

User Guide

IQTELE3 Handsfree Display Telephone

IQTEL Business Telephones - Quality at your fingertips

by **INTERQUARTZ**[®]

1. General

This Interquartz telephone has been manufactured to very high standards and is very easy to use. Please read this guide carefully before using the telephone. You can refer to the diagrams for locating the various parts mentioned in this user guide.

1.1 Off-hook and On-hook

The terms Off-hook and On-hook will appear often in this guide. "Off-hook" means when you lift the telephone handset off the cradle or when you press the HANDSFREE key or ON/OFF HOOK key to access the telephone line. "On-hook" means when you have replaced the handset to the cradle or when you press the HANDSFREE key or ON/OFF HOOK key to hang-up.

1.2 Interquartz Anti-Ring Back feature

This is a standard feature on the IQTEL Business Telephones not commonly found in other telephones. This feature avoids those annoying "phantom calls". A "phantom call" is when the phone rings immediately after you hang-up but when you answer there is no one and no ring tone there. This is due to an unintentional PBX recall during your previous call. Having this Anti-Ring Back feature means that you cannot tap the Cradle Switch Lever to recall the PBX (hook-flash); the Cradle Switch Lever is for hanging-up only. You can recall the PBX via the PBX RECALL key. PBX means Private Branch Exchange; that is your private telephone system.

2. Installation

For optimum performance you should confirm your IQTEL-E3's system match settings against the line condition of your telephone line. Please verify (and where necessary change) these system match settings by referring to Diagram 1 (for Termination & AGC setting) and Diagram 2 (for Timed-break Recall Timing).

Please note that Direct Line is referred to as PSTN (Public Switched Telephone Network) Line. If your IQTEL-E3 is connecting to a PBX then you should check with your telecommunications manager or your PBX supplier on the line condition.

Always make sure that the telephone is not connected to the telephone line before adjusting the system match settings.

2.1 Power Supply and Batteries

This telephone uses power from the telephone line for most of its operations. However it also uses batteries for the following purposes:

- Operating the clock
- Memory back up in case of telephone line power interruption
- Additional power source for handsfree loudspeaking operations

There are four (4) AA size alkaline batteries supplied with each telephone. Before inserting new batteries, first ensure that the telephone is not connected to the telephone line.

Please refer to Diagram 1 to locate the battery compartment on the underside of the telephone.

You should check the state of the batteries at least once a year. If there is any sign of corrosion, you must replace the batteries. Make sure that the telephone handset remains on the cradle while you check or while you replace the batteries. You should then find that you will not lose any previously programmed memories.

2.2 Connection

Please refer to Diagram 1 for connecting the telephone line cord and handset cord to the phone base. Plug the other end of the handset cord to the handset and place handset in the cradle. Plug the other end of the line cord to the telephone line jack.

2.3 Setting the ringer volume and pitch

You can set the ringer volume to High (HI), Low (LO) or Off (OFF). You can also adjust the ringer pitch (see Diagram 1).

2.4 RESET

Press the RESET button to initialize the telephone (see Diagram 4).

2.5 Setting the Clock

The display's idle mode is to show the time of day. The Clock's format is HH-MM-SS (HH for hours, MM for minutes and SS for seconds). However the Clock's setting format is HH-MM-X where X=0 for 12 hour AM mode, X=1 for 12 hour PM mode and X=2 for 24 hour mode. Please follow the steps below to set the time of day.

Push gently on the swing cover plate located just below the display to reveal a set of keys (see Diagram 3).

- Press STORE then input the relevant hour time (HH); e.g. 08 for eight o'clock
- Input the relevant minute time (MM); e.g. 18 for eighteen minutes passed the hour
- Input value for X according to the time of day and desired mode; e.g. X=1 for Clock setting of 08-18-00 PM (Note: when setting the clock the seconds always default to 00 seconds)
- Finally press the CLOCK/TIMER key to hear a valid tone (beep) and complete Clock setting

2.6 Programming for Automatic Pause Insertion

You can program the telephone to automatically insert a pause if your PBX requires a pause after dialling the outside line access code. Note: For Automatic Pause Insertion the access code cannot be more than two (2) digits long.

For example: if the access code is "1" then you can program the telephone as follows

- Press STORE then Press "1"
- Press STORE again then Press "*" to complete programming

then whenever you dial a telephone number that begins with the access code "1" you can complete the dialling without pausing. The telephone will automatically pause for approximately two (2) seconds after the "1" before dialling out the rest of the telephone number.

To CANCEL Automatic Pause Insertion

- Press STORE twice then Press "*" to cancel Automatic Pause Insertion programming

Diagram 1
UNDERSIDE OF TELEPHONE

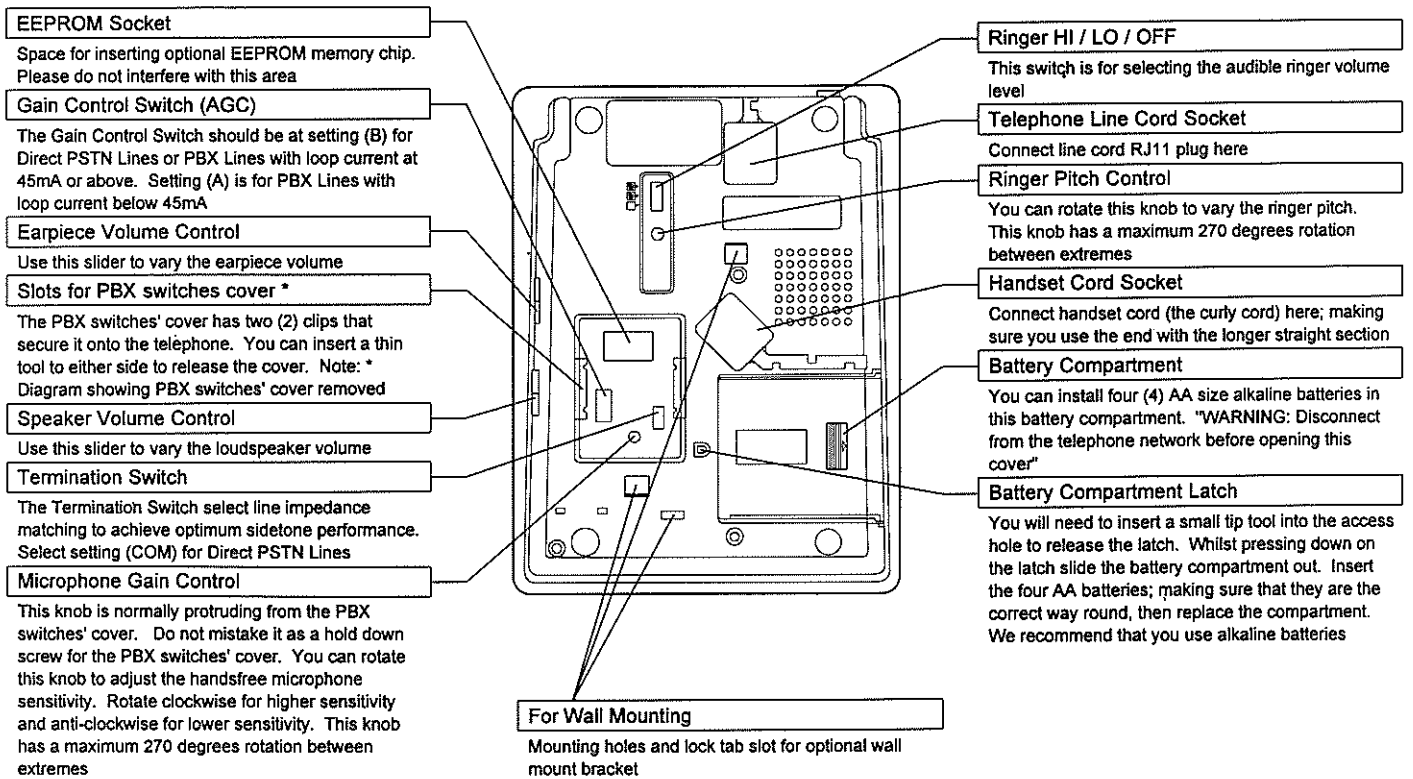
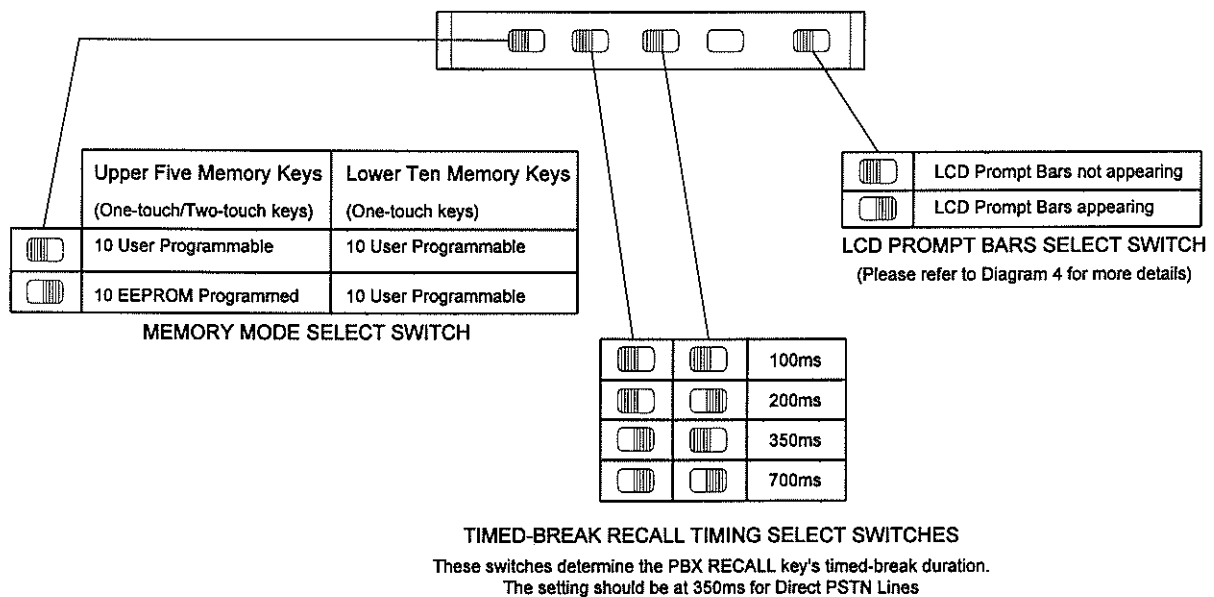


Diagram 2
SWITCHES BEHIND THE LOWER MEMORY KEYS' INDEX CARD
To remove the clear cover and index card you will need a small flat tip tool such as a small flat tip screw driver or a paper knife. Use this tool to press gently down at an angle either the left or right end. The cover and card will then pop up.



These switches determine the PBX RECALL key's timed-break duration.
The setting should be at 350ms for Direct PSTN Lines

3. Operations

3.1 Manual Dialling

Lift the handset (Handset mode) or press the HANDSFREE key (Handsfree mode), listen for the dial tone and then dial the required number using the keypad. The number will appear on the display as you enter them.

3.2 Monitor Dialling mode

This mode is often referred to as On-hook dialling mode. In this mode you can dial a telephone number without lifting the handset while monitoring the call progress. Once the called party answers you MUST either lift the handset or press the HANDSFREE key to proceed with the call.

While in the Monitor dialling mode the telephone will automatically release the line if you do not change to either the Handset mode or the Handsfree mode within sixty (60) seconds. There will be a warning tone of two (2) short beeps five (5) seconds before the line release. If you wish to continue in the Monitor mode you can restart the sixty (60) seconds time count down by pressing the PAUSE key anytime during the current sixty (60) seconds.

3.2.1 To operate in the Monitor mode

- Press the ON/OFF HOOK key to listen for the dial tone in the loudspeaker
- Dial the required number on the keypad or dial via the memory keys
- You can hear the dialling through the loudspeaker and monitor the call's progress
- Before speaking you will need to lift the handset or press the HANDSFREE key
- You can terminate the call before the automatic line release by picking up the handset and immediately replace it to cradle or press the HANDSFREE key twice

3.3 Handsfree Dialling mode

You can use the HANDSFREE key for On-hook dialling in much the same way as the Monitor mode. However in this mode the telephone will continue to ring an unanswered number until you terminate the call by pressing the HANDSFREE key. There is no automatic line release.

3.3.1 To operate in the Handsfree mode

- Press the HANDSFREE key to listen for the dial tone in the loudspeaker
- Dial the required number on the keypad or dial via the memory keys
- You can hear the dialling through the loudspeaker and monitor the call's progress
- When the called party answers, you can speak via the handsfree microphone or use the handset to talk in the Handset mode
- You can terminate the call by replacing the handset or by pressing the HANDSFREE key

It is possible to alternate between the Handset mode and Handsfree mode during a call. To do this you can follow the steps below:

- While in Handset mode you can go to Handsfree mode by pressing the HANDSFREE key BEFORE replacing the handset, OR
- While in Handsfree mode you can lift the handset to automatically go to Handset mode

3.4 Dialling using the memory keys

You can store any of the 4 x 3 DTMF keys (1, 2, 3...to 0 including * and #), the PAUSE key, the ON/OFF HOOK key, the PBX RECALL key and the HANDSFREE key into any of the memory locations. Each time you store new data into a memory location you will overwrite previously stored data.

3.4.1 Upper memory keys

The upper five (5) memory keys can access a total of ten (10) memories; for each key you can press once (one-touch) to access the "first page" and press twice (two-touch) in quick succession within about one (1) second to access the "second page". You can also select the upper memory keys to be in one of two memory modes. There is the General mode for all upper memory keys to be user programmable or there is the EEPROM mode for all upper memory keys to be pre-programmed via an EEPROM (see Diagram 2 on Memory mode select switch).

3.4.2 Lower memory keys

The lower ten (10) memory keys are all one-touch keys accessing a total of ten (10) memories. These are all user programmable only.

3.4.3 Audible Tones

You may hear a "valid" or an "invalid" tone when operating this telephone in memory dialling.

Whenever you execute a valid operation, e.g. correctly memory dialling a previously stored number, you will hear a short high pitched sound as the "valid" tone.

If you executed an incorrect operation, e.g. dialling a memory key that has no previously stored data, then you will hear a low pitched sound as the "invalid" tone. In this case please check your error and re-input the information.

3.4.4 Using the Liquid Crystal Display (LCD)

When storing data into the memories you should check the LCD to ensure that you are correctly programming your data.

3.4.5 Memory Dial storing procedure

- Press STORE to enter into the Store mode then input the telephone number or the PBX code
- Press the required memory key (press once for storing into a one-touch memory and twice for storing into a two-touch memory)
- A "valid" tone will sound for successful storing

3.4.6 To Memory Dial

- Lift the handset or press the HANDSFREE key to listen for the dial tone
- Press the appropriate memory key either once or twice (depending on where you stored the data)
- Proceed with the call according to whether you are in Handset or Handsfree mode

3.4.7 Speed Dialling

To make the most of the facilities available on this telephone, particularly when used behind a PBX, Speed Dialling is the recommended method of storing numbers and using the memories.

You can achieve Speed Dialling (memory dialling with automatic Off-hook) by storing the ON/OFF HOOK key or HANDSFREE key at the start of a number sequence in a memory location (Please refer to section 3.4.8 below for more details). You can also achieve memory dialling automatic On-hook via the ON/OFF HOOK key only if you used the ON/OFF HOOK key to go Off-hook in the first place. In the event that you are already Off-hook the phone will ignore the Off-hook function in the Speed Dial Memory and treat it the same as Memory Dialling.

3.4.8 Speed Dial storing procedure

- Press STORE then Press either ON/OFF HOOK key OR HANDSFREE key
- Press the PAUSE key if necessary then input the telephone number or PBX code
- Press the required memory key (once for storing into a one-touch memory and twice for storing into a two-touch memory)
- A "valid" tone will sound for successful storing

3.4.9 To Speed Dial

With the handset resting on the cradle, press the required memory key once, or twice, depending on the location of the stored data.

If the HANDSFREE key was used in the memory, simply start the conversation when the call is answered. If the ON/OFF HOOK key was used in the memory you will need to lift the handset or press HANDSFREE key for the conversation to begin.

You can replace the handset or press the HANDSFREE key to terminate the call.

3.4.10 Storing into the SAVE memory a number you have just dialled (maximum 32 digits)

- Press STORE then the SAVE key (The number you have just dialled is now stored into SAVE until you overwrite it)
- You can now set the phone On-hook by returning handset to cradle or press HANDSFREE key

3.4.11 Storing into the SAVE memory when using as number Notepad function

- While Off-hook press STORE to go into the Store mode
- Follow by inputting the number sequence you want to store (maximum 32 digits)
- Finally press the SAVE key to complete storing procedure

3.4.12 Dialling from the SAVE memory

Dial as if you would dial via any of the one-touch memories described previously.

CLOCK/TIMER Key

You can press this key to alternate the LCD to show Clock or Timer while the phone is in the On-hook mode. When the phone is in the Off-hook mode each time you press this key the LCD will change to show the dialled number; the Clock or the Timer. Please refer to installation 2.5 for Setting the Clock

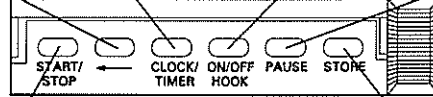
Backspace and Space Key

You can only use this key while in the Store mode. While in the Store mode pressing this key briefly will Backspace an incorrect entry; you can repeat Backspace if necessary. Alternatively you can press and hold down this key until a dash appears in the number sequence you are storing. This dash is also a 100ms pause in that number's dialling sequence

START/STOP Key

You can press this key to start or stop the Timer as applicable. The Timer will start automatically when you go Off-hook. When you go back On-hook the Timer will stop automatically and the elapsed time will show on the LCD for a short time before the LCD reverts to Clock

Diagram 3
KEYS UNDER SWING COVER



ON/OFF HOOK Key

You can press this key to put the phone into the Off-hook monitor mode or On-hook mode (hang-up). You can achieve speed dialling (memory dialling with automatic Off-hook or On-hook) by storing this key as part of a number sequence in a memory location (Please refer to 3.2 & 3.4.7 for more details)

PAUSE Key

If your telephone is behind a PBX then when dialling an outside line you may need to dial an outside line access code then "pause" to wait for the second dial tone before dialling the telephone number. The PAUSE key allows you to dial without stopping to wait for that second dial tone. You can also program the telephone to have Automatic Pause Insertion (Please refer to Installation 2.6)

STORE Key

You can set the phone into the Store mode by pressing this key. Press this key first when you want to store numbers or PBX codes into any of the one-touch or two-touch memory keys

Diagram 4
IQTEL-E3 GENERAL APPEARANCE

LCD Prompt Bars

There is one LCD Prompt Bar corresponding to each one of the upper five (5) memory keys. If you have selected the "LCD Prompt Bars Appearing" option (refer to Diagram 2), then pressing upper memory key once will show Prompt Bar. Pressing upper memory key twice in succession (within one (1) second) will remove Prompt Bar. Prompt Bars can serve as visual indicators for PBX features enabled or disabled

Cradle Switch Lever

Depress this lever to go On-hook. Due to the anti-ringing back feature there will be approximately two (2) seconds of silence if you go Off-hook immediately after going On-hook. Do not use this lever for hook-flash

Handset Retainer

If the phone is for wall mounting then you need to re-position this retainer. First remove the phone number card and cover then push the retainer out of its slot via the centre hole. Rotate retainer 180° and re-insert into slot so that the retainer is protruding

Phone Number Card and Cover

For noting down your phone number and extension number

Loudspeaking speaker

Speaker for Monitor mode and Handsfree mode

HANDSFREE Key

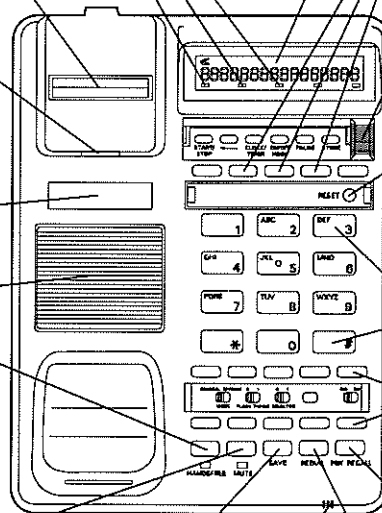
You can press this key to switch the Handsfree mode On or Off. The red LED below the key will glow when the Handsfree mode is On. You can achieve speed dialling in Handsfree mode by storing this key as part of a number sequence in a memory location. Please refer to section 3.3 & 3.4.7 for more details

MUTE Key

You can press this key to cut off handset and handsfree microphone transmission. When you activate MUTE the red LED below the key will glow also the LCD MUTE prompt will display. Press key again to cancel MUTE and resume transmission. The red LED will then go off and LCD MUTE disappears. The MUTE function will only operate in the Off-hook mode. The MUTE function will automatically release upon going On-hook

SAVE Key

Use the SAVE key to either store into or retrieve from the SAVE memory location. Please refer to section 3.4.10 for more details



Liquid Crystal Display (LCD)

The sixteen (16) characters wide LCD is for displaying the Clock, the Timer, the dialled number, the memory content (View) and other function prompts

Upper Memory Keys

These five (5) memory keys can access ten (10) memory locations via one-touch and two-touch on each key. They can be all user programmable or all pre-programmed via an EEPROM. Please refer to section 3.4.1 for more details

Ring Indicator Light

This light flashes when there is an incoming call even when the audible ringer is in the OFF position. This light can also be an optional message waiting light when configured to match the message waiting light signal generating device

RESET button

If the telephone appears not to function properly then press this button to re-set the telephone. You will need a small flat tip tool; for example a small flat tip screw driver; to remove the clear plastic cover plate and the memory location card of the upper memory keys to reveal the RESET button below

4 X 3 Standard Keypad

Keypad for DTMF (tone) dialling. DTMF signalling is continuous until you stop pressing the key

Lower Memory Keys

These ten (10) memory keys can access ten (10) memory locations via one-touch of each key. They are all user programmable only. Please refer to section 3.4.2 for more details

PBX RECALL Key

This key provides a timed-break (hook-flash) signal to the telephone line for call transfer and other PBX or PSTN functions. The timed-break duration depends on the setting of the Timed-break Recall Timing Switches. Please refer to Diagram 2

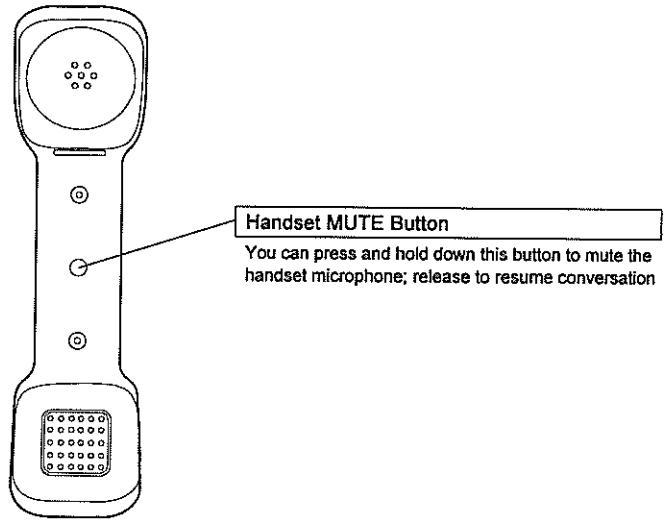
REDIAL Key

The last number dialled is automatically stored into REDIAL. To redial simply press the REDIAL key. The telephone will go On-hook then return to Off-hook within two (2) seconds and redials the last dialled number provided that the dialled number did not exceed thirty-two (32) digits long

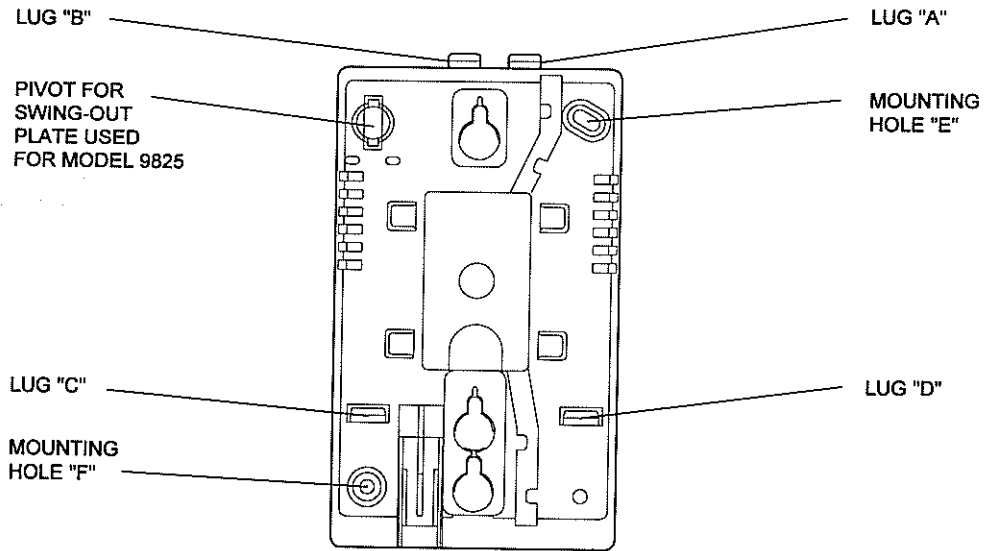
Handsfree microphone

You should speak into this microphone when in the Handsfree mode. You can adjust the sensitivity of this microphone. Please refer to Diagram 1

**Diagram 5
HANDSET**



**Diagram 6
WALL MOUNT BRACKET**
(Optional - not included with phone)



Please note :

1. This wall bracket may be secured onto the wall by using mounting holes "E" and "F".
2. Lugs to break off before wall mounting the phone.

Telephone models	Lugs to break off
IQTEL80 IQTEL280 IQTEL300 IQTEL500 IQTEL-E3	"B" and "D"
IQ300 9835FWA	"A"only

