



IBM INSTALLATION INSTRUCTIONS

8260 NWAYS (*) MULTIPROTOCOL SWITCHING HUB
INSTALLATION INSTRUCTIONS
FOR
MICROCODE UPGRADE FIELD B/M
ON ALL OLD HARDWARE SWITCHING MODULES
AT VERSION V2.00
AND PACKETCHANNEL/ATM SWITCHING MODULES
AT VERSION V2.02

READ THIS CAREFULLY

1. Customers that have existing networks with Old Hardware Switching Modules and PacketChannel/ATM Switching Modules and want to upgrade inband have to follow the following steps :
 - o Upgrade or Downgrade to DMM V5.00
 - o Upgrade all Old Hardware Switching Modules old hardware to Version v2.00
 - o Upgrade all PacketChannel/ATM Switching Modules to Version v2.02
 - o Upgrade to DMM V5.10
2. If they do not follow this download procedure all bridge port communication will be lost.
3. This is only for customers that currently have Old Hardware Switching Modules installed and PacketChannel/ATM Switching Modules at V1.01-V1.10.
4. Customers that buy the new hardware already at V2.00 and have no other Old Hardware Switching Modules and PacketChannel/ATM Switching Modules installed in the hub do not need to follow this procedure.
5. You must upgrade all Old Hardware Switching Modules to software Version v2.00 and PacketChannel/ATM Switching Modules to softwareVersion v2.02 within the same HUB.
6. Old Hardware Switching Modules at Version v2.00 and PacketChannel /ATM Switching Modules at Version v2.02 will not operate in HUB that contains modules at previous version.
7. If all the Switch modules in the HUB are at Version v2.00 or Version v2.02 the DMM, EC-DMM or Advanced DMM MUST be at level 5.10.
8. All latest 8260 microcode versions are on Internet at:
<http://www.networking.ibm.com/support>
9. Or order the F/FBM for DMMV5.10 P/N 02L2446.

. All the OLD Hardware will display under the show module command as follows :

- o SWE12-TP for Ethernet 10 Base-T 12 ports
- o SWE24-TP for Ethernet 10 Base-T 24 ports
- o SWE10-F for Ethernet 10 Base-FB/FL 10 ports
- o SWE20-F for Ethernet 10 Base-FB/FL 20 ports
- o SWE12F2-TPF for Ethernet 10 Base-T 12 ports, FDDI
- o SWE10F2-FF for Ethernet 10 Base-FB/FL 10 ports, FDDI
- o SWF4-F for FDDI DUAL 2 port DAS
- o SWE4-FX for FAST ETHERNET 100 base-FX 4 ports
- o SWE4-TX for FAST ETHERNET 100 base-TX 4 ports

. All the NEW Hardware will display under the show module command with a suffix 'A' as follow :

- o SWE12-TP-A for Ethernet 10 Base-T 12 ports
- o SWE24-TP-A for Ethernet 10 Base-T 24 ports
- o SWE10-F-A for Ethernet 10 Base-FB/FL 10 ports
- o SWE20-F-A for Ethernet 10 Base-FB/FL 20 ports
- o SWE12F2-TPF-A for Ethernet 10 Base-T 12 ports, FDDI
- o SWE10F2-FF-A for Ethernet 10 Base-FB/FL 10 ports, FDDI
- o SWF4-F-A for FDDI DUAL 2 port DAS
- o SWE4-FX-A for FAST ETHERNET 100 base-FX 4 ports
- o SWE4-TX-A for FAST ETHERNET 100 base-TX 4 ports

. Only the old hardware need to be upgrade at V2.00.

ONLY ONE HARDWARE FOR THE PACKETCHANNEL/ATM SWITCHING MODULES

1. The PacketChannel/ATM Switching Modules will receive the code Version v2.02

ONLY ONE NEW HARDWARE FOR 2 OTHER SWITCHING MODULES

1. FC 7016 (Lan Access switching Modules)
2. FC 7524 (Ethernet 24 ports TELCO)
3. These 2 Modules must have the Suffix 'A' and are shipped to customer with the V2.00 code.

TRADEMARKS AND SERVICE MARKS

The following terms, denoted by an asterisk (*), used in these Installation Instructions, are Trademarks or Service Marks of the IBM Corporation in the United States or other countries:

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Nways	OS/2

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ProComm	Data Storm Technologies Corporation
Windows	Microsoft Corporation
Softterm Custom	Softronic, Inc.

1. BEFORE INSTALLATION

A. PURPOSE

The purpose of this document is to provide the instructions to update the software microcode (flash EEPROM) of the 8260 Nways(*) Multiprotocol Switching Hub Old Hardware Switching Modules and PacketChannel/ATM Switching Modules, using material provided in the field B/M P/N 02L2967.

B. MACHINES AFFECTED

These Installation Instructions, part number P/N 02L2967, EC level E46569A, apply to 8260 Nways(*) Multiprotocol Switching Hub

- o feature code 7312 (Ethernet 10 Base-T 12 ports)
- o feature code 7324 (Ethernet 10 Base-T 24 ports)
- o Feature code 7310 (Ethernet 10 Base-FB/FL 10 ports)
- o feature code 7320 (Ethernet 10 Base-FB/FL 20 ports)
- o feature code 7314 (Ethernet 10 Base-T 12 ports, FDDI)
- o feature code 7412 (Ethernet 10 Base-FB/FL 10 ports, FDDI)
- o feature code 7304 (FDDI DUAL 2 port DAS)
- o feature code 7404 (FAST ETHERNET 100 base-FX 4 ports)
- o feature code 7504 (FAST ETHERNET 100 base-TX 4 ports)
- o feature code 7302 (PacketChannel/ATM switching Modules)

IMPORTANT NOTE

1. These instructions allow you to upgrade the 8260 Nways(*) Multiprotocol Switching Hub Switching Media Modules to the same Boot Code Version v1.12 and the same operational code level V2.00 (unique Software binary file V2.00 for all these features)

- o Ethernet 10 Base-T 12 ports: Operational Code Version v2.00.
- o Ethernet 10 Base-T 24 ports: Operational Code Version v2.00.
- o Ethernet 10 Base-FB/FL 10 ports: Operational Code Version v2.00.
- o Ethernet 10 Base-FB/FL 20 ports: Operational Code Version v2.00.
- o Ethernet 10 Base-T 12 ports, FDDI: Operational Code Version v2.00.
- o Ethernet 10 Base-FB/FL 10 ports, FDDI: Operational Code Version v2.00.
- o FDDI DUAL 2 port DAS: Operational Code Version v2.00.
- o FAST ETHERNET 100 base-FX 4 ports: Operational Code Version v2.00.
- o FAST ETHERNET 100 base-TX 4 ports: Operational Code Version v2.00.

2. These instructions allow you also to upgrade the 8260 Nways(*) Multiprotocol Switching Hub PacketChannel/ATM Switching Modules to the same

boot code V2.00 and the same operational code level V2.02 (specific software binary files for this feature):

- o PacketChannel/ATM Switching Modules: Version v2.02.

3. Make certain all Switching Media Modules and PacketChannel/ATM Switching Modules in 8260 are running the operational code versions listed above.

REQUIREMENTS

These requirements must be followed only if you DOWNLOAD the code on your Old Hardware Switching Modules.

IMPORTANT NOTICE

Read and follow the instructions in this document before you install an IBM 8260 Old Hardware Switching Modules or download Old Hardware Switching Modules Version v2.00

WARNING: FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN LOSS OF BRIDGE PORT COMMUNICATION AND INABILITY TO DOWNLOAD CODE TO THE DMM.

- o Upgrade all DMM modules in the HUB to software V5.00. This code is included in this F/FBM.
- o Download Old Hardware Switching Modules code Version v2.00 to any Switching Modules currently installed in the HUB (do not install new Switching Modules yet).
- o Download code Version v2.02 to any PacketChannel/ATM Switching Modules in the HUB.
- o Upgrade all DMM modules in the HUB to software Version v5.10.

Refer to the Release Note (P/N 02L3395) for more on this.

2. FOR OUT-OF-BAND DOWNLOAD METHOD.

Updating software microcode using the download Out-of-Band method requires a Workstation with emulated ASCII terminal and the support of XMODEM protocol for file transfer. The Workstation is connected to the console port of the Management Module either locally, using a null modem, or remotely.

ASCII terminal emulation and XMODEM protocol are offered by many products such as:

- o DOS platform
 - FTTERM
 - ProComm Plus for DOS
 - ProComm(**) for DOS

NOTE: This product is the one IBM provides in its Universal Code Download Kit (UCDK), part number 80G3150. Refer to Installation Instructions for IBM Universal Code Download Kit, part number 80G3152.

- o Windows(**) Platform
 - ProComm Plus for Windows
 - Windows Terminal function
- o OS/2(*) Platform
 - Softerm Custom(**)
- o AIX(*) Platform
 - Asynchronous Terminal Emulation (ATE)

The above list is not exhaustive, and, whatever the product one may use, the emulated ASCII terminal line settings should be set to the factory defaults for the first connection:

- o Baud rate: 9600 bps
- o Parity: None
- o Data bits: 8
- o Stop bits: 1

The communication parameters should be setup as follows:

- o Terminal emulation: VT100 (preferred)
- o Duplex: Full
- o Flow Control: None

3. FOR INBAND DOWNLOAD METHOD.

The DMM provides an Inband download feature that allows you to update your DMM or modules operational or boot EPROMs using TFTP (Trivial File Transfer Protocol).

You must check the following prerequisites prior to initialize the download:

- o Have a TFTP server on the network to perform inband downloads.
- o Connect DMMs to be updated to the same network as the TFTP server.
- o Verify IP connectivity from the TFTP server to the DMM.

IMPORTANT

- o If your TFTP server is running in a DOS environment:
Check that the current directory of your PC is the one containing the binary file you want to download when you start the server.
- o If your TFTP server is running in a OS/2 environment:

If the TFTP server has been started in foreground session, check that you gave access restricted to the directory where the binary

file resides (in opposition with the TFTP server started by INETD super server).

- o If your TFTP server is running in an AIX environment:

Ensure the binary file may be read by everyone. If a file 'tftpaccess.ctl' exists in /etc, be sure that at least one 'allow' line is provided to allow access to the path where the file resides.

- o For more on that, see below the details in the section Inband Download.

4. INSTALLATION

The installation of the new version of software microcode requires the following tasks to be performed:

- o Use the distribution diskettes to create the software files on the hard disk of the workstation (DOS or AIX).
- o Upgrade all the modules using one of the download methods available.

A. DISTRIBUTION DISKETTES

There are four 3.5 inches 1.44 MB diskettes (P/N 02L2969, P/N 02L3673, P/N 02L3133, P/N 02L3134) provided with that Field B/M (P/N 02L2967). Every diskette contains a README file and these installation installations (not compressed), some boot and operational code files, in compressed format (xxx.ZIP), and three EXEC files (UNZIPAIX.EXE, UNZIPDOS.EXE and UNZIPOS2.EXE) to be used to decompress these compressed code files from the diskette into a temporary directory on the hard disk of your workstation, according to its operating system (AIX, DOS or OS/2), before downloading within the 8260 Nways(*) Multiprotocol Switching Hub blades.

DISTRIBUTION DISKETTE P/N 02L2969

The first diskette, part number P/N 02L2969, contains the following files:

- o README: Notice file (not compressed), that details the contents of the diskettes.
- o INSTALL.DOC: Installation Instructions (not compressed)
- o UNZIPAIX.EXE: AIX executable, used later to decompress the notice, if any, the software files and the associated command files contained in the diskette(s), on the current directory of an AIX platform that may later be used as a TFTP file server.
- o UNZIPDOS.EXE: DOS executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your DOS work-station.
- o UNZIPOS2.EXE: OS/2 executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated

command files, contained in the diskette(s), on a directory of your OS/2 work-station.

- o SWV200.ZIP: Compressed file, that will produce, when decompressed in a directory of the workstation, the following files related to the Old Hardware Switching Modules:
 - SWV112.BT: Boot Software of all Old Hardware Switching Modules,
 - SWBOOT.CMD: Related ProComm DOS command file,
 - SWV200.OP: Operational Software of the Old Hardware Switching Modules,
 - SWOPER.CMD: Related ProComm DOS command file.

DISTRIBUTION DISKETTE P/N 02L3673

The second diskette, part number P/N 02L3673, contains the following files:

- o README: Notice file (not compressed), that details the contents of the diskettes.
- o INSTALL.DOC: Installation Instructions (not compressed)
- o UNZIPAIX.EXE: AIX executable, used later to decompress the notice, if any, the software files and the associated command files contained in the diskette(s), on the current directory of an AIX platform that may later be used as a TFTP file server.
- o UNZIPDOS.EXE: DOS executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your DOS work-station.
- o UNZIPOS2.EXE: OS/2 executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your OS/2 work-station.
- o P2C_V202.ZIP: Compressed file, that will produce, when decompressed in a directory of the workstation, the following files related to the PacketChannel/ATM Switching Modules:
 - P2C_V200.BT: Boot Software of all PacketChannel/ATM Switching Modules,
 - P2CBOOT.CMD: Related ProComm DOS command file,
 - P2C_V202.OP: Operational Software of the PacketChannel/ATM Switching Modules,
 - P2COPER.CMD: Related ProComm DOS command file.

DISTRIBUTION DISKETTE P/N 02L3133

The third diskette, part number P/N 02L3133, contains the following files:

- o README: Notice file (not compressed), that details the contents of the diskettes.
- o INSTALL.DOC: Installation Instructions (not compressed)
- o UNZIPAIX.EXE: AIX executable, used later to decompress the notice, if any, the software files and the associated command files contained in

the diskette(s), on the current directory of an AIX platform that may later be used as a TFTP file server.

- o UNZIPDOS.EXE: DOS executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your DOS work-station.
- o UNZIPOS2.EXE: OS/2 executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your OS/2 work-station.
- o ADMMV500.ZIP: Compressed file, that will produce, when decompressed in a directory of the workstation, the following files related to the Advanced DMM/Controller Module:
 - ADMMV103.BT: Boot Software of the Advanced DMM/Controller Module,
 - ADMMBOOT.CMD: Related ProComm DOS command file,
 - ADMMV500.OP: Operational Software of the Advanced DMM/Controller Module,
 - ADMMOPER.CMD: Related ProComm DOS command file.

DISTRIBUTION DISKETTE P/N 02L3134

The fourth diskette, part number P/N 02L3134, contains the following files:

- o README: Notice file (not compressed), that details the contents of the diskettes.
- o INSTALL.DOC: Installation Instructions (not compressed)
- o UNZIPAIX.EXE: AIX executable, used later to decompress the notice, if any, the software files and the associated command files contained in the diskette(s), on the current directory of an AIX platform that may later be used as a TFTP file server.
- o UNZIPDOS.EXE: DOS executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your DOS work-station.
- o UNZIPOS2.EXE: OS/2 executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your OS/2 work-station.
- o DMM_V500.ZIP: Compressed file, that will produce, when decompressed in a directory of the workstation, the following files related to the DMM and EC/DMM Module:
 - DMM_V103.BT: Boot Software of the Advanced DMM/Controller Module,
 - DMM_BOOT.CMD: Related ProComm DOS command file,
 - DMM_V500.OP: Operational Software of the Advanced DMM/Controller Module,
 - DMM_V500.CMD: Related ProComm DOS command file.

5. CREATING THE SOFTWARE ON A DOS OR OS/2 WORKSTATION

IMPORTANT PRELIMINARY STEP

This is a necessary step if you plan:

- |
 - o To use the OUT-OF-BAND method for downloading the Old Hardware Switching Modules ,PacketChannel/ATM Switching Modules, Advanced DMM/Controller Module, DMM and EC/DMM Module, software microcode(s) from a DOS or OS/2 platform.
 - o To use the IN_BAND method for downloading the Old Hardware Switching Modules ,PacketChannel/ATM Switching Modules, Advanced DMM/Controller Module, DMM and EC/DMM Module Software microcode(s) from a DOS or OS/2 Workstation acting as a TFTP server.

1. Insert the software distribution diskettes, part number P/N 02L2969, P/N 02L3673, P/N 02L3133, P/N 02L3134 in the DOS or OS/2 Workstation diskette unit.

2. Run the UNZIPDOS.EXE or UNZIPOS2.EXE executable from the diskette (A:), i. e. type, when in DOS:

- o A:UNZIPDOS A:ADMMV500
- o A:UNZIPDOS A:DMM_V500
- o A:UNZIPDOS A:SWV200
- o A:UNZIPDOS A:P2C_V202

or, when in OS/2:

- o A:UNZIPOS2 A:ADMMV500 files, contained in the diskette(s), on a directory of your DOS work-station.
- o UNZIPOS2.EXE: OS/2 executable, used later to decompress the notice, if any, related to an adapter, the software files and the associated command files, contained in the diskette(s), on a directory of your OS/2 work-station.
- o DMM_V500.ZIP: Compressed file, that will produce, when decompressed in a directory of the workstation, the following files related to the DMM and EC/DMM Module:
 - DMM_V103.BT: Boot Software of the Advanced DMM/Controller Module,
 - DMM_BOOT.CMD: Related ProComm DOS command file,
 - DMM_V500.OP: Operational Software of the Advanced DMM/Controller Module,
 - DMM_V500.CMD: Related ProComm DOS command file.

6. CREATING THE SOFTWARE ON AN AIX WORKSTATION

IMPORTANT PRELIMINARY STEP

This is a necessary step if you plan:

- | o To use the OUT-OF-BAND method for downloading the Old Hardware Switching Modules ,PacketChannel/ATM Switching Modules, Advanced DMM/Controller Module, DMM and EC/DMM Module, software microcode(s)

from a AIX Workstation.

- o To use the IN_BAND method for downloading the Old Hardware Switching Modules ,PacketChannel/ATM Switching Modules, Advanced DMM/Controller Module, DMM and EC/DMM Module Software microcode(s) from a AIX Work-station acting as a TFTP server.
1. Insert the software distribution diskettes, part number P/N 02L2969, P/N 02L3673,P/N 02L3133, P/N 02L3134 into the RISC System/6000 Diskette unit.
 2. Copy the UNZIPAIX.EXE executable and the ADMMV500.ZIP, DMM_V500.ZIP, SWV200.ZIP, P2C_V202.ZIP compressed files from the diskette into your current directory.
 - o DOSREAD UNZIPAIX.EXE UNZIP
(New name assigned is UNZIP)
 - o DOSREAD ADMMV500.ZIP ADMMV500.ZIP
 - o DOSREAD DMM_V500.ZIP DMM_V500.ZIP
 - o DOSREAD SWV200.ZIP SWV200.ZIP
 - o DOSREAD P2C_V202.ZIP P2C_V202.ZIP
 3. Make the just created UNZIP executable:
 - o CHMOD A+RX UNZIP
 4. Decompress the just created compressed file(s):
 - o ./UNZIP ADMMV500.ZIP
 - o ./UNZIP DMM_V500.ZIP
 - o ./UNZIP SWV200.ZIP
 - o ./UNZIP P2C_V202.ZIP

The UNZIP will decompress, within the current directory, the ADMMV500.ZIP, DMM_V500.ZIP, SWV200.ZIP, P2C_V202.ZIP compressed files,and will produce following files:

- o ADMMV103.BT: Code file.
- o ADMMBOOT.CMD: ProComm DOS Command file for Boot code.
- o ADMMV500.OP:Operational Code file.
- o ADMMOPER.CMD: ProComm DOS Command File for Operational code.

- o DMM_V103.BT: Boot Code file.

- o DMM_BOOT.CMD: ProComm DOS Command file for Boot code.
- o DMM_V500.OP:Operational Code file.
- o DMM_V500.CMD: ProComm DOS Command File for Operational code.

- o SWV112.BT: Boot Software of all Old Hardware Switching Modules,
- o SWBOOT.CMD: Related ProComm DOS command file,
- o SWV200.OP: Operational Software of the Old Hardware Switching Modules,
- o SWOPER.CMD: Related ProComm DOS command file.

- o P2C_V200.BT: Boot Software of all PacketChannel/ATM Switching Modules,
- o P2CBOOT.CMD: Related ProComm DOS command file,
- o P2C_V202.OP: Operational Software of the PacketChannel/ATM Switching Modules,
- o P2COPER.CMD: Related ProComm DOS command file.

5. Erase the executable and the compressed files:

- o RM UNZIP
- o RM ADMMV500.ZIP
- o RM DMM_V500.ZIP
- o RM SWV200.ZIP
- o RM P2C_V202.ZIP

6. Make sure that the just created notice, command and software files may be read by everyone.

- o Set path to the software file.

- o CHMOD A+R ADMMV103.BT
- o CHMOD A+R ADMMBOOT.CMD
- o CHMOD A+R ADMMV500.OP
- o CHMOD A+R ADMMOPER.CMD

- o CHMOD A+R DMM_V103.BT
- o CHMOD A+R DMM_BOOT.CMD
- o CHMOD A+R DMM_V500.OP
- o CHMOD A+R DMM_V500.CMD

- o CHMOD A+R SWV112.BT
- o CHMOD A+R SWBOOT.CMD
- o CHMOD A+R SWV200.OP
- o CHMOD A+R SWOPER.CMD

- o CHMOD A+R P2C_V200.BT
- o CHMOD A+R P2CBOOT.CMD
- o CHMOD A+R P2C_V202.OP
- o CHMOD A+R P2COPER.CMD

7. SAFETY

Since this update is to be performed with machine powered on, review the SAFETY NOTICES delivered with the shipping group.

8. REFERENCES

- Installation Instructions for IBM Universal Code Download Kit, Part Number 80G3152.
- 8260 DMM Commands Guide, form number SA33-0275..
- 8260 DMM User's Guide, form number SA33-0259...
- ProComm Reference Manual.
- 8260 Old Hardware Switching Modules Release Note, **part number 02L3395.**

END of DOCUMENT