

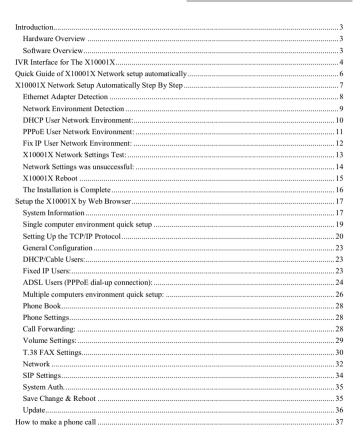
User's Manual

for the

X10001X

For use with Internet Phone service by SunRocket

To enjoy all the benefits of this product, please review the information contained in this manual





Introduction

This user's manual is for the ATS X10001X. It will explain the IVR instruction, web configuration and command line configuration for the X10001X. Before using the X10001X, some setup processes are required to make the X10001X work properly. Please refer to the Setup Menu for further information.

Hardware Overview

The X10001X has the following interfaces for Networking, telephone, LED indication, and power connection.

- 1.1.1 Two RJ-45 Networking interface, these two interfaces support 10/100Mps Fast Ethernet. You can connect one RJ-45 Fast Ethernet port to your internet connection and connect the other one to your computer.
- 1.1.2 One RJ-11 Type analog telephone jack. You can connect one analog telephone to the terminal adapter.
- 1.1.3 LED Indication: There are three LED indicators in the X10001X to show Power, Registration, and Off-Hook indication.

Software Overview

- Network Protocol
 - SIP v1 (RFC2543), v2(RFC3261)
 - IP/TCP/UDP/RTP/RTCP
 - IP/ICMP/ARP/RARP/SNTP
 - TFTP Client/DHCP Client/ PPPoE Client
 - Telnet/HTTP Server
 - DNS Client
 - NAT/DHCP Server
- Codec
 - G.711: 64k bit/s (PCM)
 - G.723.1: 6.3k / 5.3k bit/s
 - G.726: 16k / 24k / 32k / 40k bit/s (ADPCM)
 - G.729A: 8k bit/s (CS-ACELP)
 - G.729B: adds VAD & CNG to G.729
- Voice Quality
 - VAD: Voice activity detection
 - CNG: Comfort noise generator
 - LEC: Line echo canceller
 - Packet Loss Compensation
 - Adaptive Jitter Buffer
- Call Function
- Call Hold



- Call Waiting
- Call Forwarding
- Call Forwarding
 Caller ID
- 3-way conference
- DTMF Function
 - In-Band DTMF
 - Out-of Band DTMF
- SIP Info
 - Registrar Server (three SIP accounts)
- Outbound Proxy
- Tone
- Ring Tone
 - Ring Back Tone
 - Dial Tone
 - Busy Tone
- Programming Tone
- Phone Function
 - Volume Adjustment
 - Speed dial key
 Phone book
 - Flash
 - IP Assignment
 - Static IP
 - DHCP
 - PPPoE
- Security
 - HTTP 1.1 basic/digest authentication for Web setup
- MD5 for SIP authentication (RFC2069/ RFC 2617)
- QoSToS field
- NAT Traversal
- STUN
- Configuration
 - Web Browser
 - Console/Telnet
 - IVR/Keypad
- Firmware Upgrade
 - TFTP
 - Console
 - HTTP

IVR Interface for the X10001X

You can use the analog phone connected to the phone port to configure the X10001X. Please follow the instructions to configure your terminal adapter.



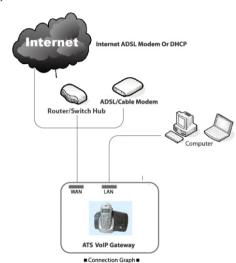
X10001X VoIP GATWAY User's Manual

Group	IVR Action	IVR Menu	Parameter (s)	Notes
Function	Reboot	#195#	None	After you hear "Option Successful,"
				hang-up. The system will reboot
				automatically.
Function	Factory Reset	#198#	None	System will automatically Reboot.
				WARNING: ALL
				"User-Changeable" NONDEFAULT
				SETTINGS WILL BE LOST! This
				will include network and service
				provider.
Info	Check IP Address	#120#	None	IVR will announce the current IP
0	Check in Address	11 12011	Trono	address of the X10001X.
Info	Check IP Type	#121#	None	IVR will announce if DHCP is
IIIIO	Check in Type	#121#	Notic	enabled or disabled.
Info	Check Phone Number	#122#	None	IVR will announce current in use
Into	Check Phone Number	#122#	None	
				VoIP number
Info	Check Network Mask	#123#	None	IVR will announce the current
				network mask of the X10001X.
Info	Check Gateway IP	#124#	None	IVR will announce the current
	Address			gateway IP address of the
				X10001X.
Info	Check Primary DNS	#125#	None	IVR will announce the current
	Server Setting			setting in the Primary DNS field.
Info	Check Firmware Version	#128#	None	IVR will announce the version of
				the firmware running on the
				X10001X.
Setting	Set DHCP client	#111#	None	The system will change to DHCP
				Client type.
Setting	Set Static IP Address	#112xxx*xxx*xxx*xxx#	Enter IP address using numbers on	DHCP will be disabled and system
			the telephone key pad. Use the *	will change to the Static IP type.
			(star) key when entering a decimal	will didnige to the didne it type.
			point.	
Setting	Set Network Mask	#113xxx*xxx*xxx*xx#	Enter value using numbers on the	Must set Static IP first
Jeung	Set Network Mask	# II JAAA AAA AAA AAA#	telephone key pad. Use the * (star)	wast set Glatic II ilist.
			key when entering a decimal point.	
Setting	Set Gateway IP Address	#114xxx*xxx*xxx*xxx#		Must set Static IP first.
Setting	Set Gateway IP Address	#114XXX"XXX"XXXXXXXX	Enter IP address using numbers on	Must set Static IP first.
			the telephone key pad. Use the *	
			(star) key when entering a decimal	
			point.	
Setting	Set Primary DNS Server	#115xxx*xxx*xxx*xxx#	Enter IP address using numbers on	Must set Static IP first.
			the telephone key pad. Use the *	
			(star) key when entering a decimal	
			point.	
Setting	Set Codec	#130+[1-8]#	1:G.711 u-Law, 2: G.711 a-Law, 3:	You can set the codec you want as
			G.723.1, 4: G.729a, 5: G.726 16K,	the first priority.
			6: G.726 24K, 7: G.726 32K, 8:	
			G.726 40K,	
Setting	Set Handset Gain	#131+[00~15]#	Handset Gain from 0~15	You can set the Handset gain to
				preferred value, default is 6.
Setting	Set Handset Volume	#132+[00~12]#	Handset Volume from 0~12	You can set the Handset volume to
-		1	I	preferred value, default is 10.



Quick Guide for Automatic Network Setup

You can enjoy the ATA with a simple network connection. You just connect it by the following steps, then you can make calls.



Refer to the Connection Graph above; connect the X10001X with your personal computer and telephone:

- Connect your modem to the WAN port of the X10001X with a ethernet cable.
- Connect your computer to the LAN/PC port of the X10001X with a ethernet cable
- Connect your telephone cable to the phone port of the X10001X.
- Connect the power cord to the X10001X power port.

After making the connections, put in the **CD-ROM** and the X10001X will be installed on your network automatically. Follow the instructions for the setup.

Step1: Make sure there is a good connection between your computer and the X10001X.



Step2: Put the CD-ROM into the CD-ROM drive.

Step3: The install program will be activated automatically.

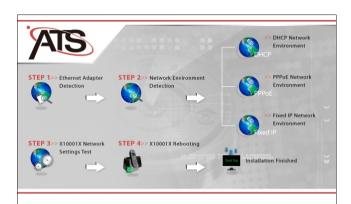
Step4: Wait about 3~5 minutes until the X10001X set up is ready.

Step5: After the X10001X finishes setting up the network, the X10001X will reboot and download the web configuration file automatically. You will see the REG LED ON then you can pick the phone up and begin calling with the X10001X.



X10001X Network Setup

Place the CD-ROM in the CD drive and run. The information page will show the activity step by step.

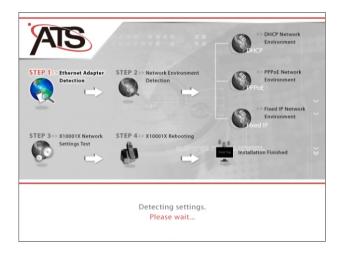


Ethernet Adapter Detection

The install program will detect your Ethernet adapter first. If you have more than one Ethernet adapter, you have to select the Ethernet adapter you would like to use for your internet connection. Otherwise, you will skip this step of the installation.

Please wait...

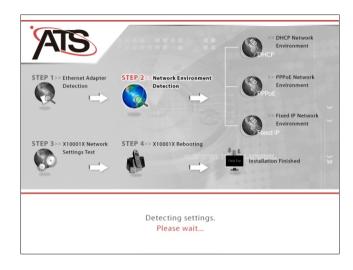




Network Environment Detection

The install program is detecting the network environment for the X10001X. Please wait...

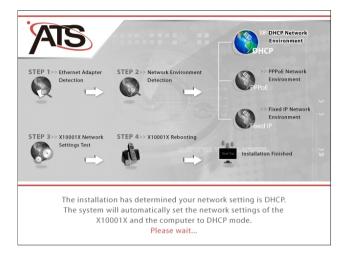




DHCP User Network Environment:

The install program will auto detect your network environment. Wait while the X10001X detects the DHCP network or Cable Modem network by itself and sets your computer to DHCP mode automatically. When the X10001X reboots and the REG LED is ON, the installation is complete. You can then make a phone call with the X10001X. The computer will get its DHCP IP address from the X10001X LAN/PC port.



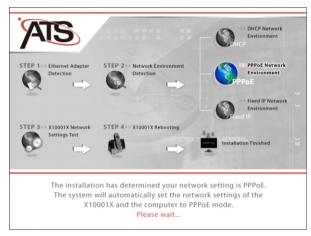


PPPoE User Network Environment:

The install program will auto detect your network. Wait while the X10001X detects the PPPoE network by itself and sets your computer to DHCP mode automatically.

- If the X10001X detects PPPoE settings, the page will tell you to connect using PPPoE from your computer.
- The X10001X PPPoE detection will set itself according to your PPPoE connection through your computer.
- Just wait for 3~5 minutes the X10001X will set itself well. If it fails, please reconnect PPPoE from the computer.
- The X10001X has been installed successfully and the computer has been set for DHCP to get a new IP from the X10001X LAN/PC port.





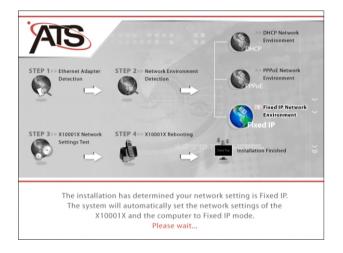


Fixed IP User Network Environment:

The install program will auto detect your network. Wait while the X10001X detects the Fixed IP network by itself and sets your computer to DHCP mode automatically.

When the X10001X reboots and the REG LED is ON, the installation is complete. You can then make a phone call with the X10001X. The computer will get its DHCP IP address from the X10001X LAN/PC port.

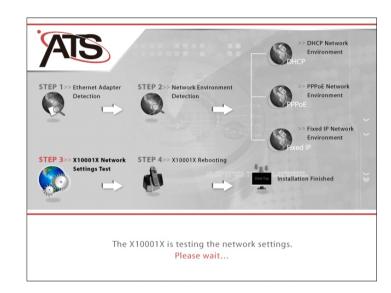




X10001X Network Settings Test:

After detecting and configuring the network environment settings, the X10001X will test the network settings.

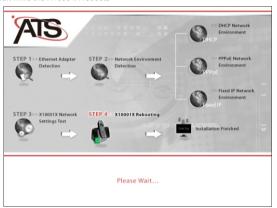






X10001X Reboot

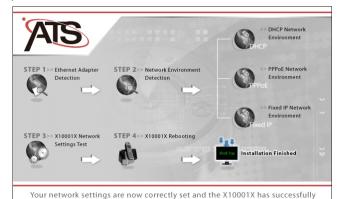
Please wait while the X10001X reboots



ATS

The Installation is Complete

Your network settings are now correctly set and the X10001X has successfully downloaded its configuration information from your service provider. Check that the REG light on the X10001X is on and your computer is working properly. You can now make and receive calls on your X10001X. To end, click here.



downloaded its configuration information from your service provider.

Check that the REG light on the X10001X is on and your computer is working properly. You can now make and receive calls on your X10001X.

To end, click here.





If the Network Auto Installation couldn't set the X10001X network settings, you have to setup the X10001X network settings by logging into the X10001X web browser.

Setup the X10001X by Web Browser

The X10001X provides a built-in web server. You can use a web browser (Internet Explorer, Mozilla, Firefox, etc.) to configure the X10001X.

- Launch your web browser and enter http://192.168.251.1 (the default IP address of the X10001X) in the Location or Address field. Press Enter.
- The password screen now appears. Input <u>username: user</u> and <u>password: test</u> into the blank field.
- 3. Click the [Login] button
- After a successful login, you will see the X10001X web based management information page.



Note: If you make any change of settings in the Web Management interface, remember to click the [Submit] button in that page. A message shows you have to save and reboot the VoIP to take effect. You must click [Save change & Reboot] on the navigation panel and click [Save] in the Save changes page. After the system reboot, all the settings will work properly.

System Information

- This is the web based management information page, you can see the X10001X current system information, such as firmware version, company... etc in this page.
- Click a menu item on the navigation panel to go to the corresponding function.



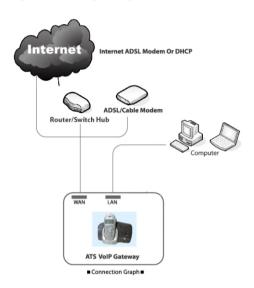
System Information This page illustrate the system related information.

Model Name:	VolP
Firmware Version:	Tue May 9 13:02:03 2006.
Codec Version:	Tue Apr 04 10:43:12 2006.

Table of Navigation	Sub-Manu	Description
Phone Book	Speed Dial Setting	Setup the Speed Dial number Speed Dial information.
Phone Settings	Call Forwarding	You can set the forward to number of your phone on this page.
	SNTP Settings	You can set the SNTP servers on this page.
	Volume Settings	You can set the volume of your phone on this page.
	Block Settings	You can set the block period of your phone on this page.
	Caller ID Settings	You can enable/disable the caller ID setting on this page.
	Dial Plan Settings	You can the set the dial plan on this page.
	Flash Time Settings	You can set the flash time on this page.
	Call Waiting Settings	You can enable/disable the call waiting setting on this page.
	T.38 (FAX) Settings	You can enable/disable the FAX function on this page.
Network	Network Status	This page shows current status of network interfaces of the system.
	WAN Settings	You can configure the WAN settings on this page.
	LAN Settings	You can configure the LAN settings on this page.
SIP Settings	Service Domain Settings	You can set service provider information on this page.
	Port Settings	You can set the port number in this page.
	Codec Settings	You can set the codec settings on this page.
	Codec ID Setting	You can set the value of Codec ID on this page.
	DTMF Setting	You can set the DTMF setting in this page.
	RPort Setting	You can enable/disable the RPort setting on this page.
	Other Settings	You can set other settings on this page.
System Authority		You can change the login username / password on this page.
Save Change & Reboot		You have to save and reboot the X10001X after changes are made.
Update	Update Firmware	You can update to the newest firmware.
	Restore Default Settings	You can click the restore button to restore the factory settings.



Single computer environment quick setup



Refer to the Connection Graph above to connect the X10001X with your personal computer and telephone:

- Connect your modem and WAN port of the X10001X with an ethernet cable.
- Connect your computer and LAN port of the X10001X with an ethernet cable
- Connect your telephone cable to the phone port of the X10001X.
- Connect the power cord to the X10001X's power port.

The Power LED will come ON. The start-up process will take approximately 20 seconds.

- REG LED ON: You may start to use VoIP services and make any phone calls.
- REG LED OFF: Internet status error. The X10001X is not successfully connected to the internet. Please follow the steps below to configure the X10001X.



Setting Up the TCP/IP Protocol

- Configuring Windows 2000 PCs
- 1 Find the Local Area Connection Status screen by clicking the Start button, then Settings and then Control Panel. From there, double click the Network and Dial-up Connections Icon, and then Local Area Connection to see the window below (you may have several local area connection choices-choose the one that has your Ethernet adapter in the Device Name field):



2 Click the Properties icon to see the window below and then select Internet Protocol (TCP/IP) from the list.



3 Click on the Properties button to see the window below. Select Use the following IP address. Enter IP address: 192.168.251. and Subnet Mask: 255.255.255.0 into the blank field. Click [OK] to finish setting.





■ Configuring Windows XP PCs

These instructions assume you are running *Windows XP style menu* as the default interface. If you are using the *Classic Star menu* Interface, please follow the instructions for Windows 2000.

 Find the Local Area Connection Status screen by clicking the Start button and then click on Control Panel. From there, click the Network Connection Icon, and finally the Local Area Connection item to see the window below:



Click the properties icon to see the window below and then select Internet Protocol (TCP/IP) from the list.



 Click on the Properties button to see the window below. Select Use the following IP address. Enter IP address: 192.168.251. and Subnet Mask: 255.255.255.0 into the blank field. Click [OK] to finish setting.

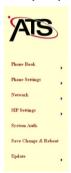




General Configuration

DHCP/Cable Users:

- You can pick up the analog telephone and dial #111# and the X10001X will automatically reboot and obtain an IP address. Now wait for the REG LED to light up and you may start using the provider's services.
- Or, use the web utility:
- 1. Click [Network] on the navigation panel.
- 2. Select sub-menu [WAN Settings].
- 3. Select [DHCP mode] from IP Type option.
- 4. Click the [Submit] button to continue.



WAN Settings



Input the below Information "IP address", "Mask", "Gateway", and "DNS server" etc. (You

Fixed IP Users:

- 1. Click [Network] on the navigation panel.
- 2. Select sub-menu [WAN Settings].
- 3. Select [Fixed IP] from IP Type option.



- 1. may contact your ISP to get this information).
- 2. Click the [Submit] button to continue.



WAN Settings



ADSL Users (PPPoE dial-up connection):

- Click [Network] on the navigation panel.
- Select sub-menu [WAN Settings].
- 3. Select [PPPoE] from IP Type option.
- 4. Input the below Information: ADSL username and password.
- 5. Click the [Submit] button to continue.



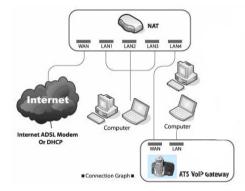




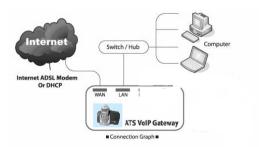


Multiple computers environment quick setup:

 NAT (Network Address Translator) users: Just connect your X10001X with one of the LAN ports of the NAT, then pick up your telephone and dial "#111#". Wait for the X10001X to restart then you may start to make phone calls.



If you do not have a NAT: Let the X10001X start up in DHCP / NAT mode to provide other computers the ability to access the internet through the X10001X.





Refer to the graph above to connect the X10001X with a switch/hub/router, computer, and telephone:

- Connect the modem and WAN port of the X10001X with an ethernet cable.
- Connect the switch/hub/router and LAN port of the X10001X with an ethernet cable
- Connect all computers to the switch/hub/router with ethernet cables.
- Connect the telephone to the Phone port of the X10001X with a phone cable.
- Connect the power cord to the X10001X power port

Power LED will be ON. The start-up process will take approximately 20 seconds.



X10001X VoIP GATWAY User's Manual

Phone Book

- Configuring the VoIP Gateway Phone Book. Click [Phone Book] on the navigation panel and select [Speed Dial Settings].
- 2. In the Speed Dial Settings page, you can add/delete Speed Dial numbers.
 - Add a phone number: Enter the "Position number", "Name", and "phone number" (by URL type) of the destination and click [Add Phone] button.
 - Delete a phone number: Select the phone number you want to delete and click [Delete Selected] button.
 - Delete all phone numbers: Click [Delete All] button.
- The X10001X supports a maximum 10 Phone book entries. It is easy to call someone by dialing the position number (from 0~9) then pressing "#".





Phone Settings

Phone Settings contains Call Forward, SNTP Settings, Volume Settings, Block Settings, Caller ID, Dial Plan Setting, Flash Time Setting and Call Waiting Setting.

Call Forwarding:

You can set the phone number you want to forward to in this page. There are three types



of forwarding. You can choose All Forward, Busy Forward, and No Answer Forward by clicking the icon. When you complete the setting, click the [Submit] button.

- All Forward: Forwards all calls. Enter a name and phone number (by URL type) in the field.
- Busy Forward: While the line is busy or the phone is off-hook, forwards calls to the number specified. Enter a name and phone number (by URL type) in the field.
- No Answer Forward: When no one answers the call, forwards calls to the number specified. Enter a name and phone number (by URL type) in the field.



Volume Settings:

You can set the Handset Volume, Ringer Volume, and the Handset Gain. When you complete the settings, please click the [Submit] button.

- Handset Volume: Set the handset volume, which can be heard from the far end.
- Ringer Volume: Set the ring volume, which can be heard from the far end.
- PSTN-Out Volume: Set the PSTN volume, which can be heard from the far end.
- Handset Gain: Set the gain, which can be heard from the far end.
- PSTN-In Gain: Set the gain, which can be heard from the far end.





Volume Setting You can set the volume of your phone on this page. Handset Volume: 10 (0-12) Handset Gain: 10 (0-15)

Submit Reset

T.38 FAX Settings

To use the FAX feature, just connect the **LINE** port of a fax machine with the **Phone/FAX** port of the X10001X, then you can FAX over the internet.

The X10001X is designed to allow you to make phone and fax calls via the internet. Just use the fax machine and dial the number you want to send a fax to. Then wait for TWO rings, the X10001X will automatically switch to fax, and you will be able to fax via the internet. If you want to make a voice call, just dial *, it will switch back to regular telephone mode(PSTN), then dial the number.









Network

- In the Network menu, you can check the Network status and configure the Network Settings.
- 2. Network Status: You can check the current Network settings in this page.



Network Status

This page shows current status of network interfaces of the system. Interface 0 Fixed IP Client Type: 205.240.79.202 255.255.255.128 Mask: Gateway 205.240.79.129 205 240 79 15 DNS Server 1: 205.240.79.16 DNS Server 2: Interface 1 DHCP Server Type: 192.168.1.100 Mask: 255.255.255.0 Gateway 192.168.123.1 205.240.79.15 DNS Server 1: DNS Server 2: 205.240.79.16

- 3. WAN Settings: You can configure the X10001X WAN settings in this page.
 - The LAN Mode is to set the X10001X Bridge mode or Router mode. If you set the Bridge Mode, then the two Fast Ethernet ports will be transparent. Otherwise, if you set the NAT Mode, then the LAN port will act as a router.
 - The WAN Setting Configuration item is to set the WAN port's network environment.
 Refer to your current network environment to configure the X10001X properly.
 - The PPPoE Configuration item is to set the PPPoE Username and Password. If you have the PPPoE account from your Service Provider, input the Username and Password.

When you finish the settings, please click the Submit button.





WAN Settings You can configure the WAN settings on this page LAN Mode: O Bridge O NAT WAN Setting ● Fixed IP ○ DHCP Client ○ PPPoE IP Type 205.240.79.202 Mask: 255.255.255.128 205.240.79.129 Gateway DNS Server1 205.240.79.15 DNS Server2: 205 240 79 16 MAC: 000e8b052cad PPPoE Setting User Name Password: Submit Reset

- 1. LAN Settings: You can configure the X10001X LAN settings in this page.
 - The LAN Setting lets you set the router address.
 - In Router mode, IP is for the LAN port's Ethernet address. Ex: 192.168.123.1,this means that the LAN address would be in the 192.168.123.xxx Ethernet class.
 - Mask lets you set the Ethernet Mask.
 - MAC is the LAN port's MAC ID.

2. DHCP SERVER

- The DHCP SERVER is for the other connected devices to get their IP address from the device. You can set up the J2200 as a DHCP server.
- Set Start IP and End IP for the range that the other devices will get their IP address from.
- When you finish the setting, please click the Submit button.

Then don't forget to click the save button.



LAN Setting	
IP:	192.168.123.1
Mask:	255.255.255.0
MAC:	00aabbccdde8
DHCP Server	
DHCP Server:	⊙ On ○ Off
Start IP:	150
End IP:	200
Lease Time:	1 (dd:hh)

SIP Settings

- 1. In Service Domain Settings, you need to input the account and the related information. In this page, please refer to your ISP provider. You can register three SIP account in the X10001X. You can dial the VoIP phone to your friends via first enable SIP account and receive the phone from these three SIP accounts. For the second phone you can use the same way to register.
- 2. First you need click Active to enable the Service Domain, then you can input the following items:
 - Display Name: you can input the name you want to display.
 - User Name: you need to input the User Name get from your ISP.
 - Register Name: you need to input the Register Name get from your ISP.
 - Register Password: you need to input the Register Password get from your ISP.
 - Domain Server: you need to input the Domain Server get from your ISP.
 - Proxy Server: you need to input the Proxy Server get from your ISP.

 - Outbound Proxy: you need to input the Outbound Proxy get from your ISP. If your ISP does not provide the information, then you can skip this item. 34



- Register Period: you need to input the Register Period get from your ISP. This is count in minute.
- You can see the Register Status in the Status item. If the item shows "Registered", then your X10001X is registered to the ISP, you can make a phone call directly.
- 3. When you finished the setting, please click the Submit button.



Service Domain Settings You can set information of service domains on this page. | Compared | Com

On Off

Realm 2 Active:

Display Name: User Name:

Register Name

In System Authority you can change your login name and password.



Save Change & Reboot

System Auth.

In Save Change you can save the changes you have done. If you want to use new setting in the X10001X, you have to click the Save button. After you click the Save button, the X10001X will automatically restart and the new setting will effect.



Update

You can update the X10001X's firmware to the new one or do factory reset to let the X10001X back to default setting.

In New Firmware function you can update new firmware via HTTP in this page. You can upgrade the firmware by the following steps:

- Select the firmware code type, Risc code.
- Click the "Browse" button in the right side of the File Location or you can type the correct path and the filename in File Location blank.
- Select the correct file you want to download to the X10001X then click the Update button.

You could updat	te the newest firmware.		
Method:	⊕HTTP ○TFTP		
нтте			
HTTP. Code Type:	Risc 💌		
	Risc V	(200E)	
Code Type	Risc •	(89E)	

In Default Setting you can restore the X10001X to factory default in this page. You can just click the Restore button, and then the X10001X will restore to default and automatically restart again.

Restore Defa	ult Settings
You could click the restore t	utton to restore the factory setting



How to make a phone call

When your X10001X is configured properly, you can make a call from the connected phone. To place a phone call, simply dial the phone number and your call will go out using your account setup with your service provider.

The X10001X also provides functions listed below:

- Call Waiting: When a new call comes in while you are talking, you can push the Flash button to switch to the new call. You can push the Flash button to switch between the two calls.
- Call Hold: You can push the Hold key to hold the current call for a while, then push Hold key again to keep talking.
- 3. 3-way conference: If you want to make a 3-way conference call, place a phone call to the first party. After the call is established, push the Flash button and you will hear a second dialtone, then place a call to the second phone number. When the second call is established, press the Flash button again. The calls will be joined together.

FCC Warning:

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

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.

Modifications not authorized by the manufacturer may void users authority to operate this device.

NOTICE: Working with the equipment while in operation, may expose the technician to RF electromagnetic fields that exceed FCC rules for human exposure. Visit the FCC website at www.fcc.gov/oet/rfsafety to learn more about the effects of exposure to RF electromagnetic fields.

Changes or modifications to this unit not expressly approved by the party responsible for compliance will void the user's authority to operate the equipment. Any change to the equipment will void FCC grant.

For general population use, a integrated Antenna with a maximum gain of 0dBi is authorized for use with this unit. Outside antennas must be positioned to observe minimum separation of 1.47cm.

For the protection of user in the vicinity of outside antennas, the above guidelines for minimum distances between the human body and the antenna must be observed.