

Terminal (TERMDSM)
On-Line Diagnostic/Support Monitor
reference manual



Distributed Systems Network

**TERMINAL (TERMDSM) ON-LINE
DIAGNOSTIC/SUPPORT MONITOR**

Reference Manual



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Effective Pages

Date

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PREFACE

This manual describes the On-Line Diagnostics and Support functions for the Advanced Terminal Processor (ATP) and the Asynchronous Data Communications Controller (ADCC). This manual should be used with systems that are currently running with MPE V (Version G.00.00 or later) operating system. If you are on MPE V (Version E.00.00 or F.00.00 or earlier) refer to the Advanced Terminal Processor (DSN/ATP) On-Line Diagnostics Manual (part number 30144-90004) for the ATPDSM program.

The ATP is an asynchronous device controller for HP 3000 Series 44, 48, 64 and 68 computer systems. A minimum ATP subsystem consists of one System Interface Board (SIB), one Asynchronous Interface Board (AIB), and one Hardwired Port Controller or one Modem Port Controller. It requires two I/O slots, uses one IMB channel address and can support twelve terminal ports. A maximum subsystem uses one System Interface Board (SIB) and eight Asynchronous Interface Boards (AIB's), requires nine slots, uses one IMB channel address, and can support 96 terminal ports. A Series 68 computer may have a maximum of 3 ATP subsystems installed. Each ATP subsystem requires one unique IMB channel address.

The ADCC is an asynchronous device controller for HP 3000 Series 30, 33, 40, 42, 44 and 48 computer systems. It is an interface for low-speed bit-serial asynchronous devices. Each interface consists of an ADCC main and, optionally, one extend PCA. Each PCA multiplexes data transmission for four ports which may be hardwired or modem connected or any mix thereof. Thus, each interface can support eight terminal ports and requires one IMB channel address.

This manual is written for the HP Customer Engineer, the HP System Engineer and the HP customer user, with the assumption that the reader has a good working knowledge of the HP 3000 System environment, and is trained in working with on-line diagnostics. This manual may be used in conjunction with related documentation for the HP 3000 Series 30, 33, 40, 42, 44, 48, 64 and 68 Computer Systems. Related documents include the following technical manuals:

- *HP 3000 Computer Systems, Communications Handbook*, (30000-90105).
- *HP 3000 Distributed Systems Network/Advanced Terminal Processor Off-line Diagnostic Procedures Manual*, (30144-90003).
- *HP 3000 Distributed Systems Network/Point-to-Point Workstation I/O Reference Manual*, (30000-90250).
- *HP 3000 Distributed Systems Network/Advanced Terminal Processor Installation Manual*, (30144-90002).
- *MPE V System Operation and Resource Management Reference Manual* (for series 40/44/64), (32033-90005).

PREFACE (continued)

This manual contains information for the use of the Hewlett-Packard Advanced Terminal Processor (ATP) and Asynchronous Data Communication Controller (ADCC) On-line Diagnostic/Support Monitor (TERMDSM). TERMDSM is a software tool that can be used for both verification testing and for more detailed troubleshooting. TERMDSM can be used as an aid to the computer user, as well as an installation tool and troubleshooting tool for the HP Customer Engineer (CE) and the HP System Engineer (SE).

Since TERMDSM is more flexible and versatile than most diagnostic programs, this manual is structured to reflect this versatility rather than merely outlining the typical step-by-step procedures.

This manual is organized as follows:

Section 1, General Information, briefly describes the main features of TERMDSM, and the TERMDSM philosophy. Required hardware and software are also listed.

Section 2, Operating Instructions, presents an overview of how TERMDSM is organized and how to use it.

Section 3, TERMDSM Commands and Test Descriptions lists and describes the diagnostic tests and commands.

Appendix A, contains Loopback Connector pictures.

CONVENTIONS USED IN THIS MANUAL

NOTATION **DESCRIPTION**

nonitalics Words in syntax statements which are not in italics must be entered exactly as shown. Punctuation characters other than brackets, braces and ellipses must also be entered exactly as shown. For example:

EXIT;

italics Words in syntax statements which are in italics denote a parameter which must be replaced by a user-supplied variable. For example:

CLOSE *filename*

[] An element inside brackets in a syntax statement is optional. Several elements stacked inside brackets means the user may select any one or none of these elements. For example:

$\left[\begin{array}{l} A \\ B \end{array} \right]$ User *may* select A or B or neither.

{ } When several elements are stacked within braces in a syntax statement, the user must select one of those elements. For example:

$\left\{ \begin{array}{l} A \\ B \\ C \end{array} \right\}$ User *must* select A or B or C.

... A horizontal ellipsis in a syntax statement indicates that a previous element may be repeated. For example:

[,*itemname*]. . . ;

In addition, vertical and horizontal ellipses may be used in examples to indicate that portions of the example have been omitted.

A shaded delimiter preceding a parameter in a syntax statement indicates that the delimiter *must* be supplied whenever (a) that parameter is included or (b) that parameter is omitted and any *other* parameter which follows is included. For example:

itema[\blacksquare *itemb*][\blacksquare *itemc*]

means that the following are allowed:

itema
itema, itemb
itema, itemb, itemc
itema, , itemc

CONVENTIONS (continued)

Δ When necessary for clarity, the symbol Δ may be used in a syntax statement to indicate a required blank or an exact number of blanks. For example:

```
SET[(modifier)] $\Delta$ (variable);
```

underlining When necessary for clarity in an example, user input may be underlined. For example:


```
NEW NAME? ALPHA
```

In addition, brackets, braces or ellipses appearing in syntax or format statements which must be entered as shown will be underlined. For example:

```
LET var[[subscript]] = value
```

shading Shading represents inverse video on the terminal's screen. In addition, it is used to emphasize key portions of an example.



The symbol  may be used to indicate a key on the terminal's keyboard. For example, **RETURN** indicates the carriage return key.

CONTROL *char*

Control characters are indicated by **CONTROL** followed by the character. For example, **CONTROL**Y means the user presses the control key and the character Y simultaneously.

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INTRODUCTION

The purpose of the HP Advanced Terminal Processor and the HP Asynchronous Data Communications Controller Online Diagnostic/Support Monitor (TERMDSM) is to provide a comprehensive support tool for use with terminal I/O ports. TERMDSM has an interactive, user friendly interface, suitable for use by both HP personnel and customers. The most valuable and critical use for the TERMDSM utility is to handle terminal port failures, allowing the necessary portions of the MPE tables to be "dumped" to a disc file and the "problem" port reset without the need to halt system operation for a memory dump and WARMSTART. (The disc file may be copied to a line printer for submittal to the factory).

TERMDSM runs in an MPE session, invoked either locally or through a dial-up port. TERMDSM will run diagnostics on one or more ports, abort jobs or I/O, reset one or more ports and associated tables, display tables, dump (to a disc file) tables for later analysis, format failure information dumped by the ATP/ADCC software, or identify ports considered broken by the ATP/ADCC software.

TERMDSM PHILOSOPHY

The philosophy behind TERMDSM is to provide an on-line mechanism for gathering information concerning a failure of an ATP/ADCC port, testing the ATP or ADCC hardware and terminal connections, and reinitializing the ATP/ADCC software and tables to a known good state.

Gathering information is provided by the BROKEN, DUMP and DISPLAY commands. The BROKEN command identifies ports considered to be broken and/or unfixable by the ATP/ADCC software subsystem. The DUMP and DISPLAY commands provide a means of gathering and formatting the ATP/ADCC tables and data areas for analysis by trained support personnel.

Troubleshooting the ATP subsystem is aided by the DIAGNOSTIC command. It allows testing of one or more ATP ports and hardware and terminal connection. (ADCC ports may be tested offline using ADCCDIAG).

The RESET command is provided to allow the re-initializing of one or more ATP/ADCC ports to a known good state after aborting any session associated with the port.

For convenience, TERMDSM provides ABORTIO and ABORTJOB commands similar in function to those provided by MPE.

CAUTION

TERMDSM provides very powerful commands that could cause the aborting of jobs and sessions, and the loss of data if used incorrectly. You should familiarize yourself with the commands being employed and the consequences of their use by reading the command descriptions provided in Section 3.

OPERATIONAL OVERVIEW

The ATP/ADCC Online Diagnostic/Support Monitor runs in session mode, and the user must have certain capabilities in order to run TERMDSM. Operator (OP) capability is required to use TERMDSM. Diagnostician (DI) capability is required to use the DIAGNOSTIC command. Save Files (SF) capability is required to use the DUMP command.

The Diagnostic/Support Monitor is dependent upon the MPE operating system. Therefore, if MPE is not functioning on the system with the ATP or ADCC to be tested, TERMDSM is not operational.

REQUIRED HARDWARE

The following hardware is required:

- A minimal mainframe configuration (an HP 3000 Series 44 or an HP 3000 Series 64)
- A minimal ATP system, ie: one SIB, one AIB, and one Port Controller, Modem or Direct Connect; or a minimal ADCC system (Series 44 only), ie: one ADCC main; either an ATP or an ADCC must be configured into the MPE I/O system.
- Loopback Connectors, which are included in the ATP product support package (p/n 30144-67801). (See Appendix A).
 - Twelve 25 pin Connectors for HP-Modem B 30146-60002
 - Twelve 3 pin Connectors for HP-DC B 30148-60002
 - Twelve 5 pin Connectors for HP-DC A 30147-60002

REQUIRED SOFTWARE

Required software for operation of TERMDSM Diagnostic/Support Monitor is:

- The HP Multiprogramming Executive (MPE) operating system
- An ATP or ADCC Driver
- The TERMDSM Diagnostic/Support Monitor



TERMDSM ORGANIZATION

There are seven parts of TERMDSM which correspond to the seven options open to you when TERMDSM is run. These options are:

- run diagnostics
- abort job(s)
- abort I/O
- reset one or more ports and associated tables
- display tables
- dump one or more ports and associated tables
- obtain a list of broken ports

Once you have created an MPE Session, you can invoke the TERMDSM job by entering:

```
RUN TERMDSM.PUB.SYS RETURN
```

Use of TERMDSM requires operator (OP) capability; therefore, when TERMDSM has verified that you have MPE operator capability, it will output:

```
HP32196G.uu.ff - TERMDSM - Terminal Diagnostics (C) Hewlett-Packard Co. 1983
```

```
ATP software version - v.uu.ff  
ADCC software version - v.uu.ff
```

```
Type HELP for aid
```

```
->
```

NOTE

These v.uu.ff levels indicate the current version of the ATP or ADCC software currently installed on the system. They are global identification numbers for these controllers. In addition, there also exists individual ID numbers for each of the modules of the ATP and ADCC. These module version numbers can be obtained by using DISPLAY mode (explained later in this section), and typing: ldev#, TDS, (where TDS is the terminal data segment).

The software version numbers displayed will change depending on what modifications have been included in that specific version. (The v.uu.ff levels will be increased by one each time any fix is made to any of the modules included in the ATP or ADCC software. These are the v.uu.ff numbers that should be specified as the "current product number" when inquiring about either controller or when submitting Service Requests (SR's) to the factory through the STARS data base).

In order to make TERMDISM easy for infrequent users, there will be a HELP facility to output messages when requested. The message output when you enter HELP will change depending on where you are in what dialog.

Whenever // is entered, TERMDISM will terminate, EXCEPT when in the DIAGNOSTIC command dialog. When in Diagnostics, EXIT must be entered before //.

In addition, DEBUG may be entered from any prompt except while in Diagnostics, to invoke the MPE debug facility.

ONLINE TESTS AND COMMANDS

The Online tests and commands are described below and are followed by representative dialog. The format for each description is: the command, its syntax, and a verbal description. The **DIAGNOSTIC** command is the only true online test, therefore specific operating instructions as well as error messages are contained in this section. The rest of the commands are tools for which to troubleshoot the ATP or ADCC subsystem. For ease of reference, the commands are listed in alphabetical order.

COMMANDS

The upper case letters indicate the abbreviated form of each command.

ABORTIO

->ABORTIO **RETURN**

This command is given to initiate dialog for aborting I/O pending on an ATP/ADCC port. Its function is identical to the MPE command interpreter ABORTIO command, except that it will only allow aborting I/O on ATP/ADCC ports.

Sample Dialog

->ABORTIO
ABORTIO

Enter LDEV#: ldev#
Enter LDEV#: ldev#
Enter LDEV#: **RETURN**

->

The LDEV # (nnn) is a logical device number of an ATP/ADCC device. Respond with a **RETURN** to return to the main block of TERMDSM. When the LDEV# of an ATP/ADCC device is entered, all I/O pending on that device will be aborted and the prompt will be repeated in order to abort I/O for other devices.

ABORTJOB

->ABORTJOB **RETURN**

This command is given to initiate the dialog for aborting one or more jobs or sessions. Its function is identical to the MPE command interpreter ABORTJOB command.

Sample Dialog

-> ABORTJOB
ABORTJOB

Enter Job ID: #jobid
Enter Job ID: #jobid
Enter Job ID: **RETURN**

->

The job ID can either be a job number (#Jnnn) or a session number (#Snnn). The job ID prompt is repeated to allow you to abort multiple jobs and sessions. Respond with a **RETURN** to terminate the command and return to the main block of TERMDSM.

BROKEN TERMINAL PORTS

->Broken **RETURN**

This command is given to obtain a list identifying ATP/ADCC ports considered to be in a broken state and/or in an unfixable state by the ATP/ADCC software subsystem. A broken state is the result of an error detected by the ATP/ADCC software and can be cleared up by using the RESET command.

Consult the RESET command description before attempting a reset.

An unfixable state is the result of an error that cannot be cleared unless the cause of the error is corrected first. RESET will not fix an unfixable port. Listed below are some of the causes resulting in a port being unfixable:

- Port configured on a missing AIB,
- ATP initiator program can't build the ATP data segment,
- Self-test on Port Controller Chip (PCC) failed.

NOTE

This list is not conclusive. Certain errors may go undetected by the ATP software subsystem.

Sample Dialog

->Broken
BROKEN TERMINAL PORTS

LDEV #	BROKEN	UNFIXABLE
101	*	*
102	*	

->

No additional response is required. The BROKEN command will examine each ATP/ADCC port in the system and list those considered broken and/or unfixable by the ATP/ADCC software subsystem, by placing an asterisk in the appropriate column. The DUMP command will RESET the port if it is broken and fixable at the end of a dump, or if PCC memory was dumped. (See DUMP command description).

DIAGNOSTICS

-> DIAGnostics **RETURN**

This command is given to initiate the dialog for running diagnostics on one or more ATP ports, and is used to diagnose suspected problems with the ATP hardware and terminal connection.

Use of this command requires diagnostician (DI) capability.

NOTE

This diagnostic does not test ADCC hardware or terminals connected via the ADCC.

Operating Instructions and Error Messages

The command provides three tests which progressively test the hardware data paths from the mainframe ATP hardware to the terminal.

Entering "EXIT" in response to any Diagnostic prompt will return to the main block of TERMDSM.

The first diagnostic test is run without loopback connectors. This test checks the operation of the ATP's Port Controller Chip (PCC) and the data paths from the HP 3000 I/O hardware to the PCC. If all the ports on a particular Asynchronous Interface Board (AIB), are to be tested, the test will also check the paths from the PCC to the Modem Controller Chip (MCC).

NOTE

All twelve ports on an AIB must be configured into the MPE I/O system for modem tests to be performed.

The second diagnostic test is run with the loopback connectors installed on the Port Connectors/Junction Panels for the specified ports. The required connectors are listed in the "Required Hardware" section.

This test performs the same checks as does the diagnostic test without loopback connectors, but also performs a check on the data paths out through the Port Connector/Junction Panel Assembly interface and back to the mainframe for the specified port.

The third test is a Write then Read test to HP264x and HP262x terminals strapped for the ENQ/ACK handshake. This test writes a line of data to the terminal and then triggers a read back from the terminal and compares the returned data. This test senses the terminal speed and parity, so that the terminals need only be set up for one of the ATP supported speeds and powered on. (The speeds supported on the ATP are 110, 300, 600, 1200, 2400, 4800, 9600, or 19.2K Baud only).

NOTE

The diagnostic test with the loopback connectors installed cannot be run at the same time as the terminal Write then Read test. Nor can it be run at the same time as the diagnostic test without loopback connectors.

The tests may be run from 1 to 32767 passes per each test. Each pass through a test will give a pass or fail indication for that specific test. In each pass, ports are tested one AIB at a time.

A number of options are available to the user of the diagnostic command for listing pass/fail information and controlling the testing of devices. The first option is to list only devices for which a test fails. This will substantially reduce the output required to be examined for failures.

The next option is to stop the diagnostic tests when the first failure occurs. This is useful when both pass and fail messages are being output so that the failure information does not run off the screen.

The final option is to stop testing a device when it fails a test. This is useful when reporting only failing devices and if a particular port has a hard failure, which otherwise would cause failure information for other ports to run off the screen.

Specification of the ports to be tested can be accomplished in two ways. First, by the logical device number of the port to be tested. Secondly, by a port specification in the form of:

P<SIB#>-<list of AIB's> [(<list of ports>)].

For example:

When running on a Series 64, the SIB# is given by:

$(16 * \text{IMB\#}) + (\text{SIB thumbwheel address})$.

Thus P35 would be:

SIB #3 on IMB #2, since $(16 * 2) + 3 = 35$

If the list of ports is omitted, all the ports on the AIB selected will be tested. The list of AIB's and ports can include individual numbers and ranges of numbers. For example:

1,2,4/7 would be a valid list of ports.

20,21,99,100,101,102 would be a valid list of ldev numbers.

Termdsm Commands and Test Descriptions

Several groups of ports can be listed on one line separated by semicolons. For example:

P1-0,1;3(0,2/4) would specify SIB 1, all ports
on AIB's 0 and 1, and the ports 2,3,4, on AIB 3.

The two modes of specifying the ports to be tested cannot be mixed on the same line. However, the prompt is repeated until just a **(RETURN)** is entered thereby allowing the use of both modes.

The diagnostic command runs with the system break facility disabled. Should termination of the command be desired, the subsystem break facility (control Y), can be used to interrupt the diagnostic. The diagnostic will prompt the user with the current pass count and ask if the diagnostic tests are to be aborted. Due to the structure of the diagnostic command, entering more than one subsystem break may be required to suspend execution of the diagnostic.

Sample Dialog

->DIAGnostic
DIAGNOSTIC

Enter ports to be tested:
> (ldev# or port specification)

Enter ports to be tested:
> **(RETURN)**

Do you want to list failing devices only?
Do you want to stop testing all devices after one failure?
Do you want to stop testing a device after it fails?
How many times do you want to run the test? (1-32767)
Do you want to test the ports with the loopback connectors
on the Junction Panel (Port Connectors)?
Do you want to test the ports without the loopback connectors
on the Junction Panel (Port Connectors)?
Do you want a write/read test to the terminals?

->

The proper response to the above mentioned questions is "E" for exit, "Y" for yes, "N" or **(RETURN)** for no.

If the diagnostic test with loopback connectors is requested, the command will prompt the user with a list of questions about the junction panels. An example is:

There are two types of ATP junction panels:
25-pin Modem panels and
3-pin or 5-pin Direct-Connect panels
Does each AIB have a Modem Junction panel
connected to it ?

A positive response will cause TERMDSTM to attempt modem tests whenever a full AIB is being tested. A negative response indicates to TERMDSTM that the ports specified for testing are using direct-connect junction panels, or a combination of direct-connect and modem panels. Therefore, modem tests should not be performed.

Also, if the diagnostic test with the loopback connector on the Port Connectors is requested, the command will prompt the user with a list of ports and logical device numbers to attach the appropriate loopback connectors to. An example is:

Install the loopback connectors on the Junction Panel(s)
for ports,
P1-0(9) (ldev# 109)
P1-0(10) (ldev# 110)
Are all the connections installed?

A negative response will terminate the command.

If the terminal write/read tests are selected, the command will prompt the user to be sure that the terminals are powered on. The example is:

Are all the terminals powered on for the write/read test?

A negative response will terminate the command.

Recommended Testing Procedure

The TERMDSM Diagnostic command gives the user the ability to test the ATP hardware and the terminal connection through the three provided tests.

The recommended procedure for diagnosing a suspected ATP hardware or terminal connection problem is as follows:

1. Perform the diagnostic test without loopback connectors on the Port Connectors/Junction Panel. This will test the port's circuitry on the AIB. A failing test will indicate a problem with the AIB, and the AIB should then be replaced. If the tests pass, then proceed to step 2.
2. Perform the diagnostic test with the appropriate loopback connectors on the Port Connectors/Junction panel. This will test the circuitry associated with the port connector interface in addition to the port's AIB circuitry which was verified as properly functioning in step 1. A failing test indicates a problem with the port's port connector circuitry, and it should be replaced. If the test passes, proceed to step 3.
3. Perform the Write/Read test with an HP264x or HP 262x terminal strapped for the ENQ/ACK handshake. This will test the connection from the Port Connectors/Junction Panel to the terminal and back. A failing test indicates a problem with the connection. Check the cable from the Port Connector to the terminal. If it passes, proceed to step 4.
4. At this point the ATP hardware and terminal connections appear to be functioning properly. If the problem is intermittent, the above tests may have to be run extensively in order to pin down the problem. If the failure is of a consistent nature, a hard failure, and all the above tests have passed, the problem probably lies in the configuration of the terminal. Check the I/O configuration of the terminal.

Diagnostic Command Limitations

The diagnostic tests do not completely test the modem Port Connector Assembly circuitry unless all the ports on the AIB are tested.

The diagnostic command does not provide detailed failure information for performing component level diagnosis. This type of diagnosis is performed by the ATP Offline Diagnostic.

The TERMDSM diagnostic command does not explicitly test the SIB circuitry. It is assumed to be in working order. Should the SIB be in question, the ATP Offline Diagnostic is to be used to do extensive testing.

System Break is disabled during diagnostics.

DISPLAY

->DIS **RETURN**

This command is given to initiate the dialog for displaying ATP or ADCC tables and data areas for a particular port to the user's terminal. It provides for visual inspection of the ATP or ADCC environment, and should only be employed by those users with an intimate knowledge of the ATP/ADCC software and its associated tables.

NOTE

DISPLAY should never be used to submit ATP or ADCC failure information to the factory. Instead use the DUMP command facility for this purpose.

The following tables can be inspected by the display command:

- TDS (terminal data segment header area)
- MONDIT (logical monitor dit)
- PDDIT (protocol and data manager dit)
- HWDIT (physical driver-hardware dit)
- CNTLPROG (control program for ATP)
- CHANPROG (channel program for ADCC)
- TBUF (terminal buffers)
- IOQ (ioq element)
- ILT (interrupt linkage table)
- DLT (driver linkage table)
- DRT (device reference table)
- LPDT (logical-physical device table)
- LDT (logical device table)
- PCB (process control block associated with the ioq)
- LDTPCD (process control block associated with the ldt)
- VFC (vertical forms control information)
- PPDIT (port protocol dit)

Termdsm Commands and Test Descriptions

Sample Dialog

-> DISplay
DISPLAY

Enter table name or LDEV number: ldev#

Enter table name or LDEV number: <table name>
(Table information will be displayed here).

Enter table name or LDEV number: **RETURN**

->

An ATP or ADCC logical device number should be entered first, and then the tables to be displayed. At any point in the dialog, a new logical device number can be entered and subsequent table requests will display information for this new device. DISPLAY remembers which logical device number was used last, and will look at any table for this device without the user having to re-enter the ldev#. Respond with a **RETURN** to exit the display command.

DUMP

->DUmp **RETURN**

This command is given to initiate the dialog for dumping the current state of ATP or ADCC tables, terminal buffers, and ATP PCC memory contents to a disc file. In addition, if an ATP or ADCC generated dump exists for the port to be dumped, this too will be placed into the disc file.

Use of this command requires save files (SF) capability.

The ATP/ADCC software subsystem has an area set aside in each terminal data segment to dump failure information at the time of a detected error. There is only enough storage for one dump, so information on the first detected failure is placed in this area.

If an ATP/ADCC generated dump exists in the subsystem, the message

An ATP/ADCC generated dump exists for ldev# n.
Use DUMP to format it.

will appear when the TERMDISM is first activated and when the dump command is entered. By specifying this logical device to be dumped, the command will place the ATP/ADCC generated dump and a dump of the current state of the device into the disc file. After the ATP/ADCC generated dump has been placed into the disc file, the storage area in the terminal data segment is freed for logging information on another failure.

Dumps are placed into a disc file with the name TERMnnn in the logon group, where nnn is the logical device number of the device being dumped. There are two methods for getting a hard copy of the dump. First, a file equation may be entered prior to executing the TERMDISM and the DUMP command.

```
:FILE TERMnnn;DEV=LP
```

will direct the dump for logical device number nnn to the line printer device. Secondly, FCOPY may be used to copy the dump file to the line printer device after exiting the TERMDISM.

```
:FILE LP;DEV=LP
:FCOPY FROM=TERMnnn;TO=*LP;CCTL
```

You also have the option of dumping the ATP's PCC memory contents. This option is destructive to the port's environment due to the fact that an automatic RESET of the port is issued upon completion of the command. If you do not wish to alter the state of the ATP tables, the DUMP command should be employed without specifying this option. If the port is already broken but not unfixable, a RESET will also be done.

Sample Dialog

```
->DUmp
DUMP
```

```
Enter LDEV number: nnn
Do you want to dump the PCC memory? Y
```

NOTE

With the ADCC driver, this question will not appear.

If the logical device specified is owned by a process, the following message will appear:

The device entered is owned. Dumping the ATP's PCC memory will result in an automatic RESET of this port that will probably abort the session associated with this device, therefore be sure that you have the correct logical device number. If you wish to dump the PCC memory, respond with "Y", if no, respond with "N" or RETURN.

Regardless of your reponse, the dialog continues with;

Do you want to include a message? Y
message-> A message explaining the reason
message-> for generating this dump.
message-> RETURN

Data dumped into file TERMnnn.

Enter LDEV number: <RETURN> to exit dump>

->

In the above dialog, nnn is a valid logical device number of an ATP or ADCC port. The prompt is repeated allowing multiple devices to be dumped until RETURN is entered. The message explaining the condition resulting in the dump may be up to 20 lines in length, and can be terminated at any time by entering RETURN .

EXIT

->Exit **RETURN**

Using the EXIT command when the TERMDASM prompt (->) is displayed causes termination of TERMDASM and returns control to MPE.

HELP

HELP **RETURN**

HELP causes TERMDASM to give you information pertaining to the particular section of the program which you are currently running. It may be entered in response to any prompt.

RESET

->RESET **RETURN**

This command is given to initiate dialog for resetting one or more ATP/ADCC ports to their initial settings when MPE was brought up. The session logged on via this port will be aborted, the ATP or ADCC tables and software reset to their initial state, and the port prepared for speed sensing.

CAUTION

Extreme care should be used when employing the RESET command to ensure that the correct port is being reset. Resetting a port will abort any job or session running on that port.

RESET should not be used on any port where an ABORTJOB of the session associated with it would not be considered.

NOTE

The RESET command will not always terminate successfully. Occasionally the command will fail the reset process because the MPE "critical" bit is set, preventing the current session from aborting. In this case, a WARMSTART is necessary to clear the broken (or hung) port.

Sample Dialog

->RESET
RESET

Enter LDEV #: ldev#

If the device to be reset is owned, the following will appear:

The device entered is currently owned. Resetting this device will probably abort the session associated with it; therefore be sure that you have the correct logical device number. If you wish to continue with the reset process, respond with "Y", if not, respond with "N" or **RETURN**.

If the reset continues and the port is not considered broken by the ATP/ADCC software subsystem, the following will appear:

The TERMINAL DRIVER does not consider this device broken. However, this does not exclude the possibility of a hung port. If you wish to continue with the reset process respond with "Y", if not, "N" or **RETURN**.

Enter ldev number: <**RETURN**> or ldev#>

->

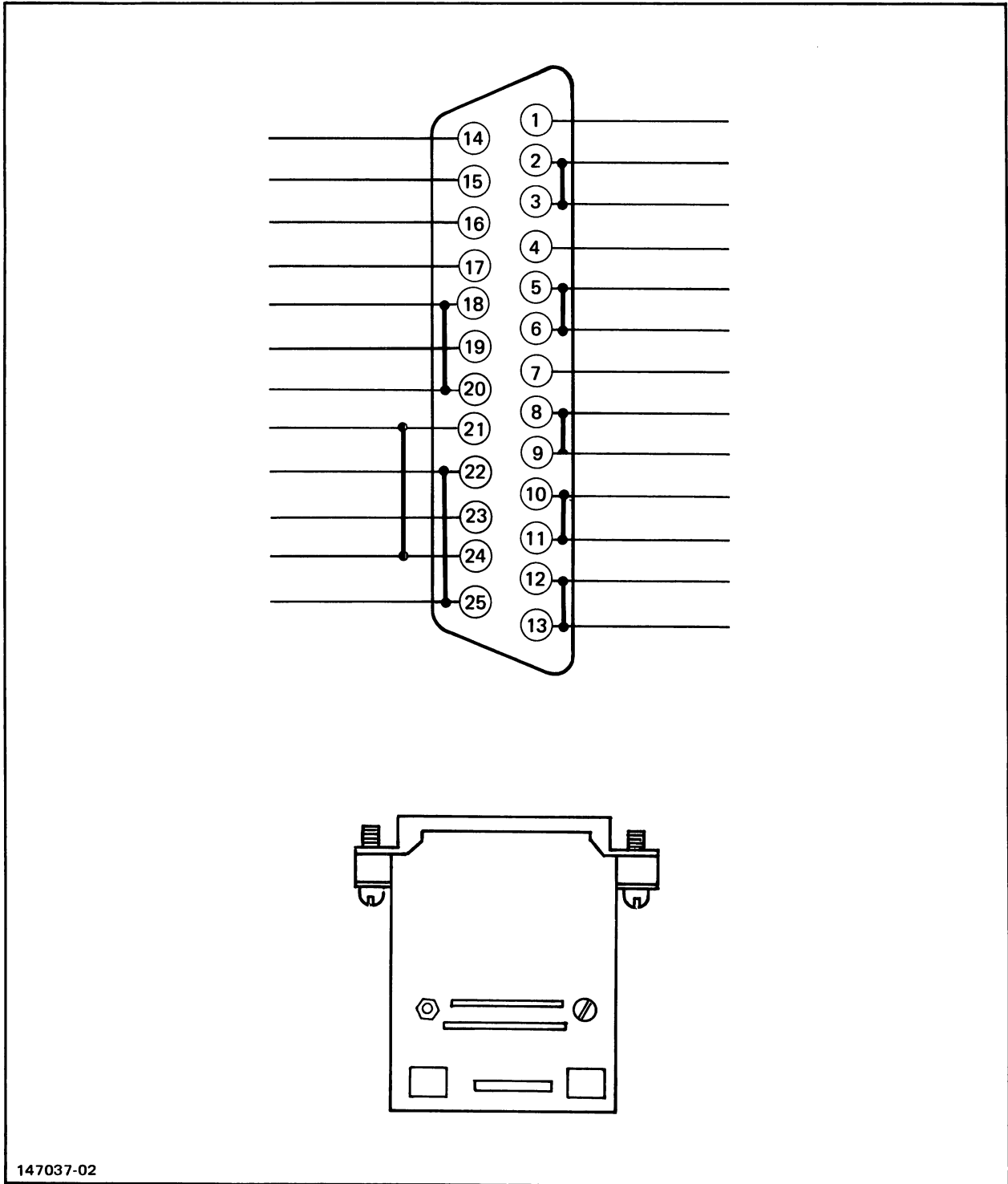
The reset prompt will continue until a **RETURN** is entered.



LOOPBACK CONNECTORS

APPENDIX

A



147037-02

Figure A-1. HP-Modem B Loopback Connector.

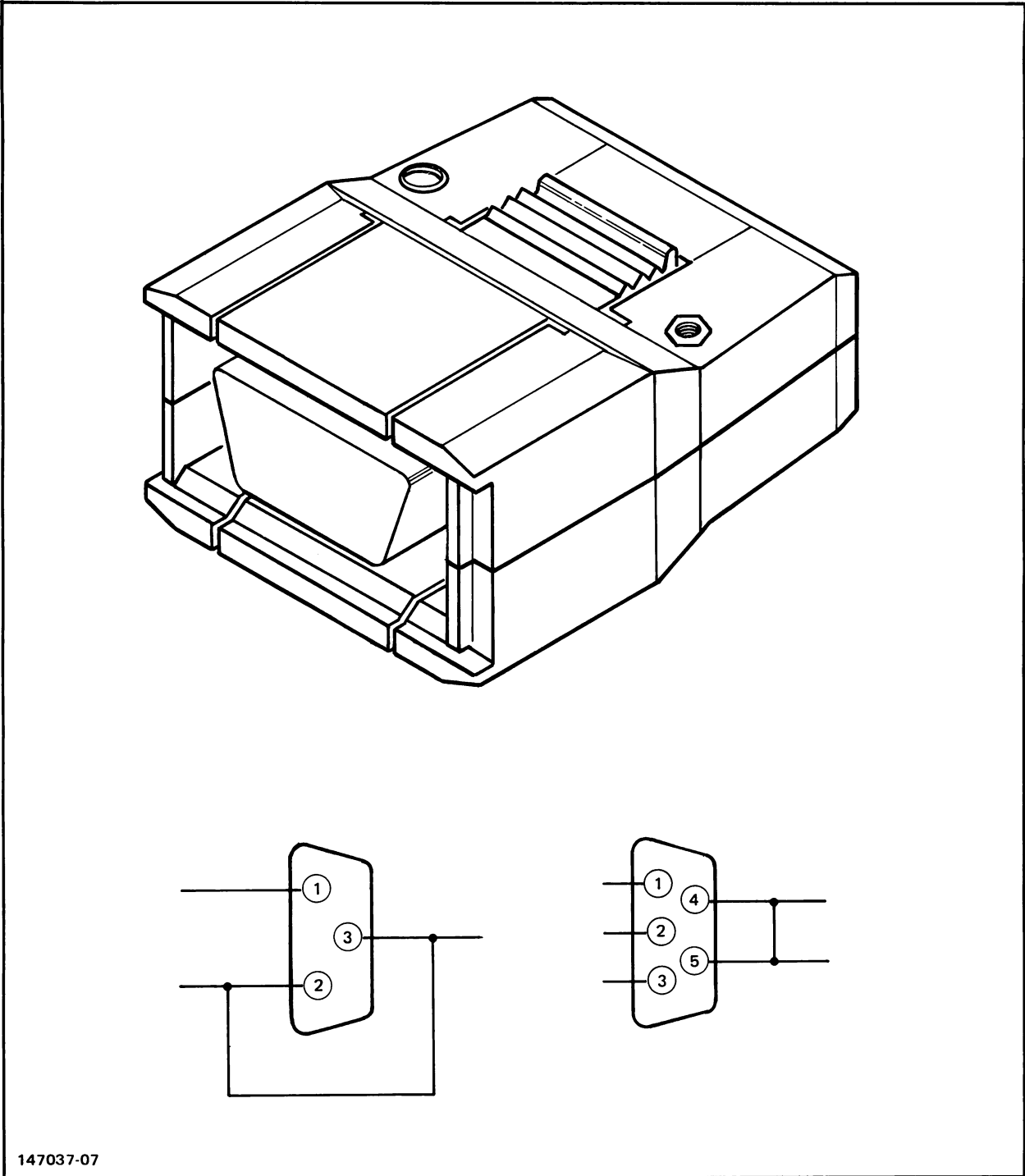


Figure A-2. HP-DC A and HP-DC B Loopback Connectors.

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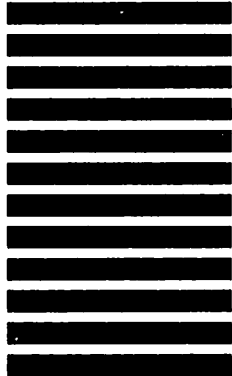
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Via Giulio Petroni, 19
I-70124 **BARI**
Tel: (080) 41-07-44
C,M

Hewlett-Packard Italiana S.p.A.
Via Emilia, 51/C
I-40011 **BOLOGNA** Anzola Dell'Emilia
Tel: (051) 731061
Telex: 511630
C,E,M

Hewlett-Packard Italiana S.p.A.
Via Principe Nicola 43G/C
I-95126 **CATANIA**
Tel: (095) 37-10-87
Telex: 970291
C

Hewlett-Packard Italiana S.p.A.
Via G. Di Vittorio 9
I-20063 **CERNUSCO SUL
NAVIGLIO**
(Milano)
Tel: (02) 4459041
Telex: 334632
A,C,CM,E,M,P

Hewlett-Packard Italiana S.p.A.
Via C. Colombo 49
I-20090 **TREZZANO SUL
NAVIGLIO**
(Milano)
Tel: (02) 4459041
Telex: 322116
C

Hewlett-Packard Italiana S.p.A.
Via Nuova San Rocco a
Capodimonte, 62/A
I-80131 **NAPOLI**
Tel: (081) 7413544
Telex: 710698
A**,C,E,M

Hewlett-Packard Italiana S.p.A.
Viale G. Modugno 33
I-16156 **GENOVA PEGLI**
Tel: (010) 68-37-07
Telex: 215238
C,E

Hewlett-Packard Italiana S.p.A.
Via Pelizzo 15
I-35128 **PADOVA**
Tel: (049) 664888
Telex: 430315
A,C,E,M

Hewlett-Packard Italiana S.p.A.
Viale C. Pavese 340
I-00144 **ROMA EUR**
Tel: (06) 54831
Telex: 610514
A,C,E,M,P*

Hewlett-Packard Italiana S.p.A.
Via di Casellina 57/C
I-50018 **SCANDICCI-FIRENZE**
Tel: (055) 753863
C,E,M

Hewlett-Packard Italiana S.p.A.
Corso Svizzera, 185
I-10144 **TORINO**
Tel: (011) 74 4044
Telex: 221079
A*,C,E

IVORY COAST

S.I.T.E.L.
Societe Ivoirienne de
Telecommunications
Bd. Giscard d'Estaing
Carrefour Marcory
Zone 4.A.
Boite postale 2580
ABIDJAN 01
Tel: 353600
Telex: 43175
E

S.I.T.I.
Immeuble "Le General"
Av. du General de Gaulle
01 BP 161
ABIDJAN 01
Tel: 321227
C,P

JAPAN

Yokogawa-Hewlett-Packard Ltd.
152-1, Onna
ATSUGI, Kanagawa, 243
Tel: (0462) 25-0031
C,CM,E

Yokogawa-Hewlett-Packard Ltd.
Meiji-Seimei Bldg. 6F
3-1 Hon Chiba-Cho
CHIBA, 280
Tel: 472 25 7701
C,E

Yokogawa-Hewlett-Packard Ltd.
Yasuda-Seimei Hiroshima Bldg.
6-11, Hon-dori, Naka-ku
HIROSHIMA, 730
Tel: 82-241-0611

Yokogawa-Hewlett-Packard Ltd.
Towa Building
2-3, Kaigan-dori, 2 Chome Chuo-ku
KOBE, 650
Tel: (078) 392-4791
C,E

Yokogawa-Hewlett-Packard Ltd.
Kumagaya Asahi 82 Bldg
3-4 Tsukuba
KUMAGAYA, Saitama 360
Tel: (0485) 24-6563
C,CM,E

Yokogawa-Hewlett-Packard Ltd.
Asahi Shinbun Daiichi Seimei Bldg.
4-7, Hanabata-cho
KUMAMOTO, 860
Tel: (096) 354-7311
C,E

Yokogawa-Hewlett-Packard Ltd.
Shin-Kyoto Center Bldg.
614, Higashi-Shiokoji-cho
Karasuma-Nishiru
Shiokoji-dori, Shimogyo-ku
KYOTO, 600
Tel: 075-343-0921
C,E

Yokogawa-Hewlett-Packard Ltd.
Mito Mitsui Bldg
4-73, Sanno-maru, 1 Chome
MITO, Ibaraki 310
Tel: (0292) 25-7470
C,CM,E

Yokogawa-Hewlett-Packard Ltd.
Meiji-Seimei Kokubun Bldg. 7-8
Kokubun, 1 Chome, Sendai
MIYAGI, 980
Tel: (0222) 25-1011
C,E

Yokogawa-Hewlett-Packard Ltd.
Nagoya Kokusai Center Building
47-1, Nagono, 1 Chome
Nakamura-ku
NAGOYA, 450
Tel: (052) 571-5171
C,CM,E,M

Yokogawa-Hewlett-Packard Ltd.
Saikyoren Building
1-2 Dote-machi, **OHMIYA**
Saitama 330
Tel: (0486) 45-8031

Yokogawa-Hewlett-Packard Ltd.
Chuo Bldg.,
4-20 Nishinakajima, 5 Chome
Yodogawa-ku
OSAKA, 532
Tel: (06) 304-6021
Telex: YHPOSA 523-3624
A,C,CM,E,M,P*

Yokogawa-Hewlett-Packard Ltd.
27-15, Yabe, 1 Chome
SAGAMIHARA Kanagawa, 229
Tel: 0427 59-1311

Yokogawa-Hewlett-Packard Ltd.
Daiichi Seimei Bldg.
7-1, Nishi Shinjuku, 2 Chome
Shinjuku-ku, **TOKYO** 160
Tel: 03-348-4611
C,E

Yokogawa-Hewlett-Packard Ltd.
29-21 Takaido-Higashi, 3 Chome
Suginami-ku **TOKYO** 168
Tel: (03) 331-6111
Telex: 232-2024 YHPTOK
A,C,CM,E,M,P*

Yokogawa Hokushin Electric Corp.
9-32 Nokacho 2 Chome
2 Chome Musashino-shi
TOKYO, 180
Tel: (0422) 54-1111
Telex: 02822-421 YEW MTK J
A

Yokogawa-Hewlett-Packard Ltd.
Meiji-Seimei
Utsunomiya Odori Building
1-5 Odori, 2 Chome
UTSUNOMIYA, Tochigi 320
Tel: (0286) 33-1153
C,E

Yokogawa-Hewlett-Packard Ltd.
Yasuda Seimei Yokohama Nishiguchi
Bldg.
30-4 Tsuruya-cho, 3 Chome
YOKOHAMA 221
Tel: (045) 312-1252
C,E

JORDAN

Scientific and Medical Supplies Co.
P.O. Box 1387
AMMAN
Tel: 24907, 39907
Telex: 21456 SABCO JO
C,E,M,P

KENYA

ADCOM Ltd., Inc., Kenya
P.O.Box 30070
NAIROBI
Tel: 331955
Telex: 22639
E,M

KOREA

Samsung Hewlett-Packard Co. Ltd.
Dongbang Yeoeuido Building
12-16th Floors
36-1 Yeoeuido-dong
Yongdeungpo-ku
SEOUL
Tel: 784-2666, 784-4666
Telex: 25166 SAMSAN K
A,C,CM,E,M,P

Young In Scientific Co., Ltd.
Youngwha Building
547 Shinsa Dong, Kangnam-ku
SEOUL 135
Tel: 5467771
Telex: K23457 GINSCO
A

KUWAIT

Al-Khaldiya Trading & Contracting
P.O. Box 830
SAFAT
Tel: 424910, 411726
Telex: 22481 AREEG KT
Cable: VISCOUNT
E,M,A

Gulf Computing Systems
P.O. Box 25125
SAFAT
Tel: 435869
Telex: 23648
P

Photo & Cine Equipment
P.O. Box 270
SAFAT
Tel: 2445111
Telex: 22247 MATIN KT
Cable: MATIN KUWAIT
P

W.J. Towell Computer Services
P.O. Box 5897
SAFAT
Tel: 2462640
Telex: 30336 TOWELL KT
C

LEBANON

Computer Information Systems S.A.L.
Chammas Building
P.O. Box 11-6274 Dora
BEIRUT
Tel: 89 40 73
Telex: 42309
C,E,M,P

LIBERIA

Unichemicals Inc.
P.O. Box 4509
MONROVIA
Tel: 224282
Telex: 4509
E

MADAGASCAR

Technique et Precision
12, rue de Nice
P.O. Box 1227
101 **ANTANANARIVO**
Tel: 22090
Telex: 22255
P

LUXEMBOURG

Hewlett-Packard Belgium S.A./N.V.
Blvd de la Woluwe, 100
Woluwedal
B-1200 **BRUSSELS**
Tel: (02) 762-32-00
Telex: 23-494 paloben bru
A,C,CM,E,M,P

MALAYSIA

Hewlett-Packard Sales (Malaysia)
Sdn. Bhd.
9th Floor
Chung Khiaw Bank Building
46, Jalan Raja Laut
KUALA LUMPUR
Tel: 03-986555
Telex: 31011 HPSM MA
A,C,E,M,P*

Protel Engineering
P.O.Box 1917
Lot 6624, Section 64
23/4 Pending Road
Kuching, **SARAWAK**
Tel: 36299
Telex: 70904 PROMAL MA
Cable: PROTELENG
A,E,M

MALTA

Philip Toledo Ltd.
Birkirkara P.O. Box 11
Notabile Rd.
MRIEHEL
Tel: 447 47, 455 66
Telex: 1649
E,M,P

MAURITIUS

Blanche Birger Co. Ltd.
18, Jules Koenig Street
PORT LOUIS
Tel: 20828
Telex: 4296
P

MEXICO

Hewlett-Packard de Mexico, S.A.
Francisco J. Allan #30
Colonia Nueva
Los Angeles 27140
COAHUILA, Torreon
Tel: 37220
P

Hewlett-Packard de Mexico, S.A.
Monti Morelos 299
Fraccionamiento Loma Bonita 45060
GUADALAJARA, Jalisco
Tel: 316630/314600
Telex: 0684 186 ECOMEX
P



MEXICO (Cont'd)

Microcomputadoras Hewlett-Packard, S.A.
Monti Pelvoux 115
LOS LOMAS, Mexico, D.F.
Tel: 520-9127
P

Hewlett-Packard Mexicana, S.A.
de C.V.
Av. Periferico Sur No. 6501
Tepepan, Xochimilco
16020 **MEXICO D.F.**
Tel: 6-76-46-00
Telex: 17-74-507 HEWPACK MEX
A,C,CM,E,M,P

Hewlett-Packard De Mexico (Polanco)
Avenida Ejercito Nacional #579
2da y 3er piso
Colonia Granada 11560
MEXICO D.F.
Tel: 254-4433
P

Hewlett-Packard De Mexico, S.A.
de C.V.
Czda. del Valle
409 Ote. 4th piso
Colonia del Valle
Municipio de Garza García
66220 **MONTERREY**, Nuevo León
Tel: 78 42 41
Telex: 038 410
P

MOROCCO

Etablissement Hubert Dolbeau & Fils
81 rue Karatchi
B.P. 11133
CASABLANCA
Tel: 3041-82, 3068-38
Telex: 23051, 22822
E

Gerep
2, rue Agadir
Boite Postale 156
CASABLANCA 01
Tel: 272093, 272095
Telex: 23 739
P

Sema-Maroc
Dept. Seric
6, rue Lapebie
CASABLANCA
Tel: 260980
Telex: 21641
C,P

NETHERLANDS

Hewlett-Packard Nederland B.V.
Startbaan 16
1187 XR **AMSTELVEEN**
P.O. Box 667
NL 1180 AR **AMSTELVEEN**
Tel: (020) 547-6911
Telex: 13 216 HEPA NL
A,C,CM,E,M,P

Hewlett-Packard Nederland B.V.
Bongerd 2
NL 2906VK **CAPELLE A/D IJSEL**
P.O. Box 41
NL 2900AA **CAPELLE A/D IJSEL**
Tel: (10) 51-64-44
Telex: 21261 HEPAC NL
C,E

Hewlett-Packard Nederland B.V.
Pastoor Petersstraat 134-136
NL 5612 LV **EINDHOVEN**
P.O. Box 2342
NL 5600 CH **EINDHOVEN**
Tel: (040) 326911
Telex: 51484 hepae nl
A,C,E,M,P

NEW ZEALAND

Hewlett-Packard (N.Z.) Ltd.
5 Owens Road
P.O. Box 26-189
Epsom, **AUCKLAND**
Tel: 687-159
Cable: HEWPAK Auckland
C,CM,E,P*

Hewlett-Packard (N.Z.) Ltd.
4-12 Cruickshank Street
Kilbirnie, **WELLINGTON 3**
P.O. Box 9443
Courtenay Place, **WELLINGTON 3**
Tel: 877-199
Cable: HEWPAK Wellington
C,CM,E,P

Northrop Instruments & Systems Ltd.
369 Khyber Pass Road
P.O. Box 8602
AUCKLAND
Tel: 794-091
Telex: 60605
A,M

Northrop Instruments & Systems Ltd.
110 Mandeville St.
P.O. Box 8388
CHRISTCHURCH
Tel: 488-873
Telex: 4203
A,M

Northrop Instruments & Systems Ltd.
Sturdee House
85-87 Ghuznee Street
P.O. Box 2406
WELLINGTON
Tel: 850-091
Telex: NZ 3380
A,M

NIGERIA

Elmeco Nigeria Ltd.
46, Calcutta Crescent Apapa
P.O. Box 244and
LAGOS
E

NORTHERN IRELAND

See United Kingdom

NORWAY

Hewlett-Packard Norge A/S
Folke Bernadottes vei 50
P.O. Box 3558
N-5033 **FYLLINGSDALEN** (Bergen)
Tel: 0047/5/16 55 40
Telex: 76621 hpnas n
C,E,M

Hewlett-Packard Norge A/S
Osterndalen 16-18
P.O. Box 34
N-1345 **ØSTERÅS**
Tel: 0047/2/17 11 80
Telex: 76621 hpnas n
A,C,CM,E,M,P

OMAN

Khimijil Ramdas
P.O. Box 19
MUSCAT/SULTANATE OF OMAN
Tel: 745601
Telex: 5289 BROKER MB MUSCAT
P

Suhail & Saud Bahwan
P.O.Box 169
MUSCAT/SULTANATE OF OMAN
Tel: 734201
Telex: 5274 BAHWAN MB
E

Imtac LLC
P.O. Box 8676
MUTRAH/SULTANATE OF OMAN
Tel: 601695
Telex: 5741 Tawoos On
A,C,M

PAKISTAN

Mushko & Company Ltd.
House No. 16, Street No. 16
Sector F-6/3
ISLAMABAD
Tel: 824545
Cable: FEMUS Islamabad
A,E,M,P*

Mushko & Company Ltd.
Oosman Chambers
Abdullah Haroon Road
KARACHI 0302
Tel: 524131, 524132
Telex: 2894 MUSKO PK
Cable: COOPERATOR Karachi
A,E,M,P*

PANAMA

Electronico Balboa, S.A.
Calle Samuel Lewis, Ed. Alfa
Apartado 4929
PANAMA 5
Tel: 64-2700
Telex: 3483 ELECTRON PG
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PERU

Cla Electro Médica S.A.
Los Flamencos 145, Ofc. 301/2
San Isidro
Casilla 1030
LIMA 1
Tel: 41-4325, 41-3705
Telex: Pub. Booth 25306 PEC PISIDR
CM,E,M,P

SAMS

Arenida Republica de Panama 3534
San Isidro, LIMA
Tel: 419928/417108
Telex: 20450 PE LIBERTAD
A,C,P

PHILIPPINES

The Online Advanced Systems Corp.
2nd Floor, Electra House
115-117 Esteban Street
Osterndalen Village, Makati
P.O. Box 1510
Metro **MANILA**
Tel: 815-38-10 (up to 16)
Telex: 63274 ONLINE PN
A,C,E,M,P

PORTUGAL

Mundinter Intercambio
Mundial de Comércio S.A.R.L.
Av. Antonio Augusto Aguiar 138
Apartado 2761
LISBON
Tel: (19) 53-21-31, 53-21-37
Telex: 16691 munter p
M

Soquimica
Av. da Liberdade, 220-2
1298 **LISBOA** Codex
Tel: 56-21-82
Telex: 13316 SABASA
A

Telectra-Empresa Técnica de
Equipamentos Eléctricos S.A.R.L.
Rua Rodrigo da Fonseca 103
P.O. Box 2531
LISBON 1
Tel: (19) 68-60-72
Telex: 12598
CM,E

C.P.C.S.I.
Rua de Costa Cabral 575
4200 **PORTO**
Tel: 499174/495173
Telex: 26054
C,P

PUERTO RICO

Hewlett-Packard Puerto Rico
101 Muñoz Rivera Av
Esu. Calle Ochoa
HATO REY, Puerto Rico 00918
Tel: (809) 754-7800
A,C,CM,M,E,P

QATAR

Computer Arabia
P.O. Box 2750
DOHA
Tel: 428555
Telex: 4806 CHPARB
P

Nasser Trading & Contracting
P.O.Box 1563
DOHA
Tel: 422170
Telex: 4439 NASSER DH
M

SAUDI ARABIA

Modern Electronics Establishment
Hewlett-Packard Division
P.O. Box 281
Thouqbah
AL-KHOBAR 31952
Tel: 895-1760, 895-1764
Telex: 671 106 HPMEEK SJ
Cable: ELECTA AL-KHOBAR
C,E,M

Modern Electronics Establishment
Hewlett-Packard Division
P.O. Box 1228
JEDDAH
Tel: 644 96 28
Telex: 4027 12 FARNAS SJ
Cable: ELECTA JEDDAH
A,C,CM,E,M,P

Modern Electronics Establishment
Hewlett-Packard Division
P.O.Box 22015
RIYADH 11495
Tel: 476-3030
Telex: 202049 MEERYD SJ
A,C,CM,E,M,P

Abdul Ghani El Ajou Corp.
P.O. Box 78
RIYADH
Tel: 40 41 717
Telex: 200 931 EL AJOU
P

SCOTLAND

See United Kingdom

SENEGAL

Societe Hussein Ayad & Cie.
76, Avenue Georges Pompidou
B.P. 305
DAKAR
Tel: 32339
Cable: AYAD-Dakar
E

Moneger Distribution S.A.
1, Rue Parent
B.P. 148
DAKAR
Tel: 215 671
Telex: 587
P

Systeme Service Conseil (SSC)
14, Avenue du Parachois
DAKAR ETOILE
Tel: 219976
Telex: 577
C,P

SINGAPORE

Hewlett-Packard Singapore (Sales)
Pte. Ltd.
08-00 Inchcape House
450-2 Alexandra Road
Singapore P.O. Box 58
SINGAPORE, 9115
Tel: 4731788
Telex: 34209 HPSGSO RS
Cable: HEWPACK, Singapore
A,C,E,M,P

Dynamar International Ltd.
Unit 05-11 Block 6
Kolam Ayer Industrial Estate
SINGAPORE 1334
Tel: 747-6188
Telex: 26283 RS
CM

SOUTH AFRICA

Hewlett-Packard So Africa (Pty.) Ltd.
P.O. Box 120
Howard Place **CAPE PROVINCE 7450**
Pine Park Center, Forest Drive, Pine-lands
CAPE PROVINCE 7405
Tel: (021) 53 7954
Telex: 57-20006
A,C,CM,E,M,P

Hewlett-Packard So Africa (Pty.) Ltd.
2nd Floor Juniper House
92 Overport Drive
DURBAN 4067
Tel: (031) 28-4178
Telex: 6-22954
C

Hewlett-Packard So Africa (Pty.) Ltd.
6 Linton Arcade
511 Cape Road
Linton Grange
PORT ELIZABETH 6001
Tel: 041-301201
Telex: 24-2916
C



SALES & SUPPORT OFFICES

Arranged alphabetically by country

SOUTH AFRICA (Cont'd)

Hewlett-Packard So Africa (Pty.) Ltd.
Fountain Center
Kalkden Str.
Monument Park Ext 2
PRETORIA 0105
Tel: (012) 45 57258
Telex: 3-21063
C,E

Hewlett-Packard So Africa (Pty.) Ltd.
Private Bag Wendywood
SANDTON 2144
Tel: 802-5111, 802-5125
Telex: 4-20877 SA
Cable: HEWPACK Johannesburg
A,C,CM,E,M,P

SPAIN

Hewlett-Packard Española S.A.
Calle Entenza, 321
08029 BARCELONA
Tel: 3/322 24 51, 321 73 54
Telex: 52603 hpbee
A,C,E,M,P

Hewlett-Packard Española S.A.
Calle San Vicente S/N
Edificio Albia II-7B
48001 BILBAO
Tel: 4/423 83 06
A,C,E,M

Hewlett-Packard Española S.A.
Ctra. de la Coruña, Km. 16, 400
Las Rozas
E-MADRID
Tel: (1) 637.00.11
Telex: 23515 HPE
C,M

Hewlett-Packard Española S.A.
Avda. S. Francisco Javier, S/N
Planta 10. Edificio Sevilla 2
41005 SEVILLA
Tel: 54/64 44 54
Telex: 72933
A,C,M,P

Hewlett-Packard Española S.A.
Isabel La Católica, 8
46004 VALENCIA
Tel: 0034/6/351 59 44
C,P

SWEDEN

Hewlett-Packard Sverige AB
Ostra Tullgatan 3
S-21128 **MALMÖ**
Tel: (040) 70270
Telex: (854) 17886 (via Spånga
office)
C,P

Hewlett-Packard Sverige AB
Skalhottsgatan 9, Kista
Box 19
S-16393 **SPÅNGA**
Tel: (08) 750-2000
Telex: (854) 17886
Telefax: (08) 7527781
A,C,CM,E,M,P

Hewlett-Packard Sverige AB
Frötallsgatan 30
S-42132 **VÄSTRA-FRÖLUNDA** (Gothen-
burg)
Tel: (031) 49-09-50
Telex: (854) 17886 (via Spånga
office)
A,C,CM,E,M,P

SUDAN

Mediterranean Engineering & Trading
Co. Ltd.
P.O. Box 1025
KHARTOUM
Tel: 41184
Telex: 24052
C,P

SWITZERLAND

Hewlett-Packard (Schweiz) AG
Clarastrasse 12
CH-4058 **BASEL**
Tel: (61) 33-59-20
A

Hewlett-Packard (Schweiz) AG
7, rue du Bois-du-Lan
Case postale 365
CH-1217 **MEYRIN** 1
Tel: (0041) 22-83-11-11
Telex: 27333 HPAG CH
C,CM

Hewlett-Packard (Schweiz) AG
Allmend 2
CH-8967 **WIDEN**
Tel: (0041) 57 31 21 11
Telex: 53933 hpag ch
Cable: HPAG CH
A,C,CM,E,M,P

SYRIA

General Electronic Inc.
Nuri Basha Ahnaf Ebn Kays Street
P.O. Box 5781
DAMASCUS
Tel: 33-24-87
Telex: 411 215
Cable: ELECTROBOR DAMASCUS
E

Middle East Electronics
P.O.Box 2308
Abu Rumaneh
DAMASCUS
Tel: 33 45 92
Telex: 411 771
M

TAIWAN

Hewlett-Packard Taiwan
Kaohsiung Office
11/F, 456, Chung Hsiao 1st Road
KAOHSIUNG
Tel: (07) 2412318
C,E

Hewlett-Packard Taiwan
8th Floor, Hewlett-Packard Building
337 Fu Hsing North Road
TAIPEI

Tel: (02) 712-0404
Telex: 24439 HEWPACK
Cable: HEWPACK Taipei
A,C,CM,E,M,P

Ing Lih Trading Co.
3rd Floor, 7 Jen-Ai Road, Sec. 2
TAIPEI 100
Tel: (02) 3948191
Cable: INGLIH Taipei
A

THAILAND

Unimesa Co. Ltd.
30 Patpong Ave., Suriwong
BANGKOK 5
Tel: 235-5727
Telex: 84439 Simonco TH
Cable: UNIMESA Bangkok
A,C,E,M

Bangkok Business Equipment Ltd.
5/5-6 Dejo Road
BANGKOK
Tel: 234-8670, 234-8671
Telex: 87699-BEQUIPT TH
Cable: BUSIQUIPT Bangkok
P

TOGO

Societe Africaine De Promotion
Immeuble Sagap
22, Rue d'Atakpame
B.P. 4150
LOME
Tel: 21-62-88
Telex: 5304
P

TRINIDAD & TOBAGO

Caribbean Telecoms Ltd.
Corner McAllister Street &
Eastern Main Road, Laventille
P.O. Box 732
PORT-OF-SPAIN
Tel: 624-4213
Telex: 22561 CARTEL WG
Cable: CARTEL, PORT OF SPAIN
CM,E,M,P

Computer and Controls Ltd.
P.O. Box 51
66 Independence Square
PORT-OF-SPAIN
Tel: 62-279-85
Telex: 3000 POSTLX WG, ACCT
LOO90 AGENCY 1264
A,P

Feral Assoc.
8 Fitzgerald Lane
PORT-OF-SPAIN
Tel: 62-36864, 62-39255
Telex: 22432 FERALCO
Cable: FERALCO
M

TUNISIA

Precision Electronique S.A.R.L.
31 Avenue de la Liberte
TUNIS
Tel: 893937
Telex: 13238
P

Tunisie Electronique S.A.R.L.
94, Av. Jugurtha, Mutuelleville
1002 **TUNIS-BELVEDERE**
Tel: 280144
Telex: 13238
C,E,P

Corema S.A.
23, bis Rue de Marseille
TUNIS
Tel: 253-821
Telex: 14812 CABAM TN
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TURKEY

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Yenisehir
ANKARA
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Telex: 26345 SANI TR
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Keskin Kaleny
Sokak 6/3, Gayrettepe
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Tel: 1721328
Telex: 42490
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P.O. Box 1641
SHARJAH
Tel: 591181
Telex: 68136 EMITAC EM
Cable: EMITAC SHARJAH
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Tel: 820419-20
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DUBAI
Tel: 377591

Emitac Ltd.
P.O. Box 473
RAS AL KHAIMAH
Tel: 28133, 21270

UNITED KINGDOM

GREAT BRITAIN

Hewlett-Packard Ltd.
Trafalgar House
Navigation Road
ALTRINCHAM
Cheshire WA14 1NU
Tel: 061 928 6422
Telex: 668068
A,C,E,M,P

Hewlett-Packard Ltd.
Miller House
The Ring, **BRACKNELL**
Berks RG12 1XN
Tel: 0344 424898
Telex: 848733
E

Hewlett-Packard Ltd.
Elstree House, Elstree Way
BOREHAMWOOD, Herts WD6 1SG
Tel: 01 207 5000
Telex: 8952716
C,E

Hewlett-Packard Ltd.
Oakfield House, Oakfield Grove
Clifton **BRISTOL**, Avon BS8 2BN
Tel: 0272 736806
Telex: 444302
C,E,P

Hewlett-Packard Ltd.
Bridewell House
9 Bridewell Place
LONDON EC4V 6BS
Tel: 01 583 6565
Telex: 298163
C,P

Hewlett-Packard Ltd.
Pontefract Road
NORMANTON, West Yorkshire WF6 1RN
Tel: 0924 895566
Telex: 557355
C,P

Hewlett-Packard Ltd.
The Quadrangle
106-118 Station Road
REDHILL, Surrey RH1 1PS
Tel: 0737 68655
Telex: 947234
C,E,P

Hewlett-Packard Ltd.
Avon House
435 Stratford Road
Shirley, **SOLIHULL**, West Midlands
B90 4BL
Tel: 021 745 8800
Telex: 339105
C,E,P

Hewlett-Packard Ltd.
West End House
41 High Street, West End
SOUTHAMPTON
Hampshire SO3 3DQ
Tel: 0703 476767
Telex: 477138
C,P

Hewlett-Packard Ltd.
Harmon House
No. 1 George Street
UXBRIDGE, Middlesex UX8 1YH
Tel: 895 720 20
Telex: 893134/5
C,CM,E,M,P

Hewlett-Packard Ltd.
King Street Lane
Winnersh, **WOKINGHAM**
Berkshire RG11 5AR
Tel: 0734 784774
Telex: 847178
A,C,E,M,P

IRELAND

NORTHERN IRELAND
Hewlett-Packard (Ireland) Ltd.
Carrickfergus Industrial Centre
75 Belfast Road, Carrickfergus
BELFAST BT38 8PH
Tel: 09603 67333
Telex: 747626
C,E

SCOTLAND

Hewlett-Packard Ltd.
8 Woodside Place
GLASGOW, G3 7QF
Tel: 041 332 6232
Telex: 779615
C,E

Hewlett-Packard Ltd.
SOUTH QUEENSFERRY
West Lothian, EH30 9TG
Tel: 031 331 1188
Telex: 72682
C,CM,E,M,P

UNITED STATES
Alabama

Hewlett-Packard Co.
700 Century Park South, Suite 128
BIRMINGHAM, AL 35226
Tel: (205) 822-6802
A,C,M,P*

Hewlett-Packard Co.
420 Wynn Drive
HUNTSVILLE, AL 35805
Tel: (205) 830-2000
C,C,M,E,M*

Alaska

Hewlett-Packard Co.
3601 C St., Suite 1416
ANCHORAGE, AK 99503
Tel: (907) 563-8855
C,E

Arizona

Hewlett-Packard Co.
8080 Pointe Parkway West
PHOENIX, AZ 85044
Tel: (602) 273-8000
A,C,C,M,E,M,P

Hewlett-Packard Co.
3400 East Britannia Dr.
Bldg. C, Suite 124
TUCSON, AZ 85706
Tel: (602) 573-7400
C,E,M**

California

Hewlett-Packard Co.
99 South Hill Dr.
BRISBANE, CA 94005
Tel: (415) 330-2500
C

Hewlett-Packard Co.
5060 E. Clinton Avenue, Suite 102
FRESNO, CA 93727
Tel: (209) 252-9652
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Hewlett-Packard Co.
1421 S. Manhattan Av.
FULLERTON, CA 92631
Tel: (714) 999-6700
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Hewlett-Packard Co.
7408 Hollister Ave. #A
GOLETA, CA 93117
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Hewlett-Packard Co.
5400 W. Rosecrans Blvd.
LAWDALE, CA 90260
Tel: (213) 643-7500
Telex: 910-325-6608
C,M

Hewlett-Packard Co.
2525 Grand Avenue
Long Beach, CA 90815
Tel: (213) 498-1111
C

Hewlett-Packard Co.
3155 Porter Drive
PALO ALTO, CA 94304
Tel: (415) 857-8000
C,E

Hewlett-Packard Co.
4244 So. Market Court, Suite A
SACRAMENTO, CA 95834
Tel: (916) 929-7222
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Hewlett-Packard Co.
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SAN DIEGO, CA 92123
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Hewlett-Packard Co.
5725 W. Las Positas Blvd.
Pleasanton, CA 94566
Tel: (415) 460-0282
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Hewlett-Packard Co.
3003 Scott Boulevard
SANTA CLARA, CA 95054
Tel: (408) 988-7000
Telex: 910-338-0586
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Hewlett-Packard Co.
2150 W. Hillcrest Dr.
THOUSAND OAKS, CA 91320
(805) 373-7000
C,C,M,E

Colorado

Hewlett-Packard Co.
2945 Center Green Court South
Suite A
BOULDER, CO 80301
Tel: (303) 938-3005
A,C,E

Hewlett-Packard Co.
24 Inverness Place, East
ENGLEWOOD, CO 80112
Tel: (303) 649-5000
A,C,C,M,E,M

Connecticut

Hewlett-Packard Co.
500 Sylvan Av.
BRIDGEPORT, CT 06606
Tel: (203) 371-6454
C,E

Hewlett-Packard Co.
47 Barnes Industrial Road South
WALLINGFORD, CT 06492
Tel: (203) 265-7801
A,C,C,M,E,M

Florida

Hewlett-Packard Co.
2901 N.W. 62nd Street
FORT LAUDERDALE, FL 33309
Tel: (305) 973-2600
C,E,M,P*

Hewlett-Packard Co.
6800 South Point Parkway
Suite 301
JACKSONVILLE, FL 32216
Tel: (904) 398-0663
C*,M**

Hewlett-Packard Co.
6177 Lake Ellenor Drive
ORLANDO, FL 32809
Tel: (305) 859-2900
A,C,C,M,E,P*

Hewlett-Packard Co.
4700 Bayou Blvd.
Building 5
PENSACOLA, FL 32503
Tel: (904) 476-8422
A,C,M

Hewlett-Packard Co.
5550 W. Idelwild, 150
TAMPA, FL 33614
Tel: (813) 884-3282
C,E,M,P

Georgia

Hewlett-Packard Co.
2000 South Park Place
ATLANTA, GA 30339
Tel: (404) 955-1500
Telex: 810-766-4890
A,C,C,M,E,M,P*

Hewlett-Packard Co.
3607 Parkway Lane
Suite 300
NORCROSS, GA 30092
Tel: (404) 448-1894
C,E,P

Hawaii

Hewlett-Packard Co.
Kawaiahaoa Plaza, Suite 190
567 South King Street
HONOLULU, HI 96813
Tel: (808) 526-1555
A,C,E,M

Idaho

Hewlett-Packard Co.
11309 Chinden Blvd.
BOISE, ID 83707
Tel: (208) 323-2700
C

Illinois

Hewlett-Packard Co.
304 Eldorado Road
P.O. Box 1607
BLOOMINGTON, IL 61701
Tel: (309) 662-9411
C,M**

Hewlett-Packard Co.
525 W. Monroe, 1308
CHICAGO, IL 60606
Tel: (312) 930-0010
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Hewlett-Packard Co.
1200 East Diehl Road
NAPERVILLE, IL 60566
Tel: (312) 357-8800
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Hewlett-Packard Co.
5201 Tollview Drive
ROLLING MEADOWS, IL 60008
Tel: (312) 255-9800
Telex: 910-687-1066
A,C,C,M,E,M

Indiana

Hewlett-Packard Co.
11911 N. Meridian St.
CARMEL, IN 46032
Tel: (317) 844-4100
A,C,C,M,E,M

Hewlett-Packard Co.
3702 Rupp Drive
FT. WAYNE, IN 46815
Tel: (219) 482-4283
C,E

Iowa

Hewlett-Packard Co.
4070 22nd Av. SW
CEDAR RAPIDS, IA 52404
Tel: (319) 390-4250
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Hewlett-Packard Co.
4201 Corporate Dr.
WEST DES MOINES, IA 50265
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Kansas

Hewlett-Packard Co.
7804 East Funston Road, 203
WICHITA, KS 67207
Tel: (316) 684-8491
C,E

Kentucky

Hewlett-Packard Co.
10300 Linn Station Road, 100
LOUISVILLE, KY 40223
Tel: (502) 426-0100
A,C,M

Louisiana

Hewlett-Packard Co.
160 James Drive East
ST. ROSE, LA 70087
P.O. Box 1449
KENNER, LA 70063
Tel: (504) 467-4100
A,C,E,M,P

Maryland

Hewlett-Packard Co.
3701 Koppers Street
BALTIMORE, MD 21227
Tel: (301) 644-5800
Telex: 710-862-1943
A,C,C,M,E,M

Hewlett-Packard Co.
2 Choke Cherry Road
ROCKVILLE, MD 20850
Tel: (301) 948-6370
A,C,C,M,E,M

Massachusetts

Hewlett-Packard Co.
1775 Minuteman Road
ANDOVER, MA 01810
Tel: (617) 682-1500
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Hewlett-Packard Co.
32 Hartwell Avenue
LINGTON, MA 02173
Tel: (617) 861-8960
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4326 Cascade Road S.E.
GRAND RAPIDS, MI 49506
Tel: (616) 957-1970
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Hewlett-Packard Co.
39550 Orchard Hill Place Drive
NOVI, MI 48020
Tel: (313) 349-9200
A,C,E,M

Hewlett-Packard Co.
1771 W. Big Beaver Road
TROY, MI 48084
Tel: (313) 643-6474
C

Minnesota

Hewlett-Packard Co.
2025 W. Larpenteur Ave.
ST. PAUL, MN 55113
Tel: (612) 644-1100
A,C,C,M,E,M

Missouri

Hewlett-Packard Co.
1001 E. 101st Terrace Suite 120
KANSAS CITY, MO 64131-3368
Tel: (816) 941-0411
A,C,C,M,E,M

Hewlett-Packard Co.
13001 Hollenberg Drive
BRIDGETON, MO 63044
Tel: (314) 344-5100
A,C,E,M

Nebraska

Hewlett-Packard
10824 Old Mill Rd., Suite 3
OMAHA, NE 68154
Tel: (402) 334-1813
C,E,M

New Jersey

Hewlett-Packard Co.
120 W. Century Road
PARAMUS, NJ 07653
Tel: (201) 265-5000
A,C,C,M,E,M

Hewlett-Packard Co.
20 New England Av. West
PISCATAWAY, NJ 08854
Tel: (201) 562-6100
A,C,C,M,E

New Mexico

Hewlett-Packard Co.
7801 Jefferson N.E.
ALBUQUERQUE, NM 87109
Tel: (505) 292-1330
C,E,M

New York

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5 Computer Drive South
ALBANY, NY 12205
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A,C,E,M

Hewlett-Packard Co.
9600 Main Street
CLARENCE, NY 14031
Tel: (716) 759-8621
C,E

Hewlett-Packard Co.
200 Cross Keys Office Park
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Tel: (716) 223-9950
A,C,C,M,E,M

Hewlett-Packard Co.
7641 Henry Clay Blvd.
LIVERPOOL, NY 13088
Tel: (315) 451-1820
A,C,C,M,E,M

Hewlett-Packard Co.
No. 1 Pennsylvania Plaza
55th Floor
34th Street & 8th Avenue
MANHATTAN NY 10119
Tel: (212) 971-0800
C,M*

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Tel: (914) 684-6100
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Hewlett-Packard Co.
3 Crossways Park West
WOODBURY, NY 11797
Tel: (516) 682-7800
A,C,C,M,E,M



SALES & SUPPORT OFFICES

Arranged alphabetically by country

UNITED STATES (Cont'd)

North Carolina

Hewlett-Packard Co.
305 Gregson Dr.
CARY, NC 27511
Tel: (919) 467-6600
C,CM,E,M,P*

Hewlett-Packard Co.
9600-H Southern Pine Blvd.
CHARLOTTE, NC 28210
Tel: (704) 527-8780
C*

Hewlett-Packard Co.
5605 Roanne Way
GREENSBORO, NC 27420
Tel: (919) 852-1800
A,C,CM,E,M,P*

Ohio

Hewlett-Packard Co.
2717 S. Arlington Road
AKRON, OH 44312
Tel: (216) 644-2270
C,E

Hewlett-Packard Co.
23200 Chagrin Blvd #100
BEACHWOOD, OH 44122
Tel: (216) 292-4677
C,P

Hewlett-Packard Co.
9920 Carver Road
CINCINNATI, OH 45242
Tel: (513) 891-9870
C,M

Hewlett-Packard Co.
16500 Sprague Road
CLEVELAND, OH 44130
Tel: (216) 243-7300
A,C,CM,E,M

Hewlett-Packard Co.
9080 Springboro Pike
MIAMISBURG, OH 45342
Tel: (513) 433-2223
A,C,CM,E*,M

Hewlett-Packard Co.
One Maritime Plaza, 5th Floor
720 Water Street
TOLEDO, OH 43604
Tel: (419) 242-2200
C

Hewlett-Packard Co.
675 Brooksedge Blvd.
WESTERVILLE, OH 43081
Tel: (614) 891-3344
C,CM,E*

Oklahoma

Hewlett-Packard Co.
3525 N.W. 56th St.
Suite C-100
OKLAHOMA CITY, OK 73112
Tel: (405) 946-9499
C,E*,M

Hewlett-Packard Co.
3840 S. 103rd E. Ave., 100
TULSA, OK 74146
Tel: (918) 665-3300
A**,C,E,M*,P*

Oregon

Hewlett-Packard Co.
9255 S. W. Pioneer Court
WILSONVILLE, OR 97070
Tel: (503) 682-8000
A,C,E*,M

Pennsylvania

Hewlett-Packard Co.
50 Dorchester Rd.
HARRISBURG, PA 17112
Tel: (717) 657-5900
C

Hewlett-Packard Co.
111 Zeta Drive
PITTSBURGH, PA 15238
Tel: (412) 782-0400
A,C,E,M

Hewlett-Packard Co.
2750 Monroe Boulevard
VALLEY FORGE, PA 19482
Tel: (215) 666-9000
A,C,CM,E,M

South Carolina

Hewlett-Packard Co.
Brookside Park, Suite 122
1 Harbison Way
COLUMBIA, SC 29210
Tel: (803) 732-0400
C,M

Hewlett-Packard Co.
555 N. Pleasantburg Dr.
Suite 107
GREENVILLE, SC 29607
Tel: (803) 232-8002
C

Tennessee

Hewlett-Packard Co.
One Energy Centr. 200
Pellissippi Pkwy.
KNOXVILLE, TN 37932
Tel: (615) 966-4747
A,C,M

Hewlett-Packard Co.
3070 Directors Row
Directors Square
MEMPHIS, TN 38131
Tel: (901) 346-8370
A,C,M

Hewlett-Packard Co.
220 Great Circle Road, Suite 116
NASHVILLE, TN 37228
Tel: (615) 255-1271
C,M,P*

Texas

Hewlett-Packard Co.
1826-P Kramer Lane
AUSTIN, TX 78758
Tel: (512) 835-6771
C,E,P*

Hewlett-Packard Co.
5700 Cromo Dr
EL PASO, TX 79912
Tel: (915) 833-4400
C,E*,M**

Hewlett-Packard Co.
3952 Sandshell Drive
FORT WORTH, TX 76137
Tel: (817) 232-9500
C

Hewlett-Packard Co.
10535 Harwin Drive
HOUSTON, TX 77036
Tel: (713) 776-6400
A,C,E,M,P*

Hewlett-Packard Co.
511 E. John W. Carpenter Fwy.
Royal Tech. Center 100
IRVING, TX 75062
Tel: (214) 556-1950
C,E

Hewlett-Packard Co.
109 E. Toronto, Suite 100
McALLEN, TX 78503
Tel: (512) 630-3030
C

Hewlett-Packard Co.
930 E. Campbell Rd.
RICHARDSON, TX 75081
Tel: (214) 231-6101
A,C,CM,E,M,P*

Hewlett-Packard Co.
1020 Central Parkway South
SAN ANTONIO, TX 78216
Tel: (512) 494-9336
A,C,E,M,P*

Utah

Hewlett-Packard Co.
3530 W. 2100 South
SALT LAKE CITY, UT 84119
Tel: (801) 974-1700
A,C,E,M

Virginia

Hewlett-Packard Co.
4305 Cox Road
GLEN ALLEN, VA 23060
Tel: (804) 747-7750
A,C,E,M,P*

Hewlett-Packard Co.
Tanglewood West Bldg.
Suite 240
3959 Electric Road
ROANOKE, VA 24018
Tel: (703) 774-3444
C,E,P

Washington

Hewlett-Packard Co.
15815 S.E. 37th Street
BELLEVUE, WA 98006
Tel: (206) 643-4000
A,C,CM,E,M

Hewlett-Packard Co.
708 North Argonne Road
SPOKANE, WA 99212-2793
Tel: (509) 922-7000
C

West Virginia

Hewlett-Packard Co.
501 56th
CHARLESTON, WV 25304
Tel: (304) 925-0492
A,C,M

Wisconsin

Hewlett-Packard Co.
275 N. Corporate Dr.
BROOKFIELD, WI 53005
Tel: (414) 784-8800
A,C,E*,M

URUGUAY

Pablo Ferrando S.A.C. e I.
Avenida Italia 2877
Casilla de Correo 370
MONTEVIDEO
Tel: 80-2586
Telex: 802586
A,CM,E,M

Olympia de Uruguay S.A.
Maquinas de Oficina
Avda. del Libertador 1997
Casilla de Correos 6644
MONTEVIDEO
Tel: 91-1809, 98-3807
Telex: 6342 OROU UY
P

VENEZUELA

Hewlett-Packard de Venezuela C.A.
3A Transversal Los Ruices Norte
Edificio Segre 2 & 3
Apartado 50933
CARACAS 1071
Tel: 239-4133
Telex: 251046 HEWPACK
A,C,CM,E,M,P

Hewlett-Packard de Venezuela, C.A.
Centro Ciudad Comercial Tamanaco
Nivel C-2 (Nueva Etapa)
Local 53H05
Chua, **CARACAS**
Tel: 928291
P

Albis Venezolana S.R.L.
Av. Las Marias, Ota. Alix,
El Pedregal
Apartado 81025
CARACAS 1080A
Tel: 747984, 742146
Telex: 24009 ALBIS VC
A

Tecnologica Medica del Caribe, C.A.
Multicentro Empresarial del Este
Ave. Libertador
Edif. Libertador
Nucleo "C" - Oficina 51-52
CARACAS
Tel: 339867/333780
M

Hewlett-Packard de Venezuela C.A.
Residencias Tia Betty Local 1
Avenida 3 y con calle 75
MARACAIBO, Estado Zulia
Apartado 2646
Tel: (061) 75801-75805-75806-
80304
Telex: 62464 HPMAR
C,E*

Hewlett-Packard de Venezuela C.A.
Urb. Lomas de Este
Torre Trebol — Piso 11
VALENCIA, Estado Carabobo
Apartado 3347
Tel: (041) 222992/223024
C,P

YUGOSLAVIA

Do Hermes
General Zdanova 4
YU-11000 **BEOGRAD**
Tel: 340 327, 342 641
Telex: 11433
A,C,E,P

Hermes
Titova 50
YU-61000 **LJUBLJANA**
Tel: 324 856, 324 858
Telex: 31583
C,E,M,P

Elektrotehna
Titova 51
YU-61000 **LJUBLJANA**
CM

ZAIRE

Computer & Industrial Engineering
25, Avenue de la Justice
B.P. 12797
KINSHASA, Gornbe
Tel: 32063
Telex: 21552
C,P

ZAMBIA

R.J. Tilbury (Zambia) Ltd.
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LUSAKA
Tel: 215590
Telex: 40128
E

ZIMBABWE

Field Technical Sales (Private) Limited
45, Kelvin Road North
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HARARE
Tel: 705 231
Telex: 4-122 RH
E,P

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