Recommendation: Using the ATA as a router

To minimize complications it is best to use the sipgate as a router. To connect the device to your DSL line, attach it directly behind the modem. If you would like to use your previous router instead of the sipgate router (e.g. in order to connect several PC's), attach the old router behind the ATA device.

The HandyTone-486 adapter (ATA) of sipgate has an adequate router built in. The adapter is ideally suited for most DSL connections and cable modems.

Using the ATA as a router

We recommend the use of the ATA as your router. This offers a set of advantages, the most important to you is that setting up the ATA as a router is a whole lot easier than making it work as a client in a network. If you don't want to use the ATA as a router, you can operate it as a client behind another router (e.g. behind a firm's network). Please read the Quick start Guide on the other side of this flyer for more information.

Note: You can only make use of our free email support if you use the ATA as a router.

1 Get your password before connecting the router.

In order to access the web configuration of your ATA, you will need your SIP password. The SIP password is NOT your password for logging in to www.sipgate.co.uk! You may find the SIP password after the Login on www.sipgate.co.uk under „my account", „Connection information", „SIP password". Copy and paste the password from the website to an intermediate file like a text editor, in order to avoid mistakes of letters and numbers, and/or in upper and lower case.

Only with DSL connection:

Have the login data of your Internet service provider (ISP) available since this information will also have to be used in the set-up of your new router. Your provider should have given you the ISP login data at the beginning of your contract.
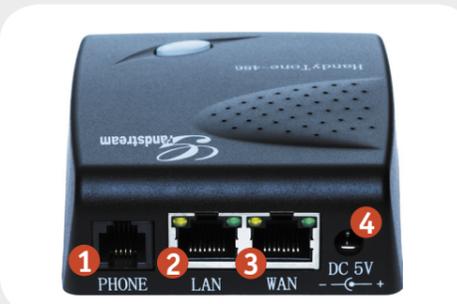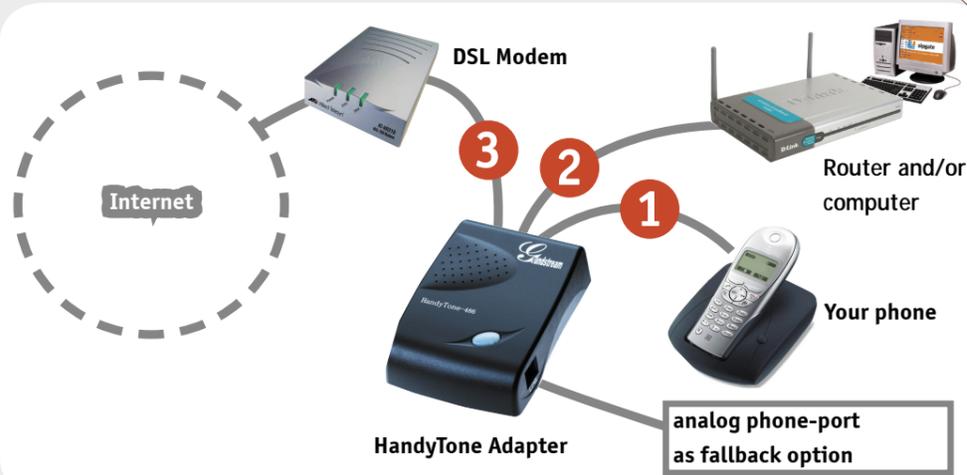
Connection information — more ►

Telephone-Nr.	08
SIP-ID	104
Registry	sipgate.co.uk
SIP-Password	8S9abcd
Show numbers	Hide numbers

View Connection information

2 Attach the ATA adapter to your Internet connection with the enclosed white network cable. You should attach the cable to a 10 Mb-Ethernet port on your DSL modem. The other end of the cable, you must plug into the WAN port on the back wall of the ATA.

You may connect your PC directly with the ATA device, if this is the only device you wish to connect to the Internet. You may also use the ATA to connect another network device such as a hub, a switch, or an old router. This has the benefit of allowing multiple computers and devices to access each other and the Internet.

Attach your analogue telephone to the provided TAE-RJ11 Adapter (1). The associated socket on the ATA is marked with "Phone". Please attach the power pack last.
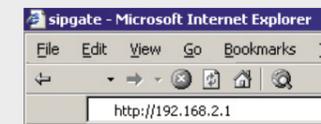
Finally, plug in the power cable.

DSL Modem

Internet

Router and/or computer

Your phone

HandyTone Adapter

analog phone-port as fallback option

Step by step:

1 Connect your telephone to the phone-port of your adapter

2 Connect the LAN-port to the WAN-port of your router, resp. computer.

3 Connect the WAN-port to your DSL-Modem.
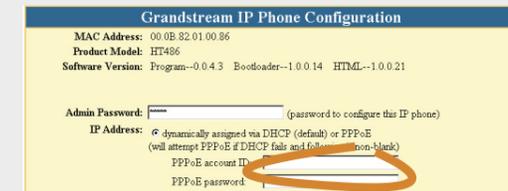
4 Please attach the power pack last.

PHONE LAN WAN DC 5V

3 Configure the ATA for your DSL line

Open a Browser (e.g. Internet Explorer) on your PC and enter the Internet address http://192.168.2.1, in order to get to the Web configuration menu of the ATA. You will start off from the login page of the adapter. Paste the SIP password copied in step 1 into the intermediate file (i.e. through the text editor) or enter it by hand and click on „Login".

Under the option „IP ADDRESS", you should activate „dynamically assigned via DHCP or PPPoE".
Under „account ID" and „password" enter the login data of your DSL account. Note: Some providers lock your account if you input of the wrong password! Proceed with extreme care! After saving the login data, the ATA adapter must be rebooted. To „Reboot", click on the button at the lower end of the Web configuration menu.

sipgate - Microsoft Internet Explorer

File Edit View Go Bookmarks To

http://192.168.2.1

Web configuration
Open an Internet browser (e.g. Microsoft Internet Explorer or Opera) and enter into the address line „http://192.168.2.1". Press enter.

Grandstream IP Phone Configuration

MAC Address: 00.0B.82.01.00.86
Product Model: HT486
Software Version: Program--0.0.4.3   Bootloader--1.0.0.14   HTML--1.0.0.21

Admin Password: ____ (password to configure this IP phone)
IP Address: ⊙ dynamically assigned via DHCP (default) or PPPoE
(will attempt PPPoE if DHCP fails and following is non-blank)
PPPoE account ID:
PPPoE password:

Account data
Please enter the account data for your Internet Service Provider (ISP) with extreme care.

Note: Your PC must be restarted, so that it is able to connect to the net!
Since your computer switches over to the new DNS server only with a restart, you must reboot to make the changes take effect („start"/"terminating" / „new to start").

Error messages and problems

Problem: I lift the handset and hear nothing at all.
Answer: For connecting your telephone to the ATA please use only the enclosed phone cable TAE for the RJ11 (Western) adapter for most telephones (e.g. Siemens, AEG). A direct connection does not function by normal RJ11-RJ11 cables, since the wiring differs.

Problem: I can no longer access the Internet.
Answer: Reboot your PC, DSL modem and the ATA. Make sure that you saved the login data of your DSL Providers correctly in the ATA. You can make a change of the login data at 192.168.2.1 in the Web configuration menu. Please reboot the adapter after making changes. Some providers lock your DSL account after repeated wrong logins, and you must wait a while to try again. Enter the data with extreme care!

Problem: The ATA does not get an IP address.
Answer: Please take the handset off of your telephone and press the button on top of your adapter. You will hear an announcement. Following the announcement, please press keys „0" and „2" on your telephone. Your IP address will be announced through your handset. If you should get a set of zeros announced, the ATA cannot access an „external" IP address. Check whether your provider supports DHCP or if you are assigned a static IP address. Change the settings accordingly in the Web configuration menu of the adapter. Consider the difference between internal and external IP addresses: Your ATA has the same (internal) IP 192.168.2.1; the external IP address always changes.

Problem: I can dial, but I hear no dial tone.
Answer: First reboot the DSL modem, and then reboot the ATA so it logs in again to your provider.

Problem: My broadband modem supports only USB ports and/or my PC does not have an Ethernet card.
Answer: You need an adapter for USB on Ethernet in order to be able to use your ATA. If your PC does not have an Ethernet card, you can buy a USB for Ethernet converter, to connect your PC with the ATA and the broadband connection.

Problem: I would like to operate a router and/or a W-LAN router behind the ATA. The PCs attached there do not connect to the Internet anymore; I can however use the ATA telephone.
Answer: Reboot your PCs call up the Web configuration menu of your old router (not the ATA! Usually 192.168.0.1 and/or. 192.168.1.1). Deactivate PPPoE and the DHCP function, so it no longer gives IP addresses. Finally, reboot your router.

1. User manual

You will find a detailed guide for your ATA486 under:

www.grandstream.com/user_manuals/HandyTone-486UserManual.pdf

2. Help Centre

If you still have questions, please consult the sipgate help centre under:

http://www.sipgate.co.uk/faq

If you do not find your question answered in the help centre, contact our support team at ata486@support.sipgate.co.uk

TIP!

Only in exceptions: The ATA as a Client

Note: You should follow the installation hints on this page only if your ATA cannot start as a router for technical reasons. This case is very rare (VPN function of your past routers, routing by the provider only, modem has a router integrated already).

How to user the ATA as a client behind a router

Sometimes you have to set the ATA as a client behind a router even though we recommend the use of the ATA as a router (see overleaf). If you your ATA must operate behind a router (e.g. within a company network), it must be configured as a client. You will find the appropriate guidance on this page. Please note that setting up the ATA as a router is a whole lot easier and we strongly recommend to do so.

1 **Attach the adapter with the enclosed white network cable to your Internet connection.** Attach the cable on one end to a 10 a Mbit Ethernet port (e.g. at the DSL modem or router), and on the other end to the rear wall of the adapter in the WAN-port. Your router should be configured in such a way that it assigns an IP address automatically to the adapter by DHCP.

Attach your old analogue telephone to the provided TAE adapter and put the other end into the socket marked phone on the back of the Grandstream ATA-486.

Attach the power pack and connect any PCs, switches or routers with the ATA-486. Use the provided power pack and a RJ45 network cable!

2 When the adapter starts, the large button on the top flashes red for approximately 30-50 seconds. Your adapter is now operational. If you take your handset off, hear a dial tone and the button on the adapter lights up and stays on.

You are now reachable through your sipgate direct-inward dialling and can select different sipgate participants, and/or free 0800-Numbers in England, Austria, and Germany. For all other calls, you need credit in your sipgate.co.uk account. You may do this by logging in with your login data under „account & billing", and following the instructions.

Internet

DSL Modem

your tele-phone

Router

Your Computer

analogue plug as fallback option

Problems? Please note the next page!
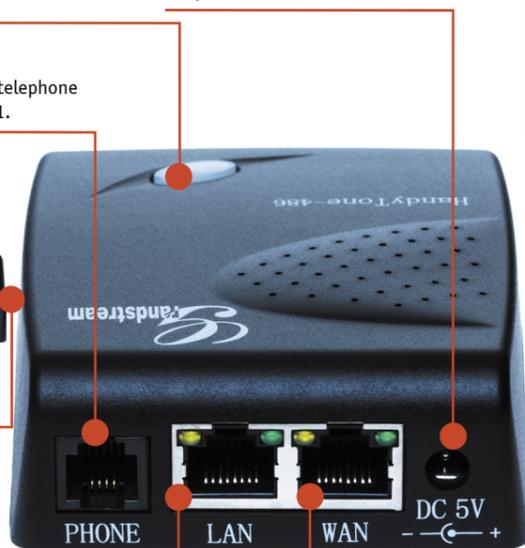
Overview of the device functions

Button: After you have attached the power, the button flashes for some seconds. Please do not interrupt this procedure, only after the light turns solid red, are you ready to use the adapter. If you are called and your telephone rings, the light flashes.

5. Internet connection: After you have attached all other cables, attach the power pack adapter to this socket.

1. Telephone: Attach your analogue telephone using the provided adapters TAE-RJ11.

2. Telephone connection: You can also make a call during a power failure or an interrupted Internet connection over your normal voice grade telephone, by connecting the equipment here with an analogue phone line.

3. Local area network: Used only if the ATA functions as a router. The white network cable attaches here and connects with your PC and/or other routers or switches. With the ATA as a client, this port remains empty.

PHONE   LAN   WAN   DC 5V

4. Internet connection: This port connects your modem to your ATA router.

3 **Configuration of your router**

Most older routers are badly prepared for the new possibilities of IP Telephony: Integrated Firewalls and package filters block important ports and packets. We recommend that you upgrade the firmware of your router to the latest release. This is frequently an English version.
For advice on how to update your router's firmware, please check the website of your router's manufacturer. Please remember to reboot your router after you upgrade your firmware.

Included in delivery

1 Network-cable to connect router
2 Power cable 220V with adapter
3 Adapter GrandStream HandyTone ATA 486

Configuration of your network

Should the equipment not function once everything has been put together or it has problems after some time, it is usually due to incorrect routing and/or firewall configurations:

- It rings on the opposite end, however you hear no voice when someone answers.
- You can dial a number, but hear no ringing. As soon as someone answers, the line disconnects.
- Your fixed-net number is not reachable.
- The phone you called continues to ring, although you have already hung up.
- You can dial but it doesn't connect.
- The connection is interrupted after 6 - 12 seconds.
- Also typical for some of these problems: They are not reproducible, but sometimes emerge only after hours or days.

Further references to the network configuration may be found in the detailed operating instructions of the ATA 486 at:
http://www.grandstream.com/user_manuals/HandyTone-486UserManual.pdf
or in the sipgate help centre at: *http://www.sipgate.co.uk/faq/index.php*

How you can eliminate these problems:

1. Activate the DMZ for the IP address of the telephone

The DMZ (Demilitarised zone) excludes a range of one or more IP addresses from all Firewall settings. Usually you can find the option DMZ in the menu of your router under "Firewall", "Advanced Settings", "WAN Settings" or 2Applications/Gaming". Switch the DMZ on and register the IP address of your equipment. You may find out this address, by taking the handset off, pressing the large button on the ATA, then dialling "0" and "2" on your telephone. Listen for the IP address.

2. Switch off all packet filter and Firewall options

With some routing problems, the first step is sufficient. If not, try turning off your active packet filters. Sometimes you must also change individual settings like "package filters", "hacker defence", "IP filter" or similar settings "Firewalls". Switch these options off.

3. Port forwarding

Arranging port forwarding for the following ports: port 5060/UDP (SIP signalling), port 5004/UDP (RTP), port 10000/UDP (STUN).

4. UPnP

In case your router is UPNP (universal Plug and Play) supported, please try turning this option on and/or off.

Other error messages and problems

Problem: I lift the handset and hear nothing at all.
Answer: For connecting your telephone to the ATA please use only the enclosed phone cable TAE for the RJ11 (Western) adapter for most telephones (e.g. Siemens, AEG). A direct connection does not function by normal RJ11-RJ11 cables, since the wiring differs.

Problem: I hear only a fast busy signal.
Answer: Please take the handset off of your telephone and press the button on your adapter. Following the announcement, please press the keys „0" and „2" on your telephone. If you get a set of zeros announced over the handset, then make sure that your router is set to distribute IP addresses with DHCP. Please also make sure that your router or switch can support speeds in excess of 10 Mbit/s over an Ethernet connection (some old devices don't support connections with 100 Mbit/s).

Problem: I hear only a fast busy signal, but the distribution of IP addresses seems to work. If I take the handset off and press the button on the adapter and press keys „0" and „2", I get a IP address announced.
Answer: Please you make sure that you router has an active Internet connection (by trying e.g. from your computer to go to an Internet site). If this is the case, the references in the help box above and to the right should help.

Problem: If I dial, it rings, but I cannot hear the other participant nor can they hear me.
Answer: This is a configuration problem of your router. The box above on the right contains further information to resolve this problem.

Problem: I can dial but I hear no dial tone.
Answer: This is a configuration problem of your router. The box above on the right contains further information to resolve this problem.

Problem: I would like to access the Web configuration menu of the adapter for further configurations settings, how do I get the password?
Answer: You may find the password on www.sipgate.co.uk under "my account", „connection information" / „SIP password".

Your problem still cannot be solved?

1. User manual

You will find a detailed guide for your ATA486 under:

http://www.sipgate.co.uk/img/usermanual_ata486_E.pdf

2. Help Centre

If you still have questions, please consult the sipgate help centre under:

http://www.sipgate.co.uk/faq

If you do not find your question answered in the help centre, contact our support team at ata486@support.sipgate.co.uk

TIP!