# MicroVAX 3100 Model 90

# Installation Information

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This manual describes how to install and test the MicroVAX 3100 Model 90.

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# Preface

This manual describes how to install and test the MicroVAX<sup>TM</sup> 3100 Model 90. 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 90. It is written for both experienced and inexperienced users.

### **Structure of This Manual**

This manual contains one chapter. Each section heading is a step in the installation procedure and is indicated by the word *step* and a numeral. Substeps in the procedure are indicated by a numeral.

### **Additional Information**

See the *MicroVAX 3100 Model 90 Operator Information* manual for the list of associated and related documents.

# Conventions

The following conventions are used in this manual:

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

# 1

# **Installation Procedure**

This chapter shows you, step by step, how to install the MicroVAX 3100 Model 90.

### 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.

\_ Note \_\_

The console terminal is not supplied with the system. If you do not have a Digital Equipment Corporation terminal, order one from your Digital<sup>™</sup> Sales representative.

# 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.



- **1** System Unit
- **2** DEC423 Terminal Cable (BC16E-25)
- One ThinWire<sup>™</sup> 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.



# 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.



**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.



**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.



• 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 90 Operator Information* manual for the list of correct settings.
- 3. Turn on the system unit by setting the on/off switch to the on ( | ) position.



**1** 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

```
KA50-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..
58..57..56..55..54..53..52..51..50..49..48..47..46..45..44..43.. 
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. 
3
```

- Central Processing Unit (CPU) name, Firmware version number, and Virtual Memory Boot (VMB) version number
- **2** Read-Only Memory (ROM) based diagnostics countdown
- **3** Status message
- **4** 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 ( | ) position.
- 5. If an error report is still displayed, see the MicroVAX 3100 Model 90 Troubleshooting and Diagnostic Information manual.

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

KA50-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 1 Vec=0000 Prev\_Errs=0000 P1=00000000 P2=01000000 P3=0000001 P4=00010000 P5=2101801C P6=0000007 r0=0000002 r1=21018000 P7=8000003 P8=0000CF4A P9=0000001 P10=2006B8D8 r4=0000001 r5=01000000 2 r2=00000008 r3=81000000 r6=2006EB77 r7=21018048 r8=00000000 r9=20140758 r10=00000000 r11=FFFFFFF dser=0000 cesr=00000000 intmsk=00 icsr=01 pcsts=FA00 pcadr=FFFFFF8 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.. 3 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 00FFFFFF, 16MB, 32768 good pages, 0 bad pages Error: SIMM Set 1 (1E,1F,1G,1H) a SIMM 1G = 64MBSIMM 1E = 64MBSIMM 1F = 64MBSIMM\_1H = 00MB ?? Total of 16MB, 32768 good pages, 0 bad pages, 104 reserved pages Normal operation not possible. 6

- Error message
- **2** Error summary
- **3** Power-Up test completion
- **4** Specific error information on the test that failed
- **6** Status message

\_ Note \_

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

## Step 9: Connecting the System to a Network

If you want to connect the system to a network, see the *MicroVAX 3100 Model 90 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 90 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  $OpenVMS^{TM}$  Factory Installed Software User Information.