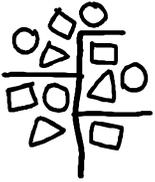


Accton

Making Partnership Work

Fast EtherHub-8se Fast EtherHub-12se Installation Manual



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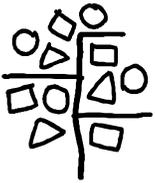
Making Partnership Work

Installation Manual

Fast EtherHub-8se

Fast EtherHub-12se

Stackable Fast Ethernet Hub with
8/12 10BASE-T/100BASE-TX Ports



INTRODUCTION

General Description

The EH3008C and EH3012C 100BASE-TX 8/12 port stackable hubs are entry level 100Mbps Fast Ethernet hubs. They are built around a standard 19-inch chassis which allows stand-alone or rack-mounted operation.

These 100BASE-TX 8/12 port stackable hubs are economical Fast Ethernet hubs with 8/12 100BASE-TX (RJ-45) ports for workstation connection. An uplink port in the front panel permits cascading to another 100BASE-TX Fast Ethernet hub (when the hubs are not stacked), or to a Fast Ethernet switch.

The EH3008C and EH3012C are compatible with the IEEE 802.3u standard. They are easy to install, no DIP switch to set and no software to load. Just plug in the power cord and connect up to 8/12 100BASE-TX station ports.

The LINK/ACTIVITY and ERROR indicate status for each port. The Collision and Power LEDs indicate status for overall system.



Key Features

- ❑ Compliant with the IEEE802.3u 100Mbps repeater specification
- ❑ 8/12 100BASE-TX ports for Fast Ethernet connectivity
- ❑ 19-inch rack mountable
- ❑ Supports Category 5 unshielded twisted-pair cabling (UTP)
- ❑ Stackable architecture supports up to 4 hubs with 100BASE-TX
- ❑ An uplink port on the front panel for cascading to another 100BASE-TX hub (when the hub is not stacked)
- ❑ Individual port status LEDs for LINK/ACTIVITY and ERROR indication
- ❑ Global Collision status LED
- ❑ Compliance with 100BASE-TX Class I (when stacked) and Class II (when stand-alone)
- ❑ Auto-partitioning of ports receiving excessive collisions

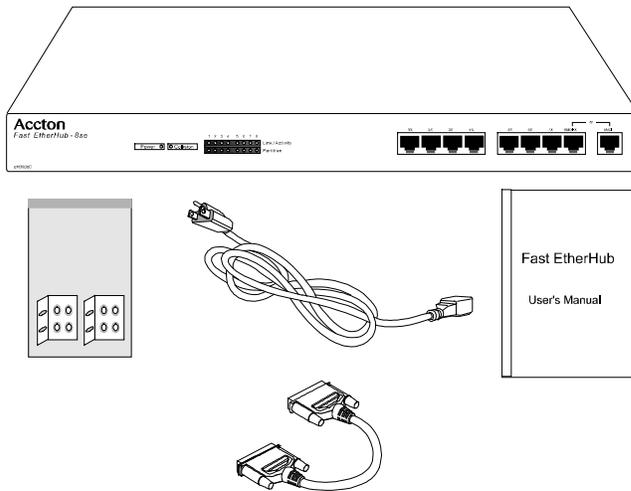


Package Contents

Check your package contents for the following parts:

- 8/12 port 100BASE-TX Fast Ethernet Stackable Hub**
(Fast EtherHub-8se or Fast EtherHub-12se)
- Power Cord**
- Stackable Cable (D-Sub 25 pins)**
- Rack-mount Kit**
- User's Manual**

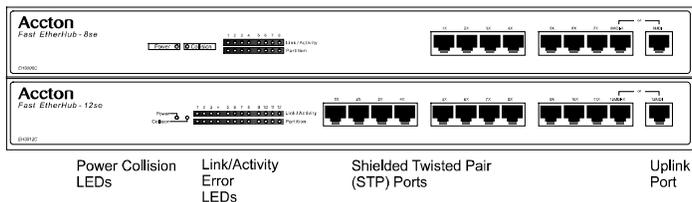
If any of these pieces are missing or are damaged, please contact your dealer immediately.



Hardware Description

The Front Panel

The front panel contains the 8/12 Shielded Twisted-Pair (STP) ports, one uplink port, and LED indicators.



Shielded Twisted- Pair (STP) ports

Use any one of the STP ports for connection to a 100BASE-TX node using Category 5 UTP cabling. Each of these ports provides 100Mbps bandwidth for connection to a workstation or server.

UPLINK port

The uplink port provides cascading capabilities to a second 100BASE-TX Fast Ethernet hub (if the hub is not stacked).



LED indicators

The front panel LED indicators help you monitor the status of each port and connected segments. There are 4 different LEDs on the front panel; including power (PWR), collision (COL), LINK/ACTIVITY and ERROR.

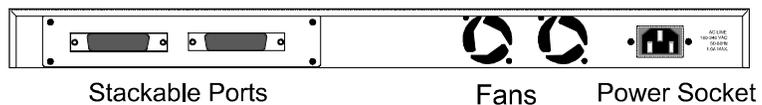
This table lists the LEDs and their respective functions.

LED Function	Color	Description
Power (PWR)	Green	Lit: Power On Unlit: Power Off
Collision (COL)	Amber	Lit: Data collision occurred
LINK/ACTIVITY	Green	Lit: Indicates the adapter is connected to the hub Blinking: Receiving data
ERROR	Yellow	Flashing: Data jabber or error Lit: Indicates partition and isolation of port



The Rear Panel

The rear panel of the hub contains the power socket , 2 D-Sub connectors (25 pins) and air fans.



Power Socket

The power socket accepts AC power of 100 - 240V at 50 - 60 Hz.

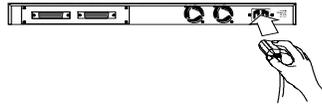


HARDWARE INSTALLATION

Quick Installation Procedure

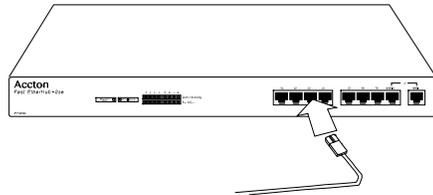
1. Place the hub on a smooth surface or mount it on a rack.

2. Connect power cord to hub and plug in.



3. Connect workstations to hub using Category 5 UTP cabling.

⚠ Plug an RJ-45 connector into any port on the hub (other than the Uplink port), and plug the other end into the RJ-45 port on the workstation's Fast Ethernet card. Distance between the hub and the workstation can be no more than 100 meters.



4. Connect each device (up to 8/12) on your network using the process described in Step 3.

⚠ Make sure you have the correct wiring

To reliably operate your network at 100Mbps, you must use Unshielded Twisted-Pair (UTP) Category 5, or better, Data Grade wire. While Category 3 or 4 wire may initially seem to work, it will soon cause data loss.



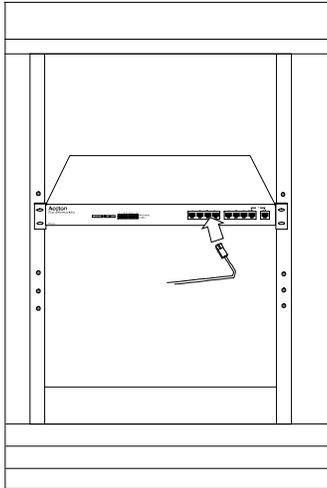
Select an Appropriate Location

A good location is at or near the center of all the computers you want to link, close to the trunk segment and the other devices you want to connect, and near a convenient power outlet.

⚠ The cable route should not be near any power lines.

After you have decided on a particular location, you can place the hub on the top of a table or a shelf, or mount it on a rack.

You may mount the hub on any EIA standard size 19-inch mounting rack. First attach the supplied mounting brackets onto the sides of the hub with screws. Afterwards, secure the hub onto the rack by screwing on the mounting brackets.



Setting Up 100BASE-TX Stackable Hubs

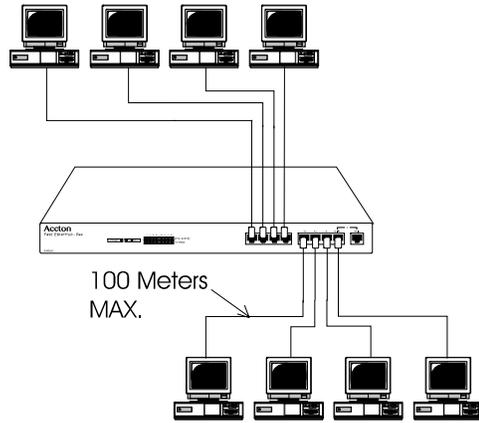
1. Put the 100BASE-TX stackable hub on the flat surface.
 - ⚠ Ensure the power is off before stacking the hub.
2. Attach the power cord and turn on power to the hub.
3. Connect one end of the D-Sub (25 pins) stack cable to the OUT port on the first hub and the other end to the IN port on the next hub in the stack.
 - ⚠ Do not connect OUT to OUT or IN to IN port on different hubs.
4. Screw on the D-Sub (25 pins) connectors if necessary.
5. Repeat steps 2-3 until all hubs are combined together in the stack. You should have a simple chain starting at the OUT port on the first hub, and ending at the IN on the last hub. You can stack up to 4 hubs in this manner. Note that a stack acts as a single repeater set.
 - ⚠ The hub's backplane ports allow cascading only up to 4 hubs.



CONFIGURATION

Standard-Alone

The configuration of a simple stand-alone hub is illustrated as below. The maximum distance between the hub and the workstation is 100 meters.



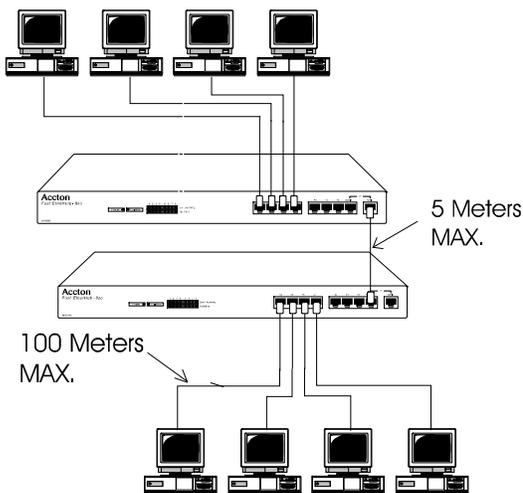
Uplink Multiple Hubs

If you want to connect more than 8/12 ports, you can use the uplink port to connect to another hub. In compliance with the IEEE802.3u Class II specification, two repeaters can be cascaded using 5 meters of cable in a single collision domain.

1. Connect a Category 5 UTP cable to the UPLINK port (Port 8/12) on the first hub.
2. Connect the other end of the UTP cable to any of Ports 1 - 8/12 on the second hub (i.e., do **not** connect it to the UPLINK port on the second hub).

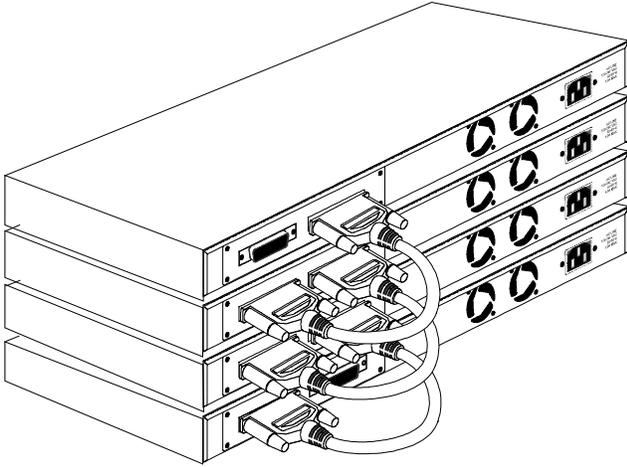
⚠ You do not need crossover cable if you use the uplink port.

⚠ Do not connect the uplink port (Port 8/12) on first hub to the uplink port (Port 8/12) on the second hub.



Stacking Multiple Hubs

The 100BASE-TX stackable hub comes with stackable backplane port for cascading up to 4 hubs. As your network grows, this stackable feature allows you to add additional units for expansion. Depending on the models used, you will be able to stack up to 32/48 ports. Note the hubs follow Class I repeater standards when stacked.



TROUBLESHOOTING

This chapter contains information to help you solve problems. If these hubs are not functioning properly, make sure they were set up according to instructions in this manual.

If the hubs don't connect to the network:

- ❶ Check the LINK/ACTIVITY LED lights on the front panel. If the LINK/ACTIVITY LED isn't lit, check all connections at the adapter and the hub. Make sure the adapter drivers are loaded.
- ❷ Try another port on the hub.
- ❸ Make sure the cable is installed properly. The network cable must be securely attached at all connection points. If the cable is properly attached but the problem persists, try a different cable.
- ❹ Turn off the unit's power, wait a few seconds, and turn it back on.



Other Important Tips

- ① Make sure no more than 100 meters of cable are used between the hub and the desktop.
- ② Verify that the cabling type used is correct. (Category 5 UTP cable)
- ③ Make sure the network adapter cards installed in the workstations and cable connections are in good working condition.
- ④ Hubs connected via the backplane ports cannot be cascaded via the uplink port. When cascading hubs, limit the cascade to two hubs, and limit the interhub cabling to 5 meters. In a two-repeater topology, the maximum network diameter between end nodes is 205 meters.



PRODUCT SPECIFICATIONS

Standard	IEEE802.3u, 100BASE-TX Class I and II repeater
100BASE-TX UTP ports	8/12
Uplink port	Hub port # 8/12
Cable Distance	5 meters for repeater to repeater 100 meters for repeater to station
Cabling	STP/UTP Category 5 wiring, 100-ohm impedance
Expandability	32/48 ports in class I stackable mode
LED indications	Power (PWR) - Green Collision (COL) - Amber 8/12 Partition LEDs - Yellow 8/12 Link/Activity LEDs - Green
Operating Temperature	0° - 55°C
Operating Humidity	5% - 95%
Power Consumption	2.3A max at 100VAC, 0.95A at 240VAC
Dimensions	435 x 210 x 42 mm



EMI Warning

FCC Class A Certification

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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.

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

You may use 100 Ω Category 5 unshielded twisted-pair (UTP) or 100 Ω Category 5 shielded twisted-pair (STP) cable for RJ-45 connections.

- Warnings**
1. Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge whenever handling this equipment.
 2. When connecting this hub to a power outlet, connect the field ground lead on the tri-pole power plug to a valid earth ground line to prevent electrical hazards.
 3. The connectors are not for telephone system use.

Note: In order to maintain compliance with the limits of a Class A digital device, Accton requires that you use a quality interface cable when connecting to this device. Changes or modifications not expressly approved by Accton could void the user's authority to operate this equipment. Suggested cable type is:

Twisted-pair for RJ-45 connections: 100BASE-TX



CE Mark Declaration of Conformance

This is to certify that this product complies with ISO/IEC Guide 22 and EN45014. It conforms to the following specifications:

EMC: EN55022(1988)/CISPR-22(1985) class B
 EN60555-2(1987) class A
 IEC 1000-4-2(1995)/IEC801-2(1991) 4kV CD, 8kV AD
 IEC 1000-4-3(1995)/IEC801-3(1984) 3V/m
 IEC 1000-4-4(1995)/IE8C01-4(1988) 1kV - (power line)
 0.5kV - (signal line)

This product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Safety Compliance

Underwriters Laboratories Compliance Statement

Important! Before making connections, make sure you have the correct Cord Set. Check it (read the label on the cable) against the following specification list.

Operating Voltage	Cord Set Specifications
120 Volts	UL Listed/CSA Certified Cord Set
	Minimum 18 AWG
	Type SVT or SJT three conductor cord
	Maximum length of 15 feet
	Parallel blade, grounding type attachment plug rated 15A, 125V

The unit automatically matches the connected input voltage. Therefore, no additional adjustments are necessary when connecting it to any input voltage within the range marked on the rear panel.

Do not plug a phone jack connector into any of the RJ-45 ports. This may damage the hub.



Warranty

Accton warrants to the original owner that the product delivered in this package will be free from defects in material and workmanship for the lifetime of the product. For the warranty to apply, you must register your purchase by returning the registration card indicating the date of purchase and including proof of purchase. There will be a minimal charge to replace consumable components, such as fuses, power transformers, and mechanical cooling devices. The warranty does not cover the product if it is damaged in the process of being installed. Accton recommends that you have the company from whom you purchased this product install it.

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