

Corecess ADSL Modem

Corecess 3114



FCC

This device complies with 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.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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 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 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.

Introduction

The Corecess 3114 is an Asymmetric Digital Subscriber Line (ADSL) modem used for home connectivity to an ADSL service provider network. The Corecess 3114 ADSL modem receives adaptive data rates of up to 8Mbps downstream and transmits 1Mbps upstream.

Key Features

The Corecess 3114 ADSL modem provides the following key features:

- Supports POTS and ADSL simultaneously.
- Sends data, voice, and video over high-speed ADSL lines to connect to the Internet or corporate intranets. (Max downstream: 8Mbps, Max upstream: 1Mbps)
- Provides an auto-negotiating 10Base-T or 100Base-TX Ethernet interface and an USB interface.
- Supports a variety of ADSL protocols such as bridge (RFC 1483), PPPoE (RFC 2516), PPPoA (RFC 2364), and Classical IP over ATM(RFC 1577).
- Supports DHCP (Dynamic Host Configuration Protocol) server and client function for dynamic IP address allocation. (only router mode)
- Supports NAT (Network Address Translation) function for conservation of registered IP addresses. (only router mode)
- Allows multiple users to share a single IP address simultaneously on a single VC by using NAT and DHCP server function. (only router mode)
- Supports web console for configuring the Corecess 3114 using web browser.



Note: For more information about using the Corecess 3114 web console, refer to the **Corecess 3114 Configuration Guide**.

Types of ADSL Service

The Corecess 3114 supports the following types of ADSL service.

Bridge Mode

When the Corecess 3114 operates in bridge mode, it behaves like a wire connecting a local PC directly to a service provider's network.

Router Mode

When the Corecess 3114 operates in router mode, you can organize a small LAN using NAT and DHCP server function with IP routing. It allows multiple PCs to communicate and share the resource using only one ADSL line. There are three types of router mode: PPPoA/PPPoE, Static IP, and Dynamic IP.

The following table shows the typical configuration for using the Corecess 3114 in bridge mode or router mode.

WAN	VPI/VCI	Provided by ISP	Provided by ISP	Provided by ISP	Provided by ISP
	Static IP Address	N/A	N/A (Automatically Assigned by ISP)	Provided by ISP	N/A (Automatically Assigned by ISP)
	Subnet Mask	N/A	N/A (Automatically Assigned by ISP)	Provided by ISP	N/A (Automatically Assigned by ISP)
	Default Gateway	N/A	N/A (Automatically Assigned by ISP)	Provided by ISP	N/A (Automatically Assigned by ISP)
	Encapsulation	1483 Bridged IP LLC	PPPoA VC-Mux/ PPPoE LLC	1483 Bridged IP LLC	1483 Bridged IP LLC
	Bridge	Enabled	Disable	Disable	Disable
	PPP User Name	N/A	Provided by ISP	N/A	N/A
	PPP Password	N/A	Provided by ISP	N/A	N/A
	DHCP Client	Disable	Disable	Disable	Enabled

(continued)

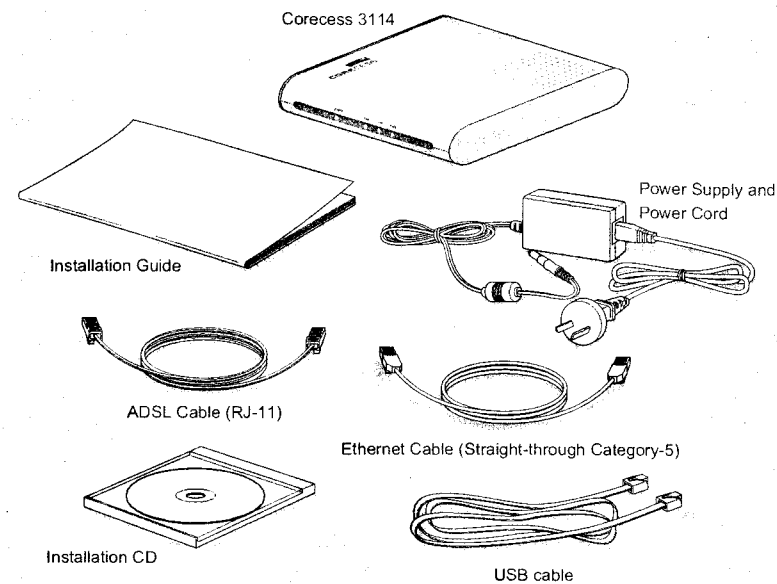
LAN	IP Address	N/A	10.0.0.2 (Default)	10.0.0.2 (Default)	10.0.0.2 (Default)
	Subnet Mask	N/A	255.0.0.0 (Default)	255.0.0.0 (Default)	255.0.0.0 (Default)
	DHCP Server	N/A	Enabled	Enabled	Enabled
NAT		N/A	NAPT	NAPT	NAPT
DNS		N/A	N/A (Automatically Assigned by ISP)	Provided by ISP	N/A (Automatically Assigned by ISP)



Note: N/A means it does not apply to the encapsulation. For more description of configuration method, refer to the **Corecess 3114 Configuration Guide**.

Unpacking the Box

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



Note: The following hardware is not provided but necessary to install and configure the Corecess 3114. Before installing the Corecess 3114, prepare the following hardware:

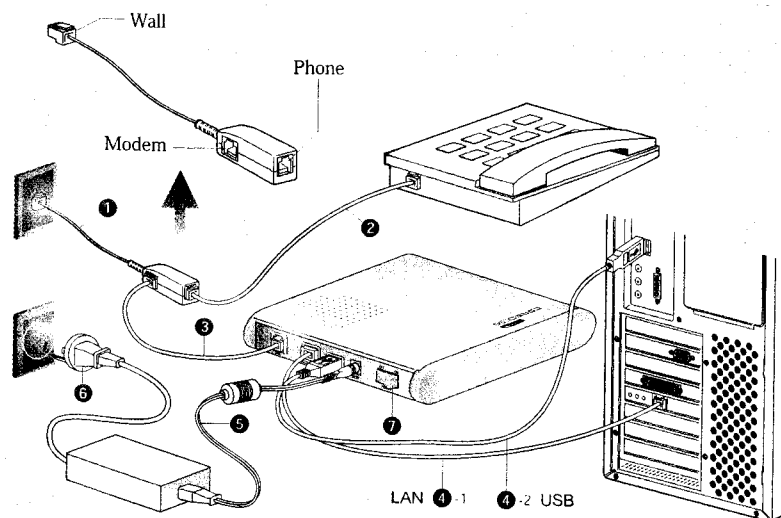
- Micro-filter or splitter (provided separately by your service provider)
- PC with Ethernet port or adapter (optional)



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

Installing the Corecess 3114

The Corecess 3114 supports both the POTS splitter and micro-filter phone configurations. Before cabling the Corecess 3114, verify your configuration with your service provider. This section describes how to install the Corecess 3114 by using micro-filter.



- 1 Unplug the telephone line from the wall receptacle and plug the line end of the micro-filter to the wall receptacle.
- 2 Connect the telephone cable that was unplugged from step 1 to the **Phone** port of the micro-filter.
- 3 Connect the provided ADSL cable to the **Modem** port of the micro-filter and then connect the other end of the cable to the **LINE** port of the Corecess 3114.
- 4-1 If you use the Ethernet adapter, connect the provided Ethernet cable to the **LAN** port of the Corecess 3114 and then connect the other end of the cable to **Ethernet** port on the NIC installed to your PC.
- 4-2 If you use the USB port, connect the provided USB cable to the **USB** port of the Corecess 3114 and then connect the other end of the cable to **USB** port on your PC.
- 5 Connect the provided power supply cable into the **DC IN** port of the Corecess 3114.
- 6 Connect the provided power cord to the power supply and connect the other end of the cord to an appropriate electrical outlet.
- 7 Turn on the Corecess 3114 with the power switch on the rear panel of the Corecess 3114.
- 8 Power on your PC.



Caution: You must power on the Corecess 3114 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 17-18 or restart your PC.

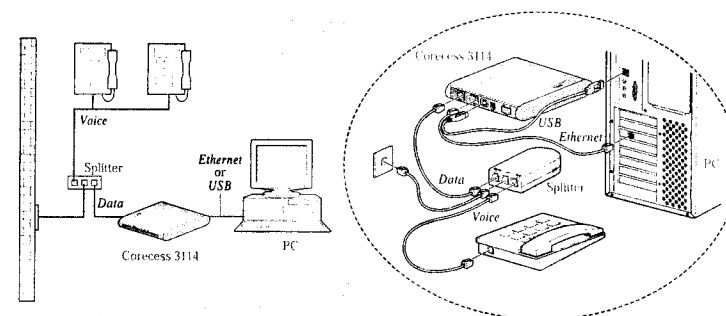
LED Operation

When you have powered up the Corecess 3114, check the status of the four LEDs on the front panel by the following table:

POWER		ON	DC power is being supplied to the Corecess 3114.
LINK	Green	ON	The system is connecting to ADSL network.
LAN		ON	The Corecess 3114 is connecting to your PC. (Using LAN port or USB port).
DATA		Blink	Data is being sent to or received from ADSL network.



Note: The following figure shows a configuration using a POTS splitter instead of micro-filters.



Installing the Driver (USB Only)

If you connect the Corecess 3114 to your PC using USB port, after connecting the cables to the Corecess 3114, install the software driver.

Windows 2000

1. Turn on the PC connected with the Corecess 3114.
2. Once the Corecess 3114 is connected to the PC, the Windows plug-and-play routine will detect the new device and show the <Found New Hardware Wizard>. Click **Next**. (Figure 1, 2)

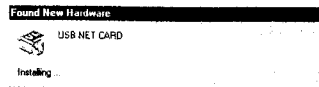


Figure 1

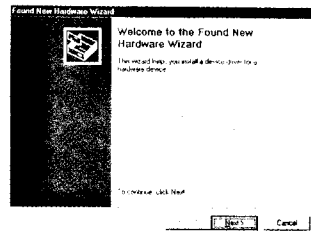


Figure 2

3. Two choices appear. Choose **Search for a suitable driver for my device (recommended)** and click **Next** to go to the next wizard panel. (Figure 3)

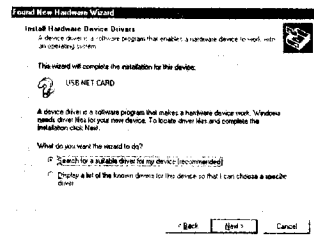


Figure 3

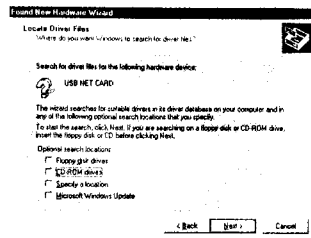


Figure 4

4. The wizard prompts you to specify a location to search for the driver you are installing. After inserting the installation driver CD into the CD-ROM drive, click **CD-ROM drives** and click **Next**. (Figure 4)

5. The wizard shows a verification panel and displays the choice you made (USB NET CARD). Click **Next** to start the installation of the drivers and connection to the ADSL modem over the USB. (Figure 5)

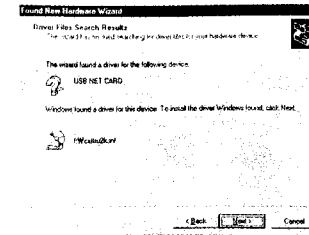


Figure 5



Figure 6

6. The system finds the driver and begins to automatically copy the driver files from the CD. (Figure 6)

7. When the driver installation is complete, click **Finish**. (Figure 7)

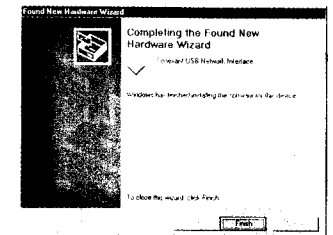


Figure 7

Windows XP

1. Turn on the PC connected with the Corecess 3114.
2. Once the Corecess 3114 is connected to the PC, the Windows plug-and-play routine will detect the new device and show the <Found New Hardware Wizard>. Choose **Install from a list or specific location (Advanced)** and click **Next** to go to the next wizard panel. (Figure 1)

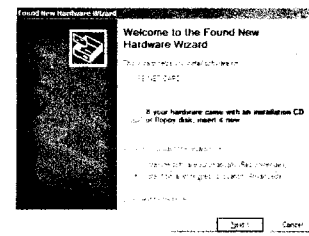


Figure 1

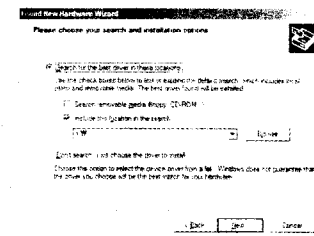


Figure 2

3. Two choices appear. Choose **Include this location in the search** and enter the CD-ROM drive letter. Insert the installation driver CD into the CD-ROM drive and click **Next**. (Figure 2)
4. If the path is correct, the system finds the driver and begins to automatically copy the driver files from the CD. (Figure 3)

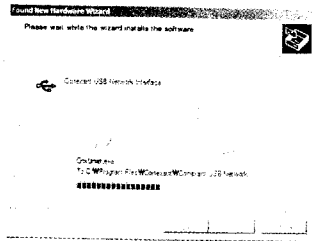


Figure 3

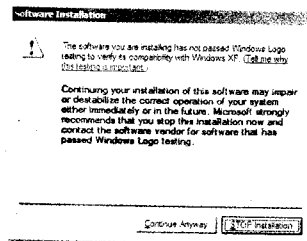


Figure 4

5. During the driver installation, the window for verifying the compatibility of the driver with XP may appear. Click **Continue Anyway**. (Figure 4)
6. When the driver installation is complete, click **Finish**. (Figure 5)

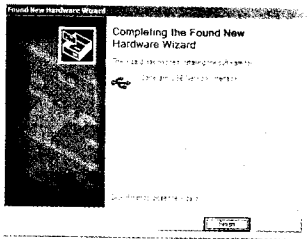


Figure 5

7. The <Found New Hardware Wizard> appears again to install USB Network Adapter. Choose **Install from a list or specific location (Advanced)** and click **Next** to go to the next wizard panel. (Figure 6)

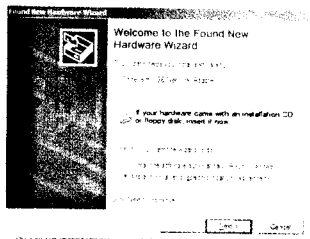


Figure 6

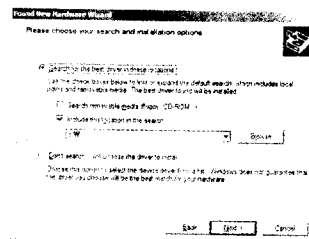


Figure 7

8. Two choices appear. Choose **Include this location in the search**, enter the CD-ROM drive letter and click **Next**. (Figure 7)
9. The system finds the driver and begins to automatically copy the driver files from the CD. (Figure 8)

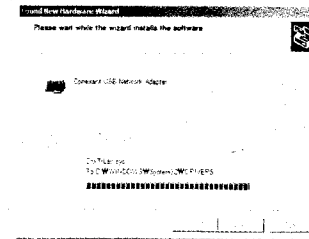


Figure 8

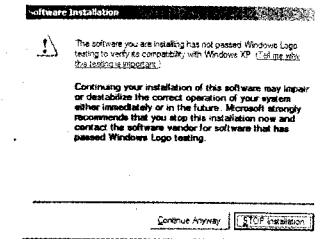


Figure 9

10. During the driver installation, the window for verifying the compatibility of the driver with XP may appear. Click **Continue Anyway**. (Figure 9)
11. When the driver installation is complete, click **Finish**. (Figure 10)

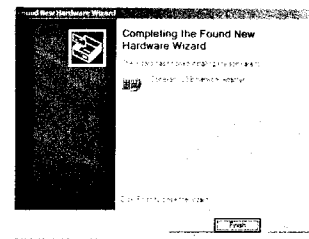


Figure 10

Configuring the TCP/IP

After you install the Corecess 3114 and the software driver, next is to configure the TCP/IP network protocol.



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

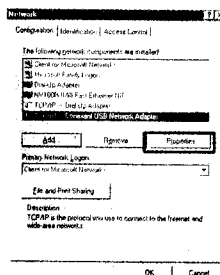


Figure 2

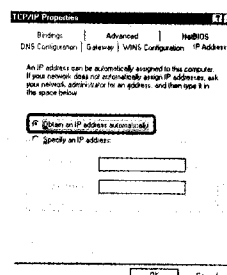


Figure 3

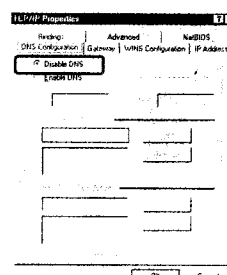


Figure 4

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**.

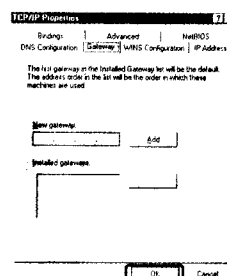


Figure 5

Windows 2000/NT

1. Click the **Start** button and select **Settings → Network and Dial-up Connections**. (Figure 1)
2. Right-click the **Local Area Connection** icon at the <Network and Dial-up Connections> windows and select **Properties** menu. (Figure 2)
3. At the <Local Area Connection Properties> dialog box, select the **Internet Protocol (TCP/IP)** in the 'Components checked 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)

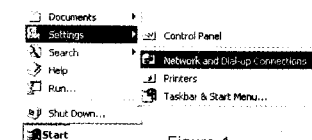


Figure 1

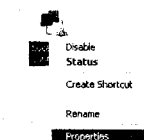


Figure 2

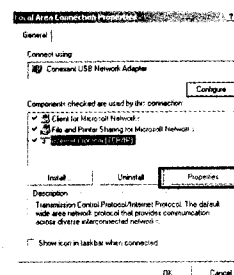


Figure 3

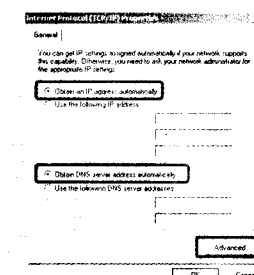


Figure 4

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)

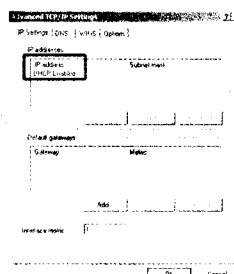


Figure 5

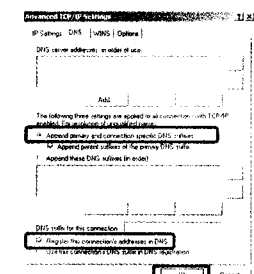


Figure 6

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

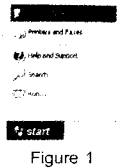


Figure 1

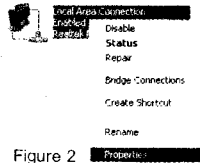


Figure 2

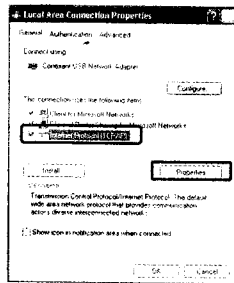


Figure 3

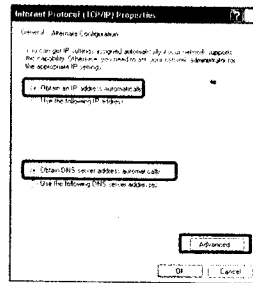


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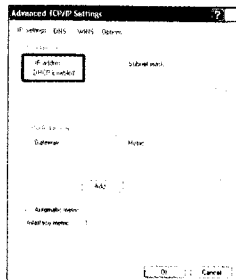


Figure 5

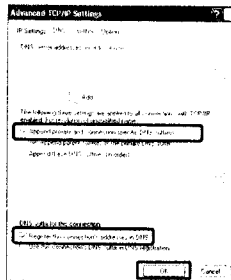


Figure 6

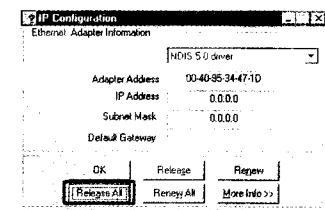
Troubleshooting

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

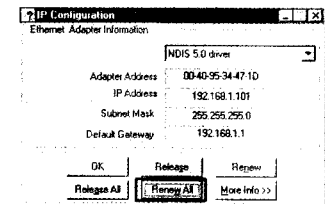
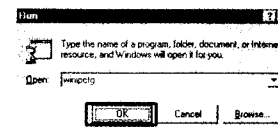
1. **Check the LAN LED**
If the LAN LED goes off, ensure that the Ethernet cable is firmly connected both to the LAN port on the Corecess 3114 and Ethernet port on the NIC installed to your PC or the USB cable is firmly connected both to the USB port on the Corecess 3114 and the USB port on your PC.
2. **Check the LINK LED**
If the LINK LED blinks continuously and never stays solid on, ensure that the ADSL cable is firmly connected to the LINE port on the Corecess 3114. If the LINK LED still blinks, contact your ADSL service provider. If the LINK LED goes off, turn off the power of the Corecess 3114 by pressing the power switch and turn on the power again. If LINK 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

1. Click the **Start** button and select **Run**.
2. Select Ethernet adapter connected with the Corecess 3114 and click **Release All**.



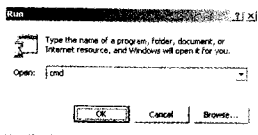
3. Input **wincpfg** and press the **[Enter]** key.
4. Click **Renew All**.



- 1 Click the **Start** button and select **Run**.



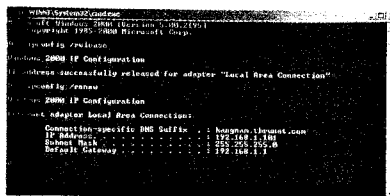
- 2 Input **cmd** and press the [Enter] key.



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



- 4 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 3114 turns on and then restart your PC.

Technical Specifications

Standard	ADSL Standard
	• T1.413i2 ADSL Standard • ITU-T G.992.1(G.dmt) ADSL Standard • ITU-T G.992.2(G.lite) ADSL Standard
Interface	IEEE Standard
	• IEEE 802.3 10Base-T • IEEE 802.3u 100Base-TX
ADSL Protocol	Ethernet
	• 10/100Base-TX • Connector: RJ-45, USB
Connector	ADSL Line
	• Line Code: DMT (Discrete Multi-Tone) • Downstream: Max 8Mbps • Upstream: Max 1Mbps • Connector: RJ-11
LED	• PPP over ATM VCMUX (RFC 2364) • PPP over ATM LLC SNAP (RFC 2364) • Bridged IP over ATM LLC SNAP (RFC 1483) • Routed IP over ATM LLC SNAP (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 LLC SNAP (RFC 2516)
Environmental Conditions	• 1 RJ-11 connector (LINE) • 1 RJ-45 connector (LAN) • 1 Power socket (DC IN)
	• POWER: Indicates DC power status • LINK: Indicates connection status with ADSL network • LAN: Indicates connection status with PC • DATA : Indicates data transmit/receive status via ADSL network
Physical Conditions	• Temperature: 0°C ~ 50°C • Humidity: 5% ~ 90%
	• Dimension: 140(W) x 150(D) x 30(H) mm • Weight: 250g
Power Requirements	• Input: 100-240VAC, 50-60Hz, DC 9V/1A • Power consumption: Max. 4 Watt