| FCC Part 15 Notice |

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. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Class B limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is not 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 the receiving antenna.
- Increase the separate between the equipment and the 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.

| Copyright |

The specifications and information regarding the products in this manual are subject to changed without notice.

| Trademark Credit |

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Windows is registered trademark of Microsoft Corp.

Corecess Inc.
500-2, Sangdaewon-dong, Jungwon-ku, Sungnam-city, Kyungki-do, Korea, 462-120
TEL: +82-31-739-6600 FAX: +82-31-739-6622
http://www.corecess.com

Thank you for using the product of Corecess.
This manual helps users to install the
Corecess SHDSL Modem
Corecess 3311N and Corecess 3312N.

Table of Contents

Introduction

The Corecess 3311N and Corecess 3312 N are Single-pair High-speed Digital Subscriber Line (SHDSL) modems used for connection to the Internet or corporate intranets over ordinary telephone lines.

Key Features

The Corecess 3311N and Corecess 3312N SHDSL modem provides the following key features:

- Provides auto-negotiating 10/100Base-TX Ethernet interface.
- Provides SHDSL interface supporting the following data transmission rate:
  - Corecess 3311N : up to 2.3 Mbps for both upstream and downstream (2-wire mode)
  - Corecess 3312N : up to 4.6 Mbps for both upstream and downstream (4-wire mode)
- Supports both symmetric and asymmetric services.
- Supports both adaptive and fixed data rate modes.
- Supports both server (CO) and client (CPE) operation modes.
- Supports PPPoE, PPPoA, IPoA, RFC 1483 bridged/routed protocols.
- Supports static routing and dynamic routing (RIP v1 and RIP v2)
- Supports DHCP (Dynamic Host Configuration Protocol) server and client for dynamic IP address allocation.
- Supports DNS (Domain Name Server) client and relay for easy mapping the domain name and IP address.
- Supports NAT (Network Address Translation) for conservation of registered IP addresses.
- Supports Telnet and HTML browser interface for configuring the SHDSL modem.
- Can upgrade the latest modem software remotely using TFTP or FTP.
- Supports Back-to-Back Connections for high-speed LAN extensions over a private network.

Before Installing

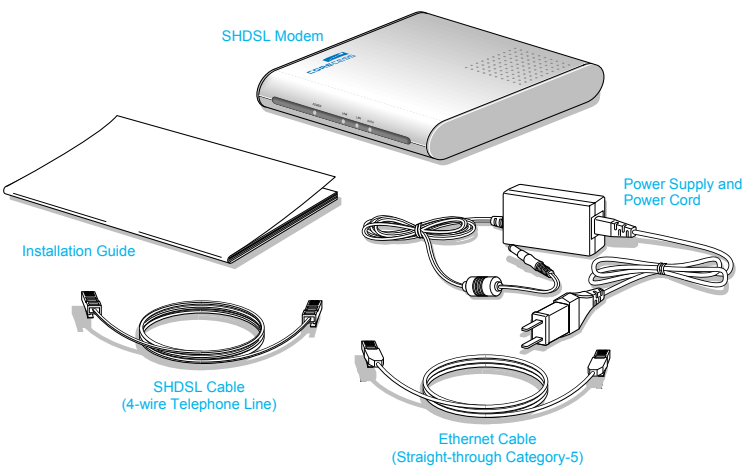
Safety Precautions

When installing or using the SHDSL modem, the following safety precautions should always be followed.

- Do not use the SHDSL modem near water, for example, near a bath tub, wash bowl, kitchen sink of laundry tub, in a wet basement or near a swimming pool.
- Use caution when installing or modifying telephone lines to prevent electric shock.
- Do not connect or disconnect telephone lines during periods of lightning activity.
- Use only the power supply and power cord provided with the SHDSL modem.

Unpacking the Box

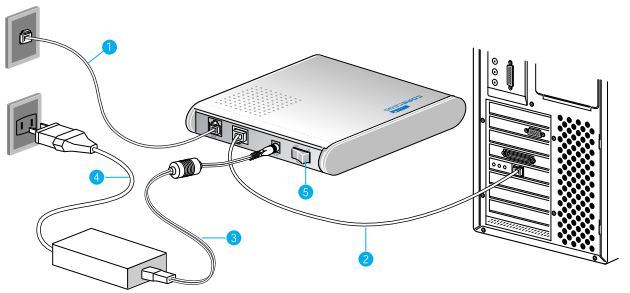
Check the shipping carton carefully to ensure that the contents include the items you ordered.



Note: The PC with a Ethernet port or adapter is neccssary to install the SHDSL modem. Before installing the SHDSL modem, prepare a PC with Ethernet port or adapter.

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

Installing the SHDSL Modem



❶ Connect the provided SHDSL cable to the wall receptacle and connect the other end of the cable to the **LINE** port of the SHDSL modem.

❷ Connect the provided Ethernet cable to the **LAN** port of the SHDSL modem and then connect the other end of the cable to Ethernet port on the NIC installed to your PC.

❸ Connect the provided power supply cable into the **DC IN** port of the SHDSL modem.

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

❺ Turn on the SHDSL modem with the power switch on the rear panel of the SHDSL modem.

❻ Power on your PC.

Caution: You should power on the SHDSL modem before powering on your PC. If you power on your PC first, PC's IP address may not be properly assigned. In this case, assign new IP address referring to 'Troubleshooting' on page 10-11 or restart your PC.

LED Operation

When you have powered up the SHDSL modem, check the status of the four LEDs on the front panel by the following table:

| Table 1 System LEDs |

LED	Color	Status	Description
POWER	Green	ON	DC power is being supplied to the SHDSL modem.
LINK		ON	The modem is connecting to SHDSL network.
LAN		ON	The LAN port is connecting to Ethernet port on your PC.
DATA		Blink	Data is being sent to or received from SHDSL network.

Configuring the TCP/IP

After you install the SHDSL modem, next is to configure the TCP/IP network protocol.

Note: This section describes how to set your PC to allocate a dynamic IP address from your ISP supporting DHCP server function. If your ISP does not support DHCP server function, contact your ISP.

Caution: When you configure the TCP/IP, leave the default value of any other configuration that is not mentioned in the following description.

Windows 95/98/ME

1. Click the **Start** button and select **Settings → Control Panel**. (Figure 1)

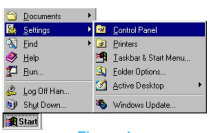


Figure 1

2. Double-click the **Network** icon.

3. Select **TCP/IP** in the 'The following network components are installed' list and click **Properties**. (Figure 2)

4. Select the **[IP Address]** tab and click the **Obtain IP address automatically**. (Figure 3)

5. Select the **[DNS Configuration]** tab and click the **Disable DNS**. (Figure 4)

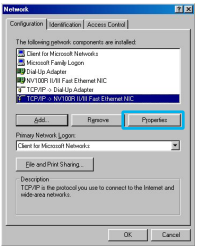


Figure 2

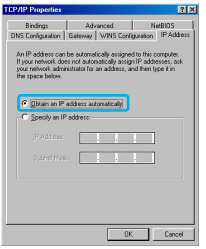


Figure 3

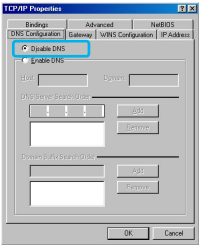


Figure 4

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

7. At the <Network> dialog box, click **OK**. The system prompts you to restart. Click **Yes**.

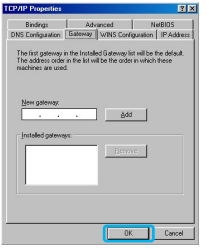


Figure 5

Windows 2000/NT

1. Click the **Start** button and select **Settings → Network and Dial-up Connections**. (Figure 1)

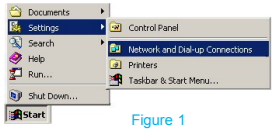


Figure 1

2. Right-click the **Local Area Connection** icon at the <Network and Dial-up Connections> windows and select **Properties** menu. (Figure 2)

Figure 2

3. At the <Local Area Connection Properties> dialog box, select the **Internet Protocol (TCP/IP)** in the 'Components checks are used by this connection' list and click **Properties**. (Figure 3)

4. At the <Internet Protocol (TCP/IP Properties)> dialog box, click the **Obtain an IP address automatically** and the **Obtain DNS server address automatically**. Then click **Advanced** to check the TCP/IP settings for accuracy. (Figure 4)

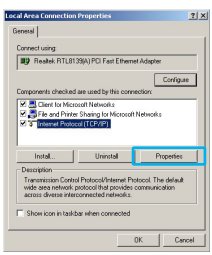


Figure 3

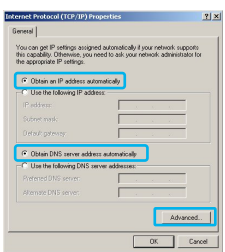


Figure 4

5. The <Advanced TCP/IP Settings> dialog box appears. At the **[IP Settings]** tab, check that the **IP Address** is set to **Enable DHCP**. (Figure 5)

6. Select the **[DNS]** tab and check that the **Append primary and connection specific DNS suffix** is selected. Click **OK**. (Figure 6)

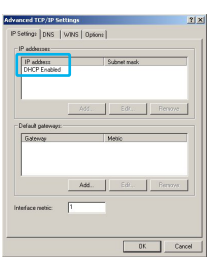


Figure 5

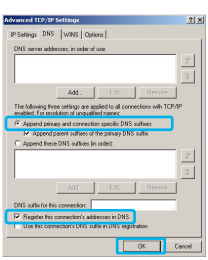


Figure 6

Windows XP

1. Click the **Start** button and select **Settings** menu. (Figure 1)

Figure 1

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

3. Right-click the **Local Area Connection** icon at the <Network Connections> windows and select **Properties** menu. (Figure 2)

4. At 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)

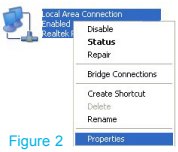


Figure 2

5. At the <Internet Protocol (TCP/IP) Properties)> dialog box, click the **Obtain an IP address automatically** and the **Obtain DNS server address automatically**. Then click **Advanced** to check the TCP/IP settings for accuracy. (Figure 4)

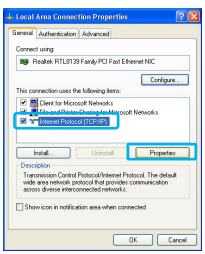


Figure 3

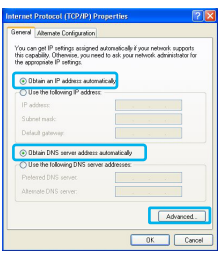


Figure 4

6. The <Advanced TCP/IP Settings> dialog box appears. At the **[IP Settings]** tab, check that the **IP Address** is set to **Enable DHCP**. (Figure 5)

7. Select the **[DNS]** tab and check that the **Append primary and connection specific DNS suffix** is selected. Click **OK**. (Figure 6)

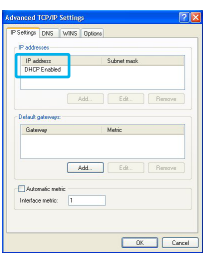


Figure 5

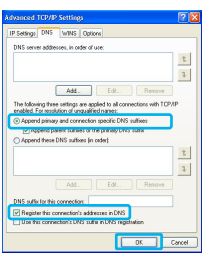


Figure 6

Troubleshooting

If you cannot connect to SHDSL 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 SHDSL modem and Ethernet port on your PC.

2. **Check the LINK LED**

   If the LINK LED blinks continuously and never stays solid on, ensure that the SHDSL cable is firmly connected to the LINE port on the SHDSL modem. If the LINK LED still blinks, contact your SHDSL service provider.

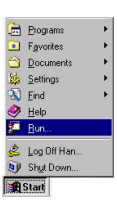
   If the LINK LED goes off, turn off the power of the SHDSL modem by pressing the power switch and turn on the power again. If LINK LED still goes off, contact your vendor.

3. **Check your PC's IP address**

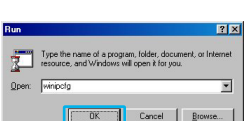
   If all LEDs operate normally and cables are firmly connected to the ports, ensure that your PC's IP address is properly assigned. Otherwise assign a new IP address according to your operating system.

Windows 95/98/ME

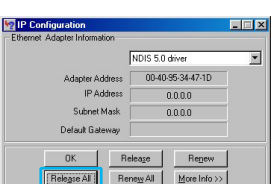
❶ Click the **Start** button and select **Run**.



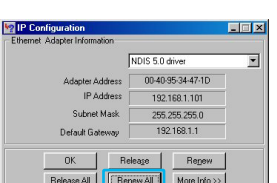
❷ Input **Winipcfg** and press the **[Enter]** key.



❸ Select Ethernet adapter connected with the SHDSL modem and click **Release All**.

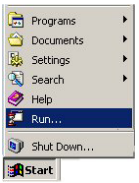


❹ Click **Renew All**.

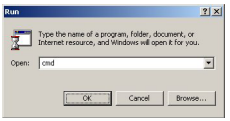


Windows 2000/NT/XP

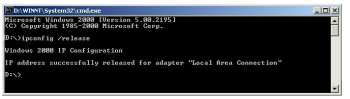
❶ Click the **Start** button and select **Run**.



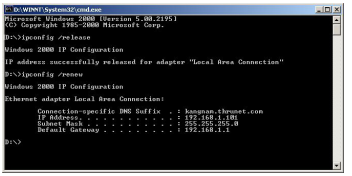
❷ Input **cmd** and press the **[Enter]** key.



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 SHDSL modem turns on and then restart your PC.

Product Specifications

Hardware Specifications

| Table 2 Hardware Specifications |

Description	Specification
Interfaces	Ethernet Interface
	• 10/100Base-TX • Distance: Up to 100m • Connector: RJ-45
	SHDSL Line Interface
	• ITU-T G.991.2 (G.SHDSL) • Line Code: TC-PAM • Data Transmission Rate - Corecess 3311N: up to 2.3 Mbps in 2-wire mode - Corecess 3312N: up to 4.6 Mbps in 4-wire mode • Distance: 3Km, up to 8Km @ 26AWG • Connector: RJ-11
Connectors	• 1 RJ-11 connectors (LINE) • 1 RJ-45 connector (LAN) • 1 Power socket (DC IN)
LEDs	• POWER: Indicates DC power status • LINK: Indicates the connection status with SHDSL network • LAN: Indicates the connection status with Ethernet network • DATA: Indicates data transmit/receive status via SHDSL network
Environmental Conditions	• Operating Temperature: 32 to 122°F (0 to 50°C) • Storage Temperature: -40 to 158°F (-40 to 70°C) • Humidity: 5 to 90% (non-condensing)
Physical Conditions	• Dimension: 140(W) x 150(D) x 30(H) mm • Weight: 250 g
Power Requirements	• Power Input: 100 to 240 VAC (auto-ranging), 50-60Hz, DC 5V/2A • Power Consumption: Max. 4 Watt

Software Specifications

| Table 2 Software Specifications |

Description	Specification
ATM Support	• Multiple protocol over ATM AAL5 (MPOA, RFC 2684) • PPP over ATM (RFC 2364) • Classical IP over ATM (RFC 2225) • ATM with up to 8 VCs support • ATM Forum UNI 3.0/4.0 PVC • I.610 OAM F4/F5 RDI/AIS, CC, Loopback
Routing Support	• Static routing • Dynamic routing (RIP v1 and RIP v2) • DHCP (Dynamic Host Configuration Protocol) server, client, and relay • DNS (Domain Name Server) client and relay • NAT (Network Address Translation)
Bridging Support	• Transparent Bridging (IEEE 802.1D) • RFC 2684 (formerly RFC 1483) Bridged Mode
Management	• CLI (Command Line Interface) • Remote management with Telnet or HTML browser interface • TFTP or FTP for software updates and configuration • Configuration file backup and restoration • SYSLOG for remote status monitoring • SNMP v1 and SNMP v2 MIB (Management Information Base)
Security	• IP/Protocol/Port Packet Filtering • IP Policy Routing • NAT supports PAT(Port Address Translation) • DMZ • Password Protected System Management Terminal • PAP (Password Authentication Protocol) • CHAP (Challenge Handshake Authentication Protocol)


CORECESS