

# MicroVAX 3100 Model 85/95

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## Installation Information

Order Number: EK-A0716-IN. B01

**June 1994**

This manual describes how to install and test the MicroVAX 3100 Model 85 and Model 95.

**Revision Information:** This manual supersedes EK-A0716-IN. A01

**Digital Equipment Corporation  
Maynard, Massachusetts**

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**June 1994**

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This warning only applies to the MicroVAX 3100 Model 85.

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Diese Warnung bezieht sich nur auf Geräte des Typs MicroVAX 3100 Modell 85.

**Attention!**

Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées.

Cette mise en garde ne s'applique qu'au MicroVAX 3100 modèle 85.

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## Preface

This manual describes how to install and test the MicroVAX™ 3100 Model 85 and Model 95. It also refers to information on connecting the system to a network, connecting external options to the system, and booting the operating system.

### Audience

This manual is intended for anyone who wants to install the MicroVAX 3100 Model 85/95. It is written for both experienced and inexperienced users.

### Structure of This Manual

The procedure for installing the MicroVAX 3100 Model 85/95 is presented in only one chapter. Each section in the chapter represents a major step in the procedure and contains detailed instructions to follow.

### Additional Information

See the *MicroVAX 3100 Model 85/95 Operator Information* manual for the list of related documents.

## Conventions

The following conventions are used in this manual:

<b>Convention</b>	<b>Description</b>
MONOSPACE type	Text displayed on the screen is shown in monospace type.
<i>italic type</i>	Italic type emphasizes important information and indicates the complete titles of manuals.
<b>Note</b>	A note contains information that is of special importance to the user.

# 1

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## Installation Procedure

This chapter shows you, step by step, how to install the MicroVAX 3100 Model 85/95.

### Step 1: Choosing a Suitable Location

Follow these guidelines when you choose where to place the system unit:

- Place the system unit where the room temperature is between 10°C and 40°C (50°F and 104°F) and the humidity is between 10% and 90%.
- Place the system unit at least 1 metre (3 feet) from heaters, photocopying machines, or other operating equipment.
- Place the system unit in a well-ventilated location.
- Place the system unit on a work surface, which is raised above the floor.
- Keep the air vents on either side of the system unit clear.
- Do not place the system unit on its side.
- Do not expose the system unit to direct sunlight or abrasive particles.

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#### Note

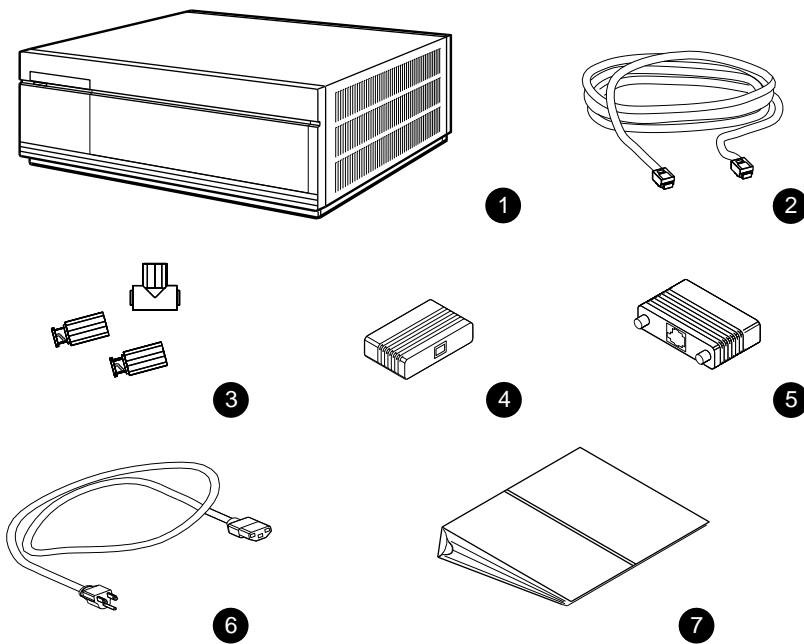
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A console terminal is required for this installation, but is not supplied with the system. You can order one from your Digital™ sales representative.

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## Step 2: Unpacking the System and Identifying the Parts

1. Unpack the system.
2. Make sure that you have all the parts listed on the packing slip. The following loose-piece accessory kit is shipped with all basic systems. If you do not have all the parts listed, contact your Digital Sales representative.



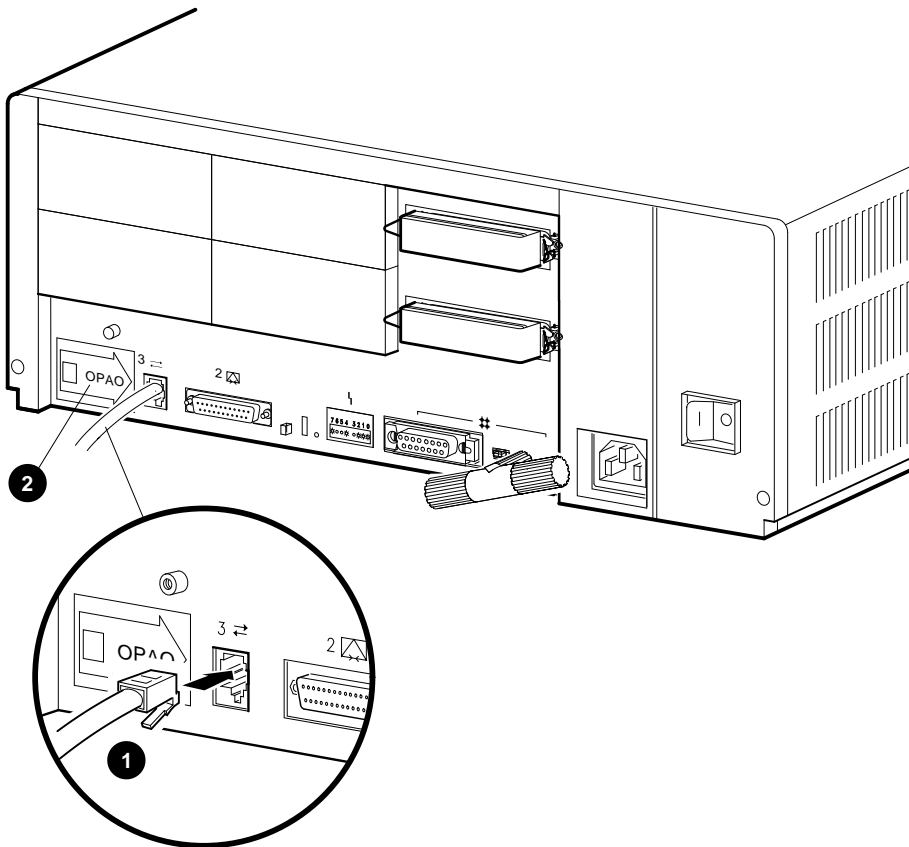
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- ① System Unit
- ② DEC423 Terminal Cable (BC16E-25)
- ③ One ThinWire™ Ethernet T-Connector (H8223) and Two Terminators (H8225)
- ④ Standard Ethernet Loopback Connector (12-22196-01)
- ⑤ RS232 to DEC423 Adapter (H8575-A)
- ⑥ Power Cord
- ⑦ Documentation and Software Licenses



### Step 3: Connecting the Console Terminal

1. Connect one end of the terminal cable to modified modular jack (MMJ) port 3.
2. Connect the other end of the terminal cable to a DEC423 (MMJ) communications port on the console terminal. If your terminal has only RS232 ports, use the RS232 to DEC423 adapter (H8575-A) to provide an MMJ port on the terminal.
3. If you want, remove the label covering MMJ ports 0 and 1.

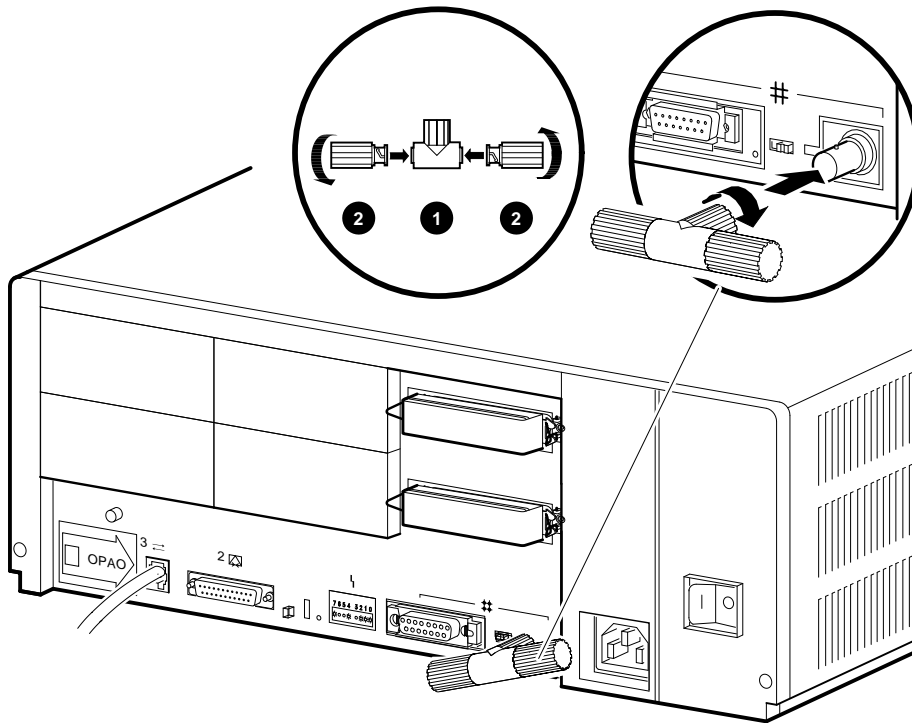


MLO-012030

- 1 Terminal Cable
- 2 Label

## Step 4: Connecting the ThinWire Terminator

1. Assemble the T-connector and the two terminators to form a ThinWire terminator.
2. Connect the ThinWire terminator to the system unit.

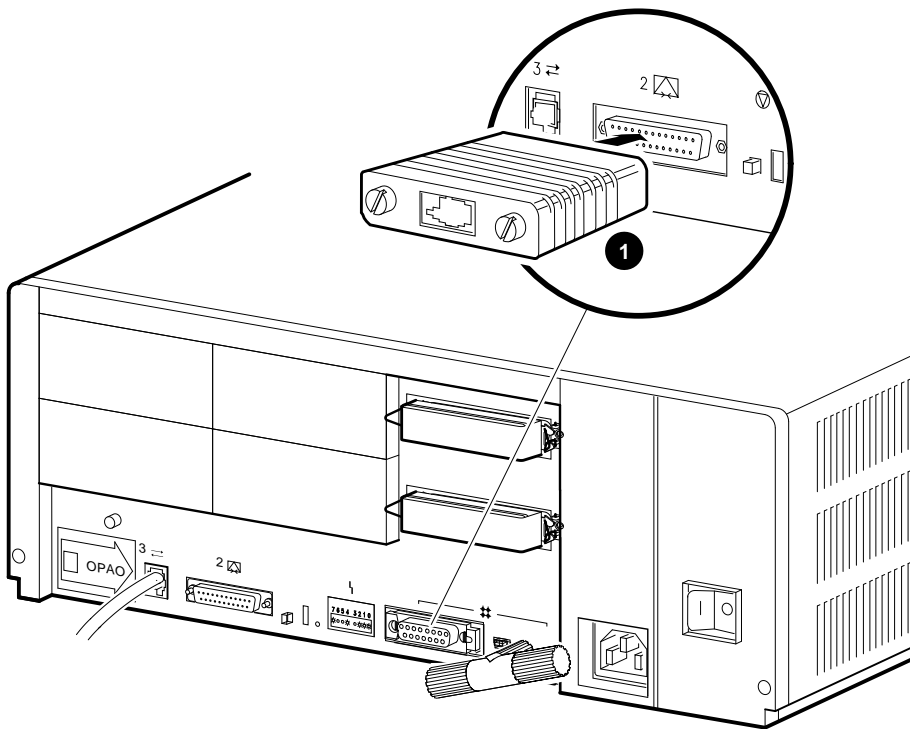


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- ① T-Connector
- ② Terminator

## Step 5: Connecting the Standard Ethernet Loopback Connector

Connect the standard Ethernet loopback connector (12-22196-01) to the system unit.

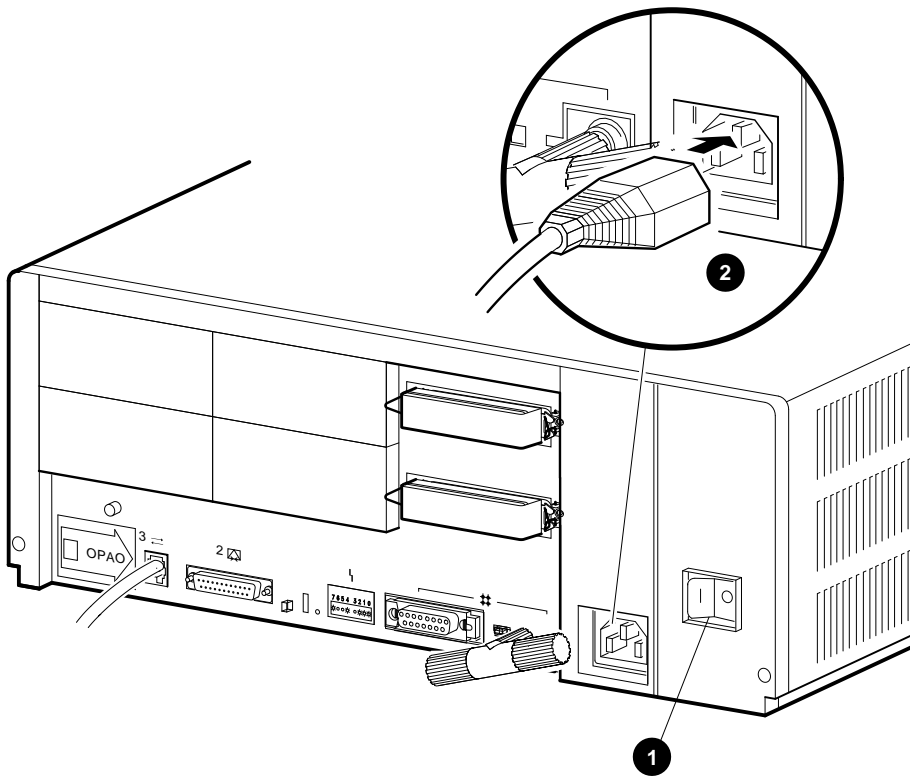


MLO-012032

- 1 Standard Ethernet Loopback Connector (12-22196-01)

## Step 6: Connecting the Power Cord

1. Ensure that the on/off switch is in the off (O) position.
2. Connect the power cord to the system unit.
3. Connect the other end of the power cord to an isolated, grounded circuit.

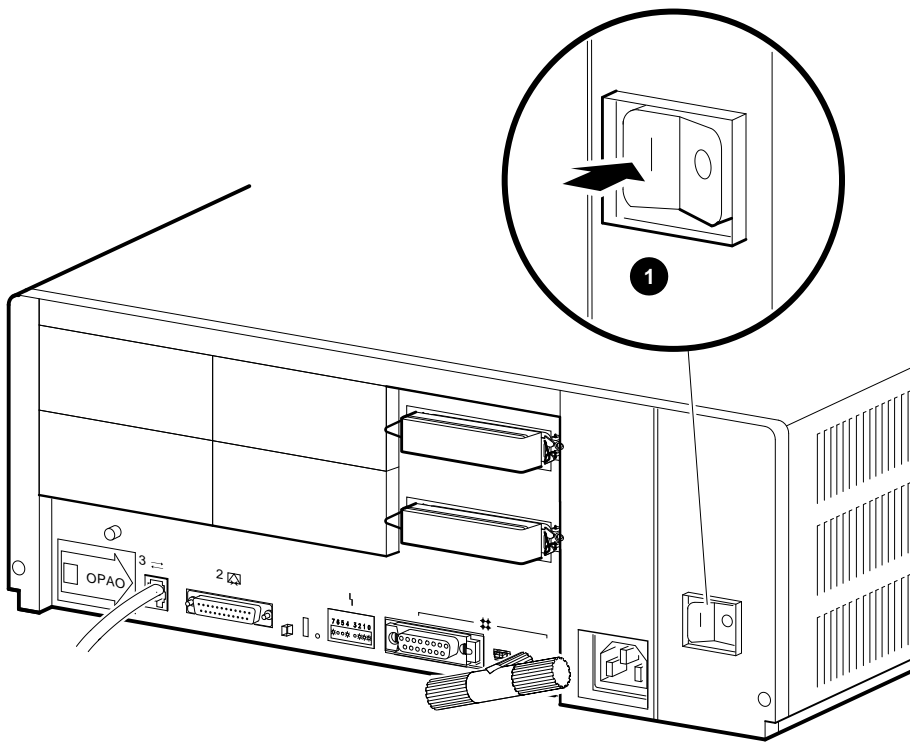


MLO-012033

- 1 On/Off Switch
- 2 Power Cord

## Step 7: Turning on the Console Terminal and System Unit

1. Turn on the console terminal. Wait until it completes its power-up test. (See the terminal documentation for more information.)
2. Check the terminal settings. See the *MicroVAX 3100 Model 85/95 Operator Information* manual for the list of correct settings.
3. Turn on the system unit by setting the on/off switch to the on ( I ) position.



MLO-012034

❶ On/Off Switch

## Step 8: Checking the Power-Up Test Results

The power-up test can take several minutes to complete, depending on the number of installed options you have and on which default settings you use:

- If the power-up test results on the screen are similar to the results in Figure 1–1, the system has passed the power-up test. Go to step 9.
- If the power-up test results on the screen are not similar to the results in Figure 1–1, the system has not passed the power-up test. Go to substep 1.

**Figure 1–1 Successful Power-Up Test Screen**

```
KA55-A or KA51-A V2.3, VMB 2.14 ❶
Performing normal system tests.
74..73..72..71..70..69..68..67..66..65..64..63..62..61..60..59..
58..57..56..55..54..53..52..51..50..49..48..47..46..45..44..43.. ❷
42..41..40..39..38..37..36..35..34..33..32..31..30..29..28..27..
26..25..24..23..22..21..20..19..18..17..16..15..14..13..12..11..
10..09..08..07..06..05..04..03..
Tests completed. ❸
>>> ❹
```

❶ Central Processing Unit (CPU) name, Firmware version number, and Virtual Memory Boot (VMB) version number

❷ Read-Only Memory (ROM) based diagnostics countdown

❸ Status message

❹ Console prompt

1. Write down the error messages and the error summaries. Figure 1–2 shows an example of an error message and an error summary.
2. Set the on/off switch to the off (O) position.
3. Make sure that all the connections you made in step 3, step 4, step 5, and step 6 are correct.
4. Set the on/off switch to the on ( I ) position.
5. If an error report is still displayed, see the *MicroVAX 3100 Model 85/95 Troubleshooting and Diagnostic Information* manual.

**Figure 1–2 Unsuccessful Power-Up Test Screen with an Error Report**

```
KA55-A or KA51-A V2.3, VMB 2.14
Performing normal system tests.
74..73..72..71..70..69..68..67..66..65..64..63..62..61..60..59..

? Test_Subtest_31_05 Loop_Subtest=00 Err_Type=FF DE_Memory_Setup_CSRs.lis ❶
Vec=0000 Prev_Errs=0000 P1=00000000 P2=01000000 P3=00000001 P4=00010000
P5=2101801C P6=00000007 P7=80000003 P8=0000CF4A P9=00000001 P10=2006B8D8
r0=00000002 r1=21018000 r2=00000008 r3=81000000 r4=00000001 r5=01000000 ❷
r6=2006EB77 r7=21018048 r8=00000000 r9=20140758 r10=00000000 r11=FFFFFFFF
dser=0000 cesr=00000000 intmsk=00 icsr=01 pcsts=FA00 pcadr=FFFFFFF8 pcctl=FC13
cctl=00000020 bcetsts=0360 bcedsts=0F00 cefsts=00019200 nests=00
mmcdsr=01FE6600 mesr=00000000

58..57..56..55..54..53..52..51..50..49..48..47..46..45..44..43.. ❸
42..41..40..39..38..37..36..35..34..33..32..31..30..29..28..27..
26..25..24..23..22..21..20..19..18..17..16..15..14..13..12..11..
10..09..08..07..06..05..04..03..

16 MB RAM, SIMM Set (0A,0B,0C,0D) present
Memory Set 0: 00000000 to 0FFFFFFF, 16MB, 32768 good pages, 0 bad pages

Error: SIMM Set 1 (1E,1F,1G,1H) ❹
SIMM_1E = 64MB SIMM_1F = 64MB SIMM_1G = 64MB SIMM_1H = 00MB ??

Total of 16MB, 32768 good pages, 0 bad pages, 104 reserved pages

Normal operation not possible. ❺
```

- ❶ Error message
- ❷ Error summary
- ❸ Power-up test completion
- ❹ Specific error information on the test that failed
- ❺ Status message

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**Note**

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Step 9 and step 10 are optional. However, step 11 is mandatory.

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### **Step 9: Connecting the System to a Network**

If you want to connect the system to a network, see the *MicroVAX 3100 Model 85/95 Operator Information* manual.

### **Step 10: Connecting External Options to the System**

If you want to connect external options to the system, see the *MicroVAX 3100 Model 85/95 Operator Information* manual.

### **Step 11: Booting the Operating System**

The system is supplied with factory installed software (FIS) on the system disk. Boot the operating system following the procedures in the *OpenVMS™ Factory Installed Software User Information*.



## Reader's Comments

MicroVAX 3100  
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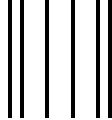
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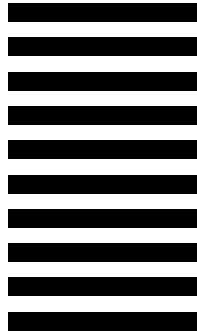
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