E2959

SL1200

Internet Security Router

Quick Installation Guide

Introduction

Thank you for buying the ASUS SL1200, the Internet Security Router!

Your Local Area Network (LAN) will now be able to access the Internet using high-speed broadband connection such as those with ADSL or cable modem.

This quick installation guide provides the basic instructions on connecting your ASUS SL1200 to your PC or LAN, and to the Internet.

System Requirements

- ADSL or cable modem and the corresponding service up and running, with at least one public Internet address assigned to your WAN
- One or more computers each containing an Ethernet 10Base-T/100Base-T network interface card (NIC)
- (Optional) An Ethernet hub/switch, if you are connecting the device to more than four computers on an Ethernet network.
- A web browser such as Netscape 7.0.2, Microsoft Internet Explorer v5.5 or later.

Package contents

Check your ASUS SL1200 package for these items:

- 1 x ASUS SL1200
- 1 x power adapter
- 1 x straight-through Ethernet cable
- 1 x manual CD

Features

Front Panel

The front panel contains LED indicators that show the status of the unit.

Label	Color	Function
POWER	green	On: Unit is powered on
		Off: Unit is powered off
WAN	green	On: WAN link established and active Flashing: Data is transmitted via WAN connection Off: No WAN link
LAN1-LAN4	green	On: LAN link is established Flashing: Data is transmitted via LAN connection Off: No LAN link

Rear Panel

The rear panel contains the ports and the power/WAN connectors.

Label	Function
POWER	Connects to the power adapter
Reset	Resets the device
CONSOLE	RJ-45 serial port for console management
WAN	Connects to your WAN device such as ADSL or cable modem.
P1-P4	Connects to the device to your PC's Ethernet port, or to the uplink port on your LAN's hub/switch using the cable.

Quick installation

Hardware connection

Before you begin, turn the power off for all devices. These include your computer(s), your LAN hub/switch (if applicable), and the ASUS SL1200.

Figure 1. Overview of Hardware Connections

Step 1: Connect an ADSL or a cable modem

To connect the router

Connect one end of the Ethernet cable to the port labeled WAN on the rear panel of the device. Connect the other end to the Ethernet port on the ADSL or cable modem.

Step 2: Connect computers or a LAN

If your LAN has four or less than four computers, you can use an Ethernet cable to connect computers directly to the built-in switch on the device. You should attach one end of the Ethernet cable to any of the port labeled LAN1 – LAN4 on the rear panel of the device and connect the other end to the Ethernet port of a computer.

If your LAN has more than four computers, you can attach one end of an Ethernet cable to a hub or a switch, such as an uplink port (refer to the hub or switch documentations for instructions), and the other to the Ethernet switch port (labeled LAN1 – LAN4) on the router.

You can use either a crossover or a straight-through Ethernet cable to connect the built-in switch and computers, hubs or switches.

Step 3: Attach the power adapter

Connect the power adapter to the POWER connector on the back of the device and plug the adapter to a wall outlet or a power strip.

Step 4: Turning on the ASUS SL1200

After plugging in, the router will automatically turn on. Turn on your ADSL or cable modem, your computer(s), and any LAN devices such as hubs or switches.

Check the LED indicators to determine if the hardware setup is working properly. Refer to the table below.

LED Indicators

LED	Description
POWER	Solid green to indicate that the router is turned on. If this light is not on, check if the power adapter is attached to the router and if it is plugged into a power source.
LAN1 – LAN4	Solid green to indicate that the router can communicate with your LAN or flashing when the router is sending or receiving data from your LAN device(s).
WAN	Solid green to indicate that the router has successfully established a connection with your ISP or flashing when the device is sending or receiving data from the Internet.

Configuring Your Computers

This section provides instructions for configuring the Internet settings on your computers to work with the router.

Before you begin

By default, the ASUS SL1200 automatically assigns all required Internet settings to your PCs. You only need to configure the PCs to accept the information when it is assigned.

In some cases, you may want to configure network settings manually to some or all of your computers rather than allow the Internet Security Router to do so. See ***Assigning static IP addresses to your PCs*** *on page 10 for instructions.*

If you have connected your PC via Ethernet to the router, follow the instructions that correspond to the operating system installed on your PC.

Windows® XP PCs

1. In the Windows task bar, click **Start -> Control Panel**.
2. Double-click the **Network Connections** icon.
3. In the LAN or High-Speed Internet window, right-click on icon corresponding to your network interface card (NIC) and select Properties. This icon is often labeled as **Local Area Connection**

   The Local Area Connection dialog box displays with a list of currently installed network items.
4. Ensure that the check box to the left of the item labeled Internet Protocol TCP/IP is checked, and click <**Properties**>.
5. In the **Internet Protocol (TCP/IP) Properties** dialog box, click the radio button labeled Obtain an IP address automatically. Also click the radio button labeled Obtain DNS server address automatically.
6. Click <**OK**> twice to confirm your changes, and close the **Control Panel**.

Windows® 2000 PCs

Check for the IP protocol and, if necessary, install it.

1. In the Windows task bar, click **Start -> Settings -> Control Panel**.
2. Double-click the **Network and Dial-up Connections** icon.
3. In the **Network and Dial-up Connections** window, right-click the Local Area Connection icon, and then select **Properties**.

   The **Local Area Connection Properties** dialog box displays a list of currently installed network components. If the list includes Internet Protocol (TCP/IP), then the protocol has already been enabled. Skip to step 10.
4. If **Internet Protocol (TCP/IP)** does not display as an installed component, click <**Install**>.
5. In the **Select Network Component Type** dialog box, select Protocol, and then click <**Add**>.
6. Select **Internet Protocol (TCP/IP)** in the Network Protocols list, and then click <**OK**>.

   You may be prompted to install files from your Windows 2000 installation CD or other media. Follow the instructions to install the files.
7. If prompted, click <**OK**> to restart your computer with the new settings.

   Next, configure the PCs to accept IP addresses assigned by the router.
8. In the **Control Panel**, double-click the **Network and Dial-up Connections** icon.
9. In **Network and Dial-up Connections** window, right-click the **Local Area Connection** icon, and then select **Properties**.
10. In the **Local Area Connection Properties** dialog box, select **Internet Protocol (TCP/IP)**, and then click <**Properties**>.
11. In the **Internet Protocol (TCP/IP) Properties** dialog box, click the radio button labeled **Obtain an IP address automatically**. Also click the radio button labeled **Obtain DNS server address automatically**.
12. Click <**OK**> twice to confirm and save your changes, and then close the **Control Panel**.

Windows® 95, 98, and Me PCs

1. In the Windows task bar, click **Start -> Settings -> Control Panel**.
2. Double-click the **Network** icon.

   In the Network dialog box, look for an entry started w/ “TCP/IP ->” and the name of your network adapter, and then click <**Properties**>. You may have to scroll down the list to find this entry.

   If the list includes such an entry, then the TCP/IP protocol has already been enabled. Skip to step 8.
3. If **Internet Protocol (TCP/IP)** does not display as an installed component, click <**Add**>.
4. In the **Select Network Component Type** dialog box, select Protocol, and then click <**Add**>.
5. Select **Microsoft** in the Manufacturers list box, and then click **TCP/IP** in the **Network Protocols** list, box and then click <**OK**>.

   You may be prompted to install files from your Windows 95, 98 or Me installation CD or other media. Follow the instructions to install the files.
6. If prompted, click <**OK**> to restart your computer with the new settings.

   Next, configure the PCs to accept IP information assigned by the router.
7. In the **Control Panel**, double-click the **Network** icon.
8. In the **Network** dialog box, select an entry started with “TCP/IP ->” and the name of your network adapter, and then click <**Properties**>.
9. In the **TCP/IP Properties** dialog box, click the radio button labeled **Obtain an IP address automatically**.
10. In the **TCP/IP Properties** dialog box, click the **Default Gateway** tab. Enter 192.168.1.1 (the default LAN port IP address of the router) in the **New gateway** address field and click <**Add**> to add the default gateway entry.
11. Click <**OK**> twice to confirm and save your changes, and then close the **Control Panel**.
12. If prompted to restart your computer, click <**OK**> to do so with the new settings.

Windows® NT 4.0 workstations

Check for the IP protocol and, if necessary, install it.

1. In the Windows NT task bar, click **Start -> Settings -> Control Panel**.
2. In the **Control Panel** window, double click the **Network** icon.
3. In the **Network** dialog box, click the **Protocols** tab.

   The Protocols tab displays a list of currently installed network protocols. If the list includes TCP/IP Protocol, then the protocol has already been enabled. Skip to step 9.

4. If TCP/IP does not display as an installed component, click <**Add**>.
5. In the **Select Network Protocol** dialog box, select TCP/IP, and then click <**OK**>.

   You may be prompted to install files from your Windows NT installation CD or other media. Follow the instructions to install the files.

   After all files are installed, a window displays to inform you that a TCP/IP service called DHCP can be set up to dynamically assign IP information.

6. Click <**Yes**> to continue, and then click <**OK**> if prompted to restart your computer.

   Next, configure the PCs to accept IP addresses assigned by the router.

7. Open the **Control Panel** window, and then double-click the **Network** icon.
8. In the **Network** dialog box, click the **Protocols** tab.
9. In the **Protocols** tab, select TCP/IP, and then click <**Properties**>.
10. In the **Microsoft TCP/IP Properties** dialog box, click the radio button labeled **Obtain an IP address from a DHCP server**.
11. Click <**OK**> twice to confirm and save your changes, and then close the **Control Panel**.

Assigning static IP addresses to your PCs

In some cases, you may want to assign IP addresses to some or all of your PCs directly (often called “statically”), rather than allowing the ASUS SL1200 to assign them. This option may be desirable (but not required) if:

- You have obtained one or more public IP addresses that you want to always associate with specific computers (for example, if you are using a computer as a public web server).
- You maintain different subnets on your LAN.

However, during the first time configuration of your router, you must assign an IP address in the 192.168.1.0 network for your PC, such as 192.168.1.2. This is in order to establish connection between the router and your PC as the default LAN IP on the router is pre-configured as 192.168.1.1. Enter 255.255.255.0 for the subnet mask and 192.168.1.1 for the default gateway. These settings may be changed later to reflect your true network environment.

On each PC to which you want to assign static information, follow the instructions on pages 6 to 9 relating only to checking for and installing the IP protocol. Once it is installed, continue to follow the instructions for displaying each of the Internet Protocol (TCP/IP) properties. Instead of enabling dynamic assignment of the IP addresses for the computer, DNS server, and default gateway, click the radio buttons that enable you to enter the information manually.

*Your PCs must have IP addresses that place them in the same subnet as the Internet Security Router’s LAN port. If you want to manually assign IP information to all your LAN PCs, you can follow the instructions in **Configuring the LAN IP Address**.*

Configuring the LAN IP Address

To change the default LAN IP address

1. Log into the Configuration Manager as administrator, and then click **LAN -> IP**. The IP Address configuration page is displayed as shown in Figure 2.

Figure 2. LAN IP Address Configuration Page

2. Enter a LAN IP address and a subnet mask for the router.
3. Click <**Apply**> to save the LAN IP address.

   The network connection will be terminated if you change the IP address while using an Ethernet connection for the current session.

4. Reconfigure your PCs, if necessary, so that their IP addresses place them in the same subnet as the new IP address of the LAN port. Refer to **Configuring Your Computers** on page 6 for instructions.
5. Enter the new IP address in your web browser's address/location box to log into the Configuration Manager.

Quick Configuration of ASUS SL1200

This section gives instructions on logging into the Configuration Manager, a preinstalled web-based program in the ASUS SL1200. This section also gives instructions on configuring the basic settings for your Internet connection. Your ISP should provide you with the necessary information to complete this step.

Buttons Used in Setup Wizard

The ASUS SL1200 comes with a preinstalled software program called Configuration Manager which enables you to configure the router via your Web browser. The settings that you are most likely to need to change before using the device are grouped into sequences of Configuration pages guided by the Setup Wizard. The following table shows the buttons that you will encounter in the Setup Wizard.

Button	Function
Next	Click this button to save the information and proceed to the next configuration page.
Back	Click this button to go back to the previous configuration page.

Setting up the ASUS SL1200

To set up the router

1. Before accessing the Configuration Manager in the router, make sure that the HTTP proxy setting is disabled in your browser. In IE, click **Tools -> Internet Options -> Connections -> LAN settings** and then uncheck "**Use proxy server for your LAN …**"

2. On any PC connected to one of the four LAN ports on the router, open your Web browser, and type the following URL in the address/location box, and press <**Enter**>:

   http://192.168.1.1

   This is the predefined IP address for the LAN port on the router. A login screen displays, as shown in Figure 3.

Figure 3. Login Screen

If you have problems connecting to the router, you may either: check if your PC is configured to accept IP address assignment from the router, or set the IP address of your PC to any IP address in the 192.168.1.0 network such as 192.168.1.2.

3. Enter your user name and password, and then click <**OK**> to enter the Configuration Manager. The first time you log into this program, use these default settings:

   Default User Name: admin

   Default Password: admin

   The Setup Wizard home page displays each time you log into the Configuration Manager.

Figure 4. Setup Wizard Home Page

4. Click <**Next**> to enter the password configuration page as shown in Figure 5. Change the password, if desired. Otherwise, click <**Next**> to proceed to the next page.

Figure 5. Setup Wizard - Password Configuration Page

When changing passwords, make sure you enter the existing login password in the Login Password field, make any changes for the passwords and click <**Apply**> to save the changes.

5. In the System Information setup page, enter the requested information and click <**Apply**> to save the changes. Otherwise, click <**Next**> to proceed to the next page.

Figure 6. Setup Wizard- System Information Setup Page

6. In the Date/Time Setup page, select your time zone from the Time Zone drop-down list. Click <**Apply**> to save the settings and then click the <**Next**> to go to the next configuration page.

Figure 7. Setup Wizard - Date/Time Configuration Page

There is no real time clock inside the router. The system date and time are maintained by the external network time server. There is no need to set the date and time here unless you do not have access to a time server and you want the router to maintain its own time.

7. It is recommended that you keep the default LAN IP settings at this point until after you have completed the rest of the configurations and confirm that your Internet connection is working.

   Click <**Next**> to proceed to the next configuration page.

Figure 8. Setup Wizard- LAN IP Configuration Page

Figure 9. Setup Wizard - DHCP Server Configuration Page

8. It is recommended that you keep the default settings for DHCP server until after you have completed the rest of the configurations and confirm that your Internet connection is working.

   Click **<Next>** to proceed to the next configuration page.

9. In the WAN Configuration page, you configure the WAN settings for the router. Depending on the connection mode required by your ISP, you can select from the three connection modes in the Connection Mode drop-down list (see Figure 10): **PPPoE, Dynamic**, and **Static**.

Figure 10. Setup Wizard - WAN PPPoE Configuration Page

a) PPPoE Connection Mode (see Figure 10)

- You do not need to enter primary/secondary DNS IP addresses. PPPoE is able to automatically obtain this information for you from your ISP. However, if you prefer to use your favorite DNS servers, you may enter them in the space provided.
- Host name is optional. You may leave it empty if your ISP did not provide such information.
- Enter the user name and password provided by your ISP.
- Click <**Apply**> to save the PPPoE settings.

b) Dynamic IP Connection Mode (see Figure 11)

- You do not need to enter primary/secondary DNS IP addresses. DHCP client is able to automatically obtain this information for you from your ISP. However, if you prefer to use your favorite DNS servers, you may enter them in the space provided.
- Host name is optional. You may leave it empty if your ISP did not provide such information.
- If you had previously registered a specific MAC address with your ISP for Internet connections, enter the registered MAC address and make sure you check the MAC cloning check box.
- Click <**Apply**> to save the dynamic IP settings.

Figure 11. Setup Wizard - WAN Dynamic IP Configuration Page

c) Static IP Connection Mode (see Figure 12)

- Enter WAN IP address in the IP Address field. This information should be provided by your ISP.
- Enter Subnet Mask for the WAN. This information should be provided by your ISP. Typically, it is 255.255.255.0.
- Enter gateway address provided by your ISP in the space provided.
- Enter at least the primary DNS IP address provided by your ISP. Secondary DNS IP address is optional. Enter it in the space provided if you have such information from your ISP.
- Click <**Apply**> to save the static IP settings.

Figure 12. Setup Wizard - WAN Static IP Configuration Page

You have now completed the basic configuration settings. The ASUS SL1200 can now be used on your PC or LAN, via the ASUS ADSL or a cable modem, to connect to the Internet.

To test the Internet connection, enter any external URL (such as http://www.yahoo.com). The LED labeled **WAN** blinks rapidly and appears solid as the device connects to the site.