



# IP8820 IP Phone



## User Guide

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for Broadworks

Please read this guide carefully before operating your set.  
Retain this guide for future reference.

## Regulatory and Safety Notices

IP8820

### 1. Radio Frequency Emissions:

#### FCC Compliance statement:

This device complies with Part 15 rules. Operation is subject to the following two conditions;

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a different circuit from that to which the receiver is connected

If problems persist, consult the dealer or an experienced radio/TV technician for help.

#### Canadian Compliance statement:

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with Class B limits of Industry Canada. Operation is subject to the following two conditions;

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

#### European Union Declarations of Conformity:

LG-Nortel Co. Ltd. declares that the equipment specified in this document, which bears the "CE" mark, conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (R&TTE 1999/5/EC) including, Electromagnetic Compatibility Directive (89/336/EEC) and Low Voltage Directive (73/23/EEC)

The product fulfills the essential requirements of the harmonized standards shown above.

### 2. Product Safety Instructions

This product complies with and conforms to the following international Product Safety standards as applicable:

- Safety of Information Technology Equipment, IEC 6095-1, including Relevant national deviations as listed in Compliance with IEC for Electrical Equipment (IECEE)
- Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-1/UL 60950-1

### 3. E-911 and use of the IP8820 Phone with Multi-Line Telephone Systems:

Please note the use and operation of this phone as part of a multi-line telephone system (MLTS) may be subject to state and/or federal E-911 MLTS laws that require the MLTS to provide a caller's telephone number, extension, and physical location to applicable state and/or local emergency services when a caller initiates a 911 call. The MLTS may not provide a caller's telephone number, extension, or physical location information to emergency services when a caller dials 911, and compliance with state and/or federal E-911 MLTS laws is the sole responsibility of the purchaser of this phone.

### 4. Privacy:

IP8820 Phone implements security and encryption technologies however, privacy of communications may not be ensured when using this telephone.

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## Care & Precautions:

Before connecting or using your new phone, take a moment to consider safety and reliability. Use common sense when locating, connecting and using your IP8820 Phone.

- Locate on a dry level surface. Keep the phone away from the edges of the surface to avoid the potential of a fall.
- Locate cables to avoid potential for damage. For example, do not locate under rugs or carpet as damage may result from foot traffic or heavy objects. Also, do not locate cables between the desktop and walls where they may be crushed, damaging the insulation.
- Check the cables regularly and, if damage is noted, disconnect your phone. Contact your local representative for a replacement.
- Should liquid spill on the phone, disconnect the unit from power and the network.
- Do not use during lightning storms. Lightning presents a potential shock hazard.
- Clean the IP8820 Phone with a soft dry cloth; do not use liquid cleaners.
- Always use caution when connecting to AC power. Use only with a properly grounded standard AC power outlet.

## What is new in this release?

Issue 01.00    2008.12    first release

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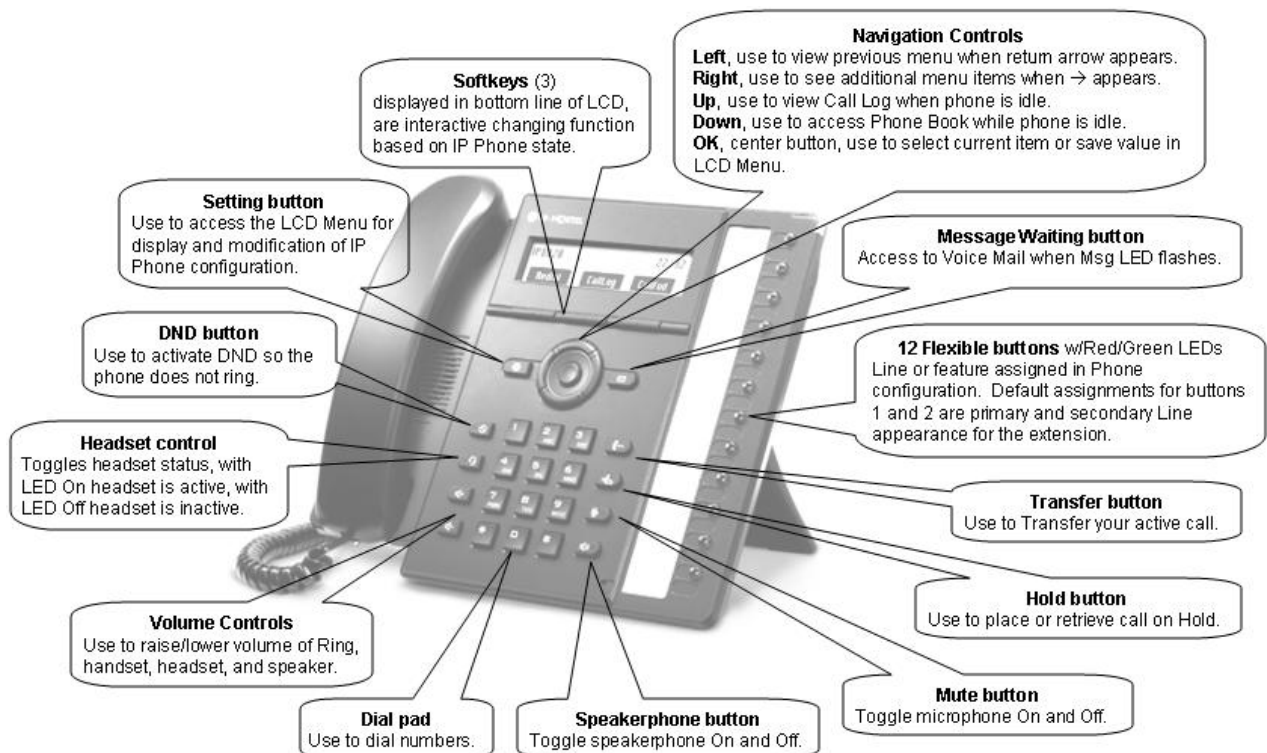
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## 1. IP8820 IP Phone Overview

Your new LG-Nortel IP8820 Phone is an Internet Protocol (IP) phone employing Session Initiation Protocol (SIP), the well-known open standard for establishing, managing and terminating a communication session. IP8820 Phone interoperates with call servers, proxies and gateways to exchange SIP signaling messages for call control. Real-time Transport Protocol (RTP) packets deliver voice between the end-points over a managed IP network.

Features available to IP8820 Phone through SIP call servers are similar to those of a conventional business telephone. In addition to the features described in this guide, your call server may provide additional features, often using dialed feature codes. Refer to your system administrator for further information.

The IP8820 Phone has fixed feature buttons, soft feature keys, flexible buttons that are configurable, and dial pad buttons as shown in the figure below.



The twelve (12) flexible buttons access lines and features based on the IP Phone configuration. Flexible buttons assigned for line access, called line buttons, represent a telephone line or a SIP user. A line may be private, calls to a private line signal at all appearances of the line but an active or held call is only visible and accessible by the original end-points. A shared line appears at multiple phones and all calls are visible and accessible by all end-points, with the line. Each line button employs LEDs to indicate status as shown below.

Incoming call	Orange*	LED flashes at 60 ipm, fast flash
Line in use at this phone	Orange*	LED On
Call held at this phone	Orange*	LED flashes at 30 ipm, slow flash
Shared line in use at	Red	LED On

another phone		
Shared line call held at another phone	Red	LED slow flash
Line not registered w/server	Red/Orange	LED flashes color, red to orange at 30 ipm

\* When the LCD displays information for a line, such as when an incoming call first rings, the LED color is orange otherwise, the LED color will be green.

Flexible buttons not assigned for line access may access features such as Speed dial, Redial and others. Refer to [section 5.5](#) and your system administrator for further information.

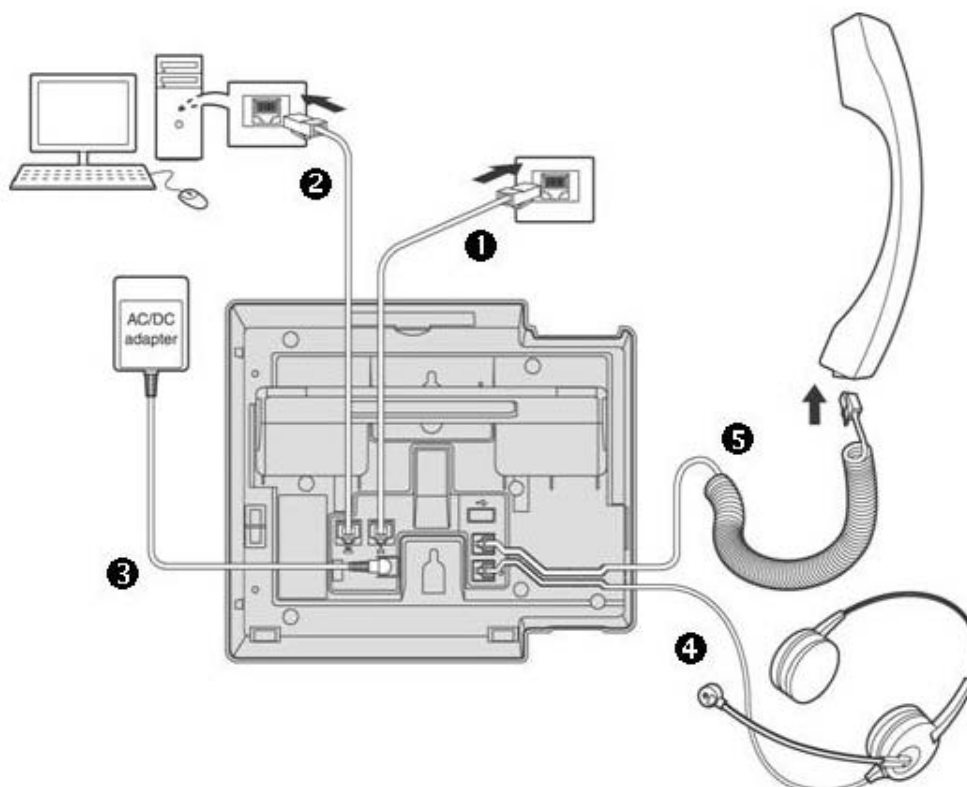
The figure below shows other major components of IP8820 Phone. These components include:

- Handset
- Speaker and microphone
- Message Wait Indicator (Message LED)
- LCD (240 by 42 pixel), displays 3-lines
- Flexible button labels



### 2. Installing your IP8820 Phone

The figure below shows the cable connections for your IP Phone. The LAN and desktop PC connections employ standard category 5 LAN cables terminated with RJ-45 connectors. The IP Phone supports PoE (Power over Ethernet) in accordance with the IEEE-802.1af industry standard. When connected to a PoE compliant LAN port, the IP Phone derives power from the port. If the LAN port does not support PoE, use the AC/DC adaptor, available separately, for connection to power. The handset connects to the base with the supplied standard handset coiled cord. Use the chart below to make connections to the IP Phone.



- |          |         |   |
|----------|---------|---|
| <b>1</b> | LAN     | Connect the IP Phone LAN port to the LAN wall jack with the provided LAN cable.   |
| <b>2</b> | PC      | Connect the IP Phone PC port to your desktop PC with an RJ-45 terminated UTP-5 cable.   |
| <b>3</b> | Power   | If the LAN port supports PoE (IEEE 802.3af compliant), the AC/DC adapter is not required. If not supported, connect the IP Phone power port to the DC out of Power Adapter. Connect the Power Adapter AC plug to an AC wall jack. |
| <b>4</b> | Headset | Connect Headset RJ-11 jack to the IP Phone headset jack.  |
| <b>5</b> | Handset | Connect the Handset coiled cord to the IP Phone base and handset.   |



### 3. Using Features of IP8820 Phone

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#### 3.1. Receiving a Call

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When you receive a call, your phone rings, the LCD displays the incoming call information and the associated line button flashes.

To answer a ringing call:

- Lift the handset. You may press the speakerphone button, line button or the **Answer** softkey to activate the speakerphone. To use a headset, press the headset button.

To end the call:

- Hang up the handset. If using the speakerphone, press the speakerphone button. If using the headset, press the headset button.

To refuse a ringing call:

- Press **Refuse** softkey, the IP Phone stops ringing and the call server routes the call.

#### 3.2. Placing a Call

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You place calls with the handset on-hook or off-hook. Similar to your mobile phone, the IP8820 Phone uses a technique called 'store and forward dialing'. After you dial a digit, the IP Phone waits about 6 seconds for additional digits. If you do not dial additional digits, the IP Phone sends the digits you dialed to the call server for processing. To send the digits immediately, press the # button to indicate dialing is complete, and then the IP Phone sends the number to the call server.

To place a call:

- Lift the handset. You may press the speakerphone button or line button to activate the speakerphone. To use a headset, press the headset button.
- Dial the destination number. After a short delay, the IP Phone sends the number, or dial # to send the dialed digits immediately.
- When the called party answers, begin speaking, the LCD displays the elapsed call time.

To end the call,

- Hang up the handset. If using the speakerphone, press the speakerphone button. If using the headset, press the headset button.

#### 3.3. Putting a Call on Hold

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You can place a call in a waiting state where the held party cannot hear you and you cannot hear the held party. The held party receives MOH (Music-On-Hold), if configured in the call server.

While a call is on hold, you can answer or place other calls and can toggle between held calls on the same line. With Call Hold Ringback enabled, the IP Phone rings as a reminder of calls on hold when you return the IP Phone to idle. Refer to your system administrator or Installer Guide for further information.

To place a call on hold:

- Press the Hold button or the **Hold** softkey. The call status changes to hold and you receive dial tone. You may then select another line to answer or place a call. Note, if you select an idle line and take no action for about 15 seconds, the line is disconnected.

To retrieve a held call on a different line:

- Press the slow flashing line button
- Select the desired call from the displayed call list using **Previous-Next** softkeys
- Select the **OK** softkey to resume a connection with the call.

To toggle between two calls on the same line:

- Press the Hold button or the **Resume** softkey, the active call status changes to hold and the held call connects.

### 3.4. Announcing a Call Transfer

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Using Announcing a Call Transfer, you send an active call to another extension after announcing the call transfer to the receiving party.

To transfer an active call:

- Press the Transfer button or the **Transfer** softkey. The active call status changes to hold and you receive dial tone.
- Dial the number you wish to receive the transfer.
- Await answer and announce the transfer.
- To complete the transfer, hang up the handset.

To cancel a transfer, for example the second party does not answer or is busy:

- Press the **EndCall** softkey.

### 3.5. Using Blind Call Transfer

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You can transfer an active call to another extension without talking to the party receiving the call. The call transfers to the new party without verifying that the new party is there or willing to receive the call.

To transfer an active call without announcing the transfer:

- Press the **BlindXfr** softkey. The active call status changes to hold and you receive dial tone.
- Dial the number you wish to receive the transfer.
- To complete the transfer, hang up the handset.

To cancel a transfer, for example you mis-dial the receiving number:

- Press the **EndCall** softkey.

### 3.6. Call Forward

---

Call forward directs incoming calls to ring at another location that you designate. You can select one of four (4) conditions that will forward your calls:

- Call Forward Busy – redirects incoming calls if the line is busy.

- Call Forward No Answer – redirects incoming calls that are not answered in the configured no answer time.
- Call Forward Busy or No Answer – redirects incoming calls if the line is busy or not answered after the no answer time expires.
- Call Forward All Calls – immediately redirects all incoming calls.

To set up Call Forward:

- o Press the **CallFwd** softkey.
- o Use the **Previous**/**Next** softkeys to select the desired Call Forward condition.
- o Press the **OK** softkey.
- o Input the destination where you want your calls sent.
- o Press the **OK** softkey. The display shows “(x) Fwd to ext” indicating the forward condition and destination for the calls.  
(B) = Busy, (N) = No-answer, (BN) = Busy or No-answer, (U) = Unconditional

To disable Call Forward:

- o Press the **CallFwd** softkey. The message “(x) Fwd to xxxx” disappears from the LCD.

### 3.7. 3-Party Conference

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The IP Phone has a 3-Party Conference feature that lets you converse with two other parties simultaneously.

To set-up a conference:

- o Place first call as normal.
- o Press the **Conferen** softkey. The call status changes to hold and you receive dial tone.
- o Dial the number you want to join the conference.
- o When the party answers, press the **Join** softkey to establish the conference.

To end your conference:

- o Hang up the handset.

To cancel a conference, for example the second party does not answer or is busy:

- o Press the **EndCall** softkey.

### 3.8. Call Waiting

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With Call Waiting configured, while you are in a call the IP Phone alerts you of an incoming call. The line button flashes and you receive a beep tone over the active conversation to indicate the new call. In addition, during the ring signal, the LCD displays the incoming caller id so you know who is calling before you interrupt the current call.

To answer an incoming call while on a call:

- o Press the **Answer** softkey. The active call changes to the hold state and the new call connects.

### 3.9. Redial

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Your IP Phone saves the last number you dialed and allows you to redial the number with the touch of a button. The number is stored in memory but is lost if power to the IP Phone is interrupted.

To redial a call:

- Press the **Redial** softkey. The IP Phone activates the speakerphone and places the call.
- Lift the handset for privacy or press the headset button to use the headset.

### 3.10. Speed Dial Buttons

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Flexible buttons not assigned as a line are available for configuration as feature buttons including Speed dial. Pressing a Speed dial button selects your line and sends the stored number to the call server for processing. Refer to your system administrator for further information.

To place a call using Speed dial:

- Press the desired Speed dial flexible button. The IP Phone activates the speakerphone and places the call on your line. You may select a different line button on your IP Phone prior to selecting the Speed dial button.
- Lift the handset for privacy or press the headset button to use the headset

### 3.11. Speed Number Dialing

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Your IP8820 Phone incorporates a Phone Book with up to 100 records. Refer to [section 4.2](#) for information on use of the Phone Book. Each record includes a name, contact information and a Speed number (00 to 99). When you dial a Speed number, the IP Phone initiates a call to the contact. Speed number dialing must be enabled. Refer to your system administrator for further information.

To place a call using a Speed number:

- Dial the Speed number (00-99) for the desired contact. After a short delay, the IP Phone sends the contact information from the Phone Book. You may dial # to set up the call immediately. If the Phone Book has no record of the Speed number, the IP Phone sends the digits dialed to the call server for processing.

### 3.12. DND (Do-Not-Disturb)

---

When the DND (Do Not Disturb) feature is enabled and activated, the IP Phone will not notify you of an incoming call. The IP Phone does not ring, allowing you to work without interruption from an incoming call. The call server configuration determines routing of the incoming call while your phone is in DND. Refer to your system administrator for further information.

To activate DND:

- While the IP Phone is idle, press the DND button. When active, the DND button LED illuminates red, and "Do not disturb" displays in the LCD.

To deactivate DND:

- Press the illuminated DND button again.

### 3.13. Muting a Call

---

Mute toggles the microphone of the Handset, Speakerphone and Headset Off and On. When Mute is active, the connected party will not receive audio from the microphone.

To mute the microphone:

- Press the Mute button. The Mute button LED illuminates red indicating mute is active.

To turn the microphone back on:

- Press the illuminated Mute button again.

### 3.14. Accessing Your Voice Mail

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When you have a message waiting, the Message LED flashes to indicate you have new messages in your mailbox. The IP Phone delivers the message waiting indication for your primary line, line button 1.

To access your voice mailbox:

- Press the Message button. The display indicates the number of messages waiting.
- Press **Dial** softkey. The IP Phone activates the speakerphone and places a call to your voice mailbox. To listen to your messages, follow the instructions for your voice mail system.

### 3.15. DSS/BLF Coverage

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The IP8820 Phone has a DSS line type that addresses the special needs associated with an Attendant or Secretarial answering position. The specific needs for these users are:

- Direct Station Selection (DSS) - one-touch calling and transfers to extensions
- Busy Lamp Field (BLF) - visual status indication of covered lines.
- Coverage - the ability to pick up calls ringing at those extensions.

The DSS line in the IP Phone uses the shared line assignment in the call server. Operation of the DSS/BLF Coverage button however is distinctly different than a shared line. For more information on assigning DSS lines, consult your system administrator.

To call an idle covered extension:

- Lift the handset. You may press the speakerphone button or the headset button.
- Press the DSS line button. You may press the DSS line button prior to lifting the handset, which activates the speakerphone and places the call.

To transfer an active call:

- Press the DSS line button. The IP Phone places the active call on hold, and calls the extension.
- Await answer and announce the transfer.
- To complete the transfer, hang up the handset.

To cancel a transfer, for example the second party does not answer or is busy:

- Press the **EndCall** softkey.

To answer a call for a covered extension:

- Lift the handset. You may press the speakerphone button or press the headset button.

- Press the flashing DSS/BLF Coverage button. You may press the DSS line button prior to lifting the handset, which activates the speakerphone and answers the call.

The LED indications of the DSS line button are:

- Solid red line in use remotely
- Fast blinking red Call appearance ringing for covered line
- Slow blinking red Remote call hold

### 3.16. Hotline/Warm-Line

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With Hotline/Warm-Line operation configured, the IP Phone automatically calls the defined destination when you take the handset off-hook or press the speaker button. The call initiates immediately, Hotline, or after a delay of up to 10 seconds, Warm-Line. The later permits you the time to access another feature or line as needed. Note that with Hotline configured, Speed dial, redial and other automated dialing features will not operate.

Operation of this feature is automatic.

## **4. Advanced Services and the IP8820 Phone LCD Menu**

This section describes how to view and use the advanced services available through the LCD menu. The IP8820 Phone has three context sensitive softkeys, pressing the softkey selects the function or value shown in the LCD just above the softkey. The left (return) and right navigation buttons navigate through menus.

The menu items and order of display may be different on your phone based on the service subscription. Not all features may be available to you based on the call server configuration.

### **4.1. Using the Call Logs Menu**

The IP8820 Phone has access to a log of all calls placed or received by the phone, including incoming calls that were not answered (missed calls). The LCD displays the call logs that you can use to place a call to the logged party. You access the call logs using the Up navigation button or with a flexible button assigned for the Call Log function. Refer to your system administrator for further information.

To access the Call Logs menu:

- While in an idle state, press the Up navigation or Call Log flexible button. The Call Log menu displays with several choices (missed, outgoing and incoming).
- Use the **Previous-Next** softkeys to select the desired log and press the **OK** softkey, or dial the digit in front of the desired selection.
- The log will display information on the calls along with the received caller id.



To place a call using the Call Logs:

- Dial the digit preceding the desired log item or use the **Previous-Next** softkeys to highlight the desired log item and press the **Dial** softkey.

### **4.2. Using the Phone Book Menu**

The IP8820 Phone has an internal Phone Book with up to 100 entries. Each record includes the contact name, contact information ring type and Speed number. You can add, delete, edit, dial and search entries from the Phone Book Menu. You access the Phone Book Menu with the Down Navigation button or using a flexible button assigned for the Phone Book function. Refer to your system administrator for further information.

To access the Phone Book menu:

- Press the Down Navigation or Phone Book flexible button, the LCD displays the first Phone Book record.

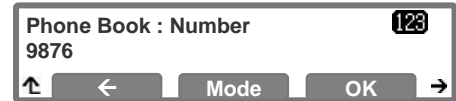
To call a contact from the Phone Book:

- Access the Phone Book as described above.
- Use the **Previous-Next** softkeys to display the desired record or dial the digit preceding the desired record.
- Press the **Dial** softkey.



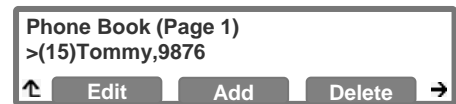
To add a record to the Phone Book:

- Access the Phone Book as described above.
- Press the right navigation button to display the **Add** softkey.
- Select the **Add** softkey.
- Enter the name, contact information, ring type and speed number for the record, selecting the **OK** softkey for each entry. Use the **Mode** softkey to enter characters. Refer to [Appendix A Dial Pad Character Set](#), which shows the relationship between the dial pad digits and characters.



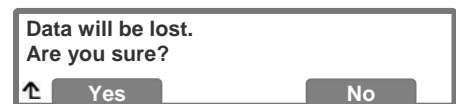
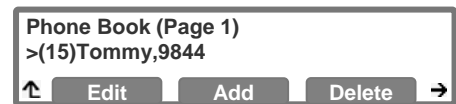
To edit a record:

- Access the Phone Book as described above.
- Use the **Previous-Next** softkeys to display the desired record or dial the digit preceding the desired record.
- Press the right navigation button to display the **Edit** softkey.
- Select the **Edit** softkey.
- Edit the name, contact information, ring type and speed number for the record, selecting the **OK** softkey for each entry. Use the **Mode** softkey to enter characters. Refer to [Appendix A Dial Pad Character Set](#), which shows the relationship between the dial pad digits and characters.



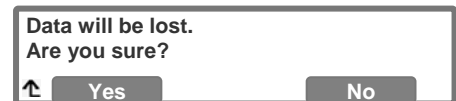
To delete a record:

- Access the Phone Book as described above.
- Use the **Previous-Next** softkeys to display the desired record or dial the digit preceding the desired record.
- Press the right navigation button to locate the **Delete** softkey.
- Select the **Delete** softkey and confirm by selecting the **Yes** softkey. Caution this action deletes the record from the Phone Book.



To delete all records:

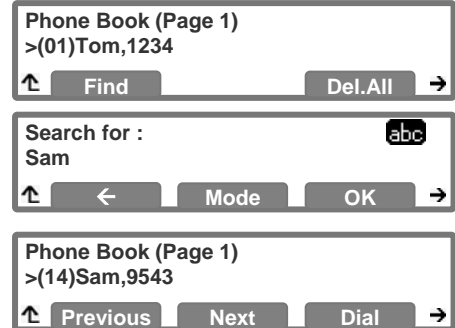
- Access the Phone Book as described above.
- Press the right navigation button to locate the **Del.All** softkey.
- Select **Del.All** softkey and confirm the deletion by selecting the **Yes** softkey. Caution this action deletes all records from the Phone Book.





To search for a record in the Phone Book:

- Access the Phone Book as described above.
- Press the right navigation button to locate the **Find** softkey.
- Select the **Find** softkey.
  
- Enter the search criteria (name or contact information). Use the **Mode** softkey to enter characters. Refer to [Appendix A Dial Pad Character Set](#), which shows the relationship between the dial pad digits and characters.
- Select the **OK** softkey to view the search results.



### 4.3. Private Hold

Your Call Server may provide “private hold”. If available, a call on a shared line can be placed on hold and others cannot access the call.

To place an active shared line call on private hold:

- Press the right navigation button to display the **PrivHold** selection.
- Press the **PrivHold** softkey.

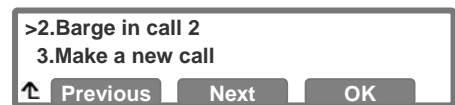


### 4.4. Barge-in

Your Call Server may provide barge-in operation. If available, other users with the shared line appearance may be able to enter a call directly.

To enter a call using Barge-in:

- Press the shared line appearance button. A list of call selections (held calls, active calls subject to Barge-in and “Make a new call”) for the line displays.
- Use the **Previous-Next** softkeys to highlight the Barge-in selection.
- Press the **OK** softkey.



## 5. Setting Your Preferences

In the LCD Menu, you can set various preferences for the IP Phone. Settings you can adjust include:



- LCD contrast
- Ring Setting
- Ringer off
- Headset auto mode
- Flexible button settings
- Time Configuration
- Outgoing Call Lock
- Speed Number Dialing
- Key Tone
- Language

The following paragraphs provide detailed instructions for each of the preferences as well as descriptive information for each.

### 5.1. LCD Contrast

The contrast of the LCD is adjustable for best viewing angle.

To adjust the LCD contrast:

- o Press the Setting () button.
- o Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- o Dial 1, or move the cursor to **1.LCD Contrast** using the **Previous-Next** softkeys and press the **OK** softkey.
- o Press the **Down** softkey to decrease the contrast, or press the **Up** softkey to increase the contrast.
- o Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.





### 5.2. Ring Setting

Ring settings determine the ring type (tone) for the phone. You may select one of up to fourteen ring signals. Of the fourteen signals, nine are stored in permanent memory. The remaining five must be downloaded from an external source prior to use. In addition, the ring type for each line can be set with immediate or delayed audible notification. Note that the ring type set for a contact in the Phone Book has priority over the phone or line settings, see [section 4.2](#).

#### 5.2.1. Setting the Ring Type

The IP Phone uses one of fourteen distinctive ring types for incoming call notification. Nine are stored in the memory of your IP Phone and the remaining five (5) must be downloaded prior to use. By assigning different ring signals to closely located phones, you can identify the ringing phone. The ring type assigned for the IP Phone is the "Default Ring Type" for incoming calls to the phone. The Default Ring may be set to one of the fourteen tones or "Ringer Off", [see section 5.3](#).

To set the ring type for the phone:



- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 2, or move the cursor to **2.Ring Setting** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 1, or move the cursor to **1.Default Ring Type** using the **Previous-Next** softkeys and press the **OK** softkey. An asterisk, \*, displays in front of the current setting.
- Select the ring type using the **Next** softkey. Press the **Play** softkey to hear the selected tone.
- Press the **OK** softkey to save the selected the ring type.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.



### 5.2.2. Setting Line Ring Type and Delay


You can assign each line with a different ring type to distinguish which line is ringing. Selections for the type include one of up to fourteen tones, “Ringer Off” or “Set to Default”, see [section 5.2.1](#) . Of the fourteen tones, five are permanently stored in the memory of the phone and the remaining five must be downloaded before use. In addition, for each line the ring signal can be immediate or delayed. The delay is set in 1 second increments from 0 (no delay) to 10 seconds.


To set the ring type for a line:

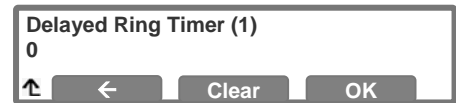
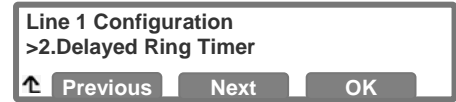
- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 2, or move the cursor to **2.Ring Setting** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial the Line number plus one (2 for Line 1, 3 for Line 2, etc.), or move the cursor to **2.Line n Configuration** using the **Previous-Next** softkeys and press the **OK** softkey. The value of *n* is the Line button number.
- Dial 1, or move the cursor to **1.Ring Type** using the **Previous-Next** softkeys and press the **OK** softkey. Note the line number displays in parenthesis after “Ring Type”.
- Select the ring type using the **Next** softkey. Press the **Play** softkey to hear the selected tone. An asterisk, \*, displays in front of the current setting.
- Press the **OK** softkey to save your entry.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.



To set delayed ring for a line:

- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.



- Dial 2, or move the cursor to **2.Ring Setting** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial the Line number plus one (2 for Line 1, 3 for Line 2, etc.), or move the cursor to **Line *n* Configuration** using the **Previous-Next** softkeys and press the **OK** softkey. The value of *n* is the Line button number.
- Dial 2, or move the cursor to **2.Delayed Ring Timer** using the **Previous-Next** softkeys and press the **OK** softkey. . Note the line number is shown in parenthesis after “Delayed Ring Timer”.
- Using the dial pad enter the desired delay up to 10 seconds in one-second increments, zero is no delay. The backspace softkey will delete the previous character and the **Clear** softkey deletes the entire entry.
- Press the **OK** softkey to save your entry.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.



### 5.3. Ringer Off

The IP Phone can be programmed not to ring when an incoming call is received.

To set the Ringer Off parameter:


- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 3, or move the cursor to **3.Ringer Off** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Yes** softkey to enable Ringer Off, or press the **No** softkey to disable Ringer Off.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.



### 5.4. Enabling Automatic Headset Operation

Your IP8820 Phone supports use of a headset with a standard RJ-11 jack. In the Headset Auto Mode, pressing a line button automatically connects audio to the headset. Also, redial, Speed dial, Speed number dialing and click-to-call place calls with audio through the headset.

To enable Headset Auto Mode:

- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 4, or move the cursor to **4.Headset Auto Mode** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Yes** softkey to enable the Headset Auto Mode or press the **No** softkey to disable the Headset Auto Mode.



- Move to another parameter with the navigation buttons and continue the session or press the Setting (☰) button to exit the configuration session.

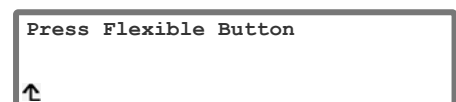
## 5.5. Setting Flexible Buttons

Your IP8820 Phone has twelve (12) flexible buttons. Normally, the first two (2) buttons are for your line. The flexible buttons not assigned as line buttons can access various functions. The table below indicates the available functions with a brief description of each.

Feature		Description
0	No Function	Unassigned
1	Speed Dial Function	Dials the assigned number
2	Phone Book Function	Views the personal phone book
3	Call Log Function	Views the call log list
4	Mute Function	Toggles the Mute feature on and off
5	Headset Function	Toggles the Headset on and off
6	Redial Function	Dials the last number dialed by the user.
7	Return Call Function	Dials the number of the last answered call
8	Set Call Forwarding	Sets the call forwarding configuration
9	Conference Function	1. Initiates a conference call 2. Joins calls in a conference
10	Transfer Function	Initiates a call transfer
11	Hold Function	Places an active call on hold
12	Do not disturb	Toggles the DND on and off
13	Set Ringer Off	Toggles the ringer on and off
14	Message Function	Views the number of new and old messages stored in the Voice Mail server, and dials the Voice Mail server by pressing the <b>Dial</b> softkey

To assign a function to a flexible button not used as a line:

- Press the Setting (☰) button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 5, or move the cursor to **5.Flexible Key Setting** using the **Previous-Next** softkeys and press the **OK** softkey.
- Select the desired flexible button. An asterisk, \*, displays in front of the current setting.
- Select a function using the **Previous-Next** softkey and press the **OK** softkey. Refer to the flexible button functions chart above.
- If the selected function is Speed dial, enter the speed number and press the **OK** softkey to save the entry. To enter alphanumeric characters select the **Mode** softkey. Refer to [Appendix A](#) for the character mapping of dial pad digits.



- Move to another parameter with the navigation buttons and continue the session or press the Setting (☰) button to exit the configuration session.

## 5.6. Time Configuration

Within the Time Configuration menu, the IP Address or name of the desired Simple Network Time Protocol (SNTP) server and the local time zone are defined. In addition, Daylight Savings Time (DST) is enabled. Consult with your administrator before changing the SNTP server.

### 5.6.1. SNTP Server Address

SNTP (Simple Network Time Protocol) is a standard protocol that permits a network device to obtain the network's current time. For operation with SNTP, the IP8820 IP Phone requires an SNTP server IP address or name.

To assign the SNTP server address:

- Press the Setting (☰) button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 6, or move the cursor to **6.Time Configuration** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 1, or move the cursor to **1.SNTP Server Address** using the **Previous-Next** softkeys and press the **OK** softkey.
- Input the SNTP server address using the dial pad and press the **OK** softkey to save the entry. To enter alphanumeric characters select the **Mode** softkey. Refer to [Appendix A](#) for the character mapping of dial pad digits.
- Move to another parameter with the navigation buttons and continue the session or press the Setting (☰) button to exit the configuration session.




### 5.6.2. Time Zone

For proper operation of the clock, the IP Phone requires the local time zone. For available time zones, see Appendix B Time Zones.

To enter the Time Zone:

- Press the Setting (☰) button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 6, or move the cursor to **6.Time Configuration** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 2, or move the cursor to **2.Time Zone** using the **Previous-Next** softkeys and press the **OK** softkey.
- An asterisk, \*, displays in front of the current selection. Select the nearest region from the display using the **Previous-Next** softkeys and press the **OK** softkey to save the entry.





- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.

### 5.6.3. DST Auto Adjustment

The IP8820 Phone automatically adjusts for DST (Daylight Savings Time) when enabled.

To enable/disable automatic daylight savings time:



- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 6, or move the cursor to **6.Time Configuration** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 3, or move the cursor to **3.DST Auto Adjustment** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Yes** softkey to enable DST Auto Adjustment, or press the **No** softkey to disable DST Auto Adjustment.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.



### 5.6.4. Time Format

The format of the LCD time display can be set for 12-hour format or 24-hour format. In addition, the LCD time display can be disabled.

To set the display format for time:

- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 6, or move the cursor to **6.Time Configuration** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 4, or move the cursor to **4.Time Format** using the **Previous-Next** softkeys and press the **OK** softkey.
- An asterisk, **\***, displays in front of the current setting. Press the **Previous-Next** softkeys to select the Time Format and press the **OK** softkey to save your entry.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.





### 5.6.5. Date Format

The format of the LCD date displays in the one of the formats below:

- MM/DD (01/22)
- DD/MM (22/01)
- DD Month (22 Jan)
- Month DD (Jan 22)
- Disabled, no date display

To set the date display format:

- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 6, or move the cursor to **6.Time Configuration** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 5, or move the cursor to **5.Date Format** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Previous-Next** softkeys to select the display format and press the **OK** softkey to save your entry. An asterisk, \*, displays in front of the current setting.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.





## 5.7. Lock Outgoing Call

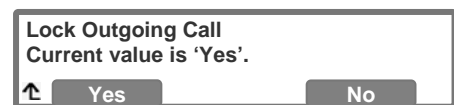
The IP Phone can be configured to allow outgoing calls only if a password is entered. When enabled, the LCD screen will display the password request and the pad-lock icon is shown, and the password must be entered prior to connecting an outgoing call.



To activate this feature, the LCD password must be set, consult your system administrator to set the LCD password.

To enable/disable the Lock Outgoing Call feature:


- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 8, or move cursor to **8.Lock Outgoing Call** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Yes** softkey to enable Lock Outgoing Call, or press the **No** softkey to disable Lock Outgoing Call.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.




## 5.8. Enabling Speed Number Dialing

The IP8820 Phone includes a Phone Book that supports up to 100 entries. Each Phone Book record includes a two-digit Speed number, see [Speed Number Dialing](#). When enabled, dialing the Speed number (00-99) sends the contact number or user id from the associated Phone Book record.

To enable/disable Speed number operation:

- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.





- Dial 9, or move cursor to **9.Speed Number** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Yes** softkey to enable Speed number, or press the **No** softkey to disable Speed number.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.

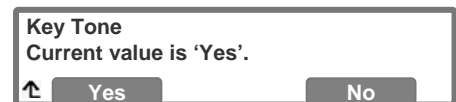


## 5.9. Key Tone

When you press a button on the IP8820 phone, the phone will generate a beep tone to indicate that the button has been pressed. This key tone is optional and can be enabled or disabled using the key tone setting.

To enable/disable Key Tone operation:



- Press the Setting () button.
- Dial 3, or move the cursor to **3.Phone Settings** using the **Previous-Next** softkeys and press the **OK** softkey.
- Dial 10, or move cursor to **10.Key Tone** using the **Previous-Next** softkeys and press the **OK** softkey.
- Press the **Yes** softkey to enable Key Tone, or press the **No** softkey to disable Key Tone.
- Move to another parameter with the navigation buttons and continue the session or press the Setting () button to exit the configuration session.



## 5.10. Language Setting

The IP Phone firmware includes an xml file, which, among other things, determines the languages available to the phone. The Language setting determines the display of text in the LCD. When the xml file contains more than one (1) language, you may select the language shown in the display.

To select an available language:

- Press the Settings () button.
- Dial 3, or move cursor to **3.Phone Settings** using the **Previous-Next** softkeys, and press the **OK** softkey.
- Dial 11, or move cursor to **11.Language** using the **Previous-Next** softkeys, and press the **OK** softkey.
- Select a Language from the list using the **Previous-Next** softkeys, and press the **OK** softkey. An asterisk, **\***, displays in front of the current selection.
- Move to another parameter with the navigation buttons and continue the session or press the Settings () button to exit the configuration session.



**Appendix A Dial Pad Character Set**

The IP8820 Phone dial pad inputs digits or alphanumeric characters. The table below maps each dial pad digit to characters available. Three modes are available, dial pad digits, upper case letters and lower case letters as shown in the table.

Digit	Dial Pad Mode	
	Upper Case '[A]'	Lower Case '[a]'
1	@ : /	@ : /
2	A B C	a b c
3	D E F	d e f
4	G H I	g h i
5	J K L	j k l
6	M N O	m n o
7	P Q R S	p q r s
8	T U V	t u v
9	W X Y Z	w x y z
0	. , ? !	. , ? !
*	. *	. *
#	Space (' ')	Space (' ')

**Appendix B Time Zones**

Country	No	Country	No
GMT-12:00 International Date Line, West	60	GMT+01:00 Oslo, Norway	30
GMT-11:00 Midway/Samoa	61	GMT+01:00 Paris, France	31
GMT-10:00 Hawaii	1	GMT+01:00 Rome, Italy	32
GMT-09:00 Alaska	62	GMT+01:00 Stockholm, Sweden	33
GMT-08:00 Los Angeles, California	2	GMT+01:00 Vienna, Austria	34
GMT-08:00 Pacific Standard	3	GMT+02:00 Athens, Greece	35
GMT-07:00 Mountain Standard	4	GMT+02:00 Harare, Zimbabwe	36
GMT-06:00 Central Standard	5	GMT+02:00 Helsinki, Finland	37
GMT-06:00 Mexico City, Mexico	6	GMT+02:00 Istanbul, Turkey	38
GMT-06:00 Saskatc., Canada	7	GMT+02:00 Jerusalem, Israel	39
GMT-05:00 Bogotá, Colombia	8	GMT+03:00 Kuwait	40
GMT-05:00 Eastern Standard	9	GMT+03:00 Moscow, Russia	41
GMT-05:00 Lima, Peru	10	GMT+03:00 Nairobi, Kenya	42
GMT-05:00 New York, NY	11	GMT+03:00 Riyadh, Saudi Arabia	43
GMT-04:00 Atlantic Standard	12	GMT+03:30 Tehran, Iran	44
GMT-04:00 Caracas, Venezuela	13	GMT+04:00 Abu Dhabi, UAE	45
GMT-04:00 La Paz, Bolivia	14	GMT+04:00 Tbilisi, Georgia	46
GMT-03:30 New Found land	15	GMT+04:30 Kabul, Afghanistan	47
GMT-03:00 Brasilia, Brazil	16	GMT+05:00 Islamabad, Pakistan	64
GMT-03:00 Buenos Aires, Argentina	17	GMT+05:30 New Delhi, India	48
GMT-03:00 Georgetown, Guyana	18	GMT+06:00 Dhaka, Bangladesh	65
GMT-02:00 Inuuk, Greenland	63	GMT+06:30 Yangon, Myanmar	66
GMT-01:00 Azores, Portugal	19	GMT+07:00 Bangkok, Thailand	49
GMT-01:00 Cape Verde	20	GMT+07:00 Jakarta, Indonesia	50
GMT 00:00 Casablanca, Morocco	21	GMT+08:00 Beijing, China	51
GMT 00:00 Lisbon, Portugal	22	GMT+09:00 Seoul, Korea	52
GMT 00:00 London, England	23	GMT+09:00 Tokyo, Japan	53
GMT+01:00 Amsterdam, Netherlands	24	GMT+09:30 Darwin, Australia	54
GMT+01:00 Berlin, Germany	25	GMT+10:00 Guam Standard	55
GMT+01:00 Bern, Switzerland	26	GMT+11:00 Solomon Islands	67
GMT+01:00 Brussels, Belgium	27	GMT+12:00 Marshall Islands	56
GMT+01:00 Central European	28	GMT+12:00 Auckland, Wellington	57
GMT+01:00 Copenhagen, Denmark	59	GMT+13:00 Nuku'alofa	58
GMT+01:00 Madrid, Spain	29		

