| FCC Part 15 Notice |

NOTE: 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 pro-vide reasonable
protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency
energy and, if not in-stalled 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.

CAUTION : Changes or modifications not expressly approved by
the manufacturer responsible for compliance could void the
user's authority to operate the equipment.

| Copyright |

| Trademark Credit |

Using This Document

Thank you for using the product of Corecess. This manual will show you how to set up the Corecess 3121 ADSL modem, and how to customize its configuration to get the most out of your new product.

This user manual uses the following conventions:

Note: Introduces useful item for the use of product, reference, and its related materials.

Caution: Explains possible situations or conditions of improper operation and possibility of losing data and provides suggestions how to deal with those cases.

Table of Contents

Introduction

The Corecess 3121 is an Asymmetric Digital Subscriber Line (ADSL) modem used for home connectivity to an ADSL service provider network. The Corecess 3121 ADSL modem receives adaptive data rates of up to 24Mbps downstream and transmits 1Mbps upstream.

Key Features

The Corecess 3121 ADSL modem provides the following key features:

- Internal ADSL modem for high-speed Internet access.

- 10/100Base-T Ethernet router to provide Internet connectivity to all computers on your LAN.

- Network address translation (NAT), Firewall, and IP filtering functions to provide security for your LAN.

- Network configuration through DHCP Server and DHCP Relay.

- Services including IP route and DNS configuration, RIP, and IP and DSL performance monitoring.

- Configuration program you access via an HTML browser.

- Quality of Service for traffic routed and/or bridged by the modem.

System Requirement

In order to use the Corecess 3121, you must have the following:

- ADSL service up and running on your telephone line, with at least one public Internet address for your computer.

- One or more computers with an Ethernet 10Base-T/100Base-T network interface card (NIC).

- An Ethernet hub/switch, if you are connecting the device to more than one computer on an Ethernet network.

- For system configuration using the supplied web-based program: a web browser such as Internet Explorer v5.0 or later, or Netscape v4.7 or later.

Getting to Know the Corecess 3121

Unpacking the Box

Check the shipping carton carefully to ensure that the contents include the items you ordered.

- Corecess 3121 ADSL modem

- Power adapter and power cord

- Ethernet cable ("straight-through" type)

- Standard phone/DSL line cable

- Manual CD

Corecess 3121

Phone/DSL line cable(RJ-11)

Power adpater

Power cord

Manual CD

Ethernet cable (straight-through type)
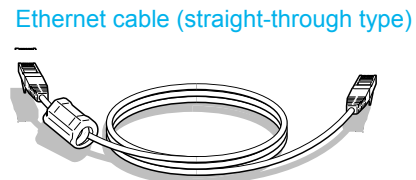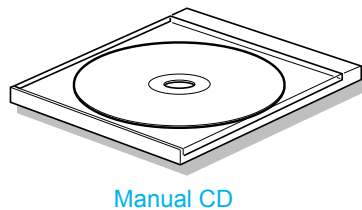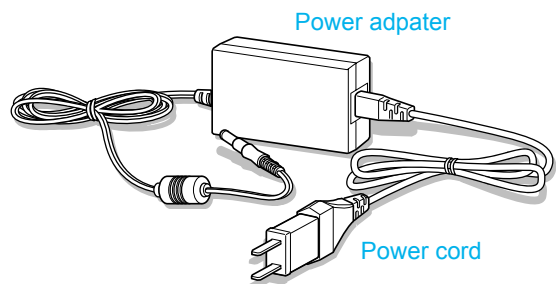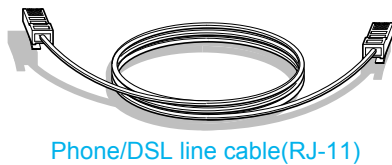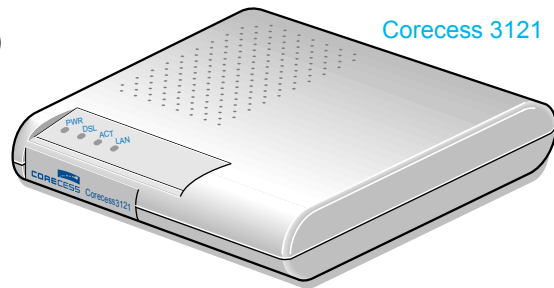
Note: The Ethernet cable for the Corecess 3121 should be assembled with a ferrite core which meets the following specification:

- Internal diameter: 9.50mm
- External diameter: 18.40 ± 0.40mm
- Length: 28.00 ± 0.40mm

Note: The following hardware is not provided but neccssary to install and configure the Corecess 3121. Before installing the Corecess 3121, prepare the following hardware:
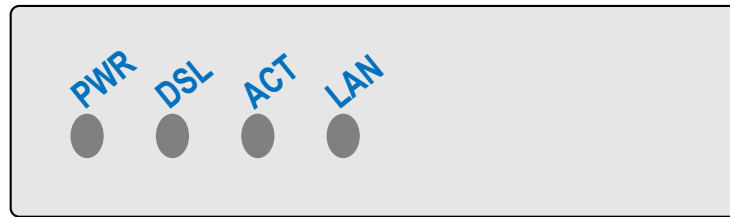
- Micro-filter or splitter (provided separately by your service provider)
- PC with Ethernet port or adapter (optional)

Caution: To reduce the risk of fire, use only No. 26AWG or larger telecommunication line cord.

Front Panel

The front panel contains lights called LEDs that indicate the status of the unit.

Label	Color	Function
PWR	Green	On : The Corecess 3121 is powered on. Off : The Corecess 3121 is powered off.
DSL	Green	On : ADSL link is established and active. Blinking : ADSL link is training. Off : No ADSL link.
ACT	Green	Blinking : ADSL data is sending/receiving through the port. Off : No ADSL data.
LAN	Green	On : LAN link is established and active. Blinking : Ethernet data is sending/receiving through the port. Off : No LAN link.

Rear Panel

The rear panel contains the ports for the unit's data and power connections.
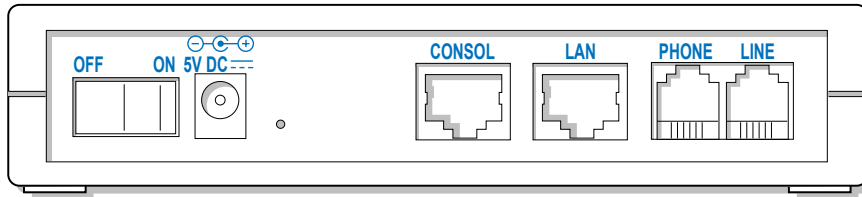

| Label	Function
OFF/ON	Switches the unit on or off.
5V DC	Connects to the supplied power converter cable.
CONSOL	Connects the device to a console terminal.
LAN	Connects the device to your PC's Ethernet port, or to the uplink port on your LAN's hub, using the cable provided.
PHONE	Connects the device to a telephone jack for DSL communication.
LINE	Connects the device to a telephone jack for DSL communication.

Connecting Hardware

The Corecess 3121 supports both the POTS splitter and micro-filter phone configurations. Before cabling the Corecess 3121, verify your configuration with your service provider. This section describes how to connect the Corecess 3121 to the phone jack, the power outlet, and your computer or network.

The following figure illustrates the hardware connections. The layout of the ports on your device may vary from the layout shown. Refer to the steps that follow for specific instructions.
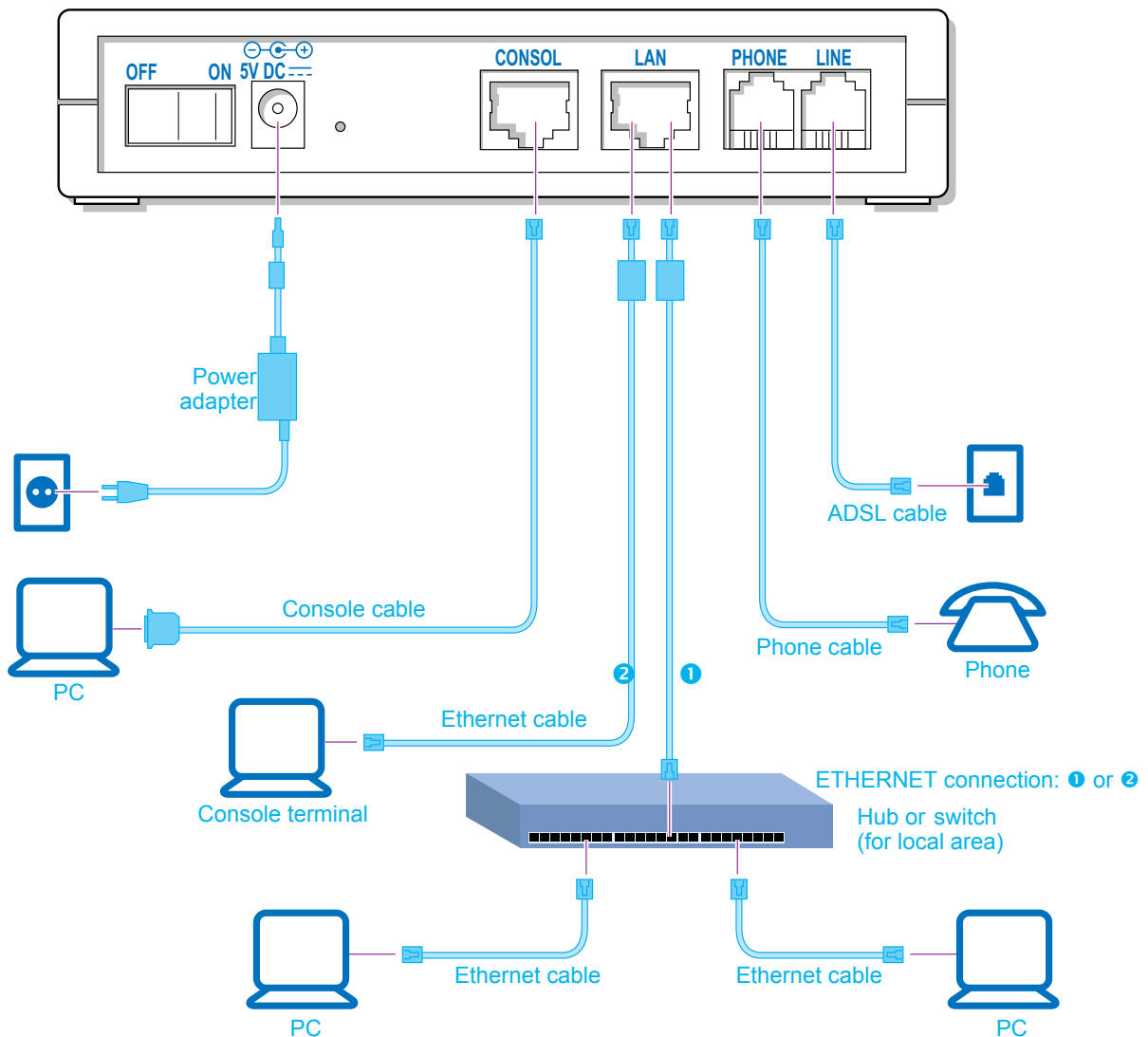
Connecting Telephone/ADSL Line

❶ Connect the provided ADSL cable to the PHONE port of the Corecess 3121 and a telephone.

❷ Unplug the telephone line from the telephone and plug the line to the LINE port of the Corecess 3121.
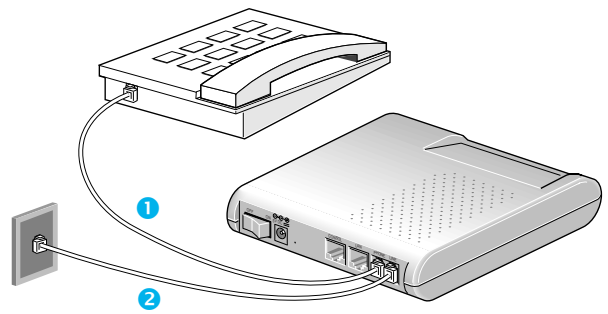
Connecting PC

Connect the provided Ethernet cable to the LAN port of the Corecess 3121 and then connect the other end of the cable to Ethernet port on the NIC installed to your PC.
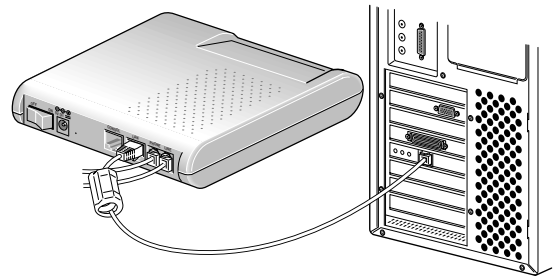
Note: If you are connecting a LAN to the Corecess 3121, you must use a "crossover" Ethernet cable (not provided) to attach a regular hub or switch port. The crossover cable is wired differently than the cable you would use to connect to a hub. When you compare the colored wires on each end of a straight-through cable, they will be in the same sequence; on crossover cables, they will not. Contact your ISP for assistance.

Connecting Console Terminal

Caution: General users need not to connect a console terminal. It is only for the ADSL Service Provider.

Connect a console cable to the CONSOL port of the Corecess 3121 and then connect the other end of the cable to the terminal or a PC.
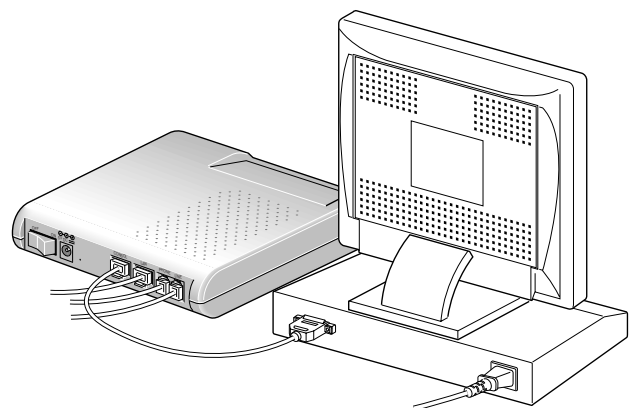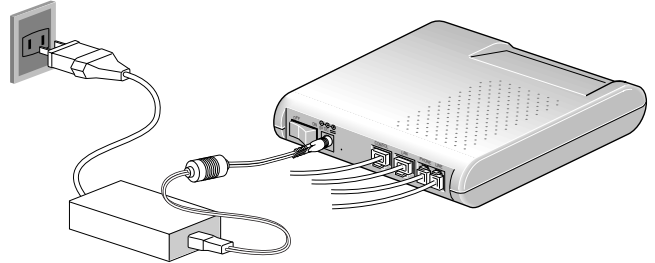
Connecting Power

> **Caution:** You must use the power adapter provided with the Corecess 3121.

❶ Connect the provided power supply cable into the 5V DC port of the Corecess 3121.

❷ Connect the provided power cord to the power supply and connect the other end of the cord to an appropriate electrical outlet.

> **Caution:** You must power on the Corecess 3121 before powering on your PC. If you power on your PC first, PC's IP address may not be properly assigned.

Configuring Your Computers

This section provides instructions for configuring the Internet settings on your computers to work with the Corecess 3121.

Before you begin

By default, the Corecess 3121 automatically assigns all required Internet settings to your PCs. You need only to configure the PCs to accept the information when it is assigned. Follow the instructions that correspond to the operating system installed on your PC.

> **Caution:** When you configure your computer, leave the default value of any other configuration that is not mentioned in the following description.

Windows XP

1. In the Windows task bar, click the Start button and then select Control Panel. (Figure 1)

2. Double-click the Network 🌐 icon at the <Control Panel> window.

Figure 1

3. Right-click the Local Area Connection icon at the <Network Connections> windows and select Properties. (Figure 2)
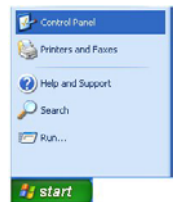
4. In the <Local Area Connection Properties> dialog box, select the Internet Protocol (TCP/IP) in the 'This connection uses the following items' list and click Properties. (Figure 3)

Figure 2

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 the Obtain DNS server address automatically. (Figure 4)
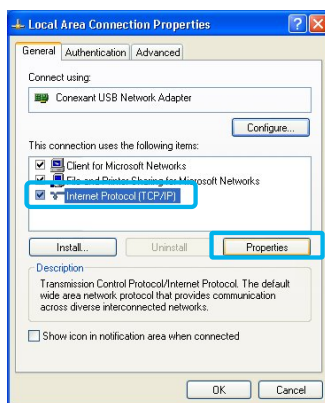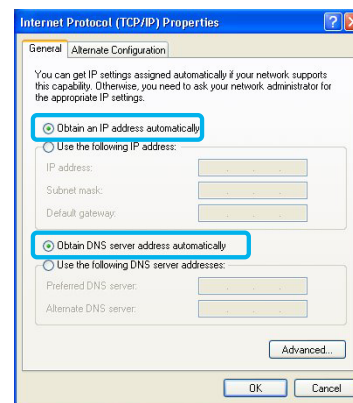

Figure 3

Figure 4

6. Click OK twice to confirm your changes, and close the Control Panel.

Windows 2000/NT

1. In the Windows task, click the Start button, point to Settings, and then click Network and Dial-up Connections. (Figure 1)
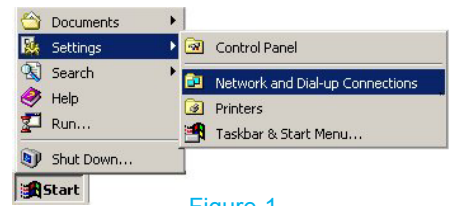
2. Right-click the Local Area Connection icon at the <Network and Dial-up Connections> windows and then select Properties. (Figure 2)
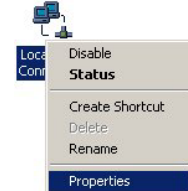
3. In the <Local Area Connection Properties> dialog box, select Internet Protocol (TCP/IP), and then click [Properties]. (Figure 3)
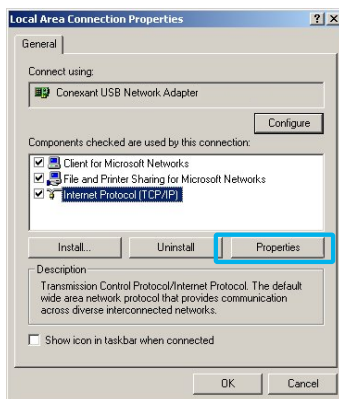
4. In the <Internet Protocol (TCP/IP) Properties> dialog box, click the radio button labeled Obtain an IP address automatically. Also click the radio button labeled Obtain DNS server address automatically. (Figure 4)
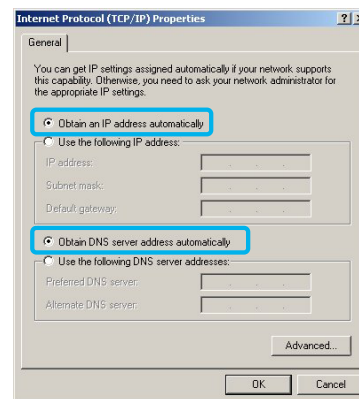
Figure 1

Figure 2

Figure 3

Figure 4

5. Click [OK] twice to confirm your changes, and close the Control Panel.

Windows 95/98/ME

1. In the Windows task bar, click the **Start** button, point to **Settings**, and then click **Control Panel**. (Figure 1)
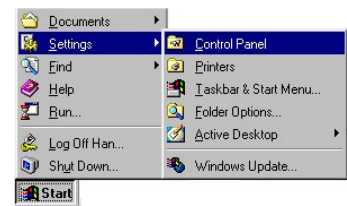
2. Double-click the **Network** 🖳 icon.

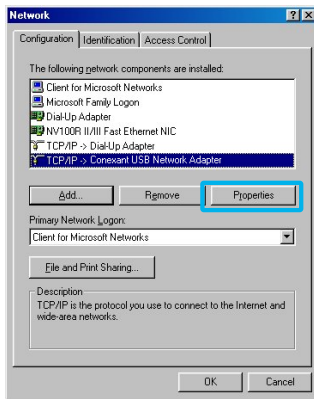3. In the <Network> dialog box, select **TCP/IP**, and then click **Properties**. (Figure 2)

4. In the <TCP/IP Properties> dialog box, click the **[IP Address]** tab and then click the radio button labeled **Obtain an IP address automatically**. (Figure 3)
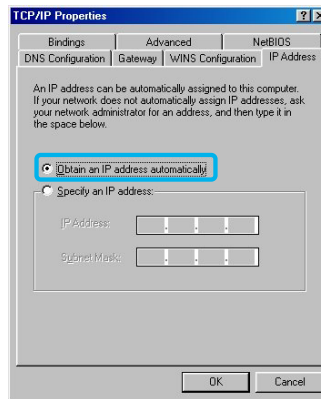
5. Click the **[DNS Configuration]** tab, and then click the radio button labeled **Disable DNS**. (Figure 4)

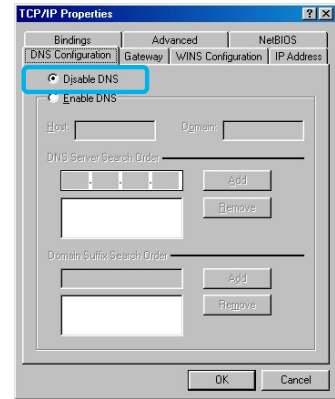Figure 1

Figure 2   Figure 3   Figure 4

6. Click the **[Gateway]** tab and ensure that there is no gateway installed. If there are installed gateways, delete them by clicking **[Remove]**. Click **OK**. (Figure 5)

7. Click **OK** twice to confirm and save your changes. You will be prompted to restart Windows. Click **Yes**.

Figure 5

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Troubleshooting

If you cannot connect to ADSL network, please check the status of the LEDs on the front panel, and then ensure the following:

1. **Check the LAN LED**

   If the LAN LED goes off, ensure that the Ethernet cable is firmly connected both to the LAN port on the Corecess 3121 and Ethernet port on the NIC installed to your PC.

2. **Check the DSL LED**

   If the DSL LED blinks continuously and never stays solid on, ensure that the DSL cable is firmly connected to the LINE port on the Corecess 3121. If the DSL LED still blinks, contact your ADSL service provider. If the DSL LED goes off, turn off the power of the Corecess 3121 by pressing the power switch and turn on the power again. If DSL LED still blinks, contact your vendor.
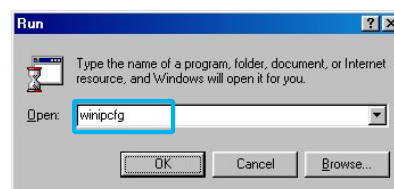
3. **Check your PC's IP address**

   If all LEDs operate normally and cables are firmly connected to the ports, ensure that your PC's IP address is properly assigned. Otherwise, assign a new IP address according to your operating system.
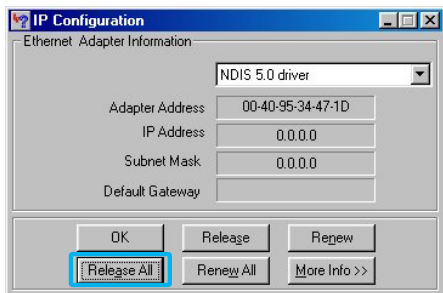
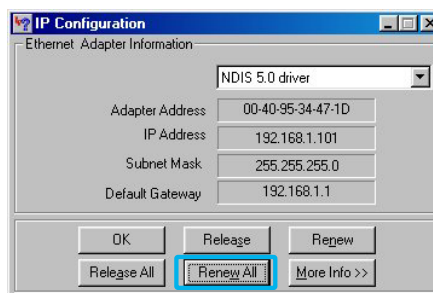   **Windows 95/98/ME**
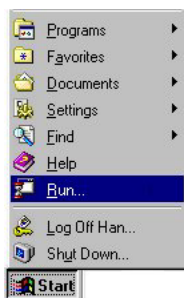
   ❶ Click the Start button and select Run.   ❷ Input winipcfg and press the [Enter] key.

❸ Select Ethernet adapter connected with the Corecess 3121 and click Release All.

❹ Click Renew All.

Windows 2000/NT/XP

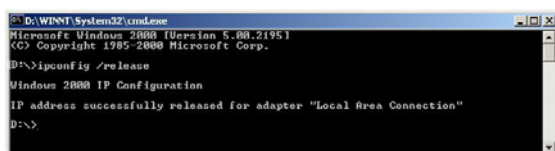❶ Click the Start button and select Run.

❷ Input cmd and press the [Enter] key.

❸ The DOS-prompt appears. Input ipconfig /release and press [Enter] key.

❹ Input ipconfig /renew and press [Enter] key.

4. Restart your PC

If new IP address is not assigned properly or you cannot solve the problem, ensure that the Corecess 3121 turns on and then restart your PC.

Technical Specifications

Description	Specification
Standard	**ADSL Standard**
	• T1.413i2 • ITU-T G.992.1(G.dmt) • ITU-T G.992.2(G.lite) • ITU-T G.992.3(G.dmt.bis) • ITU-T G.992.5(ADSL2+)
	IEEE Standard
	• IEEE 802.3 10Base-T • IEEE 802.3u 100Base-TX
Interface	**Ethernet**
	• 10/100Base-TX • Connector: RJ-45
	ADSL Line
	• Line Code: DMT (Discrete Multi-Tone) • Downstream: Max 24Mbps • Upstream: Max 1Mbps • Connector: RJ-11
ADSL Protocol	• PPP over ATM VCMUX (RFC 2364) • PPP over ATM LLCSNAP (RFC 2364) • Bridged IP over ATM LLCSNAP (RFC 1483) • Routed IP over ATM LLCSNAP (RFC 1483) • Bridged IP over ATM VCMUX (RFC 1483) • Routed IP over ATM VCMUX (RFC 1483) • Classical IP over ATM (RFC 1577) • PPP over Ethernet VCMUX (RFC 2516) • PPP over Ethernet LLCSNAP (RFC 2516)
Connector	• 1 RJ-11 (DSL) • 1 RJ-45 (LAN) • 1 Power socket (5V DC)
LED	• PWR: Indicates DC power status. • DSL : Indicates connection status with ADSL network (physical link). • ACT : Indicates ADSL data activity. • LAN : Indicates connection status and data activity with LAN.
Environmental Conditions	• Temperature: 0°C ~ 50°C • Humidity: 5% ~ 90%
Physical Conditions	• Dimension: 160(W) x 160(D) x 36(H) mm • Weight: 310g
Power Requirements	• Input: 100-240VAC, 50-60Hz, DC 5V/2A • Power consumption: Max. 6 Watt