

# **DB120 4-Port Ethernet ADSL MODEM**

## **USER MANUAL**

(V1.0)

## ABOUT ADSL

ADSL MODEM is a broadband Internet access device, which utilizes the high frequency segment of the phone line to transmit high-speed data without interfering with the voice transmission. The frequency of ADSL signal is higher than that of voice, so voice and ADSL signal can coexist in one line by using a splitter to insulate each from the other. ADSL data transfer on the asymmetry way. The upload speed is up to 1Mbps and download speed is up to 8 Mbps. It is an ideal device for broadband access.

The 4-port DB120 is a powerful Ethernet ADSL MODEM. It supports PnP and direct access to Internet with no need to configure. It is easy to install and use. With 4-port switch function, the DB120 just likes to integrate a HUB device, so it can provide flexible networking solutions and shared connections for many users. The DB120 can be smoothly updated to support ADSL2/2+. However, it has powerful software performance such as: remote update and management, multicast functions, DHCP server and routing capabilities etc. In a word, the DB120 is adaptive to small LAN's connection to Internet.

## FEATURES and SPECIFICATION

### FEATURES

- Support Plug & Play, no need to configure
- Pure bridge mode, Supports up to 12 PVCs
- Maximum upstream transmission rates of 1Mbps.
- Maximum downstream transmission rates of 24Mbps.
- Transmission distance up to 5.5km.
- 4 ethernet ports
- Multicast functions
- Support remote update and management
- DHCP server, NAT, and DMZ

### TECHNOLOGY PARAMETERS

#### ADSL Standards

- ANSI T1.413 Issue2
- ITU-T G.992.1 (G.DMT)
- ITU-T G.992 .3(ADSL2)
- ITU-T G.992 .5(ADSL2plus)

#### Protocols

Support encapsulation protocols, include:

- RFC2516 PPPoE LLC SNAP / VC MUX
- RFC2364 PPPoA LLC SNAP / VC MUX

- RFC1483 1483 bridged/routed LLC SNAP / VCMUX
- RFC1577 Classical IP over ATM

### **Exterior Interface**

- 4-Port Ethernet Interface (RJ45)
- Line Interface (RJ-11)
- Power Interface (DC 12V)

### **Environment Requirements**

- Working Temperature: 0° - 40°
- Storing Temperature: -40° - 65°
- Operating Humidity: 30% - 90%
- Non-operating Humidity: 0% - 95% (40° )

### **FCC Interference Statement**

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 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.

**FCC Caution:** To assure continued compliance, (example – use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## DEVICE INTRODUCTION

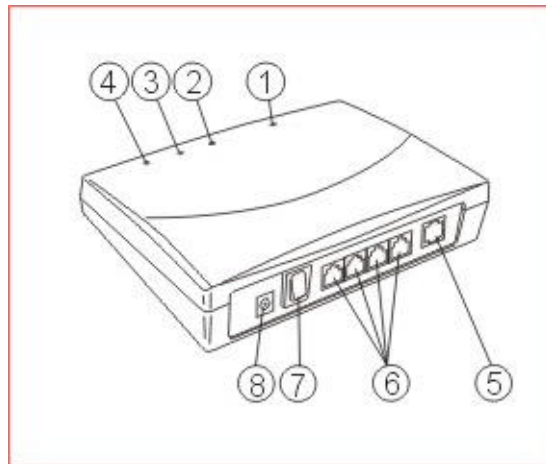


Figure 1

.POWER Indicator    .LINK Indicator    .DATA Indicator    .PC Indicator    .LINE Port  
4-ETHERNET Port    .Power Switch    .Power Jack

### Interface Introduction:

? POWER Indicator (red):

A steady red light means the power connection works properly.

? LINK Indicator (Tri-color):

Shows DSL line status.

Red led flashing means the DSL line is in handshaking state.

Red fast flashing means the DSL line is in training state.

Red led steady light means the modem is in good connection by common rate (ITU-T G.992.1).

Yellow led steady light means the modem is in good connection by high rate (ITU-T G.992.5).

And after modem showtime, when line port has data transmission, the tri-color led will flash.

? DATA Indicator (green):

Flashing means the Modem has obtain PPPOE IP address and valid IP packed transferred.

? PC Indicator (green):

Indicates status of connection to the PC network card. Steady light means connection is good.

Flashing means data transmitted.

? LINE Port: To be connected to a telephone.

? 4-ETHERNET Port:

To be connected to a PC or a HUB by a CAT 5 twisted parallel cable. A straight-through network cable should be used when it is connected to a PC network card and a crossover cable should be used for UP LINK interface of HUB.

? Power Switch: To turn on or off the power.

? Power Jack: 12V DC, 700mA. 

## CONNECTION and USING

### SYSTEM REQUIREMENT

- A computer with a network card with Ethernet interface.

### HARDWARE CONNECTION

This device is no need to configure and you can follow the steps below to finish the hardware connection:

1. Connect Ethernet port of the ADSL MODEM to 10/100BASE-T port of the computer using the network cable that comes with the modem.
2. Use a telephone cord to connect the LINE port of the splitter and the RJ-11 port (the phone jack) on the wall.
3. Use another telephone cord to connect the ADSL port of the splitter and the LINE port of the ADSL Modem.
4. Use another telephone cord to connect the telephone set and the PHONE port of the splitter.
5. Plug in the power cord, and turn on the Power Switch.

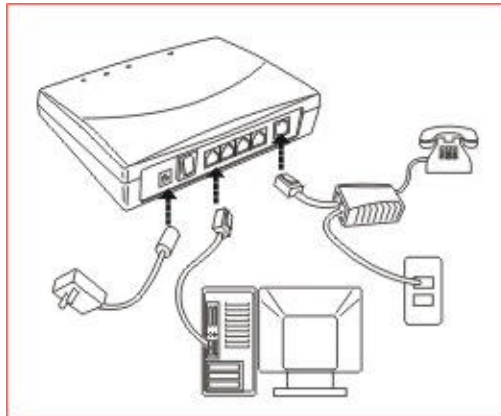


Figure 2

If you do not want go online and make phone calls simultaneously, please just use a telephone cord to connect the LINE port of the ADSL Modem and the RJ-11 port (the phone jack) on the wall. In this case, the splitter is not necessary.

## TROUBLESHOOTING

Phenomena	Solution
The indicator of power supply is not on	<ol style="list-style-type: none"> <li>1. Make sure the switch of power supply is turned on.</li> <li>2. Make sure the connection of power supply is good.</li> <li>3. Make sure the output of power supply is correct.</li> </ol>
The indicator of LINK is not fast flashing	<ol style="list-style-type: none"> <li>1. Make sure the connection of telephone cord is current.</li> </ol>
The indicator of PC is not on	<ol style="list-style-type: none"> <li>1. Check the connection between the cable and the network card.</li> <li>2. Make sure that the correct cable is used.</li> </ol>
Can not access Internet or remote networks	<ol style="list-style-type: none"> <li>1. Make sure the problems listed above are eliminated.</li> <li>2. Try to reboot the ADSL MODEM.</li> </ol>



*Notes: Please contacting the product provider or the agent, if have any problems.*

## SHIPPING LIST

Make sure the following items are included in the box. If any one of them is missing, please contact the vendor immediately.

ADSL MODEM	×1
User Manual	×1
Telephone Line (RJ-11)	×2
Power Adapter	×1
Cable Cat5 RJ45	×1
Splitter	×1

*Notes: Please use the factory recommended power supply.*