



M22

Administrator's Manual

Environment

The phone you have purchased, as well as any used batteries must not be disposed of with household waste. You should return these to your distributor if they are to be replaced or disposed of them in an approved recycling center.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions in this guide, may cause interference to radio communications. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against radio interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference.

CE Declaration of Conformity

This equipment complies with the requirements relating to electromagnetic compatibility, EN55022 class B for ITE and EN 50082-1. This meets the essential protection requirements of the European Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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WARNING!



1. Read these installation instructions carefully before connecting the IP phone to its power.
2. To reduce the risk of electric shock, do not remove the cover from the IP phone or attempt to dismantle it. Opening or removing covers may expose you to dangerous voltage levels. Equally, incorrect reassembly could cause electric shock on re-use of the appliance.
3. Do not expose the IP Phone to Fire, direct sunlight or excessive heat.
4. Do not expose the IP Phone to rain or moisture and do not allow it to come into contact with water.
5. Do not install the IP phone in an environment likely to present a THREAT OF IMPACT.
6. You may clean the IP phone using a fine damp cloth. Never use solvents (such as trichloroethylene or acetone), which may damage the phone's plastic surface and LCD screen. Never spray the phone with any cleaning product whatsoever.
7. Take care not to scratch the LCD screen.
8. The IP phone is designed to work in temperatures from 5°C to 40°C.
9. The IP phone must be installed at least 1 meter from radio frequency equipment, such as TVs, radios, hi-fi or video equipment (which radiate electromagnetic fields).
10. Do not connect the LAN/PC port to any network other than an Ethernet network.
11. Do not attempt to upgrade your IP phone in an unstable power environment. This could cause unexpected issues.
12. Do not work on the system or connect or disconnect cables during lightning storms.
13. Children don't recognize the risks of electrical appliances. Therefore use or keep the phone only under supervision of adults or out of the reach from children.
14. No repair can be performed by the end user, if you experience trouble with this equipment, for repair or warranty information, please contact your supplier.

Electrical Powering:

The M22 can be powered with PoE Switch or power adaptor in the package, the power adaptor must be **5V/2A**. Any damage caused to the M22 as a result of using unsupported power adaptors will NOT be covered by the manufacturer's warranty.

COMPANY disclaims all responsibility in the event of use that does not comply with the present instructions.

Product Disposal Warning:

Ultimate disposal of this product, accessories, packing, especially the batteries should be handled carefully for recycle and nature protection in accordance with national laws and regulations.

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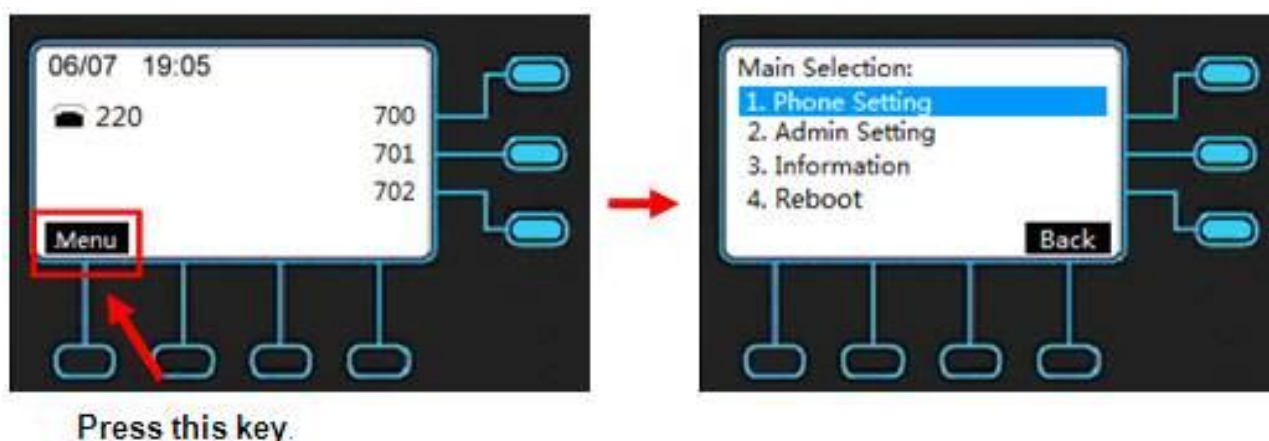
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Getting Started

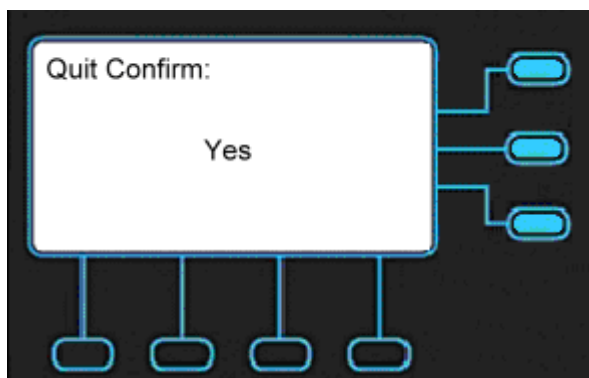
You can customize your IP phone by adjusting the settings including display contrast, ring type, device volume adjustment, call settings, and add, edit or delete contacts in the phonebooks of the M22 using the on-screen menus, buttons and navigation keys.

To configure your IP Phone from the menu, you can press Menu soft-key under the LCD screen.



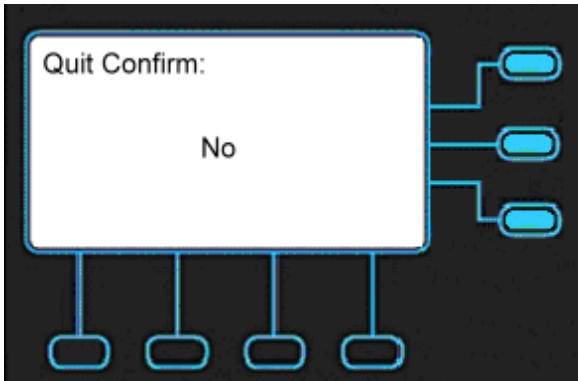
You can navigate through the menu with the navigation keys. The following sections will describe how you can setup your IP Phone through this menu. If you require additional information or assistance with your new phone, contact your system administrator.

Note: changes to the phone settings will only become active after you exit from the menu and confirm the changes. The LCD will show the following screen to let you confirm your changes and exit the menu.



If you press Navigation OK, phone will save the settings.

If you press Navigation Up and Down, phone will change the screen to the following screen:



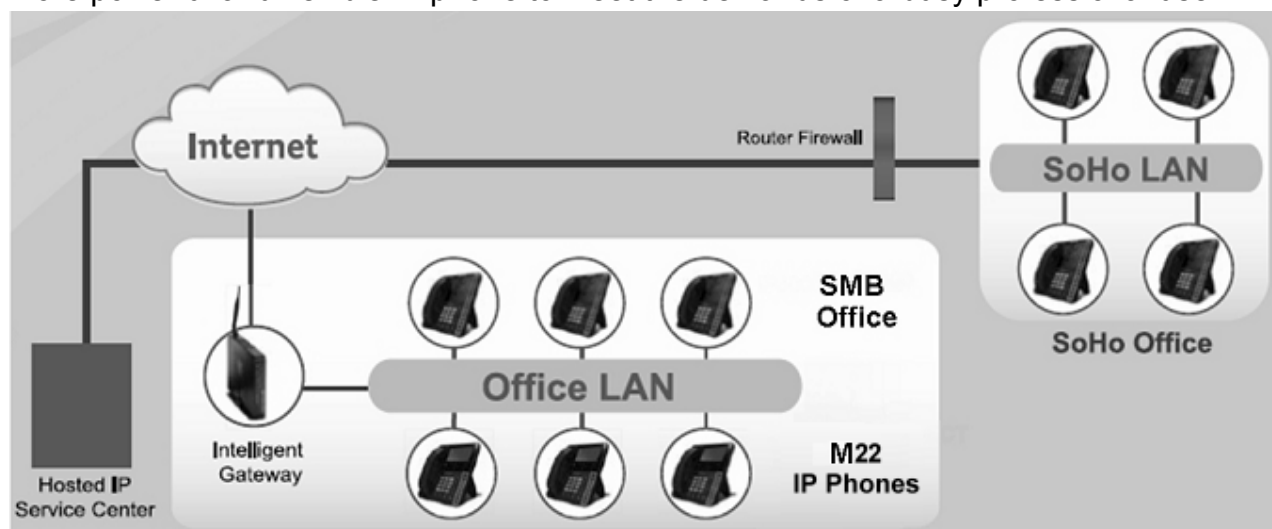
If choose No, phone will not save the settings. You will exit the screen and could continue to configure your phone.

Overview of the M22

The M22 Professional IP phone is an easy-to-use high quality desk phone with many advanced features. Utilizing a next generation capacitive touch sensitivity panel design, the M22 supports up to four simultaneous lines and can be positioned in multiple tilt angles and has a wall mount option, and has a built-in two port 10/100 Ethernet switch with automatic support for power over Ethernet (PoE). The M22 has 8 programmable buttons and can be configured through the simple built in menus displayed on the blue backlit LCD or from the phone's web user interface. The M22 can be automatically provisioned from a local or Internet based on IG servers.

The M22 IP Phone supports many advanced features including 5-way on-phone conferencing, can transfer and receive calls using industry-standard SIP protocols, and can provide built-in music-on-hold (MoH) over IP network. Therefore, the M22 can be deployed and used anywhere there is a suitable local area network (LAN) with Internet access and a local or remotely hosted SIP server. Since it is a stand-alone and “always-on” device, it does not require connection to a computer for it to work.

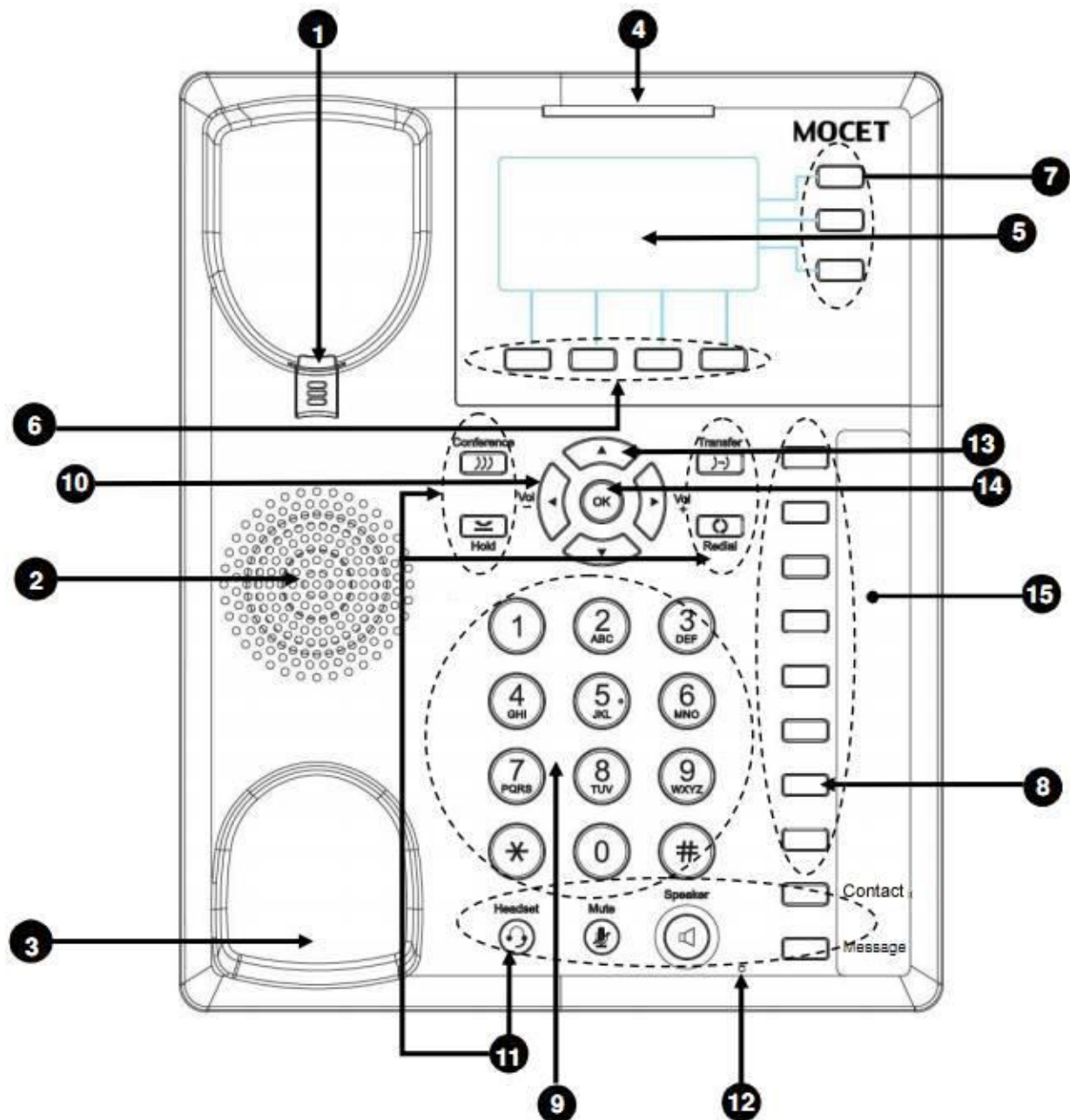
In addition, the M22 has a large LCD display to show all calls in progress at once and supports HD audio through the use of the G.722 wideband codec, has a dedicated external headset port, and an Extended Dial Module port. These functions make the M22 a more powerful and flexible IP phone to meet the demands of a busy professional user.








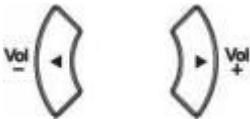


The Front-View of the M22




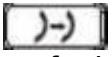
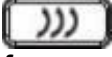

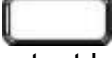



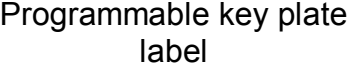
The M22 Standard IP Phone comes with a blue backlit LCD display, capacitive touch keys, including 4 soft keys, 3 line keys, and 5 navigator keys, as well as a traditional keypad, 8

programmable keys and 9 function keys. In the box, a handset, curly handset cord and a power adaptor supplied. It can be installed and placed on the desktop or mounted on the wall. The wall mount accessory is available separately. The figure below illustrates the front view of the M22 IP Phone. With the point numbers, you can find its name and a simple description of specified part in the following table.





No	Part Name	Description of function
1	Hanger	The hanger can be pulled; it is reversed for wall-mount installation.
2	Speaker	For ring and hands-free talking.

3	Hook switch & Handset bottom cradle	Under the cradle, a hook switch is used for handset hang-on and hang-off detection. The handset bottom cradle is for the placement of handset; placing the handset on the bottom cradle while on a call will end the call.
4	 Message LED	The message LED. Steady blue means the phone is booting or upgrading.
5	LCD Display	The LCD screen is used for displaying phone's settings, phone number, call status and so forth.
6	 Soft keys	Soft keys displayed on the LCD are used for item selection or control. The various soft key functions depend on the current activity on the phone as they are context-sensitive.
7	 Line keys	Line keys can be used for indicating busy lamp field (BLF) status of other phones, speed dial phone numbers, or for activating features of a service or IP-PBX. A blue LED is associated with each key to indicate its status.
8	 Programmable keys	Programmable keys can be used for indicating busy lamp field (BLF) status of other phones, speed dial phone numbers, or for activating features of a service or IP-PBX. A green LED and a red LED are associated with each key to indicate its status.
9	 Numeric keypad	[1], [2], ..., [9], [*], [0], [#]: The numeric keypad for dialing numbers.
10	 Volume Control Keys	The Volume Control key is used to set the loudness of the ringer, handset, headset and speakerphone functions. While the phone is in idle state, the ringer is adjustable. While in a call, the handset, headset or speaker volume is adjustable. [Note]: The left and right arrow keys can be used for volume adjustment purpose when idle.
11	 Headset key	This headset key is used to activate or deactivate the external headset. The headset icon will show to indicate active status.
	 MUTE key	The MUTE key is used to activate or deactivate the microphones on the M22. The mute icon will show or not to indicate whether the phone is muted or not.

	 Speaker Phone key	The SPKR key is used to activate or deactivate the Hands-free feature. A blue LED is used to indicate whether the speakerphone is active or not.
	 Redial key	The Redial key dials the last dialed number automatically.
	 Hold key	The Hold key is used to place the active call on hold.
	 Transfer key	The Transfer key is used to transfer a call to another IP phone.
	 Conference key	The Conference key is used to place multiple calls on the phone into a conference on the phone.
	 Message key	The Message key is used to access the Voice Mail System for message retrieval.
	 Contact key	The Contact key is used to enter into the Phonebook menu to call, add, edit or delete a contact in a selected phonebook.
12	 Hands-free MIC	The Hands-free MIC.
13	 Navigator Control Keys	The Navigation Control Keys are used for navigating the menus on the phone; menu items are displayed on the LCD screen.
14	 Navigator OK Key	The OK button is used to confirm and save a setting on the phone or to dial a phone number.
15	 Programmable key plate label	The programmable key plate label is plastic. For best results, we recommend using a fine permanent marker (such as Sharpie brand) to write on it. It can be cleaned with industrial alcohol.

		Note: Custom templates and programming software for phones are available from DESI (see, http://labels.desi.com)
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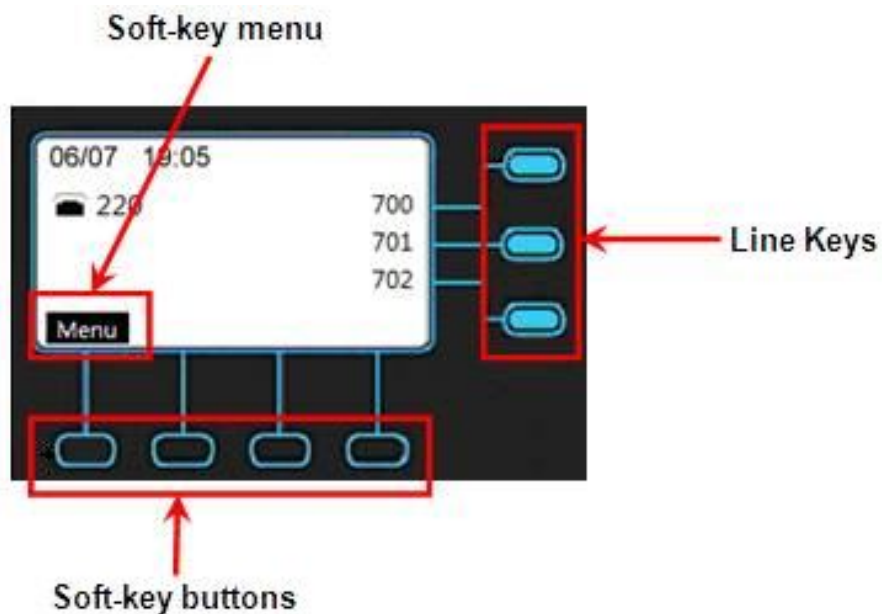
The LED Indication

<i>LED</i>	<i>Color</i>	<i>Status</i>	<i>Description</i>
 MESSAGE LED	Blue	Off	Idle or no new message.
		Blinking Slowly	New voice message(s) indication.
		Steady	Phone is booting or upgrading.
 Programmable LED	Green/Red	Off	Extension: relative phone is idle. Trunk: relative trunk line is idle. Call Park: relative park number is idle. Feature Key: feature is inactive. Do Not Disturb: feature is inactive. Live Record: feature is inactive. Virtual Mailbox: relative virtual number is in idle.
		Blinking Fast	Trunk: relative trunk line has an incoming call (for local phone).
		Blinking Slow	Trunk: relative trunk line is held (for local phone). Virtual Mailbox: relative virtual number has new voicemail.
	Green	Steady	Trunk: relative trunk line is busy (for local phone). Do Not Disturb: feature is active. Live Record: feature is active.
		Blinking Fast	Trunk: relative trunk line has an incoming call (not for local phone).
		Blinking Slow	Trunk: relative trunk line is held (not for local phone). Call Park: relative park number is in use.
	Red	Steady	Extension: relative phone is busy. Trunk: relative trunk line is busy (not for local phone).
		Off	Extension: relative phone is idle. Trunk: relative trunk line is idle. Call Park: relative park number is idle. Feature Key: feature is inactive. Do Not Disturb: feature is inactive. Live Record: feature is inactive. Virtual Mailbox: relative virtual number is in idle.
		Blinking Fast	Trunk: relative trunk line has an incoming call.
Programmable Keys LED (besides LCD)	Blue	Blinking Slow	Trunk: relative trunk line is held. Call Park: relative park number is in use.

			Virtual Mailbox: relative virtual number has new voicemail.
		Steady	Extension: relative phone is busy. Trunk: relative trunk line is busy. Do Not Disturb: feature is active. Live Record: feature is active.
Speakerphone LED	Blue	Off	Speakerphone is not in use.
		Steady	On-hook dialing or hands-free mode.

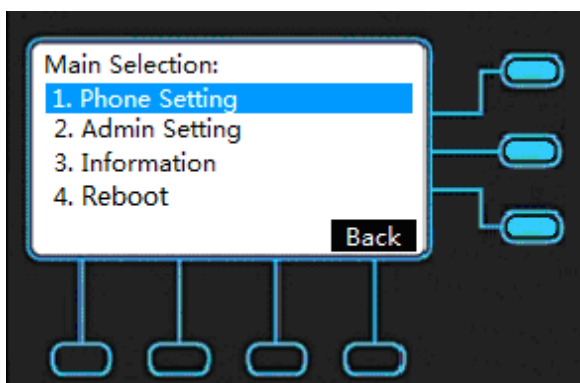
The LCD Indication

The following figure shows a standard format of LCD screen. There are 4 soft keys associated with the operation of LCD display. For different menu or status, the display format will be changed accordingly.



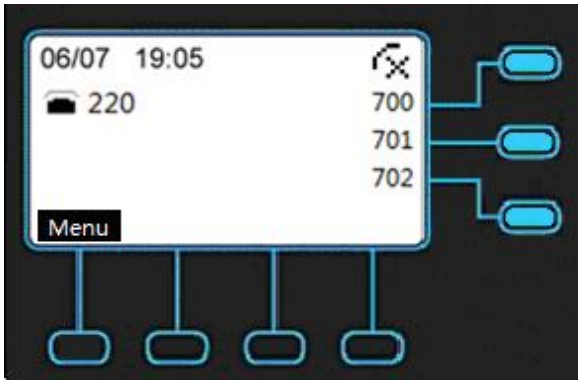
Menu: The M22 supports 4 functions for selection.

- Phone Setting
- Admin Setting
- Information
- Reboot

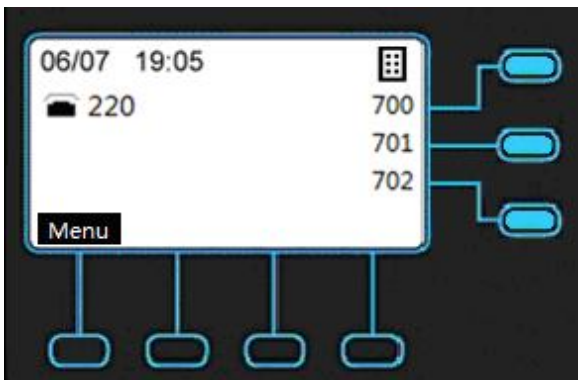


Date and Time: If M22 is registered to the IG7600 successfully, the M22 will sync the correct time to server according to user's time zone setting. If not, it shows the elapsed time since last boot.

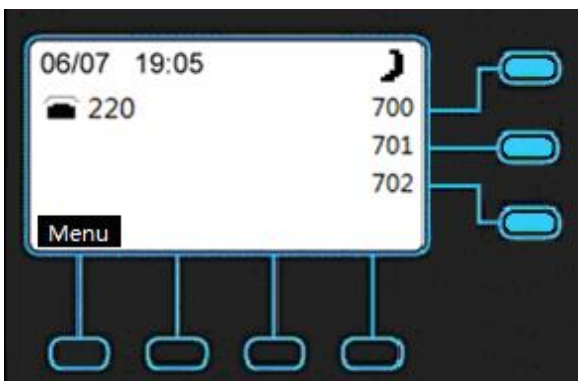
DND Indication: If DND (Do Not Disturb) function is enabled, the phone will show as below on LCD.



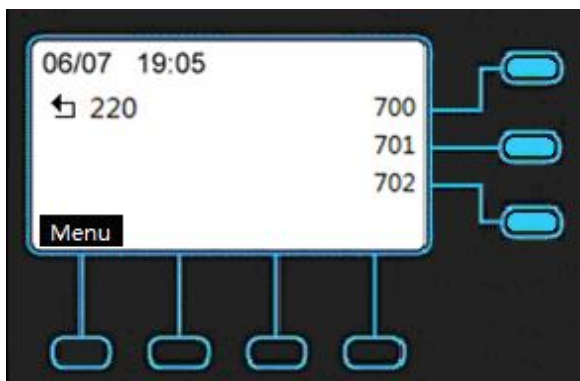
EDM Indication: If EDM device is plug in, the phone will show as below on LCD.



Night Mode Indication: If service mode on IG server is night mode, the phone will show as below on LCD.

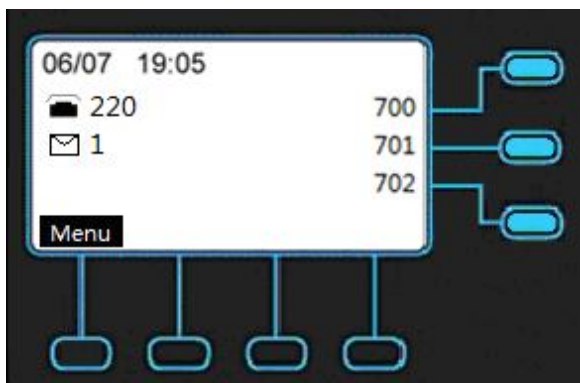


Call Forward Indication: If the phone is in always call forward status, the phone will show as below on LCD.

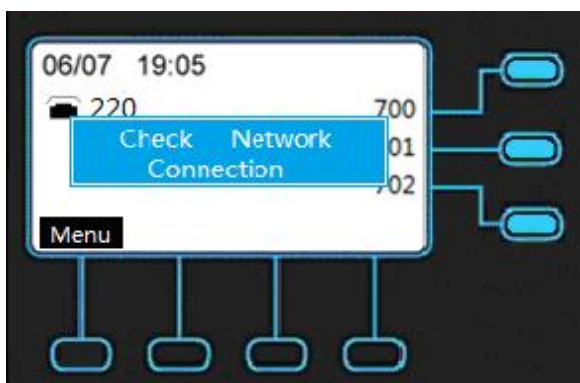


NOTE: Busy/No Answer/DND/Forking call forward will not show the forward icon on LCD.

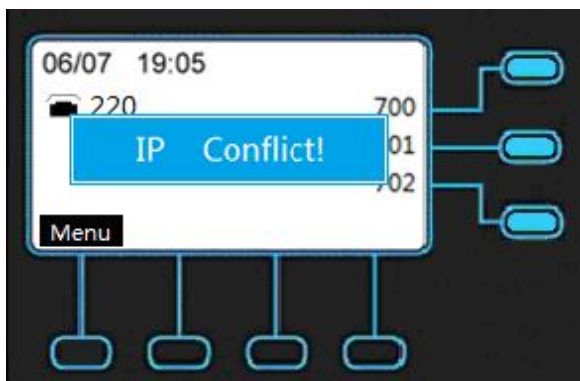
Message Indication: If voice message is notified by IG server the phone will show the number of message for relative line and the MESSAGE LED will blinking slowly.



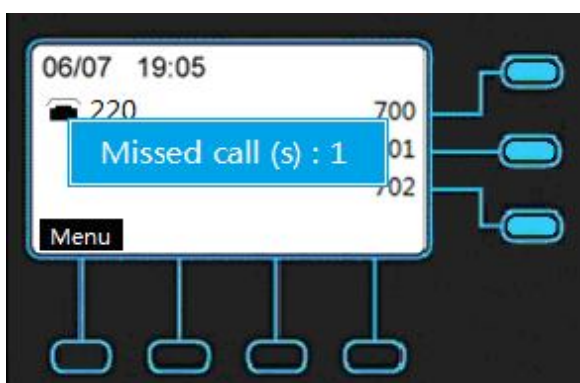
Disconnection Indication: If the cable is unplugged, the phone will show as below on LCD.



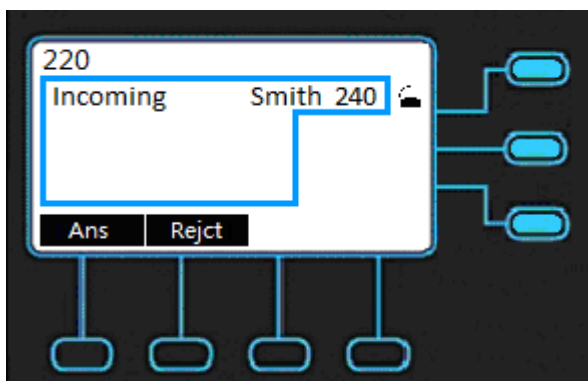
IP Conflict Indication: If the phone is in IP conflict status, the phone will show as below on LCD.



Missed Call Indication: If you have a missed call, the phone will show pop-up window on LCD.

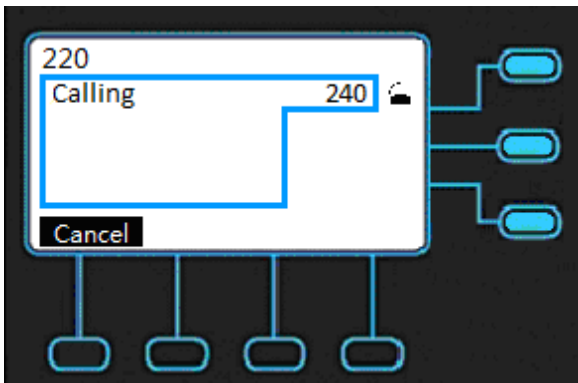


Incoming Call Indication: If the phone ringing, the caller ID of incoming call will show on LCD.

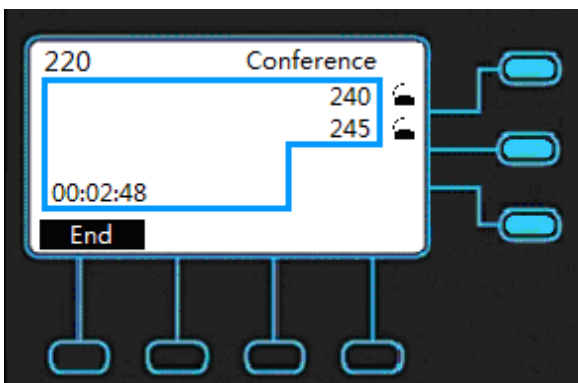


NOTE: If phone is setting as operator, there will be no **Rejct** on LCD.

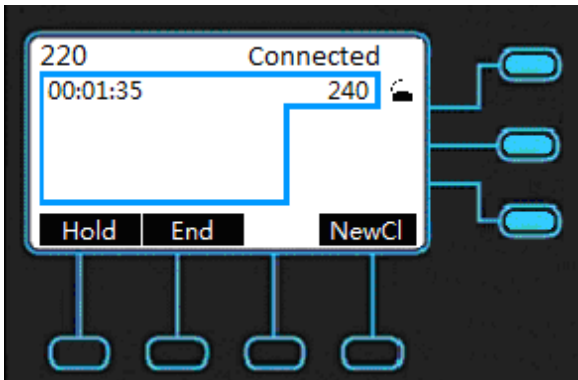
Outgoing Call Indication: If you dial the phone to another user, the phone number will show on LCD.



Conference Indication: If the call is in conference status, the caller ID of other users will show on LCD.

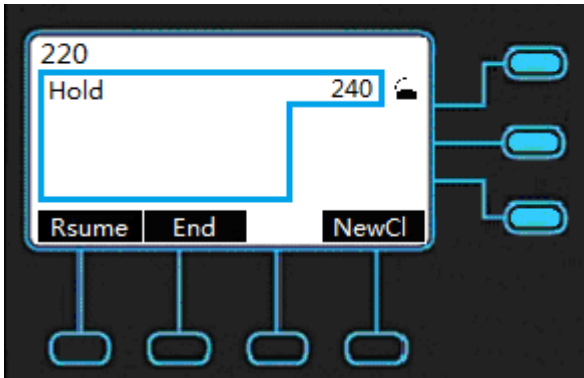


Talk Indication: If the phone is in talk status, the caller ID of other users and the talk time will show on LCD.

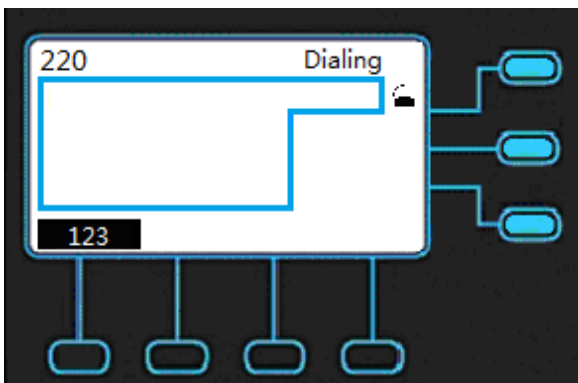


NOTE: If it is paging call, it will auto answer the call, and there will be **Ans End** on LCD before press **Ans**.

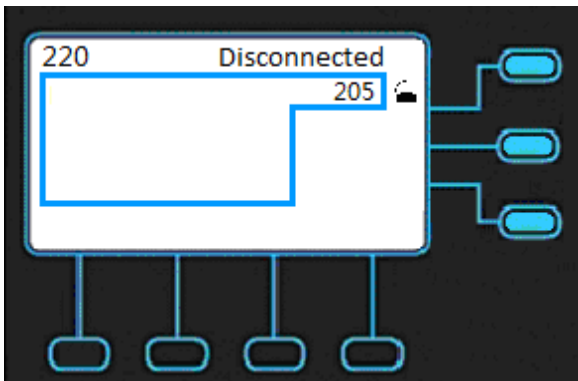
Hold Indication: If the phone is in hold status, the phone will show "Hold" as below on LCD.



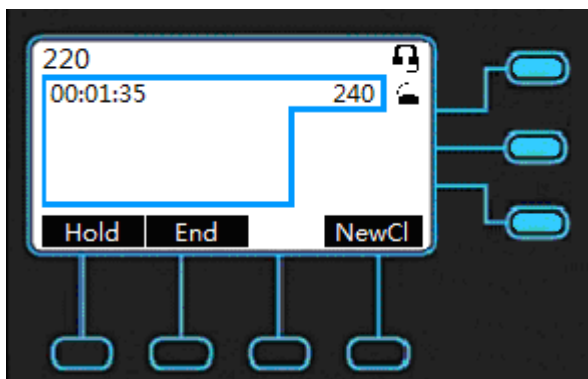
Off Hook Indication: If the phone is in off hook status, the phone will show as below on LCD.



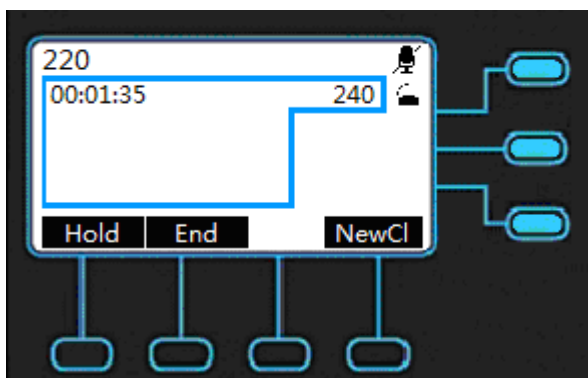
Dial Wrong Number Indication: If the phone dial wrong number, the phone will show as below on LCD.



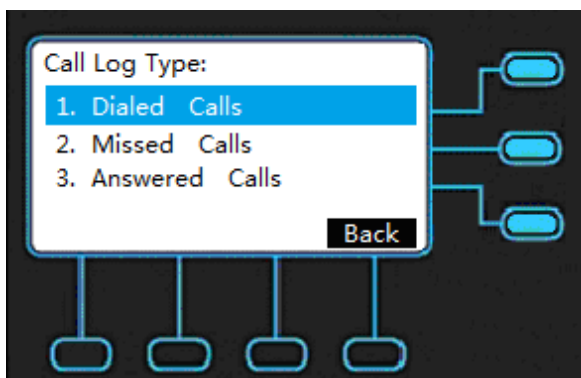
Headset Indication: If the phone is using headset device, the phone will show as below on LCD.



Mute Indication: If the phone is in mute status, the phone will show as below on LCD.






Call Log Indication: If using navigation key and pressing Navigation Up, the Call Log Type will show as below on LCD.






Icons Indication:

No	Name	Icon	Description of function
1	DND		DND feature is enabled.
2	EDM		There's EDM device plug in.
3	Night Mode		Current service mode is night mode.
4	Call Forward		Always call forward feature is enabled.

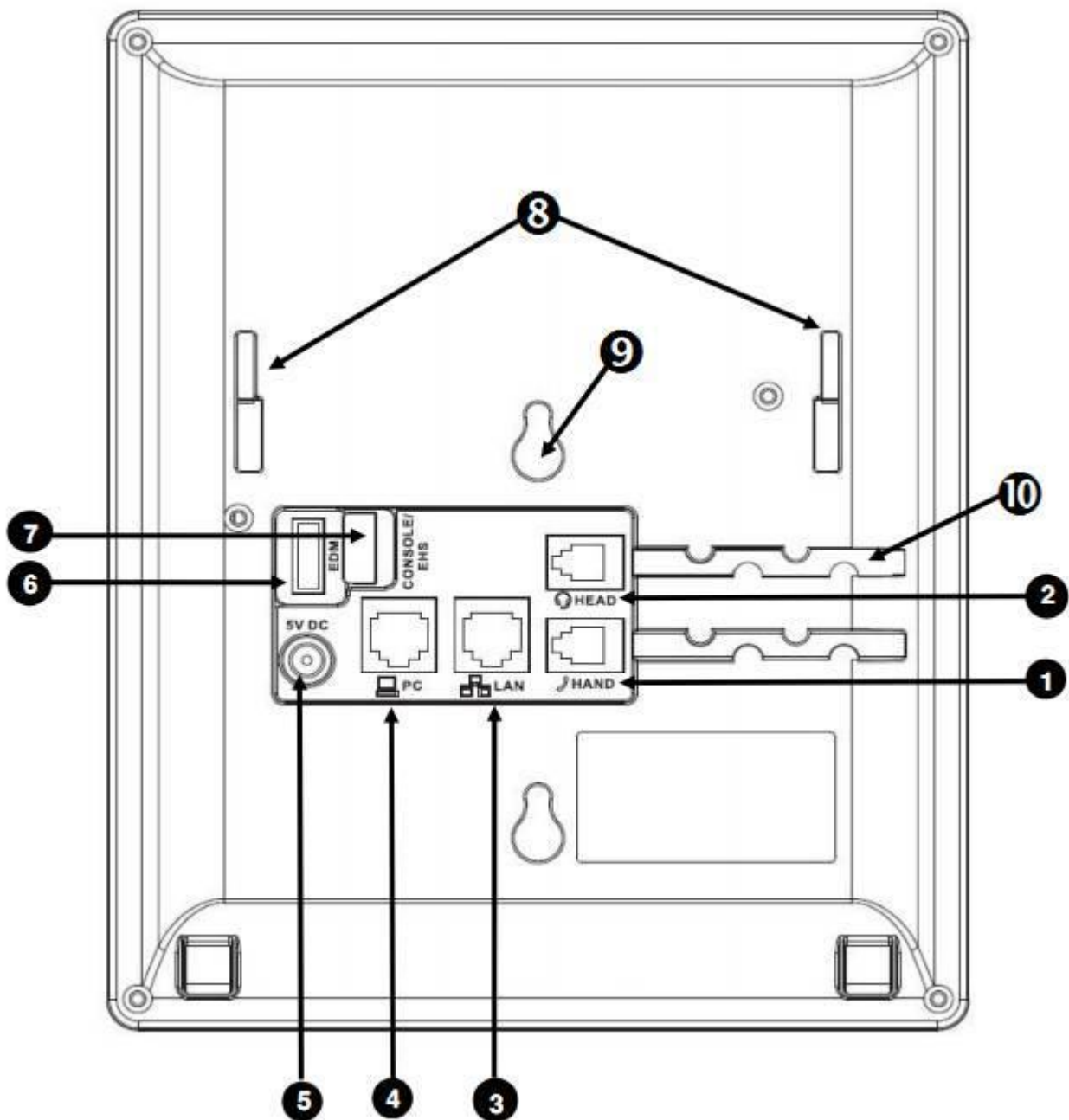
5	Voicemail		There's unread voicemail message from server.
6	Headset		Current call is using headset device.
7	Mute		Current call is in mute.

Line Status Indication:

No	Line Status Icon	Description of function
1		The line is registered to the SIP server or service.
2		The line is not registered to the SIP server or service.
3		The line is registered to the SIP server or service and is in use.

The Connectors of the M22

Their locations are shown in the figure below:



The back side view and the connectors of the M22 are as follows:

No	Part Name	Description of function
1	Handset Connector	RJ-9 Jack for connecting handset cord.

2	Headset Connector	RJ-9 Jack for connecting headset cord.
3	LAN Port	RJ-45 Jack 100/10Mbps Ethernet port for connecting to the local area network (LAN). This port can support power over Ethernet (PoE) if the LAN switch provides it.
4	PC Port	RJ-45 Jack 100/10Mbps Ethernet port for connecting to a computer.
5	Power Jack	If a power source from adaptor is required, please order the M22 power adapter separately from MOCET.
6	EDM Port	SATA interface for attaching the Extended Dial (EDM) accessory. Up to two EDM units can be supported on the M22. Please refer to EDM Quick Installation Guide for more information.
7	Console/EHS Port	1. Console port for engineering maintainence purpose. or 2. EHS Port (Electrical Hook Switch) connects to IP-EHS for Wireless Headset support. This can be connected to general DHSG I/F(eg. Jabra) or APD-80 I/F of Plantronics. The default is set to EHS. And switching between Console and EHS will be done by software.
8	Stand Slots	These 2 slots are used for snapping the stand.
9	Hang Holes	These 2 holes are reserved for wall-mount support
10	Wire Route Ditch	The wires of Handset and Headset can be routed and run in the ditches.

General Operations

Introduction

To operate the M22, you need to know some conventions that we will mention in this manual. In the following descriptions, we will introduce some terminologies for your understanding.

Calls

A “Call” in this guide represents how many simultaneous connections can be made to a single phone number. M22 has only one line based on IG server, which can support up to four calls simultaneously. This allows the user to place one caller on hold and talk to the other person in another call on the same Line. Therefore, the M22 phone is said to support multiple call appearances.

Register to IG7600

The M22 supports Plug-n-Play function to register and get configured automatically when it is connected to IG7600's LAN/WAN port (with same subnet as IG7600). It also supports manual configuration if it is a remote phone (need to obtain the account information from system administrator).

Refer to Configuration through Menus or Configuration through Web for detail information of how to configure the phone to register to IG7600.

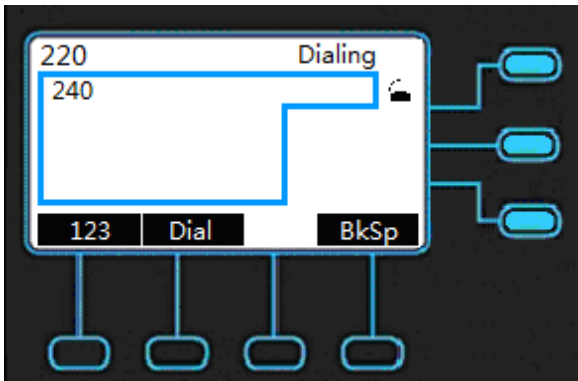
Caller ID & User ID

When you receive a call, the caller's phone number is shown on the screen, if the caller hasn't chosen to hide his number and if the network supports the Caller ID feature. The IP Phone can display both the Caller ID (CLID) and the Caller Name (CNAM) of the caller if it is available. Not all services and servers support CLID and CNAM. For more information about this topic, please contact your service provider or system administrator.

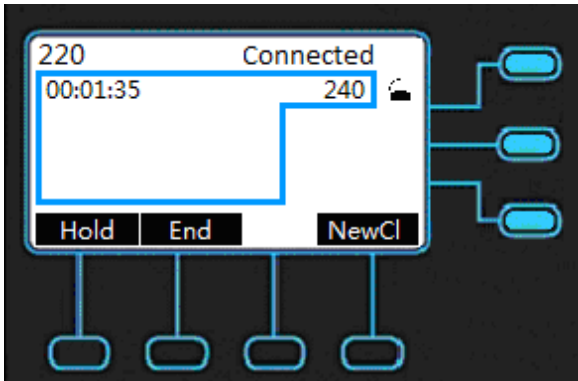
Using Multiple Calls

Each line of service in the M22 can support up to four calls simultaneously. It allows you to place one caller on hold and talk to the other person in another call on the same line.

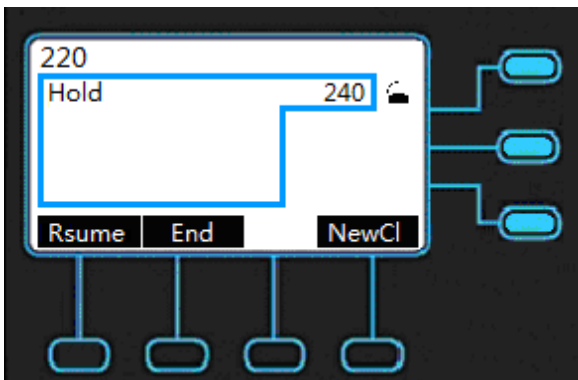
For example, the following screen shows you line 220 has one active call with number 240. When you dial the number 240, the number you dial will show on the LCD.



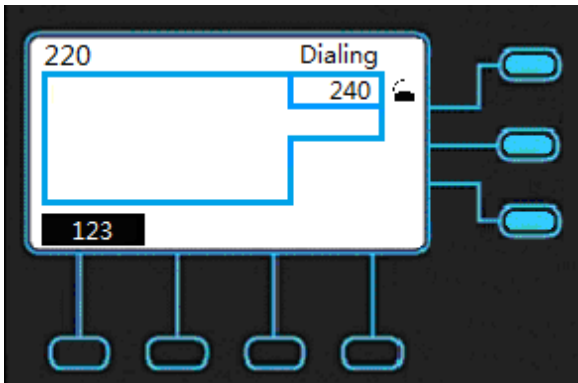
When the call party answers the call, the LCD will show as below.



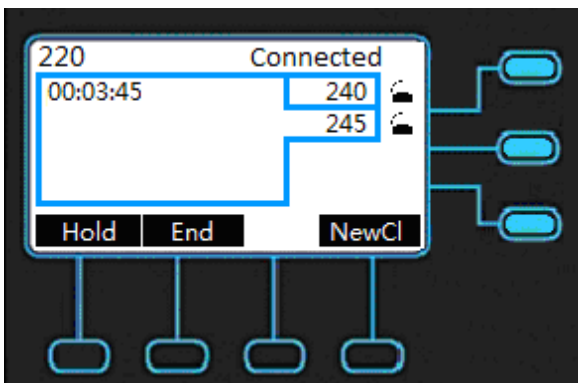
Press the Hold key to keep this call.



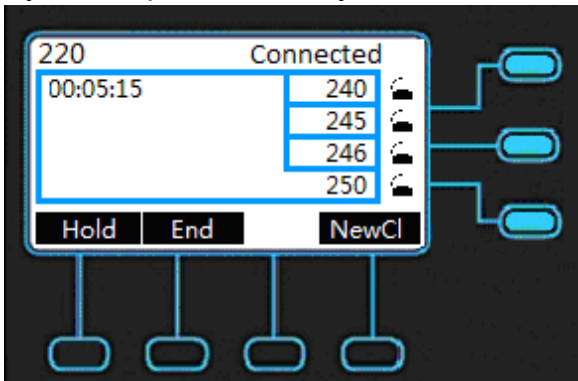
You can make a new call on the same line by pressing NewCl.





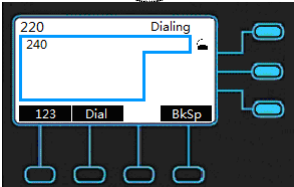









After the called party answers the call, the following screen shows you line has two calls, the call to number 240 is on hold, and the call to number 245 is active.

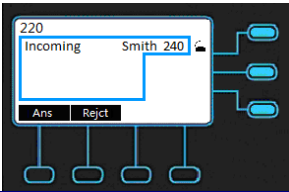








By the steps as above, you can use one line to make 4 calls simultaneously.


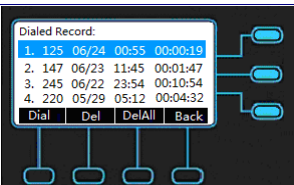


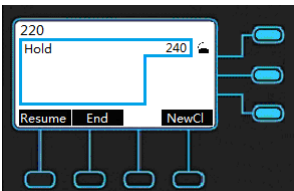


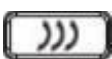


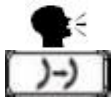
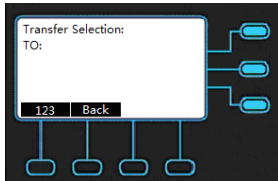
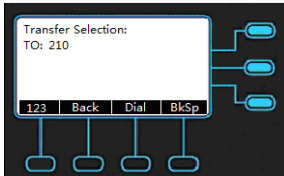


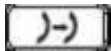
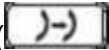

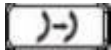

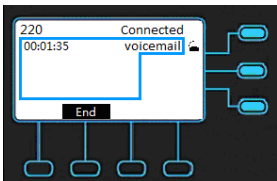
Basic Call Features

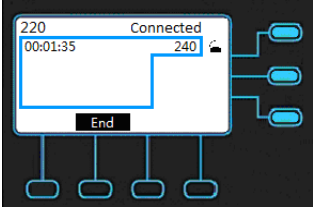

Operation	Description	
Making a Call		1. Pick-up the handset. You will hear dial tone played.
	 	2. Use the keypad to dial the phone number. Press OK key or "Dial" soft-key to dial out immediately, or wait for a while (Dial Timeout setting) for auto-ending the dial. <ul style="list-style-type: none"> The LCD window displays the number you enter. <div style="border: 1px solid black; padding: 5px;"> Note: You could use the "BkSp" soft-key to delete the last digit. </div>
		Start talking to called party.
		On-hook the handset when your conversation is over.
	<p>There are two mode to establish a call for this IP phone, handset mode and hands-free mode. In this manual, only handset mode is used for example. In the following features, you can replace  to hands-free mode by pressing  key. When the conversation is over, press  key again to release call. For headset mode, please prepare a headset first.</p>	
Ending a call	 or  or End	<ul style="list-style-type: none"> If there is only one call, just place the handset back into the cradle, press speakerphone or press "End" soft-key to end the call. If there is another call, press the "End" soft-key to end the call.
Holding a call	 or Hold	Press the "Hold" soft-key or Hold key on the phone to place an active call on hold.
Resuming a call	 or Rsume	Press the "Rsume" soft-key or Hold key on the phone again to place an active call on hold.

Receiving a Call		<ol style="list-style-type: none"> 1. Pick-up the handset while hearing phone's ringing.
		Start talking to caller party.
		On-hook the handset when your conversation is over.
Mute the Microphone		<ol style="list-style-type: none"> 1. While being engaged in a conversation (handset, headset, or hands-free mode), you could mute the microphone by pressing the MUTE key.
		<ol style="list-style-type: none"> 2. The mute icon will show on LCD. At this moment, the user may speak freely, the outside party will not hear anything.
Adjust the Voice Volume During a Conversation		<ol style="list-style-type: none"> 1. During a conversation, if the voice volume is too low or too high, you may adjust it.
		<ol style="list-style-type: none"> 2. Press the volume control key to adjust the volume

Advanced Call Operations






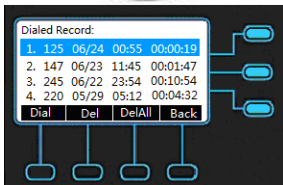


Operation	Description	
Redialing a Number		1. Press Redial hot key.
		2. Phone will enter "Dial Record" list.
		3. Select the number you want to redial.
		4. Press "Dial" soft key on LCD to dial out.
3-Way Conference Call		1. Call the first party and Hold the call. Note: The M22 can support a 5-party conference call.
		2. Press "NewCl" soft key
		3. Dial the number and call another party.
		4. Press the Conference hot key to set up the 3-party conference. Note: If you want to set up a 4-party or a 5-party conference call, repeat Step2 to dial third or fourth call, and then do Step3 and Step 4.



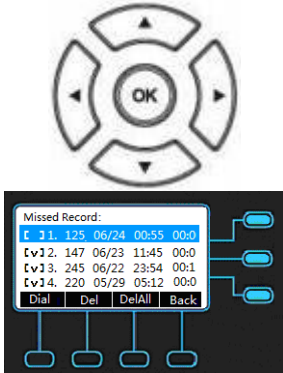




Call Transfer (Blind Transfer)		1. During an active call, press the Transfer hot key.
		2. The active call is placed on hold, and an entry screen is displayed for the number you want to transfer to.
		3. Press “Dial” soft-key to complete the transfer. If you want to cancel transfer operation, just press the “Back” soft-key.
Call Transfer (Attended Transfer)		1. During an active call, press “NewCI” soft-key to call another party.
		2. Wait for the other party to answer the call.
		3. Press the Transfer hot key.
Note: sometimes, you may place more than 2 calls on your phone, when you press Transfer () hot key, phone will show a call list to let you select a call to finish the transfer operation.		
Call Transfer (Semi-Attended Transfer)		1. During an active call, press “NewCI” soft-key to call another party
		2. When you hear the ring-back tone, press the Transfer hot key.
Voice Mail		1. Press the Message key.
		2. Input the voicemail password. Follow the interactive voice response (IVR) instructions to retrieve and listen, forward or delete your messages.

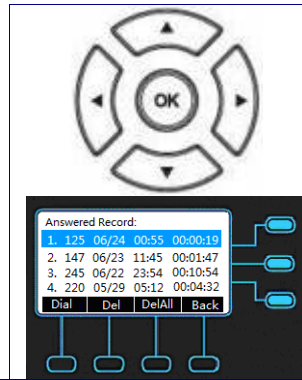
ODP Call		<ol style="list-style-type: none">1. When talk with ODP call, it could not do these actions below: hold, transfer, conference, call forward, and make new call.
		<ol style="list-style-type: none">2. Using the keypad to input password as the format of “##” or “#PASSWORD#”, user can open the door through ODP. (Note: password could not set on feature keys.)

Call Log

Record the dialed calls, the missed calls and the received calls.

Operation	Description	
Dialed Calls		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Log	3. Use the navigation key to select the <i>Call Log</i> item and press OK key.
	 → Dialed Calls	4. Use the navigation key to select the <i>Dialed Calls</i> item and press OK key.
	 	5. Use the navigation key to review the dialed calls. You may choose to redial the number (using the “Dial” soft-key). Press the “Del” soft-key to delete the selected record. Press the “Cancel” soft-key to exit the menu.
Missed Calls		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.






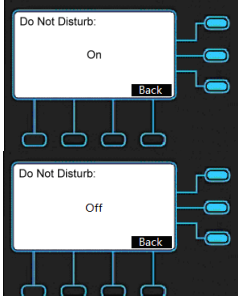
	 <p>→ Call Log</p>	<p>3. Use the navigation key to select the <i>Call Log</i> item and press OK key.</p>
	 <p>→ Missed Calls</p>	<p>4. Use the navigation key to select the <i>Missed Calls</i> item and press OK key.</p>
		<p>5. Use the navigation key to review the missed calls. You may choose to redial the number (using the “Dial” soft-key). Press the “Del” soft-key to delete the selected record. Press the “Cancel” soft-key to exit the menu.</p>
		<p>1. Press the Menu key on LCD.</p>
Answered Calls	 <p>→ Phone Setting</p>	<p>2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.</p>
	 <p>→ Call Log</p>	<p>3. Use the navigation key to select the <i>Call Log</i> item and press OK key.</p>
	 <p>→ Answered Calls</p>	<p>4. Use the navigation key to select the <i>Answered Calls</i> item and press OK key.</p>






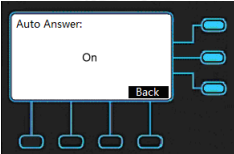
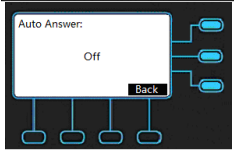







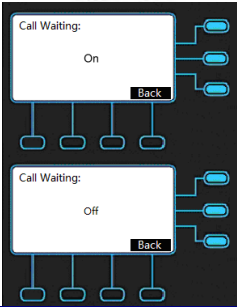
5. Use the navigation key to review the answered calls. You may choose to redial the number (using the “Dial” soft-key). Press the “Del” soft-key to delete the selected record. Press the “Cancel” soft-key to exit the menu.









Call Setting









The specific ring type assigned to the M22 when the M22 rings.

Operation	Description	
DND Setting		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Setting	3. Use the navigation key to select the <i>Call Setting</i> item and press OK key.
	 → DND Setting	4. Use the navigation key to select the <i>DND Setting</i> item and press OK key.
	 → DND	5. Go to previous menu, choose <i>DND</i> item and press OK key.
		6. Use the navigation key to choose to turn On or Off the DND feature and press OK key to validate. Press the Back key to exit the menu.







Auto Answer		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Setting	3. Use the navigation key to select the <i>Call Setting</i> item and press OK key.
	 → Auto Answer	4. Use the navigation key to select the <i>Auto Setting</i> item and press OK key.
	  	5. Use the navigation key to choose to turn On or Off and press OK key to validate. Press the Back key to exit the menu.



Call Waiting		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Setting	3. Use the navigation key to select the <i>Call Setting</i> item and press OK key.
	 → Call Waiting	4. Use the navigation key to select the <i>Call Waiting</i> item and press OK key.
	 	5. Use the navigation key to choose to turn On or Off and press OK key to validate. Press the Back key to exit the menu.








Call Forward		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Setting	3. Use the navigation key to select the <i>Call Setting</i> item and press OK key.
	 → Call Forward	4. Use the navigation key to select the <i>Call Forward</i> item and press the OK key to validate the selection. Select the next item according to the type of call forward (<i>Always Forward</i> , <i>Busy Forward</i> , <i>No Answer Forward</i> , <i>DND Forward</i> or <i>Forking Forward</i>) you would like to activate.
	 → Status	5. Choose the <i>Status</i> item to turn On/Off the call forwarding feature. Select On or Off then press the OK key to validate.
	 → FWD Number	6. Select the FWD Number item to input the phone number you wish to forward the calls to.
	 → No Answer Forward	7. For <i>No Answer Forward</i> item, there is one additional item “Timeout” for user to set. If the phone doesn’t answer the call after this time, the call will be forwarded to the destination. (Default value is 15 seconds)
	 → Forking Forward	8. For <i>Forking Forward</i> item, there is one additional item “2 nd FWD Number” for user to set. If the 1 st destination is busy, the call will be forwarded to the 2 nd destination.




Note: It is possible to activate different kinds of call forward at the same time. Ex: <i>No Answer forward + Busy Forward</i> , etc.		
Call Blocking (Add, Edit, or Delete a Number)		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Setting	3. Use the navigation key to select the <i>Call Setting</i> item and press OK key.
	 → Call Blocking	4. Use the navigation key to select the <i>Call Blocking</i> item to enter the Call Blocking List menu. The LCD screen prompts you to enter a number between 0 and 9.
		5. Use the navigation key to browse all the blocked Caller ID and press OK key to validate.
SIP Server		<ul style="list-style-type: none"> • If you want to add a new number, find an empty position, then using keypad to enter a number. Press OK key to validate and press Back to exit the Call Blocking menu. • If you want to edit an existing number, find the number you would like to edit. Use the “BkSp” soft-key to clear the number and use keypad to enter a new number. Press OK key to validate.
		1. Press the Menu key on LCD.
		2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.









	➔ Admin Setting	
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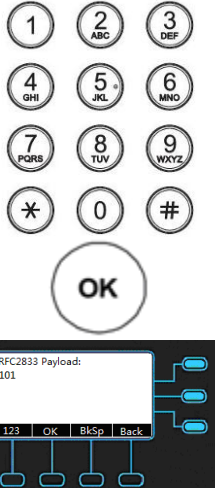
	 → Voice Setting	3. Select the <i>Voice Setting</i> item and press OK key.
	 → SIP Server	4. Select the <i>SIP Server</i> item and press OK key.
	 → SIP Proxy, Outbound Proxy, Registrar Server, Registrar Outbound, Registrar Time, Server Port and Registrar Port, Codec Setting, Packet Time	5. There are <i>SIP Proxy, Outbound Proxy, Registrar Server, Registrar Outbound, Registrar Time, Server Port, Registrar Port, Codec Setting and Packet Time</i> items for user to configure.
Phone Number		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
	 → Voice Setting	3. Select the <i>Voice Setting</i> item and press OK key.

	<p>4. Select the <i>Phone Number</i> item and press OK key.</p>
	<p>5. Use the keypad to edit Phone Number. Press OK key to validate the input.</p> <div data-bbox="740 645 1423 725"><p>Note: You could use the “BkSp” soft-key to delete the last character.</p></div>

Display Name		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
	 → Voice Setting	3. Select the <i>Voice Setting</i> item and press OK key.
	 → Display Name	4. Select the <i>Display Name</i> item and press OK key.
		5. Use the keypad to set display name. Press OK key to validate the input. <div>Note: You could use the “BkSp” soft-key to delete the last character.</div>
Authentication		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.






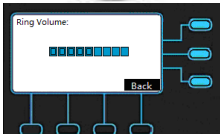
 → Voice Setting	<p>3. Select the <i>Voice Setting</i> item and press OK key.</p>
 → Authentication	<p>4. Select the <i>Authentication</i> item and press OK key.</p>
 → Authorized ID, Password	<p>5. There are <i>Authorized ID</i> and <i>Password</i> items for user to configure.</p>






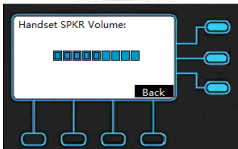



DTMF Type		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
	 → Voice Setting	3. Select the <i>Voice Setting</i> item and press OK key.
	 → DTMF	4. Select the <i>DTMF</i> item and press OK key.
	 → DTMF Type	5. Select the <i>DTMF Type</i> item and press OK key.
	 Back	6. Use the navigation key to choose the DTMF you would like to set. There are 4 DTMF types for selection. Press the Back key to exit the menu.
RFC2833 Payload		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.



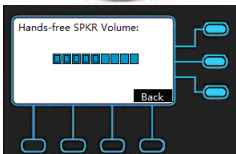





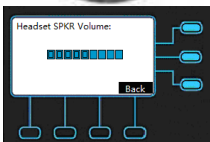
 → Voice Setting	<p>3. Select the <i>Voice Setting</i> item and press OK key.</p>
 → DTMF	<p>4. Select the <i>DTMF</i> item and press OK key.</p>
 → RFC2833 Payload	<p>5. Select the <i>RFC2833 payload</i> item and press OK key.</p>
	<p>6. Use the keypad to set RFC2833 Payload. Press OK key to validate the input. The default RFC2833 payload is 101.</p> <div><p>Note: You could use the “BkSp” soft-key to delete the last character.</p></div>

Volume Setting

Select the volume level of ring, handset speaker, hands-free speaker and headset speaker.


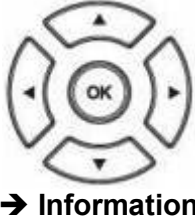

Operation	Description	
Ring Volume		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item. Press OK key to validate the selection.
	 → Volume Setting	3. Use the navigation key to select the <i>Volume Setting</i> item. Press OK key to validate the selection.
	 → Ring Volume	4. Select the <i>Ring Volume</i> item and validate with the OK key.
	 	5. Use the navigation key to tune the voice. Press the Navigation Left key to make voice lower. Press the Navigation Right key to make voice louder. Press the OK key to exit the menu.

Handset Speaker		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item. Press OK key to validate the selection.
	 → Volume Setting	3. Use the navigation key to select the <i>Volume Setting</i> item. Press OK key to validate the selection.
	 → Handset Speaker	4. Select the <i>Handset Speaker</i> item and validate with the OK key.
	 	5. Use the navigation key to tune the voice. Press the Navigation Left key to make voice lower. Press the Navigation Right key to make voice louder. Press the OK key to exit the menu.
Hands-free Speaker		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item. Press OK key to validate the selection.
	 → Volume Setting	3. Use the navigation key to select the <i>Volume Setting</i> item. Press OK key to validate the selection.

Headset Speaker	 → Hands-free Speaker	<p>4. Select the <i>Hands-free Speaker</i> item and validate with the OK key.</p>
	 	<p>5. Use the navigation key to tune the voice. Press the Navigation Left key to make voice lower. Press the Navigation Right key to make voice louder. Press the OK key to exit the menu.</p>
		<p>1. Press the Menu key on LCD.</p>
	 → Phone Setting	<p>2. Use the navigation key to select the <i>Phone Setting</i> item. Press OK key to validate the selection.</p>
	 → Volume Setting	<p>3. Use the navigation key to select the <i>Volume Setting</i> item. Press OK key to validate the selection.</p>
	 → Headset Speaker	<p>4. Select the <i>Headset Speaker</i> item and validate with the OK key.</p>
	 	<p>5. Use the navigation key to tune the voice. Press the Navigation Left key to make voice lower. Press the Navigation Right key to make voice louder. Press the OK key to exit the menu.</p>

Information

You may view all related information about the M22 through the LCD menu. This may give you, for example, the current network settings of the M22.





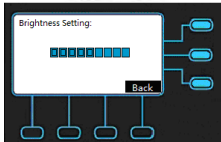
<i>Operation</i>	<i>Description</i>	
View Information about the M22		1. Press the Menu key on LCD.
		2. Use the navigation key to select the <i>Information</i> item and press OK key.
		3. Use the navigation key to choose the information you would like to review. Press the OK key to exit the menu.

The following information can be reviewed from the LCD screen of your M22:

- Model Name
- Application Version
- Firmware Version
- Hardware Version
- MAC Address
- SN
- EDM Version
- Network Type
- IP Address
- Subnet Mask
- Default Gateway
- DNS Server





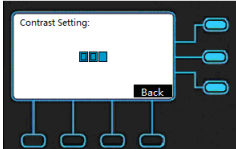
Backlight

To configure the brightness of the LCD to a comfortable level.

Operation	Description	
Backlight		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Backlight	3. Select the <i>Backlight</i> item and validate with the OK key.
	 	4. Use the navigation key to tune the display brightness. Press the Navigation Up key to increase the display brightness. Press the Navigation Down key to decrease the display brightness. Press OK key to validate the selection or press the Back key to exit the menu.








Contrast










To configure the contrast of the LCD to a comfortable level.

Operation	Description	
Contrast		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Contract	3. Select the <i>Contract</i> item and validate with the OK key.
	 	4. Use the navigation key to tune the LCD contrast. Press the Navigation Up key to increase the display contrast. Press the Navigation Down key to decrease the display contrast. Press OK key to validate the selection or press the Back key to exit the menu.

Phonebook

The phonebook feature let's you store a list of phone numbers. (For M22, it could be stored up to 100 entries).

Operation	Description	
Add Contacts		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Phonebook	3. Use the navigation key to select the <i>Phonebook</i> item and press OK key.
	 → Private	4. Select the <i>Private</i> item and validate with the OK key.
	 → Add	5. Press the <i>Add</i> button.
		6. Enter the "Username", "Phone Number", "Group", and "Ring Type" items and input by using the keypad. Press OK key to validate the input. Press the Back key to exit the menu.
		7. When finished making changes, press the "Save" soft-key to save the changes. Press "Back" soft-key to exit the phonebook menu

Edit Contacts		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Phonebook	3. Use the navigation key to select the <i>Phonebook</i> item and press OK key.
	 → Private	4. Select the <i>Private</i> item and validate with the OK key.
	 → Edit	5. Using navigation key to browse all phonebook data. When browsing certain phonebook entry's items, press "Edit" soft-key to add or edit. There are 4 items for user to add or edit, "Username", "Phone Number", "Group", and "Ring Type".
		6. When finished making changes, press the "Save" soft-key to save the changes. Press "Back" soft-key to exit the phonebook menu.
Delete a Number		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Phonebook	3. Use the navigation key to select the <i>Phonebook</i> item and press OK key.



→ **Private**

4. Select the *Private* item and validate with the OK key.








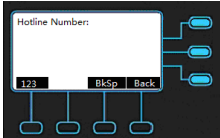


→ **Del**




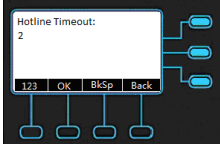
5. Using navigation key to browse all phonebook data. When browsing certain phonebook entry, press “Del” soft-key to delete it. Press “Back” soft-key to exit the phonebook menu.
-

Hotline Setting

Set the hotline number which can be dialed immediately.






<i>Operation</i>	<i>Description</i>
------------------	--------------------

Hotline Number		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Call Setting	3. Use the navigation key to select the <i>Call Setting</i> item and press OK key.
	 → Hotline Setting	4. Use the navigation key to select the <i>Hotline Setting</i> item and press OK key.
	 	5. Enter the <i>Hotline Number</i> and input by using the keypad. Press OK key to validate the input. Press the Back key to exit the menu. <div style="border: 1px solid black; padding: 5px;"> Note: You could use the “BkSp” soft-key to delete the last character. </div>
Hotline Timeout		1. Press the Menu key on LCD.
	 → Phone Setting	6. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.

 → Call Setting	<p>2. Use the navigation key to select the <i>Call Setting</i> item and press OK key.</p>
 → Hotline Setting	<p>7. Use the navigation key to select the <i>Hotline Setting</i> item and press OK key.</p>
 	<p>3. Enter the <i>Hotline Time</i> and input by using the keypad. Press OK key to validate the input. You should enter a number from 0 to 9. Press the Back key to exit the menu. The default timeout is 2.</p> <div data-bbox="740 990 1423 1072"><p>Note: You could use the “BkSp” soft-key to delete the last character.</p></div>

Speed Dialing

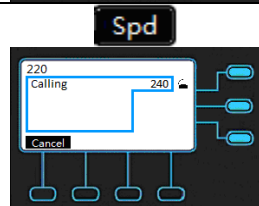
The Speed Dialing feature let you store a list of 10 phone numbers that you can access easily using a Speed Dialing number from 0 to 9.

Operation	Description	
Speed Dialing (Clr or Edit a Number)		1. Press the Menu key on LCD.
	 → Phone Setting	2. Use the navigation key to select the <i>Phone Setting</i> item and press OK key.
	 → Speed Dialing	3. Use the navigation key to select the <i>Speed Dialing</i> item and press OK key. The LCD screen prompts you to enter a number between 0 and 9.
		4. Use the navigation key to browse all the Speed Dialing numbers and press OK key to validate.
		<ul style="list-style-type: none"> • If you want to add a new number, find an empty position and press “Edit” soft-key, then using keypad to enter a number. Press OK key to validate and press Back to exit the Speed Dialing menu • If you want to edit an existing number, find the number you would like to edit and press “Edit” soft-key. Use the “BkSp” soft-key to clear the number and use keypad to enter a new number. Press OK key to validate

Dial a Speed Dialing Number



1. Dial the first digit between 0 and 9, then the LCD will show "Spd" soft-key option. (If dial second digit, the "Spd" soft-key will disappeared)



2. Press "Spd" soft-key, then M22 will dial out the stored number. (If the stored number is empty, then it will show "SPD is Empty!" on LCD)

Admin Setting

You will need to enter administrator's password to set the administrator's account, network, QoS, dial timeout, language and reset to default.

The default network settings are the following:

Default IP address: 192.168.1.10

Default Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

Default DNS: 8.8.8.8





Default Administrator's Username of Web: admin



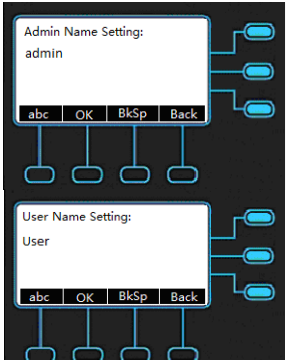


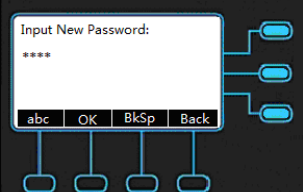
Default Administrator's Password of Web: 1234









There are 5 functions for setting:








- Account Setting
- Networking Setting
- Voice Setting
- Dial Timeout
- Reset to Default

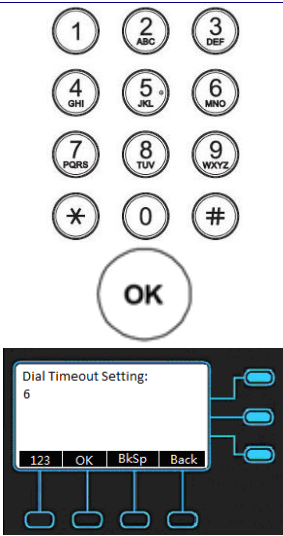





If you need to change these default settings, please refer to the following instructions.







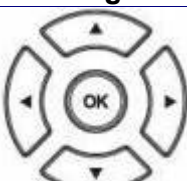

Operation	Description	
Admin/User Name, Password		1. Press the Menu key on LCD.
		2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
		3. Use the navigation key to select the <i>Account setting</i> item. Press OK key to validate the selection. The LCD displays the Account Setting menu.
		4. Select the <i>Admin/User</i> item and press OK key.

 <p>→ Name</p>	<p>5. Use the navigation key to choose <i>Name</i> type and press OK key to validate.</p>
 	<p>6. Use the keypad to enter name and press OK key to validate the input. Press the Back to exit the menu. The default Admin/User name is admin/user.</p> <div data-bbox="805 824 1428 907"><p>Note: You could use the “BkSp” soft-key to delete the last character.</p></div>
 <p>→ Password</p>	<p>7. Go to previous menu, choose <i>Password</i> item and press OK key.</p>
 	<p>8. Use the keypad to enter new password. Press OK key to validate the input. The default password is 1234.</p> <div data-bbox="805 1680 1428 1758"><p>Note: You could use the “BkSp” soft-key to delete the last character.</p></div>

Dynamic IP Address (DHCP)		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
	 → Network Setting	3. Use the navigation key to select the <i>Network Setting</i> item. Press OK key to validate the selection. The LCD displays the Network Type menu.
	 → Network Type	4. Select the <i>Network Type</i> item and press OK key.
	 → DHCP	5. Use the navigation key to choose <i>DHCP</i> type and press OK key to validate.
You must reboot the phone to validate the network parameter changing.		
Static IP Address		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
	 → Network Setting	3. Use the navigation key to select the <i>Network Setting</i> item. Press OK key to validate the selection. The LCD displays the Network Type menu.

		 → Network Type	<p>4. Select the <i>Network Type</i> item and press OK key.</p>
		 → Static IP	<p>5. Use the navigation key to choose <i>Static IP</i> type and press OK key to validate.</p>
		 → IP Address, Subnet Mask, Default Gateway, DNS	<p>6. There are <i>IP Address</i>, <i>Subnet Mask</i>, <i>Default Gateway</i>, and <i>DNS</i> items for user to configure, press OK key to enter particular entry.</p>
			<p>7. Use the keypad to enter the IP address, subnet mask, default gateway, or DNS of your IP phone. Use the * key for representing a dot . . Press OK key to validate the entered value. Press the Back key to exit the menu.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Note: You could use the “BkSp” soft-key to delete the last character.</p> </div>
		<p>You must reboot the phone to validate the network parameter changing.</p>	
			<p>1. Press the Menu key on LCD.</p>
		 → Admin Setting	<p>2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.</p>
Dial Timeout		 → Dial Timeout	<p>3. Use the navigation key to select the <i>Dial Timeout</i> item. Press OK key to validate the selection.</p>

Ping		<p>4. Use the keypad to enter the <i>Dial Timeout</i> and press OK key to validate the input. The You should enter a number from 0 to 9. Press the Back key to exit the menu. The default dial timeout setting is 6.</p>
		<p>1. Press the Menu key on LCD.</p>
	 → Admin Setting	<p>2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.</p>
	 → Network Setting	<p>3. Use the navigation key to select the <i>Network Setting</i> item. Press OK key to validate the selection.</p>
	 → Ping	<p>4. Select the <i>Ping</i> item and press OK key.</p>
		<p>5. Use the keypad to input network address and press OK key, then LCD will show the ping result several seconds later.</p>


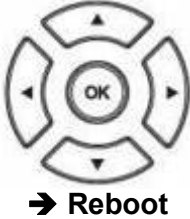
Reset to Default		1. Press the Menu key on LCD.
	 → Admin Setting	2. Use the navigation key to select the <i>Admin Setting</i> item. Press OK key to validate the selection. Type the administrator's password to get into <i>Admin</i> menu.
	 → Reset to Default	3. Use the navigation key to select the <i>Reset to Default</i> item. Press OK key to validate the selection.
	 → Configuration	4. Select the <i>Configuration</i> item and press OK key.
		5. Use the navigation key to choose "Yes" to reset configuration or choose "No" to exit the menu, and press OK key to validate.
	 → Phonebook/Call Log	6. Go to previous menu, choose <i>Phonebook</i> item and press OK key.
		7. Use the navigation key to choose "Yes" to reset phonebook or choose "No" to exit the menu, and press OK key to validate.
	 → All	8. Go to previous menu, choose <i>All</i> item and press OK key.



9. Use the navigation key to choose “Yes” to reset all or choose “No” to exit the menu, and press OK key to validate.

Reboot

Sometimes you will need to reboot your phone to apply new settings.

<i>Operation</i>	<i>Description</i>	
Reboot		1. Press the Menu key on LCD.
		2. Use the navigation key to select the <i>Reboot</i> item. Press OK key to validate the selection. And Phone will show a “Reboot” message and the phone will restart.

Note: the M22 takes about 2 minutes to startup after rebooting; there will be a series of diagnostic lights on the phone during the process. If your phone does not become operational within 2 minutes, contact your administrator or Service Provider support line.

Web Configuration

Login page

The default network settings are the following:

Default IP address: **192.168.1.10**

Default Subnet Mask: **255.255.255.0**

Default Gateway: **192.168.1.1**

Default DNS: **8.8.8.8**

Default Administrator's Username of Web: **admin**

Default Administrator's Password of Web: **1234**

Default User's Username of Web: **user**

Default User's Password of Web: **1111**

There are two modes to access the IP phone's webpage: Administrator and User mode. Here lists several differences between two modes:

1. There is no Network page for user mode.
2. There is no SW Upgrade page for user mode.
3. There is no SIP page for user mode.
4. In System page of user mode, user's password and time settings are kept for user to set.

Accessing the phone through web browser, just simply enter the "**http://phone-ip**" in the location field of the browser. If you are not sure about the IP address of the phone, you can examine the current IP address through phone's menu. (Press Menu key, select item "3. Information", use navigation key to check the IP address)



Press ENTER key to validate, the above dialog box will pop up and prompt you to provide the username and password in order to prevent unauthorized user accessing the phone. Please input the username and password then press OK button to enter phone's webpage.

Configuration Pages

Information Page

The following is the default page you will see when you login to the phone's webpage.

[Information](#) [Network](#) [Phone](#) [SW Upgrade](#) [SIP](#) [System](#) [EDM](#) [Phonebook](#)

Network Information	Network Type: Static IP Subnet Mask: 255.255.224.0 Primary DNS: 8.8.8.8	Current IP: 172.16.12.12 Default Gateway: 172.16.0.2 Secondary DNS: 8.8.4.4
Product Information	Product Name: X-3020 Firmware Version: F_5_3_V1.0.50_2013-05-02 SN: 1111111 MAC Address: 00:19:15:D9:BD:60	Application Version: F_5_4_V0.2.2 Hardware Version: X-3020_PR
Phone Status	Phone Number: 201 SIP Proxy Server: 172.16.11.11	Registration State: Registered

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In this page, it shows Network/Product information and Phone status.

- For Phone status:
- “Registration State” will be marked “Registered” with green text.
- “Unregistered” will be marked with red text.

Network Page

Information

Network

Phone

SW Upgrade

SIP

System

EDM

Phonebook

Network

QoS Settings

VLAN Items

Network Type: Static IP
Time Server: pool.ntp.org
IP Address: 192.168.1.10
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.1.1
Primary DNS: 8.8.8.8
Secondary DNS: 8.8.4.4
Third DNS: 4.2.2.1
DSCP for RTP: Best Effort
DSCP for SIP: Best Effort
VLAN Mode: None
VLAN ID: 2
VLAN Priority: 0

Save Settings

Cancel

Network:

Field Name	Function
Network Type	Select the network type. There are two types: DHCP, Static IP.
Time Server	SNTP (Simple Network Time Protocol) server. Phone will sync correct time from the server according to phone's time zone setting (In "System" page).
IP Address	Set IP address when network type is Static IP.
Subnet Mask	Set subnet mask when network type is Static IP.
Default Gateway	Set gateway address when network type is Static IP.
Primary DNS	Set first DNS server when network type is Static IP.
Secondary DNS	Set second DNS server when network type is Static IP.
Third DNS	Set third DNS server when network type is Static IP

It is necessary to reboot the phone after you change the above network related items. Press "Save Settings" button first, then it will pop up "Need to Reboot" tips, and choose "Confirm" button to restart the phone.

QoS Settings:

DSCP for RTP	Select Differentiated Services Code Point (DSCP) for RTP.
DSCP for SIP	Select Differentiated Services Code Point (DSCP) for SIP.

VLAN Items:

VLAN Mode	Set the VLAN routing mode.
VLAN ID	Set VLAN ID.

VLAN Priority	Set the VLAN priority.
----------------------	------------------------

Buttons:

Save Settings	Save changes in this page to the phone.
Cancel	Discard all changes in this page.

Phone Page

Information	Network	Phone	SW Upgrade	SIP	System	EDM	Phonebook
Volume Control							
Handset Mic.: <input type="text" value="6"/> Handset Speaker: <input type="text" value="6"/> Handsfree Mic.: <input type="text" value="6"/> Handsfree Speaker: <input type="text" value="6"/> Headset Mic.: <input type="text" value="6"/> Headset Speaker: <input type="text" value="6"/> Ring Volume: <input type="text" value="6"/>							
Tone/Ring Selection							
Tone Type: <input type="text" value="United States"/> Ring Type: <input type="text" value="0"/>							
Voice Parameters							
Enable VAD+CNG: <input type="checkbox"/> Enable Silence Suppression: <input type="text" value="None"/> Enable Echo Cancellation: <input checked="" type="checkbox"/>							
Phone Features							
Enable DND: <input type="checkbox"/> DND Type: <input type="text" value="Both"/> Enable Music on Hold: <input type="checkbox"/> Dial Timeout (Sec.): <input type="text" value="6"/> Enable Auto Answer: <input type="checkbox"/> Enable Call Waiting Tone: <input type="checkbox"/> Enable Call Waiting: <input type="checkbox"/> Hold Reminder Time (Sec.): <input type="text" value="10"/> (10~60) Enable Hold Reminder: <input type="checkbox"/> Hotline Number: <input type="text"/> Hotline Timeout (Sec.): <input type="text" value="2"/> Enable CLIP: <input checked="" type="checkbox"/> Language Type: <input type="text" value="English"/>							
Phone Display Setting							
Phone Number Display Style: <input type="text" value="Name"/>							

Volume Control:

Field Name	Function
Handset Mic	Select the volume level of handset microphone.
Handset Speaker	Select the volume level of handset speaker.
Handsfree Mic	Select the volume level of hands-free microphone.
Handsfree Speaker	Select the volume level of hands-free speaker.
Headset Mic	Set the volume level of headset microphone.
Headset Speaker	Set the volume level of headset speaker.
Ring Volume	Select the volume level of ring.

Tone/Ring Selection:

Tone Type	Select the tone type for country. There are 13 tone types for selection.
Ring Type	Select the ring type. There are 13 ring types for selection.

Voice Parameters:

Enable VAD+CNG	Turn on VAD (Voice Activity Detection) and CNG (Comfortable Noise Generation) function.
Enable Silence	Turn on the Silence Suppression function.

Suppression	
Enable Echo Cancellor	Turn on the Echo Cancellation function.
Phone Features:	
Enable DND	Turn on "Do Not Disturb" function. When it is enabled, all incoming call will get busy tone when they make call to this phone number.
DND Type	Select DND action range.
Enable Music on Hold	Plays hold music on phone when held by remote.
Enable Auto Answer	Turn on Auto Answer function. When it is enabled, phone will pick up the call automatically.
Dial Timeout (Sec.)	Set the timeout (0~30 sec) to automatically end dialing.
Enable Call Waiting	When Call Waiting function is enabled and user is in talk state, phone can allow other incoming calls. It plays Call Waiting Tone (if Call Waiting tone is enabled) to indicate user. If it's disabled, when user is in talk state, other incoming caller will get busy tone.
Enable Call Waiting Tone	Turn on the Call Waiting Tone function. At talk state, a beep tone will indicate user every 10 seconds when another call is ringing in.
Enable Hold Reminder	Turn on the Hold Reminder function.
Hold Reminder Time (Sec.)	When a call is held, phone will remind user with a beep tone every this time period.
Hotline Number	This string is only for "Hotline Number" type.
Hotline Timeout (Sec.)	Set hotline time (1~60 sec) for Hotline Number.
Enable CLIP	Turn on the CLIP function.
Language Type	Select language type for local display.
Phone Display Setting:	
Phone Number Display Style	Set the display style for calling name and number.

Call Forwarding Settings	
Always Call Forwarding:	<input type="checkbox"/> Type: Both
Always Forward Destination:	<input type="text"/>
Busy Call Forwarding:	<input type="checkbox"/> Type: Both
Busy Forward Destination:	<input type="text"/>
No Answer Call Forwarding:	<input type="checkbox"/> Type: Both
No Answer Forward Destination:	<input type="text"/>
No Answer Time (Sec.):	<input type="text" value="15"/> (1~60)
DND Call Forwarding:	<input type="checkbox"/> Type: Both
DND Forward Destination:	<input type="text"/>
Forking Call Forwarding:	<input type="checkbox"/> Type: Both
Forking Forward Destination:	<input type="text"/>
Forking Secondary Forward Destination:	<input type="text"/>
Caller Blocking Settings	
Block Anonymous Call:	<input type="checkbox"/>
Caller Blocking Entry 0:	<input type="text"/>
Caller Blocking Entry 1:	<input type="text"/>
Caller Blocking Entry 2:	<input type="text"/>
Caller Blocking Entry 3:	<input type="text"/>
Caller Blocking Entry 4:	<input type="text"/>
Caller Blocking Entry 5:	<input type="text"/>
Caller Blocking Entry 6:	<input type="text"/>
Caller Blocking Entry 7:	<input type="text"/>
Caller Blocking Entry 8:	<input type="text"/>
Caller Blocking Entry 9:	<input type="text"/>
Speed Dialing Settings	
Speed Dialing Entry 0:	<input type="text"/>
Speed Dialing Entry 1:	<input type="text"/>
Speed Dialing Entry 2:	<input type="text"/>
Speed Dialing Entry 3:	<input type="text"/>
Speed Dialing Entry 4:	<input type="text"/>
Speed Dialing Entry 5:	<input type="text"/>
Speed Dialing Entry 6:	<input type="text"/>
Speed Dialing Entry 7:	<input type="text"/>
Speed Dialing Entry 8:	<input type="text"/>
Speed Dialing Entry 9:	<input type="text"/>

Call Forwarding Settings:

Always Call Forwarding	Turn on the always call forwarding function, the right side is selecting forward action range.
Always Forward Destination	Set where the call will be forwarded to.
Busy Call Forwarding	Turn on the busy call forwarding function, the right side is selecting forward action range.
Busy Forward Destination	Set where the call will be forwarded to.
No Answer Call Forwarding	Turn on the no answer call forwarding function, the right side is selecting forward action range.
No Answer Forward Destination	Set where the call will be forwarded to.
No Answer Timeout (Sec.)	Set the timeout for no answer call forwarding.
DND Call Forwarding	Turn on the DND call forwarding function, the right side is selecting forward action range.
DND Forward Destination	Set where the call will be forwarded to.
Forking Call Forwarding	Turn on the forking call forwarding function, the right side is selecting forward action range.
Forking Forward	Set where the call will be forwarded to.

Destination	
Forking Secondary Forward Destination	Set where the call will be forwarded to when first destination is busy.

Caller Blocking Settings:

Enable Block Anonymous Call	Turn on to block the incoming call without Display Name.
Caller Blocking Entry 0~9	There are 10 blocking entries for user to set. When the caller ID of the incoming call matches a certain blocking entry, the call will be blocked. The remote party will hear busy tone.

Speed Dialing Settings:

Speed Dialing Entry 0~9	There are 10 speed dialing entries for user to set.
--------------------------------	---

Feature Key Settings	Feature Key 1:	Trunk	Feature Key Number 1:	710
	Feature Key 2:	Trunk	Feature Key Number 2:	711
	Feature Key 3:	Trunk	Feature Key Number 3:	712
Programmable Key Settings	Programmable key 1:	Extension	Function Number 1:	201
	Programmable key 2:	Extension	Function Number 2:	202
	Programmable key 3:	Extension	Function Number 3:	203
	Programmable key 4:	Extension	Function Number 4:	204
	Programmable key 5:	Extension	Function Number 5:	205
	Programmable key 6:	Extension	Function Number 6:	206
	Programmable key 7:	Extension	Function Number 7:	207
	Programmable key 8:	Extension	Function Number 8:	208

Feature Key Settings:

Feature Key 1~3	There are 9 types could be chosen, None, Extension, Trunk, Call Park, Feature Key, Do Not Disturb, Live Record, Virtual Mailbox and Others. Phone will do the relative function when user pressing related feature key button.
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Programmable Key Settings:

Programmable Key 1~8	There are 9 types could be chosen, None, Extension, Trunk, Call Park, Feature Key, Do Not Disturb, Live Record, Virtual Mailbox and Others. Phone will do the relative function when user pressing related programmable key button.
-----------------------------	---

Buttons:

Save Settings	Save changes in this page to the phone.
Cancel	Discard all changes in this page.

SW Upgrade Page

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[Phone](#)
[SW Upgrade](#)
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[Phonebook](#)

HTTP Upgrade

Software File:

选择文件 未选择文件

Update

Configuration File:

选择文件 未选择文件

Update

Backup

Private Phonebook File:

选择文件 未选择文件

Update

Backup

Linux Kernel:

选择文件 未选择文件

Update

Application Pack:

选择文件 未选择文件

Update

TFTP/FTP/HTTP/HTTPS Upgrade

Server Type:

TFTP

Server IP Address:

192.168.1.100

Files Directory:

Server User Name:

root

User Password:

Software File:

Update

Configuration File:

PhoneConfigure.xml

Update

Phonebook Updates

Private Phonebook File:

addressbook_private.cs

Update

Public Phonebook File:

addressbook_public.cs

Update

Save Settings

Cancel

HTTP Upgrade:

Field Name	Function
Software File	Select software firmware and press Update button to upgrade software.
Configuration File	Select the desired configuration file and press Update button to restore the settings. Press Backup button to save the configuration file on your PC.
Private Phonebook File	Select desired private phonebook file and press Update button to update. Press Backup button to save the phonebook file on your PC.
Linux Kernel	Select Linux kernel and press Update Button to upgrade kernel.
Application Pack	Select application and press Update button to upgrade application.

The software upgrade process needs 2 minutes to finish, please do not turn off the power at this time. After updating successfully, the phone will reboot automatically.

TFTP/FTP/HTTP/HTTPs Upgrade:

Server Type	Select the Server Type (TFTP, FTP, HTTP or HTTPs).
Server IP Address	IP address of TFTP, FTP, HTTP or HTTPs Server.
Files Directory	Files directory where the software, configuration file, or phonebook file located.

Server User Name	Username of the account on the server.
User Password	Password of the account on the server.
Software File	Software file name on the server.
Configuration File	Configuration file name on the server.

Phonebook Updates:

Private Phonebook File	<ul style="list-style-type: none">• The user can add, edit, delete or dial an entry directly from the web page. The user can also upload his contacts from a file using a web browser. The Private Phonebook can have up to 100 contacts.
Public Phonebook File	A user or administrator can upload a file using a web browser.

You can also use TFTP, FTP, HTTP or HTTPs server to update the software, configuration file, or phonebook file. First, fill the correct file name which you desire to update. Second, press "Save Settings" button to save. Finally, press relative "Update" button, the update process will start.

Buttons:

Save Settings	Save changes in this page to the phone.
Cancel	Discard all changes in this page.

SIP Page

Information	Network	Phone	SW Upgrade	SIP	System	EDM	Phonebook
SIP Proxy Server							
SIP Proxy Server:		<input type="text" value="172.16.11.11"/>		Port:		<input type="text" value="5070"/>	
Outbound Proxy Server:		<input type="text" value="172.16.11.11"/>		Port:		<input type="text" value="5070"/>	
Backup Proxy Server:		<input type="text"/>		Port:		<input type="text" value="5070"/>	
SIP Registrar Server							
Registrar Server:		<input type="text" value="172.16.11.11"/>		Port:		<input type="text" value="5070"/>	
Registrar Outbound Server:		<input type="text" value="172.16.11.11"/>		Port:		<input type="text" value="5070"/>	
Backup Registrar Server:		<input type="text"/>		Port:		<input type="text" value="5070"/>	
Registrar Expire Time (Sec.):		<input type="text" value="180"/>		Registrar Retry After Time (Sec.):		<input type="text" value="300"/>	
Subscriber Information							
Phone Number:		<input type="text" value="201"/>		Display Name:		<input type="text"/>	
Authorized ID:		<input type="text" value="201"/>		Authorized Password:		<input type="text" value="*****"/>	
Locating SIP Server:		<input type="checkbox"/>		Enum Suffix:		<input type="text"/>	
End Dial on #:		<input type="checkbox"/>		RFC2833 Payload:		<input type="text" value="101"/> (96-127)	
DTMF Type:		<input type="text" value="RFC2833"/>					
SIP Settings							
Session Expires(Sec.):		<input type="text" value="300"/>		Min-SE(Sec.):		<input type="text" value="60"/>	
SIP 100rel Support:		<input checked="" type="checkbox"/>					

SIP Proxy Server:

SIP Proxy Server	Set SIP proxy server.
Outbound Proxy Server	Set SIP outbound proxy server.
Backup Proxy Server	Set SIP backup proxy server.
Server Port	Set SIP proxy service port.

SIP Registrar Server:

Registrar Server	Set SIP registrar server.
Registrar Outbound Server	Set SIP registrar outbound server.
Backup Registrar Server	Set SIP registrar backup server.
Registrar Server Port	Set SIP registrar port.
Registrar Expire Time (Sec.)	Set SIP registrar expire time.
Registrar Retry After Time (Sec.)	Set SIP registrar retry after time.

Subscriber Information:

Phone Number	Set SIP registrar phone number.
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Display Name	Set SIP registrar display name.
Authorized ID	Set SIP registrar authorized ID.
Authorized Password	Set SIP registrar authorized password.
Locating SIP Server	Enable locating SIP server.
Enum Suffix	Set Enum Suffix.
End Dial on #	Enable end dial on #.
DTMF Type	Select DTMF type (None, Tone, RFC2833, SIP-INFO).
RFC2833 Payload	Set RFC2833 payload length (96 ~ 127).

SIP Settings:

Session Expires (Sec.)	Set expire time for session.
MIN SE (Sec.)	Set minimum session expiration time. It will notify server the minimum expiration time that you accepted in negotiation state. It is conveyed in the Min-SE header in the initial INVITE request.
SIP 100rel Support	Turn on SIP 100rel Support.

Optional SIP Header	Optional Header1:	<input type="text"/>	Optional Header2:	<input type="text"/>
RTP Parameters	RTP Port Base:	<input type="text" value="10000"/>		
	Enable Statistic:	<input type="checkbox"/>		
	Statistic Server:	<input type="text"/>	Statistic Port:	<input type="text" value="10000"/>
Codec Settings	First Codec:	<input type="text" value="G.729"/>	Packet Time:	<input type="text" value="20(ms)"/>
	Second Codec:	<input type="text" value="G.711 a-law"/>		
	Third Codec:	<input type="text" value="G.711 u-law"/>		
	Fourth Codec:	<input type="text" value="iLBC"/>		
	Fifth Codec:	<input type="text" value="G.726-32"/>	G.726-32 Payload:	<input type="text" value="114"/> (96-127)
	Sixth Codec:	<input type="text" value="G.723.1"/>		
	Seventh Codec:	<input type="text" value="G.722"/>		
NAT Settings	SIP NAT Type:	<input type="text" value="None"/>	RTP NAT Type:	<input type="text" value="None"/>
	SIP Keep Alive:	<input type="checkbox"/>	SIP Keep Alive Time(Sec.):	<input type="text" value="20"/>
	STUN Server:	<input type="text"/>	STUN Server Port:	<input type="text" value="0"/>

Optional SIP Header:

Optional SIP Header1	Set first optional SIP header.
Optional SIP Header2	Set second optional SIP header.

RTP Parameters:

RTP Port Base	Set port base for RTP (Real-time Transport Protocol).
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Enable Statistic	Enable statistic RTP server.
Statistic Server	Set statistic server.
Statistic Port	Set statistic port.

Codec Settings:

G.711 u-law G.711 a-law G.722 G.723.1 G.726-32 G.729 iLBC None	Select the codec priority for RTP communications.
Packet Time	Select the relative packet time.
G.726-32 Payload	Fill the number of G.726-32 payload.

NAT Settings:

SIP NAT Type	Select SIP NAT type.
RTP NAT Type	Select RTP NAT type.
SIP Keep Alive	Turn on SIP keep alive.
SIP Keep Alive Time (Sec.)	Set SIP keep alive time.
STUN Server	Set STUN server IP address.
STUN Server Port	Set STUN server port.

Prefix Entry Settings

Dial Plan

Prefix Entry 0 Type: Disabled

Prefix Entry 0 Pattern:

Prefix Entry 1 Type: Disabled

Prefix Entry 1 Pattern:

Prefix Entry 2 Type: Disabled

Prefix Entry 2 Pattern:

Prefix Entry 3 Type: Disabled

Prefix Entry 3 Pattern:

Prefix Entry 4 Type: Disabled

Prefix Entry 4 Pattern:

Prefix Entry 5 Type: Disabled

Prefix Entry 5 Pattern:

Prefix Entry 6 Type: Disabled

Prefix Entry 6 Pattern:

Prefix Entry 7 Type: Disabled

Prefix Entry 7 Pattern:

Prefix Entry 8 Type: Disabled

Prefix Entry 8 Pattern:

Prefix Entry 9 Type: Disabled

Prefix Entry 9 Pattern:

Prefix Entry 0 Replace:

Prefix Entry 1 Replace:

Prefix Entry 2 Replace:

Prefix Entry 3 Replace:

Prefix Entry 4 Replace:

Prefix Entry 5 Replace:

Prefix Entry 6 Replace:

Prefix Entry 7 Replace:

Prefix Entry 8 Replace:

Prefix Entry 9 Replace:

Dial Plan:

Save Settings

Cancel

Prefix Entry Settings:

Prefix Entry Type, Pattern, or Replace	If the “Prefix Entry Type” is “Replace” mode, the “Prefix Entry Pattern” will be replaced by the “Prefix Entry Replace”. For example, the “Prefix Entry Pattern” is 220 and the “Prefix Entry Replace” is 210. When you dial 220 with keyboard, the phone will dial 210.
--	--

Dial Plan:

Dial Plan	Outgoing call which fit for the dial plan rule will be called out immediately, without waiting the dial timeout. It is convenient for users to make call quickly. There are several kinds of settings for dial plan: 1. “x” means any single digit from 0~9. 2. “[digit-digit]” means a valid range for a certain number position. 3. [digits] means acceptable numbers for a certain number position. 4. “ ” is used for separate different dial plan items. For example, set dial plan as “60xx 30[6-9] 10[45]”, if user dial 6000~6099, 306, 307, 308, 309, 104, and 105, IP phone will dial out it immediately. Otherwise, dial out the number after dial timeout.
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Buttons:

Save Settings	Save changes in this page to the phone.
Cancel	Discard all changes in this page.

System Page

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Admin Settings
Time Settings
Download Logs
Reboot Phone
Reset to Default

Administrator Name: admin
User Name: user
System Log to: Console
System Log Address:

Administrator Password:
User Password:
Log Level: Emergency
System Log Port: 514

Display Date and Time:
Auto DST:
Starts on: Month MAR Day 8 Time 02:00
Ends on: Month NOV Day 1 Time 02:00
Time Format: USA TIME_24_HOUR
Time Zone: GMT-08:00 (Pacific Time (US & Canada), ...)

System Log: Download
SIP Log: Download

Reboot Phone: Reboot

Reset Configuration: Reset Configuration
Reset All: Reset All
Reset Phonebook/Call Log: Reset Phonebook/Call Log

Save Settings
Cancel

Admin Settings:

Field Name	Function
Administrator Name	The administrator username to login phone's webpage.
Administrator Password	The administrator password to login phone's webpage.
User Name	The user username to login phone's webpage.
User Password	The user password to login phone's webpage.
System Log to	Select destination of system log redirect to.
Log Level	Select log level.
System Log Address	Set IP address for system log server.
System Log Port	Set port for system log server.

The user's name is not allowed to be the same as administrator's name. The administrator's and user's name should be set at least 1 character, not allowed to be null. The administrator's and user's password should be set at least 4 characters. When changing password in phone's config menu, less than 4 characters will be discarded, not be saved.

Time Settings: (Not used with IG server)

Display Day and Time	Turn on to display day and time on LCD.
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Auto DST	Turn on the auto DST (Daylight Saving Time) function.
Daylight Saving Time	Three time shifts could be set, -1, 0, and +1.
Starts on	Start time for DST.
Ends on	End time for DST.
Time Format	USA 24_HOUR, USA 12_HOUR, European 24_HOUR, and European 12_HOUR.
Time Zone	Set time zone.

Download Logs:

System Log	Press to download system log.
SIP Log	Press to download SIP log.

Reboot Phone:

Reboot	Restart the phone.
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Reset to Default:

Reset Configuration	Reset Configuration to factory default.
Reset Phonebook/Call Log	Clear all Phonebook and Call Log data.
Reset All	Reset all data to default including Configuration, Call Records, and Phonebook data.

Buttons:

Save Settings	Save changes in this page to the phone.
Cancel	Discard all changes in this page.

EDM

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EDM Key

EDM Key 1:	Trunk	Function Number 1:	700
EDM Key 2:	Trunk	Function Number 2:	701
EDM Key 3:	Trunk	Function Number 3:	702
EDM Key 4:	Trunk	Function Number 4:	703
EDM Key 5:	None	Function Number 5:	
EDM Key 6:	None	Function Number 6:	
EDM Key 7:	None	Function Number 7:	
EDM Key 8:	None	Function Number 8:	
EDM Key 9:	None	Function Number 9:	
EDM Key 10:	None	Function Number 10:	
EDM Key 11:	None	Function Number 11:	
EDM Key 12:	None	Function Number 12:	
EDM Key 13:	None	Function Number 13:	
EDM Key 14:	None	Function Number 14:	
EDM Key 15:	None	Function Number 15:	
EDM Key 16:	None	Function Number 16:	
EDM Key 17:	None	Function Number 17:	
EDM Key 18:	None	Function Number 18:	
EDM Key 19:	None	Function Number 19:	
EDM Key 20:	None	Function Number 20:	
EDM Key 21:	None	Function Number 21:	
EDM Key 22:	None	Function Number 22:	
EDM Key 23:	None	Function Number 23:	
EDM Key 24:	None	Function Number 24:	

Save Settings
Cancel

EDM Key:

Field Name	Function
EDM Key 1~24	There are 9 types could be chosen, None, Extension, Trunk, Call Park, Feature Key, Do Not Disturb, Live Record, Virtual Mailbox and Others. Phone will do the relative function when user pressing related EDM key button.

Buttons:

Save Settings	Save changes in this page to the phone.
Cancel	Discard all changes in this page.

Phonebook

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Phonebook Entry(1-1)

No.: 1
Username: Phone Number:
Group: Ring Type:

New Phonebook Entry

Username:
Group:
Phone Number:
Ring Type:

This page lets you configure phonebook data of your phone. You may:

- Edit up to 200 entries. Each page will just show 20 entries.
- Dial a phone number directly from this webpage.

Phonebook Entry:

Field Name	Function
Dial	Dial the phone number which your want to dial.
Delete	Delete current contact entry.
Username	Name of your contact.
Phone Number	Phone number or SIP URI of your contact.
Group	Select group type for each entry.
Ring Type	Select particular ring type for each entry.

New Phonebook Entry:

Username	Set name of new contact.
Phone Number	Set number of SIP URI of new contact.
Group	Select group type for new contact.
Ring Type	Select particular ring type for new contact.
Add	Save the new contact.

Button:

Save Settings	Save changes in this page to the phone.
Prev Page	Go to the previous page.
Next Page	Go to the next page.

To call your contact, simply click on the corresponding number and it will show the following dialog box (for example, if you click entry 001 to call out, the result will be the following):



Then press the “Dial” button in order to start dialing. Phone will dial out corresponding number automatically.

Features & Specifications

With highly integrated chip and sophisticated design, this IP2032 offers a variety of features. And it can provide high performance, reliable and quality voice communication for the users. The hardware specifications are list as follows for your reference.

Main Unit

- Dimension: 180 * 195 * 105 mm.
- Plastic material: ABS type.
- Support 2 angles. (one with stand and one without stand)
- Can be mounted onto the wall with the stand.
- Support detachable handset and curled cord.

LAN and PC Ports

- Integrated 2 ports Ethernet switch.
- IEEE 802.3 10BaseT / 802.3u 100BaseTx compliant.
- Auto-negotiation with link speed and full/half duplex mode.
- Auto MDI/MDIX for both downlink and uplink auto-swapping.
- Support QoS IEEE 802.1p voice priority function.

Power Supply

- Input: 5VDC/2A power adapter.
- Support PoE (Power over Ethernet), IEEE 802.3af Device - Class 2 (7W).

Voice Handling

- Supports multiple Audio Codecs: G.711 a-law/ μ -law, G722, G.723.1, G726-32, G.729, iLBC.
- Supports VAD (Voice Activity Detection) and CNG (Comfort Noise Generation).
- Volume adjustable for Handset, Headset, Hands-free and Hands-free Ring output.
- Support G.165 16ms line Echo Cancellation.
- Adaptive Jitter Buffering function supported.
- Hands-free talking supported.
- Support multiple calls appearance.

Note: * These features are optional. Please contact your supplier to purchase option.

Tone Function:

- DTMF tone generation and detection.
- Side tone and good voice quality supported.
- Out-bound DTMF relay (RFC2833/SIP-INFO) support.

-Local tone support (Dial, Ring, Ring back, Busy and related tones).

Troubleshooting

<i>Symptom</i>	<i>Check & Remedy</i>
No operation	<ul style="list-style-type: none">● Check if the power adapter is properly connected.● Check if the Ethernet cable is properly connected.● If applicable, check if the PoE (Power over Ethernet) switch behind the IP phone is set to the right position.
No dial tone	<ul style="list-style-type: none">● Check if the handset cord is properly connected.● Check if the power adapter is properly connected.
Check network connection shown on LCD	<ul style="list-style-type: none">● Check if the Ethernet cable is properly connected.
Cannot make call	<ul style="list-style-type: none">● Check the status of your SIP registration or contact your supplier or ITSP for more information or assistance.
IP phone cannot receive any phone call	<ul style="list-style-type: none">● Check if the Ethernet cable is properly connected● Check the status of your SIP registration or contact your supplier or ITSP for more information or assistance.
Cannot connect to the configuration website of the IP phone	<ul style="list-style-type: none">● Check if the Ethernet cable is properly connected.● Check the IP address of the IP phone.● Check if your firewall/NAT settings are correct.

Glossary

Acronyms

CODEC	Coder and Decoder of Voice
CNG	Comfort Noise Generation
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name Server
DTMF	Dual Tone Multiple Frequency
HTTP	Hypertext Transfer Protocol
IP	Internet Protocol
ISP	Internet Service Provider
ITSP	IP Telephony Service Provider
LAN	Local Area Network
MWI	Message Waiting Indication
PoE	Power over Ethernet (IEEE802.3af standard)
PPPoE	Point-to-point protocol over Ethernet
QoS	Quality of Service
NAT	Network Address Translation
RTP	Real Time Protocol
SIP	Session Initiation Protocol
SNTP	Simple Network Address Translation
TFTP	Trivial File Transfer Protocol

Terminology

10/100BASE-T	It's a LAN transmission line specification stipulated by IEEE. Transmission speed is 10 or 100 Mbps and the modulation technique is base-band modulation. The cable uses unshielded twisted pair, similar to a telephone wire. 10BaseT is an IEEE standard (802.3) for operating 10 Mbps Ethernet networks (LANs) with twisted pair cabling and a wiring hub.
Auto answer	In telephone call control: The capability of a machine to answer a ringing telephone without human intervention.
CODEC	The CODEC (CODER/DECODER) is a standard through which voice information can be encoded into data or decoded back to voice information. Both a Coder and Decoder are necessary on both sides of the telephone call since telephone calls occur simultaneously in both directions. Bandwidth is an extremely important factor in QOS (Quality of Service). MOS (Mean Opinion Score) is an attempt to make a quantifiable benchmark of voice quality. Below are examples of the CODEC, bit rate and mean opinion score: G.711 (toll quality) 64K MOS=4.1, G.726 16K (32K) MOS=3.8, G.729AB (cell phone quality) 8K MOS=3.7.
DHCP	Dynamic Host Configuration Protocol (DHCP): A utility that enables a server to dynamically assign IP addresses from a predefined list and limit their time of use so that they can be reassigned. Without DHCP, an IT Manager would have to manually enter in all the IP addresses of all the computers on the network. When DHCP is used, whenever a computer logs onto the network, it automatically gets an IP address assigned to it.
Diff-Serv	Differentiated Services: The Diff-Serv model divides traffic into a small number of classes to provide quality of service (QoS). One of QoS in internet.
DNS	Domain Name Service (DNS): A server/program that translates URLs to IP addresses by accessing a database maintained on a collection of Internet servers. The program works behind the scenes to facilitate surfing the Web with alpha versus numeric addresses. A DNS server converts a name like mywebsite.com to a series of numbers like 107.22.55.26. Every website has its own specific IP address on the Internet. Typically one or more DNS servers is located in an IP network.
DTMF	Dual Tone Multi-Frequency (DTMF): The type of audio signals generated when you press the buttons on a touch-tone telephone. Can be used in inbound (after voice channel connected) and outbound (before voice channel connected) application.
Ethernet	International standard networking technology for wired implementations. Basic 10BaseT networks offer a bandwidth of about 10 Mbps. Fast Ethernet (100 Mbps) and Gigabit Ethernet (1000 Mbps) are becoming popular.
G.711	64 kbps PCM half-duplex codec (high quality, high bandwidth, minimum processor load)
IP	Internet Protocol (IP) is located at 3rd layer of ISO network model. A set of rules used to send and receive messages at the Internet address level. IP protocol is widely used in Internet and LAN networks. The purpose is to deliver data between computing equipment over the network. The protocol is generally effective but does not guarantee complete and accurate data communications.

IP address	A 32-bit number that identifies each sender or receiver of information that is sent across the Internet. An IP address has two parts: an identifier of a particular network on the Internet and an identifier of the particular device (which can be a server or a workstation) within that network. A number used to identify the location of a host device. It is expressed in numeric dot notation (e.g. 202.203.27.31).
MAC address	Media Access Control address (MAC address): It is a unique identifier assigned to most network adapters or network interface cards by the manufacturer for identification, and used in the Media Access Control protocol sub-layer. It may also be known as an Ethernet Hardware Address or physical address. In TCP/IP networks, the MAC address of a subnet interface can be queried with the IP address using the Address Resolution Protocol (ARP) for Internet Protocol. On broadcast networks, such as Ethernet, the MAC address uniquely identifies each node and allows frames to be marked for specific hosts. It thus forms the basis of most of the Link layer (OSI Layer 2) networking upon which upper layer protocols rely to produce complex, functioning networks.
NAT	Network Address Translation (NAT): A network capability that enables a houseful of computers to dynamically share a single incoming IP address from a dial-up, cable or xDSL connection. NAT takes the single incoming IP address and creates new IP address for each client computer on the network.
Proxy server	Used in larger companies and organizations to improve network operations and security, a proxy server is able to prevent direct communication between two or more networks. The proxy server forwards allowable data requests to remote servers and/or responds to data requests directly from stored remote server data.
PSTN	Public Switched Telephone Network (PSTN): The worldwide voice telephone network.
RJ-45	Standard connectors used in Ethernet networks. Even though they look very similar to standard RJ-11 telephone connectors, RJ-45 connectors can have up to eight wires, whereas telephone connectors have only four.
RTP/RTCP	Real-Time Protocol/Real-Time Control Protocol (RTP/RTCP): IETF specifications for audio and video signal management. Allows applications to synchronize and spool audio and video information. RTP is specifically concerned with the dependable transmission of latency-sensitive traffic across the network and is involved in using time stamping to determine network jitter tolerance and makes sure that voice packets are arriving in order.
SIP	Session Initiation Protocol (SIP): A protocol that provides telephony services similar to H.323, but is less complex and uses fewer resources. SIP is a signaling protocol for Internet conferencing, telephony, presence, events notification and instant messaging. SIP is a text-based protocol, similar to HTTP and SMTP, for initiating interactive communication sessions between users.
Subnetwork or Subnet	Found in larger networks, these smaller networks are used to simplify addressing between numerous computers. Subnets connect to the central network through a router, hub or gateway. Each individual wireless LAN will probably use the same subnet for all the local computers it talks to.
TCP/IP	Internet Standard Protocol: The underlying technology behind the Internet and communications between computers in a network. The first part, TCP, is the transport part, which matches the size of the messages on either end and guarantees that the correct message has been received. The IP part is the user's computer address on a network. Every computer in a TCP/IP network has its own IP address that is either dynamically assigned at startup or permanently assigned.

	All TCP/IP messages contain the address of the destination network as well as the address of the destination station. This enables TCP/IP messages to be transmitted to multiple networks (subnets) within an organization or worldwide.
VAD	Voice Activity Detection (VAD) helps save bandwidth during calls. Examples: When making a VoIP call and you not speaking and you listening, that silence is still taking up bandwidth during the call. When silence is detected by VAD software over a predetermined length of time, it sends silent packets that inform other VAD enabled systems to stop holding the bandwidth for these empty packets.
VoIP	Voice Over Internet Protocol: VoIP is based on the principal of transmitting digitized voice packets over networks. Basically, VoIP consists of converting voice signals into streams of digital packets and sending those packets of data through an IP-constructed network environment. VoIP can work in both LAN (local area network) and WAN (wide area network) environments for internetwork or internetwork communication between VoIP channel users. Routers and switches and other special compression protocols direct the packetized voice data to their destination IP address. VoIP can be less expensive than voice transmission using standard analog packets over POTS (Plain Old Telephone Service). It allows telephone calls, faxes, or overhead paging to be transported over an existing IP data network topology.