Feature Operation

(VT 40-2421)

2.4GHz 4-Line Cordless Telephone with speakerphone, Type II Caller ID on Handset

TABLE OF CONTENTS

1. REVISION RECORD 3

2. INTRODUCTION 4

3. FEATURES OVERVIEW 5

4. HANDSET KEYPAD LAYOUT 7

5. FUNCTIONAL DESCRIPTION OF HANDSET AND BASE 8

5.1. HANDSET 8
5.2. BASE 10
5.3. CHARGER 11
5.4. LCD ON THE HANDSET 11

6. OPERATIONS 13

7. FCC WARNING STATEMENT 43

7.1. FCC WARNING STATEMENT 43
7.2. RF EXPOSURE WARNING STATEMENT 43

1. REVISION RECORD

Revision	Date	Summary of changes
0	24-Jun-2000	Initial release
1	19-July 2000	REVISION
2	7-Aug-2000	REVISION
3	8-Aug-2000	REVISION
4	15-Nov-2000	REVISION

2. INTRODUCTION

VT 40-2421 system consists of one base unit and up to 12 wireless handset units. The base unit provides 4 voice (RF) channels for intercom or outside calling by any wireless handset.

Since the transmitter has the value of 5dBm, the EUT passed the applicable requirements.

3. FEATURES OVERVIEW

- CO LINES/PBX : 4 CO LINES ,12 STATIONS
- LCD with 2 x 16 ALPHA-NUMERIC & 2 ROWS ICONS
- TONE/PULSE DIALING SELECTABLE
- SPEED DIAL : 20 (EACH 30 DGT AND 16 CHAR NAME MAX)
- MEMORY: 01 - 20
- CID MEMORY: 50
- HANDSET SPEAKERPHONE
- PAGE
- ROOM MONITOR
- CALL TIMER
- TYPE I & II CALLER ID
- VISUAL MESSAGE WAITING
- INTERCOM
- LAST NUMBER REDIAL
- CALL HOLD FOR EXTERNAL CALL
- 3-WAY CONFERENCE
- CALL TRANSFER OF EXTERNAL CALL
- TRANSFER RECALL
- HOLD REMINDER
- DO-NOT-DISTURB(DND)
- FLASH
- PAUSE (2 SECONDS)
- MUTE/UNMUTE TOGGLE CONTROL
- HEADSET COMPATIBILITY
- RINGER TONES SELECTION AND VOL ADJUSTABLE
- HANDSET/HEADSET/SPEAKERPHONE VOL ADJUSTABLE
- CO LINE RINGING ENABLE/DISABLE
- PROGRAMMABLE FLASH (0.6 SECONDS DEFAULT)
  RANGE 0.1SEC -----0.9 SEC
- STORE REDIAL INTO SPEED DIAL MEMORY
- ERASE SPEED DIAL MEMORY
- PROGRAM SYSTEM SECURITY CODE
- PROGRAM CID AREA CODES
- HOME AREA CODES : 1
- LOCAL AREA CODES : 5
- MASTER RESET
- HOLD TONE REMINDER TIME (30 SECONDS DEFAULT)
  15 SECONDS -------60 SECONDS
  WITH OFF SETTING
- LINE IN USE DETECT ENABLE/DISABLE
- RINGING INDICATORS

- CONFERENCE TWO OUTSIDE LINES
- CONFERENCE ONE OUTSIDE AND TWO HANDSET
- HANDSET IDENTIFICATION (01 --12)
- BATTERY LOW INDICATION
- OUT OF RANGE INDICTION AND WARNING TONE
- REVIEWING A CALL
- AUTO-DIAL FROM CALLER ID LOG
- STORE CID INTO SPEED DIAL
- ERASE CID CALL
- ERASE ALL CALLS
- DISPLAY TOTAL CALLS /TOTAL NEW CALLS
- ANY KEY ANSWER
- DIGITAL KEYS AND LINE KEYS
- DIRECTLY ANSWER ANY RINGING LINE BY PRESSING THE ASSOCIATED LINE BUTTON
- AUX DATA PORT (Connected to Line 2)
- KEYPAD BACKLIGHT
- LCD BACKLIGHT
- US STANDARD WALL MOUNT BRACKET
- AUTO RELEASE WHEN THE HANDSET IS RETRUNTED TO CRADLE

4. HANDSET KEYPAD LAYOUT

FLASH		CID LIST	END
LINE 1	LINE 2	LINE 3	LINE 4
REDIAL	HOLD	MUTE	SPEAKERPHONE
1 *DEL*	2ABC		3DEF
4GHI *DND*	5JKL		6MNO
7PQRS *PAUSE*	8TUV		9WXYZ
Æ TONE *CONF*	0 OPER		# (Confirm)
FUNCTION	MEM	INTERCOM	CALLER

5. FUNCTIONAL DESCRIPTION OF HANDSET AND BASE

5.1. HANDSET

5.1.1. DIALING KEYS "0~9", "*" & "#"

Press the dial digits 0~9, "*" or "#' on the dialing keypad. The corresponding DTMF tone (or pulse sequence) will be dialed out immediately. The dial digits will be buffered up to 30 digits maximum. If the digit you entered faster than the phone dialing, all the digits will dialed out in sequentially.

The '#' key will be ignored if in pulse dialing mode.

In pulse dialing mode. The "*" key is temporarily used for enable tone dialing mode.

5.1.2. LINE KEYS

Pressed the [Lx] key, where x=1,2,3,4 you can hear a dial tone on the Earpiece for placing an outside call or retrieving a line on hold.

5.1.3. END KEY

You can press the [END] key to ending a call and to quit all modes.

5.1.4. INTERCOM KEY

Press the [INTERCOM] key to initiate / confirm two-way internal communication between the handsets. To exit the intercom mode by presses the [END] key on the Handset.

5.1.5. REDIAL KEY

Press the [Lx] key, where x=1,2,3,4 and then Press [REDIAL] to redial the last dialed number.

or

Press [REDIAL] key to display the last dialed number and then press an available [Lx] key, where x=1,2,3,4 to automatically dial out the last dialed number.

5.1.6. CID LIST KEY

Press the [CID LIST] key to retrieve CID database.

5.1.7. FLASH KEY

Press [FLASH] key to activate call waiting or 3-way calling.

5.1.8. HOLD KEY

Press the [HOLD] key to place the call on hold. You can then,

a) *make an intercom for conference call*

b) *make the second line call for conference*

c) *transfer the call to another station*

5.1.9. MUTE KEY

Press [MUTE] key to turns off the microphone for privacy or to resume back the conversation.

5.1.10. SPEAKERPHONE KEY

Press [SPEAKERPHONE] to use the speakerphone for making or answering calls. To end the call by presses this key again.

5.1.11. FUNCTION KEY

Press the [FUNCTION] will form a function access key by followed function code [1/4/7/*].
[FUNCTION] [1] DELETE code, to delete the SPEED/CID list memory, or CID area Code
[FUNCTION] [4] DND code, to activate Do Not Disturb feature
[FUNCTION] [7] PAUSE code, to insert a delay during digits
[FUNCTION] [*] CONFERENCE code, to bridge 3-way conference call

5.1.12. MEM KEY

Press [MEM] key for speed dialing operation and programming parameters. The list of programming parameters is as below:-

- System Security Code (S.S.C.)
- Handset ID Programming.
- CO Line Ring Programming.
- Handset Ring Type Programming.
- Hold-Reminder Time Programming.
- FLASH Time Programming.
- Tone/Pulse Mode Programming.
- Caller ID Area Code Programming (Refer to the Caller ID Operation)
- LIU (Line In Use) Enable/Disable Programming
- Handset Reset Programming.
- Base Unit Reset Programming
- System Security Code Registration (Refer to the Installation Operation)

5.1.13. CALLER KEY

Press [CALLER] key for view the caller ID information between ring calls or see the Caller ID of the waiting caller.

5.1.14. VOLUME UP/DOWN KEYS

These two keys have the following operations:-

a) For adjusting speakerphone volume in speakerphone mode (There are total of 5 volume levels setting).

b) For adjusting ringer volume in idle mode (There are total of 3 volume levels setting Low/Mid/Hi).

c) For adjusting the handset or headset volume when off-hook (There are total of 5 volume levels setting).

d) For editing the speed dial memory

e) For viewing the CID index

f) For editing the CID memory for storing in the speed dial memory

g) For selecting the programming parameters

5.2. BASE

5.2.1. LED CADENCE

Dark	Solid dark
Lit	solid lit
Slowest	1sec off, 1sec on repeatedly.
Slow	0.5sec off, 0.5sec on repeatedly.
Fast	0.125sec off, 0.125sec on, repeatedly.
wink1	0.250sec off, 1.750sec on, repeatedly.
Wink2 (Reserved) wink3	0.25sec off, 0.250sec on, 0250sec off, 1.250sec on, repeatedly 0.250sec off, 0.250sec on, 0.250sec off, 0.250sec on, 0.250sec off, 0.750sec on, repeatedly.

5.2.2. POWER LED

This LED indicates the AC power and the base unit status as below:-

Dark:	The AC power lost.
Slowest:	1sec on, 1sec off, repeatedly.
	Within power on 15 seconds, waiting to receive the new S.S.C. period,
	Base unit in S.S.C. Programming mode.
Fast:	0.125sec on, 0.125sec off, repeatedly.
	The S.S.C. is empty in the Base unit.
Lit:	Base unit is in idle mode.
Wink1:	At least, one user uses the 1 voice channel in this system.
Wink3:	The all 4 voice channels are occupied.
	The other users can't access the voice channel.

5.3. CHARGER

5.3.1. CHARGING LED

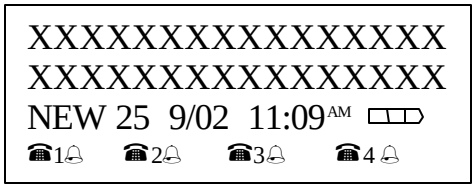
This LED is used to indicate the charging status of the handset.

5.3.2. SPARE BATT LED

This LED lights, illuminate a spare battery pack has been installed on the charger in charging condition.

5.4. LCD on the handset

The LCD of the handset is 2*16 dot matrix with some icons. The top two rows are 2*16 dot matrix.
The 3rd and 4th row is icons and 7-segment display. The full LCD is.



2*16 dot matrix
It displays handset ID in standby mode (eg Handset ID is 01).

Handset & CO Line
There are 4 CO lines, 1, 2, 3, and 4

☎ & CO line OFF: CO Line is idle
☎ ON & CO line ON: CO Line is in use
☎ & CO line FLASH: CO Line is held
If the CO line is disconnected, ☎ & CO line is OFF

Ringer
: Ringer is set to OFF
FLASH: CO Line is ringing
Press **[▲]** / **[▼]** in idle mode or ringing mode to adjust the ringer volume

Ringer and Handset
Both ringer and Handset icon FLASH: Transfer ring or recall ring

Battery Icon
This icon represents the battery status

NEW Icon
This icon is for new caller ID messages if there is new caller ID in database in idle mode or in retrieve mode.

Caller Counter Icon (eg 25 in fig.1)
This icon has three purposes.
a) New caller ID counter (NEW icon is on)
It means there are 25 new caller ID in database.
Or

b) Total caller ID counter (NEW icon is off)
It means there are totally 25 caller ID in database.
Or
c) Current ringing Co line (eg line 3)
When Co line 3 is ringing, it will display "L3" instead of caller ID counter. The 1st row will display caller name and the 2nd row will show caller number.

7-segment for date/time (It is for Caller ID only)
7-segment is for date and time. (eg 9/02 11:09 AM)
It means date and time is September 2 and 11:09am respectively.

6. Operations

1. STANDBY MODE

1. In the Standby mode and the handset ID is programmed, the display shows as Fig. 1a or 1b or 1c:

1a) Handset links with the idle base unit
1b) Handset links with the busy base unit
1c) Handset cannot link with base unit

Note: 1. In the No Service case, the handset may have the wrong S.S.C., or if the local power is OFF at the base unit or the handset is out of the system service areas.
2. If trying to request a service from the 'Busy' base unit which all the paths are in use, you will get a audible warning tone.

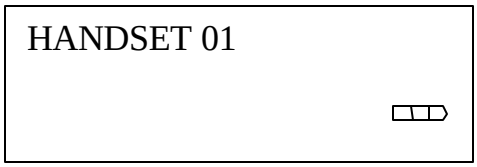


Fig.1a

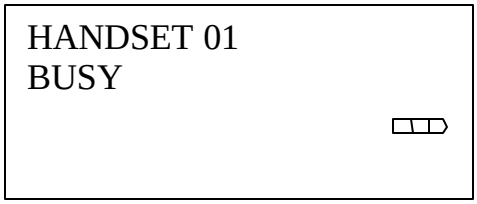


Fig.1b

Fig.1c

2. INSTALLATION

After charging, the handset is removed it from its charging cradle, the screen will as Fig. 2.

Registering handset security codes

1. Press [MEM] and the LCD will display the first programming choice as Fig.3
2. Press **[▲]** / **[▼]** until displaying "HS SECUIRTY CODE"(refer to Fig 4. Show "XXXXXX" or "EMPTY")
3. Press [#] to confirm this option
4. Enter 6 digits for the security code (see Fig. 5, eg.123456).
5. Press [#] to confirm the code and the handset will display Fig. 7 for 3 seconds if the registration is successful and return to programming mode (refer to Fig. 4).

Registering base security codes

1. Power up the base unit and be sure the handset security code has been programmed to in the handset
2. Press [MEM] t o enter the programming mode (refer to Fig 3)
3. Press **[▲]** / **[▼]** until displaying "BU SECUIRTY CODE"(refer to Fig 6)
4. Press [#] and HOLD the [#] key until a confirmation beep is heard to indicate the security code is accepted correctly in the base unit.
5. The handset will display Fig. 7 for 3 seconds if the registration is successful and return to programming mode (refer to Fig. 6).
6. After about 15 seconds, if you still do not get the confirmation, then it means that the programming failed. The error message is displayed as Fig 8 for 3 seconds and return to Fig.6 display. In this case, the user has to re-do from step 1 again.

Note:

If the programming is successful, a happy tone (one beep) will be emitted.
If the programming is unsuccessful, an error tone(two beeps) will be emitted.

Fig.2

Fig.3

Fig.4

Fig.5

Fig.6

Fig.7

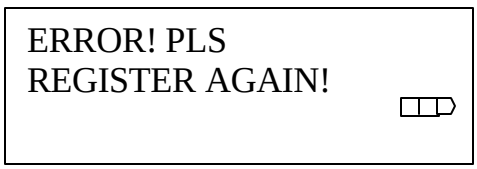


Fig.8

3. PROGRAMMING HANDSET ID

1. Press [MEM] to enter the programming mode (refer to Fig. 3)
2. Press **[▲]** / **[▼]** until displaying "HANDSET ID"(refer to Fig. 9)
3. Press [#] to confirm this option (refer Fig. 9)
4. Enter 2 digit ID no. (01-12) (refer to Fig.10). For example, handset ID is 05
5. Press [#] to confirm the ID no. and the screen will display Fig. 11 for 3 seconds and return to programming display as Fig. 9 (The ID will be changed to 05)

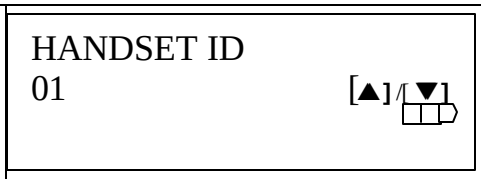


Fig.9

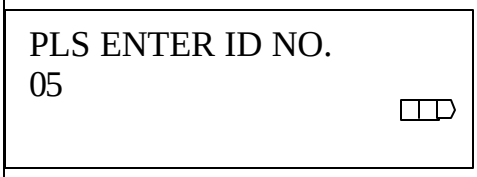


Fig.10

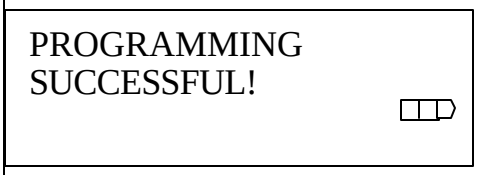


Fig.11

4. SETTING RINGER VOLUME & ON/OFF

1. Press [MEM] to enter the programming mode (refer to Fig 3)
2. Press **[▲]** / **[▼]** until displaying "CO LINE x RING" where x=1-4 of your chosen line for setting ringer on/off. (refer to Fig. 12)
3. Press [#] to confirm this option
4. Press **[▲]** / **[▼]** to choose ON or Off
5. Press [#] to confirm the choice to display either Fig.13 or Fig.14 and the screen will display Fig. 11 for 3 seconds and return to programming display as Fig 12.

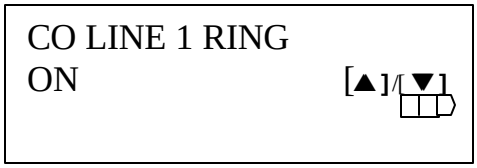


Fig.12

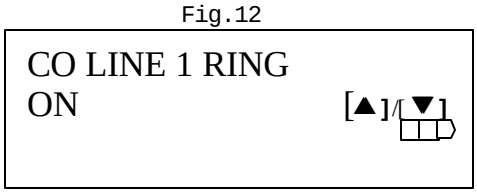


Fig.13

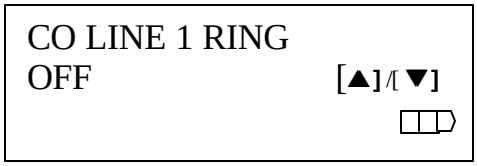


Fig.14

5. PROGRAMMING RINGER TYPE (4 TYPES)

1. Press [MEM] to enter the programming mode (refer to Fig 3)
2. Press **[▲]** / **[▼]** until displaying "RINGER TYPE" (refer to Fig. 15)

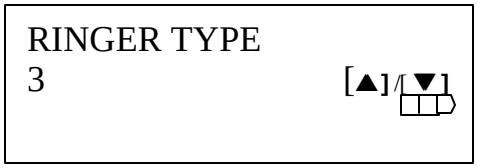


Fig.15

3. Press [#] to confirm this option.
4. Choose the ringer type by using **[▲]** / **[▼]** (refer to Fig.16). The default type is 1.
5. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig 15 (Change to type 3)

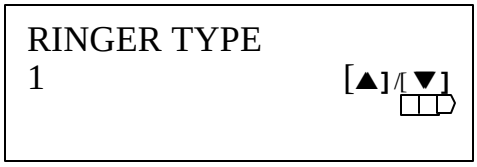


Fig.16

6. PROGRAMMING FLASH TIME

1. Press [MEM] to enter the programming mode (refer to Fig 3)
2. Press **[▲]** / **[▼]** until displaying "FLASH TIME" (refer to Fig.17)
3. Press [#] to confirm this option.
4. Choose the flash time by using **[▲]** / **[▼]** (refer to Fig.18). (Option is from 100ms to 900ms)
5. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig 17. (Change to 300ms)

Fig.17

Fig.18

7. PROGRAMMING TONE/PULSE MODE

1. Press [MEM] to enter the programming mode (refer to Fig. 3)
2. Press [▲] / [▼] until displaying "TONE/PULSE" (refer to Fig..19)
3. Press [#] to confirm this option.
4. Select Tone or Pulse by using [▲] / [▼] (refer to Fig. 20)
5. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig. 19. (Change to TONE)

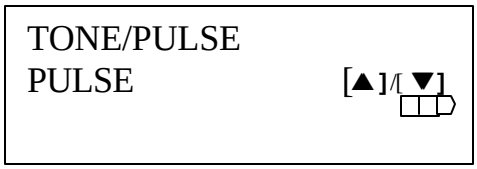


Fig.19

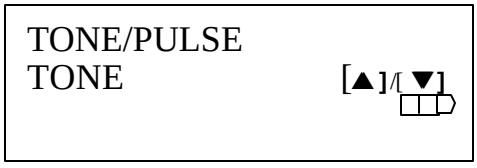


Fig.20

8. PROGRAMMING HOLD REMINDER TIME

1. Press [MEM] to enter the programming mode (refer to Fig 3)
2. Press [▲] / [▼] until displaying "HOLD REMINDER" (refer to Fig.21)
3. Press [#] to confirm this option.
4. Choose the reminder time setting by using [▲] / [▼] (refer to Fig. 22) (Option:OFF/15/30/45/60 seconds and the default is 30 seconds)
5. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig 21. (Change to 45 SEC)

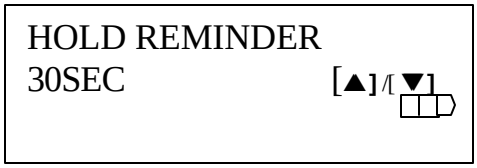


Fig.21

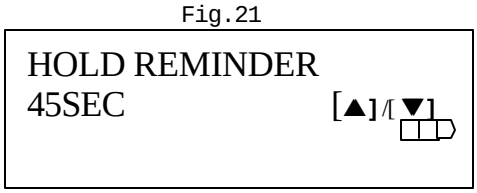


Fig.22

9. PROGRAMMING LINE IN USE DETECT

1. Press [MEM] to enter the programming mode (refer to Fig 3)
2. Press [▲] / [▼] until displaying "LINE IN USE" (refer to Fig.23)
3. Press [#] to confirm this option.
4. Choose the line in use on or off by using [▲] / [▼] (refer to Fig.. 24) (The default is on)
5. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig 23. (Change to OFF)

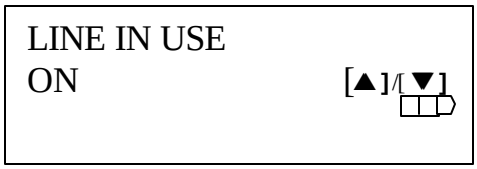


Fig.23

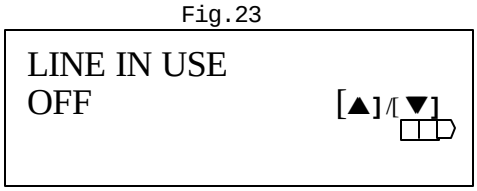


Fig.24

10. RESET HANDSET PROGRAMMING

1. Press [MEM] to enter the programming mode (refer to Fig 3)
2. Press [▲] / [▼] until displaying "HANDSET RESET" (refer to Fig.25)
3. Press [#] to confirm this option and the LCD will display Fig 26
4. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig 1a or 1b or 1c.

Fig.25

Fig.26

11. RESET BASE PROGRAMMING

1. Re-power the unit
2. Press [MEM] to enter the programming mode (refer to Fig. 3)
3. Press [▲] / [▼] until displaying "BASE RESET" (refer to Fig.27)
4. Press [#] to confirm this option and the LCD will display Fig. 28
5. Press [#] to confirm the choice and the screen will display Fig. 11 for 3 seconds and return to the programming display as Fig 1a or 1b or 1c.

Fig.27

Fig.28

12. MAKING OUTSIDE LINE CALL

If trying to request a service from the 'busy' base unit which all the paths are in use. You will get an audible warning tone.

1. Press an available [Lx], where x = 1/2/3/4. For example, press [L2]. The LCD will display Fig. 29
2. For example, the telephone number is 035775141+PAUSE +2581"
3. Enter "035775141and then press [FUNCTION][7], then the LCD will display Fig. 30
4. Then, enter "2581" & the LCD will display Fig. 31. Some leading digits will be shifted away.
5. Press [END] to release the call, or put the handset to the charger to release the call automatically. The screen will return to idle mode as Fig.1a

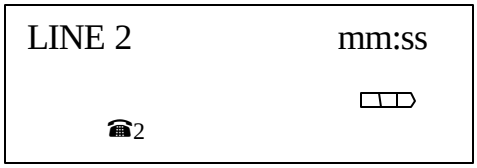


Fig.29

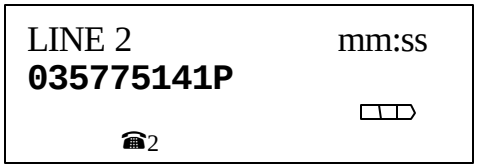


Fig.30

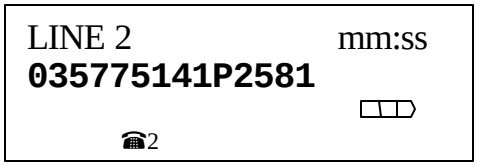


Fig.31

13. ANSWERING CALL

You may press any one of the digit keys [1/2/3/4/5/6/7/8/9/0/*/#] to pick up the ringing call, and the answer priority is Ringing Intercom Call, Transfer Calls, Hold Recall Calls, Ringing CO Line Calls. But, you may override the priority, by press the [Lx] or [ICM] directly.

1. Handset in the standby mode when the handset rings (eg. Co line 2), the caller ID will be displayed. (refer to Fig.32)
2. Press [any one of the digit] key, or you may press the ringing [Lx] to pick up the CO ringing line, the LCD will display as Fig. 33.
3. Press [END] to release the call, or put the handset to the charger to release the call automatically. The screen will return to idle mode as Fig.1a

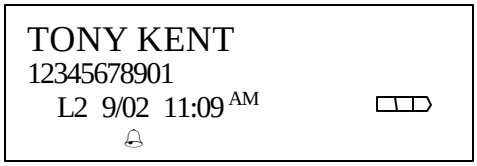


Fig.32

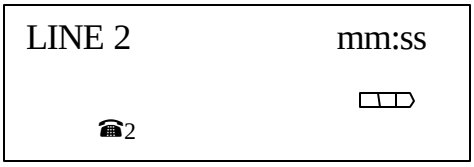


Fig.33

14. PR-DIALING

1. Enter the telephone number, for example: "0357751412581 and the LCD will display Fig. 34
2. Press an available [Lx], where x = 1/2/3/4. For example, press [L2]. The LCD will display Fig. 35
3. Press [END] to release the call, or put the handset to the charger to release the call automatically. The screen will return to idle mode as Fig.1a

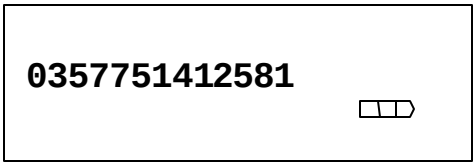


Fig.34

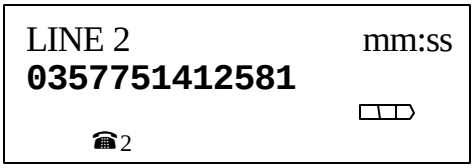


Fig.35

15. REDIAL

1. Standby, press an available [Lx], where x = 1/2/3/4. For example, if you press [L2], the LCD will display Fig 36.
2. Press [REDIAL] to redial the last dialed number. The LCD will display as Fig .37.

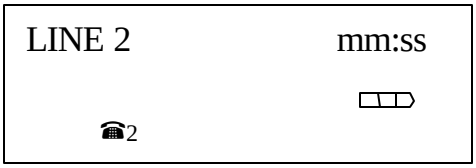


Fig.36

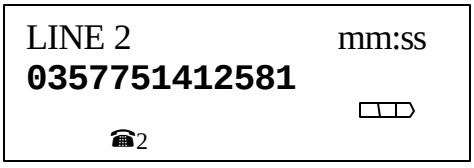


Fig.37

16. REDIAL WITH PRE-DAILING

1. Press [REDIAL] to redial the last dialed number. The LCD will display as Fig .38
2. After Last dialing number reviewed, and you want to dial the number. Press an available [Lx], where x = 1/2/3/4, handset will pick up the CO line and dial out the number as display as Fig. 39

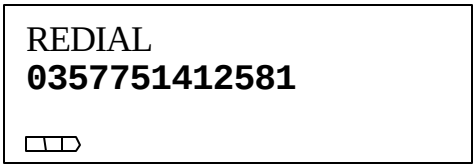


Fig.38

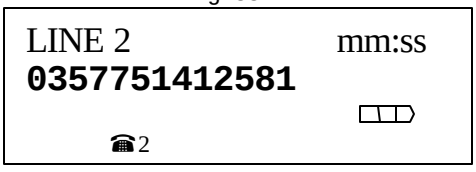


Fig.39

17. HOLD

1. On line (eg. Line 2), the screen will display either Fig. 33 or Fig.35
2. Press [HOLD], and the LCD will display Fig.40 and Handset icons will be flashing.
3. After 10 seconds time out, the display will return to idle display as Fig. 1a with flashing Handset icons
4. If the Hold Reminder Time is not disabled, when you held a CO line over a programmed period of time, a triple beep will be heard to remind you that the line is still held. (The hold reminder time can be set from 15/30/45/60 seconds and off. The default is 30 seconds)
5. If the held CO line is not picked up for 3 minutes, all handset units will start ringing (i.e., Recall Ring) to remind all of users. The related icons will be changed.
6. Press [any one of the digit] key or you may press the ringing [Lx] to pick up the CO hold recall ringing line, the LCD will display Fig.33

Note: In this wireless system, the held CO line will be released when the held line isn't picked up within 5 minutes.

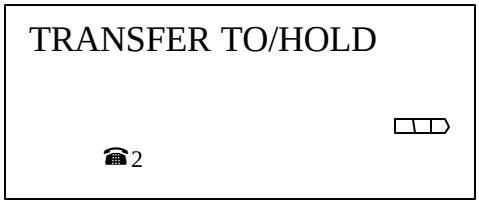


Fig.40

MAKE AN INTERCOM CALL

1. Standby, press the [ICM] key. The LCD will display Fig. 42
2. Dial desired intercom number, say station 12 calls station 05, the LCD will display Fig. 43
3. If the Called Party is Idle and Access-able, the calling party station 12 will display Fig. 44 and the called party station 05 will get an intercom ring and display Fig.45
4. If the called party is busy and access-able, the calling party station 12 will display Fig.46
5. If the Called Party is in DND (Ringer Off) Mode and Access-able, the calling party station 12 will display Fig.47.
6. If the called party is an illegal number, the calling party station will display Fig.48.

Note:
-Access-able means the called party is linked with the base unit.
When the called party is busy or in DND, the called party station 05 will remain UN-changed. The called party will not hear a call waiting triple beep for intercom call.
- Illegal means the called party is non-existing or loses the link with this system.

Fig.42

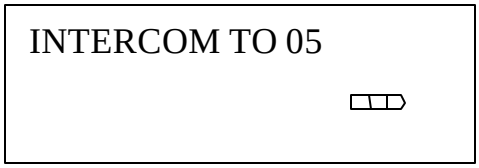


Fig.43

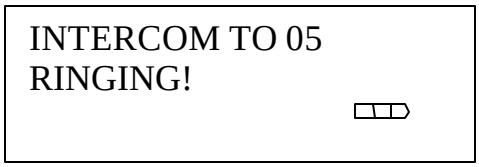


Fig.44

Fig.45

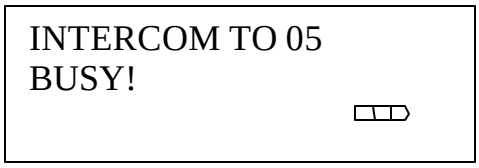


Fig.46

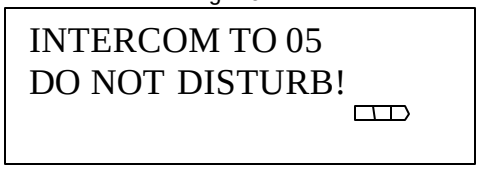


Fig.47

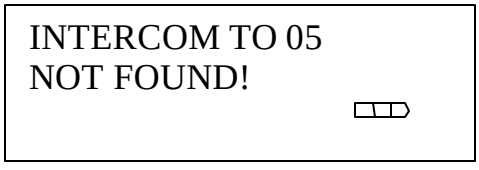


Fig.48

18. ANSWERING AN INTERCOM CALL

1. Handset is ringing, the LCD will display Fig. 45
2. Press [any one of the digit] key or you may press the [ICM] to pick up the ringing intercom call. The LCD will display Fig. 49.
3. The calling party station will show Fig.50

.

Fig.49

Fig.50

19. PAGE CALL TO THE HANDSET

1. Make an intercom call. The calling party station will display Fig.44
2. The called party station 05 will get an intercom ring and display Fig.45
3. When the calling party station 12 presses the [ICM] key again, the intercom ring will be changed to talk automatically. The calling party station 12 display Fig. 51, while the called party's LCD will display Fig. 52.
4. If the called party station 05 wants to talk by handset, just press [SPEAKERPHONE] and the LCD will display Fig. 49.

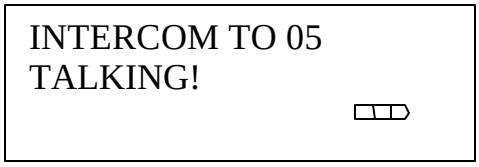


Fig.51

Fig.52

20. INTERCOM CALL AND PAGE CALL INTERCHANGING

1. After make a page call. The calling party station 12 will display Fig. 51
2. The called party station 05 will stop ring and display Fig.52
3. The calling party station 12 presses the [ICM] key again. The page will be changed to intercom ring automatically. The calling party station 12 will display Fig.44
4. The called party station 05 will get an intercom ring and display Fig.45

Note:

1. If the called party answers the call by pressing the [ICM] or [SPEAKERPHONE] key, the intercom call will not change to "Page Call" mode anymore.

21. CONFERENCE CALL

The user is allowed to make a three-way conference call.

Two CO lines Conference Call

1. On CO line, the LCD will display Fig.53 or Fig.54
2. Press [HOLD], the LCD will display Fig. 55. Handset icons will be flashing.
3. Make the second CO line call, the LCD will display Fig. 56
4. Press [FUNCTION] and LCD will display Fig. 57. The first line's icon will be flashing.
5. Press [CONF] (same as [*]) to bridge the two CO lines and the LCD will display Fig.58a or Fig.58b if in speakerphone mode

One CO line Conference Call

1. On CO line, the LCD will display Fig.53 or Fig.54
2. Press [HOLD], the LCD will display Fig. 55
3. Make an intercom call to another station (eg.05) and it is available. The calling party will display Fig. 50 and the called party will display Fig.49.
4. Press [FUNCTION]and LCD will display Fig. 57
5. Press [CONF] (same as [*]) to bridge the two handsets and one CO lines, the LCD will display Fig.59a or Fig.59b if in speakerphone mode
   (Note: The dialing number field should be blank.)

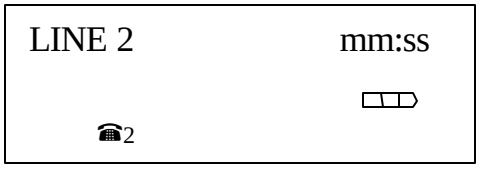


Fig.53

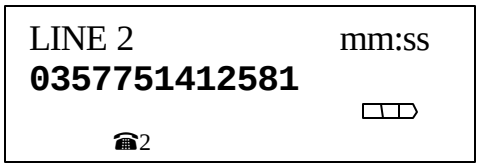


Fig.54

Fig.55

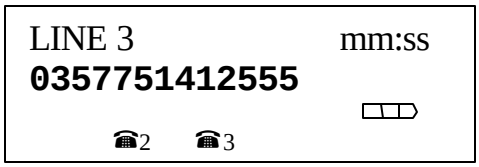


Fig.56

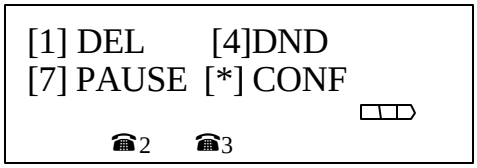


Fig.57

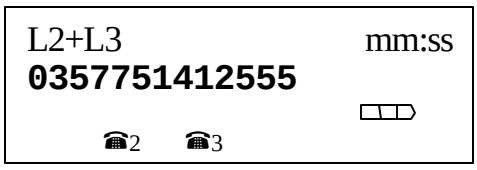


Fig.58a

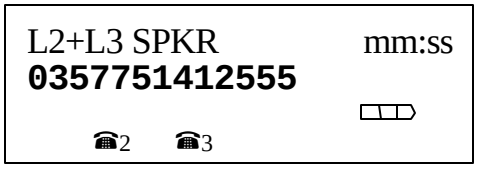


Fig.58b

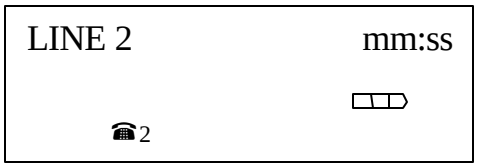


Fig.59a

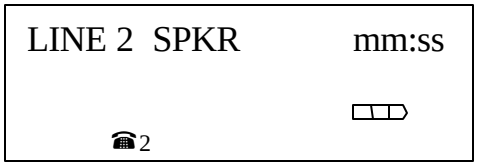


Fig.59b

22. TRANSFERRING CO CALL

1. On CO line, the LCD will display Fig.53 or Fig.54
2. Press [HOLD], the LCD will display Fig. 55
3. After the 10 seconds time-out, the display will revert to the final idle display if nothing is dialed. If you enter the transfer station number in time, say station 12 transfer a call to station 05. Then, the LCD will display Fig .61
4. A transfer ring will be heard at station 05.

The icon below the LCD will indicate the transferred line.

Note: You will hear a call waiting triple beep when you are on the other line and receive a transfer ring.

Fig.60

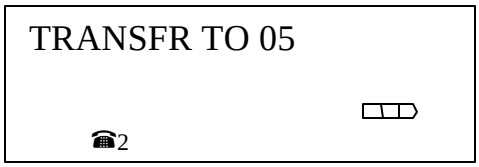


Fig.61

23. TRANSFERRING RECALL

1. If the transferred call didn't answer over 3 minute, the system will recall to all handsets to remind there is a line has been unanswered and in holding state for too long. The icon below the LCD will indicate the transferred line.

2. Press [any one of the digit] key or you may press the recalling [Lx] to pick up the CO ringing line. The LCD will display Fig.62.

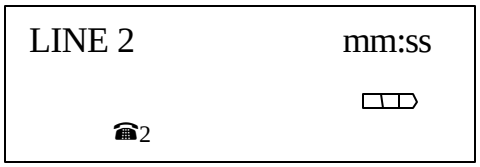


Fig.62

24. FLASH FUNCTION

You may press the FLASH function key instead of pressing the hook switch to activate services such as call waiting, 3-way calling, etc.

1. On line, the LCD will display Fig. 63
2. Press [FLASH] to make a hook switch to the line. The LCD will display Fig .64
3. Enter new phone number, or service code and the LCD will display Fig. 65

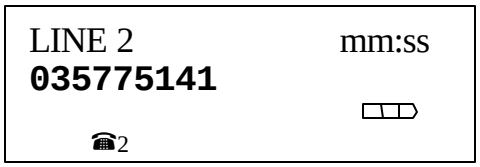


Fig.63

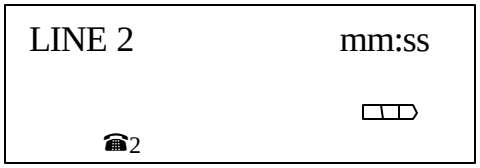


Fig.64

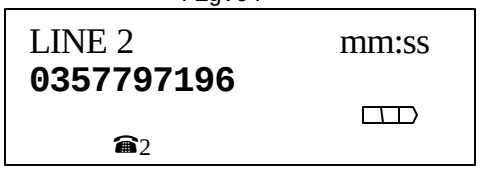


Fig.65

25. PAUSE FUNCTION

Please refer to "12. Making Outside line call".

26. TONE FUNCTION

If you have pulse service and wish to access a computer or calling service that use tone.

1. On line, and dialed digits in pulse. The LCD will display Fig. 63
2. Press [TONE] (same as [*]) to change the dialing mode to TONE mode. And then enter the rest digits will be dialed as TONE signal. The LCD will display Fig. 66

Note: When you release the line, the dial mode will change to the pulse mode again automatically.

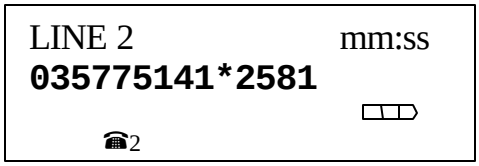


Fig.66

27. DO NOT DISTURB FUNCTION

1. Press [FUNCTION] to display Fig. 57. And then press [DND] (same as [4]) to activate DND. The LCD will display Fig. 67a
2. To cancel the DND mode, press [FUNCTION] and then press [DND] (same as [4]) again to disable DND mode. The handset will be return to idle mode (Fig. 67b)

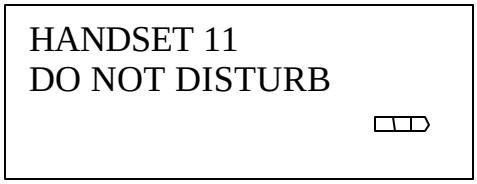


Fig.67a

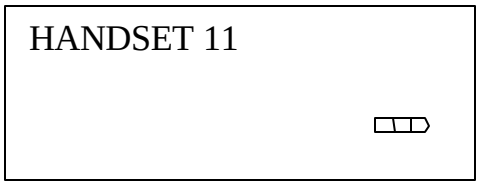


Fig.67b

28. MUTE FUNCTION

The Mute feature turns off the microphone so the person at the other phone cannot hear you. The Mute feature automatically cancels when you hang up or change lines.

1. On line, press [MUTE] key for privacy, the LCD will display Fig .68
2. To resume your conversation, press the [MUTE] key again and will display Fig. 69.

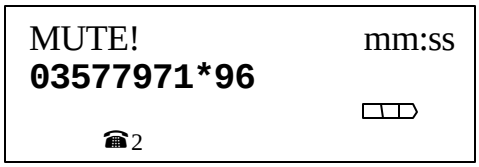


Fig.68

29. OUT OF RANG WARNING

The LCD will display the "Out Of Range" and a double beep warning when the handset is too far from the base unit. You have to move closer to the base unit for clear conversation.

1. Walking out from base unit service area, the LCD will display Fig. 72
2. If the user walks back to the base unit after he/she receive the Out Of Range warning (O.O.R.), the handset will stop the O.O.R. warning and return to Fig.71
3. If the user keeps walking away from the base unit service area, once the system lose the signal for a period of time, say 20 seconds, then the base will disconnect the call.

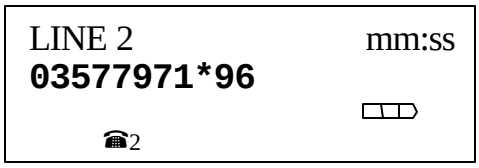


Fig.69

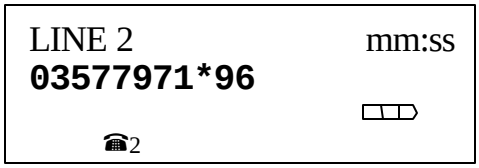


Fig.71

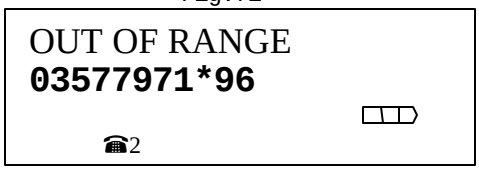


Fig.72

30. BATTRY LOW WARNING

The warning indicator appears when the battery of the handset becomes weak. If you are on a call when battery low, you will hear the double beep, end the conversation as soon as possible. Otherwise, you may lose the call. The icon will warn you about the battery at low status.

31. COMPLETE WITH HEADSET

The Headset unit frees your hands so you can keep working. Plug the headset into the headset jack. The voice will be switched to the headset unit automatically. Plug out the headset when you want to talk by handset. The voice will be switched to the handset automatically.

32. COMPLETE WITH SPEAKERPHONE

The speakerphone function frees your hands so you can keep working, too.
Press the [SPEAKER] key to turn on the speakerphone function when you are using the handset unit. The voice will be switched to the speakerphone.

If the user wants to come back handset mode. Press [SPEAKERPHONE] again to switch the voice to the handset automatically.

Note: If the headset unit has plugged in the handset, the speakerphone would not work.

33. VOLUME CONTROL

Adjusting the handset/speaker/headset volume level
While using the handset or speaker or handset, the user may adjust the volume level of pressing [▲]/[▼] and the LCD will show Fig.73 for 3 seconds after the volume is set.

Fig.73

There are 5 receiver volume levels (Level 1,2,3,4,5). The default level is middle (Level 3).

.A warning beep will be heard when the volume is set at the maximum (Level 5) and minimum level (Level 1)

Adjusting the Ringe r volume
1. While the telephone is idle (not being used), the user may adjust the ringer volume level by pressing [▲]/[▼] key.

2 The LCD will automatically show “RINGER:HIGH” or “RINGER: MID” or “RINGER: LOW” . For example, if the user increases the ringe r volume from ringer low to ringer high, the display will show Fig 74 for 3 seconds. Then, the display will return to idle mode as Fig. 1a.

Fig.74

There are 3 ringer volume levels (Low/Mid/High). The default level is middle.

34. SPEED DIALING OPERATION

The Speed Dialing memory stores 20 names and phone numbers. Name: maximum 16 characters. Number: maximum 30 digits.

Storing the information into speed dialing memory

1. Press [MEM] to enter the programming mode and the LCD display "MEMORY" (refer to Fig. 75)
2. Press [#] to confirm this option
3. The SPEED MEMORY will be displayed. (refer to Fig. 75a)
4. Enter speed dialing memory index or use [▲] / [▼] to choose another memory location. (Fig. 77a and Fig. 77b)

NOTE:
1. If the number length is longer than 12, the LCD will show 2nd page for more numbers information after 3 seconds automatically.
2. Use Down arrow to view the next record (eg. memory 05 to 06)
3. Use up arrow to view back the previous record (eg. Memory 05 to 04)
4. When the display shows "SPEED MEMORY", the user can either view the memory index (eg M02) by pressing the down arrow twice or enter the index no. 02.

5. Press [#] to confirm the chosen memory
6. Use the [▲]/[▼] key for the Backward/Forward the cursor to edit the name. When the cursor is moved to the character to be changed, that character will flash.
7. Press [#] to confirm the name.
8. Use the [▲]/[▼] key for the Backward/Forward the cursor to edit the phone no. When the cursor is moved to the digit to be changed, that digit will flash.
9. Press [#] to confirm the storing and LCD shows Fig. 78 for 3 seconds with a happy tone and return to the programming mode as Fig. 77b.

Note:
- If the user would like to store the "#" character in name field or in the number field, he must press and hold the [#] over 2 seconds.
-Repeatedly press the dial pad key that letter or symbols, until the display shows the letter or symbol that you want to save.

1 for , - ' & . ( ) @ 1
2 for A, B, C, a, b, c, 2
3 for D, E, F, d, e, f, 3
4 for G, H, I, g, h, i, 4
5 for J, K, L, j, k, l, 5
6 for M, N, O, m, n, o, 6
7 for P, Q, R, S, p, q, r, s, 7

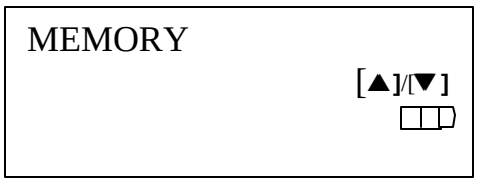


Fig.75

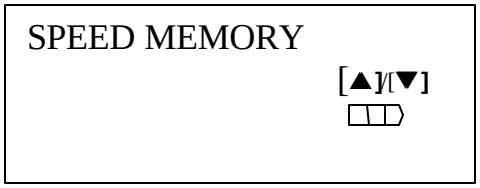
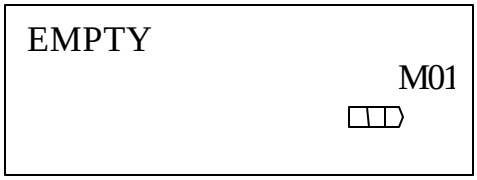


Fig.75a



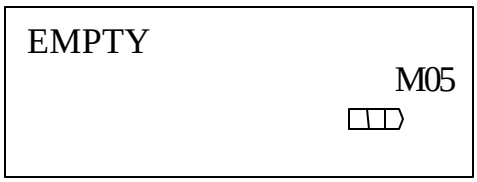


Fig.77a

8 for T, U, V, t, u, v, 8

9 for W, X, Y, Z, w, x, y, z, 9

0 for 0, "SPACE"

* for *

for

Reviewing the information from speed dialing memory

1. User could review the speed dialing memory by repeating the above step 1 to step 5.

Dialing information from speed dialing memory

1. User could review the speed dialing memory by repeating the above step 1 to step 4.

2. Press an available [Lx], where x = 1/2/3/4, handset will automatically pick up the CO line and dial out the number.

Dialing Information after pick up the line

1. Press an available [Lx], where x = 1/2/3/4, handset will automatically pick up the CO line and shows Fig. 64.
2. Press [MEM] to enter the programming mode.

Enter speed dialing memory index (01-20), for example"12", it will automatically dial out the content in the memory index 12 and the LCD will display Fig.71(eg. memory no. is 03577971*96)

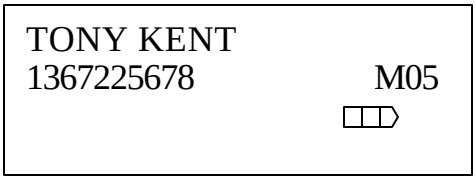


Fig.77b

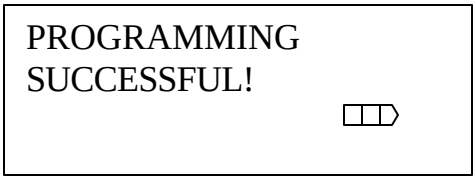


Fig.78

35. REMOVING ONE INFORMATION FROM SPPED DIAL MEMORY

Removing one information from speed dial memory

1. User could review the speed dialing memory by repeating the above step 1 to step 5.
2. Once the memory to be deleted is displayed (eg. memory 05 (Fig.77b), press [FUNCTION] and the LCD will display Fig.79
3. Press [DEL] (same as [1]) to delete the memory(eg. delete memory 5). The LCD will display Fig. 80.
4. Press [#] to confirm the deletion, the LCD display Fig .81a for 3 seconds and return to the programming display as Fig 81b.

Removing alle information from speed dial memory

1. User could review the speed dialing memory by repeating the above step 1 to step 3. (fig 75a)
2. Press [FUNCTION] and the LCD will display Fig.79
3. Press [DEL] (same as [1]) to delete all speed dial memory (Fig 81c)
4. Press [#] to confirm the deletion, the LCD display Fig .81a for 3 seconds and return to the programming display as Fig 75a.

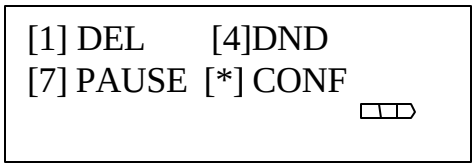


Fig.79

Fig.80

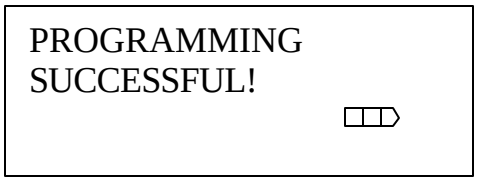


Fig.81a

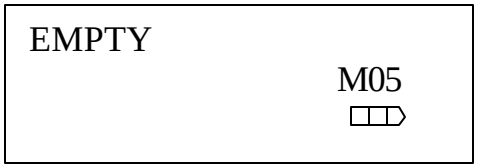


Fig.81b

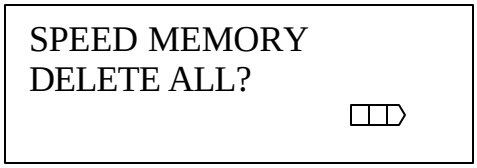


Fig.81C

36. PROGRAMMING AREA CODE

The Cordless System provides 1 home area code and 5 local area codes that are programmable.

--- If the phone number came from your home area code (the one you programmed), the LCD displays only the phone number (without an area code).

--- If the phone number does not come from your home area codes, the LCD displays the phone number with the area code prefixed.

Programming the Home Area Code

1. Press [MEM] to enter programming mode (refer to Fig 75)
2. Press **[▲] / [▼]** until displaying "HOME AREA CODE"(refer to Fig. 82)
3. Press [#] to confirm this option and the screen will display Fig.83)
4. Enter 3 digit home area code (refer to Fig. 84)
5. Press [#] to confirm no. and the screen will display Fig. 85 for 3 seconds and return to the programming display as Fig 82.(Change to 527)

Programming the Local Area Code

1. Press [MEM] to enter programming mode (refer to Fig 75)
2. Press **[▲] / [▼]** until displaying "LOCAL AREA CODE x" where x=1-5(refer to Fig. 86a)
3. Press [#] to confirm this option and the screen will display Fig. 86b)
4. Enter 3 digit local area code (eg.522, the LCD will display Fig.86c)
5. Press [#] to confirm the no. and the screen will display Fig. 85 for 3 seconds and return to the programming display as Fig 86a. (Change to 522)

Erasing the Local Area Code

1. Press [MEM] to enter programming mode (refer to Fig 75)
2. Press **[▲] / [▼]** until displaying "LOCAL AREA CODE x" where x=1-5(eg refer to Fig. 86a)
3. Press [#] to confirm this option

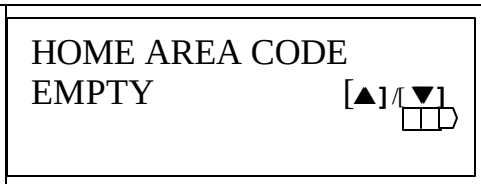


Fig.82

Fig.83

Fig.84

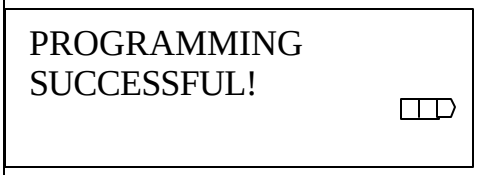


Fig.85

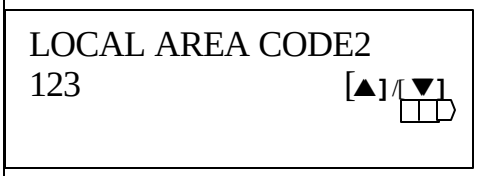


Fig.86a

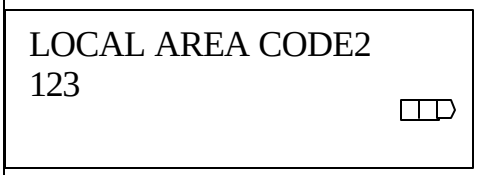


Fig.86b

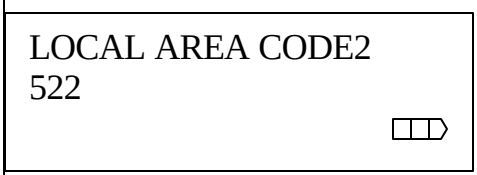


Fig.86c

4. Press [FUNCTION] to display Fig. 79 and then press [DEL] (same as [1]) to erase the CID Area code. The LCD will display Fig. 87
5. Press [#] to confirm the ID no. and the screen will display Fig. 85 for 3 seconds and return to the programming display as Fig 86a. (But, change to "EMPTY")

Fig.87

37.CALLER ID

Display

If the Caller ID service is available from your telephone company, and you have requested this feature, the LCD will show the telephone name and number of the incoming calls. When you receive a call, the caller's Number & Name is displayed as:

" Name & Number": Name and number are sent from your telephone company (refer to Fig. 88a)

If there is no name with telephone no., it will show "NO CALLER INFO" on the first row. (refer to Fig. 88b)
If there is name without number, it will show "NO CALLER INFO" on the 2nd row. (refer to Fig. 88c)

"Private": Incoming caller's Name Private indicator (refer to Fig. 88d)

"Out Of Area": Incoming caller's Name Out-Of-Area indicator (refer to Fig. 88e)

View the caller ID information between ringing calls

If you get more than one line ringing at the same time, you can check the caller from these different lines to decide which line should be answered with higher priority.

1. Handset in standby mode, line 2 and line 3 ringing, the LCD shows line 2 caller information as Fig. 89
1. Press [CALLER] again to check the Line 3 caller information and the screen will display Fig. 90.
2. Press [CALLER] again will back to normal mode.
3. Press [CALLER] again to check the Line 2 caller information and the screen will return to Fig. 89.

Enter the CID data base retrieve mode

You may enter the CID Database, which stored the latest 50 calls, and you may use some very useful features during the view of the database.

1. Standby, press [CID LIST] to enter CID database retrieve mode. The LCD will display Fig. 91

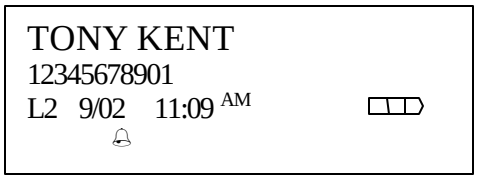


Fig.88a

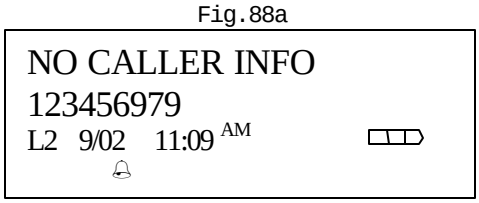


Fig.88b

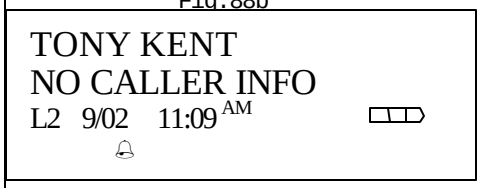


Fig.88c

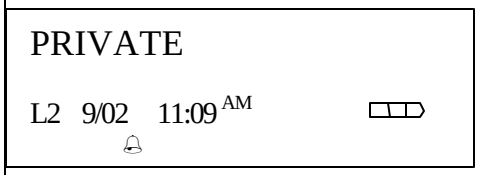


Fig.88d

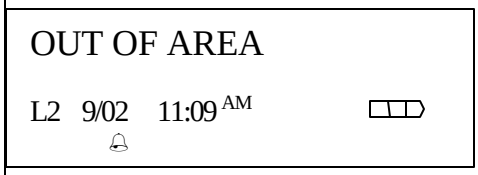


Fig.88e

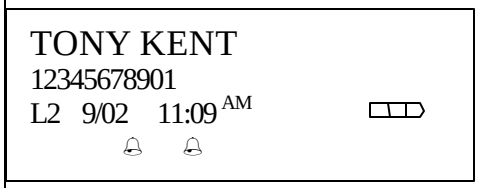


Fig.89

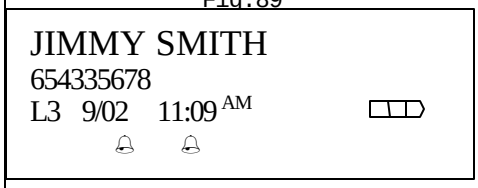


Fig.90

Delete all callers information

1. Press [CID LIST] to show Fig.91
2. To delete all callers information, press [FUNCTION] to display Fig. 79 and then press [DEL] (same as [1]). The LCD displays Fig. 92
3. Press [#] to confirm the choice and the LCD will shows Fig. 93

Delete a single callers information

1. Press [CID LIST] to show Fig.91
2. Use **[▲]** / **[▼]** key to scroll the CID information, which you wish to delete. (eg. Fig .94)
4. Press [FUNCTION] and the LCD will display Fig. 95.
5. Press [DEL] (same as [1]) to delete the caller data. The LCD displays Fig. 96a.
6. Press [#] to confirm the choice and the LCD will shows Fig.96.

Dial back for the caller on the display

1. Press [CID LIST] to show Fig.91
2. Use **[▲]** / **[▼]** key to scroll the CID information, which you wish to dial. (eg. Fig .94)

NOTE: During the review mode, if the Caller number length is longer than 13, the LCD will show 2nd page for more numbers information after 3 seconds automatically.

3. Press an available [Lx] (where x = 1/2/3/4) to pick up the CO line. And then the unit will dial out the number automatically. The LCD will show fig. 97

Note:

1. If the phone number came from your home area code, the call will be dialed only the 7-phonenumber (without an area code).
2. If the phone number came from one of your local area code, the call will be dialed 10 digits including the local area code prefixed.
3. If the phone number did not come from any of your area codes (the ones you programmed), and then there are 2 cases:

   Case 1: If the phone number is more than or equal to 10, the phone will automatically insert and display '1', the call will be dialed all digits with the leading digit "1".

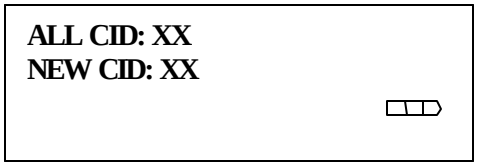


Fig.91

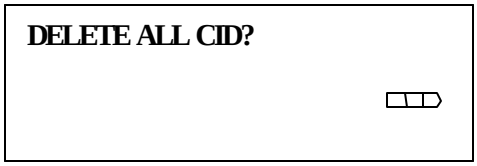


Fig.92

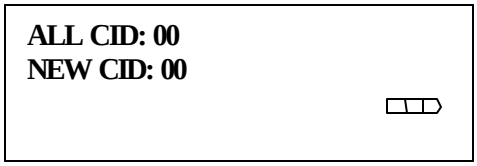


Fig.93

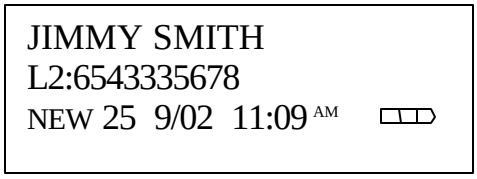


Fig.94

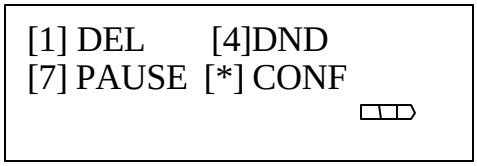


Fig.95

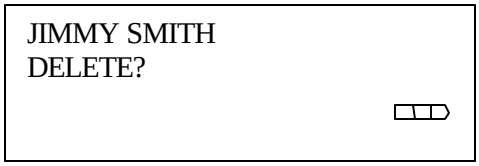


Fig.96a

Case 2: If the phone number is less than 10, the phone will dial the phone number only without the leading "1".

Store a caller number into speed dialing memory

1. Press [CID LIST] to show Fig.91
2. Use **[▲]** / **[▼]** key to scroll the CID information, which you wish to store. (eg. Fig .94)
3. Press [MEM] to enter the programming mode and the LCD will display Fig. 98
4. Press [#] to confirm this option
5. The SPEED MEMORY index will be displayed.
6. Enter speed dialing memory index or use [▲] / [▼] to choose another memory location. (eg. choose M05, the display will be as Fig. 99 or 100)
7. Press [#] to confirm the chosen memory location and the LCD will display Fig.99 or 100.
8. Press [CID LIST] Key to show Fig.101a.
9. Use the [▲]/[▼] key for the Backward/Forward the cursor to edit the name. When the cursor is moved to the character to be changed, that character will flash.
10. Press [#] to confirm the name.
11. Use the [▲]/[▼] key for the Backward/Forward the cursor to edit the phone no. When the cursor is moved to the digit to be changed, that digit will flash.
12. Press [#] to confirm the storing and LCD shows Fig. 101 for 3 seconds with a happy tone and return to the programming mode as Fig. 101a.

Type II Caller ID

This is a telephone service that identifies a waiting caller without interrupting your current call.

This feature gives you the informed choice of whether or not to take the incoming call.

The operation is same as the normal operation. Please see the example below:

Suppose that you are talking on Line#2. The LCD displays Fig. 102

DELETED !

Fig.96

LINE 2 mm:ss
16543335678
☎2

Fig.97

MEMORY
[▲]/[▼]

Fig.98

EMPTY
M05

Fig.99

MARY GROTE
1762337890 M05

Fig.100

JIMMY SMITH
16543335678 M05

Fig.101a

PROGRAMMING
SUCCESSFUL!

Fig.101

1. After hearing a short CPE Alert Signal (CAS), the LCD will display the new incoming Caller ID automatically. If you want to view the new incoming Call ID of this line when you are doing something else, press [CALLER] and see the Caller ID of the waiting caller as Fig. 103

2. Press [CALLER] again to return the original line#2 talking mode as Fig 102.

Fig.102

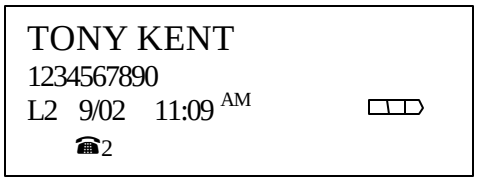


Fig.103

38.CALLER ID MESSAGE WAITING

Your telephone company may send a "Message Waiting" signal to you. You can retrieve the messages through your telephone company. For example, Fig. 104a shows someone left messages to you on Line 1, 2, 3, 4. Fig. 104b shows someone left messages to you on Line 3 only.

Delete the display of the message waiting

1. Press [FUNCTION] & the LCD Fig.95 and then press [DEL] (same as [1]. The LCD will display Fig. 105
2. Suppose that the user presses "3", the LCD will display Fig. 106
3. Suppose that the user presses "0" (all 4 CO lines). The LCD will display return to idle mode as Fig. 107

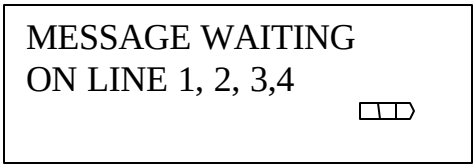


Fig.104a

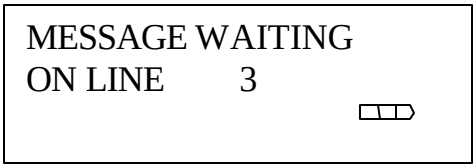


Fig.104b

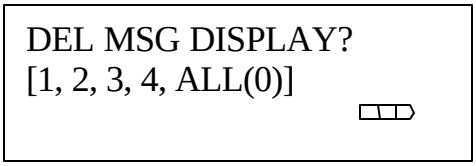


Fig.105

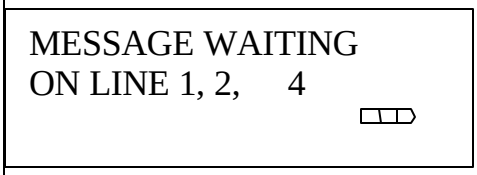


Fig.106

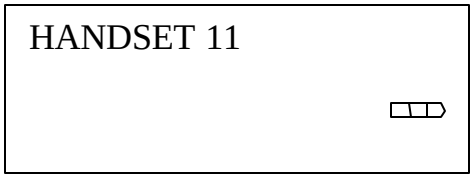


Fig.107

39.PRROMGRAMMING SEQUENCE

Once entering the programming mode, pressing **[▲]** / **[▼]** will cycle through the programming parameters' display in the following sequence.

1. MEMEORY
2. CO LINE1 RING
3. CO LINE 2 RING
4. CO LINE 3 RING
5. CO LINE 4 RING
6. RINGER TYPE

7. HS SECURITY CODE
8. BU SECURITY CODE
9. HANDSET ID
10. HOLD REMINDER
11. TONE/PULSE
12. FLASH TIME
13. HOME AREA CODE
14. LOCAL AREA CODE 1
15. LOCAL AREA CODE 2
16. LOCAL AREA CODE 3
17. LOCAL AREA CODE 4
18. LOCAL AREA CODE 5
19. LINE IN USE
20. HANDSET RESET
21. BASE RESET

If the user has finished all the programming, Press [END] to exit the programming mode and return to the idle display.

7. FCC Warning Statement

7.1. FCC Warning Statement

Caution to User: the changes or modification not expressly approved by the party responsible or Compliance could void the user's authority to operate the equipment.

7.2. RF Exposure Warning Statement

The 40-2421 is classified as a portable device and it does not operate in the one of the services listed in Section 2.1093(c). Therefore, the 40-2421 is categorically excluded from routine environmental evaluation for RF exposure as per section 2.1093(c).

* Important Notice

Since this equipment has very low output power (EIRP <5 dBm), it complies with the FCC RF Exposure Limit.