

Palm-Top 5/8-Port Ethernet Hub

EH-501

EH-801

Version 2.0

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FCC Warning

This device 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 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.

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CHAPTER 1 UNPACKING INFORMATION

Thank you for purchase PLANET EH-501/EH-801 5/8-port Ethernet Palm-Top Hub. Before your installation, please read the following for more detail about your installation.

EH-501/EH-801 is shipped in a box that contains the following accessories. Please contact with your authorized dealer if any thing is missed.

- ◆ One EH-501/EH-801 Hub
- ◆ This User's Manual
- ◆ AC Adapter (7.5VDC)
- ◆ Screws (for wall mounting)

CHAPTER 2 GENERAL DESCRIPTION

The EH-501/EH-801 hub is a standard Ethernet concentrator that re-times and re-transmits the signal to each network station on the LAN. Each Hub has six/nine modular RJ-45 STP ports for attaching network devices (file server, bridge, and workstations) or additional concentrators.

The Cover Panel of EH-501/EH-801

On the cover panel of this Hub, there are Power, Collision LED(EH-501) and ports' Active LED indicators. For each RJ-45 STP port, there are one LED indicators - LINK and Receiving LED. These LEDs help in diagnosing line troubles and indicate the status of data transmission.

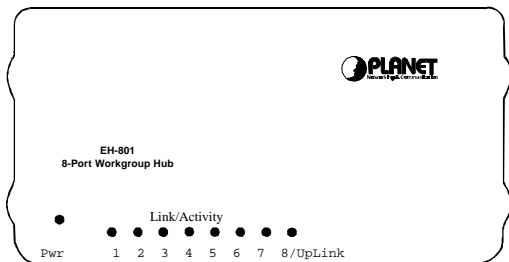


Figure 2-1 Cover panel of EH-801

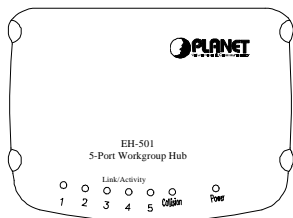


Figure 2-2 Cover Panel of EH-501

The cover panel LEDs indicating the status as below:

LEDs	Status	Description
Power	Steady Green	Indicate Power ON ok
Collision	Blink Red	Indicate collision detected in any port
Link/Activity	Steady/Blink Green	Lit as UTP port connected Blinks as data receiving

The Rear Panel of EH-501/EH-801

As shown in Figure 2-2:

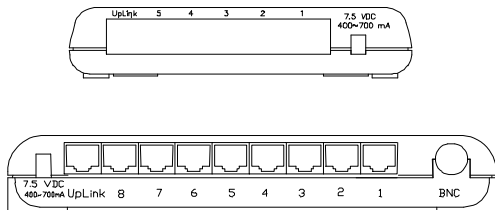


Figure 2-2 Rear Panel of EH-501/EH-801

5/8 RJ-45 STP ports to connect with PC node, one RJ-45 STP port for easy hub-to-hub connection, one BNC Port (EH-801) and one power port.

Product Characteristics

Each workstation connects to the EH-501/EH-801 hub in a star configuration, which means each workstation connects only to the central concentrator.

To attach a workstation to the concentrator, you can use your own STP/UTP cable or the existing STP/UTP cable installed in the building that is wired through the telephone punch-down block to wire directly from the workstation to the EH-501/EH-801 Hub.

The network cable that runs from the EH-501/EH-801 Hub to the network station is called a cable segment. The maximum number of cable segments between any two stations is Five (5 segments) . The maximum distance for a cable segment is 328 feet (100 meters).

The IEEE 802.3 standard-compliant EH-501/EH-801 Hub supports both 10Base-2 (EH-801) and 10Base-T Ethernet environments. The following table compares the two:

IEEE 802.3		
Type	10BASE-2	10BASE-T
Topology	Bus	Star

Maximum nodes per cable segment	30	1
Cable types	RG-58, RG-58/A, RG-58/U, RG-58A/U	Shielded/ Unshielded Twisted- Pairs, AWG 22, 24, 26
Maximum length of a cable segment	606 feet (185 m)	328 feet (100 m)
Maximum repeater sets	4	

CHAPTER 3 INSTALLATION

Getting Ready to Install the EH-501/EH-801

Before installing the EH-501/EH-801 Hub, you should determine the installation location.

- ◆ Make sure that the cable distance between the concentrator and the host device is not longer than 328 feet (10Base-T), or 606 feet(10Base-2) including all connection cables.
- ◆ Check if you are using a external AC power adapter, 7.5 V DC output, 400~700mA required.

Warning:

Please make sure you are using a power adapter of the right type; otherwise, the warranty will be invalidated.

- ◆ Make sure there is enough room to service the Hub and to make cable connections to the rear panel.
- ◆ Avoid direct sunlight, heat vents and warm air exhaust from other equipment.

Installing the Hub

You can place the Hub on a desk or mount it on the wall.

The wall-mounting design provides space-saving and flexibility in cable routing and expansion. Fix the two screws on the wall,

as Figure 3-1. Hook up the two front rubber pads on the Hub bottom to the crews.

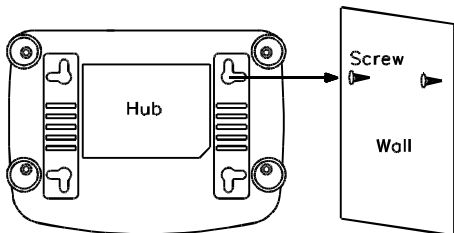


Figure 3-1 Mounting the hub on the wall

Follow the steps below to attach the power adapter to the Hub:

1. Insert the jack end of the power adapter into the power port of EH-501/EH-801.
2. Insert the plug end of the power adapter into a grounded power outlet.

Now, the Power LED indicator on the cover panel of the Hub should be lit. If this LED is still off, check the cable connection, or refer to Chapter 4, "Troubleshooting".

If you want to power off the Hub, unplug the power adapter from the grounded power outlet.

Linking Ethernet Nodes to the Hub

You can connect a workstation or file server to the EH-501/EH-801 through the STP port.

1. Insert one end of the STP/UTP cable to any STP port of the Hub.

2. Insert the other end of the STP/UTP cable to the STP port of a file server or workstation.

Interconnecting the Hubs through STP Ports

1. Insert one end of the straight cable into the any port of the first Hub.
2. Insert the other end of the straight cable into one of the "Uplink" ports of the second hub.
3. Repeat Steps 1 and 2 to interconnect the other Hubs.

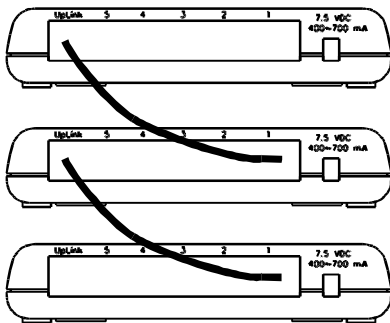


Figure 3-2 Interconnecting the Hub through straight cable

- 3) The limitation in cascading is no more than 5 hubs can be daisy- chained.

Connection through the BNC Port

For EH-801, users can also connect the network devices through the BNC port, please refer to the following for the install steps.

1. Connect a T-connector to the BNC port of the Hub and one to the BNC port of the workstation or file server.
2. Connect one end of a thin coaxial cable to the T-connector on the BNC port of the Hub.
3. Connect the other end of the thin coaxial cable to the T-connector on the BNC port of the workstation or file server.

Note: Please make sure both ends of the RG-58 BNC cable are terminated with a 50 ohm terminator.

CHAPTER 4 TROUBLESHOOTING

SYMPTOM: The power LED is not lit.

SOLUTION: If the power LED is not lit after the power adapter is plugged into the concentrator and the power outlet, there may be a power fault.

1. First verify if there is power at the power outlet by plugging in a device which is known to operate.
2. If there is no problem, try to use another power adapter available to verify the status of the original power adapter.
3. If a volt meter is available, measure the voltage on the nylon connector which is plugged into the concentrator.
4. If a volt meter is not available and the second power adapter does not fix the problem, contact the authorized dealer from whom you purchased your concentrator for assistance.

SYMPTOM: The Link LED is not lit.

SOLUTION: The Link LED is not on after a workstation is connected to the STP/UTP port of the concentrator.

1. Verify if the workstation and the concentrator are powered up.
2. Verify if the network cable has been attached to the workstation.

3. Verify if the network cable from the Hub to workstation is straight-through and is not cross-overed.
4. Verify if the wires to the phone jack pins are connected correctly and the connections are not faulty.

SYMPTON: When port auto-partitioned out.

SOLUTION:

1. Use another Ethernet adapter to verify if the original Ethernet adapter malfunctions.
2. Connect the twisted-pair cable to another concentrator to verify if the twisted-pair cable can work well.

CHAPTER 5 PRODUCT SPECIFICATION

Ports	5/8-port STP, 1-port Uplink, 1-port BNC(EH-801)
Standard Compliance	IEEE802.3, Ethernet 10Base-T 10Base-2 (EH-801)
Transmission Rate	10Mbps baseband
Power Adapter	7.5 VDC, 400~700 mA
Physical Dimensions	130 x 90 x 30 mm (EH-501) 200 x 100 x 30 mm (EH-801) (WxDxH)
Net Weight	0.13 KG (EH-501) 0.33 KG (EH-801)
Operating Temperature	0 ~ 45 degree (Centigrade)
Storage Temperature	-40 ~ 70 degree (Centigrade)
Operating Humidity	10% ~ 80% (non-condensing)
Storage Humidity	5% ~ 90%

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