

Using Quadro Features on IP Phones



Abstract: This document explains how to use Quadro telephony services on IP phones tested with the Quadro and provides with the feature codes dialed on IP phones to access those services.

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1 Introduction

This document explains how to use Quadro telephony services on IP phones tested with the Quadro and provides with the feature codes dialed on IP phones to access those services.

Note that the feature codes are functional regardless of whether the IP phone is connected to the Quadro locally (the phone is configured as a Quadro's local IP extension) or remotely (the phone is configured as a Quadro's remote extension).

2 References

- Quadro Manual-II: Administrator's Guide of the corresponding release.
- Quadro Manual III: Extension User's Guide of the corresponding release
- IP Phones and IP Lines Configuration Guide

3 Requirements and Preparations

- SW 3.1.x is running on Quadro2x/4x/16x.
- Quadro is connected to the network and all network settings are done without any issue.
- IP phone is connected to the Quadro, powered up and appropriately configured.

4 SIP Phones Tested with the Quadro

For optimal compatibility with Quadro2x/4x/16x, we recommend that you use the following SIP phones:

Vendor	Model	Software
Aastra	480i	Firmware Version: 1.3.0.1080 Boot Version: 1.1.0.4
ACT	P104SLD	Version 02.09
ATCOM	AT-320	1.48
CISCO	7960	POS3-07-4.00
IpDialog	ST201	Application: SipTone 1.2.0 rc Z_21
IWATSU	IX-6IPKTD-A(WH)	Firmware: 2.00.09V4A
POLYCOM	SoundPoint IP300SIP	Application: SIP software 1.3.1.0056 Boot: BootROM 2.5.0.0006
SIPUra	SPA 841	3.1.4(a)
Snom	190	Application: snom190-SIP 3.60s
Snom	200	Application version 3.56m
Snom	220	Application version 3.56m
Snom	320	Application: snom320-SIP 4.2
Snom	360	Application: snom360-SIP 4.1
Swissvoice	IP 10S	Application version: IP10 SP v1.0.0 (Build 16) Boot version: IP10 Boot v1.0.7

5 Limitations on Using Quadro Services on IP Phones

The following services of the Quadro are not available on IP phones.

- Hotline.
- Distinctive ringing.
- Feature codes for disconnecting conference participants from a conference call.

The Voice Mail Indication feature is available with the following limitation.

- Voice Mail Indication is activated on the Quadro, but the indication type (lamp, tone, or ringing) should be selected on the phone. For more information on the voice mail indication types available on your IP phone and how to activate them, please refer to the User's Manual of that phone.

For other services of the Quadro not supported by an individual SIP phone, refer to **Limitations Specific to the *corresponding* Phone** section below.

Attention: We do not guarantee the correct functionality of a SIP phone's feature if the Quadro has no support for that. Moreover, if a particular feature is supported both by the Quadro and a SIP phone, the Quadro's feature has to be used. Using a SIP phone's feature not supported by the Quadro is left at the user's own risk.

6 Quadro Feature Codes on IP Phones

A feature code is a combination of keys dialed on a phone (analogue or IP) connected to the Quadro to access Quadro's telephony services.

Quadro's telephony services are divided into three groups: **PBX**, **Voice Mail**, and **Auto Attendant** services. Each of these groups has its own hierarchy.

PBX services comprise

- **PBX services accessible at the dial tone.**
- **PBX services accessible during a call.**

This section presents the feature codes for **PBX services accessible at the dial tone**, **Voice Mail**, and **Auto Attendant services**.

The feature codes for **PBX services accessible during a call** are different on different IP phones. For those codes, please refer to the **Feature Codes on the *corresponding* Phone** section below

6.1 Establishing a call

To establish a call, dial the appropriate **Routing Number**. **Routing Numbers** and available routs to, from and through Quadro are listed in the **Local Routing Table**, which is configured and managed by Quadro's administrator. To get information about dialing rules, please turn to administrator.

Please Note: You may accelerate establishing a connection by a pound (#) sign dialed at the end of the number.

6.2 PBX Services Accessible at the Dial Tone

The table below presents the feature codes for PBX services accessible at the dial tone, characterized by starting with the key *.

Services	Keys
Enter Voice Mail System	* 0
Busy Autoretrial	* 1
Call Back	* 2
Forwarding Activating/deactivating	* 4
Call Park After putting the call on hold	* 5
Do Not Disturb Activating/deactivating	* 7 2
Block Last Caller (Within 10 sec. after terminating the call)	* 7 3
Getting the line information	* 7 4
Administrator login	* 7 5

6.2.1 To Use Busy Autore dial

Service is functional for SIP and PBX calls only. For PSTN calls, feature works as a single redial (with no multiple attempts to reach the called destination).

Dial *1 to redial the last number that you called.

If the called number is busy, after dialing *1, stay with the handset lifted to activate the automatic redialing of the last called number for the time period specified on the **Autore dial Settings** page (User login→Call Handling→Autore dial).

The autore dial terminates as soon as

1. The called number is idle and you hear ring back tones,
2. The specified **Autore dial Period** has expired.

A beep sound will be heard if no autore dialing is possible.

6.2.2 To Call Back

Dial *2. The system will call back the last caller.

"The dialed number doesn't exist" voice message will be played if no call back is possible.

6.2.3 To Activate Forwarding Service

Dial *4 and hang up. The Unconditional Call Forwarding service with the settings specified for **Any Address/Other Addresses** on the **Caller ID Based Services page** will get activated (User login→Supplementary Services).

Use the same key combination to deactivate the service.

The feature code will have no effect if no unconditional forwarding is configured for **Any Address/Other Addresses**. Instead, the system will ask to configure the forwarding settings first.

6.2.4 To Park a Call

The service requires initial configuration from the Quadro web management, i.e. at least one extension should be configured to be used for call parking.

Put the call to park on hold by using the hold key/soft key of the IP phone. See the **Feature Codes on the corresponding Phone** section below.

Switch to a free line and dial *5. The system will play the extension number of a call-park extension. This is usually the first available extension initially configured for call parking. If the call-park extension is registered with a SIP server, the system will also play the SIP username of the extension.

To retrieve the parked call locally, dial the prompted call-park extension number on any phone locally connected to the Quadro. In case of remote access, dial the SIP username of the extension. The system will ask for authentication. Enter the password of the call-park extension, or press # if the extension has no password specified.

Attention: Call Parking is valid within 15 minutes, during which hold music (if configured) will be played to the held party. When the Call Park timeout expires, the phone initiating call parking will start ringing, and if nobody picks up the parked call, or if the phone is off hook, the parked party will be automatically disconnected.

6.2.5 To Switch Do Not Disturb Mode

Dial *72 and hang up. Your phone bell will be off during the period indicated on the **Do Not Disturb Settings** page (User login→Call Handling) and all incoming calls will be directly forwarded to your voice mail (if the voice mail service is activated).

Use the same key combination to deactivate the DND service.

6.2.6 To Block Last Caller

Dial *73. The last caller will be blocked and a corresponding entry will be added to the **Caller ID Based Services** (User login→Supplementary Services) page.

Attention: This service can be activated within 10 seconds after call termination. To unblock the blocked party, go to the **Caller ID Based Services** page and disable the **Incoming Call Blocking** service for the blocked address. If no other services are enabled for the address, you may delete the entry from the table.

Blocking the caller with anonymous caller ID (like anonymous@anonymous or similar) will lead to blocking all callers with unknown caller address.

6.3 Voice Mail Services

The **Voice Mail Services** are divided into two main parts: **Voice Mailbox** and **Review System Messages**. Each of these parts has a hierarchy itself that is described below.

* 0 Enter Voice Mail Services		
* 0 Exit Voice Mail Services	* 1 Go to the top of the voice Mail Services Tree	* 2 Go one level up in the Voice Mail Services Tree

Voice Mailbox

* 0 Enter Voice Mail Services								
1 New Messages Menu			3 Review System Messages					
1 Send a Message or Leave a Reminder	2 Play First Message	3 Get Date/Time info	1 Greeting Message (GM)	2 End of Greeting Message (EGM)	3 Incoming Blocking Message (IBM)	4 Outgoing Blocking Message (OBM)	5 Your Name	6 Out of Office Message (OFM)
4 Play Previous Message	5 Play Current Message	6 Play Next Message	1 Listen to current GM	1 Listen to current EGM	1 Listen to current IBM	1 Listen to current OBM	1 Listen to current Name	1 Listen to Current OFM
7 Print the attached FAX (and press START on the FAX machine)	8 Play Last Message	9 Delete Current Message	2 Record a New GM	2 Record a New EGM	2 Record a New IBM	2 Record a New OBM	2 Record a New Name	2 Record a New OFM
* *	0 Reply or Forward a Message	# #	3 Restore Default GM	3 Restore Default EGM	3 Restore Default IBM	3 Restore Default OBM	3 Restore Default Name	3 Restore Default OFM
# Stop Recording or Playback								

The **New Messages** mailbox has the following sub-hierarchy in the **Reply or Forward a Message** and **Send a Message or Leave a Reminder** menu options:

0 Reply or Forward a Message		
0 Call Back immediately	1 Reply by Voice Mail	2 Forward a Message
	Dial 1 to mark the message as Urgent, or press pound to assign the Normal priority.	Dial Destination Number
	# Record a Message	# Record a Message
		# Record a Message
		Dial 1 to mark the message as Urgent, or press pound to assign the Normal priority.

1 Send a Message or Leave a Reminder		
Dial Destination Number		# Leave a reminder
# Record a Message	Dial additional Destination Number	Dial 1 to mark the message as Urgent, or press pound to assign the Normal priority.
	# Record a Message	
Dial 1 to mark the message as Urgent, or press pound to assign the Normal priority.		

Please Note: The service is restricted regarding sending a message to the PSTN destinations. Message will be successfully received by the destination if all of the following conditions fit:

- The connection to the destination is successful;
- The voice mail service is enabled on the destination;
- There is enough space in the voice mailbox of the destination;
- The duration of the forwarded/replied message is less than the maximal voice mail duration set up by the destination

Voice Mail Services for Incoming Calls:

Calling to the extension's Voice Mailbox		In call queue
0 (during the greeting message) Calling to the Zero Out destination	# Skip the greeting message and start Voice Mail recording	0 Leave the call queue and record a Voice Mail

6.4 Feature Codes in Auto Attendant

For external IP calls addressed to the Auto Attendant or incoming calls from FXO lines routed to the Auto Attendant or local by dialing the 2-digit attendant extension, following key combinations are available to access and manipulate within Auto Attendant services:

Incoming call to Auto Attendant Services or dial locally	Keys
Extensions Menu - establishing a connection to an extension on the called Quadro	(already in)
Remote Enquiry - establishing a connection to the mailbox of an extension on the called Quadro	* 0
<p>Call Relay Menu - mainly for external calls (IP/FXO or IP/ISDN), local calls are allowed, too.</p> <p>Service allows to avoid hanging up and redo the entire dialing, if Quadro detects an error in the dialed number or the user decides to cancel the call and start a new one: Entering the combination * * the call will be interrupted and the user will get an invitation to make a new one.</p>	* 2
<p>* * digit combination is applicable:</p> <ul style="list-style-type: none"> • During the dialing, • After ring tones start, • After call establishment. <p>Under the following restrictions:</p> <ul style="list-style-type: none"> • This feature can be used when accessing the AA from the PSTN line to make IP or local calls • This feature can be used when calling to PSTN through the AA • This feature is not available on the second Quadro Auto Attendant (calling from one Auto Attendant to another) 	
Remote Configuration Menu – allows remote enabling/disabling of Unconditional Call Forwarding service for Page: 13 Any Address/Other Addresses on the extension.	* 4
Non Permanent Call Back – initiates an instant call back from the Quadro's Auto Attendant to the PSTN caller.	* 5
Permanent Call Back – registers the PSTN caller to the Authorized Phones Database and initiates an instant call back from the Quadro's Auto Attendant to the PSTN caller.	* 6
Extensions Directory - accesses Quadro extensions by spelling the extension's user name using keypad on the phone	#

Please note: For more information on Quadro's Auto Attendant Services, please refer to Manual III: Extension User's Guide of the corresponding release.

6.4.1 Administrator Login

At the moment, the administrator login allows only the modification of the auto attendant (AA) greeting and Universal Extension Messages. After dialing *75, use key 1 to enter the auto attendant greeting menu and use key 3 to enter the Universal Extension Messages menu. The key combinations beside are available to modify the auto attendant greetings.

*75 Administrator Login							
1 Auto Attendant Greeting	2 Auto Attendant Menu Message	3 Universal Extension Messages					
1 Listen to Current AA Greeting	1 Listen to AA Menu Message	1 Greeting Message (GM)	2 End of Greeting Message (EGM)	3 Incoming Blocking Message (IBM)	4 Outgoing Blocking Message (OBM)	5 Your Name	6 Out of Office Message (OFM)
2 Record a New AA Greeting	2 Record a New AA Menu Message	1 Listen to Current GM	1 Listen to Current EGM	1 Listen to Current IBM	1 Listen to Current OBM	1 Listen to Current Name recorded	1 Listen to Current OFM
3 Restore Default AA Greeting	3 Restore Default AA Menu Message	2 Record a Universal GM	2 Record a Universal EGM	2 Record a Universal IBM	2 Record a Universal OBM	2 Record a Universal Name	2 Record a Universal OFM
# Stop Recording or Playback	# Stop Recording or Playback	3 Restore System Default GM	3 Restore System Default EGM	3 Restore System Default IBM	3 Restore System Default OBM	3 Restore System Default Name	3 Restore System Default OFM
		# Stop Recording or Playback GM	# Stop Recording or Playback EGM	# Stop Recording or Playback IBM	# Stop Recording or Playback OBM	# Stop Recording or Playback Name Message	# Stop Recording or Playback OFM
*0 Administrator's Logout							

7 Snom190

7.1 Limitations Specific to Snom190

There are no additional limitations except for those mentioned in [Quadro Feature Codes on IP Phones](#).

7.2 Feature Codes on Snom190

This section presents the feature codes for **PBX Services accessible during a call** specific to Snom190 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys/Soft Keys
Call Hold	R/Hold
Call Waiting	Key with a blinking LED
Call Blind Transfer, Call Transfer with Consultation	"Xfer"¹ or Transfer
Call Conference	"Cnf.On"

7.2.1 To Put a Call on Hold

During a call, press the **R/Hold** key. This puts the call in progress on hold and provides a dial tone on a free line. While a call is on hold, you can make a second call by dialling your desired phone number. To resume the call on hold, press either the **R/Hold** key again or the line key associated with the held call.

You can also put a call on hold and immediately get a dial tone by pressing any free line key.

7.2.2 To Accept a Second Incoming Call

Press the key with a blinking LED. This puts the call in progress on hold and receives an incoming call.

To terminate the call in progress and resume the one on hold, press **Cancel**. To put the call in progress on hold and resume the one on hold, press the key with a blinking LED.

7.2.3 To Blind Transfer a Call

During a call, press the soft key **"Xfer"** to hold the call partner and get a dial tone.

Dial the phone number to which the call is to be transferred to and press **OK**. The call partner on hold will be transferred to the specified destination.

¹ The names of soft keys are taken into inverted commas.

7.2.4 To Transfer a Call with Consultation

During a call, press the **Hold** key. This puts the call in progress on hold and provides a dial tone.

Dial the phone number to which the call is to be transferred to. Consult the second party, i.e. to announce the call.

Press the soft key "*Xfer*" or hook on the handset to connect the call partner on hold to the called party.

7.2.5 To Make a Call Conference

When the phone is connected with two calls, one on hold and one active, press the function key "*Cnf.On*" to connect all three parties in a conference.

Pressing the function key "*Cnf.Off*" during a conference disconnects the conference and drops the calls.


8 Snom200

8.1 Limitations Specific to TTSnom200

There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

8.2 Features Codes on TTSnom200

This section presents the feature codes for **PBX Services accessible during a call** specific to TTSnom200 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys/Soft Keys
Call Hold	
Call Waiting	Line key with a blinking LED
Call Blind Transfer, Call Transfer with Consultation	"Xfer" ²
Call Conference	"Cnf.On"

8.2.1 To Put a Call on Hold

During a call, press the **R/Hold** key. This puts the call in progress on hold and provides a dial tone on a free line. While a call is on hold, you can make a second call by dialling your desired phone number. To resume the call on hold, press either the **R/Hold** key again or the line key associated with the held call.

You can also put a call on hold and immediately get a dial tone by pressing any free line key.


8.2.2 To Accept a Second Incoming Call

Press the key with a blinking LED. This puts a call in progress on hold and receives an incoming call.

To terminate the call in progress and resume the one on hold, press **Cancel**.


8.2.3 To Blind Transfer a Call


During a call, press the soft key "**Xfer**". This puts the call in progress on hold and provides a dial tone.

Dial the phone number to which the call is to be transferred to and press the key . The call partner on hold will be transferred to the specified destination.

² The names of soft keys are taken into inverted commas.

8.2.4 To Transfer a Call with Consultation

During a call, press the hold key . This puts the call in progress on hold and provides a dial tone.

Dial the phone number to which the call is to be transferred to and press the key . Consult the second party, i.e. to announce the call.

Press the soft key "**Xfer**" or hook on the handset to connect the call partner on hold to the called party.

8.2.5 To Make a Call Conference

When the phone is connected with two calls, one on hold and one active, press the function key "**Cnf.On**" to connect all three parties in a conference.

Pressing the function key "**Cnf.Off**" during a conference disconnects the conference and drops the calls.

9 Snom220

9.1 Limitations Specific to Snom220

There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

9.2 Features Codes on Snom220

This section presents the feature codes for **PBX Services accessible during a call** specific to Snom220 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services	Keys
Call Hold	Hold or F1
Call Waiting	Key with a blinking LED
Call Blind Transfer, Call Transfer with Consultation	F2
Call Conference	F3

9.2.1 To Put a Call on Hold

During a call, press the **Hold** key. This puts the call in progress on hold and provides a dial tone on a free line. While a call is on hold, you can make a second call by dialling your desired phone number. To resume the call on hold, press either the **Hold** key again or the line key associated with the held call.

You can also put a call on hold and immediately get a dial tone by pressing any free line key.

9.2.2 To Accept a Second Incoming Call

Press the key with a blinking LED. This puts a call in progress on hold and receives an incoming call.

To terminate the call in progress and resume the one on hold, press **Cancel**. To put the call in progress on hold and resume the one on hold, press the key with a blinking LED.

You may also reject an incoming call by pressing **F4** or **Cancel**.

9.2.3 To Blind Transfer a Call

During a call, press the key **F2** to hold the call partner and get a dial tone.

Dial the phone number to which the call is to be transferred to and press **OK**. The call partner on hold will be transferred to the specified destination.

9.2.4 To Transfer a Call with Consultation

Press the **Hold** key to hold the call partner and get a dial tone.

Dial the phone number to which the call is to be transferred to. Consult the second party, i.e. to announce the call.

Press the function key **F2** to connect the call partner on hold to the called party.

9.2.5 To Make a Call Conference

When the phone is connected with two calls, one on hold and one active, press the function key **F3** (or the key **Conf**) to set a conference.





10 Snom320

10.1 Limitations Specific to Snom320



There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

10.2 Features Codes on Snom320

This section presents the feature codes for **PBX Services accessible during a call** specific to Snom320 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys/Soft Keys
Call Hold	
Call Waiting	Key with a blinking LED
Call Blind Transfer	"Xfer" ³ + number + 
Call Transfer with Consultation	 + number +  + consult + "Xfer"
Call Conference	"Cnf.On"

10.2.1 To Put a Call on Hold

During a call, press the hold key . This puts the call in progress on hold and provides a dial tone on a free line. While a call is on hold, you can make a second call by dialling your desired phone number. To resume the call on hold, press either the hold key  again or the line key associated with the held call.


You can also put a call on hold and immediately get a dial tone by pressing any free line key.


10.2.2 To Accept an Incoming Call

Press the key with a blinking LED. This puts the call in progress on hold and receives an incoming call.

To terminate the call in progress and resume the one on hold, press **Cancel**.


10.2.3 To Blind Transfer a Call


During a call, press the soft key **"Xfer"** or the transfer key . This puts the call in progress on hold and provides a dial tone.


Dial the phone number to which the call is to be transferred to and press . The call partner on hold will be transferred to the specified destination.

³ The names of soft keys are taken into inverted commas.


10.2.4 To Transfer a Call with Consultation


During a call, press the hold key . This puts the call in progress on hold and provides a dial tone.

Dial the phone number to which the call is to be transferred to and press the key . Consult the second party, i.e. to announce the call.

Press the soft key "**Xfer**" or the transfer key  to connect the call partner on hold to the called party.

10.2.5 To Make a Call Conference

When the phone is connected with two calls, one on hold and one active, press the soft key "**Cnf.On**"  to connect all three parties in a conference.

Pressing the function key "**Cnf.Off**" or  disconnects the conference and drops the calls.










11 Snom360

11.1 Limitations Specific to Snom360



There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

11.2 Features Codes on Snom360

This section presents the feature codes for **PBX Services accessible during a call** specific to Snom360 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys
Call Hold	
Call Waiting	Key with a blinking LED
Call Blind Transfer	 /  + number + 
Call Transfer with Consultation	 + number +  + consult +  / 
Call Conference	

11.2.1 To Put a Call on Hold

During a call, press the hold key . This puts the call in progress on hold and provides a dial tone on a free line. While a call is on hold, you can make a second call by dialling your desired phone number. To resume the call on hold, press either the flash key  or the line key associated with the held call.



You can also put a call on hold and immediately get a dial tone by pressing any free line key.


11.2.2 To Accept a Second Incoming Call

Press the key with a blinking LED. This puts the call in progress on hold and receives an incoming call.


To terminate the call in progress and resume the one on hold, press **Cancel**.


11.2.3 To Blind Transfer a Call

During a call, press the transfer key  / . This puts the call in progress on hold and provides a dial tone.

Dial the phone number to which the call is to be transferred to and press . The call partner on hold will be transferred to the specified destination.


11.2.4 To Transfer a Call with Consultation

During a call, press the hold key . This puts the call in progress on hold and provides a dial tone.

Dial the phone number to which the call is to be transferred to and press the key . Consult the second party, i.e. to announce the call.

Press the transfer key  /  to connect the call partner on hold to the called party.

11.2.5 To Make a Call Conference

When the phone is connected with two calls, one on hold and one active, press the conference key .

Pressing the function key  or  disconnects the conference and puts the calls on hold.

12 Polycom SoundPoint IP300

12.1 Limitations Specific to Polycom SoundPoint IP300

There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

12.2 Features Codes on Polycom SoundPoint IP300

This section presents the feature codes for **PBX Services accessible during a call** specific to Polycom SoundPoint IP300 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Soft Keys
Call Hold	Hold (the key is also possible)
Call Waiting	Hold
Call Blind Transfer	More→Trnsfr → Blind
Call Transfer with Consultation	More→Trnsfr → Dial→Trnsfr
Call Conference	More→Conf → Dial → Conf

12.2.1 To Put a Call on Hold

During a call, press either the key **Hold** on the keypad or the soft key **Hold**. To resume the held call, press **Resume**.

12.2.2 To Accept a Second Incoming Call

Put a call in progress on hold (see above).

Use the arrow keys on the keypad to receive a second call.

Press **Answer** to receive the call or **Reject** to reject it.

12.2.3 To Blind Transfer a Call

During a call, press the soft key **More**, then **Trnsfr**. This puts the call in progress on hold.

Press **Blind** to get a dial tone.

Dial the phone number to which the call on hold is to be transferred to and press **Dial**. You will be disconnected automatically from both calls.

12.2.4 To Transfer a Call with Consultation

During a call, press the soft key **More**, then **Trnsfr**. This puts the call in progress on hold.

Dial the phone number to which the call on hold is to be transferred to and press **Dial**. Consult the called party, i.e. to announce the call.

Press **Trnsfr** again to transfer the call on hold to the called number. You will be automatically disconnected from both calls.

12.2.5 To Make a Call Conference

During a call, press the soft key **More**, then **Conf**. This puts the call in progress on hold.

Dial the phone number to which the call on hold is to be transferred to and press **Dial**.

Press **Conf** to join both calls into a conference.

13 Cisco IP Phone 7960

13.1 Limitations Specific to Cisco IP Phone 7960

There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

13.2 Feature Codes on Cisco IP Phone 7960

This section presents the feature codes for **PBX Services accessible during a call** specific to Cisco IP Phone 7960 and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services	Soft Keys
Call Hold	Hold
Call Waiting	Answer
Call Blind Transfer	More→BldXfer
Call Transfer with Consultation	More→Trnsfr
Call Conference	Conf

13.2.1 To Put a Call on Hold

During a call, press the **Hold** soft key.

To make a new call while another one is on hold, press the **New Call** soft key.

To resume the held call, press the **Resume** soft key.

13.2.2 To Accept a Second Incoming Call

Attention: To accept an incoming call while in a call, make sure that the call waiting service for that extension is activated **BOTH** on the Quadro (**Call Handling→Call Waiting→Enable Call Waiting Service**) **AND** on the phone (**Settings→Call Preferences→Call Waiting**).

During a call, press the soft key **Answer** to put the call in progress on hold and receive an incoming one. To switch between the calls, use arrow keys in the middle of the base unit. To terminate a call, press the **End Call** soft key.

13.2.3 To Blind Transfer a Call

During a call, press **More** then **BldXfer** soft keys. This puts the call in progress on hold and provides a dial tone on the line.

Dial a phone number to which the held call is to be transferred to and press the **Dial** soft key. You will be disconnected automatically as soon as the call reaches the destination number.

13.2.4 To Transfer a Call with Consultation

During a call, press **More** then **Trnsfr** soft keys. This puts the call in progress on hold and provides a dial tone on the line.

Dial the phone number to which the held call is to be transferred to and press the **Dial** soft key. Consult the called party, i.e. to announce the call.

Press the soft key **Trnsfr** again to transfer the call on hold. You will be automatically disconnected from both calls.

13.2.5 To Make a Call Conference

During a call, press the soft key **Conf**. This puts the call in progress on hold.

Dial a third participant's phone number and press the soft key **Dial**. Consult the called party, i.e. to announce the call conference.

Press **Join** to set a conference with both parties. If you choose to terminate the conference by pressing **End Call**, the two parties in the conference can still continue the call.

14 Swissvoice IP 10S

14.1 Limitations Specific to Swissvoice IP 10S

The Swissvoice IP 10S SIP-phone does not support the **Call Conferencing** feature.

See also [Limitations on Using Quadro Services on IP Phones](#).

14.2 Feature Codes on Swissvoice IP 10S

This section presents the feature codes for **PBX Services accessible during a call** specific to Swissvoice IP 10S and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Soft Keys
Call Hold	L2/OK
Call Waiting	OK
Call Blind Transfer	Blind Transfer (from Services)
Call Transfer with Consultation	Transfer (from Services)

14.2.1 To Put a Call on Hold

There are two options of putting a call on hold:

- 1 During a call, press the soft key **OK** to put the call in progress on hold and get a dial tone. You may make a second call while the first one is on hold.
or
- 2 During a call, press the key with a white dot on and select the **Hold** sub-item by pressing **OK**. The party is put on hold but a dial tone is *not* provided on the line.

To resume the held call, press **OK** again.

14.2.2 To Accept a Second Incoming Call

Press the key **OK** to put the call in progress on hold and accept an incoming call.

To terminate the call in progress and resume the held one, press the key **C**. To put the call in progress on hold and resume the held one, go one level up by the upward arrow key and press **OK**.

14.2.3 To Blind Transfer a Call

During a call, press the key with a white dot on.

Select the **Blind Transfer** sub-item (use arrow keys to move up or down through the menu items) and press **OK**. The call in progress is put on hold and a dial tone is provided on the line enabling you to make a call.

Dial a phone number to which the call is to be transferred to and press **OK**. The call partner on hold is transferred to the specified destination.

14.2.4 To Transfer a Call with Consultation

This service is available when you are in a call.

Switch to the second line by pressing **OK** and make or accept an incoming call. The call in progress is put on hold.

Press the key with a white dot on.

Select the **Transfer** sub-item (use arrow keys to move up or down through the menu items) and press **OK**. The call partner on hold will be transferred to the called or calling number.

15 Aastra 480i

15.1 Limitations Specific to Aastra 480i

If the phone has been configured through the Quadro using the auto-configuration option, the following features will not be working on the phone:

1. Speed calling.
2. Accessing FXO in selective mode. In this mode, you may place an outgoing FXO call though the selected FXO line by dialing "*PSTN-access code*+ * + *FXO line number*".

To enable those features, you need to change the dial plan on the phone:

- Open a browser on a PC connected to the Quadro LAN and enter the phone's IP address into the address bar of the browser, (e.g. <http://172.30.15.95>). The phone will require authentication.
- Enter the username and password (by default, **admin** and **22222**) and press OK.
- In the right navigation window on the left, click **Preferences**.
- Enter "**X+^**" into the **Local Dial Plan** text field and click the **Save Settings** button.

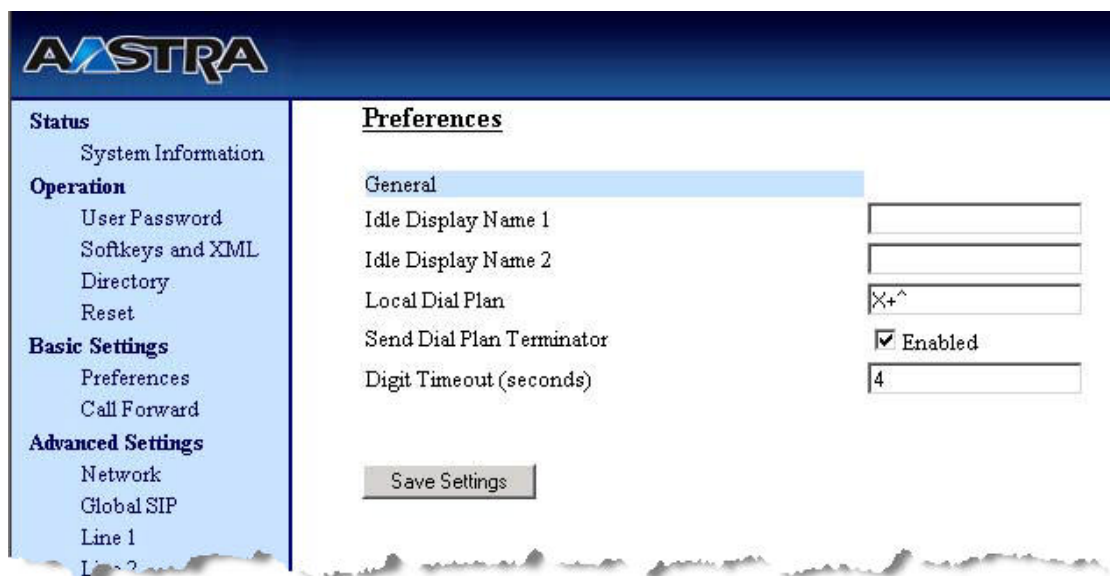


Figure 1 Preferences Page

See also [Limitations on Using Quadro Services on IP Phones](#).

15.2 Feature Codes on Aastra 480i

This section presents the feature codes for **PBX Services accessible during a call** specific to Aastra 480i and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

Please Note: Almost all PBX services described in the **Feature Codes for SIP Phones** section can be accessed by using corresponding soft keys. For example, instead of dialing ***74** to get the line information, you can press the soft key **"Line info."**

PBX Services	Keys / Soft Keys
Call Hold	Hold
Call Waiting	"Pickup"⁴
Call Blind Transfer	Xfer → <i>dial the number</i> → "Call" → Xfer
Call Transfer with Consultation	Xfer → <i>dial the number</i> → " Call" → <i>consult</i> → Xfer
Call Conference	Conf → <i>dial the number</i> → "Call" → Conf

15.2.1 To Put a Call on Hold

To put a call in progress on hold, press the **Hold** key on the phone keypad. The LED of the corresponding line key starts blinking, indicating that you have a call on hold.

To resume the call on hold, either press the **"Pickup"** soft key or press the line key with a blinking LED.

While a call is on hold you can make a second call by switching to a free line available: press the corresponding line key. This provides a dial tone on that line enabling you to make a second call.

Please Note: You can put a call on hold and switch directly to another line by pressing a free line key during a call.

15.2.2 To Accept a Second Incoming Call

To accept a second call when you are in a call, either press the line key with a flickering LED or press the **"Pickup"** soft key. Accepting a second call puts the call in progress on hold.

To switch between the calls, use the line keys (**L1** to **L4**): press the key with a blinking LED to resume the call on hold and put the current one on hold.

To terminate a second call and return to the held one, press the **"Drop"** then **"Pickup"** soft keys.

15.2.3 To Blind Transfer a Call

Press the **Xfer** key during a call to be transferred. This puts the call in progress on hold and provides a dial tone on a free line available.

Dial the number to which the call is to be transferred and press the soft key **"Dial"**.

Press **Xfer** again just as you hear ring tones. The party on hold is transferred to the called party.

⁴ The names of soft key are taken into inverted commas

15.2.4 To Transfer a Call with Consultation

Press the **Xfer** key during a call to be transferred. This puts the call in progress on hold and provides a dial tone on a free line available.

Dial the number to which the call is to be transferred and press the soft key "**Dial**".

Consult the called part and press **Xfer** again. The party on hold is transferred to the called party.

15.2.5 To Make a Call Conference

Press the **Conf** key on the keypad during a call. This puts the call in progress on hold and switches to a free line available.

Dial a third party's phone number and press the soft key "**Dial**". You may talk to the called party while the other is on hold.

Press **Conf** again to join the parties in a conference.

To terminate the conference, press the key **Goodbye** on the keypad. The other two conference participants are also disconnected from the conference.

You may disconnect either of the both parties from the conference and resume the call with the other party:

Use the soft key "**Previous**"/"**Next**" to select the party you would like to disconnect from the conference and press the soft key "**Drop**".

16 IpDialog SipTone II (ST201)

16.1 Limitations Specific to IpDialog SipTone II (ST201)

There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

16.2 Feature Codes on IpDialog SipTone II (ST201)

This section presents the feature codes for **PBX Services accessible during a call** specific to IpDialog SipTone II (ST201) and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys
Call Hold	DND/HOLD or Line1/2
Call Waiting	Line1/2
Call Blind Transfer	VM/XFER
Call Transfer with Consultation	VM/XFER
Call Conference	SET/CONF

16.2.1 To Put a Call on Hold

Press **DND/HOLD** to put the call in progress on hold. To resume a call on hold, press **DND/HOLD** again. While a call is on hold, you can make a second call by switching to line 2 (press **Line1/2**).

Or

Press **Line1/2** to put the call in progress on hold and switch directly to line 2. To terminate the call in progress and resume the held one, press **MENU/HANGUP**. To resume the call on hold without terminating the call in progress, press **Line1/2**.

16.2.2 To Accept a Second Incoming Call

Press **Line1/2** to put the call in progress on hold and accept an incoming call. To switch between the calls, use **Line1/2**. To terminate the active call and resume the held one, press **MENU/HANGUP**.

16.2.3 To Blind Transfer a Call

During a call, press **VM/XFER** and get a dial tone. The call in progress is put on hold and a dial tone is provided on the line enabling you to make a call.

Dial a phone number to which the call on hold is to be transferred to and press **OK**. As soon as the call partner on hold is transferred to the specified destination, you will be disconnected from the held call.

16.2.4 To Transfer a Call with Consultation

During a call, switch to line 2 by pressing **Line1/2** and make (or accept) an incoming call. The call in progress is put on hold. Consult the called (or caller) party.

Press **VM/XFER**. The call partner on hold is transferred to the called (or caller) party disconnecting you from both calls.

16.2.5 To Make a Call Conference

During a call, switch to line 2 by pressing **Line1/2** and make (or accept) an incoming call.

Press **SET/CONF** to join both parties in a conference.

17 Sipura SPA-841 IP Phone

17.1 Limitations Specific to Sipura SPA-841 IP Phone

There are no additional limitations except for those mentioned in [Limitations on Using Quadro Services on IP Phones](#).

17.2 Feature Codes on Sipura SPA-841 IP Phone

This section presents the feature codes for **PBX Services accessible during a call** specific to Sipura SPA-841 IP Phone and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys / Soft Keys
Call Hold	Hold ⁵
Call Waiting	Line key with a blinking LED
Call Blind Transfer, Call Transfer with Consultation	"xfer" → number → "dial" → "xfer"
Call Conference	"conf" → number → "dial" → "conf"

17.2.1 To Put a Call on Hold

During a call press the **Hold** key. The LED of the corresponding line key will flash red, indicating that the call is on hold.

While a call is on hold, you can make a second call: press the line key of a free line available to get a dial tone and dial the number.

To resume a call on hold, press the line key associated with the held call.

If the phone is connected to two calls, one is in progress and the other is on hold, use their line keys to switch between the calls.

17.2.2 To Accept a Second Incoming Call

During a call press the line key with a flickering LED. This puts the call in progress on hold and receives the incoming call.

17.2.3 To Blind Transfer a Call

During a call, press the **"xfer"** soft key, which is the rightmost soft key. This puts the call in progress on hold and provides a dial tone on a free line available.

Dial the number the call is to be transferred to and press the **"dial"** soft key.

Just as you hear ringing tones, press **"xfer"** again. The call on hold will be transferred to the called party.

⁵ The hold button has a **"hand"** sign above it.

17.2.4 To Transfer a Call with Consultation

During a call, press the “**xfer**” soft key, which is the rightmost soft key. This puts the call in progress on hold and provides a dial tone on a free line available.

Dial the number the call is to be transferred to and press the “**dial**” soft key.

After consulting the called party (for example, to announce the call), press the “**xfer**” key again. The call on hold will be transferred to the called destination.

17.2.5 To Make a Call Conference

During a call, press the “**conf**” key, which is the leftmost soft key. This puts the call in progress on hold and provides a dial tone on a free line available.

Dial the third participant’s telephone number and press the “**dial**” soft key.

After the call is established, press the “**conf**” key again to join the held and active calls.

18 Iwatsu SIP Phone

18.1 Limitations Specific to Iwatsu SIP Phone

The Iwatsu SIP phone does not support the **Call Waiting**, **Call Conferencing**, and **Voice Mail Indication** features.

The phone cannot be used as a Quadro Remote Extension if the phone is placed behind a NAT.

See also [Limitations on Using Quadro Services on IP Phones](#).

18.2 Feature Codes on the Iwatsu SIP Phone

This section presents the feature codes for **PBX Services accessible during a call** specific to Iwatsu SIP Phone and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

Please Note: Feature codes in this section are based on the default configuration of the phone.

PBX Services accessible during a call	Keys / Buttons
Call Hold	FK 36 – Hold
Call Blind Transfer	<i>"FK 27" → dial the number → hang up the phone</i>
Call Transfer with Consultation	<i>"FK 27" → dial the number → consult → hang the phone</i>

18.2.1 To Put a Call on Hold

During a call press the hold- **FK 36** key.

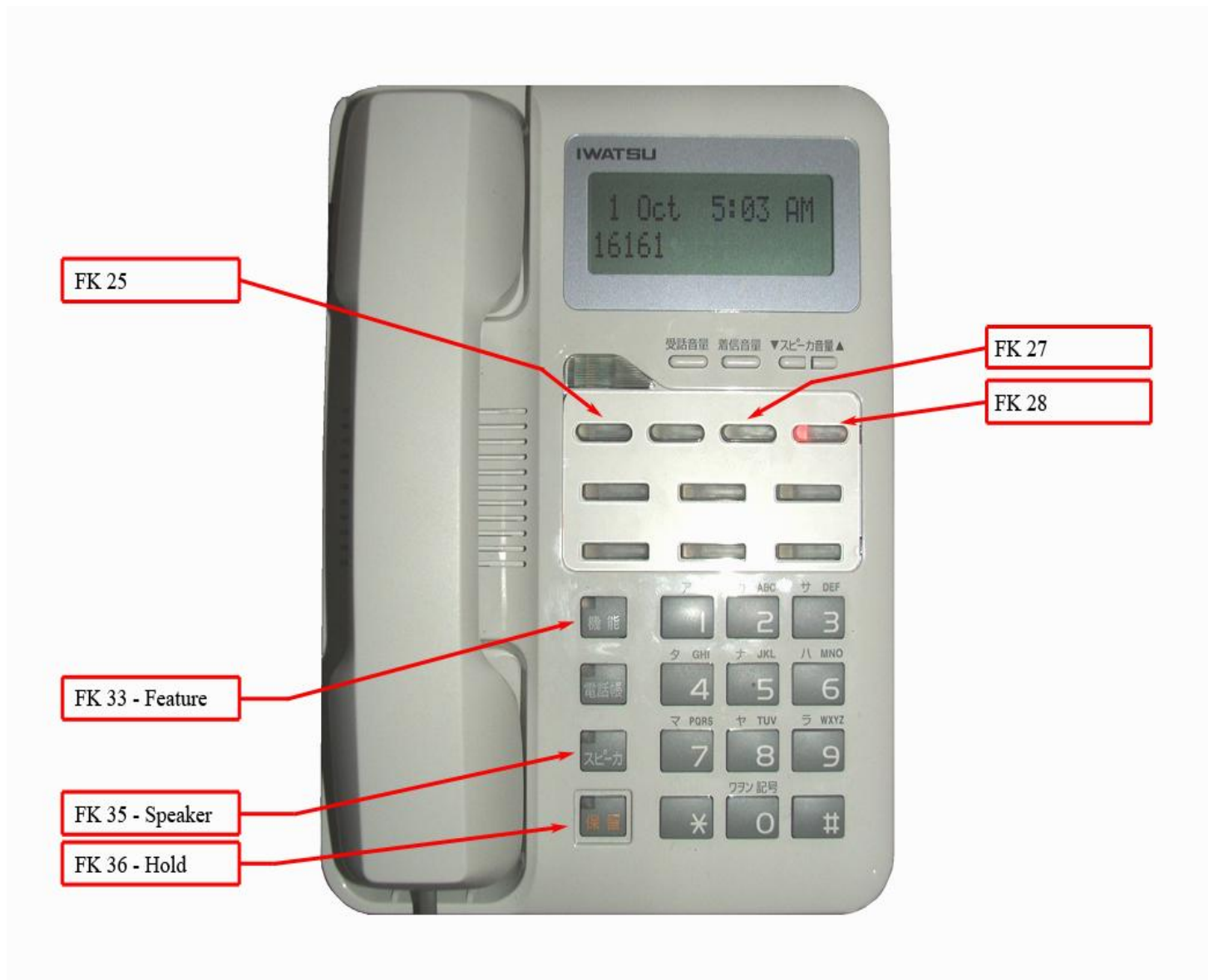
To resume a call on hold, press the hold- **FK 36** key again.

18.2.2 To Blind Transfer a Call

During a call press the Call Transfer-**FK 27** key. This puts the call in progress on hold and provides a dial tone. Dial the number the call is to be transferred to. Just as you hear ringing tones, hang the phone. Call will be transferred to the called destination.

18.2.3 To Transfer a Call with Consultation

During a call press the Call Transfer-**FK 27** key. This puts the call in progress on hold and provides a dial tone. Dial the number the call is to be transferred to. After the call is established, consult the called party (for example, to announce the call) and hang up the phone. The call on hold will be transferred to the called destination.



19 AT-320 SIP Phone

19.1 Limitations Specific to AT-320 SIP Phone

AT-320 SIP Phone does not support the **Call Conferencing** feature.

See also [Limitations on Using Quadro Services on IP Phones](#).

19.2 Feature Codes on AT-320 SIP Phone

This section presents the feature codes for **PBX Services accessible during a call** specific to AT-320 SIP Phone and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Keys / Soft Keys
Call Hold	Hold
Call Waiting	Hold
Call Blind Transfer	Hold → <i>number</i> → FWD
Call Transfer with Consultation	Hold → <i>number</i> → # → FWD

19.2.1 To Put a Call on Hold

During a call, press the **Hold** key. To resume a call on hold, press the **Hold** key again.

While a call is on hold, you can make a second call. Dial the phone number you wish to call and press **#**.

If the phone is connected to two calls, one is in progress and the other is on hold, use the **Hold** key to switch between those calls.

19.2.2 To Accept a Second Call

During a call, press the **Hold** key. This puts the call in progress on hold and receives an incoming call.

19.2.3 To Blind Transfer a Call

During a call, press the **Hold** key to put the call in progress on hold.

Dial the phone number the held call is to be transferred and press the **FWD** key.

Hang up the phone. The call on hold will be transferred to the called party.

19.2.4 To Transfer a Call with Consultation

During a call, press the **Hold** key to put the call in progress on hold.

Dial the phone number the held call is to be transferred and press the **#** key.

Consult the called party, for example, announcing the call.

Press the **FWD** key to transfer the held call to the called destination.

20 ACT-P10SLD IP Phone

20.1 Limitations Specific to ACT-P10SLD IP Phone

The phone cannot be used as a Quadro Remote Extension if it is placed behind a NAT.

See also [Limitations on Using Quadro Services on IP Phones](#).

20.2 Feature Codes on ACT-P10SLD IP Phone

This section presents the feature codes for **PBX Services accessible during a call** specific to ACT-P10SLD IP Phone and serves as a supplement to [Quadro Feature Codes on IP Phones](#).

PBX Services accessible during a call	Buttons
Call Hold	Hold
Call Waiting	Line button with a flickering LED
Call Blind Transfer Call Transfer with Consultation	Transfer → <i>number</i> → Transfer
Call Conference	Conference ⁶ → <i>number</i> → Conference

20.2.1 To Put a Call on Hold

During a call press the **Hold** key. The LED of the corresponding line button will start blinking, indicating that the call is on hold.

While a call is on hold, you can make a second call: press the line button of a free line available to get a dial tone, and dial the number.

To resume a call on hold, press the line button associated with the held call.

If the phone is connected to two calls, one is in progress and the other is on hold, use their line buttons to switch between the calls.

20.2.2 To Accept a Second Incoming Call

During a call press the line button with a flickering LED to put the call in progress on hold and receive an incoming call.

20.2.3 To Blind Transfer a Call

During a call press the **Transfer** button to put the call in progress on hold and to get a dial tone on a free line available.

Dial the number the call is to be transferred to. You may press the **Transfer** button at the end of your dialled number to immediately transfer the call, or wait until you hear ring tones to ensure that the called party is alerted, and then press **Transfer**.

⁶ The button is in the right upper corner of the keypad.

20.2.4 To Transfer a Call with Consultation

During a call press the **Transfer** button to put the call in progress on hold, and to get a dial tone on a free line available.

Dial the number the call is to be transferred to and press **#**. As the call is set up, consult the called party, i.e. to announce the call, and press **Transfer** again.

20.2.5 To Make a Call Conference

During a call press the conference key to put the call in progress on hold and to get a dial tone on a free line available.

Dial a third participant's number and press **#**. As the call is set up, press the button again to connect the party on hold to the established call.