

LinkBuilder® FDDI Workgroup Hub User Guide Release Note

Part No. 09-0487-002/October 1993

This release note to the 3Com® *LinkBuilder® FDDI Workgroup Hub User Guide* discusses the following topics:

- Change in FCC compliance
- Contents of the LinkBuilder diskette
- Corrections in the User Guide
 - Software-related
 - Hardware-related
- Replacing the fuse

Change in FCC Compliance

This notification of FCC compliance replaces the FCC compliance and verification statements on page v of the *LinkBuilder FDDI Workgroup Hub User Guide*. This notification acknowledges compliance with the limits for a Class A digital device instead of a Class B digital device.



WARNING: 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 in a commercial 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. 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 the user's own expense.

Changes or modifications not expressly approved by 3Com could void the user's authority to operate this equipment.

Contents of the LinkBuilder Diskette

The diskette shipped with the LinkBuilder FDDI Workgroup Hub contains the following:

- Backup copy of LinkBuilder FDDI system software image, version 1.0
- Readme file

The system software has been preloaded into the hub management module flash memory. Downloading the image to the FDDI Workgroup Hub disrupts the ring. The download sequence isolates the hub from the ring during the power-on self-test (POST) and may cause the ring to wrap or to isolate attached stations. Downloads impact the ring the least when the hub is attached to the ring in a ring of trees configuration as a single attachment hub.

Corrections in the User Guide

The information provided in this section corrects software- and hardware-related errors and omissions.

Software-Related Corrections

The corrections below are software corrections:

Page 2-14: Check the Baud Rate Setting After *Post*

When the power-on self-test (POST) is run, the hub's serial port output defaults to 9600 baud regardless of the baud rate setting in nonvolatile RAM. If you have set the console baud rate to other than 9600, you may need to adjust the attached terminal baud rate after POST has finished. The default baud rate setting is 9600.

Page 2-14: Removing Modules

The first two steps for removing modules as given in the User Guide should be reversed. They should read:

- 1. Enter the *disconnect* command.**

This disables all ports and isolates the hub from the ring.

- 2. Disconnect all cables connected to the module that you want to remove.**

If possible, you should always turn off the power before attempting to remove or insert hardware.

Removing modules from the hub with the power on will not damage the hardware. However, the software may not be able to distinguish between intentional removal and catastrophic failure of a media module. As a result, some errors will be entered in the fault log and in some cases may fill the fault log entirely. The most common error resulting from the removal of a media module is 05000002 (bus error). Other errors may also occur. Check the fault log for valid errors before you remove any module. Also, clear the fault log (using the *clear log* command) after all changes are complete and the system has been reinitialized.

Pages 3-9, 3-10, and 3-11: Accessing the Primitive Console Command Mode

The procedure for accessing the primitive console command mode has been modified. To access the primitive console command mode:

1. Press the RESET button once, or enter the *reset* command.

During the subsequent power-on self-test (POST), the status LED flashes amber/green for 10 seconds, indicating that the primitive console command mode is being accessed.

2. Press the RESET button again.

POST is reinitialized. When POST is completed, this prompt appears for 10 seconds:

```
Press Ctrl-P to enter Primitive console
```

All other keys except [Ctrl] and [P] are ignored during this 10-second interval.

3. Press [Ctrl] + [P].

The hub is now in the primitive console command mode.

If you do not access the primitive console command mode, POST executes the system software resident in flash memory. Prior to execution of the system software, POST verifies that flash memory is not corrupted. This process takes about 20–30 seconds. During this time the status LED is off.

After flash memory has been verified, the status LED turns green when the system is fully initialized. Within a short time, the modem initialization string *AT&F* is briefly displayed. When the *AT&F* display disappears, you can access the management console command mode by pressing [Enter].

When there is no active console session or if a console session times out, *AT&F* will be displayed periodically to determine if a modem is present. You must wait for the *AT&F* to disappear before pressing [Enter] to enter the management console command mode.

Page 5-20: *route dump* and *route add* Commands

Changes have been made in the *route* command display and description. When you enter the *route dump* command, a metric value appears in the subsequent display, as explained below:

- A metric of 0 indicates that the entry is a host.
- A metric of 1 indicates that the entry is a gateway.

You can include a metric of 0 or 1 with the *route add* command. If you enter a value greater than 1, it is converted to 1. If the metric is not entered, 1 is assumed, which designates the entry as a gateway.

The default gateway, whether entered using the *route add* command or the *set gateway* command, sets the metric to 1 regardless of the metric option given.

The *metric* option does *not* indicate the number of hops to the destination network, as stated on page 5-20. It does indicate whether the entry is a host or a gateway.

Page 5-21: Fault Log Display

A reset count has been added to the fault log display header. When you enter the *show log* command, the fault log header appears, as shown in the example below:

```
Fault Log:  [#      10]
```

The number corresponds to the number of times the hub has been reset and allows you to correlate fault log entries with a given reset shown in the fourth column of the display.

Page A-7: Management Module Failure Error Code

This a clarification of the management module failure error code. The management module failure error code is 0xxxxxxx. If the second digit is 0 or 1 (that is, of the form 00xxxxxx or 01xxxxxx), the error code indicates a nonvolatile RAM error or a flash memory error on the management module, not a failure of the management module itself.

Page C-22: *show rev* Command

This explains the length of time the *show rev* command takes to complete. When you enter the *show rev* command in primitive console command mode, the display verifies that flash memory is not corrupted before reporting the firmware and software version strings. This process takes about 20–30 seconds.

Hardware-Related Corrections

The following section corrects errors relating to the wiring specifications for UTP (unshielded twisted-pair):

Page 1-7: Media Flexibility

Under the Media Flexibility bullet, the UTP paragraph now reads as follows:

UTP media port module supporting level 5, data grade unshielded twisted-pair (UTP) cabling system per the ANSI TP-PMD standard

Page 2-21: Unshielded Twisted-Pair Cable

Under the Unshielded Twisted-Pair Cable heading, the first paragraph now reads as follows:

The standard UTP cabling type supported by the LinkBuilder FDDI Workgroup Hub is Level 5 data grade media cable, for example, AT&T® type 2061, 1061, or equivalent. Configure the cable as a cross-over cable with RJ-45 connectors, as specified by ANSI X3T9.5. The cross-over cable connections are shown in Figure 2-7.

Figure 2-7 is corrected, as shown below:

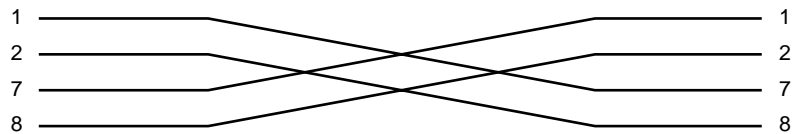


Figure 2-7. Cross-over Connections on a UTP Cable

Page 2-22: NOTE

The NOTE on page 2-22 applies to STP connectors, not UTP connectors. The text of the NOTE, which is shown below, has not changed.



NOTE: To minimize RF emissions, the connector shell must be connected to hub ground. Also, the connector shell must completely surround the cable shield.

Replacing the Fuse

If the hub's LEDs are no longer lit, the unit may be disconnected from its AC power cord. If the power cord is securely connected but the LEDs are still not lit, the fuse probably needs to be replaced.

The fuse is located in the hub's AC receptacle assembly and supplied as standard equipment for the hub. It is a "quick-acting," FSF034.1523 fuse or equivalent, rated at 5 amps, 250 volts.

To replace the fuse, follow these steps:

1. **Locate the AC receptacle on the hub's back panel.**
2. **Disconnect the AC power cord.**
3. **Carefully pry open and pull out the fuse-holder, as shown in Figure 1.**

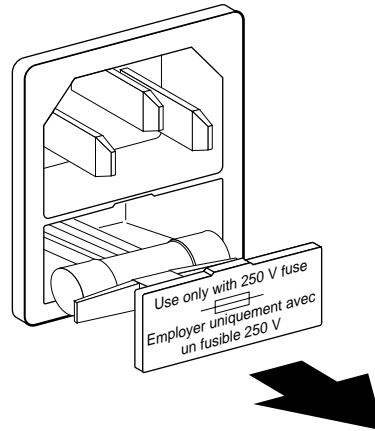


Figure 1. Opening the Fuse-holder in the AC Receptacle Assembly

4. **Remove the burned-out fuse by pulling it straight out of its socket, as shown in Figure 2.**

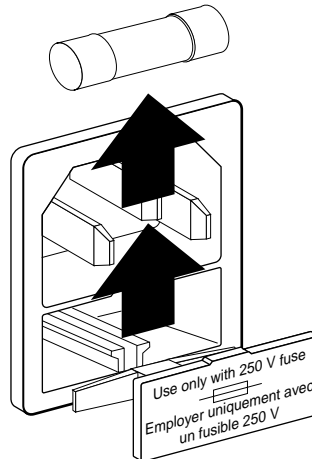


Figure 2. Removing the Fuse

If you wish, you can store a spare fuse in the front section of the fuse-holder.

5. **Insert a new fuse in the fuse-holder by reversing step 4.**
6. **Push the fuse-holder back into the AC receptacle until it snaps in place, and reconnect the AC power cord.**

Once power is restored, the hub will reinitialize and run its power-on self-tests (POST).

If the unit still does not power up, contact your network supplier.