

SMS OPENLink Systems

Installation and Configuration Information

Order Number: EK-SMSIC-IN. C01

This manual describes how to install and configure the SMS OPENLink Systems.

NOTE

Please call SMS at (610)219-4945 with questions or information not detailed in this manual.

Digital Equipment Corporation
Maynard, Massachusetts

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Preface

Document Purpose

This document contains the information necessary to install and configure the SMS OPENLink system.

Intended Audience

This document is designed for the people responsible for installing, using, or maintaining SMS OPENLink systems.

Document Structure

This document is organized as follows:

- **Chapter 1**— Contains SMS OPENLink configuration and connection information for the VAXstation 4000 96.
- **Chapter 2**— Contains the Category C Field Service Support Plan.
- **Chapter 3**— Contains information to set up a Paradyne 3820 dial modem for use as a support mode for an SMS OPENLink interface Platform.

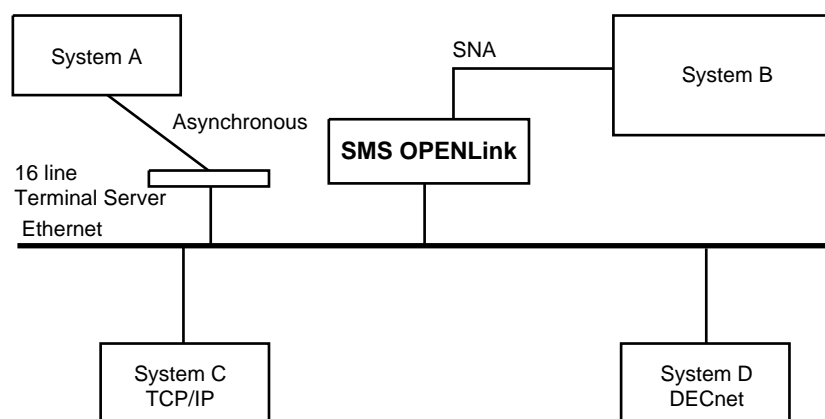
SMS OPENLink Configuration Information

1.1 Overview of the VAXstation 4000 Configuration

SMS OPENLink is SMS' Interface management platform. It consists of a Digital VAXstation 4000 96 CPU, Digital layered software products (ie VMS/SNA, DECnet, TCP/IP, ...) and SMS developed communications software. It's role is to provide a flexible platform that can be used to connect to Hospital systems and provide conversion of protocol and physical connections. To this end, SMS OPENLink will provide the ability to interface an asynchronous system to a DECnet based system, or a DECnet to TCP/IP or asynchronous to TCP/IP, etc... In each of these cases, the SMS OPENLink platform is connected to the system using the resources available on that system and provides translation/conversion between dissimilar systems to allow them to share information.

The following is a schematic of a typical configuration. In this configuration, an interface has been constructed between systems A, C & D and system B. This allows system B to send information to system A, C & D and system A, C & D to send information back to system B. In fact, it will allow each system to communicate to every system connected to SMS OPENLink.

Figure 1-1 Typical SMS OPENLink Configuration



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1.1.1 SMS OPENLink Part Numbers (Digital Integration)

The following four figures show various configurations with part numbers.

Figure 1–2 Configuration 1

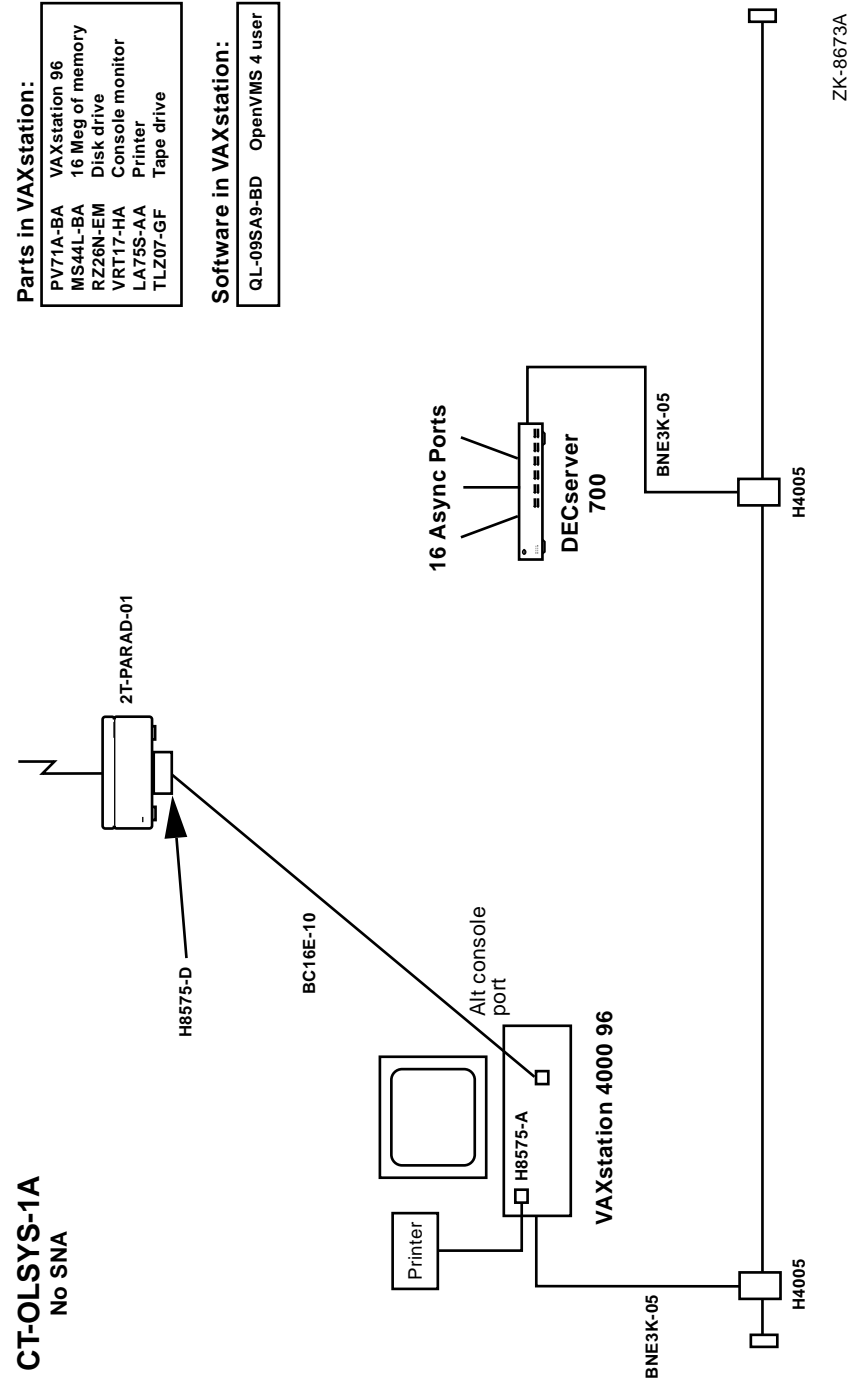
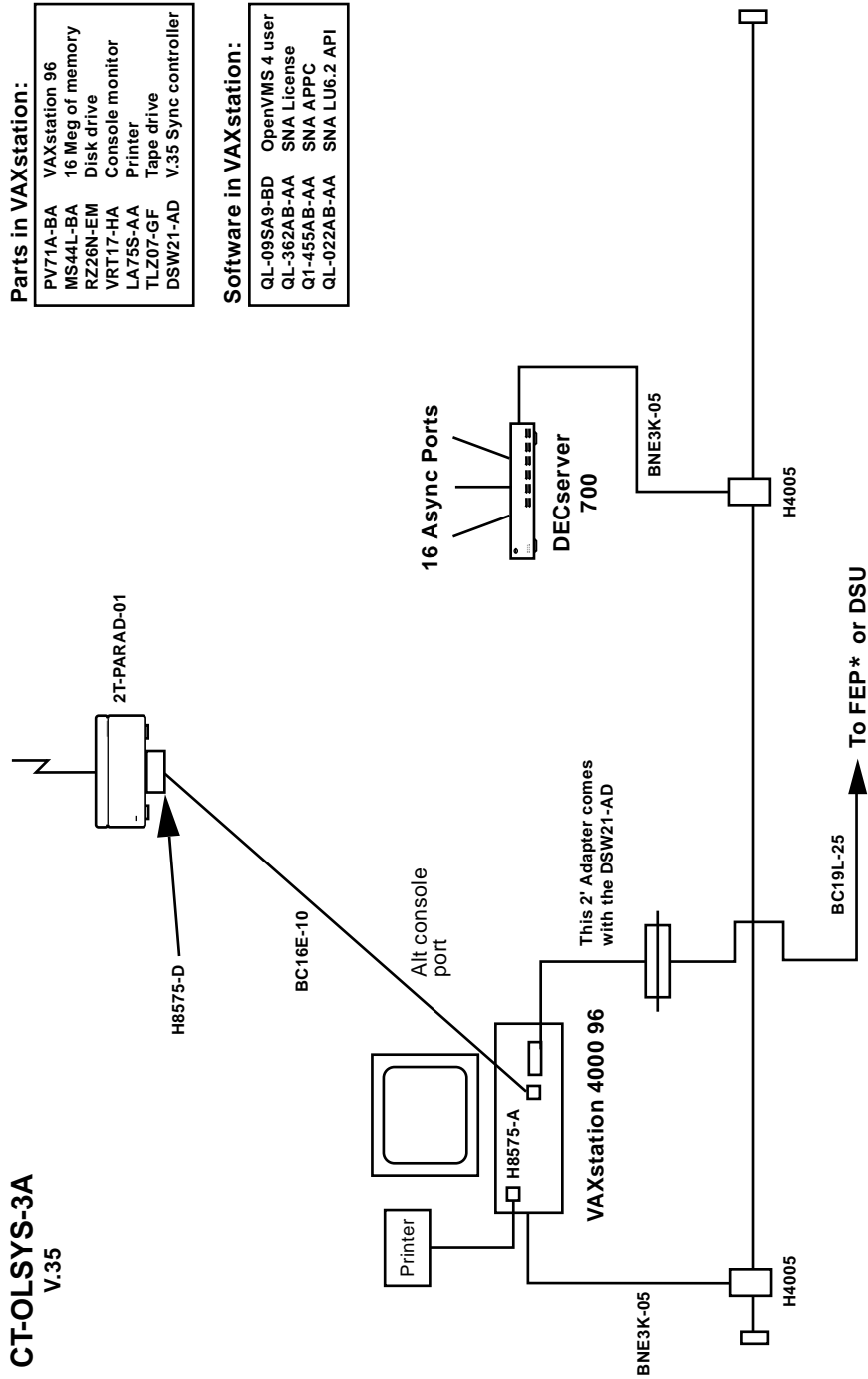


Figure 1-3 Configuration 2



Parts in VAXstation:

PV71A-BA	VAXstation 96
MS44L-BA	16 Meg of memory
RZ26N-EM	Disk drive
VRT17-HA	Console monitor
LA75S-AA	Printer
TLZ07-GF	Tape drive
DSW21-AD	V.35 Sync controller

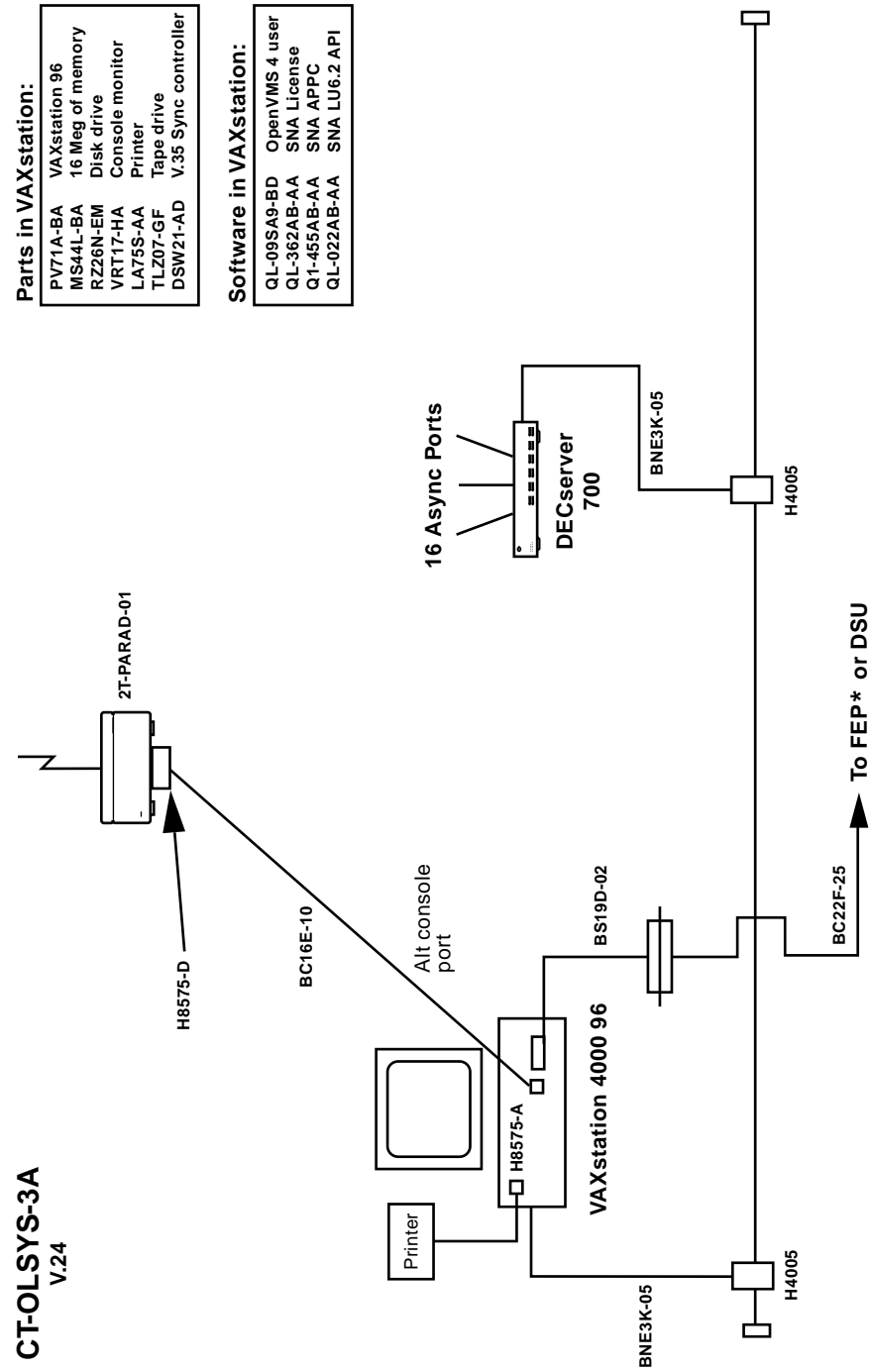
Software in VAXstation:

QL-09SA9-BD	OpenVMS 4 user
QL-362AB-AA	SNA License
QL-455AB-AA	SNA APPC
QL-022AB-AA	SNA LUG.2 API

* FEP connection requires IBM part # 58X9484 for LIC type 3

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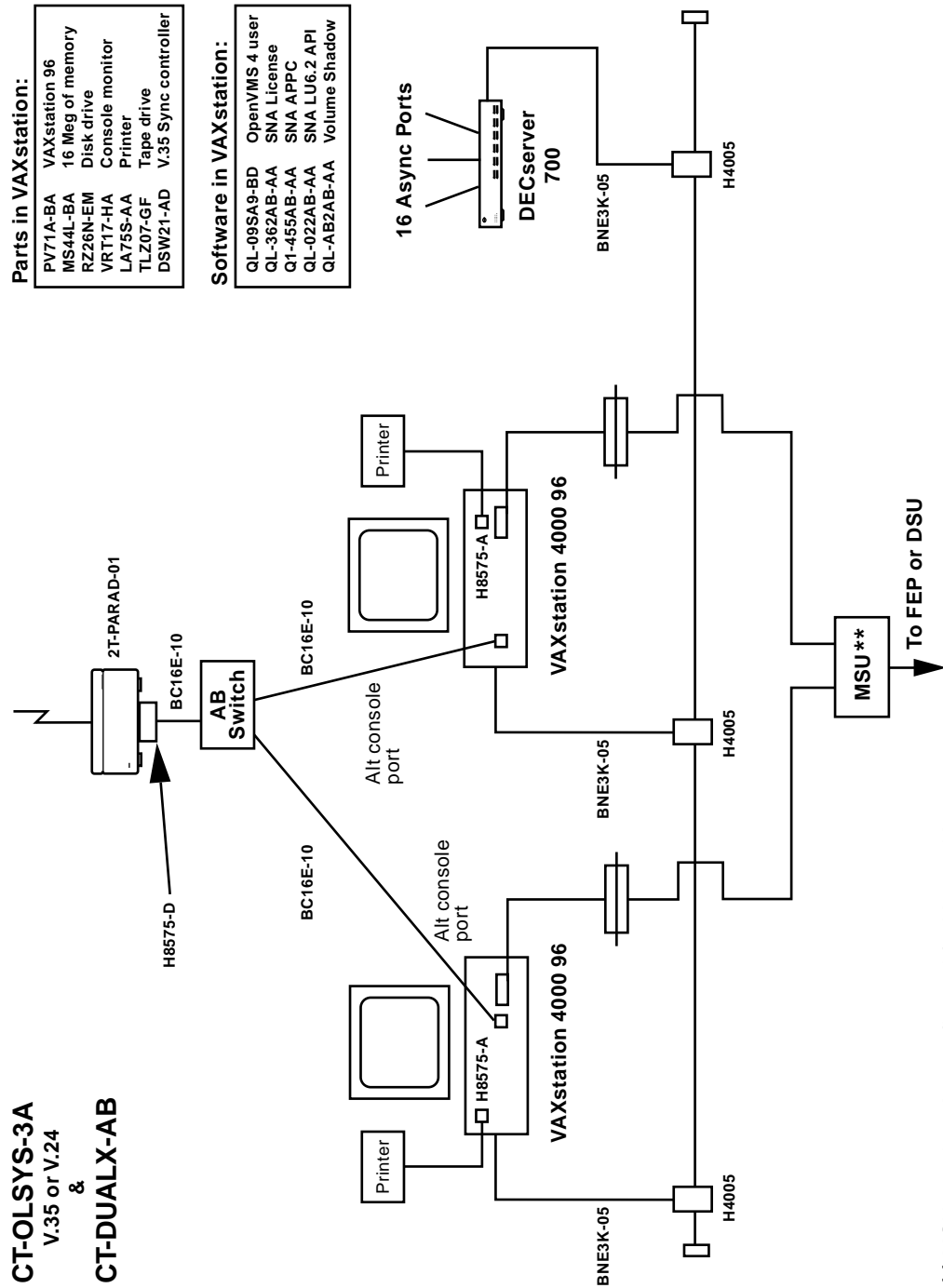
Figure 1-4 Configuration 3



* FEP connection requires IBM part # 7837395 for LIC type 1

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Figure 1-5 Configuration 4



** MSU needs to be configured for V.24 or V.35.
Network Services has details and ordering information

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1.1.2 SMS OPENLink Synchronous Connections

The SMS OPENLink Interface Management Platform connects IBM systems through the DSW21 synchronous option. The DSW21 can provide both V.24 or V.35 communication. SMS, in most configurations, will use the V.35 option. The Synchronous capability is implemented to connect to SMS' INVISION application.

1.1.2.1 V.35 Cabling

The V.35 cabling consists of a 2' adapter cable that is included with DSW21-AD option. This part does not appear on the parts list. The 2' adapter cable connects directly to the back of the VAXstation 4000 96. The BC19L-25 is a 25 foot extension cable that connects to the 2 foot adapter cable. This is the typical configuration

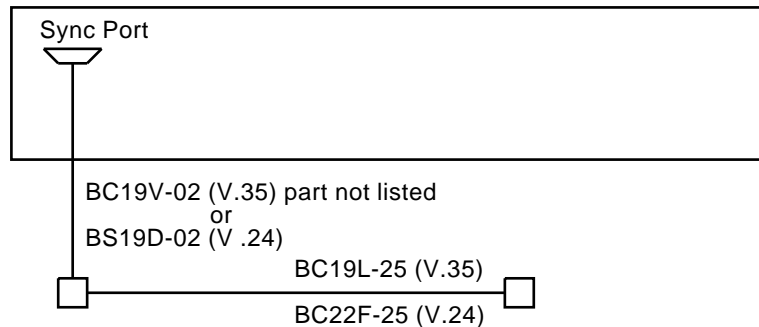
1.1.2.2 V.24 (RS232) Cabling

The V.24 cabling consists of a BS19D-02 2' adapter cable. This cable provides a V.24 connection. The connection to the included, is the 25' extension cable.

The connection will be used to connect either an 37xx IBM Front End Processor or to a DSU (Digital Service Unit) connected to a digital telephone company circuit. The connection depends on the hospitals option of ICO or RCO INVISION®. The ICO option connects to the FEP, and the RCO option connects to the DSU.

In a redundant scenario the connections to the VAXstations 4000 96 will be the same. However, a MSU (Modem Sharing Unit) may be necessary on the IBM side. There may be ports available on either the FEP or the DSU. If there are none, please notify the SMS project manager, or the installation programmer.

Figure 1-6 Synchronous Cabling (SNA)

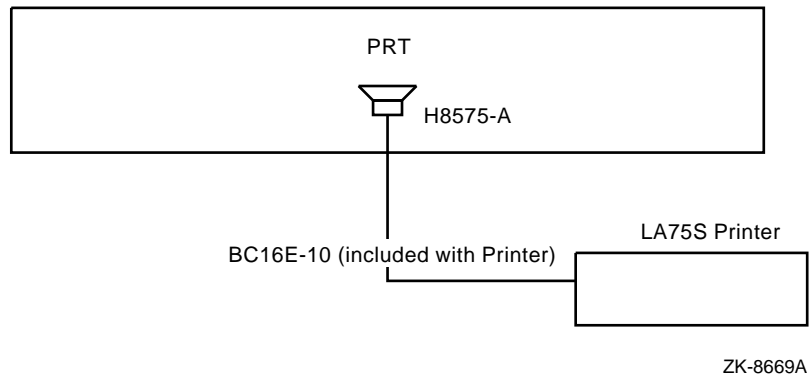


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1.1.3 SMS OPENLink Printer Cabling

The Printer connects in the PRT port of the VAXstation. A BC16E-10 should be included with the printer. The second H8575-A is included to convert the 25 pin cable to MMJ.

Figure 1-7 Printer Cabling



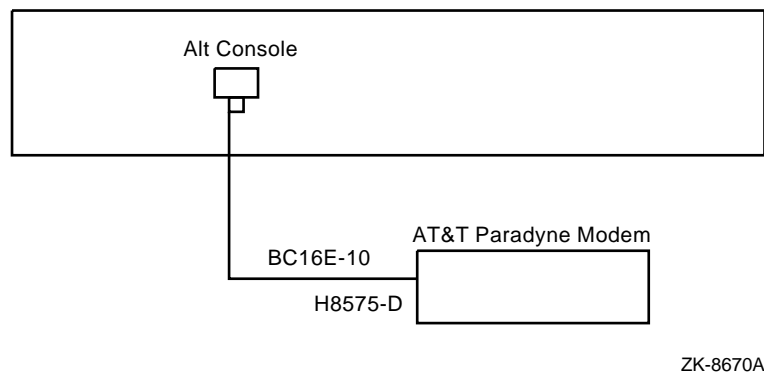
1.1.4 SMS OPENLink Modem Cabling

As described in the CT-OLSYS-1A and CT-OLSYS-3A part numbers the modem is connected to the VAXstation via Digital Connect Cable and one adapter.

BC16E-10 Digital Connect Cable
H8575-D Adapter 25 Pos Male with EOS

The H8575-D connects to the back of the modem. The BC16E-10 connects the H8575-D to the VAXstation alt console port. If you have any question, please notify the SMS project manager, or the installation programmer.

Figure 1-8 Dial Modem Cabling

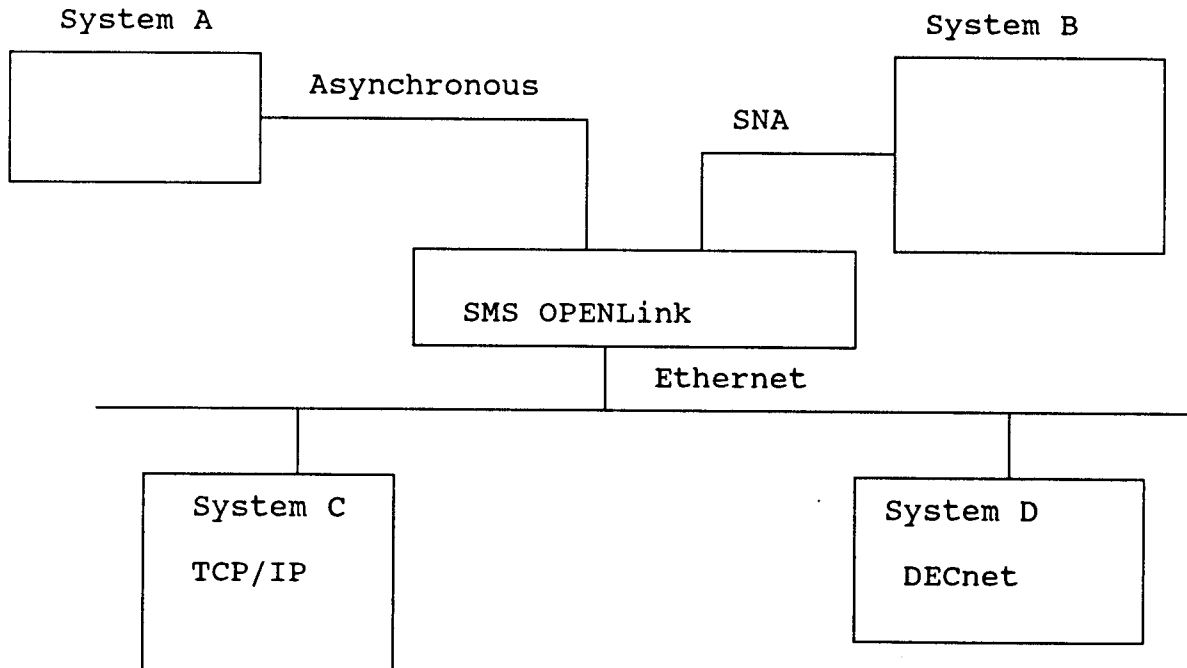


1.2 Overview of the SMS OPENLink Configuration

SMS OPENLink is SMS' Interface Management Platform. It consists of an SMS OPENLink configuration and SMS developed communications software. Its role is to provide a flexible platform that can be used to connect to Hospital systems and provide conversion of protocols and physical connections. To this end, SMS OPENLink will provide the ability to interface an asynchronous system to a DECnet based system, or DECnet to TCP/IP or Asynchronous to TCP/IP, etc... In each of these cases, the SMS OPENLink platform is connected to the system using the resources available on that system and provides translation/conversion between dissimilar systems to allow them to share data.

The following is a typical configuration. In this configuration, an interface has been constructed between systems A, C & D and System B. This allows System B to send information to System A, C & D and Systems A, C & D to send information back to System B.

Figure 1-9 Typical SMS OPENLink Configuration



1.3 Account Management Team

**DIGITAL EQUIPMENT CORPORATION
ACCOUNT MANAGEMENT TEAM
FOR
SHARED MEDICAL SYSTEMS**

I. Sales Team

Sales Account Manager

Jean Langone-Smith
(610) 219-82300

Digital Equipment Corporation
512 Township Line Road
Blue Bell, PA 19422-2388

Sales Executive

Mike Venn
(610) 219-3811

Digital Equipment Corporation
512 Township Line Road
Blue Bell, PA 19422-2388

Sales Representatives

Marsha Spencer
(610) 268-6928
(610) 219-4165

Digital Equipment Corporation
709 Spencer Road
Avondale, PA 19311

II. Digital Services Account Team

D.S. Account Manager

Connie Sundberg
DTN: 328-3085
(215) 542-3085

Digital Equipment Corporation
Two Penns Way
New Castle, DE 19720

III. CAS Administration (Short-Ship Coordination)

Gary Higgenson
(609) 231-9409

Digital Equipment Corporation
243 Amberfield Drive
Mt. Laurel, NJ 08054

Please see attached Material Replacement Request. The information requested on this form is required when contacting CAS regarding short-ships or mis-ships.

Note

**THE FOLLOWING PART NUMBER SHOULD BE USED FOR
CATEGORY C ITEMS**

ATT modem 2T-PARAD-01 order through stockroom 020

1.4 Material Replacement Request

Material Replacement Request

Digital # _____ Part # Received _____
Initial ID Date _____ Mis-Ship Serial # _____
Initial ID Time _____ System to be used on _____
Company Name _____ Serial #/Line Item _____
Company Contact _____ Part # Now Requested _____
Company Contact Phone _____ Quantity Requested _____
Reason _____ Description _____

Category C Plan

For reasons listed below, a Category C Field Service Support Plan will not be written for the:

CUSTOMER: Shared Medical
Part Number: 2T-PARAD-01

This memo serves as notification to the customer's Sales account team and local Field Service Unit Manager of Digital/CSS's intention to ship this product without distributing such a support document. The customer's Sales Account Rep is requested to forward this memo to the appropriate local Field Service Unit Managers and to review the Sales Quotation with Field Service prior to system shipment. If additional information is required from CSS, please contact:

Linda Brooks
Digital Services Custom Product Manager
MKO1-2/J15
E-mail: SOLVIT::LBrooks or Linda Brooks MKO
Phone: DTN: 264-6347 or
(603)-884-6347

- All of the components included in the above configuration are either Category A supported by Digital Field Service, or are available to Field Service through normal logistics channels.

Note

*****THE FOLLOWING PART NUMBER SHOULD BE USED WHEN ORDERING SPARES*****

AT&T Modem available thru stockroom 020 as 2T-PARAD-01. Installation instructions for the AT&T modem will be included in the SMS Turnover Checklist that will be sent to you.

(This part number is not available from SR 017) However, you may choose to order spares directly from AT&T for field inventory.

- This system configuration imposes no additional restrictions on the customer's use of the devices included within it.
- This system configuration imposes no unusual requirements on Digital's Field Service organization for its service.

SMS OPENLink Support Modem Setup Paradyne 3820 Modem

3.1 About This Procedure

This procedure outlines the steps required to set up a Paradyne 3820 dial modem for use as a support mode for an SMS OPENLink interface Platform. It covers the keystrokes required to use the front panel of the modem to:

- Set up the speed, parity & character size to be used between the modem and the VAXstation 4000 96 port.
- Turn off messages generated by the modem (ie RING, CONNECT 9600, ...) that would otherwise be sent to this VAXstation 4000 96 port.
- Determine the number of rings to answer on.

3.2 Modem Front Panel

The Paradyne 3820 modem is equipped with a 2 line (16 characters per line) LCD display and a key pad that can be used to navigate through the various setup options.

The keypad has the following keys:

Right Arrow	Used to show additional options on the LCD display.
Left Arrow	Can be used to move back to a previously displayed option.
Double Up Arrow	Used to jump to the top of the command list.
F1, F2, F3	Used to select the option displayed above the key.

3.3 Setup Procedure

Use the following steps to setup the Paradyne 3820 modem.

I. Reset to Factory Defaults

1. Power up the modem and wait for a message similar to the following to appear:

```
Idle:9600    Call_Setup
```

2. Press the **right arrow** (>) key 3 times to cause the **CONFIGURE** option to appear on the LCD display.
3. Press the **F3** button below the word **CONFIGURE**. This selects the **CONFIGURE** option and causes the following to be displayed:

```
Ld Edit Area Frm>  
Active (Operating)
```

4. Press the **right arrow** (>) key 4 times to cause the **Factory** option to appear on the display. Press the **F1** key to select Factory Defaults.

The following is displayed on the screen:

```
Ld Fact Preset:>
Async_Dial
```

5. Press the **F1** key to select the Factory Defaults for the Async_Dial configurations. The following is displayed:

```
Choose Function>
Edit      Save
```

6. Press the **F3** key to save the factory defaults. The following is displayed:

```
Save EditArea to>
Active(saved)
```

7. Press the **F1** key to save factory defaults to the Active configuration. The following message is displayed:

```
Command Complete
```

8. Press the **double up arrow** to reset the display to:

```
Idle:9600
Call_Setup
```

II. Modem Setup

1. Power up the modem and wait for a message similar to the following to appear:

```
Idle:9600
Call_Setup
```

2. Press the **right arrow** (>) key 3 times to cause the **CONFIGURE** option to appear on the LCD display.
3. Press the **F3** button below the word **CONFIGURE**. This selects the **CONFIGURE** option and causes the following to be displayed:

```
Ld Edit Area Frm>
Active(Operating)
```

4. Press the **F1** key to select the **ACTIVE(Operating)** Edit Area. The following is displayed:

```
Choose Function>
Edit      Save
```

5. Press the **F1** to select the **Edit** option. The following is displayed:

```
Edit StrapGroup>
DTE_Interface
```

6. Press the **F1** key to select setup of the **DTE_interface**. The modem will begin to display the various parameters for the DTE Interface. These will be displayed in the following format:

```
Async/Sync Mode>
NXT      Async
```

7. Ensure that the following setups are correct. If the correct value is not displayed, use the **right arrow** key to display optional values until the proper value is displayed. Then press the **F2** key to select that option.

When the proper option is displayed, press the **F1** key to move to the next parameter.

```
Async DTE Rate >
Nxt 9600

Async #Data Bits>
Nxt 8

Asyn Parity Bit >
Nxt None

Asyn #Stop Bits >
Nxt 1

DTR Action >
Nxt Ignore

DSR Control >
Nxt Forced_On

RTS Action >
Nxt Ignore

CTS Control >
Nxt Forced_On

RTS/CTS Delay >
Nxt 0Msec

LSD Control >
Nxt Stndrd_RS232

CT111_Rate Cntl >
End Disable
```

8. Press **F1** at the last parameter to select End. The following will be displayed:

```
Edit StrapGroup>
DTE_Interface
```

9. Using the **right arrow** key, display the following and press the **F1**, **F2** or **F3** key located under it.

```
Edit StrapGroup
DTE_Dialer
```

The following is displayed:

```
DTE Dialer Type
Nxt AT
```

10. Press the **F1** key to move to and verify the values of the following parameters. If a value is incorrect, use the right arrow key to walk through the available values and select the correct value by pressing the **F1**, **F2** or **F3** key located under it. Some parameters will be displayed in between those listed below. Ignore these other parameters and their values.

```
CommandCharEcho>
Nxt Disable

Result Codes >
Nxt Disable

ExtendResltCode>
Nxt Disable
```

11. When the following parameter is reached:

```
AT Cmd Mode    >
End Normal
```

press the **F1** key to select **End**. This returns you to the level at which you selected **DTE_Interface** and **DTE_Dialer**.

12. Use the **right arrow** key to move to the **Line Dialer** option.

```
EditStrapGroup
Line Dialer
```

13. Press the **F1** key located directly below this option to select it. The following will be displayed:

```
AutoAnswrRing#>
Nxt 1
```

If 1 is not displayed, use the **right arrow** key to walk through the available options until a 1 is displayed. Then press the **F2** key located directly below this option to select it.

Ensure that the following parameter is set:

```
Long Space Disc>
Disabled
```

Keep selecting Nxt until you have stepped through all of the options under Line Dialer and have returned to the level at which you selected Line Dialer.

14. Use the **right arrow** (>) key to move to the V42/MNP/Buffer option. Press the **F1**, **F2** or **F3** key located under V42/MNP/Buffer to select this category.

Ensure that the following parameters are set:

```
EC Negot Buffer>
Enable

Flow Ctl of DTE>
Xon/Xoff

Flow Ctl of Modem>
Xon/Xoff

Xon/Xoff Passthru>
Enable
```

15. After completing the editing of V42/MNP/Buffer parameters, press the **double up arrow** (located to the right of the LCD display). This will move you to the following prompt.

```
Save Straps?
Yes No
```

16. Press the **F1** key to select **Yes**. The following is displayed.

```
Sav EditArea to>
Active(Saved)
```

17. Press the **F1** key to select **Active(Saved)**. The following is displayed.

```
Sav EditArea to>
Command Complete
```

18. Press the **Double up arrow** to restore the display to the idle message:

Idle:9600¹

Call_Setup

19. Follow the turnover instructions that follow:

When installation of the SMS OPENLink hardware is complete or problems arise, please contact SMS by beeping the SMS OPENLink installs beeper. This beeper is on 24 hours a day, 7 days a week, 365 days a year. The SMS OPENLink installs beeper is the preferred method of contact. If you do not receive a call back within 15 minutes to the number you put in the page, please try to beep the installs beeper two more times. Only after no response to your third attempt should you contact Joe Auriemma's beeper.

SMS OPENLink Installs Beeper: (610) 907-2849

Joe Auriemma's Beeper: (610) 334-1171

¹ This parameter refers to the speed between modems, not to the speed between modems and VAXstation systems.

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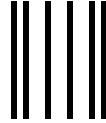
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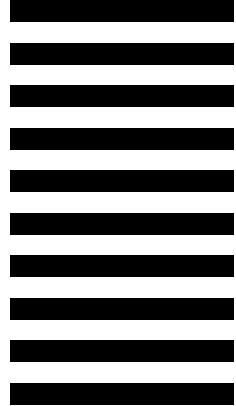
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