



Samsung HX
System User
Guide

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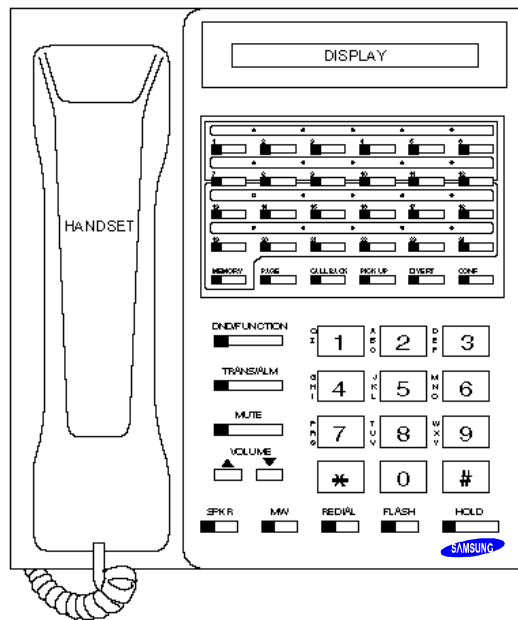
Things You Should Know

Keysets

There are two keyset models:

Standard Keyset (No display)

Executive Keyset (1 line x 16 character display)



Keyset Diagram

Function Keys

1. [DND/FUNCTION]

When the station is in the idle mode this key will initiate “Do Not Disturb”. In the Off-Hook mode it is used to prefix function codes.

2. [TRANS/ALARM]

In the idle mode this key is used to set up an appointment alarm. During conversation it is used to transfer a call to another station.

3. [MUTE]

Enables and disables the station microphone.

4. [Δ] and [∇]

Increases or decreases the handset, loudspeaker and ringing volume.

5. [SPKR]

Enables or disables the Speakerphone mode.

6. [MW]

Used in conjunction with the Message Wait facility.

7. [REDIAL]

The [Redial] key is used to redial the last number called or while listening to ring/busy tone on an outside line call will initiate Automatic Redial.

8. [FLASH]

Used to recall a parent PABX. Also with certain network facilities, such as Call Waiting.

9. [HOLD]

Used to place outside line and intercom calls on hold. Also in the idle mode, pressing the [Hold] key will turn the Background Music on and off.

10. [MEMORY]

Used to access memory functions.

11. [PAGE]

Used to access the paging facility.

12. [CALL BACK]

Provides an automatic call back when busy stations or lines become free.

13. [PICK UP]

Picks up calls ringing at other stations in the same station group.

14. [DIVERT]

Used to temporarily transfer incoming calls to another station.

15. [CONF]

Used to set up a conference.

16. Dial Keys

Used to access numbers and functions within the system and via the PSTN.

17. Selection Keys

[DSS] Direct Station Select keys access other stations within the system. Associated LEDs indicate the status of the station, ie. Busy, Ringing or Idle.

[SPD] Personal Speed Dial keys give one touch dialling facilities.

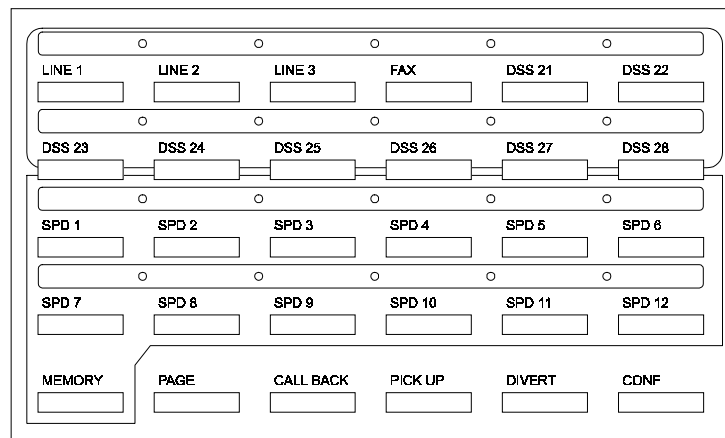
Keypad Key Description

Selection Keys

For each system the allocation of functions to the selection keys varies. The following layouts show the functions allocated to each selection key.

Keypad labels are supplied with each system indicating the key function layout for that system. The HX1224 also has supplied two labels for the “Operator” station, Station 21. On these labels the last 18 keys are blank.

Samsung HX308

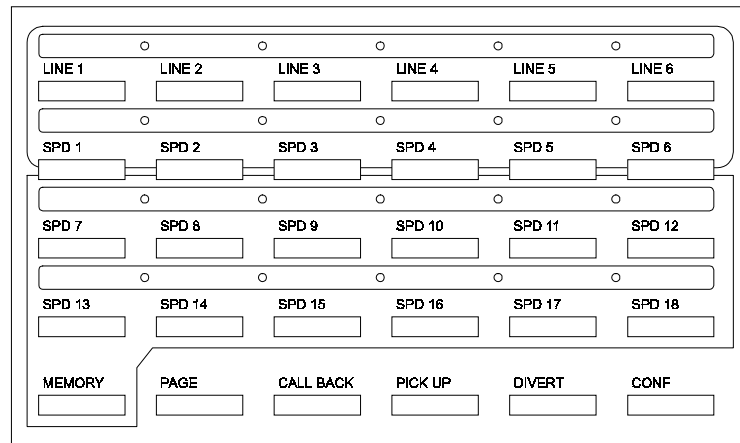


Selection Key Assignment for the HX308 Keypad

The selection keys on the Samsung HX308 keysets are assigned the following functions:

- | | |
|---------------|---|
| Keys 1 to 3 | Outside line keys 1 to 3 |
| Key 4 | Fax key |
| Keys 5 to 12 | Direct Station Select (DSS) keys 1 to 8 |
| Keys 13 to 24 | Personal Speed Dial keys 1 to 12 |
| Keys 25 to 30 | Preset function keys 1 to 6 |

Samsung HX616

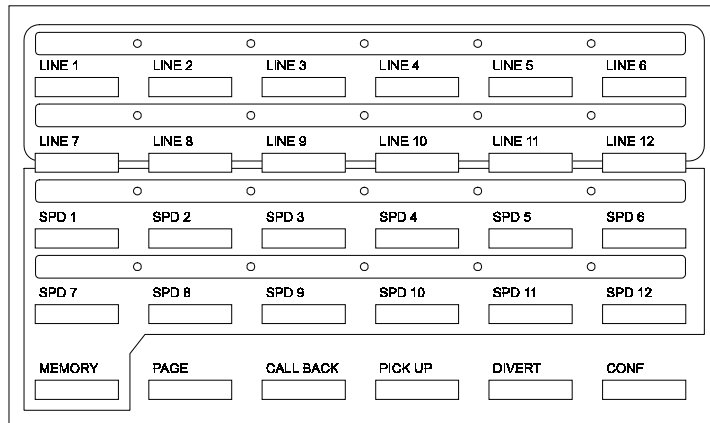


Selection Key Assignment for the HX616 Keyset

The selection keys on the Samsung HX616 keysets are assigned the following functions:

- Keys 1 to 6 Outside line keys 1 to 6
- Keys 7 to 22 Dual function:
 - Direct Station Select (DSS) keys
 - OR
 - Personal Speed Dial keys 1 to 16
- Keys 23 and 24 Personal Speed Dial keys 17 and 18
- Keys 25 to 30 Preset function keys 1 to 6

Samsung HX1224



Selection Key Assignment for the HX1224 Keypad

The selection keys on the Samsung HX1224 keysets are assigned the following functions:

- | | |
|---------------|---|
| Keys 1 to 12 | Outside line keys 1 to 12 |
| Keys 13 to 24 | Dual function:
Programmable Direct Station Select (DSS) keys
OR
Personal Speed Dial keys 1 to 12 |
| Keys 25 to 30 | User programmable:
Direct Station Select (DSS) keys
OR
Function keys |

Programmable Selection Keys (HX1224 only)

Selection keys 13 to 24 are dual function keys: the DSS facility can be programmed to access any station.

Selection keys 25 to 30 are programmable as either DSS keys or function keys.

The following codes are used during programming.

- | | |
|----------|--------------------------------|
| 11 | Memory (Speed Dial) |
| 12 | Page |
| 13 | Call-back |
| 14 | Pick-up |
| 15 | Divert |
| 16 | Conference |
| 21 to 44 | DSS keys for stations 21 to 44 |

To Assign a Station to a DSS Key:

- Press the [#] key
- Enter the Command number (16)
- Press the required selection key (13 to 30)

Eg. 26

The display shows the station/function already assigned to that key

- Enter the required station number
Eg. **35**
- Press the [#] key to return to Idle mode

To Assign a Feature to a Function Key:

- Press the [#] key
- Enter the Command number (16)
- Press the required selection key (25 to 30)

Eg. 26

The display shows the station/function already assigned to that key.

- Enter the required function number (11 to 16)

Eg. 12 (PAGE)

- Press the [#] key to return to Idle mode

Speakerphone and Off-hook Operation

The Samsung HX keysets have a built-in loudspeaker and an additional microphone that enables the keyset to be used in either Off-hook mode or Speakerphone mode.

In the Off-hook mode the handset is used and the loudspeaker is turned off.

In the Speakerphone mode the handset is left On-hook and the [SPKR] key is used to activate the station. Progress of the call and conversations is heard through the loudspeaker.

To return to the Idle mode, from Speakerphone mode, press the [SPKR] key.

In the following instructions for use of your keyset, the term “Lift the handset” may also be read as ‘Press the [SPKR] key’ to proceed in Speakerphone mode.

Direct Station Select Keys

Direct Station Select [DSS] keys provided single button access to other stations on the system. Each [DSS] key has an associated red LED which shows the station status.

Indication	Meaning
Off	Free
On Flashing	Ringing
Red	Busy

The Samsung HX308 and HX616 systems have one [DSS] key for each station.

The 12 [DSS] keys on the Samsung HX1224 keyset have, at default, the first 12 stations assigned to them. These may be changed by programming.

The [DSS] keys can be used in either Speakerphone or Off-hook mode. Pressing a [DSS] key while the keyset is idle activates your keyset in Speakerphone mode and connects you to the desired station.

Line Keys

Each outside line has a dedicated [LINE] key, which provides single button access to that line. Each [LINE] key has an associated two colour LED that shows the status of that line.

Colour	Attribute	Meaning
Off		Free
Red	Steady	In use at another station
Red	Flashing	On Common Hold at another station
Green	Steady	In use at this station
Green	Slow Flashing	On Common Hold at this station
Green	Fast Flashing	Ringling or on Exclusive Hold at this station

The [LINE] keys can be used in either Speakerphone or Off-hook mode. Pressing the key while the station is idle will activate the station and connect you to the line, in Speakerphone mode.

Single Line Telephones

Single Line Telephones (SLTs) may be connected to Samsung HX systems - up to 4 on the HX308, up to 8 on the HX616 and up to 16 on the HX1224.

If you have an SLT, the facilities and features explained in the following sections can be accessed by dialling the following codes:

Feature	Code
Seize an Exchange Line	0
Call Pick-up	11
Call Diversion	#11
Access Barring Override	12+Password
Zone Paging	13
Last Number Redial	15
Speed Dial	16
Place call on Common Hold	HF 17
Retrieve call from Hold	17
Program Personal Speed Dial Numbers	#17
Call-back	HF 1
Transfer	HF + (STN NO.)
Set Message Wait	HF 191
PABX Hook-flash (Centel Access)	HF 18
Paging Call Pick-up	*1 + (STN No.)

HF = Hook-flash

Hook-flash will not be recognised on an outside line call for up to 10 seconds after the last digit has been sent.

The range of codes in this table is indicative only. Any keyset operation described in this user guide that has a dial code associated can be performed from an SLT.

Audible Signals

Signal	Indicating
Normal ring	Outside call
Long repeating ring	Intercom call
Normal ring for ten seconds repeated every 90 seconds	Hold Recall
Short burst of ring	Call Waiting OR Incoming intercom call in Voice mode

System Tones

Tone	Indicating
Continuous tone	System dial tone
Long repeating tone	Intercom ring tone
Short repeating tone	Error tone
Slow repeating tone	Busy tone
Rapid repeating tone	Transfer tone
	OR
	Hold confirmation tone

2. Outside Calls

To Answer an Outside Call Ringing at Your Station:

- Hear ringing
- Lift the handset

To Answer an Outside Call Ringing at Another Station:

- Press the flashing red [LINE] key

To Answer an Outside Call Ringing at Another Station within Your Station Group:

- Press the flashing red [LINE] key
OR
Lift the handset
- Press the [PICKUP] key
OR
Dial 11

To Make an Outside Call:

- Lift the handset
- Dial 0 and listen for dial tone
- Dial the required number
OR
- Lift the handset
- Press a free [LINE] key and listen for dial tone
- Dial the required number

In the Idle mode pressing a [LINE] key or dialling 0 will activate the keyset and connect you to a free line in Handsfree mode. Then continue as above.

To Make an Outside Call on a Particular Line from a Single Line Telephone:

For Samsung HX308/616

- Dial 6
- Dial the line number 1 to 6

For Samsung HX1224

- Dial 61 to 69 for lines 1 to 9
- Dial 71 to 72 for lines 10 to 12

Outside Line Call-back

If all outside lines are busy you can activate this feature to queue on one particular line and call you back when it becomes free.

To Set Outside Line Call-back when All Lines are Busy:

- Hear the busy tone
- Press the [CALL BACK] key
- Replace the handset
- *When the line becomes free.
your station rings*
- Lift the handset

You are connected to the free line and may continue dialling the required number

If you dial 0 to access a line, the system monitors the last line and you will only receive a Call-back when it becomes free.

3. Intercom Calls

To Answer an Intercom Call Ringing at Your Station:

- Hear ringing
- Lift the handset
- Replace the handset at THE end of the call

If a call is made to your station while you are on another call, you will hear a short burst of ringing and the display will show:

To Answer an Intercom Call Ringing at Another Station:

- Press the flashing [DSS] key

To Answer an Intercom Call Ringing at Another Station within Your Station Group:

- Press the flashing [DSS] key
OR
Lift the handset
- Press the [PICKUP] key
OR
Dial 11

To Make an Intercom Call:

- LIFT THE HANDSET
- DIAL THE STATION NUMBER
OR
PRESS THE APPROPRIATE [DSS] KEY

If the station is free and ringing is heard, the [DSS] key may be pressed again. The call is converted from a Signal call to a Voice call. The called station is automatically activated in Speakerphone mode and two-way conversation may take place.

Intercom Call-back

If the station you call is busy, you can activate this feature to call you back when that station becomes free.

To Set Intercom Call-back when a Called Station is Busy:

- HEAR THE BUSY TONE
- PRESS THE [CALL BACK] KEY
- Replace the handset

WHEN THE CALLED STATION IS FREE, YOUR STATION RINGS

- LIFT THE HANDSET

The called station will not ring until you lift the handset. If you do not lift the handset within 10 seconds, the Call-back is cancelled.

Door Station Calls

When a call is made to a Door Station, no tones are heard at the Door Station. This feature can be used to monitor activity in the vicinity of the Door Station. To ensure that no sound is sent from your keystation use the [MUTE] key.

Door Station on the Samsung HX308

To Make a Door Station Call:

- LIFT THE HANDSET
- DIAL 193

Door Stations on the Samsung HX616/1224

To Make a Door Station Call:

- LIFT THE HANDSET
- DIAL 193
- DIAL THE DOOR STATION NUMBER - 0 OR 1

Door Unlock (HX308 only)

If an electric door lock has been connected, it can be operated from your station.

While You are Connected to the Door Station:

- Dial 1 to unlock the door

This feature is not available from Single Line Telephones.

Door Station Calls

To Answer a Door Station Call Ringing at Your Station:

- Hear ringing
- Lift the handset

To Answer a Door Station Call Ringing at Another Station within Your Station Group:

- Lift the handset
- Press the [PICKUP] key
OR
Dial 11

After the call button is pressed on the Door Station, Music On Hold is heard at the Door Station for up to 5 seconds. If the call is not answered during this period the call is cancelled.

The display on the HX308 indicates 'DOOR' only.

Door Unlock (HX308 only)

If an electronic door lock has been connected, it can be operated from your station.

While You are Connected to the Door Station:

- Dial 1 to unlock the door

4. Dialling Features

Last Number Redial

To Automatically Redial the Last Outside Number Dialed from Your Station:

- Lift the handset
- Press the [REDIAL] key

The system automatically redials the last outside number

You can use the [REDIAL] key after pressing the [SPKR] key or a free [LINE] key, or after dialling 0.

If you press the [REDIAL] key while the station is in the Idle mode, a free outgoing line is automatically selected and the last number redialled.

Repeat Dialling

If you receive a busy signal or your call is unanswered after making an outside call, you can set your station to automatically retry the number up to 3 times at 30 seconds intervals.

During this waiting period, the outside line that was selected is reserved for you and appears busy to all other stations. However an incoming call on this line takes priority and the automatic redial will be cancelled.

When Repeat Dialling is activated the [REDIAL] LED flashes slowly.

To Set Repeat Dialling:

- Listen to Busy or Ring tone
- Press the [REDIAL] key and hang up
- Wait 30 seconds

Your call is automatically redialled

If there is still no answer or the number is still engaged the call is released and retried in 30 seconds. When the called person answers:

- Lift the handset
The call is released if not answered within 10 seconds

Automatic redial is attempted three times and then cancels.

To Cancel Repeat Dialling:

- Lift and replace the handset

Speed Dialling

This facility allows you to access previously stored numbers by dialling a short code. Speed Dial numbers fall into two categories:

Personal Up to 20 numbers may be stored for each station.
These numbers are stored by you at your station.

Common Up to 80 numbers may be stored for use by any station within the system. These numbers can only be stored by station 21.

Speed Dial numbers are numbered from 00 to 99:

00 to 19 are Personal (for each station)

20 to 99 are Common

To Store Speed Dial Numbers:

- Press the [#] key
- Press the [MEMORY] key
OR
Dial 17
- Dial a Speed Dial number
(00 to 19)
- Dial the number to be stored
and press the [MEMORY] key
- Enter the next number to
be stored
OR
- Press the [#] key to return
to Idle mode

Use the [HOLD] key to delete an entry.

When storing numbers the following keys may also be used:

- # places a DTMF # in the Speed Dial number
- * places a DTMF * in the Speed Dial number
- [FLASH] places a Timed Loop Break (TLB) in the Speed Dial number
- [REDIAL] places a pause in the Speed Dial number

To Call a Speed Dial Number:

- Lift the handset
- Press the [MEMORY] key SPEED DIAL
Hear the confirmation tone
- Dial the speed dial code (00 to 99) SPEED DIAL

The number is automatically dialled

LINE02: 98249592

Speed Dial Keys

The Speed Dial [SPD] keys provide single button access to Personal Speed Dial numbers.

Each keystation has a number of [SPD] keys: the allocation and use of these keys depends on the system model to which the station is connected.

Samsung HX308

Selection keys 13 to 24 (see HX 308 Keypad Key Description) are allocated as Speed Dial keys. Personal Speed Dial numbers 00 to 11 are assigned to these keys.

To make a call using one of these keys simply press the [SPD] key. An outgoing line will be selected and the number dialled.

Samsung HX616

Selection keys 7 to 24 (see HX616 Keypad Key Description) are allocated as Speed Dial keys. Personal Speed Dial numbers 00 to 17 are assigned to these keys.

To make a call using one of these keys, select a free Outside line and then press the required [SPD] key. The stored number will be dialled.

Selection keys 7 to 22 are dual function keys. When one of these keys is pressed without selecting an Outside line, it will function as a [DSS] key.

Samsung HX1224

Selection keys 13 to 24 (see HX1224 Keypad Key Description) are allocated as Speed Dial Keys. Personal Speed Dial numbers 00 to 11 are assigned to these keys.

To make a call using one of these keys, select a free Outside line and then press the required [SPD] key. The stored number will be dialled.

Selection keys 13 to 24 are dual function keys. When one of these keys is pressed, without selecting an Outside line, it will function as a [DSS] key.

To Use [SPD] Keys with Automatic Line Selection:

- Lift the handset
- Press the [MEMORY] key SPEED DIAL
Hear the confirmation tone
- Press the [SPD] key LINE02:98248592

An outside line is automatically selected and the number dialled

PABX Access

When PABX lines are connected to the Samsung HX as well as ordinary PSTN lines, special consideration must be given when storing and using Speed Dial numbers.

All Speed Dial numbers must be stored with the PABX access code. The system will recognise the type of line selected and will either:

- Ignore the PABX access code if a PSTN line is selected
- OR
- Insert a pause after the PABX access code if a PABX line is selected.

5. Call Processing

Holding Calls

Outside Calls

An outside call may be placed on Hold. The keyset is then free to make a second call. The held caller will hear music while on Hold.

Calls may be placed on either Common or Exclusive Hold:

Common Hold - any keyset can retrieve the held call.

Exclusive Hold - only the holding keyset can retrieve the held call.

Common Hold

To Place a Call on Common Hold:

- Ask the person to wait
- Press the [Hold] key

Hear confirmation tone then internal dial tone. The display will become blank after 2 seconds

The [Hold] LED will be lit while the call is held. The [LINE] key on your keyset will slowly flash green to indicate that this keyset is holding the call. At all other keysets the [LINE] key will slowly flash red.

To Retrieve a Call from Common Hold:

- Press the slowly flashing green [LINE] key at your keyset
OR
Press the slowly flashing red [LINE] key at any other keyset

A call on Common Hold may be retrieved at any station.

Exclusive Hold

To Place a Call on Exclusive Hold:

- Ask the person to wait
- Press the [Hold] key **twice**

Hear confirmation tone then internal dial tone. The display will go blank after 2 seconds

The [Hold] LED will be lit while the call is held. The [LINE] key on your keyset will fast flash green to indicate that this keyset is holding the call. At all other keysets the [LINE] key will be steady red.

To Retrieve a Call from Exclusive Hold:

- Press the fast flashing green [LINE] key at your keyset

Recall from Hold

If a call is not retrieved from Hold within a preset period, usually 90 seconds, a reminder signal is given:

- The station will ring for 10 seconds
- Lift the handset

If the call is not answered another timeout period will begin. If the call was on Exclusive Hold the call will revert to Common Hold.

Holding Calls at a Single Line Telephone

To Place a Call on Hold:

- Ask the person to wait
- Press the [FLASH] key
- Dial 17
- Hang up

To Retrieve from Hold:

- Lift the handset
- Dial 17

To Retrieve a Particular Line from Hold:

For Samsung HX308/616

- Dial 6
- Dial the line number 1 to 6

For Samsung HX1224

- Dial 61 to 69 for lines 1 to 9
- Dial 71 to 72 for lines 10 to 12

Exclusive Hold is not available on Single Line Telephones.

Intercom Calls

An Intercom call may be placed on Hold. Your keyset is then free to make a second call. The held caller will hear music while on hold. If the held station hangs up, the Hold will be cancelled. Intercom Calls can only be placed on Common Hold, allowing any station to retrieve the held call.

To Place a Call on Common Hold:

- Ask the person to wait
- Press the [Hold] key

Hear confirmation tone then internal dial tone. The display will go blank after 2 seconds

The [Hold] LED will be lit while the call is held. The [DSS] key on all keysets will slowly flash red to indicate the keyset is being held.

To Retrieve a Call from Common Hold:

- Press the slowly flashing red [DSS] key at any keyset

Recall from Hold

If a call is not retrieved from Hold within a preset period, usually 90 seconds, a reminder signal will be given:

- The station will ring for 30 seconds
- Lift the handset

If the call is not answered within the 30 seconds the held call will be cancelled.

Transferring Calls

An outside call may be transferred to another station, either with or without announcement. If the call is transferred without announcement and is not answered within a preset period, the call will revert to the original station.

To Transfer a Call to a Free Station:

- Ask the caller to wait
- Press the [TRANS] key
Hear the transfer tone
- Press the required [DSS] key
OR
Dial the station number
Hear ringing tone
- Replace the handset
OR
Wait until the station answers - announce the call and then replace the handset

To Return to the Call Without Completing the Transfer:

- Press the [LINE] key the
caller is waiting on
OR
Press the [TRANS] key

To Transfer a Call Using Voice Call:

- Ask the caller to wait
- Press the [HOLD] key
- Press the required [DSS] key **twice**
- When called person responds, advise which line key to press

Transfer to a Busy Station

To Transfer a Call to a Busy Station:

- Ask the caller to wait
- Press the [TRANS] key
Hear the transfer tone
- Press the required [DSS] key
OR
Dial the station number
Hear the busy tone
- Replace the handset

When the called station becomes free the call will be connected to that station.

If an outside line call is transferred to your station while you are engaged on another call, you will hear a short burst of ringing and the display will show "TRSF CALL BACK 21".

To Transfer from a Single Line Telephone

- Ask the caller to wait
- Press [FLASH]
- Dial station number

Unannounced Transfer

- Replace the handset

Announced transfer

- Wait for station to answer
- Announce the call
- Replace the handset

If wanted station does not answer, press [FLASH] to return to original caller.

Transfer with Page

To Transfer a Call After a Paging Announcement:

- Ask the caller to wait
- Press the [PAGE] key
*Hear the paging tone.
The incoming call is automatically placed on Common Hold and your [HOLD] LED will glow*
- Dial the required Zone number
- Make the Paging announcement including the station number
- Replace the handset

To Retrieve a Call After Hearing a Paging Announcement:

- At any station press the slowly flashing [LINE] key
OR
Dial *1 followed by the station number that made the Paging Call

Transfer with Page from a Single Line Telephone

To Make an Announcement:

- Ask person to wait
- Press [FLASH]
- Dial 13
- Dial required Paging Zone
- Make announcement
- Replace handset

To Retrieve Announced Call:

- Lift handset at any telephone
- Dial *1
- Dial the station number that made the page

Direct Transfer (HX308 Only)

A call may be transferred directly to another station using the [DSS] keys.

To Transfer a Call Using the [DSS] Keys:

- Ask the caller to wait
- Press the required [DSS] key
Hear the ringing tone
- Replace the handset
OR
Wait until the station answers, announce the call and replace the handset

To Return to the Call Without Completing the Transfer:

- Press the [LINE] key the caller is waiting on

Recall from Transfer

If the call was transferred without announcement and is not answered within a preset period, (usually 90 seconds) the call will revert to the station that made the transfer.

To Answer a Recall From Transfer:

- *Hear the ringing tone*
- Lift the handset

6. Paging, Messaging and Conference Calls

Paging Calls

Paging calls can be made through the speakers of idle keysets or, if connected, through an external public address system. Paging calls can be directed to:

- 1 of 3 Internal Zones
- All Internal Zones
- 1 External Zone
- All Zones

To Make a Paging Announcement:

- Lift handset
- Press the [PAGE] key
Hear the confirmation tone
- Dial required zone number:
0 = All Internal Zones
1 = Internal Zone 1
2 = Internal Zone 2
3 = Internal Zone 3
4 = External Zone
5 = All Zones (see Note 1)
Hear the paging tone (see note 2)
- Make your announcement
- Replace the handset

Note 1: Pressing the [PAGE] key twice will select All Zones paging.

Note 2: If no Paging Tone is heard, the paging call will not be successful. This will happen if all the stations in a zone are busy. If a station is busy the Paging call will not be heard over that station's speaker.

SLTs cannot receive Paging calls.

To make a Paging Announcement from a Single Line Telephone:

- Lift the handset
- Dial 13
- Dial required zone number
- Make your announcement
- Replace the handset

Conference Calls

You can set up a Conference call with up to three people. This can include one outside party and/or one Single Line Telephone.

Internal Conference

To Make a Conference Call with Three Internal Parties:

- Call first station
- Press [CONF] key
First station is placed on Hold and the confirmation tone is heard
- Call second station
- Press [CONF] key
Second station is placed on Hold and the confirmation tone is heard
- Press [CONF] key
All stations hear the intrusion tone
- The conference can now proceed

While in conference, only the convenor has 'CONF 25 27' displayed, other stations have 'CALL FROM 22' displayed.

SLT's cannot set up a conference.

External Conference

To Make a Conference Call with One External and Two Internal Parties:

- Call the outside party and advise of conference call
- Press the [CONF] key
Confirmation tone is heard and the outside party is placed on Hold
- Call the internal party
- Press the [CONF] key
Confirmation tone is heard and the 2nd station is placed on Hold
- Press the [CONF] key
All parties hear the intrusion tone
- The conference can now proceed

Message Waiting

Message Waiting allows you to notify a busy or unattended keyset that you would like that person to contact you. A visual indication is left at the called keyset.

To Set a Message Waiting Signal at a Keyset:

- Make a call to the station
- Press [MW]

The [MW] LED at your keyset lights and the called keyset [MW] LED flashes. The display goes blank after 2 seconds, the call is cancelled and dial tone is heard.

If a Message Waiting Signal is left on Your Keyset:

- Press the [MW] key

The display shows the number of the station(s) that set Message Wait.

To Return a Call to the Station that Set Message Wait:

- Lift the handset
- Press [MW]

A call is made to the keyset that left the message. The [MW] LED on each keyset only goes out when the call is answered.

To Cancel a Message Waiting on Your Station Without Calling Back:

- Press the lit [MW] key **twice**

Single Line Telephones cannot receive messages and cannot leave messages at busy stations. Paging and Conference Calls

7. Convenience Features

Access Barring Override

At installation, stations are allocated a Class of Restriction. This limits the numbers that can be dialled from each station and is called Access Barring. Access Barring Override is used to bypass this restriction.

To Override Access Barring:

- Press the [SPKR] key
- Dial 12
- Enter the Password
- *Internal dial tone is heard*
- Access an outside line
- Dial the required number

The call will not be subject to Access Barring. The override will only be valid for one call: the above procedure must be repeated to make a second call.

Alarm Reminder

You can set a reminder alarm to sound at a preset time. There are two types of alarms available:

- The first alarm is used for a single occasion and is cancelled automatically after the alarm rings.
- The second type of alarm is used for a daily reminder and operates each day at the same time, until it is changed.

Single Alarm

To Set the Single Alarm:

- Press the [TRANS/ALARM] key
- Dial 1
- Dial the required time (24hr format)
Four digits must be entered.
The display scrolls left as the digits are entered
- Press the [TRANS/ALM] key

The [TRANS/ALM] LED will glow.

At the required time rapid ringing is heard for 10 seconds, or three bursts if the station is busy. The station returns to idle and the [TRANS/ALM] LED goes out.

To Reset the Alarm Before the 10 seconds:

- Lift the handset

Daily Alarm

To Set a Daily Alarm:

- Press the [TRANS/ALM] key
- Dial 0
- Dial the required time (24hr format)
Four digits must be entered.
The display scrolls to the left as digits are entered.
- Press the [TRANS/ALM] key

The [TRANS/ALM] LED glows.

At the set time rapid ringing is heard for 10 secs, or three bursts if the station is busy. The station returns to idle and the [TRANS/ALM] LED continues to glow while the Daily Alarm is set.

Canceling an Alarm

To Cancel a Reminder Alarm:

- Press the [TRANS/ALM] key
- Dial 1 to cancel Single Alarm
OR
Dial 0 to cancel Daily Alarm
The current Alarm set time is displayed
- Press the [Hold] key
The alarm is cancelled, the station returns to Idle and the [TRANS/ALM] LED goes out

Background Music

If your system has access to music from an external source, this music can be played through your keyset speaker while the station is idle. If an external music source is not available then the internal Music On Hold chimes will play.

To Activate Background Music:

While the station is idle,

- Press the [HOLD] key

Mon,30 Sep 11:45

Music is heard through the loudspeaker.

Background Music is cancelled if the station is used to make or receive a call.

To Cancel Background Music:

- Press the [HOLD] key

Mon,30 Sep 11:45

Call Detail Recorder (CDR)

Call Detail Recorder (CDR) output is available on the Samsung HX616 and HX1224 systems and provides call record information. A printer, Call Management System (CMS) or Telephone Information Management System (TIMS) can be connected to this output to print or store the information.

CDR Output Format

The following is a sample of a CDR printout for an HX616.

Each page contains up to 50 call records. The title and column headings are printed at the top of each new page.

If the printer etc. fails, runs out of paper or the connection is broken for some reason, then some call records will be lost.

<< STATION MESSAGE DETAIL RECORDING >> SAMSUNG HX 616									
	CLASS	DATE	TIME	LINE	DUR	ST#	DIALED#	RING	AC
00	INC	02/07/93	10:07:03	03	00:01:55	21			
01	OTG	02/07/93	10:09:43	02	00:04:34	35	98248592		
02	INC	02/07/93	10:15:07	03	00:02:10	22			
03	OTG	02/07/93	10:18:14	04	00:01:15	31	001112129792727		
04	INC	02/07/93	10:24:33	02	00:00:17	21			
05	INC	02/07/93	10:25:54	02	00:01:43	28			
06	OTG	02/07/93	10:21:19	06	00:08:27	27	092583698		
07	OTG	02/07/93	10:31:03	03	00:02:22	24	11661		

Column 1 Call Number
The call records are numbered sequentially from 00 to 49 on each page.

Column 2 (CLASS) Class of Call
The Class or type of call is shown as follows:
Incoming Call INC
Outgoing Call OTG

Column (Date) Date of Call
Indicates the date the call was recorded in the format Day/Month/Year.

Column 4 (TIME) Time of Call
Indicates the start time of the call in 24 format.

Column 5 (LINE) Line Number
Indicates the number of the outgoing line in the system

Column 6 (DUR) Duration of the call
Indicates the duration of the call in hours, minutes and seconds (hr:min:sec).

Column 7 Station Number

(ST#) Indicates the digits dialed on an outgoing call. The CDR may be programmed to strip the last two digits of a dialed number to maintain privacy.

**Column 8
(DIALED#)** Dialed Number
Indicates the digits dialed on an outgoing call. The CDR may be programmed to strip the last two digits of a dialed number to maintain privacy.

**Column 9
(RING)** Not Used

**Column 1
(AC)** Not Used.

Confidence Tone

This facility confirms the registration of each valid key press at a keyset. When activated, a low level tone is heard by the user as each key is pressed. A tone is not given if the pressed key is not a valid option.

To Activate Confidence Tone:

- Press the [#] key
- Dial 14
- Dial 1
- Press the [#] key

To Disable Confidence Tone:

- Press the [#] key
- Dial 14
- Dial 0
- Press the [#] key

Divert All Calls

Divert All Calls allows a keyset user to divert all incoming calls to another nominated station.

To Divert All Calls to Another Station:

- Press the [DIVERT] key and wait 2 seconds SET DIVERT:
- Dial the station number to receive your calls DIVERT ALL:25
- Press the [#] key Mon,30 Sep 09:45

While divert is set, the [DIVERT] LED will glow and interrupted dial tone is heard when the handset is lifted.

To Cancel Divert All Calls:

- Press the lit [DIVERT] key and wait 2 seconds SET DIVERT
- The display will change after one second* DIVERT ALL:25
- Press [HOLD] Mon,30 Sep 09:45

The [Divert] LED goes out and Divert All Calls is cancelled

To Set Divert From a Single Line Telephone:

- Lift the handset and dial #11
- Dial the station number calls are to be diverted to
- Dial # and hang up

To Cancel Divert from a Single Line Telephone

- Lift the handset and dial #11
- Dial your own station number
- Dial # and hang up

Do Not Disturb

Do Not Disturb (DND) allows you to block all intercom and Paging calls to your station.

To Set Do Not Disturb:

- Press the [DND/FUNCTION] key

DO NOT DISTURB

The [DND/FUNCTION] LED will glow while DND is set and callers will receive busy tone

To Cancel Do Not Disturb:

- Press the lit [DND/FUNCTION] key

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If your station is a 'manager' station and has a 'secretary' assigned, when DND is activated any calls to your station will be diverted to the 'secretary' station. The 'secretary' can still call the 'manager' even when DND is set.

Station number 21 does not have this facility.

Facsimile

Facsimile machines may be connected, as stations, to any of the Samsung HX systems. The Samsung HX308 provides extra facilities as detailed below. For the larger systems, calls intended for the facsimile machine must first be answered and then transferred in the normal way.

HX308 Only

On the Samsung HX308 up to two facsimile machines may be allocated for one touch transfer. An incoming call intended for the facsimile machine can be transferred by pressing the [FAX] key. If two facsimile machines are used, the call will be connected to the first free machine.

To Forward an Incoming Call Intended for the Facsimile Machine:

- Answer the incoming call
Hear the fax tones
- Press the [FAX] key
- Replace the handset

The [FAX] LED indicates the status of the facsimile machines as follows:

Attribute	Meaning
Off	Both facsimile machines free
On	Both facsimile machines busy
Flashing	1 of 2 facsimile machines busy

Group Listening

This facility enables the keyset speaker to be turned on while the handset is in use. This allows both sides of a conversation to be heard over the loudspeaker.

To Activate Group Listening:

- Make a call using the handset
- Press the [DND/FUNCTION] key
- Dial * 0
The keyset speaker turns on
- Continue the conversation using the handset

Group listening is de-activated automatically when the call is terminated.

To De-activate Group Listening While a Conversation is in Progress:

- Press the [DND/FUNCTION] key
- Dial * 0

The keyset speaker turns off and the conversation may be continued as normal

Headset Operation

A keyset handset may be replaced by an approved headset. When connected and activated the [SPKR] key is used to perform the Off-hook function.

To Activate Headset Mode:

- Press the [#] key
- Dial 15
- Dial 1
- Press the [#] key

To De-activate Headset Mode:

- Press the [#] key
- Dial 15
- Dial 0
- Press the [#] key

While in Headset mode, the station cannot operate in Speakerphone mode.

Intercom Answer Mode

A keyset user may choose to have incoming intercom calls signalled by one of the following modes:

- Ring - incoming intercom calls ring at the keyset until the call is answered.
- Voice - incoming intercom calls are signalled by a short burst of ringing, then the keyset automatically enters Speakerphone mode. The caller's voice is heard through the loudspeaker and conversation can take place handsfree. If required you can lift the handset to change to Off-hook mode.

To Set Intercom Answer Mode:

- Press the [#] key PROGRAM CODE :
- Dial 10 SET CALL MODE

- Dial the required code VOICE CALL
Voice Mode = 1
Ring Mode = 0
- Press the [#] key Mon,30 Sep 09:45

Ring mode may be overridden by callers pressing their [DSS] key twice. See page *Making Intercom Calls*.

Incoming Ring Tone

You can select one of four different ringing pitches for incoming calls to your keyset.

To Change the Ringing Tone of Your Keyset:

With the handset on the keyset;

- Press the [#] key PROGRAM MODE
- Dial 13 RING FREQUENCY
- Press the [*] key FREQUENCY 2
Hear test tone
- Continue pressing the [*] key until the required tone is heard FREQUENCY 3
- Press the [#] key to select Mon,30 Sep 11:45
The station returns to Idle mode.

Four different ring frequencies are available.

Line Failure Monitoring

If an attempt is made to access an outside line that has failed or is not connected to the system an error tone is heard and the display shows 'NOT CONNECTED'.

This line is then taken out of service and cannot be accessed by dialling 0. When the fault has been rectified and the line is successfully accessed by pressing the [LINE] key, the system will return the line to service.

HX1224 Only

If a non equipped [LINE] key is pressed the display shows:

LINE ■■: NOT EXIST

Manager - Secretary Pairs

When a station (programmed as the 'manager' station) selects DND, all calls to that station are automatically forwarded to the associated 'secretary' station. The secretary is the only station that can call to the manager's station while DND is selected.

While DND is not selected and the 'manager' station is busy, incoming calls will be transferred to the 'secretary'.

When the manager station is in Idle mode the [FLASH] key can be used to signal or "Buzz" the secretary station. This is an audible indication only: no connection is made.

Microphone Mute

The [MUTE] key on your keyset is used to temporarily mute the station microphone during a conversation. This facility may be required if you do not wish the caller to overhear a conversation taking place in the vicinity of the station.

To Mute the Microphone:

- Press the [MUTE] key

The microphone is disabled and the [MUTE] LED glows.

- Press the [MUTE] key again to enable the microphone.

[MUTE] can be used in either Speakerphone or Off-Hook mode.

8.Operator Station

Date and Time

The system date and time can be reset at Station 21.

To Set Date and Time:

- Press the [#] key
- Dial 55
- Dial the new Date and Time.

The display scrolls left as the digits are entered:

YY Last two digits of the year
MM The month (01-12)
DD The day of the month (01-31)
W The day of the week
0 - Sunday
1 - Monday
2 - Tuesday
3 - Wednesday
4 - Thursday
5 - Friday
6 - Saturday

HH The hour of the day (00-23)
MM The minute of the hour (00-59)

- Press the [#] key

The system automatically updates all the display stations.

Night Service

The Night Service function, which is assigned by the installing technician, allows the following programmable facilities to be changed for different parts of the day:

- The ring allocations for incoming outside line calls.
- The class of restriction for each station.

To Activate Night Service at Station 21:

- Press the [DND/FUNCTION] key
The [DND/FUNCTION] LED flashes.

To Return to Day Mode:

- Press the [DND/FUNCTION] key

Storing Common Speed Dial Numbers

Station 21 can store the Common Speed Dial numbers that are accessed by all stations.

To Store Station Speed Dial Numbers:

- Press the [#] key
- Press the [MEMORY] key
OR
Dial 17
- Dial a Speed Dial number
(20 to 99)
- Dial the number to be
stored and press the
[MEMORY] key
- Enter the next number to
be stored
OR
- Press the [#] key to return
to Idle mode

Use the [HOLD] key to erase an entry.

If required, Common Speed Dial numbers 00 to 59 can be exempt from Access Barring.

9. Care of Your Samsung HX

Care of the HX System

The Samsung HX Key Systems are manufactured to meet the highest quality standards.

Follow these common-sense guidelines to help maintain trouble-free service:

- Handle the keyset with care; avoid dropping or knocking it.
- Avoid subjecting the equipment to temperature extremes or damp, steamy or greasy conditions.
- Never immerse the equipment in water. Clean the surface with a slightly damp cloth. Do not use detergents, polishes or commercial cleaners.
- Do not place the keysets in direct sunlight since, over time, this may discolour the plastics.
- Do not tamper with the system in any way: interference with its sensitive electrical components could render it unsafe to use.

Service Problems

Power Failure

To prevent loss of service during a power failure:

- A customer supplied Battery Back-up facility can be connected to maintain full system operation
OR
As an option, the system can be configured to automatically connect the first two or three outside lines to Single Line Telephones when the power fails.

Unless one of these facilities is provided, calls cannot be made or received under powerfail conditions.

If power failure occurs, the system will retain all programmed data for a minimum of 48 hours.

Other Difficulties

If operating difficulties occur, first check if power is available.

If difficulties persist, call the service centre of the company that provided the system.