

# 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.

|     | VPI/VCI              | Provided by ISP        | Provided by ISP                           | Provided by ISP        | Provided by ISP                           |
|-----|----------------------|------------------------|---|------------------------|---|
| WAN | Static IP<br>Address | N/A                    | N/A<br>(Automatically<br>Assigned by ISP) | Provided by ISP        | N/A<br>(Automatically<br>Assigned by ISP) |
|     | Subnet Mask          | N/A                    | N/A<br>(Automatically<br>Assigned by ISP) | Provided by ISP        | N/A<br>(Automatically<br>Assigned by ISP) |
|     | Default<br>Gateway   | N/A                    | N/A<br>(Automatically<br>Assigned by ISP) | Provided by ISP        | N/A<br>(Automatically<br>Assigned by ISP) |
|     | Encapsulation        | 1483 Bridged IP<br>LLC | PPPoA VC-Mux/<br>PPPoE LLC                | 1483 Bridged IP<br>LLC | 1483 Bridged IP<br>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)

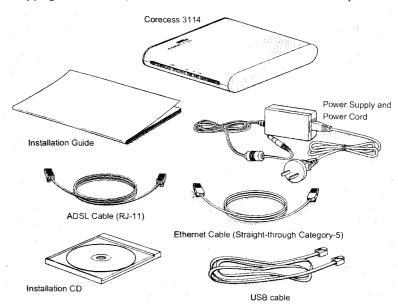
| -   |             |     | <del>adjula addina addina</del>           | Anti-reservation was a common or | Quidant and the second of the            |
|-----|-------------|-----|---|----------------------------------|--|
| LAN | IP Address  | N/A | 10.0.0.2 (Default)                        | 10.0.0.2 (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<br>(Automatically<br>Assigned by ISP) | Provided by ISP                  | N/A<br>(Automatically<br>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 haredware:

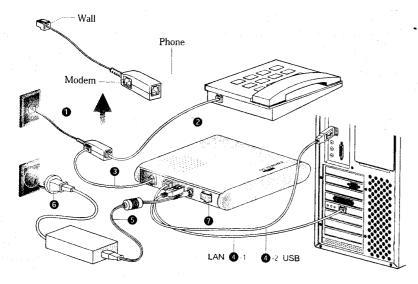
- Micro-filter or splitter (provided separately by your service provider)
- PC with Ethernet port or adapter (optional)



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.



- Unplug the telephone line from the wall receptacle and plug the line end of the micro-filter to the wall receptacle.
- Connect the telephone cable that was unplugged from step 1 to the Phone port of the micro-filter.
- 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.
- 9-1 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.
- **10**-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.
- 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.
- Turn on the Corecess 3114 with the power switch on the rear panel of the Corecess 3114.
- 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.

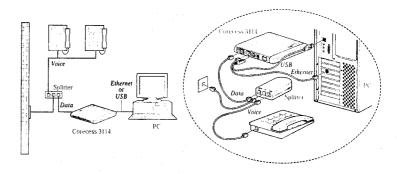
### **LED Operation**

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

| in the second | indicated). |       | 1.<br>2. 19 - 1981 - 1981 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 - 1982 |
|---------------|-------------|-------|--|
| POWER         | Green       | ON    | DC power is being supplied to the Corecess 3114.   |
| LINK          |             | 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)

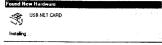






Figure 2

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 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)



Carcel

Figure 6

Figure 5

- 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)



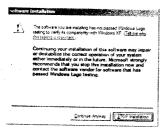


Figure 3

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

 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



**8**. Two choices appear. Choose Include this location in the search, enter the CD-ROM drive letter and click Next. (Figure 7)

The system finds the driver and begins to automatically copy the driver files from the CD. (Figure 8)



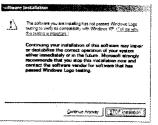


Figure 8

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

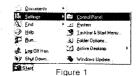
After you install the Corecess 3114 and the software driver, next is to configure the TCP/IP network protocol.



Caution: When you configure the TCP/IP, leave the default value of any other configuration tat 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.
- 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

- 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.

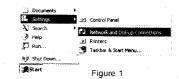


Figure 4

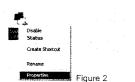
Cir. Cancel

### Windows 2000/NT

1. Click the Start button and select Settings → Network and Dialup Connections. (Figure 1)

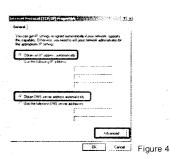


2. Right-click the Local Area Connection icon at the < Network and Dial-up Connections> windows and select Properties menu. (Figure 2)



- 3. At the <Local Area Connection Properties > dialog box, select the Internet Protocol (TCP/IP) in the 'Components 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)





- 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)

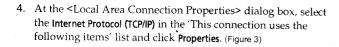


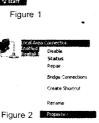


Corecess 3114 Installation Guide

#### Windows XP

- 1. Click the Start button and select Settings menu. (Figure 1)
- 2. Double-click the Network icon at the <Control Panel> window. Figu
- Right-click the Local Area Connection icon at the <Network Connections> windows and select Properties menu. (Figure 2)





 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)

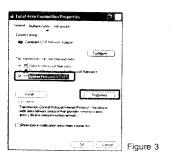
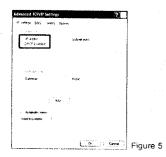
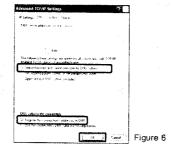




Figure 4

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

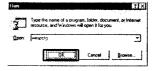
If all LEDs operate normally and cables are firmly connected to the ports, ensure that your PC's IP address is properly assigned. Otherwise, assign a new IP address according to your operating system.

### Windows 95/98/ME

• Click the Start button and select Run.



2 Input winipcfg and press the [Enter] key.



 Select Ethernet adapter connected with the Corecess 3114 and click Release All.



Click Renew All.



### Windows 2000/NT/XP

• Click the Start button and select Run.



2 Input cmd and press the [Enter] key.



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



• 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

| -                        | ADSL Standard  |  |  |  |
|--------------------------|--|--|--|--|
| Standard                 | T1.413i2 ADSL Standard ITU-T G.992.1(G.dmt) ADSL Standard ITU-T G.992.2(G.lite) ADSL Standard  |  |  |  |
|                          | IEEE Standard  |  |  |  |
|                          | • IEEE 802.3 10Base-T<br>• IEEE 802.3u 100Base-TX  |  |  |  |
|                          | Ethernet   |  |  |  |
|                          | • 10/100Base-TX<br>• Connector: RJ-45, USB   |  |  |  |
| Interface                | ADSL Line  |  |  |  |
|                          | Line Code: DMT (Discrete Multi-Tone)     Downstream: Max 8Mbps     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 connector (LINE) • 1 RJ-45 connector (LAN) • 1 Power socket (DC IN)  |  |  |  |
| LED                      | 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  |  |  |  |
| Environmental Conditions | • Temperature: 0°C ~ 50°C<br>• Humidity: 5% ~ 90%  |  |  |  |
| Physical Conditions      | • Dimension: 140(W) x 150(D) x 30(H) mm<br>• Weight: 250g  |  |  |  |
| Power Requirements       | • Input: 100-240VAC, 50-60Hz, DC 9V/1A<br>• Power consumption: Max. 4 Watt   |  |  |  |