



# ICW-1000 Global Admin's Manual



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# Manual Introduction

Before use, kindly read this “Administrator Manual” thoroughly to have an understanding of the contents.

After reading, place it within reach at all times such as at the side of this product.

This manual is for administrator who has working knowledge of fundamental terms and concepts of computer networking, converged voice and data networks to include LANs, WANs, and IP switching and routing.

# Safety Precautions

Since this is provided to make safe and right use of ICW-1000G to prevent any accidents or risks, be sure to carefully read it, follow instructions, and keep it where it is easily noticed.

## Warning

This mark is intended to warn users of the risk of a serious injury or death when they violate instructions.



Do not put ICW-1000G in heating appliances such as heaters and microwave ovens to dry them if they are wet. It can cause explosions, deformation, or troubles. In this case, free services shall not be provided.



Do not use ICW-1000G in places that are too hot or too wet (keep them indoors between 0 °C and + 50 °C). If they get wet with rain, have drinks spilled, or are used in extremely hot/wet places such as public sauna bathroom, it can cause battery explosions.



Put ICW-1000G and chargers in places out of reach of children or pets. If one puts batteries his or her mouth, or uses broken batteries, it can hurt his or her body, or cause electric shocks.



Do not disassemble ICW-1000G, or apply shocks to them as you please. If they get damaged while you disassemble them, or inflict shocks on them, you cannot have free services.



You should stop charging the phone and separate it from battery if the phone is overheating during charging the phone. Doing so may get burned.



Be aware of much ESD (Electrostatic Discharge simulator) environment. The product may have the abnormal condition



Be sure to use designated batteries and accessories only for ICW-1000G provided by our company. If you use unauthorized batteries or accessories, it can reduce the life of ICW-1000G, cause explosions, or damage them. In this case, you cannot have free services.



Be careful for conductors such as necklaces, keys, and coins not to contact battery terminals (metal section). Since short circuits can cause explosions, be careful for such events never to take place.



Neither throws batteries, which can inflict shocks on them, nor put them near to heating appliances such as heaters and microwave ovens. It can cause the leak of battery contents, or explosions.



Use standard chargers that obtained INCOM authentication for batteries. Otherwise, batteries will have their life reduced, face explosions, or damage ICW-1000G. In this case, free services shall not be provided.



Refrain from the use of ICW-1000G, and leave the power cord of chargers unplugged when thunders and lightening are severe. Thunderbolts can cause severe physical injuries, or fires.



Do not hold ICW-1000G to your ears to turn on the power. It can cause hearing impairments, or physical injuries. Do not look at the infrared window in a direct way when using remote control. It can cause visual impairments.



Do not use chemical detergents such as benzene, thinner, and alcohol to clean ICW-1000G. It can cause fires.



Never push the power button when ICW-1000G are wet, nor touch ICW-1000G, chargers, or power cords with wet hands. It can cause fires or electric shocks.



#### Precautions

This mark is intended to caution users against violating instructions since it can cause a slight physical injury or product damage.



Correctly install ICW-1000G in compliance with instructions. Otherwise, it can cause an abnormal operation of ICW-1000G, or reduce their life.



Be aware of radio interference. Since this radio equipment can have radio interference, services related to life safety are not provided.



Do not install ICW-1000G in places exposed to direct sunlight, and on carpets or cushions. It can cause fires or troubles.



Do not install ICW-1000G in narrow places with poor ventilation, or near heat sources. It can cause fires or troubles.



Do not install ICW-1000G in places with much dust. It can cause operational problems, or reduce phone life.



Install ICW-1000G on flat places, not on shelves or slopes. Otherwise, it can hurt you, or cause troubles when they drop.



Since emergency calls are available only within call coverage, check in advance whether or not calls are available.



Do not use ICW-1000G covered wrap or vinyl. Coating can be removed.



Record and keep the information contained in ICW-1000G separately.

Since the important information stored in ICW-1000G can be removed due to unavoidable circumstances such as users' carelessness, maintenance, and product upgrade, please keep a record of important information. Take note that manufacturer will not take responsibility for any damage from the loss of information. If batteries are not used for a long time, keep them at room temperature after charging.

If you want to use again after leaving them for a long time, it is recommended to use them after fully charging.

Keep in mind that ICW-1000G can produce much heat while using for a long time.

Do not install ICW-1000G in heavily shaking places. It can cause performance degradation, or reduce the life of products.

After using ICW-1000G for a long time, they can produce a weak sound due to their liquid crystal protective vinyl covering the speaker.

If ICW-1000G is separated from AP or chargers for a long time, they cannot work due to battery discharge.

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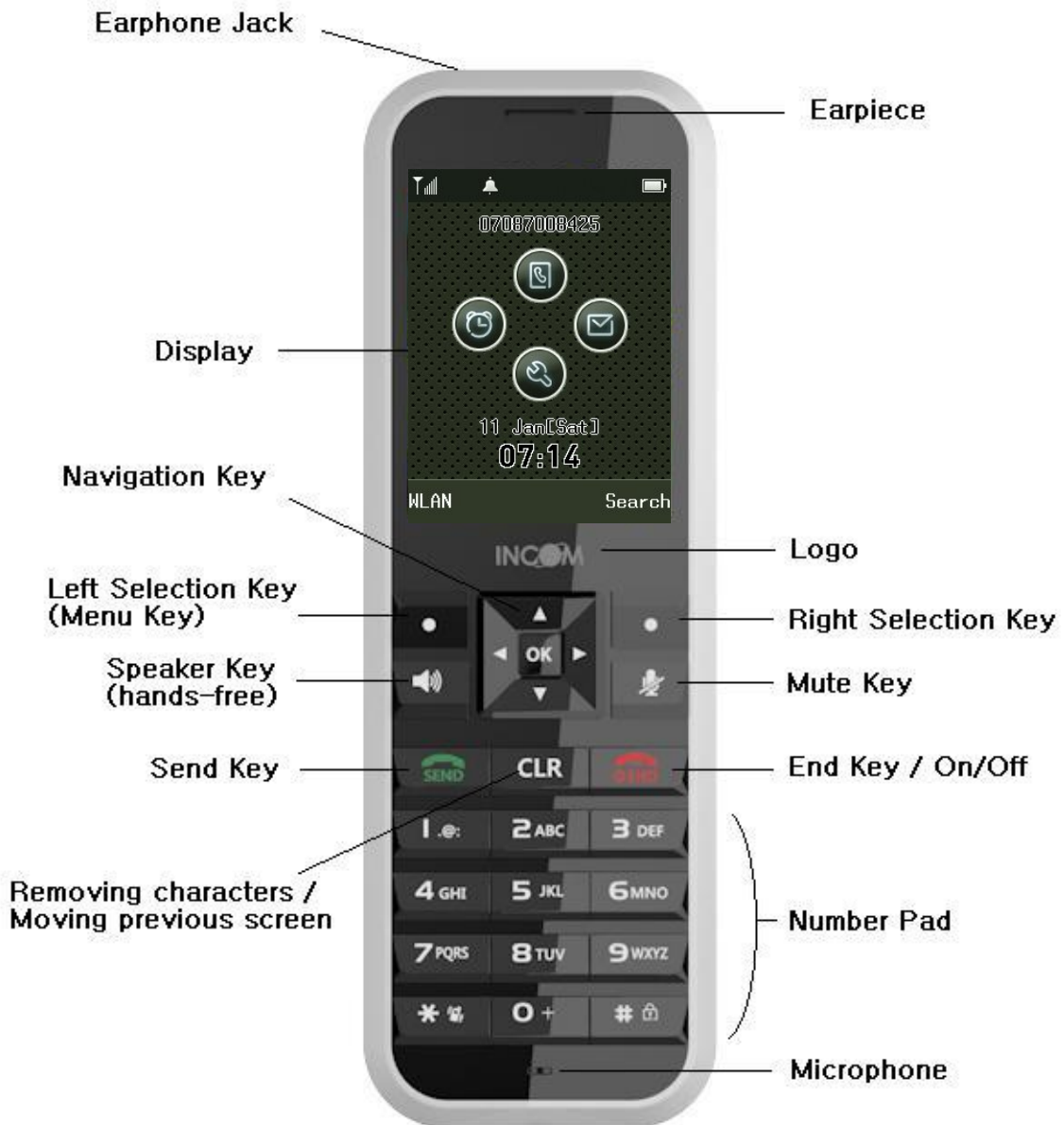
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











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ICW-1000G at a Glance


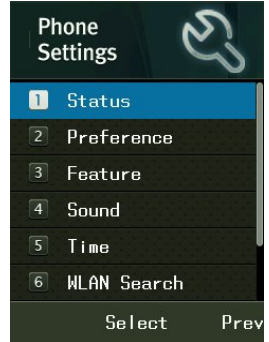

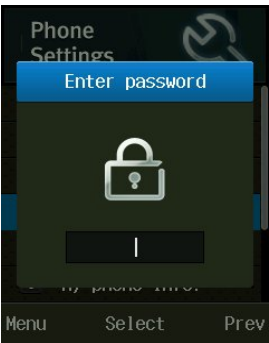




## Basic Key Function




Key Name	Icon	Basic functions
Navigation key		Navigation Key – In the idle state, this button opens each function. Within a menu or a list, you can use this as direction keys.
Left selection key Right selection key		Left selection key – Search WLAN key / Scroll up in the menu list. Right selection key – Search grouped phone book.
Send key		Equivalent to “Answer” on a standard phone and “hold” during a call.
End key		Equivalent to “hang up” on a standard phone. Return to idle state. Pressing and holding the key in the idle state turns the handset On/Off.
OK key		Confirmation(OK), Select, View, Connect on each display screen
Search phonebook key		Search phonebook, trace call history and storage phonebook/ Scroll up in the menu list
Alarm key		Setting up alarm and wakeup call / Move to left in the menu.
Setting key		Set phone settings / Scroll down in the menu list
Message key		Using message function/ Move to right in the menu.
Speaker key		Using speaker function
Mute key		Mute key is used when calling on the phone. Pressing the key during a call turns “Mute” mode.
Vibration key		Pressing and holding the key in the idle state: Switch the ringer (buzzer) On/Off
Clear key		CLR Key is used to return to previous menu list. Cancel (ESC) and removing characters.
Lock key		The pound is for entering the pound sign. Pressing and holding the key in the idle state: Switches on the key lock.

# Admin Menu and Changing Password

# 2





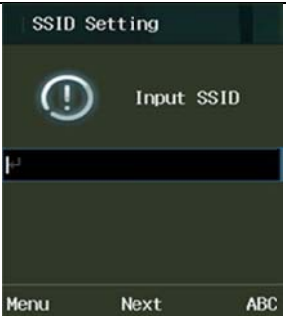




1	Press the up key  on navigation and directly access "Phone setting".	 <p>Phone Settings</p> <ul style="list-style-type: none"> <li>1 Status</li> <li>2 Preference</li> <li>3 Feature</li> <li>4 Sound</li> <li>5 Time</li> <li>6 WLAN Search</li> </ul> <p>Select Prev</p>
2	Press "8" or find "Admin. Menu" with scroll down.	 <p>Phone Settings</p> <ul style="list-style-type: none"> <li>3 Feature</li> <li>4 Sound</li> <li>5 Time</li> <li>6 WLAN Search</li> <li>7 Reset to Default</li> <li>8 Admin. Menu</li> </ul> <p>Select Prev</p>
3	Default administrator password is 000000 and user password is 0000	 <p>Phone Settings</p> <p>Enter password</p> <p></p> <p>Menu Select Prev</p>
4	Administrator can only change the Administrator password and User password. To change Password, select "Admin Password" or "User Password"	 <p>System Settings</p> <ul style="list-style-type: none"> <li>1 Password</li> <li>2 VoIP Setting</li> <li>3 APS Address</li> <li>4 Firmware Upgrade</li> <li>5 Certs Manager</li> <li>6 Ping Test</li> </ul> <p>Select Prev</p>

## Searching an available Access Point

1	Press <b>OK</b> L-> shortcuts to search an available Wi-Fi Access Points	 <p>WLAN Search</p> <ul style="list-style-type: none"> <li>LGWD</li> <li>NESPOT</li> <li>AP_1</li> <li>Zoro</li> <li>any3</li> <li>any4</li> <li>any5</li> </ul> <p>Menu Connect</p>
2	Select an access point from the list that you will connect then press <b>OK</b> .	 <p>WLAN Search</p> <ul style="list-style-type: none"> <li>LGWD</li> <li>NESPOT</li> <li>AP_1</li> <li>Zoro</li> <li>any3</li> <li>any4</li> <li>any5</li> </ul> <p>Menu <b>Connect</b></p>
3	<p>If you using password for connect to AP then select configuring security as 64-bits WEP and Enter the password into line number 1, then press <b>OK</b>.</p> <p>Select authentication and network type then press <b>OK</b>.</p> <p>Please refer to Configuring Security (p.15 Configuring Security and Authentication)</p>	 <p>Network Setup</p> <p>Configuring Network</p> <p>DHCP</p> <p>Connect</p>







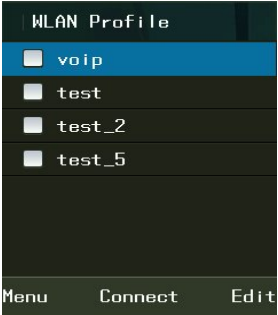

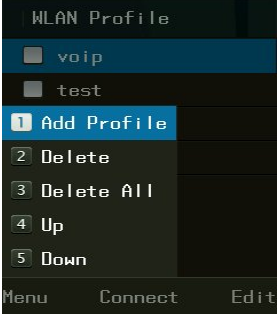
## Creating a new Access Point

If there is no AP that you're connecting for from the list, you can refresh the search or add access point.

1	<p>Press  to directly connect to phone settings and go into 1. Status. And please press figure 2 or moving your navigation to 2. WLAN Profile</p>	 <p>The screenshot shows a 'Status' menu with three items: '1 My Phone Info.', '2 WLAN Profile', and '3 Call Duration'. The 'WLAN Profile' item is highlighted in blue. At the bottom, there are 'Select' and 'Prev' buttons.</p>
2	<p>Press  L "Menu" and "1. Add Profile" using with navigation or press "1"</p>	 <p>The screenshot shows a 'WLAN Profile' menu with several options: 'voip', 'test', '1 Add Profile', '2 Delete', '3 Delete All', '4 Up', and '5 Down'. The 'Add Profile' option is highlighted in blue. At the bottom, there are 'Menu', 'Connect', and 'Edit' buttons.</p>
3	<p>Enter SSID, security and authentication type of access point. If 4 Access Points are saved already, it is not able to add.</p>	 <p>The screenshot shows an 'SSID Setting' screen with a warning icon and the text 'Input SSID'. Below the text is an input field. At the bottom, there are 'Menu', 'Next', and 'ABC' buttons.</p>
4	<p>You can input the special characters as well. Press left selection key  L and select 1. symbol. To change Alphanumeric to numeric, press the right selection key  R.</p>	 <p>The screenshot shows the 'SSID Setting' screen with a warning icon and 'Input SSID'. Below the input field, there are two options: '1 Symbol' and '2 Cancel'. The 'Symbol' option is highlighted in blue. At the bottom, there are 'Menu', 'Next', and 'ABC' buttons.</p>
5	<p>Enter network type of Wi-Fi access point. Please refer to Security and TCP/IP chapter (p.17 TCP/IP)</p>	 <p>The screenshot shows a 'Network Setup' screen with a warning icon and the text 'Configuring Network'. Below the text, there is a dropdown menu showing 'DHCP'. At the bottom, there is a 'Connect' button.</p>




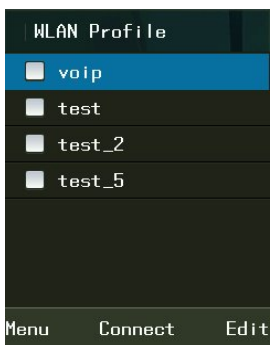
## Deleting Registered Access Point

ICW-1000G supports to delete saved Access Point. In WLAN search mode, select Menu then 4.Delete to remove Wi-Fi Access Point. After confirm with entering administrator password, select “Yes”, it will be deleted.

1.	<p>Press  to directly connect to phone settings and go into 1. Status. And please press figure 2 or moving your navigation to 2. WLAN Profile</p>	 <p>The screenshot shows a 'Status' menu with three options: '1 My Phone Info.', '2 WLAN Profile', and '3 Call Duration'. The 'WLAN Profile' option is highlighted in blue. At the bottom, there are 'Select' and 'Prev' buttons.</p>
2.	<p>Select an access point from the list that you will delete then press Left selection key , choose 2.Delete to delete and press  with entering password</p> <p> L → 2 →  → Enter the admin Password.</p>	 <p>The screenshot shows a 'WLAN Profile' menu with a list of profiles: 'voip', 'test', 'test_2', and 'test_5'. The 'voip' profile is selected. At the bottom, there are 'Menu', 'Connect', and 'Edit' buttons.</p>
3.	<p>If you want to delete all Access Point that you registered already, press Left selection key , select “3. Delete all” follow by entering password.</p>	 <p>The screenshot shows a 'WLAN Profile' menu with a list of profiles: 'voip' and 'test'. Below the profiles, there is a sub-menu with options: '1 Add Profile', '2 Delete', '3 Delete All', '4 Up', and '5 Down'. The 'Delete All' option is highlighted. At the bottom, there are 'Menu', 'Connect', and 'Edit' buttons.</p>


## Changing Priority Access Point

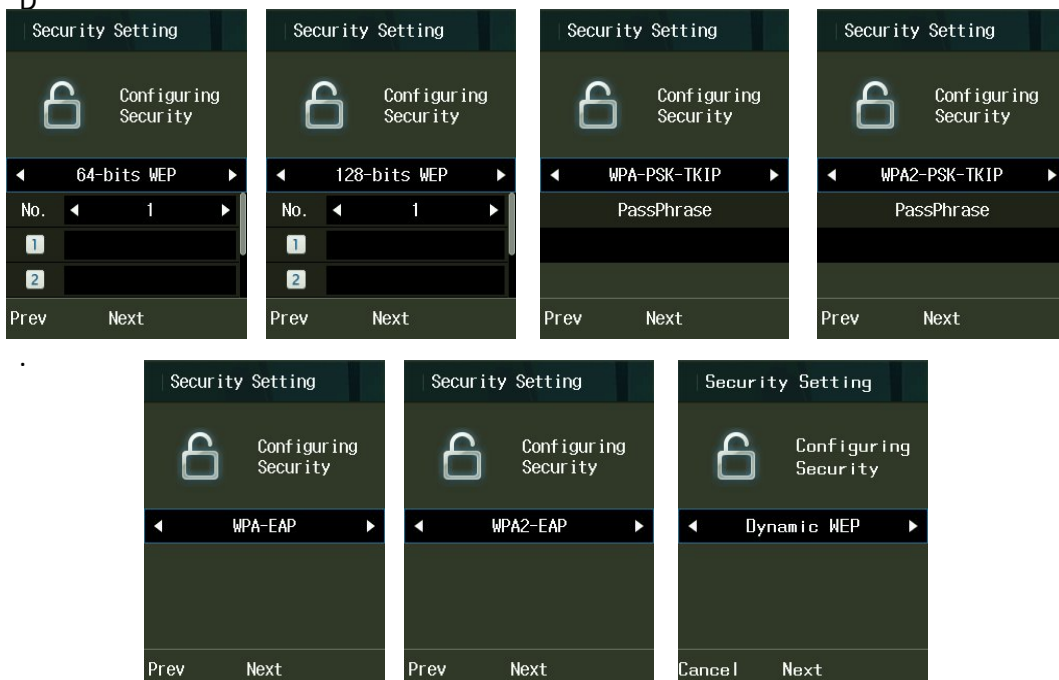
The higher position of Access Point in the registered screen has higher priority when connect automatically

	<p>Press  to directly connect to phone settings and go into 1. Status. And please press figure 2 or moving your navigation to 2. WLAN Profile</p>	
	<p>Select the Access Point from the registered list that you want to change priority, press Left selection key  L then select Up or Down in menu to change the position for priority.</p> <p>Default Access Point "VoIP" can be changed by the Auto- provisioning configuration only</p>	

## Configuring Security

While creating a new access point or edit existing access point, security option can be set.

For setting up the type of security, press  R as "add" at WLAN Search screen when you're sure to setting the type of security. ICW-1000G supports various types of security 64-bits WEP, 128-bits WEP, WPA-PSK, WPA2-PSK, WPA-EAP, WPA2-EAP and D

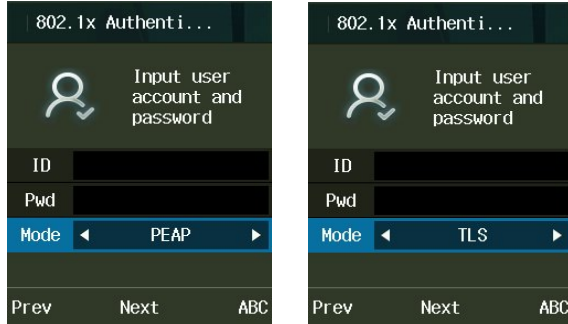




If your AP does not necessary to these kinds of security, this procedure can be passed.

## Authentication

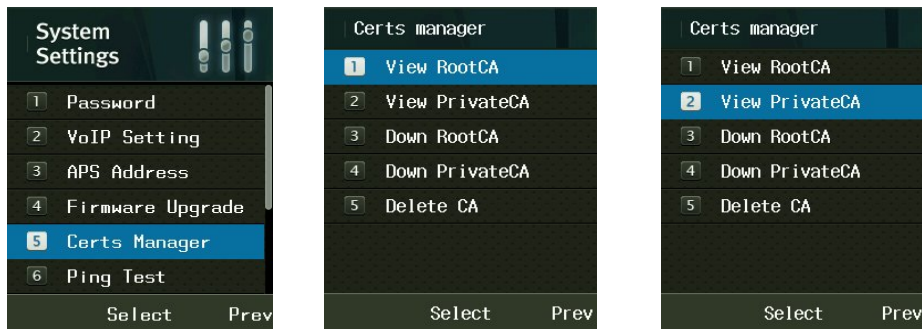
If you and your Access Point are using 802.1x authentication then select “Yes” to configure. Enter your ID and Password for authentication and select your types of authentication among the mode list.



## Certification Manager

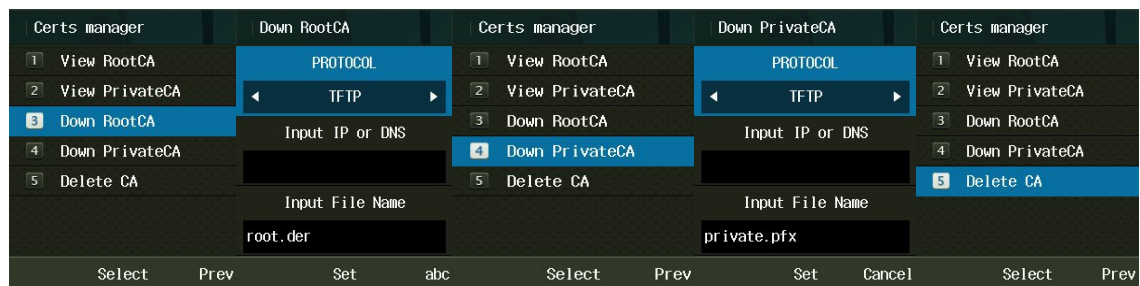
In case of EAP-TLS, Select “Certs manger” in administrator menu.

▼ → 8. Admin Menu → Enter Password → 5. Certs Manager



Reference and download of the Root CA and Private CA are possible in order to use 802.1x (EAP-TLS, PEAP, TTLS). You can select which of TFTP, HTTP or HTTPS as a download system.

Root certificate	Supporting .der, .cer and .pem Encode system
Private certificate	Supporting .pfx and .p12 Encode system



Certificate will be deleted when select “Delete CA”

# TCP/IP

ICW-1000G supports DHCP and manual IP. You can select “DHCP” automatically or “Manual IP” manually to configuring network at WLAN Search screen.



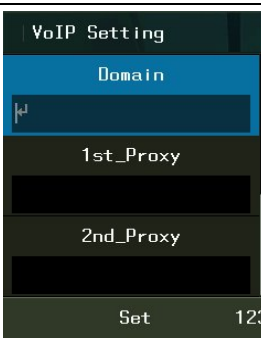



IP, Net mask, Gateway and DNS should be entered in case of using manual IP in network setup.



## SIP Setting


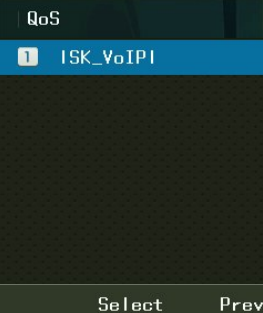

▼ → 8. Admin Menu → Enter Password → 2. VoIP Setting.

1	Select "2.VoIP setting" in System mode	 <p>The screenshot shows the 'System Settings' menu. The 'VoIP Setting' option is highlighted with a blue bar. Other options include Password, APS Address, Firmware Upgrade, Certs Manager, and Ping Test. 'Select' and 'Prev' buttons are at the bottom.</p>
2	<p>Display name: type the display name of phone</p> <p>User name: type phone number or user name registered in SIP.</p> <p>Auth. User name: User ID for SIP Proxy</p>	 <p>The screenshot shows the 'VoIP Setting' screen. The 'Display name' field is active with a cursor. Below it are fields for 'User name' and 'Auth. user name'. A 'Set' button and the number '123' are at the bottom.</p>
3	<p>Auth. Password: User Password for SIP Proxy</p> <p>Domain: Domain Server</p>	 <p>The screenshot shows the 'VoIP Setting' screen. The 'Domain' field is active with a cursor. Below it are fields for '1st_Proxy' and '2nd_Proxy'. A 'Set' button and the number '123' are at the bottom.</p>
4	<p>If you have secondary or backup proxy server, you can also input IP address in 2<sup>nd</sup>_Proxy section.</p> <p>⚠ In Domain section, you should put the domain name server only if SIP header includes Domain Name.</p>	 <p>The screenshot shows the 'VoIP Setting' screen. The '2nd_Proxy' field is active with a cursor. Other fields like 'Domain' and '1st_Proxy' are visible. A 'Set' button and the number '123' are at the bottom.</p>

# QoS

Qos: Quality of Service

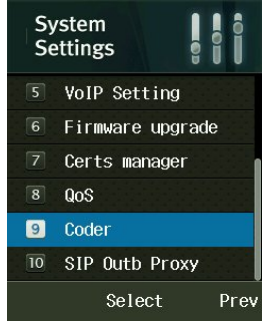
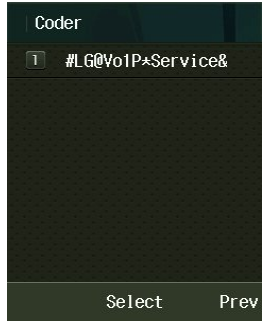



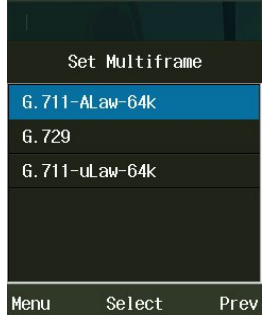
▼ → 8. Admin Menu → Enter Password → 8. QoS → VoIP .


1	Select "8.QoS" in System menu	 A screenshot of the 'System Settings' menu. The menu items are: 5 VoIP Setting, 6 Firmware upgrade, 7 Certs manager, 8 QoS (highlighted in blue), 9 Coder, and 10 SIP Outb Proxy. At the bottom, there are 'Select' and 'Prev' buttons.
2	Select "VoIP" in QoS menu	 A screenshot of the 'QoS' menu. The menu item '1 ISK_VoIP' is highlighted in blue. At the bottom, there are 'Select' and 'Prev' buttons.
3	Enter Signal DSCP and Voice DSCP.	 A screenshot of the 'ISK_VoIP' configuration screen. It shows 'Set DSCP Hex value 0x0 to 0x3F.' with two input fields. The 'Signal DSCP' field contains '0x2e' and the 'Voice DSCP' field contains '0x2e'. At the bottom, there are 'Cancel', 'Save', and '123' buttons.

# Coder

▼ → 8. Admin Menu → Enter Password → 9. Coder → 1. VoIP .


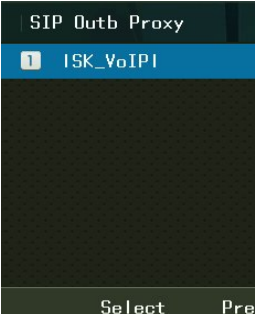

ICW-1000G supports G.711-ALaw-64K, G.729 and G729-uLaw-64K.

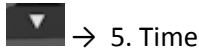
1	Select "9. Coder" in System menu	 <p>System Settings</p> <ul style="list-style-type: none"> <li>5 VoIP Setting</li> <li>6 Firmware upgrade</li> <li>7 Certs manager</li> <li>8 QoS</li> <li><b>9 Coder</b></li> <li>10 SIP Outb Proxy</li> </ul> <p>Select Prev</p>
2	Select "VoIP" in Coder menu	 <p>Coder</p> <ul style="list-style-type: none"> <li><b>1 #LG@VoIP*Service&amp;</b></li> </ul> <p>Select Prev</p>
3	<p>Press the  key to set Multi-frame.</p> <p>Select the coder type you wish to set.</p>	 <p>Set Multiframe</p> <ul style="list-style-type: none"> <li><b>G.711-ALaw-64k</b></li> <li>G.729</li> <li>G.711-uLaw-64k</li> </ul> <p>Menu Select Prev</p> <p>#LG@VoIP*Service&amp;</p> <ul style="list-style-type: none"> <li><b>G.711-ALaw-64k</b></li> <li>1 10m</li> <li><b>2 20m</b></li> <li>3 30m</li> <li>4 40m</li> </ul> <p>Menu Select Prev</p>
4	<p>Press  L in VoIP mode to set the priority then select Up or Down in menu list to change the position for priority.</p> <p>Set the priority order of audio coder.</p>	 <p>Set Multiframe</p> <ul style="list-style-type: none"> <li><b>G.711-ALaw-64k</b></li> <li>G.729</li> <li>G.711-uLaw-64k</li> </ul> <p>Menu Select Prev</p>

		 <p>#LG@VoIP*Service&amp; Set Multiframe G.711-ALaw-64k G.729 G.711-uLaw-64k 1 Up 2 Down Menu Select Prev</p>
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## SIP Outbound Proxy

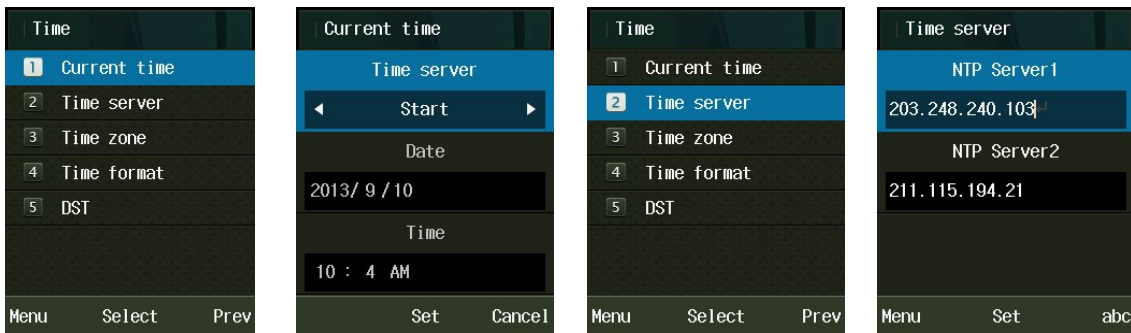
▼ → 8. Admin Menu → Enter Password → 10. SIP Outb Proxy → 1. VoIP .

1	Select "10. SIP Outb Proxy" in System menu.	 <p>System Settings 5 VoIP Setting 6 Firmware upgrade 7 Certs manager 8 QoS 9 Coder 10 SIP Outb Proxy Select Prev</p>
2	Select "VoIP" in SIP Outb Proxy menu	 <p>SIP Outb Proxy 1 ISK_VoIPI Select Prev</p>
3	Put the SIP Outbound Proxy.	 <p>SIP Outb Proxy ISK_VoIPI   Cancel Set abc</p>



You can set the date and time automatically and manually.

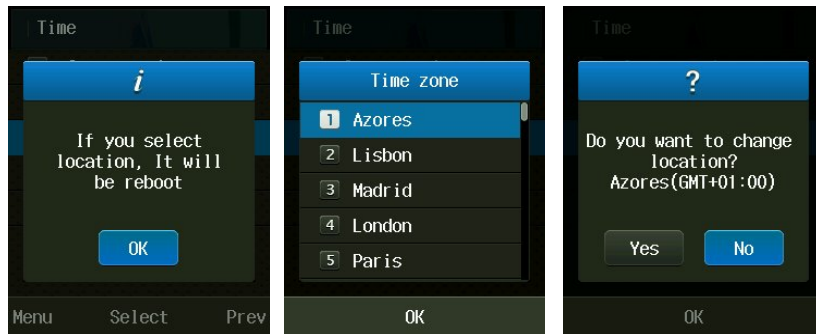
To set Current time automatically select Current time > Time Sever > Start otherwise must set current time manually. To use NTP server, select Time server and Input the NTP IP in NTP Server1 and Server2.



**⚠** We strongly recommend using NTP server. It would be re-set the time after reboot if you don't use NTP server.

ICW-1000G supports 52 Of principal capital cities in the world time. To setup the Time zone service, select 3.Time Zone and select your location of GMT.

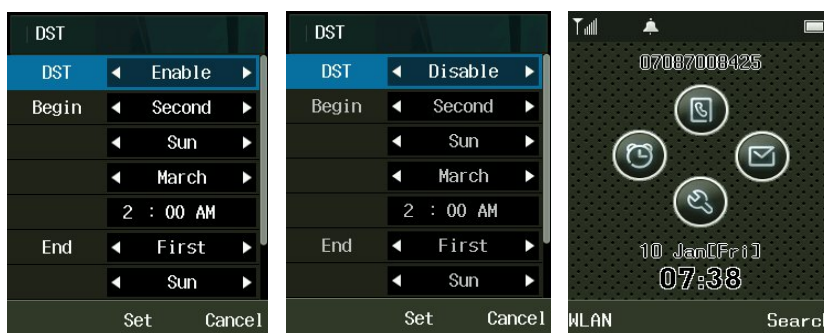
Finally the phone will be rebooted.



To define the Daylight Saving Time, select DST and choose Disable or Enable.

After set Start time, the End time should be settled by time which is applied DST time.

After set DST time will be displayed on the screen.



## Diagnose Network

→ 8. Admin Menu → Enter Password → 7. Diagnostic → 1. Diagnostic Network.  
And then select Diagnose Network, WLAN to diagnostic that you need.



### Results of Diagnose Network

It shows Network Status as WLAN, TCP/IP, and Packet Error Rate between Gateway and DNS. It takes about three to five seconds to finish all the processes, and all input key shall be inactive until finish the diagnose network.

<p>Diagnose Network explanation</p> <p>WANN status (Connection of wireless LAN)</p> <p>ESSID: Present-connected SSID of AP</p> <p>BSSID: Present-connected MAC Address of AP</p> <p>RSSI: Received Signal Strength Indication from the AP present-connected</p>	
<p>Result to PER (Ping Error Rate)</p> <p>PER to GW: packet error rate to GW. PER test to Gateway (ping to GW per 20ms period, 100 units)</p> <p>PER to DNS: ping error rate to DNS. PER test to DNS1 (ping to DNS1 per 20ms period, 100 units)</p>	



## Diagnose WLAN

→ 8. Admin Menu → Enter Password → 7. Diagnostic → 2. Diagnostic WLAN .

While diagnose WLAN, cannot receive the call while scan WLAN network.



### Results of the Diagnose WLAN

Diagnose WLAN	Diagnose WLAN	Diagnose WLAN
<b>WLAN information</b> RSSI: 0dBm SNR: 0dBm NF: 0dBm RP: 0xf77a8cf7, 0x1 TP: 0x0, 0xf77b7000 RE: 0xf71df135, 0xf03ff068, 0x82add67 TE: 0xa1f5200 FC: 0xf77a7ed4	TP: 0x0, 0xf77b7000 RE: 0xf71df135, 0xf03ff068, 0x82add67 TE: 0xa1f5200 FC: 0xf77a7ed4 RC: 0xf03ff038 MRC: 0x1 FDC: 0x81 RSC: 0xf77a7cdf RFC: 0x1 WUC: 0x0	FC: 0xf77a7ed4 RC: 0xf03ff038 MRC: 0x1 FDC: 0x81 RSC: 0xf77a7cdf RFC: 0x1 WUC: 0x0 <b>Scanned APs</b> Scanned AP: 64 -285212608 Channel: 0
Stop Scan	Stop Scan	Stop Scan

The diagnosis of wireless communication surroundings is possible to find out the connection from ICW-1000G to AP, the units of AP around and inside of the present-connected channel, and variables of the surroundings through diagnosing the status of wireless local area

Each output information is automatically updated once per one minute, AP status around can be updated pressing on the soft key (searching). Automatic update of AP around net-time is not recommended, but need to press on the button when needed, because frequent updating by scanning could give bad influence, when engaged

Each information unit is, except for dBm, is (RSSI/SNR/NF) hexadecimal of them.

RSSI: Received Signal Strength Indication (dBm)

SNR: Signal to Noise Ratio (dBm)

NF: Noise Floor (dBm)

RP: Rx Packet Count/Rx Bytes

TP: Tx Packet Count/Tx Bytes

RE: Rx Error Count/Rx Dropped Count/Rx Length Error Count TE: Tx Error Count/Tx Dropped Count

FC : Tx Failed Count - Increments when a MSDU is not successfully transmitted

RC : Retry Count - Increments when a MSDU is successfully transmitted after one or more retransmissions

MRC : Multiple Retry Count - Increments when a MSDU is successfully transmitted after more than one retransmission

FDC : Frame Duplicate Count - Increments when a frame is received that the Sequence Control field is indicating a duplicate count

RSC : RTS Success Count - Increments when a CTS is received in response to an RTS

RFC : RTS Failure Count - Increments when a CTS is not received in response to an RTS

AFC : Ack Failure Count - Increments when an Ack is not received when expected

FEC : FCS Error Count - Increments when a FCS error is detected in a received MPDU

TFC : Transmitted Frame Count - Increments for each successfully transmitted MSDU

WUC : WEP Undecryptable Count - Increments when a frame is received with the WEP subfield of the Frame Control field set to one The WEP On value for the key mapped to the TA's MAC address indicates that the frame is not encrypted or frame is discarded because the receiving station is not implementing the privacy option


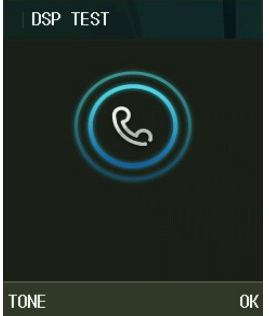
Scanned AP

Scanned AP: Searched units of AP around.

0 channel: AP units of present-associated channel


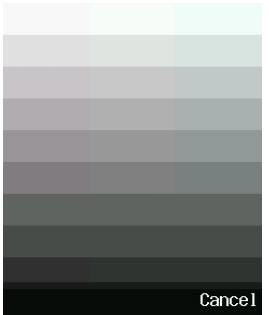
## DSP Test

▼ → 8. Admin Menu → Enter Password → 7. Diagnostic → 3. DSP Test

1	Select "3. DSP TEST" in Diagnostic mode.	 A screenshot of a device's diagnostic menu. The title is "Diagnostic". There are five numbered options: 1 Diagnose Network, 2 Diagnose WLAN, 3 DSP TEST (highlighted in blue), 4 LCD TEST, and 5 Speaker TEST. At the bottom, there are "Select" and "Prev" buttons.
2	Using ▲ ▼ key for controlling receiver volume.	 A screenshot of the "DSP TEST" screen. It features a large, glowing blue circular icon with a telephone handset inside, representing a volume control or tone test. At the bottom, there are "TONE" and "OK" buttons.



## LCD Test

▼ → 8. Admin Menu → Enter Password → 7. Diagnostic → 4. LCD Test

1	Select "4.LCD TEST" in Diagnostic mode.	 A screenshot of a device's diagnostic menu. The title is "Diagnostic". There are five numbered options: 1 Diagnose Network, 2 Diagnose WLAN, 3 DSP TEST, 4 LCD TEST (highlighted in blue), and 5 Speaker TEST. At the bottom, there are "Select" and "Prev" buttons.
2	Using ◀ ▶ key for controlling display.	 A screenshot of the "LCD TEST" screen. It displays a vertical grayscale gradient bar. At the bottom right, there is a "Cancel" button.


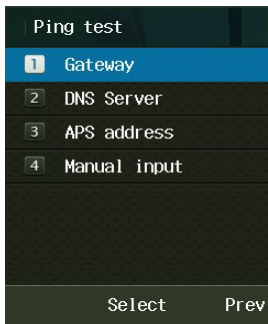
## Speaker Test





▼ → 8. Admin Menu → Enter Password → 7. Diagnostic → 5. Speaker Test

1	Select "5. Speaker TEST" in Diagnostic mode.	 <p>Diagnostic</p> <ul style="list-style-type: none"> <li>1 Diagnose Network</li> <li>2 Diagnose WLAN</li> <li>3 DSP TEST</li> <li>4 LCD TEST</li> <li>5 Speaker TEST</li> </ul> <p>Select Prev</p>
2	Using ▲ ▼ key or • L key for controlling test mode.	 <p>Speaker TEST</p> <p>LOW 1 OK</p>

## Ping Test

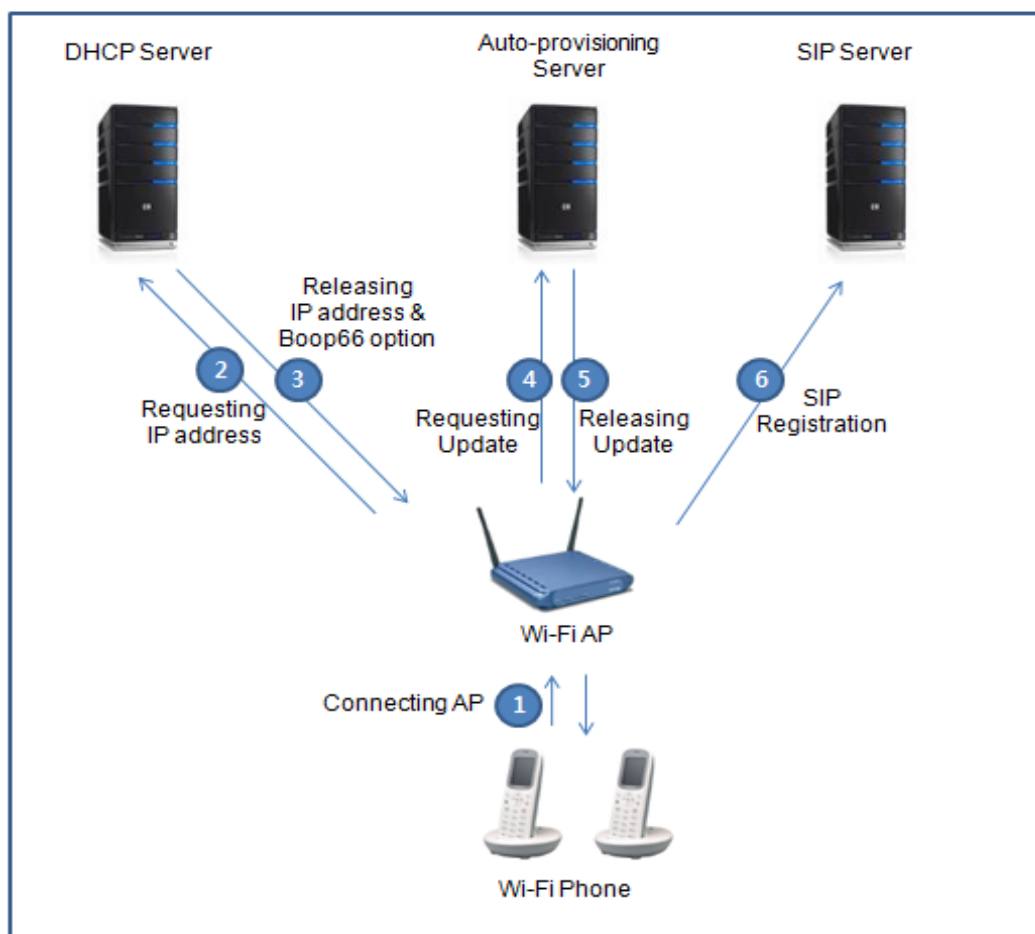
▼ → 8. Admin Menu → Enter Password → 6. Ping test → 5. Speaker Test

1	Select "6. Ping test" in System menu. Ping Test is accessible for simple diagnosis of network.	 <p>System Settings</p> <ul style="list-style-type: none"> <li>3 APS Address</li> <li>4 Firmware Upgrade</li> <li>5 Certs Manager</li> <li>6 Ping Test</li> <li>7 Diagnostic</li> <li>8 QoS</li> </ul> <p>Select Prev</p>
2	Select "1. Gateway, 2 . DNS server, 3 . APS address or 4 . Manual input" in Ping test mode.	 <p>Ping test</p> <ul style="list-style-type: none"> <li>1 Gateway</li> <li>2 DNS Server</li> <li>3 APS address</li> <li>4 Manual input</li> </ul> <p>Select Prev</p>

3	<p>Send the ping through the Gateway, DNS server, APS address and Manual input.</p> <p>DNS server</p> <p>APS server</p> <p>Manual Input</p>	   
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## General Sequence of Auto-provisioning



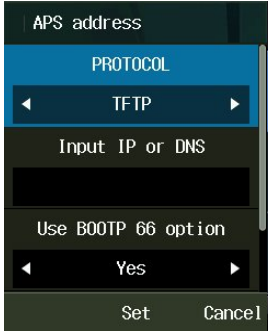
ICW-1000G supports Auto-provisioning to configure update firmware. Below picture is interoperation between phone and servers.



- ① VoIP phone connect to the nearest Wi-Fi Access Point.
- ② Phone request IP address to the registered DHCP server
- ③ DHCP server provide phone with IP address and Boot 66 option which indicate Auto- provisioning server.
- ④ Phone connect Auto-provisioning server
- ⑤ Auto-provisioning server compare version of e1\_common.ini and e1\_mac.ini with phone and if server has higher version, phone started to download firmware files from server.
- ⑥ Phone connect SIP server and register IP address.

## Setting Auto provisioning Server Address

There are two way to set Auto provisioning Server address. The first one is input address in menu via the key pad; another one is getting the address by DHCP server with the bootp option 66.

1	Select "3. APS address" in System Settings' menu.	 <p>The screenshot shows the 'System Settings' menu with the following options: 1 Password, 2 VoIP Setting, 3 APS Address (highlighted), 4 Firmware Upgrade, 5 Certs Manager, and 6 Ping Test. At the bottom, there are 'Select' and 'Prev' buttons.</p>
2	To set the address in manually, choose APS address in the administrator menu. Three protocols, HTTP, HTTPs and TFTP are available. Please make sure USE BOOTP 66 option is NO when using in manually setting the address.	 <p>The screenshot shows the 'APS address' configuration screen. The 'PROTOCOL' is set to 'TFTP'. Below it is an 'Input IP or DNS' field. The 'Use BOOTP 66 option' is set to 'No'. At the bottom, there are 'Set' and 'abc' buttons.</p>
3	To set the address by DHCP BOOTP 66 option, please make empty in the input IP or DNS field. Make USE BOOTP 66 option filed to YES. ICW-1000G will get configuration file from auto-provisioning server in the next boot up.	 <p>The screenshot shows the 'APS address' configuration screen. The 'PROTOCOL' is set to 'TFTP'. Below it is an 'Input IP or DNS' field. The 'Use BOOTP 66 option' is set to 'Yes'. At the bottom, there are 'Set' and 'Cancel' buttons.</p>

## Web Configuration Tool

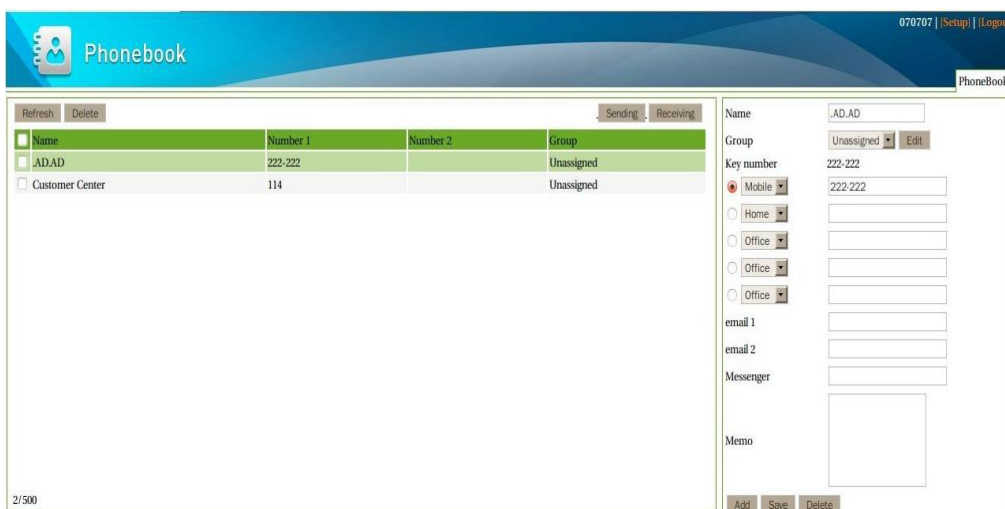
A PC browser can be used as an alternative to configuring system. Ensure that the PC is connected to the same AP as the phone and enable <Lock PC Sync>

Menu -> Settings -> Security -> Enter user password -> Lock PC Sync -> Enable -> set the password for Web Configuration Tool

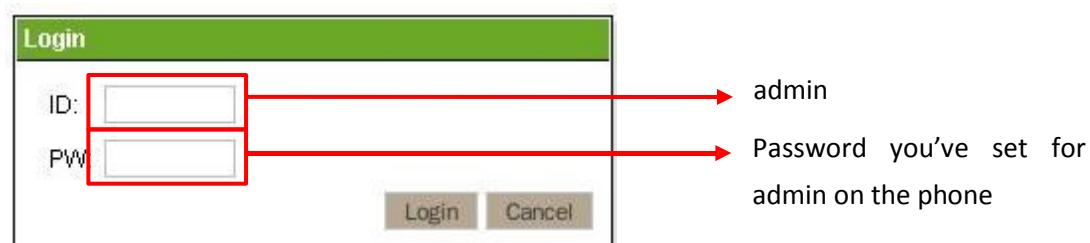
1. Enter the phone's IP address:8080 in the address bar of the PC's web browser and press <Enter>



2. Follow screen prompts to enter the password for Web Configuration tool and then click <OK>

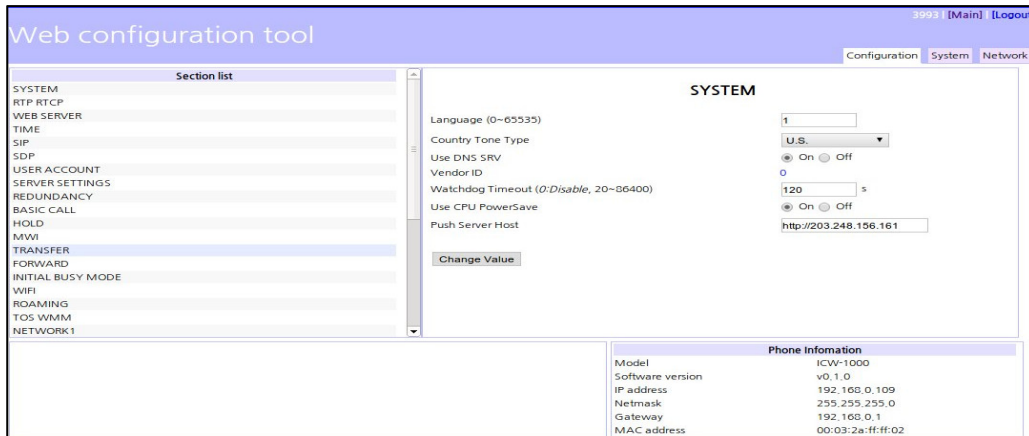


3. You can store frequently used phone number and names in the phonebook. You can also import or export saved information between PC and ICW-1000G.
4. After displayed Web Configuration Tool, click <setup> button above the right side.



5. Follow screen prompts to enter the user name (admin) and password for admin and then click <OK>





## Setting the .ini file in Auto-Provisioning Server

You use the value of two Statements after modifying according to each condition. Make sure that sever IP will be root directory of auto-provisioning server.

You can use the “e1\_Common.ini” file if you want to set the all the same value.

You can use the “e1\_00:00:00:00:00:00(replace your phone mac).ini” file if you want to set different value individually.

(In every line’s # means just comment of value. You don’t need to apply it to each line.)

```
e1_Common.ini [SYSTEM]
Language = 1

Admin_Password = 000000

Country_Tone_Type = 1

[RTP_RTCP] Use_RTCP = 1
RTP_Port_Min = 9000

RTP_Port_Max = 9020

RTCP_Report_Interval = 5000

Last_RTP_Received_Timeout = 0

[TIME]

NTP_Refresh_Interval = 7200

NTP_Server1 = 203.248.240.103

NTP_Server2 = 203.254.163.74

[SIP]
```

Local\_Port = 5060

[BASIC\_CALL]

Use\_Call\_Waiting = 1

Session\_Expire = 1800

Remove\_DASH\_On\_Alias = 1

[MWI]

Use\_MWI = 1

Use\_Subscribe = 1 Subscribe\_Server = Subscribe\_Expire = 3600 VMS\_Alias =

[WIFI]

Enable\_Check\_Server\_Cert = 0

Force\_Enable\_Short\_Preamble = 0

[WIFI\_SCAN]

Scan\_Channel\_List = 1,2,3,4,5,6,7,8,9,10,11,12,13

[ROAMING]

Try\_Beacon\_Signal\_Level = -77

Try\_Over\_TxError\_Count = 5

[NETWORK1]

Enable = 1 SIP\_Outbound\_Proxy = SSID = VoIP  
Enable\_DHCP = 1

Address = 0.0.0.0

Netmask = 255.255.255.0

Gateway = 0.0.0.0

DNS1 = 0.0.0.0

DNS2 = 0.0.0.0

Security = 2

WEP\_Bits = 0

Default\_WEP\_Key = 1 WEP\_Key1 = WEP\_Key2 = WEP\_Key3 = WEP\_Key4 =  
Post\_Authentication\_Mode = 0 8021X\_Name = 80121X\_Password =  
WPA\_PSK\_PassPhrase = un1d4t4wpu7700

WPA\_PSK\_Key =  
5ae4b848d871fdcba8dda23716245901b0e5ea8047b06e4445e94d96ec27ee23 Use\_WPA\_PSK\_Key\_Hex\_Mode = 1  
Proactive\_Key\_Caching = 1

PMK\_LifeTime = 43200

PMK\_Max\_Count = 32

DiffServ\_Signal = 46

DiffServ\_Media = 46

WMM = 1

Jitter\_Buffer\_Size = 60

Payload\_Type = 8,18,0

Multiframe = 2,2,2

[NETWORK2]

Enable = 0 SIP\_Outbound\_Proxy = SSID = wifi Enable\_DHCP = 1  
Address = 0.0.0.0

Netmask = 255.255.255.0

Gateway = 0.0.0.0

DNS1 = 0.0.0.0

DNS2 = 0.0.0.0

Security = 1

WEP\_Bits = 0

Default\_WEP\_Key = 1 WEP\_Key1 = 123456789a

WEP\_Key2 = WEP\_Key3 = WEP\_Key4 =

Post\_Authentication\_Mode = 0 8021X\_Name = 8021X\_Password = WPA\_PSK\_PassPhrase = WPA\_PSK\_Key =

Use\_WPA\_PSK\_Key\_Hex\_Mode = 1

Proactive\_Key\_Caching = 1

PMK\_LifeTime = 43200

PMK\_Max\_Count = 32

DiffServ\_Signal = 46

DiffServ\_Media = 46

WMM = 1

Jitter\_Buffer\_Size = 60

Payload\_Type = 8,18,0

Multiframe = 2,2,2

[NETWORK3]

Enable = 0 SIP\_Outbound\_Proxy = SSID = VoIP  
Enable\_DHCP = 1

Address = 0.0.0.0

Netmask = 255.255.255.0

Gateway = 0.0.0.0

DNS1 = 0.0.0.0

DNS2 = 0.0.0.0

Security = 2

WEP\_Bits = 0

Default\_WEP\_Key = 1 WEP\_Key1 = WEP\_Key2 = WEP\_Key3 = WEP\_Key4 =  
Post\_Authentication\_Mode = 0 8021X\_Name = 8021X\_Password =  
WPA\_PSK\_PassPhrase = un1d4t4wpu7700

WPA\_PSK\_Key =  
5ae4b848d871fdcba8dda23716245901b0e5ea8047b06e4445e94d96ec27ee23 Use\_WPA\_PSK\_Key\_Hex\_Mode = 1  
Proactive\_Key\_Caching = 1

PMK\_LifeTime = 43200

PMK\_Max\_Count = 32

DiffServ\_Signal = 46

DiffServ\_Media = 46

WMM = 1

Jitter\_Buffer\_Size = 60

Payload\_Type = 8,18,0

Multiframe = 2,2,2

[NETWORK4]

Enable = 0 SIP\_Outbound\_Proxy = SSID = VoIP  
Enable\_DHCP = 1

Address = 0.0.0.0

Netmask = 255.255.255.0

Gateway = 0.0.0.0

DNS1 = 0.0.0.0

DNS2 = 0.0.0.0

Security = 2

WEP\_Bits = 0

Default\_WEP\_Key = 1 WEP\_Key1 = WEP\_Key2 = WEP\_Key3 = WEP\_Key4 =  
Post\_Authentication\_Mode = 0 8021X\_Name = 8021X\_Password =  
WPA\_PSK\_PassPhrase = un1d4t4wpu7700

WPA\_PSK\_Key =  
5ae4b848d871fdcba8dda23716245901b0e5ea8047b06e4445e94d96ec27ee23 Use\_WPA\_PSK\_Key\_Hex\_Mode = 1  
Proactive\_Key\_Caching = 1

PMK\_LifeTime = 43200

PMK\_Max\_Count = 32

DiffServ\_Signal = 46

DiffServ\_Media = 46

WMM = 1

Jitter\_Buffer\_Size = 60

Payload\_Type = 8,18,0

Multiframe = 2,2,2

[SOUND]

Bell\_ID = 0x1 Bell\_Volume = 6  
Effects\_Button\_ID = 0x00010101 Effects\_Button\_Volume = 4 Effects\_PowerOn\_ID = 0x00030001  
Effects\_PowerOn\_Volume = 4 Effects\_PowerOff\_ID = 0x00040001 Effects\_PowerOff\_Volume = 4 Info\_Battery\_ID =  
0x00080001 Info\_Battery\_Volume = 2 Info\_Window\_ID = 0x00080002 Info\_Window\_Volume = 2 Info\_Network\_ID =  
0x00080000 Info\_Network\_Volume = 2

[PROVISION]

Firmware\_Version = Firmware\_Name = Phonebook\_Name =

e1\_00:00:00:00:00:00(replace you phone MAC).ini( Configuration Entry)


[USER\_ACCOUNT]

Displayname = Phone\_Number =

User\_ID = User\_Password =

[SERVER\_SETTINGS]


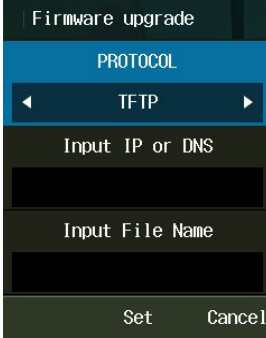
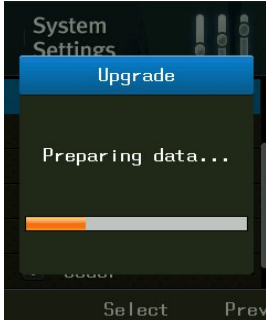
1st\_Proxy = 2nd\_Proxy = Domain\_Realm =  
Register\_Expire = 3600

 Please refer to Appendix of ini configuration file.

## Firmware Upgrade

There are two ways to set Firm ware update. The first one is input address in menu via the key pad; another one is upgraded by Auto-provisioning server automatically.

▼ → 8. Admin Menu → Enter Password → 4. Firmware upgrade

1	Select "4.Firmware Upgrade" in System Settings' menu	
2	<p>Select protocol, Enter IP and File name.</p> <p>Enter IP or DNS in "Input IP or DNS"</p> <p>Enter Firmware file name in "Input File Name"</p> <p>i.e Input IP or DNS: 192.168.10.10</p> <p>Input File Name : example.zip</p> <p>⚠ Do not unzip the Firmware zip file which was provided by Unidata. Just load the zip file on the TFTP or HTTP server. The ICW-1000G pulls its configuration and upgrade when you turn the phone off and on.</p> <p>⚠ If the original zip file name is too long to input on the phone, you can replace it with simple one like 240.zip</p>	
3	<p>Firmware will be updated.</p> <p>It cannot be upgraded if the Firmware version is same or less than current version. Make sure that the server should be root directory.</p> <p>⚠ Don't tune the phone off during update. Make sure battery is enough. Power off during update will cause</p>	

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