8250 FDDI Media Modules Release Note Document Number 17-00302-6

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This note contains information regarding the operation of the 8250 FDDI media modules at V3.xx. Add this note to the binder containing your specific 8250 FDDI media module installation guide. The media modules consist of:

- FDDI Copper Module (Feature Code 6718)
- FDDI Shielded Twisted Pair Module (Feature Code 3826)
- FDDI Fiber Module with ST connectors (Feature Code 3825)
- FDDI Fiber Module with MIC connectors (Feature Code 7388).

IMPORTANT

All 8250 FDDI media modules at V3.xx or greater that reside in an 8250 Multiprotocol Intelligent Hub require an 8250 FDDI Management Module (FMM) V2.00 to function. If the FMM is at a prior version of software, you may experience connectivity issues with the stations connected to the media modules. The connectivity issues are due to the SMT incompatibilities between the two versions of software. To upgrade your FMM, contact your IBM Customer Representative.

This Release Note is structured into the following sections:

- SMT Operating Dependencies
- Download Information
- Operating Requirements
- General Information
- Information on the 8250 FDDI Copper Module
- Documentation Correction
- Known Problems.

SMT Operating Dependencies

Connectivity issues with stations connected to an FDDI media module due to SMT incompatibilities with an 8250 hub exist if:

- An FDDI media module V3.xx or greater resides in an 8250 hub with an FMM V1.xx
- A FDDI media module prior to V3.xx resides in the same 8250 hub with an FMM V2.00.

FDDI modules using SMT Version 7.3 are incompatible with FDDI modules using SMT Version 6.2. Ensure that your FDDI management and media modules are using the same SMT version.

Supported SMT Versions

The following versions of FMM and FDDI media modules support the SMT values listed:

- FMM V2.00 and FDDI media modules V3.xx or greater use SMT Version 7.3.
- FMM V1.xx and FDDI media modules V2.00 use SMT Version 6.2.

To accommodate your SMT preference, the FDDI media module shipment includes a V3.xx diskette. This diskette enables you to update all of your FDDI media modules to V3.xx.

Refer to the instructions provided with the Universal Code Download Kit (80G3150) for the out-of-band procedure to download new flash code to your FDDI media modules.

- **Note:** When upgrading an FMM and an FDDI media module to the following versions, you must upgrade the FMM first. You may then upgrade the FDDI media module.
 - From FMM V1.xx to FMM V2.00
 - From an FDDI media module Vx.xx to an FDDI media module V3.xx.

Download Information

The following information applies to downloads. Read this information before starting a download to either an FMM or FDDI media module.

- 1. Ensure the FMM is at V2.00 to manage any of the FDDI media modules at V3.xx or greater. Upgrade your FMM to V2.00 *before* upgrading any FDDI Media Modules to V3.xx.
- 2. When performing downloads to the various FDDI media modules, ensure that you are using the correct file type. Currently, the FMM does not check to ensure that the correct code is being downloaded to the module. Therefore, it is possible to inadvertently download FMM Flash code to a media module.
- **3.** When downloading five or more FDDI media modules simultaneously from an FMM in an 8260 hub, not all of the media modules may download successfully. The Download LED lights, but the media modules do not download correctly and do not boot up again.

To install the new software in the modules that failed:

- Reset the hub once the download is complete.
- Try the download again on those modules that need to be updated.

Operating Requirements

The following operating requirements apply to the FDDI media modules.

- 1. Management of the FDDI media modules is available through:
 - AIX NetView Intelligent Hub Management Program/6000 at software release V1.2 or later
 - Intelligent Hub Manager for AIX V2.0.

You must have an 8250 management module at the software versions described in the following table for complete management of the media modules:

FDDI Media	8250 Management Module		
Module	EMM	TRMM	FMM
Fiber with ST (3825)	V4.00 or greater	V2.00 or greater	V2.00 or greater
Fiber with MIC (7388)	V4.00 or greater	V2.10 or greater	V2.00 or greater
STP (3826)	V4.00 or greater	V2.00 or greater	V2.00 or greater
Copper (6718)	V4.10 or greater	N/A	V2.00 or greater

Management module versions prior to the recommended versions may allow you to perform certain management functions, but you may see unpredictable results.

General Information

The following information applies to the 8250 FDDI media modules.

- 1. The FMM forces any ports you may have designated as S (Slave) ports on the FDDI media module to become M (Master) ports if you:
 - Install an FMM and an FDDI media module in the same 8250 or 8260 Hub
 - Assign both modules to the same backplane network

The FMM performs this action automatically to maintain a legal FDDI network topology.

To create a legal "tree" topology:

- Use the FMM A and B ports to connect to the M ports of another FDDI concentrator (CON).
- Add or cascade to this existing concentrator by defining port 1 or port 2 on the added concentrator as S and using the port for attachment to the M port of the other concentrator.

For more information about legal FDDI topologies, refer to the *FDDI Station Management (SMT) Standard*, Section 5.2. Refer also to Chapter 2 of the appropriate 8250 FDDI media module installation guide.

- 2. In some cases, short SDDI and TPDDI cable connections may cause transceivers from different vendors to intercommunicate improperly. If the connection between the workstation and the FDDI STP Module port does not function properly or toggles between connecting and okay state, try a longer cable distance between the two ports.
- **3.** Some FDDI-UTP adapter cards exhibit a performance degradation when used with short cable lengths (less than 30 meters). If your FDDI-UTP adapter card exhibits performance degradation, use a cable that is greater than 30 meters in length.

Information on the 8250 FDDI Copper Module

The following information applies to the 8250 FDDI Copper Module ((Feature Code 6718). This information supplements the information contained in the 8250 FDDI Copper Module Installation and Operation Guide (Document Number SA33-0346).

Configuring the Module

In the *8250 FDDI Copper Module Installation and Operation Guide*, in the section Configuring the Module on page 3-7, the bullet list which lists the steps necessary to configure the Copper Module is changed to the following steps:

- **1.** Set the module network assignment.
- 2. Set the port type if your configuration requires a slave port (default is master)
- 3. Enable the ports you plan to use
- 4. Save the configuration.

Port Type

All ports default to Type M (master) when you first install the FDDI Copper Module into a hub. You may designate ports 1 and 2 as Type S (slave) ports. IBM recommends that you designate your S port before enabling the ports on the module.

To designate an S port, issue the following command:

8250> set port {slot.port} type {slave}

Ports 3 through 8 operate only as Type M ports. Therefore, the SET PORT TYPE command is not available for ports 3 through 8. For additional information on using Type M and S ports, refer to Chapter 2, Designing and Expanding the Network.

Note: The SET PORT TYPE command is not available if an FMM and an FDDI media module are assigned to the same network. For information on slave and master ports, refer to the General Information section, item 1, in this release note.

Cable Requirements for the 8250 FDDI Copper Module

In the *8250 FDDI Copper Module Installation and Operation Guide*, in the section Installing the Module on page 3-5, the procedure to install the Copper Module requires step 6:

6. Cable the FDDI station to the concentrator using Category 5 UTP. There must be one crossover between the FDDI station and the hub.

Note: The crossover cable is not a straight-through cable as required by Ethernet.

Refer to Appendix A, Table A-7 for a description of the crossover cable pinouts.

Documentation Correction

In the *8250 FDDI Copper Module Installation and Operation Guide*, Appendix A, Specifications, the text describing Figure A-1 incorrectly identifies Figure A-1 as the pinouts for the cable used with the Copper Module. The text should correctly identify Figure A-1 as the RJ-45 connector pinouts for the Copper Module. The figure caption is correct.

Known Problems

This section lists known problems and important information you need to know prior to installing your FDDI media modules:

- 1. FDDI media modules may remain in diagnostics mode if not properly inserted into an 8260 Hub.
 - Make sure you push in the module all the way
 - Ensure that the module boots up prior to tightening the thumb screws.
 - Remove and reseat the module if it appears to remain in diagnostics mode.
- 2. All ports on the FDDI STP Module automatically default to SDDI mode if you manage the FDDI STP Module through an 8250 Ethernet Management Module (EMM). You cannot use the SET PORT PERSONALITY command to set ports on the module to TPDDI mode through EMM terminal management prior to V4.00. You can set this mode through SNMP using the variable 53nnMSTPPortPersonality with a value of SDDI (1) or TPDDI (2).