Critical Release Notice

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The content of this customer NTP supports the SN06 (DMS) software release.

Bookmarks used in this NTP highlight the changes between the baseline NTP and the current release. The bookmarks provided are color-coded to identify release-specific content changes. NTP volumes that do not contain bookmarks indicate that the baseline NTP remains unchanged and is valid for the current release.

Bookmark Color Legend

Black: Applies to new or modified content for the baseline NTP that is valid through the current release.

Red: Applies to new or modified content for NA017 that is valid through the current release.

Blue: Applies to new or modified content for NA018 (SN05 DMS) that is valid through the current release.

Green: Applies to new or modified content for SN06 (DMS) that is valid through the current release.

Attention!
Adobe⌀ Acrobat⌀ Reader™ 5.0 is required to view bookmarks in color.

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Change of phone number from 1-800-684-2273 to 1-877-662-5669, Option 4 + 1.

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UCS DMS-250
Turbolink Installation Guide

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Turbolink Installation Guide

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Contents

About this document

When to use this document

This publication provides information to all personnel responsible for the hardware installation, datafill, and initialization of Turbolink in a DMS switch being patched by Richardson Patch Administration.

How to check the version and issue of this document

The version and issue of the document are indicated by numbers, for example, 01.01.

The first two digits indicate the version. The version number increases each time the document is updated to support a new software release. For example, the first release of a document is 01.01. In the *next* software release cycle, the first release of the same document is 02.01.

The second two digits indicate the issue. The issue number increases each time the document is revised but rereleased in the *same* software release cycle. For example, the second release of a document in the same software release cycle is 01.02.

How this document is organized

The chapters in this document provide the following information:

- Chapter 1 provides information on the installation of the 1X89BA or BB
- Chapter 2 provides the software datafill for Turbolink
- Chapter 3 provides the internal modem specific instructions
- Chapter 4 provides initialization procedures
- Appendix A provides modem settings

What precautionary messages mean

The types of precautionary messages used in NT documents include attention boxes and danger, warning, and caution messages.

An attention box identifies information that is necessary for the proper performance of a procedure or task or the correct interpretation of information or data. Danger, warning, and caution messages indicate possible risks.

Examples of the precautionary messages follow.

ATTENTION Information needed to perform a task

ATTENTION

If the unused DS-3 ports are not deprovisioned before a DS-1/VT Mapper is installed, the DS-1 traffic will not be carried through the DS-1/VT Mapper, even though the DS-1/VT Mapper is properly provisioned.

DANGER Possibility of personal injury

DANGER
Risk of electrocution
Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed. The inverter contains high-voltage lines. Until the fuses are removed, the high-voltage lines are active, and you risk being electrocuted.

WARNING Possibility of equipment damage

WARNING
Damage to the backplane connector pins
Align the card before seating it, to avoid bending the backplane connector pins. Use light thumb pressure to align the card with the connectors. Next, use the levers on the card to seat the card into the connectors.

CAUTION   Possibility of service interruption or degradation

CAUTION
Possible loss of service
Before continuing, confirm that you are removing the card
from the inactive unit of the peripheral module.
Subscriber service will be lost if you remove a card from
the active unit.

How commands, parameters, and responses are represented

Commands, parameters, and responses in this document conform to the
following conventions.

Input prompt (>)

An input prompt (>) indicates that the information that follows is a
command:

>BSY

Commands and fixed parameters

Commands and fixed parameters that are entered at a MAP terminal are
shown in bold type:

>BSY CTRL

Variables

Variables are shown in lowercase letters:

>BSY CTRL ctrl_no

The letters or numbers that the variable represents must be entered. Each
variable is explained in a list that follows the command string.

Responses

Responses correspond to the MAP display and are shown in a different type:

```
FP 3 Busy CTRL 0: Command request has been submitted.
FP 3 Busy CTRL 0: Command passed.
```

The following excerpt from a procedure shows the command syntax used in this document:

1 Manually busy the CTRL on the inactive plane by typing

>BSY CTRL ctrl_no
and pressing the Enter key.

where

ctrl_no   is the number of the CTRL (0 or 1)

Example of a MAP response:

```
FP 3 Busy CTRL 0: Command request has been submitted.
FP 3 Busy CTRL 0: Command passed.
```

Installation of the 1X89BA or BB

Overview of Turbolink

Turbolink is a high speed file transfer link that utilizes the Nortel Networks Operation Protocol. Turbolink offers communications between Nortel Software Delivery and the DMS customer.

This chapter covers the hardware portion of the Turbolink installation. This procedure is specifically tailored to the DMS customer.

Note 1: It is recommended that LINK 3 on the 1X89 circuit pack be used for Turbolink. The example datafill shown later in the procedure will reflect this recommendation.

Note 2: You will need to datafill a dedicated line for use by Turbolink (1FR is recommended). This will be the line that Patch Administration will utilize for access.

ATTENTION

Always observe ESD procedures when replacing or removing hardware.

Benefits

Sites without Turbolink require patches to be manually uploaded. The transmit speed for the manual process is 1200 to 2400 bps. Turbolink sites utilize a GDC V.Fast modem which allows a site to be automatically updated at a speed of 19,200 bps. Turbolink is a more efficient use of bandwidth than the manual patching process and enables Nortel to be more responsive to the customer.

Security

Turbolink can only be accessed by terminals utilizing the specific 10–12 digit Data Network Address that is datafilled in the DMS. Users must also have a valid userid and password in order to obtain access.

Installation requirements

You will require the following equipment to successfully complete the hardware portion of the Turbolink installation:

- 1X89BA or 1X89BB circuit pack

- GDC V.FAST Modem

- 1 datafilled feature–free (1FR) line

- NTOX26LY cable

Note: If your IOC is equipped with a 1X61AG shelf you will need the NTOX96GS cable.

CAUTION

If you do not understand any of the following steps, contact your next level of support for assistance.

Installation of the 1X89BA or BB circuit pack

If there is an empty slot in your IOC that has been identified for Turbolink use, continue with step 1. If you need to remove an existing 1X67 in order to free a slot for Turbolink proceed to step 2.

1 For an unused vacant IOC slot:

Insert the 1X89BA or BB into the vacant slot.

Proceed to step 3.

2 For a currently occupied IOC slot (NT1X67):

Remove the card from the slot by entering the following command at the MAP terminal:

>mapci;mtc;iod;ioc #;card #
is the number for the relevant IOC and card you are going to remove.

Press <Return>

Busy and Offline all terminals assigned to the NT1X67 by typing:

>bsy #
is the port number

Press <Return>

>offl #
is the port number

Press <Return>

Repeat the above commands for ports 0 –3 on the card you wish to remove.

   a.   Delete table TERMDEV datafill for terminals assigned to the removed
        1X67.

   b.   Remove the old 1X67 and insert the 1X89 circuit pack.

3   Connect the NTOX26LY cable to a connector in link 3 that corresponds to the
     card slot in which you installed your 1X89BA or BB. Use Table 1-1 to determine
     the correct connector for your configuration.

4   Connect the opposite end of the NTOX26LY cable to the serial port on the GDC
     V.Fast modem.

   Note: If your IOC is equipped with a 1X61AG shelf you will need the
   NTOX96GS cable.

Table 1-1
Cable connectivity

Card Number	Card Slot	IOCCCT	Link 3 Conn.
0	04	0	C07
1	06	4	C11
2	08	8	C15
3	10	12	C19
4	12	16	C23
5	14	20	C27
6	16	24	C31
7	18	28	C35
8	20	32	C39
—end—			

Example: If you installed the 1X89 in slot 18 of the IOC using link 3, you
would connect the NTOX26LY cable to connector C35 on the back of the
IOC.

Initialization of the GDC V.Fast 28.8 modem

The following procedure details the steps needed to initialize the GDC V.Fast 28.8 modem.

1 Install a dedicated, feature–free (1FR) line to be used as access for Turbolink only. Make a note of the DN for the line as it will be needed later.

2 Connect your dedicated line to the SN connector on the back of the GDC modem.

3 Ensure the NTOX26LY** cable from the IOC is connected to the serial port on the back of the GDC modem.

   Note: If your IOC is equipped with a 1X61AG shelf you will need the NTOX96GS cable.

4 Confirm the power switch on the back of the modem is off and then connect the AC power cord to the back of the modem and insert the other end into a standard 120V outlet.

5 Turn the toggle switch on the back of the modem to the on position.

Datafill for Turbolink

The software datafill for Turbolink consists of the following seven tables in the order listed:

- Table MPC

- Table MPCLINK

- Table GDLADEV

- Table NOPAPPLN

- Table NOPUSERS

- Table NOPADDR

- Table PADNDEV

This chapter will cover each table above in detail.

Note: Ensure that mpcx33ab has been copied to disk and the volume that it is located in has been listed out at this terminal. If this has not occurred, refer to Section II, Procedure 2.0 Load file preparation for instructions.

Load file preparation

If you don't already have the mpcx33ab load on a disk volume, mount your pmload tape.

At the map terminal type:

>mount 0
Enter mount 1 if you are using MTD 1

Press <Return>

System response:

```
VOLUME='LIST'
```

>list t0
Enter list t1 if you are using MTD 1

Press <Return>

>copy mpcx33ab s00dpmload
Press <Return>

System response:

```
OK
```

>diskut
Press <Return>

>lf s00dpmload
Press <Return>

In the above example, the tape was mounted on MTD 0 and the file was copied to volume s00dpmload. You should copy mpcx33ab to the volume where your pmloads are stored.

The volume is then listed in order to add the load name to that terminals symbol table. If you attempt to reference this load from another terminal, you must list the volume out on that terminal.

Datafill for Table MPC

Datafill Table MPC by entering the following commands at the MAP terminal:

At the map terminal type:

>Table MPC
Press <Return>

>list all
Press <Return>

System response:

EMPTY TABLE

>add
Press <Return>

System response:

MPCNO:

>1
If Table MPC is not an empty table, enter the next consecutive number

Press <Return>

System response:

MPCIOC:

>0
This number is the same as the IOC in which the 1X89 was inserted.

Press <Return>

System response:

IOCCCT:

>28
This should be the card location of the 1X89BA x 4. Ex: Card 7 x 4 = 28

> *Note:* Table 1-1 in Chapter 1 can be used to determine your IOCCCT number.

Press <Return>

System response:

EQ:

>1X89BA
Press <Return>

System response:

DLDFILE:

>mpcx33ab
Press <Return>

System response:

```
TUPLE TO BE ADDED:
1          0          28      1X89BA MPCX33AB
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
```

>y
Press <Return>

System response:

```
TUPLE ADDED
```

>lis all
Press <Return>

System response:

```
  MPC     MPCIOC     IOCCCT     EQ       DLDFILE
-------------------------------------------------
    1         0         28      IX89BA   MPCX33AB
```

Datafill for Table MPCLINK

Most datafill in Table MPCLINK is standardized. Enter the commands exactly as shown.

For entry LINKKEY, the first number is the same as the MPC number in Table MPC and the second number is the link number on the card.

Datafill Table MPC by entering the following commands at the MAP terminal:

>**table MPCLINK**
Press <Return>

>**lis all**
Press <Return>

System response:

`EMPTY TABLE`

>**add**
Press <Return>

System response:

`LINKKEY:`

>**1 3**
Press <Return>

The first number is the same as the MPC number in Table MPC, the second number is the link number on the card.

System response:

`LINKALM`

>**n**
Press <Return>

System response:

`PROTOCOL:`

>**x25orig**
Press <Return>

System response:

`LINKNABL:`

>**0**
Press <Return>

System response:

`CONVNABL:`

>55
Press <Return>

System response:

PARMSEL:

>numsvcs
Press <Return>

System response:

NUMSVCS:

>15
Press <Return>

System response:

PARMSEL:

>tinactive
Press <Return>

System response:

VALUE:

>120
Press <Return>

System response:

PARMSEL:

>L2window
Press <Return>

System response:

SIZE:

>7
Press <Return>

System response:

PARMSEL:

>L3window
Press <Return>

System response:

SIZE:

>2
Press <Return>

System response:

PARMSEL:

>t20
Press <Return>

System response:

VALUE:

>30
Press <Return>

System response:

PARMSEL:

>environ
Press <Return>

System response:

MPCENVRN:

>dtetodxe
Press <Return>

System response:

PARMSEL:

>nodetype
Press <Return>

System response:

NODE:

>dte
Press <Return>

System response:

PARMSEL:

>L1pttopt
Press <Return>

System response:

VALUE:

>yes
Press <Return>

System response:

PARMSEL:

>$
Press <Return>

System response:

EXINFSEL:

>svcdna
Press <Return>

System response:

DIGITS:

>22222222
Press <Return>

System response:

EXINFSEL:

>svctype
Press <Return>

System response:

NETWORK:

>ddn
Press <Return>

System response:

```
TUPLE TO BE ADDED:
1       2             N
X24ORIG 0 55 (NUMSVCS   15)(TINACTIVE     120)(L2WINDOW
7)(L3WINDOW 2) (T20   30) (ENVIRON  DTETODXE) (NODETYPE
DTE)(L1PTTOPT  YES) $ (SVCDNA 22222222) (SVCTYPE DDN)$

ENTER Y TO CONFIRM, N TO REJECT, OR E TO EDIT.
```

>y
Press <Return>

System response:

```
TUPLE ADDED
WRITTEN TO JOURNAL FILE AS JF NUMBER XXXX
```

>lis all
Press <Return>

System response:

```
LINKKEY   LINKALM   PROTOCOL   LINKNABL   CONVNABL
PRTCLDAT
-------------------------------------------------------
  1 2       N       X25ORIG      0            55
(NUMSVCS 15)(TINACTIVE 120)(L2WINDOW 7)(L3WINDOW 2)
(T20 30)(ENVIRON DTETODXE)(NODETYPE DTE)(L1PTTOPT YES)
$
```

Datafill for Table GDLADEV

Datafill Table GDLADEV by entering the following commands at the MAP terminal:

>table GDLADEV
Press <Return>

>lis all
Press <Return>

System response:

EMPTY TABLE

>add
Press <Return>

System response:

APPLN:

>nop
Press <Return>

System response:

DEVICE:

>mpc
Press <Return>

System response:

```
TUPLE TO BE ADDED:
NOP     MPC
ENTER Y TO CONFIRM, N TO REJECT, AND E TO EDIT
```

>y
Press <Return>

System response:

```
TUPLE ADDED
WRITTEN TO JOURNAL FILE AS JF NUMBER XXXX
```

>lis all
Press <Return>

System response:

```
TOP
APPLN     DEVICE
NOP       MPC
----------------
BOTTOM
```

Datafill for Table NOPAPPLN

Datafill Table NOPAPPLN by entering the following commands at the MAP terminal:

>table NOPAPPLN
Press <Return>

>lis all
Press <Return>

System response:

```
EMPTY TABLE
```

>add
Press <Return>

System response:

```
DNAKEY:
```

>40056500
Press <Return>

System response:

```
CHOICE:
```

>all
Press <Return>

System response:

```
TUPLE TO BE ADDED:
40056500     ALL
ENTER Y TO CONFIRM, N TO REJECT, OR E TO EDIT.
```

>y
Press <Return>

System response:

```
TUPLE ADDED
WRITTEN TO JOURNAL FILE AS JF XXXX
```

Note: Repeat the above add process for DNA's 40051800 and 40051900. When this is completed enter the following command:

>lis all
Press <Return>

System response:

```
TOP
DNAKEY               APPLNS
--------------------------
40056500             ALL
40051800             ALL
40051900             ALL
```

Datafill for Table NOPUSERS

If the parm NOP_USERID_SECURITY_ACCESS is Y in Table OFCENG, table NOPUSERS must be datafilled with each permitted user and the applications they are allowed to access. For Turbolink, it is recommended that the parm in OFCENG be set to N.

Datafill Table NOPUSRS by entering the following commands at the MAP terminal:

>**table NOPUSERS**
Press <Return>

>**lis all**
Press <Return>

System response:

```
EMPTY TABLE
```

>**add**
Press <Return>

System response:

```
USERKEY:
```

>**userid**
Press <Return>

System response:

```
APPLNS:
```

>**all**
Press <Return>

System response:

```
TUPLE TO BE ADDED:
USERID          ALL
ENTER Y TO ACCEPT, N TO REJECT, OR E TO EDIT
```

>**y**
Press <Return>

System response:

```
TUPLE ADDED
WRITTEN TO JOURNAL FILE AS JF XXXX
```

> *Note:* This table can be utilized to control application access by userid. However, for the purpose of this procedure the standard basic setup is being used. If you require further assistance in establishing additional access controls, contact your TAS organization.

Datafill for Table NOPADDR

The DNA's used in this procedure are specifically intended for DMS switches being patched out of the Richardson Patch Administration Department. If you are not sure of your DNA's, call your Nortel Patch Administration Contact and they will be able to supply you with the correct DNA's for your switch. The following datafill will work for any customers under Richardson Patch Administration.

Datafill Table NOPADDR by entering the following commands at the MAP terminal:

> **>Table NOPADDR**
> Press <Return>
>
> **>lis all**
> Press <Return>
>
> System response:
>
> `EMPTY TABLE`
>
> **>add**
> Press <Return>
>
> System response:
>
> `INDEX:`
>
> **>1**
> If the table is not empty enter the next consecutive number
>
> Press <Return>
>
> System response:
>
> `UNIT:`
>
> **>1**
> This must be the same as the MPNO in Table MPC
>
> Press <Return>
>
> System response:
>
> `LINK:`
>
> **>3**
> Press <Return>
>
> System response:
>
> `ADDRESS:`

>40056500
Press <Return>

System response:

```
PROTOCOL:
```

>3 1 128 0
Press <Return>

System response:

```
TUPLE TO BE ADDED:
   1   1   3   40056500   3   1   128   0
ENTER Y TO ACCEPT, N TO REJECT, OR E TO EDIT
```

>y
Press <Return>

System response:

```
TUPLE ADDED
WRITTEN TO JOURNAL FILE AS JF NUMBER XXXX
```

> *Note:* Repeat the above add process for DNA's 40051800 and
> 40051900. When this is completed enter the following command:

>lis all
Press <Return>

System response:

```
TOP
INDEX   UNIT   LINK    ADDRESS       PROTOCOL
------------------------------------------------
  1       1     3      40056500      3 1 128 0
  2       1     3      40051800      3 1 128 0
  3       1     3      40051900      3 1 128 0
```

Your UNIT number may be different. Ensure that the value that was
datafilled is the same as MPCNO in Table MPC. If the table NOPADDR
already had entries your INDEX numbers may be different.

Datafill for Table PADNDEV

Table PADNDEV lists up to three devices on which to store patches. It is highly recommended that disk and/or SLM devices be used for this purpose. If PADNDEV is currently datafilled in your switch with your patch volumes, no changes are necessary.

Datafill Table PADNDEV by entering the following commands at the MAP terminal:

>table PADNDEV
Press <Return>

>lis all
Press <Return>

System response:

```
EMPTY TABLE
```

>add
Press <Return>

System response:

```
DEVKEY
```

>1
The values for this field are 1–3

Press <Return>

System response:

```
DEVICE
```

>s00dpatch
Enter the volume designated for patch storage

Press <Return>

System response:

```
TUPLE TO BE ADDED:
1       S00DPATCH
ENTER Y TO ACCEPT, N TO REJECT, OR E TO EDIT
```

>y
Press <Return>

System response:

```
TUPLE ADDED
WRITTEN TO JOURNAL FILE AS JF XXXX
```

You may datafill up to three devices.

Internal modem specific instructions

Some sites may receive an internal modem to be implemented for Turbolink use. This chapter covers special steps necessary to prepare the internal modem.

Note: Your modem should be configured correctly when you receive it. In most initial installations, the following procedures will not be necessary.

Modem Configuration Methods

On external units the modem settings can be changed via a keypad on the face of the modem. However, internal modems must be configured by dial–up or via a terminal connected to the 25 pin connector on the back plane of the modem card.

Configuration using a VT100 terminal

This section describes the equipment and procedures for configuring an internal modem from a VT100 terminal.

Materials required

- VT100 Terminal
- 25 pin to 25 pin cable

Procedure

Connect one end of the 25 pin cable to the 25 pin connector on the back of the internal modem card. The other end is connected to the VT100 terminal.

Once the connection is complete enter the following commands from the VT100 terminal:

    >AT&F1&W0

You should see the lights on the modem flash. You will not receive a confirmation on the terminal.

Configuration using a laptop computer

This section describes the equipment and procedures for configuring an internal modem from a laptop computer.

Materials required

- 9 pin to 25 pin cable

- Laptop computer with HyperTerminal or other communications program

Connect the 25 pin end of the cable to the connector on the back of the internal modem and the other end of the cable to the COM 1 port on the laptop. Configure the communications program for a direct cable connection on COM1. Start the communications program. Once the cursor appears type the following commands:

> **>AT&F1&W0**

You should see the lights on the modem flash. You will not receive a confirmation on the terminal.

Additional Instructions

Check the internal modem for a daughter board. The daughter board will be attached with a screw to the main circuit board. Remove the daughter board. (The daughter is used for V.35 operations and may interfere with Turbolink.)

Turbolink initialization procedures

This chapter covers the initialization procedures for Turbolink. It is important that you make arrangements with your Patch Administration prior to initialization in order to co–ordinate a time when they will be able to verify successful Turbolink installation. You will need to provide the DDN for the dedicated line that was installed for Turbolink.

Initialization

Type in the following commands at the MAP terminal:

>**mapci;mtc;iod;ioc #;card #**
 # is your IOC and card number

Press <Return>

>**bsy all**
Press <Return>

>**rts all**
Press <Return>

After the RTS the link status should be ENABLIP.

Patch Administration Verification

Notify Patch Administration that you have initialized Turbolink. Patch Administration will attempt to access the switch via the newly installed Turbolink. When connection is made, the link status will change to ENABLD. When the link is dropped it will go SYSB. This is not abnormal.

If Patch Administration cannot access the DMS via Turbolink contact your next level of support.

Upon successful connection by Patch Administration, the installation of Turbolink is complete.

Appendix A
Modem settings

Table 5-1
Modem Settings

Setting	Option – An (*) indicates options to be selected
Quick Start	Select Config
	Factory Default 0
	Factory Default 1
	Factory Default 2
	Factory Default 3
	User Profile 0
	User Profile 1
	User Profile 2
	User Profile 3
	Answer ORG Mode
	Org if no Ring*
	Forced Answer
	Auto Ans in Org
	PL HDSK Mode
	GDC FAST Only*
	V32BIS Only
	V32 Only
	SN HDSK Mode
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Quick Start (continued)	GDC FAST Auto*
	GDC FAST Only
	V32BIS Auto
	V32BIS Only
	V32 Auto
	V32 Only
	V22BIS Only
	V22 Only
	212 Only
	103 Only
	V21 Only
	Operating Mode
	ASYNC Data
	SYNC Data*
	Save Config
	User Profile 0
	User Profile 1
	User Profile 2
	User Profile 3
Network Options	Network Select
	Switch Network*
	PL 2W
	PL 4W
	SN TX Level
	Permissive*
	Programmable
	PL TX Level
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Network Options (continued)	0 dBm to –15 dBm
	–9 dBm*
	Autodial Reset
	Disable*
	End Session
	No End Session
	PL Look back
	10 minute*
	20 minute
	30 minute
	40 minute
	Disable
	PL Down Time
	1 minute*
	2 minutes
	3 minutes
	4 minutes
	Disable
Terminal Options	DTE Speed
	Autobaud Speed*
	Last AT Speed
	300
	1200
	2400
	4800
	7200
	9600
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Terminal Options (continued)	12000
	14400
	16800
	19200
	21600
	24000
	26400
	28800
	38400
	57600
	76800
	115200
	128000
	CPM RESP Speed
	Autobaud Speed*
	Last CON Speed
	300
	1200
	2400
	4800
	7200
	9600
	12000
	14400
	16800
	19200
	21600
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Terminal Options (continued)	24000
	26400
	CPM RESP Speed (Cont'd)
	Autobaud Speed*
	28800
	38400
	57600
	115200
	128000
	CHAR Length
	8 6D
	9 7D
	10 7D PAR*
	10 8D
	11 7D PAR 2 STP
	11 8D PAR
	Parity
	Auto*
	Even
	Space
	Odd
	Mark
	Overspeed
	Nominal*
	Extended
	DTE Flow CTL
	Disable
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Terminal Options (continued)	Xon/Xoff
	CTS
	RTS/CTS*
	UNIDIR Xon/Xoff
	Terminal Echo
	Disable
	Enable*
	DCD Control
	On
	Real*
	On Wink DISC
	CTS Control
	CMD on/RTS
	CMD on/REAL*
	REAL
	FORCED on
	DTR TRANS CTL
	Ignored*
	On/Off CMD MD
	On/Off Idle
	On/Off Reset
	DSR Control
	On Wink DISC
	Normal*
	Follows DCD
	Forced On
	DSR in ANALOOP
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Terminal Options (continued)	On
	Off*
	Transmit Clock
	Internal*
	External
	WRAP
	RTS/CTS Delay
	0 msec*
	15 msec
	60 msec
	100 msec
Modem Options	Rings to Answer
	Disable
	1*
	2
	4
	8
	Fall FWD BCKWD
	Enable*
	Disable
	Trellis
	Enable*
	Disable
	Retrain Options
	Disable
	Enable 3 Times*
	Forever
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Modem Options (continued)	Long Space DISC
	Enable*
	Disable
	Speaker Control
	Off
	Off in Data*
	On
	On during CPM
	Speaker Volume
	Low
	Medium*
	High
	Make Busy
	Disable*
	On Loss of DTR
	In ANALOOP
	In AL No RS TR
	On Loss of RTS
	Power Up As
	User Profile 0*
	User Profile 1
	User Profile 2
	User Profile 3
	RDL Options
	Enable
	Disable*
	Test Timer
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Modem Options (continued)	Disable*
	1 minute
	5 minutes
	10 minutes
	DTE Test CTL
	Enable
	Disable*
	DCD Loss to DISC
	01400 msec
	2 sec
	4 sec
	8 sec
	Disable
	Delay DTR
	00005 sec
	10 sec
	20 sec
	30 sec
	CD RESP Time
	00600 msec
	500 msec
	1 sec
	2 sec
	Remote Config
	Enable
	Disable*

—continued—

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Dialer Options	Command Format
	AT*
	V25bis ASYNC
	V25bis HDLC
	V25bis BISYNC
	NONE
	Alpha Numeric
	Numeric
	Alpha*
	Call Progress
	Basic NO CPM
	EXTD RES NO CPM
	EXTD Dialtone
	EXTD Busy
	EXTD FULL CPM *
	Response Mode
	Enable*
	Disable
	Enable in ORG
	DTR Dial
	Disable*
	Cell 0 to 9
	DTR Talk/Data
	Dial Type
	Pulse
	DTMF*
	Pause Time, <
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Dialer Options (continued)	2 Sec*
	4 Sec
	6 Sec
	8 Sec
	Wait Dial tone
	2 Sec*
	4 Sec
	8 Sec
Protocol Options	ASYNC Protocol
	Wire Mode
	Direct Mode
	MNP Rel Mode
	Auto Rel Mode*
	V42 Rel Mode
	Rel LAPM or MNP
	ASYNC V13
	Compression
	Disable
	Enable*
	Tx Path Only
	Rx Path Only
	Break Handling
	EXP DST
	EXP Non DST
	Non EXP–DST
	Ignored
	TMD Non EXP–DST*
—continued—	

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Protocol Options (continued)	Modem Flow CTL
	Disable*
	Enable
	Unidirectional
	BiDir Pass Thru
	EC Data in HSK
	No Buffer
	Buffer Rx Data
	FB w/FB CHR*
	FB V14 No Bufr
	FB w/FB CHR V14
	SYNC Protocol
	Normal SYNC*
	SYNC V13
	V13 Mode
	Bidirectional*
	Tx Enable
	Rx Enable
	CONN & Link MSGS
	Separate MSGS
	Both after LINK
	Microcom Compat
	CONN after LINK*

—continued—

Table 5-1
Modem Settings (continued)

Setting	Option – An (*) indicates options to be selected
Modem Information	Protocol Select
	Normal SYNC
	PL Card
	None
	DTE Card
	EIA232C
Save Config	Save Config
	User Profile 0
	User Profile 1
	User Profile 2
	User Profile 3
—end—	

Table 5-2
Modem Configuration using AT Commands

Setting	Option – An (*) indicates options to be selected
Quick Start	AT%O0&H0&M2&W0
Network Options	AT&L0:T9&B0
Terminal Options	AT/T0%R0/B2/P4/A0/Q3E1&C1&R1&D0&S1%D1&X0S26=0
—continued—	

Table 5-2
Modem Configuration using AT Commands (continued)

Setting	Option – An (*) indicates options to be selected
Modem Options	ATS0=1&A1&U0%Q1Y1M1L2%B0&Y0&T5S18=0%EOS10=14S25=5S9=6*W1
Dialer Options	AT%V0V1X4Q0%Z0TS8=2S6=2
Protocol Options	AT/N3%C1/K4/G0/C2/M0&E0/V3
Save Config	AT&W0
—**end**—	

List of terms

DMS

       Digital multiplex system

DN

       Directory number

DNA

       Data network address

DND

       Dialable number delivery

IOC

       Input/output controller

MAP

       Maintenance and administration position

MTD

       Magnetic tape drive

SLM

       System load module

TAS

       Technical assistance service

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