Cisco SPA 112 Setup & User Guide





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1 Introduction

This document describes how to install the Cisco terminal adaptors.

This document is applicable to the following devices:

| Model Number | Description |
|--------------|-----------------------------|
| SPA 112 | 2 FXS Port Terminal Adaptor |

We use a sophisticated auto provisioning system to pre-configure and test all the devices we supply.

This has the following advantages:

- Easiest possible installation
- Elimination of configuration errors caused by mistyping
- The ability to seamlessly apply configuration and firmware updates
- The ability to apply custom and site specific changes to your configuration.

The document is in two parts, the first section is the setup of a new Cisco as supplied pre-configured for your use

1.1 Shipping List

| Quantity | Description |
|----------|---------------------------------|
| 1 | Cisco SPA112 (Terminal Adaptor) |
| 1 | UK Power Supply |
| 1 | Ethernet Cable |
| 1 | UK Telephone Socket converters |
| 1 | This Setup Guide |

1.2 Additional equipment required

- Operational Ethernet LAN with ADSL router providing Internet connectivity
- Standard UK telephone(s)

2 Initial configuration

The device comes pre-configured with all the settings pre-loaded. It is only necessary to follow the network setup process described below.

2.1 Network Assumptions

- The SPA 112 will be connected to the LAN side of a broadband Ethernet router.
- The router is in NAT (network address translation) mode and the LAN side of the router is using private IP address (usually 192.168.x.x).
- It is assumed that the router will act as a DHCP server and hand out IP addresses for devices on the LAN side.
- It is also assumed that the router DHCP server will also provide the IP addresses of DNS servers to use.
- It does not matter if the broadband has a static or dynamic IP address.

2.2 SPA112 Lights



| Light | Description |
|----------|--|
| | Steady green—On hook. |
| | Slow flashing green—Off hook. |
| Phone 1 | Off—Port not ready. |
| Phone 2 | |
| | Flashing green—Transmitting or receiving data through |
| Ŷ | the WAN port. |
| Internet | Off—No link. |
| | Steady green—System ready, IP address acquired. |
| Ф | Slow flashing green—Acquiring IP address. (By default, |
| C . | uses DHCP.) |
| System | Fast flashing green—Upgrading firmware. |
| | Off—No power or system can not boot up. |

2.3 SPA112 Back Panel



| Feature | Description | |
|----------------------------|---|--|
| Reset | No not press the reset button under any circumstances. This will permanently disable the operation of the unit. | |
| Phone 1, Phone 2 (Gray) | Connect to an analogue phone, using the UK Phone adaptor provided | |
| Internet (Blue) | Connect to a broadband network device (DSL or cable modem) or a network router, using an Ethernet cable. | |
| Power | Connect to a power source, using the provided power adapter. | |

2.4 Network Setup



Please follow the following instructions

- Connect the Internet cable directly into your ADSL router.
- Plug in the phone(s) that you are going to use now, using the UK/RJ11 phone adaptors if necessary.
- Insert power lead. Power on the Cisco and wait for 60 seconds

You should now have a solid green power light, and also a solid green Internet light, If not you must correct the problem with the DHCP before proceeding.

2.5 Router

Your router should be set up to perform NAT (Network Address Translation) and act as a DHCP server (or have a standalone DHCP server somewhere on you network). These features are normally enabled by default on most routers.

An IP address will be allocated to the phone automatically when you plug the Ethernet cable from your phone into your router.

Please note: you should ensure the following ports are not blocked by the firewall within your router:

Far end ports

- UDP Ports 4144 and 4244
- UDP Ports 10000 to 32767
- HTPPS Port 443
- Sys Log Port 514
- HTTP Port 80
- DNS Port 53
- NTP Port 123

Local ports

Outbound requests to standard services will be from a random port (as for a PC)

The following ports will be used to receive SIP and RTP packets

- UDP Ports 5061 and 5062
- UDP Ports 4241 to 4280
- UDP Ports 10000 to 32767

It is our strong recommendation to minimise the number of firewall rules required on the router. This will reduce the CPU load on the router and also future proof the site from future additions to the service.

This can be simply implemented by a single rule which allows all (UDP and TCP) traffic to and from 154.51.129.0 netmask 255.255.255.0 - this is a /24 network

The system can support both static and dynamic IP addresses.

3 Check the operation of the SPA112

3.1 Registration and Account activation

Check the Phone 1 and Phone 2 lights on the Cisco, for one subscription on the Cisco you should have one light, and 2 lights for 2 subscriptions.

Logon to <u>www.telephony-cloud.com</u>. Your username and password are on MySettings Sheet

You should see the phone displayed in Blue and Mauve as below.

If you hover over the phone the tool tips show the IP address and the time of the last registration.

There should be a small "p" below the phone to indicate that the Cisco is using the MyPhones Outbound Proxy Server.

| Quic | Quick view of my phones | | | | | | |
|------|-------------------------|------------------------|------------------------|--|--|--|--|
| | My Phone | Highest Ranked Feature | | | | | |
| 8 | 01494414106 | IIII IIII | Call Forwarding | | | | |
| 0 | | | (1 to 5 of 15 items) 💷 | | | | |

3.2 Phone Operation

Dial 1451

You should hear a message with technical details about your Phone

3.3 Check Ringing

Phone the number from a normal phone to check that ringing is operational.

If the phone does not ring, check if you need a master phone adaptor and try an alternative phone

3.4 Finished

You may now enjoy your new service, there is no need to read beyond this page.

4 Trouble Shooting

4.1 SPA112 Lights

The Power, Internet and at least one phone light must be on solid for successful operation of the unit.

Power Light (far left)

Off

• Unit has no power

Solid light

• Unit operating properly

Slow Blinking (0.5s ON, 0.5s OFF)

- System Initialisation
- Looking for DHCP

long, short, short, off for 2 seconds

• No Ethernet link detected

Very Fast Blinking , for 30 seconds

• The unit is being upgraded, **NO NOT DISCONNECT OP UNPLUG** the unit until it has finished.

Internet Light

Off

• No Ethernet link detected

Solid light

• Ethernet link detected

Random flashing

• Network has data flowing

Phone Light

Off

• Phone line is not configured or is not registering properly with the MyPhones Service

Solid light

• Phone line is registering properly with the MyPhones Service, and is ready for use

Show flashing

• Phone is in use or off hook.

4.2 No Audio

If you cannot hear audio during a call please check the firewall settings of your router are correct.