
10	Dial.
000 000 000 *	Dial your own extension number and press.
(1-5)	Press the search profile digit.

Press and replace the handset.

Note: When another party is included in the activated profile, a colleague or an operator, etc., always remember to inform about your absence. If Voice Mail is included in the activated profile, always update your greeting with Absence Information.

To cancel from an external phone

The external phone must be of push button type provided with pound key (#) and star key (\times) or a mobile phone adapted for dial tone pulses (DTMF).

000 000 000 0	Call the DISA feature at your office. Dial tone.
*75 *	Dial.
000 000 * 000 *	Dial the Authorization Code and press.
000 000 000 #	Dial your own extension number and press. Dial tone.
#10×	Dial.
000 000 000 #	Dial your own extension number and press.

Replace the handset.

To design and order your search profiles

The search profiles are installed or changed by your system administrator. In order to set up your profiles, copy the setting form, fill in your new or changed profiles and give it to your system administrator.

Note: If a profile handling application is connected to your system, you can edit profiles via your Intranet. See separate instructions for the application.

Important notes when designing your search profiles:

- Avoid ring times longer than 45 seconds for your profiles.
 Usually the caller hangs up after 3-6 ring signals. If you need a longer ring time, the maximum time is 60 sec.
- Consider the time you need to react and answer on each answering position in your profile.

You might need up to 15 seconds to react and answer a call on a desk or cordless phone and 20–25 seconds for a mobile phone.

 There must be an answering position at the end of every profile (Voice Mail or operator/secretary).

If not, calls might end up unanswered.

- Consider what should happen while you are busy on a phone.
 The available options are:
 - Activate Free on 2nd (if available)
 - Follow-me to Voice Mail
 - Follow-me to the operator
- If an answering machine, a fax or other answering device is used as an early answering position, it might interrupt the searching.

Disconnect the answering device, or design the ring times so they do not affect the searching.

- If your system admits just one single personal profile, design the profile only with your 2–3 most frequently used positions.
 - If you add more numbers, there is a risk that the caller hangs up before a latter position is called.
- Make sure you use as few answering positions as possible for each profile. Profile examples:
 - In office
 - At home
 - Traveling
 - Absent/not reachable

Example:

How to fill in your setting form for search profiles:

Profile 1 In office

Search order	Type of telephone or Answering position*	Telephone number	Ring time (seconds)
1	Desk	1234	10
2	Cordless	5234	15
3	Voice Mail		

^{*} Examples: Desk, Cordless, Mobile, External, Voice Mail, Operator, etc.

Profile 2 At home

Search order	Type of telephone or Answering position*	Telephone number	Ring time (seconds)
1	External	222222	20
2	Mobile	0706666666	25
3	Voice Mail		

Setting form for search profiles

Name	:		
Depar	tment:		
-	ione No:		
•			
Accou	INT:		
Search	Type of telephone or		Ring time
order	Answering position*	Telephone number	(seconds)
1			
2			
3			
4			
* Examp	oles: Desk, Cordless, Mobile,	External, Voice Mail, Open	ator, etc.
Search			Ring time
order	Answering position*	Telephone number	(seconds)
1			
2			
3			
4			
Search			Ring time
order	Answering position*	Telephone number	(seconds)
1			
2			
3			
4			
Search order	Type of telephone or Answering position*	Telephone number	Ring time (seconds)
1			
2			
3			
4			
	ı	1	
Search			Ring time
order	Answering position*	Telephone number	(seconds)
1			

Absence Information (optional)

Absence Information is used to inform callers why you are absent and when you will return. If you are authorized, you can also enter Absence Information for another extension from your extension. During Absence Information, your phone can still be used for outgoing calls and you will hear a special dial tone when you lift the handset.

Order

Example: Back on September 15 (=0915).

23 Dial.

(0-9) Enter the absence code.

Note: The absence codes consist of one digit. The absence code assigned to each digit depends on the system connected to the exchange. Contact your system administrator regarding the available absence codes.

imes 0 9 1 5 Press and enter the date (MMDD) or time (HHMM) of your return.

Notes

If no return time or date is needed, this step can be skipped.

The order in which the date is stated is system dependent.

Press.

Cancel

#23#

Dial.



Press.

The programmed information is erased.

Order for another extension

230

Dial.

000 000 000 **X**

Dial the extension number and press.

(0-9) Enter the absence code.

Enter the absence code.

***0915**

Press and enter the date or time of the other person's return.



Press.

The display on the other person's extension shows the selected reason and, if entered, time or date of return.

Cancel for another extension

#230 × 000 #

Dial, enter the extension number and press.

Note: If the special dial tone is received, the Authorization Code for the other extension is required. Add the code and press # before pressing the Clear key.



Press.

Messages

Manual Message Waiting (MMW)

If the called extension does not answer you can initiate a message waiting indication on that extension (if this feature is allowed). If there is a message waiting, the Message key lamp is on and you will hear a special dial tone after lifting the handset.

Answer





Press.

A call is initiated to the extension that requested Message Waiting.

Note: After the call you have to cancel the message manually, see below.

Cancel MMW at your own extension

#31#

Dial.



Press.

Order MMW to another extension

In idle mode:



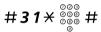
Dial, enter the extension number and press.



Press.

The Message Waiting key lights up on the called extension.

Cancel MMW to another extension



Dial, enter the extension number and press.



Press.

Message Waiting (optional)

If your phone is assigned with this feature and if it is diverted to an interception computer, the Message key lamp is on when there are messages stored for you in the computer. The messages will be printed out on a printer connected to the computer.

To print out messages





Press.

If you find that the notification of Message Waiting is intrusive or you want to shut off the notification:

#**91**#*

Dial.

Acknowledgement tone.

Voice Mail (optional)

This Voice Mail application allows you to leave a voice message to the caller when you are unable to answer calls, e.g. when out of office, in a meeting, etc. The caller can then leave a message in your mailbox. When back in your office you can enter your mailbox and listen to the messages received.

You can choose to divert all incoming calls to your mailbox, or calls when there is no answer, or calls when your phone is busy.

If you use the Personal Number feature, it is recommended to program Voice Mail as the last answering position for all search profiles.

When you enter your mailbox, you will hear recorded instructions on how to handle listening, recording, storing and deleting messages, and how to change your security code.

Note: How to handle your mailbox, depends on the type of Voice Mail system. The following describes the, in MD110, integrated type. For other types, please refer to separate user instructions. Contact your system administrator if you do not know which type of Voice Mail system you have.

To activate and deactivate your mailbox

For all incoming calls:

See section "Internal Follow-me" on page 30. Use the number to the Voice Mail system as the "answering position number".

To access your mailbox

From your office phone:

000 000 000

Dial the number to the Voice Mail system.

Note: When the Message key lamp is on (= a new message is received), you can also press this key.

If you are asked to enter your security code:

000 000 000

Enter your security code.

Code at delivery = your extension number.

From another phone:

000 000 000

Dial the number to the Voice Mail system.

If you are asked to enter your security code (if the phone you are using has a mailbox of its own):



Press.

Dial your mailbox number.

(normally your office extension number)

000 000 000

Enter your security code (if required).

000

To access someone else's mailbox

000 000 0

Dial the number to the Voice Mail system.

If you are asked to enter your security code (if the phone you are using has a mailbox of its own):

#

Press.

Dial the mailbox number.

(Normally the office extension number of the person served).

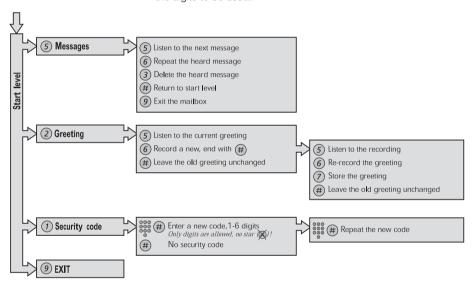
Enter the security code of the other person (if required).

To handle the mailbox

Recorded information on the line tells you the number of new and stored messages. If you have too many messages stored, you will first be asked to delete saved messages.

Recorded instructions ask you to press different digits in order to listen to caller's messages, record your own greetings, change your password or exit your mailbox, etc.

The following diagram gives an overview of the mailbox system and the digits to be used.



Group Features

Group Call-pick-up

People working in a team can have their phones programmed by their system administrator to form Call-pick-up groups.

In a Call-pick-up group, any member can answer any individual call to group members.



Lift the handset.

***8#**

Press to answer.

Notes:

One Call-pick-up group can serve as an alternative to another group. Calls to the alternative group can only be answered when there are no calls to your own group.

Finland and Sweden, press **X 0** #.

Common Bell Group

Calls are signalled on a common bell.



Lift the handset.

 $\times 8 \pm$

Press to answer.

Note: Finland and Sweden, press * 0 #.

Group Hunting

An internal Group Hunting number is a common directory number for a group of extensions. Calls to the group will be indicated at a free extension in the group.

When you leave the group temporarily, you make your phone unavailable for incoming calls.

To leave the group temporarily

*21**********

Dial, enter your own extension number and press.

Note: U.K., dial * 2 * No #.

₩/C

Press.

To re-enter the group

#21# Dial.

Note: U.K., dial # 2 #

Press.

Other Useful Features

Account Code (optional)

This feature is used to charge a call to an account number or to prevent unauthorized calls from your phone. The Account Code can have 1 to 15 digits.



Lift the handset.

Dial, enter the Account Code and press. Dial tone.

Note: Finland and Norway, dial * 71 * Code #.

Dial the digit or digits to get an external line and the external number.

Ongoing external call

When used to charge a call it is also possible to connect an ongoing external call to an Account Code. During the call:



Press the ongoing call Line key to put the call on hold.

Note: Finland and Norway, dial * 71 * Code #.

Dial, enter the Account Code and press. Dial tone.



Press the flashing Line key for the call put on hold.

General Deactivation

The following features can be simultaneously cancelled:

- Callback (all Callbacks are cancelled)
- Internal and External Follow-me
- Manual Message Waiting/Absence Information

Order

#001#

Dial.



Press.

Emergency mode

In the event of an emergency the operator can set the exchange into Emergency mode, during which only preprogrammed extensions are permitted to make calls. If your extension is not assigned with this category and you try to make a call, you will not receive a dial tone.

Night Service

When the exchange is in Night Service mode, all your incoming calls to the operator are transferred to a selected extension or group of extensions. The exchange has three different Night Service modes:

Common Night Service

All incoming calls to the operator are transferred to one specific extension. Answer the call in the normal way.

Individual Night Service

Selected external calls to the operator are transferred to one specific extension. Answer the call in the normal way.

Universal Night Service

All incoming calls to the operator are transferred to a universal signalling device. Answer the call as described in section "Group Call-pick-up" on page 47.

Key Monitoring

It is possible to monitor and to answer calls to other extensions from a programmable function key on your phone. This feature is useful in e.g. Boss-Secretary applications. To answer calls on a Monitoring key, see section "Answer calls" on page 14.

The following status can be indicated on the Monitoring key:

- 1 The monitored extension is free (lamp is off).
- 2 An incoming call to the monitored extension (lamp with fast flash).
- 3 The monitored extension is busy (lamp is on).
- 4 The monitored extension has performed common hold (lamp with slow flash).

The Monitoring keys are programmed by your system administrator.

To make calls on a Monitoring key, see section "Speed Dialing" on page 25.

Hot-Line (Non dialed connection)

An extension number can be defined as a direct hot-line. Lift the handset or press a line-key and the call is automatically generated to a predefined extension position or external subscriber.

Malicious Call Tracing

When a malicious call is received a signal can be sent to the switched telephone network (PSTN) before a call is disconnected. If the calling subscriber clears the call, the external line can be held for a limited period of time to invoke the malicious call tracing (MCT).

The system administrator assigns the MCT to a function key.

The MCT can be ordered by pressing the MCT key:

- If the request is successful, the lamp (LED) is lit, a text message is shown in the display and an acknowledge tone is heard.
- If the request fails, the lamp (LED) associated to the key flashes rapidly, a text message is shown in the display and a reject tone is heard

DISA = Direct Inward System Access (optional)

If you are assigned to use this feature and you are working externally, you can call your office and get access to an external line in order to make business calls. The business call will be charged your office extension number or an account number. You will be charged just for the call to the office.

The external phone must be of push button type provided with pound key (#) and star key (#) or a mobile phone adapted for dial tone pulses (DTMF).

After a completed DISA call you must hang up before a new DISA call can be made.

There are different procedures depending on the type of Authorization Code, or when an Account Code is used.

With common Authorization Code നമദ 000 Call the DISA feature at your office. 000 Dial tone *72* Dial. 000 000 000 # Dial the Authorization Code and press. Dial tone. 000 000 Dial the external number. With individual Authorization Code രമ ð 0 0 Call the DISA feature at your office. Dial tone *75* Dial. 000 000 000 **X** Dial the Authorization Code and press. 000 000 **#** Dial your own extension number and press. Dial tone Dial the external number.

Settings

Handset and loudspeaker volume

Use the Volume keys to adjust the volume of the handset or loudspeaker during a call. Adjust the handset listening volume when the handset is off hook. Adjust the loudspeaker volume when dial tone is heard via the loudspeaker, or during a monitor call.



Press to adjust the volume.

The handset and loudspeaker volume level is stored.

Ring signal volume



Use the Volume keys to adjust the ring signal volume when the phone is in idle mode or ringing. Adjusted volume is stored.

Press to adjust the volume.

Note: The volume will return to the default level in case of a power failure.

Mute ring signal



You can suppress the ring signal for an incoming call.

Press to suppress the ring signal.

The ring signal is switched off for the current call, and your phone is automatically set to Silent Ringing.

Silent Ringing

If you do not want to be disturbed by the ring signal but still want to be able to answer an incoming call, you can switch off the ring signal. Incoming calls are only indicated by a flashing line lamp.



When the phone is in idle mode, or when ringing:

Press to switch off the ring signal.

The Mute key lamp is switched on to indicate Silent Ringing. The ring signal will automatically be switched on the next time you lift the handset or press any key.

Accessories

Pull-out leaf (optional)

The pull-out leaf is used for a personal phone number list and is installed under the phone. To install the pull-out leaf, see section "Installation" on page 62.

Use the DCM (Designation Card Manager) to make and print your own card for the pull-out leaf. DCM is included on the Enterprise Telephone Toolbox CD or it can be downloaded from: http://www.aastra.com

For more information, please contact your Aastra Certified Sales Partner.

Web Server

You can access your IP phone from a PC web browser to edit the function keys, change hearing level, change the ring signal tone character and change the web server password.

To access your IP phone from a PC

On your PC:

Get the IP address and PIN or password to your telephone from your system administrator.

http://130.120.189.28

Enter the IP address in the address field in your web browser. (This address is an example). The web browser shows:



XXXXXX

Enter the telephone PIN or password.

Note: The password is case sensitive!

Note: Use the same PIN as for logging on to the exchange.

Log on Click.

A menu is displayed in the left column, with the following options:

Click to show the sub-menus.

Log off

Click to log off from the web server.

Settings - Programmable keys

Example 2 Settings

Click.

The sub-menus are shown.

Programmable Keys

Click.

A table with the current programming for each key is shown. The key order corresponds to the programmable keys on the telephone, i.e. the Line 1 key is located in the left lower corner.

Note: Text that is not underlined, is a designation for a fixed key and cannot be changed.

To program a key that has not been programmed:

Click for the key to be programmed.

12345 Enter the number or code (example).

Save Click to save.

The key table is shown with the new number or code.

To edit a programmed key:

(Number/Code) Click the underlined number or code for the key to be

changed.

12345 Mark the characters to be changed (example).

467 Enter new characters (example).

Save Click to save.

The key table is shown with the edited number or code.

To delete a programmed key:

(Number/Code) Click the underlined number or code for the key to be

deleted.

Delete Click to delete.

The key table is shown with text **Not programmed** for that key.

To exit the edit and delete menu without any changes:

Programmable Keys Click.

Note: You can also click the Back key.

Settings - Hearing level

The sub-menus are shown.

Hearing level Click.
 The current level is shown in bold characters.

Change Click to change the level.

A confirmation page is shown.

Log off Click to exit,

or

click any menu to continue.

Settings - Ring signal tone character

± Cartings

Click.

The sub-menus are shown.

Ring Character

Click.

The current tone character is displayed.

(0-9) I

Enter a new character.

Save

Click to save.

The phone rings with the chosen character.

Log off

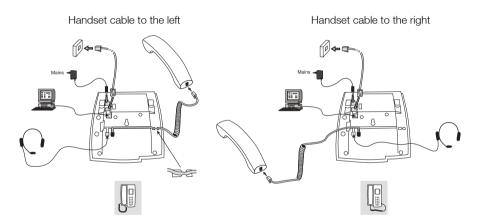
Click to exit,

or

click any menu to continue.

Installation

Install cables



The handset cable has to be plugged into "HANDSET", and the cable to the network has to be plugged into "LAN". If an external power adapter is used this has to be plugged into "POWER". You can put the cable to the handset into the notch underneath the telephone. When only one single wall terminal for the local network is available, a PC can be connected to "PC" so that it is connected to the network via the phone.

The phone can be powered either from the network or from a 24 V AC/AC plug-in power adapter.

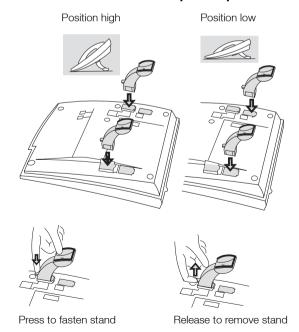
 Only use applicable 24 V AC/AC plug-in adapters (power supplies) listed below or an adapter approved by your local reseller.

Aastra product number	Power rating	Supplier	Supplier product number
RES 141 312/1	20VA 230V/24V	Toroid, Sweden	HBP 90120
RES 141 314/1	20VA 230V/24V	Toroid, Sweden	HBP 90220 (for Great Britain, Hong Kong, Singapore)
RES 141 315/1	20VA 120V/24V	Jameco, USA	AC2410F1 (model number ADU240100)

Change cables

To remove a cable, use a screwdriver to unlock the stop.

Install stands and adapt telephone



Install card

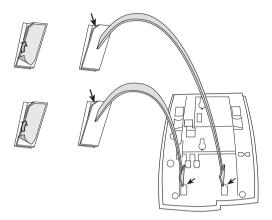
Use the Designation Card Manager to make and print your own designation cards. DCM is included on the Enterprise Telephone Toolbox CD or it can be downloaded from:

http://www.aastra.com

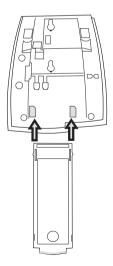
For more information, please contact your Aastra Certified Sales Partner.



Install pull-out leaf (optional)



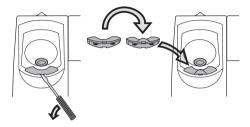
- 1 Remove the protective film from the guiding rails.
- 2 Attach the guiding rails to the bottom of the phone, observing the direction of the "cut" corner.



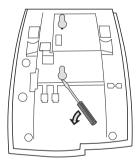
3 Insert the pull-out leaf.

Wall mounting

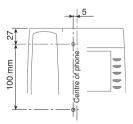
The phone can be wall mounted, useful for instance in conference rooms or public areas.



- 1 Use a screwdriver to remove the handset hook.
- 2 Turn the hook upside down and insert.

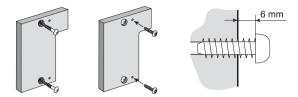


3 Use a screwdriver to remove the two plastic covers.



4 Drill appropriate wall holes according to measurements given here.

Wall screws Ø max 5mm.



- 5 Mount the spacer (article no. SXK 106 2049/1) on the wall. Wall screws (not supplied) \varnothing max 5mm.
- 6 Place screws according to measurements and mount the phone.

Placing the phone

Do not expose your phone to direct sunlight for long periods. Keep the phone away from excessive heat and moisture.

Cleaning

Clean your phone only with a soft, water dampened cloth. Using soap or any other cleaning materials may discolor or damage the phone.

Troubleshooting

This section contains information on how to solve common operational problems, and warnings you may receive.

Go through the following list if you encounter any problems. If this checklist does not cover the problem, contact your system administrator. If others have similar problems, there may be a system error.

Fault	Probable cause	Action or comment
The phone is locked	Disturbance on the network.	Press the Clear key, Mute key and # simultaneously for one or two seconds. This will restart the phone.
The Status lamp is extinguished.	There is no power.	Verify that the phone has power support.
The Status lamp is double flashing.	There is no connection to the network.	Verify that the phone is connected to the network by checking the connection.
The Status lamp is flashing slowly.	The phone is not registered or you are not logged on.	Contact your system administrator for assistance.

Glossary

Call mode The different states your phone is in; calling, ringing,

forwarded, etc.

Exchange Switch. Your telephone switching system.

Idle mode The state your phone is in when nothing is activated; not

calling, not ringing, not forwarded etc.

LAN Local Area Network.

Speed Dialing number Abbreviated number or short number, used for making

frequently used numbers faster to dial.

Triple Access Line A collective name for Line 1, Line 2 and Inquiry lines. Line 1

and Line 2 forms your extension number and are available both for incoming and outgoing calls. Inquiry can only be used

for outgoing calls.

Index

A	E
Absence Information 40	Emergency mode 50
Accessories 56	External Follow-me 32
Pull-out leaf 56	
Account Code 49	F
Answer calls 14	Free on 2nd access 16
В	G
Bypass 25	General Deactivation 50
	Glossary 69
C	Group Call-pick-up 47
Call Forwarding	Group features 46
External Follow-me 32	Group Hunting 48
Internal Follow-me 30	
Personal Number 33	Н
Call forwarding 30	Handset and loudspeaker volume 54
Call Waiting 23	Hold 27
Callback 22	Hot-Line 52
Common Bell Group 47	
Common Speed Dialing numbers 25	1
Conference 28	Important user information 6
Copyright 5	Incoming calls 14
D	Answer a second call 16
D	On another extension 15
Declaration of conformity 5	On Line 1 14
Description 7	On Line 2 or Monitoring key 14
Lamp indications 10 Tones and signals 11	Parallel Ringing 17
Dial by a function key 25	Individual External Line 20
Dial by a monitoring key 25	Inquiry 27
DISA = Direct Inward System Access 53	Installation 62 Internal Follow-me 30
Disposal of the product 6	Internal Follow-me 30 Internal messages 42
During calls 26	Intrusion 24
Conference 28	IIIII USIOIT 24
Hold 27	K
Inquiry 27	••
Microphone on or off 26	Key Monitoring 51
Monitoring 26	

ı Lamp indications 10 Parallel Ringing 17 Last External Number Redial 21 Personal Number 33 Pull-out leaf 56 Maclicious Call Tracing 52 Mailbox 46 Refer Back 27 Make calls 19 Reset the phone 13 Malicious Call Tracing 52 Ring signal volume 54 Manual Message Waiting (MMW) 42 Ring signals 12 Message Waiting 43 Messages 42 Manual Message Waiting (MMW) 42 Safety instructions 6 Message Waiting 43 Setting form for search profiles 39 Voice Mail 44 Settinas 54 Monitorina 26 Handset and loudspeaker volume 54 Mute 26 Mute ring signal 54 Mute ring signal 54 Ring signal volume 54 Silent Ringing 55 Silent Ringing 55 Night Service 51 SOS calls (Emergency calls) 20 Number Presentation Restriction 21 Start the phone 13 Startup procedure 13 0 Other useful features 49 Outgoing calls 19 To access your IP phone from a PC 58 Tones and signals 11 Bypass 25 Call Waiting 23 Troubleshooting 68 Callback 22 External calls 19 Individual External Line 20 Voice Mail 44 Internal calls 19 Volume 54 Intrusion 24 Last External Number Redial 21 Monitorina 20 Warranty 5 Number Presentation Restriction 21 Web server 57 SOS calls (Emergency calls) 20 Welcome 4 When you receive a busy tone 22 When you receive a busy tone 22