

Ethernet

Adapter

Your flexible connection

to the world

Mitron Computer, Inc.

LX-2100v SERIES

User Guide

32-bit VESA Local Bus Ethernet Adapter

FCC Certification

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Mitron Computer, Inc
2220 S.Bascom Avenue
Campbell, CA 95008

Sales :
Orders : (800) 713-6888
Fax : (408) 371-8167

Tech Support :
Voice : (408) 371-8166
BBS : (408) 371-9786

1. Hardware Features

LX-2100v Series Ethernet Adapter has the following hardware features:

- VESA VL-Bus Specification
- High Performance with peak transfer rate of 132 MByte/sec at 33 MHz
- 32-bit Bus Master
- Microwire EEPROM interface supports Jumperless design
- RJ-45 port for Unshield Twisted Pair cable (10Base-T)
- BNC port for Thin Ethernet Coaxial cable (10Base-2)
- Conforms to ISO 8802-3 (ANSI/IEEE 802.3) Standard
- 10 Mbps transmission rate using CSMA/CD method
- Support IRQ 3, 5, 10, 15
- I/O base address : 200h-3FFh (per 20h offset)
- Status LEDs
 - Green LED : Twisted Pair network linking status.
 - Yellow LED : Network traffic data status.

2. Software Features

LX-2100v drivers support the following network operating systems :

- Novell Network 3.1x, Netware 4.x, DOS ODI, OS/2 ODI.
- Microsoft LAN Manager & Windows for Workgroups 3.1 and 3.11.
- Microsoft Network Device Interface Specification (NDIS 2.0.1) compatible networks, including DEC Pathworks, Banyan VINES, IBM LAN Server and Sun PC-NFS.
- Microsoft Windows NT (NDIS 3.0).
- UNIX STREAMS for SCO UNIX.
- Artisoft LANtastic/AI 4.x and 5.x.
- Packet Driver.

3. Package Contents

The LX-2100v package comes with the following items :

- LX-2100v Adapter
- T-connector
- LX-2100 Driver Diskette
- User Guide (this manual)

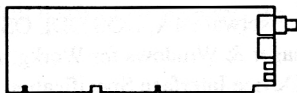
4. Default Setting

The default setting for the LX-2100v series are as follows :

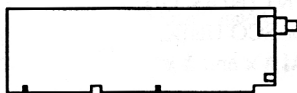
I/O Base Address : 300H

Interrupt (IRQ) : IRQ 3

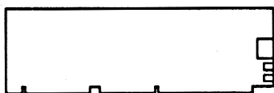
To modify the I/O Address and IRQ setting, please refer to Section 7. PCnet Configuration & Installation Utility.



LX-2100v/T2 adapter



LX-2100v/2 adapter



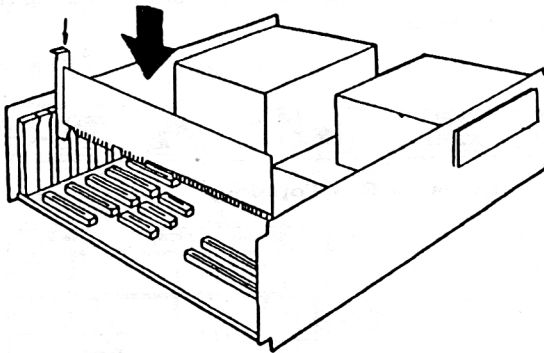
LX-2100v/T adapter

5. Hardware Installation

5.1 Inserting the Adapter

The steps to install the LX-2100v adapter into the VL-Bus system are as follows:

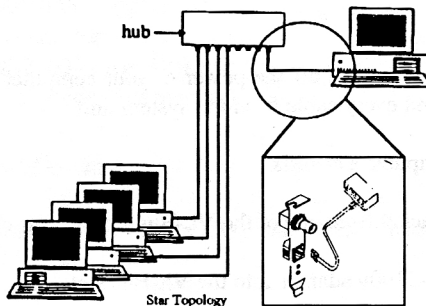
1. For safety reason, turn off the power of your computer. Unplug its AC power cord and every cable from the system unit.
2. Open the computer's chassis.
3. Remove a bracket from one of the VL-Bus slot of your choice.
4. Insert the LX-2100v adapter into the VL-Bus slot.
5. Ensure that the card is seated properly on the slot.
6. Tighten the adapter with a screw.
7. Close up the computer's cover and plug back all the cables.
8. The hardware installation is completed now.



Inserting LX-2100v adapter into a PC

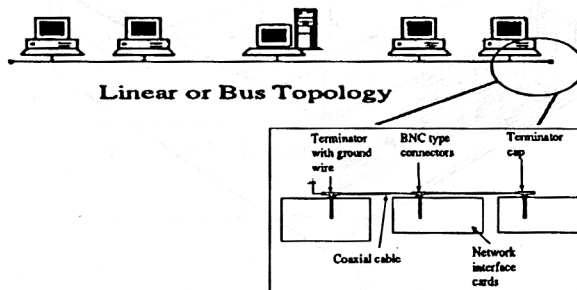
5.2 10BASE-T connection

The LX-2100v/T and LX-2100v/T2 adapters have a RJ-45 connector, which use Unshield Twisted Pair (UTP) cable. The maximum length from the computer to the hub is 100 meters or 328 feet.



5.3 10BASE-2 connection

The BNC connector on the LX-2100v/2 and LX-2100v/T2 adapters use thin Coaxial cable. At both end of the Bus topology network, 50-ohm BNC terminators must be used to terminate the trunk segment, with one of the terminator grounded. The maximum length of a thin coaxial cable segment is 185 meters or 606 feet.



6. Software Drivers

LX-2100 Driver Diskette consists of drivers for various network operation system. For driver installation, please always refer to the specific network installation guide first.

7. PCnet Configuration & Installation Utility

Included with the LX-2100 Driver Diskette is PCnet Configuration and Installation Utility (AMINSTAL.EXE). It serves as a quick way to configure the LX-2100v adapter and installing one device driver.

The Utility consists of two sections :

The Configuration section.

The Utility will automatically scan the system buses to find the resident LX-2100 device. The Utility will identify the LX-2100v Ethernet Adapter as PCnet-32. It allows the user to view and modify the I/O address and IRQ channel of the LX-2100v Ethernet Adapter,

The Installation section.

The Utility will either install or provide instructions to install the selected device driver. When the Utility install the device driver, it will also create or modify the CONFIG.SYS, AUTOEXEC.BAT and PROTOCOL.INI or NET.CFG files for proper operation.

Use the following Key to navigate through the Utility program.

Key	Function
ESC	Exit the configuration
F1	HELP
Tab	Move the cursor to the next position
Left/Right Arrows	Move the cursor
ENTER	Select (Highlight)
Space Bar	Select (Highlight)
<Alt> + C	Continue to configure
<Alt> + N	Go to next screen
<Alt> + P	Go to previous screen
<Alt> + E	Exit the Utility
<Alt> + R	Reboot the system

8. Driver Installation Guideline

1. The Installation section of the Pcnnet Configuration & Installation Utility may NOT properly install the driver as required, you always need to refer to the specific network installation guide.
2. The drivers on the LX-2100 Driver Diskette have been structured for automatic OEM installation for some of the network operating system. In other words, the directory structures have been setup on the diskette to correspond with the path that network operation system searches for during the installation process. Please refer to the OEM's user manuals for specific instructions to load additional drivers from an external floppy diskette. If an environment of your interest is not supported, you need to refer back to the specific network installation guide.