



ALWAYS AHEAD

Internet Usage Start-up

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Internet Usage Start-up

Introduced you to the basic of broadband Internet as following information;

- 1. Introduction to ADSL**
- 2. ADSL Router**
- 3. ADSL Router Used with KSC Internet Service**



Introduction to ADSL

What is ADSL?



ADSL standing for Asymmetric Digital Subscriber Line is the data communications technology that enables faster data transmission over copper telephone lines.

By utilizing frequencies that are not used by a voice call, The **ADSL** allows a single telephone connection to be used for both **ADSL** service and voice calls at the same time.

The upstream and downstream bands of the **ADSL** are not the same. The maximum downstream that the technology is capable of is 8 Mbps, while upstream is 1 Mbps.

Normally **ADSL** upload/download speed are displayed as a pair of numbers, for example 256/128 Kbps, 512/256 Kbps. The first digit is upload speed while the latter is download speed.

Advantages of ADSL Internet



- **Simultaneous Data and Voice Transmission** - ADSL service, can provide both voice and data over the same copper telephone line at the same time.
- **140 times Faster Speeds.** - ADSL maximum speed is 8 Mbps, 140 times faster than Dial-Up.
- **Uninterrupted Connection.** (ADSL provides continuously - available, "always on" connection.)
- **No "Line Busy" problem.**
- **No need for logging on and off.**
- **Cheaper Costs** – There are no dialing cost when connecting the Internet.
- **Manageable Internet cost** – with a fixed monthly fee.
- **Unlimited Usage Hours.**
- **Secured and Reliable** - ADSL is sent from telephone node directly to your home.



A telephone line with and ADSL signal.



A computer with a Supported Operating Systems;
Window 98, 2000, ME, XP, MAC OS or Linux
with an Interface USB or LAN, depending on your devices.



ADSL compatible router or modem.



POTs Splitter- a device that helps you connect Internet while
making a phone call. Normally splitter is together with a router
and modem.



Username and Password for ADSL.



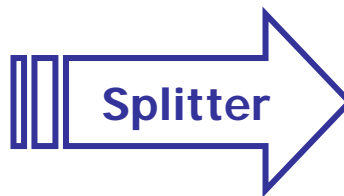
Required configuration such as VPI/VCI and Encapsulation.

What is Splitter?

What is Splitter/Micro Filter/Ports Splitter ?



A splitter is an electronic device, comprising a Low Pass Filter. It separates the voice signals from the data signal (DSL) in a telephone line.



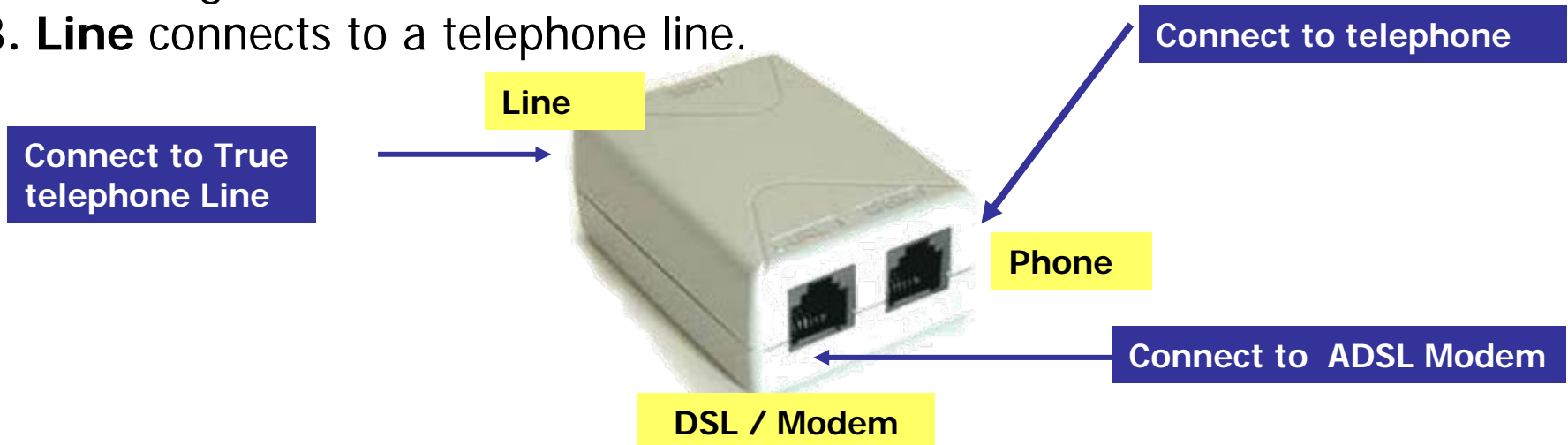
What is Splitter?

Dual-Line Filter



Dual Line Filter is a signal filtering device with 3 sockets;

1. **Phone** connects to a telephone. It filters noise or ADSL signal interfering telephone signal.
2. **DSL or Modem** connects to an ADSL modem. It filters noise interfering ADSL signal.
3. **Line** connects to a telephone line.



ADSL Router

What is ADSL Router?



ADSL Router

ADSL router is a high-speed Internet connecting device for connecting to the Internet and sharing within the organization.

An **ADSL Router** usually consists of at least 1 LAN port, to connect to Hub or Switch or computer with a LAN line. The computer also requires LAN port.

Some models of **ADSL Router** are designed to support both LAN and USB to make it compatible with various types of computers.

ADSL Router is easy for users to instantly connect to the Internet as their usernames and password are already set in the device.

These advantages make an **ADSL router** more expensive than a normal modem.



What is ADSL Wireless Router



ADSL Wireless Router

ADSL Wireless Router is an ADSL Router that supports Wireless Internet Connection.

Computers are required to be able to connect wirelessly which the wireless LAN adapter should be built in.

How to install ADSL Router?

Requirement

1. ADSL Router
2. Splitter
3. Telephone line
4. LAN line (Twisted Pairs – RJ-45)
5. Adapter



1



2



3

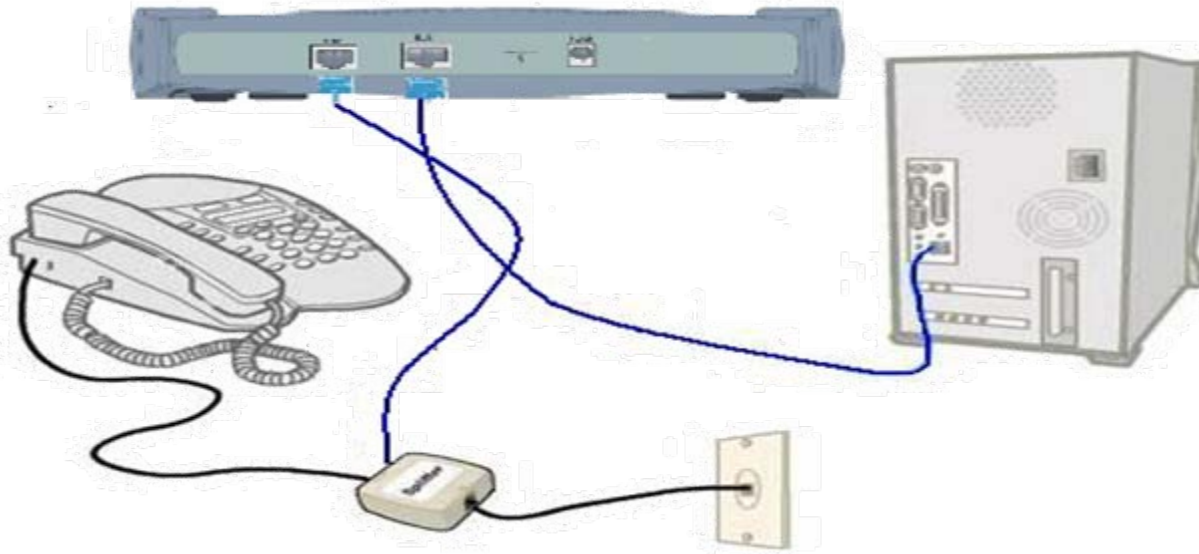


4



5

ADSL Router Installation



Connect by using a Splitter

1. Connect ADSL line from KSC to the splitter's line port.
2. Connect LAN (RJ45) to LAN port of the router. Connect another end to computer's LAN port.
3. Connect the telephone line (RJ11) to a router's ADSL port. Connect another end to the Splitter's DSL/Modem port.
4. Connect telephone line to the splitter's phone port.



ADSL Router Used with KSC Internet Service

ADSL Router Used with KSC Service



1. Zyxel 660R



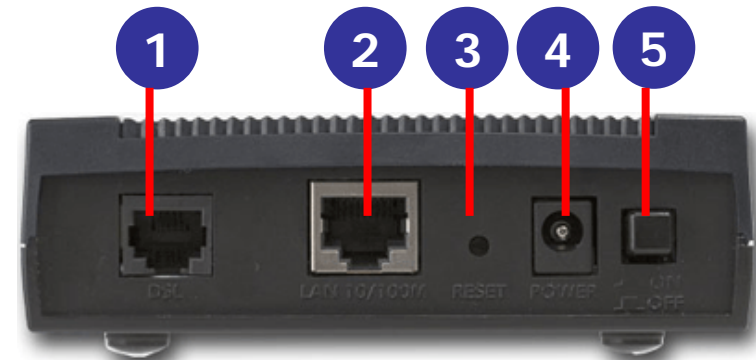
2. Zyxel 660HW-T1



1. Zyxel 660R



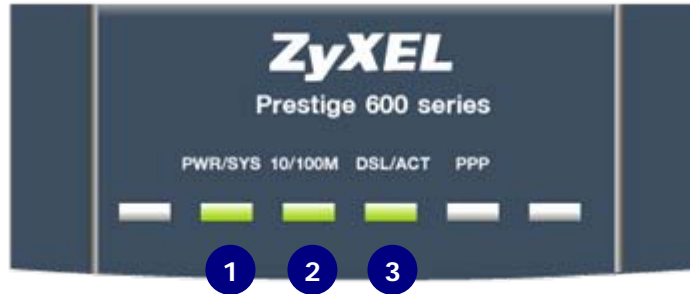
FRONT



BACK

- No. 1 ADSL :** To connect ADSL Router to the telephone line.
- No. 2 LAN :** To connect LAN Line to computer, for Internet configuration.
- No. 3 Reset :** To restore settings to default setting.
- No. 4 PWR :** To connect ADSL Router to the power supply, required to plug-in the power adapter.
- No. 5 ON/OFF :** To switch the ADSL Router on and off.

1. Zyxel 660R



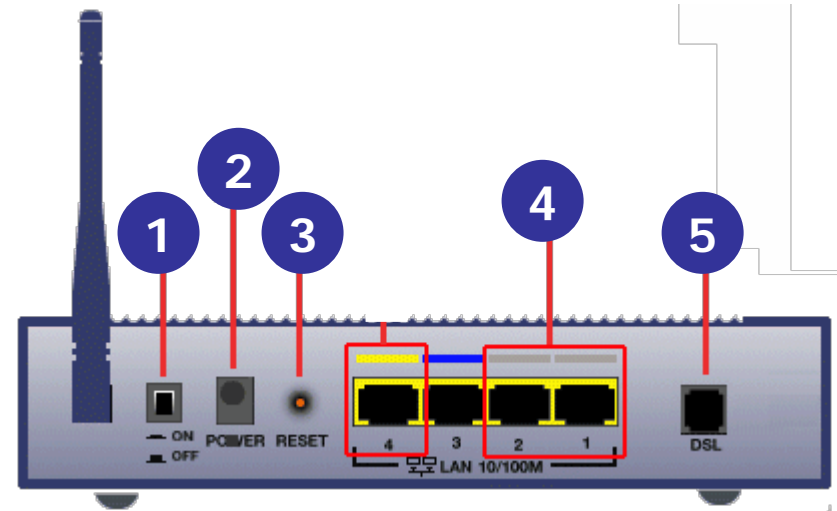
Light indicating status

Status	meanings	Normal Status	errors
1. PWR/SYS	device status on/off	Steady green light	No green light
			Steady red light, low power supply the device
2. LAN	LAN status	Steady green light = Internet connecting at speed 10 Mbps (flashing light when data is transferring)	No light
		Steady orange light = Internet connecting at speed 100 Mbps (flashing light when data is transferring)	No light
4. DSL	ADSL status	Steady green light, connect to Internet (flashing light when data is transferring)	No light or Flashing light

2. Zyxel 660HW-T1



FRONT



BACK

- No. 1 ON/OFF :** To switch the wireless ADSL Router on and off
- No. 2 Power :** To connect ADSL Router to the power supply, required to plug-in the power adapter.
- No. 3 Reset :** To restore settings to default setting.
- No. 4 LAN :** To connect LAN Line to computer, for Internet configuration.
- No. 5 DSL :** To connect ADSL Router to the telephone line.

2. Zyxel 660HW-T1



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3. WLAN	Wireless status	Steady green light	No light
4. DSL	ADSL status	Steady green light when connected	Flashing green light
5. Internet	Wireless Router connection status	Steady green light	No light

ALWAYS THANKS



ALWAYS AHEAD

