



SVG301S 2 FXS + 4 LAN + 1 WAN SIP ATA User Guide



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# 1. Introducing ATA

#### 1.1 Hardware Overview



Figure 1-1 ATA hardware overview

### 1.2 Interface Description

One LED for Wan status Four LEDs for Lan status

Button: Press it over 5 seconds to reset ATA

Power: DC 12V

Tel 1: Connect to Analog Telephone

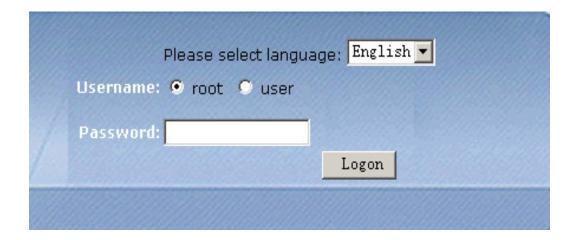
Tel 2: Connect to PSTN line

## 2. Installing ATA

Please follow the instruction below for ATA setup

- 1. Connect the RJ-45 connector labeled WAN to your cable or DSL modem (or other network connection).
- 2. Connect the RJ-45 connector labeled 'LAN' to a PC.
- 3. Optionally, you can connect the connector labeled 'Lan' to a switch / hub and connect multiple PCs to the latter.
- 4. Connect the RJ-11 port labeled 'Tel' to an analog telephone.
- 5. Connect the RJ-11 port labeled 'Line' to PSTN line
- 3. Configuration Guide
- 3.1 Configuration with Web Browser





Default the ATA's NAT is enabled, WAN port is in DHCP Client Mode, LAN port is in DHCP Server Mode. You can connect your PC to ATA's LAN port and set pc's ip type to DHCP, then you will get an IP Address from the ATA.

Use Web Browser for system configuration

- 1. After ATA boot OK, you can use web browser for system configuration.
- 2. Enter http://192.168.0.1 in the webpage (Lan default IP address is 192.168.0.1)
- 3. Login with account 'root' or 'user'.(Default password is 111111 for root and 000000 for user)
- 3.2 Configuration with analog telephone
- 1. Enter the analog phone debug mode, Press "\*#8356#" on keypad in sequence
- 2. You can use below command to configure the ATA

100	Set Wan ip address	*#8356#100*192*168*1*100*1##
101	Set netmask	*#8356#101*255*255*255*0*1##
102	Set default gateway	*#8356#102*192*168*1*1*1##
103	Set 1st DNS server	*#8356#103*192*168*1*1*1##
200	Enable/Disable web server	*#8356#200*1##
300	Enable/Disable Telenet server.	*#8356#300*1##
999	RESET to factory settings.	*#8356#999*1##

- 3. You may need input 0/1 to enable/disable or cancel/confirm the change
- 4. Interval use the sing "\*", at the end input "##". (In IP/mask/gateway/DNS mode, use '\*' to instead of '.')



# 4 ATA Setup Menu

# 4.1 Current configurations

It shows system current information of this ATA

ATA Version:	
Hardware Version: Software Version:	ATA-S1300 2007/12/03 02:27:
Account: Line1 Username: Line2 Username:	USER USER2
Network Conf	figurations:
WAN Port IP	Mode: Static ODHCP PPPOE
WAN Port IP	Parameters:
IP Addr.:	Parameters: 192. 168. 1. 124
IP Addr.:	192. 168. 1. 124
IP Addr.: Subnet Mask:	192. 168. 1. 124 255. 255. 255. 0
IP Addr.: Subnet Mask: Gateway:	192. 168. 1. 124 255. 255. 255. 0 192. 168. 1. 1
IP Addr.: Subnet Mask: Gateway: DNS1:	192. 168. 1. 124 255. 255. 255. 0 192. 168. 1. 1 211. 148. 192. 135
IP Addr.: Subnet Mask: Gateway: DNS1: MAC: PPPoE	192.168.1.124 255.255.255.0 192.168.1.1 211.148.192.135 00:0a:a5:60:02:29 user
IP Addr.: Subnet Mask: Gateway: DNS1: MAC: PPPoE Username:	192.168.1.124 255.255.255.0 192.168.1.1 211.148.192.135 00:0a:a5:60:02:29 user

# 4.2 Basic configurations

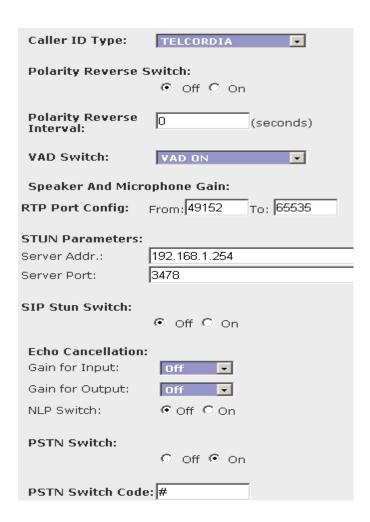


In the basic configuration page, the parameters of WAN, LAN, DHCP and SNTP can be set and shown

Network Con	
WAN Port IP	Mode:
	C Static ⊙ DHCP C PPPoE
WAN Port IP	Parameters:
IP Addr.:	192. 168. 1. 192
Subnet Mask:	255. 255. 255. 0
Gateway:	192. 168. 1. 1
DNS1:	211. 148. 192. 135
DNS2:	192. 168. 1. 1
DNS3:	0. 0. 0. 0
PPPoE Username:	user
PPPoE Password:	password
LAN Port IP I	Parameters:
IP Addr.:	192. 168. 0. 1
Subnet Mask:	255. 255. 255. 0
DHCP Server	Switch: ○ Off
<b>DHCP Addres</b>	ss Pool:
From:	192. 168. 0. 128
To:	192. 168. 0. 254
<b>SNTP Configu</b>	urations:
SNTP Server:	time.nist.gov
Time Zone:	(GMT) Dublin, Edinburgh, London, Lisbon, Casablanca, Monrovia 🔻



# 4.3 Advanced Configurations



RTP Port Config:	From: 49152 To: 65535
STUN Parameters:	
Server Addr.:	192.168.1.254
Server Port:	3478
SIP Stun Switch:	
	⊙ Off C On



Select a suitable type
Polarity reverse function. Switch and interval.
To use VAD function set the switch to on, else to off
You can set Speaker and Mic Gain to uper/lower input/output
of audio signal.(Default 0)
Tos function switch and parameters.
Echo Cancellation function switch and parameters.
If you ATA have an additional PSTN port,you can use it to
swith between voip and PSTN line.
Set rang of RTP port
Set the STUN server address and port if needed.
STUN Switch for SIP signal.

# 4.4 Line1 and Line2 configurations

Line1 Switch:	● Off ○ On		
Line1 Dial Plan:			
Sequence:			
Line1 Parameters	:		
Username:	USER		
Display Name:	DISPLAYNAME		
Auth. Name:	AUTHNAME		
Password:	**		
Server Addr.:	192.168.1.254		: 5060 (Port)
Realm/Domain:	REALM		
Register Interval:	3600	(s)(0	indicates OFF)
Heartbeat Interval:	20	(s)(0	indicates OFF)
Options Interval:	0	(s)(0	indicates OFF)



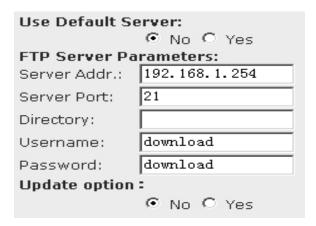
Line1 DTMF Paran	neters:	
DTMF Mode:	RFC2833 -	Payload: 101
Line 1 Codec PRI.:		
Primary:	G729 💌	
Secondary:	G723 🔽	
Tertiary:	G711u 🔻	
Quaternary:	G711a •	
Quinary:	G728 •	
Senary:	G726 •	
Septenary:	iLBC -	
Line1 Crypto Supp	ort:	
Crypto Server Addr.:	192.168.1.254	
Crypto Server Port	55060	
Cipher Algorithm:	● Off C AES	
Cipher Blocksize:	C 128 © 256	
Line1 STUN Switc	h:	
	Off ○ On	
Line1 RTCP Switch	h:	
	⊙ Off C On	

Line1 Forward Pa	rameters:	
Forward No.:	0000	
Forward Type:	NONE	Ŧ

Line1 Configurations and Line2 Configurations pages are used to configure the parameters of accounts. If you have two accounts set "Line2 switch" to "on", or else set it to "off". Configure parameters which are needed.

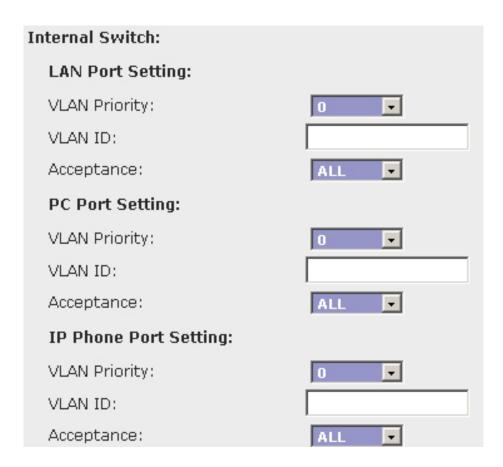


# 4.5 Updating Configurations



In the Updating configurations page, you can configure the route of updating FTP server and update the firmware of ATA. Default is Our FTP server. If you want to use another server, select "No" and input the parameters needed, then press "Apply"

# 4.6 Qos Configurations





Priority-Queue mapping:		
Layer2:		
Layer3:		
Priority Selector	use L2 priority 🔽	
Queuing Policy:	strict priority	·
Queue assignment:	NO 💌	
LAN port:	low	
PC port:	low •	
IP Phone Port:	low 🔻	
Expanded QOS setting (st	ream classification):	
802.1p/Q priority:	Disable 💌	
Management Data:		
VLAN Priority:	0	
VLAN ID:		
VOIP Data:		
VLAN Priority:	0	
VLAN ID:		
Signaling Data:		
VLAN Priority:	0	
VLAN ID:		
other Data:		
VLAN Priority:	0	
VLAN ID:		
DSCP/Tos priority:	Disable -	
Management Data:		
VOIP Data:		
Signaling Data:		
Other Data:		



Qos configurations provide an interface to configure the Qos parameters.

# 4.7 Provision Configurations

Provision Switch:	:
	⊙ Off ○ On
Provision Type:	
	○ HTTP ○ FTP
<b>Provision Parame</b>	eters:
Server Addr.:	192.168.1.254
Server Port:	21
Username:	anonymous
Password:	voip
Group:	ATA
Provision Interval:	7 (Days)

Group	The folder's name where you put the setting.ini in
Provision Interval	After an period time, the device will provision automatcally

# 4.8 User Management

User Management	
Username:	root
Password:	
Retype Password:	

The User Management page can be used to change the password of current user

# 4.9 Factory Reset

In this page, "Apply" button is used to set all parameters to factory settings.



## 4.10 Rebooting System

After all change have been done, click "Rebooting System", select "Yes", then click "Apply" to reboot the device.

## 5 Appendix

#### 5.1 Provision Function

Provision function is convenient for service provider or administrator to configure some parameters of ATA and our VOIP phones all at once. You just need to modify a file named setting.ini, all devices which you want them to get work under new parameters will update config automatically if the provision function is set correct. This function can modify all parameters of device, but it is for parameters for group devices, just common parameters are recommended.

- 1. Have a proper functioning FTP server or a HTTP server with username and password(also anonymous).
- 2. Make a directory named "provision" at the root path of FTP path or HTTP path.
- 3. In provision directory make some group directory, under the group directory make a file named "setting.ini".
- 4. Modify the setting.ini
- 5. Configure the device provision parameters.

This is a simply template for setting.ini. Just one parameter per line.

External mode = 1

Ext ip address = 192.168.1.254

Ext subnet mask = 255.255.255.0

Ext gw address = 192.168.1.1

Ext dns1 = 192.168.1.1

Ext dns2 = 192.168.1.1

Ext dns3 = 192.168.1.1

PPPoE user ID = user

PPPoE password = password

Int ip address = 192.168.254.1

Int subnet mask = 255.255.255.0

DHCP Server = 0

5.2 Dial Plan Syntax

5.2.1 Description



A dial plan consists of three parts:

- (1) the timeout interval when no component is adapted to the inputs(L);
- (2) the dial-out interval when some component is adapted to the inputs but there is no "SO" followed (S)
- (3) the sequence of dial plan (the whole sequence must be enclosed by a pair of brackets '()').

#### 5.2.2 Basic Dial Plan

A basic dial plan is like this: "L:n,S:n,( )"

While there are no L or S configured, the default value of L is set to 10s, the one of S, 3s. And the sequence can contain 300 characters at most. The components are separated by the pipe character '|'. Each rule is explained following.

#### 5.2.3 Common Notations

- (1) Any specific individual keys from 0 to 9, \*(asterisk) and #(pound) can be included.
- (2) 'X' or 'x' means a single digit(from 0 to 9). 8XX(8xx) means a number from 800 to 899 for example.
- (3) [x-y] represents a digits which is from x to y. [2-5] is a number range allowing 2, 3, 4 or 5 to fit the dialplan. In another word, if you dial a '4' as the first character, this fits the first part of the dial plan.
- (4) [xy] means a digits x or y. [25] means the digit 2 or 5 is fit the part of the dial plan.
- (5) '.' means repeating the previously listed digit zero or more times. "x." means any numeric digits repeat 0 or more times. "xx." means one or more digits.

### 5.2.4 Substitution Rule

<:> means to replace any characters within '<>' brackets before ":" with the ones within '<>' branckets after ":". <xyz:abc> means any dialed "xyz" will be replaced with "abc".<:001>8xxxxxxx means any number from 80000000 to 89999999 will be appended a 001 in the front, such as 00180000000, 00181111111 and so on.

#### 5.2.5 Block Rule

Any components which contains a '!' in the end will block access to the number. So in this case "1900xxxxxxxx!", 1900 followed by 7 digits numerical sequence is not allowed to be dial using the device and is hence, blocked.



## 5.2.6 Straight Out Rule

S0(S followed by the number 0) represents "straight out", and is usually used at the end of a dial plan string means "immediately dial when matched".

#### 5.2.7 Hotline and Warmline Rule

Pn <:number> (P follow by a number and then a space and then <:number>) means a hotline ('n' = 0)or warmline dial('n' > 0). P0 <:123456> means when you pick up the phone, it will dial 123456 automatically, yet P5 <:123456> means the phone will dial 123456 automatically after 5 seconds you pick up the phone but dial no numbers.

#### 5.2.8 Ignore Dial Plan Rule

A '#'(pound) follows the number will ignore the dial plan and call out the number immediately.

If there is no number dialed, the priority of the hotline rule is higher than the one of warmline rule, which is higher than others of course. The priority of block rule is higher than the one of S0 rule which is higher than the one of others. And the priority of the front component is higher than the one of the back.

### 5.2.9 An Example

L:8,S:3,(8xxxxSO|<:0755>[29]xxxxxxx|13xxxxxxxxx|\*xxx|010xxxxxx!|P5<:110>)

- (1) "8xxxxSO" means any numbers from 80000 to 89999 will be dial immediately even without a '#' followed.
- (2) "010xxxxxx!" means any numbers from 010000000 to 010999999 will be blocked. In other word, you can not dial the numbers using the device.
- (3) "L:8,S:3," means any no matched number with the other components except (1)(2) will be timeout and play busy tone after 8 seconds, and any matched number with the other components except (1)(2) will be dialed out after 3 seconds even without a '#'(pound) followed.
- (4) "<:0755>[29]xxxxxxx" means any 8 digits numbers starting with 2 or 9 will be appended 0755 and then dialed out.
- (5) "13xxxxxxxxx" means any 11 digits numbers starting with 13 is matched with the dial plan.
- (6) "\*xxx" allows you dial the \* service with a \* + a 3 digits number.
- (7) "P5 <:110>" means the phone will automatically dial the 110 after the phone is picked up but no digits input.



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