

Setting Up Executive Spreadsheet



**Manual Part No.
68332-90003**

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Setting Up Executive Spreadsheet

Getting Started

This booklet contains instructions for setting up your Executive Spreadsheet (ESS) software. Before you begin, there is some advance information you should know -- so you'll understand what you're doing, and so you won't make errors that might damage data on your discs.

First, here's the sequence of events:

- You will install a working copy of Executive Spreadsheet on your personal computer. This is a one-time task. You only need to do it the first time ESS is to be used. After installation, ESS is ready to run any time you start it.
- You may choose to install one or more printers so you can print copies of spreadsheets you create.
- You will modify the system limit on the number of open files permitted and install ESS into PAM (if you have HP's Personal Applications Manager on your system).

All of these activities are part of the installation procedure provided by HP. While the procedure itself is simpler than it may sound, there are some requirements you need to know in advance. . . .

What You Need

To install and run Executive Spreadsheet you must have:

- At least 256K of RAM
- DOS version 2.0 or later
- The Executive Spreadsheet Master disc
- The Utility disc

For systems with flexible disc drives you must have:

- The DOS disc you use with your system
- A formatted disc (to receive the working copy) that is "blank" or has a minimum of 340Kbytes of space available

Supported Personal Computers

Hewlett-Packard supports Executive Spreadsheet on these systems:

- HP Vectra
- IBM PC/XT/AT

Keyboards, Function Keys, and Function Labels

If you are familiar with the operation of your keyboard, function keys, and function labels, skip ahead to page 5.

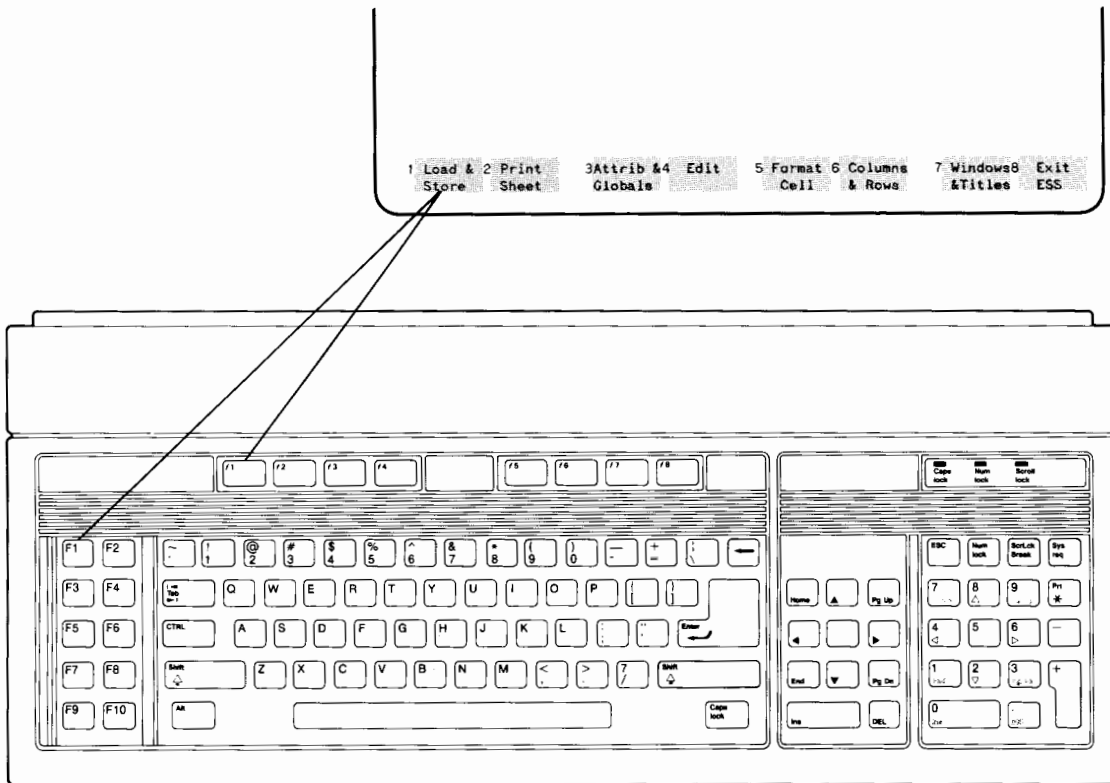
If you're *not* already familiar with function keys and function labels, you need to understand some basics. On the left side of the keyboard you'll find 10 keys labeled **F1** through **F10**. And the HP Vectra has duplicates of the first 8 function keys, along the top of the keyboard, labeled **F1** through **F8**.

The **F9** key (on the left side of the keyboard) is not used in Executive Spreadsheet. The **F10** key is used with File Manager (as a "select" key).

If you have both sets of function keys, just use the ones that are most comfortable for your typing style. **F1** through **F8** perform exactly the same whether they're along the top or on the left side of the keyboard.

These keys relate to the corresponding function labels, shown in the 8 boxes along the bottom of your screen. (Notice that each box has a number beside it, identifying the number of the corresponding key.) When you want the computer to perform a function, you simply press the appropriate function key; or, if you have the "touch" feature, touch the corresponding function label, right on your screen.

Here is an example of a set of function labels from Executive Spreadsheet (with a Vectra keyboard to show the relationship):



Every HP application has its own function labels, providing a kind of shorthand that allows you to press one key (or touch one label) instead of typing an entire command. This can save time and avoid the annoyance of typing errors.

Installing Executive Spreadsheet

Before you can run Executive Spreadsheet, you must go through the process of installing the application. It's a little like being handed the key to a new car; the car won't run without the key, and the application won't run without installation. However, there is one big difference: Most people have had the experience of starting a car; not everyone has installed an application on a computer. And while the operation of most cars is similar, the installation of software can vary, depending on the manufacturer.

Simply Follow the Prompts

Hewlett-Packard's procedure for installing Executive Spreadsheet has been designed to make the task as simple and foolproof as possible. You will be using a "batch installation" program that has been provided with Executive Spreadsheet (ESS). This program will take care of the tedious details and will prompt you, as needed, for specific information about your computer system.

Before you begin, there is some advance information you should know -- so you'll understand what you're doing. The overall installation process comes in three phases:

- Creating a working copy of the application
- Installing a printer with the application
- Altering system limits and installing into PAM



1. Creating a Working Copy of the Application

The first part of the process prompts you for the necessary information to copy the ESS program onto a disc -- either a hard disc or a flexible disc -- for day-to-day use as a working copy of the application. This is something you will do once and should not have to repeat again until your original working copy wears out.

2. Installing a Printer with the Application

In the second phase of the installation procedure, the program will ask you whether you want to install a printer to work with Executive Spreadsheet. You can decide to install a printer now or postpone this part of the procedure. And you can repeat this particular part of the process any time, independent of the rest of the installation procedure -- whenever you acquire a new printer. In other words, while installing a printer is an *option* during your first installation of ESS, it is not necessary to say "yes."

IMPORTANT: Since you may want to install printers at a later time (or to modify the specifics of previous installations) be sure to keep this guide, *Setting Up Executive Spreadsheet*, as a reference for future use.

3. Altering System Limits and Installing into PAM

In the final phase of installation, you make a small adjustment in the limits on the number of files that can be "open" and the number of data buffers available when you use ESS. In addition, if you use PAM (the HP Personal Applications Manager), ESS will be installed into PAM.

The Installation Procedure

You can run the batch installation program from PAM on an HP Vectra or from DOS on a Vectra or an IBM PC/XT/AT.

Phase 1: Creating a Working Copy

While you *can* use the Master disc to run the application, it is a good idea to make and use a working copy instead. That way, if anything happens to damage the copy, you can always use the Master disc to make another working copy.

For Hard Disc Users

If you have a hard disc and plan to install ESS onto it, follow the steps below. (If you plan to install onto a flexible disc, turn to "For Flexible Disc Users" on page 12.)

1. Insert the Executive Spreadsheet Master disc into a flexible disc drive.
2. Check the prompt on the screen to see which disc drive is identified there. The drive ID should be the same as the one where you inserted the ESS Master disc. If necessary, change the drive ID.

For example, if the ESS Master disc is in drive A, but the screen prompt specifies C>, simply type A: and press .

3. Now you're ready to go! Type this command to start the installation program:

```
install <drive ID><path>
```

You must type the command "install." In addition, you must identify the disc drive, <drive ID>, where you want the copy to go. And include a reverse slash (\) to indicate the root directory. So what you type might look like this:

```
install c:\
```

If you want to install ESS into a directory or subdirectory on your hard disc, you must specify a path name. In that case what you type might look like this:

```
install c:\ess
```

If the subdirectory you name is new, the batch installation program will create it for you.

(For more detailed information about paths and subdirectories see your DOS user's guide.)

4. When you are satisfied with the command you've typed, press **Enter**.

Now the program verifies the validity of the drive and path (if any) you specified. If everything is OK, you will see this message on the screen:

```
You are about to install Executive  
Spreadsheet from the current drive to  
<drive ID>. If this is not correct, press  
the [ESC] key to quit. If it is correct,  
press [Enter] to begin the installation
```

If you suddenly realize that although the drive you specified is valid, it's not really where you want the copy to go, you can cancel (by pressing **ESC**) and start over from the beginning.

On the other hand, if you're happy with what you typed, simply press **Enter**.

Possible Problems

If there is an error in the drive ID or the path name you typed, you will get a message on the screen -- including information that should help in diagnosing the problem. For example, here is one message:

The drive specified in the path "<drive ID\path>" is not available.

The drive specified is not connected to your system, is not turned on, or has no diskette in the drive.

- If you do *not* have PAM on your system, the batch installation program will terminate at this point and return you to DOS.
- If you are running the batch installation program from PAM, you'll see this message:

Press any key to continue

Press **Enter** to terminate the installation program and return to the Main PAM screen.

As in the example, the text of the message should help you to identify and correct the problem.

5. Once the drive and path have passed inspection, the program verifies that there is enough space on your hard disc to receive the ESS program you are installing. If there is enough space, the program will continue the installation. (Go on to step 6.)

Possible Problems

If there is a shortage of space on the hard disc, you will see this message:

```
Not enough space on the drive specified in
the path "<drive\path>" to install
Executive Spreadsheet
```

- If you do *not* have PAM on your system, the batch installation program will terminate at this point and return you to DOS.
- If you are running the batch installation program from PAM, you'll see this message:

Press any key to continue

Press **Enter** to terminate the installation program and return to the Main PAM screen.

If necessary, delete obsolete files from your hard disc to create additional space. Restart the installation at step 1.

6. Assuming there were no problems that forced you to cancel installation, the system will give you a prompt requesting information about the type of drive you are copying to:

Is the destination <drive\path> a hard disc? (Y/N)

Type Y (for "yes") and press .

The batch installation program will begin to copy the files from the ESS Master to the drive and directory you specified.

7. Each time a file is copied, a message will appear on the screen. After the last file has been copied, you will get this prompt:

Remove the ESS Master disc and replace it with the Utility disc. Press Enter to continue.

Remove the Executive Spreadsheet Master disc from the drive it's in, and insert the Utility disc. Then when you're ready, press .

8. You will see this prompt:

Would you like to install a printer at this time? (Y/N)

- If you want to install a printer, answer Y (for "yes") and press . Now go on to Phase 2 of the installation procedure (beginning on page 17).
- If you do not want to install a printer right now, answer N (for "no") and press . Then skip to Phase 3 of the procedure (beginning on page 27).

For Flexible Disc Users

If you plan to install ESS onto a flexible disc, follow the steps below:

1. Insert the Executive Spreadsheet Master disc into a flexible disc drive.
2. Insert a blank, formatted flexible "target" disc into a second flexible disc drive (to receive the copy).

Note



REMEMBER, if the target disc is a 360Kbyte double-sided disc, do *not* insert it into a 1.2Mbyte high capacity disc drive.

3. Check the prompt on the screen to see which disc drive is identified there. The drive ID should be the same as the one where you inserted the ESS Master disc (in step 1, above). If necessary, change the drive ID.

For example, if the ESS Master disc is in drive A, but the screen prompt specifies B>, simply type A: and press .

4. Now you're ready to go! Type this command to start the installation program:

```
install <drive ID><path>
```

You must type the command "install." In addition, you must identify the disc drive, <drive ID>, where you inserted the target disc in step 2.

So what you type might look like this:

```
install b:\
```

To put ESS into a subdirectory on the flexible target disc, simply type the path name you want, after the drive ID. In this case, the command might look like this:

```
install b:\ess
```

If the subdirectory you name is new, the batch installation program will create it for you.

(For more detailed information about paths and subdirectories see your DOS user's guide.)

5. When you are satisfied with the command you've typed, press **Enter**.

Now the program verifies the validity of the drive and path (if any) you specified. If everything is OK, you will see this message on the screen:

```
You are about to install Executive  
Spreadsheet from the current drive to  
<drive ID>. If this is not correct, press  
the [ESC] key to quit. If it is correct,  
press [Enter] to begin the installation
```

If you suddenly realize that although the drive you specified is valid, it's not really where you want the copy to go, you can cancel (by pressing **ESC**) and start over from the beginning.

On the other hand, if you're happy with what you typed, simply press **Enter**.



Possible Problems

If there is an error in the drive ID or the path name you typed, you will get a message on the screen -- including information that should help in diagnosing the problem. For example, here is one message:

```
The drive specified in the path "<drive
ID\path>" is not available.
```

```
The drive specified is not connected to
your system, is not turned on, or has no
diskette in the drive.
```

- If you do *not* have PAM on your system, the batch installation program will terminate at this point and return you to DOS.
- If you are running the batch installation program from PAM, you'll see this message:

```
Press any key to continue
```

```
Press Enter to terminate the installation program
and return to the Main PAM screen.
```

As in the example, the text of the message should help you to identify and correct the problem.

6. Once the drive and path have passed inspection, the program verifies that there is enough space on the target disc to receive the ESS program you are installing. If there is enough space, installation will continue. (Go on to step 7.)

Possible Problems

If there is a shortage of space on the target disc, you will see this message:

```
Not enough space on the drive specified in
the path "<drive\path>" to install
Executive Spreadsheet
```

- If you do *not* have PAM on your system, the batch installation program will terminate at this point and return you to DOS.
- If you are running the batch installation program from PAM, you'll see this message:

Press any key to continue

Press to terminate the installation program and return to the Main PAM screen.

Make sure the target disc is "blank" before you try again. (You need at least 340Kbytes of space on the target disc.)

7. Assuming there were no problems that forced you to cancel installation, the system will give you a prompt requesting information about the type of drive you are copying *to*:

```
Is the destination <drive\path> a hard
disc? (Y/N)
```

Type N (for "no") and press .

8. The program will ask you one more question:

Is <drive\path> a high capacity flexible disc? (Y/N)

- If you are copying ESS to a 1.2M drive, answer Y (for "yes") and press **Enter**.
- If you are copying ESS to a 360K drive, answer N (for "no") and press **Enter**.

The batch installation program will begin to copy the files from the ESS Master to the drive (and directory, if any) you specified.

9. Each time a file is copied, a message will appear on the screen. After the last file has been copied, you will get this prompt:

Remove the ESS Master disc and replace it with the Utility disc. Press **[Enter]** to continue.

Remove the Executive Spreadsheet Master disc from the drive it's in, and insert the Utility disc. Then, when you're ready, press **Enter**.

10. You will see this prompt:

Would you like to install a printer at this time? (Y/N)

- If you want to install a printer, answer Y (for "yes") and press **Enter**. Now go on to Phase 2 of the installation procedure (beginning on the next page).
- If you do not want to install a printer right now, answer N (for "no") and press **Enter**. Then skip to Phase 3 of the installation procedure (beginning on page 27).

Phase 2: Installing a Printer

As mentioned earlier, you can install a printer as part of the process of installing Executive Spreadsheet. OR you can use the Utility disc to install a printer at a later time, independent of the overall installation procedure. You can install as many as six different printers -- as you acquire them or all at once if you have them now.

The Utility disc provided with Executive Spreadsheet contains important information for establishing a communication link between your printer and ESS. Correct configuration for most well-known printers sold today is included in the information. And if your printer is not listed among those defined on the Utility disc, you can change one of the existing configurations to meet your needs.

In addition, there is a file for a "default" printer (called "Other Printer") which represents characteristics common to many printers. The configuration of "Other Printer" may be sufficiently general to use with your printer -- or may require some simple modifications in order to work with ESS.

Considerations Before You Begin

Obviously, if you don't have a printer, you won't need to install it. But assuming you do have one, there are other factors that may affect your decision to install or not. . . .

- If you have a hard disc drive and have already used the Utility disc to install a printer with another HP software application on the hard disc, that same printer will work with ESS. It may not be necessary to repeat the installation for ESS.

However, even with a working printer attached to your computer, if you have *never* used the Utility disc to install the printer with any HP application, it may not work with ESS.

- If your system has flexible disc drives (no hard disc) it will be necessary for you to install your printer specifically for use with ESS. Even if you've been through the process with other HP applications, the important information goes into a file on the flexible disc along with the working copy of the software. In other words, the printer file must be present on the same disc as ESS.

The Procedure

If you are now in the process of installing ESS, you will already see the MAIN screen of the Printer/Plotter Install utility on your display (pictured below). You can skip steps 1 - 3 and go directly to step 4.

If you are *not* in the process of installing ESS and plan to install a printer now, begin with step 1.

1. Make sure the Utility disc is inserted into a disc drive and you have the DOS prompt for that drive (A>, for example) on your screen.
2. Make sure the working copy of ESS is in another drive. (This may be on a hard disc, if you have one, or on a flexible disc inserted into a second flexible disc drive.)
3. Type `prinстал` and press `Enter`.

In a few moments you will see this screen:

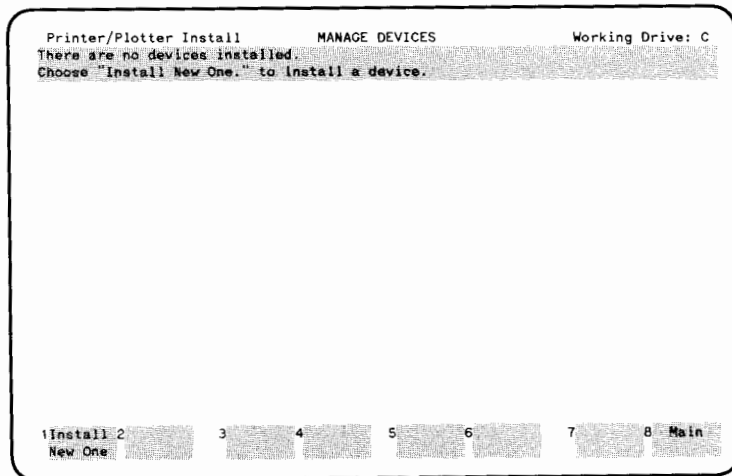
```
Printer/Plotter Install          MAIN
Enter a drive letter of an application working copy and choose "Manage Devices."
C:

1 Manage 2          3          4          5          6          7 Help 8 Exit
  Devices          Devices          Devices          Devices          Devices          Install
```


4. The action you take now depends on where you started from:

- If you are in the midst of the 3-phase installation process, the appropriate drive ID will appear at the top of the screen. Simply press **F1** to choose **Manage Devices**.
- If you are *not* in the process of installing ESS, but are installing a printer, you need to identify the drive where the system will find the working copy of ESS. (In step 2 you made sure the working copy of ESS was in a drive.) Type the drive ID and press **F1** to choose **Manage Devices**.

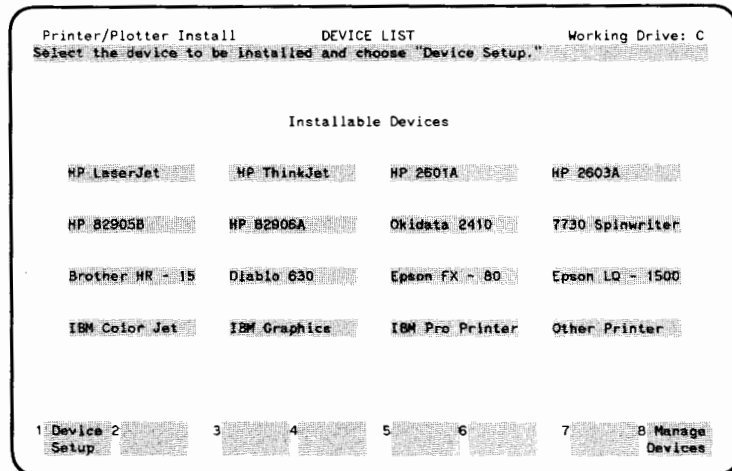
The MANAGE DEVICES screen will appear. It will look something like this (although, if you have already installed a printer, its name will appear):



5. Make sure that any printer you plan to install is set up properly and cabled to your personal computer. Consult the printer manual if you have any questions. (HP Vectra owners can also consult *Book 2: Connecting Peripherals to Vectra.*)

6. Choose **Install New One**.

Now the DEVICE LIST screen will show you a list of printers you can install:



With this program you can install as many as six printers (one at a time). The devices include plotters, which you might use with other applications, as well as printers. This DEVICE LIST screen shows the names of many popular printers and plotters made by Hewlett-Packard and by other manufacturers.



7. Highlight the name of the printer you want to install. (For example, you might choose **HP LaserJet**.)

Use the cursor keys (or the **Tab** key) to move the highlight to the name you want. If you do not see the name, press **Pg Dn** until it appears.

If you have a printer that does not appear on this list, you have a couple of choices:

- You can highlight **Other Printer**, then make any necessary changes to its configuration when you get to the DEVICE SETUP screen.
- You can highlight the name of a printer that you know is similar to the one you have, then make any necessary changes to its configuration when you get to DEVICE SETUP.

For detailed instructions, see "Installing an Unlisted Printer" later in this booklet.

8. Choose **Device Setup**.

The screen now shows the usual (default) setup values for the printer you chose (in step 7).

Here is the screen for an HP LaserJet printer:

```
Printer/Plotter Install      DEVICE SETUP      Working Drive: C
Enter the correct information for your device and choose "Install Device."

Device Name  HP LaserJet      Graphics Support  No
Interface    Serial              Character Set    HP Roman8
Port         COM1

Serial Interface Configuration

Baud        9600      Parity  None      Data Bits  8
Xon/Xoff    No        Stop Bits  1

1 Install 2 Device 3 4 5 Modify 6 Start 7 Test 8 Device
Device   ExcSeq  Over  Device  List
```

In many cases, all of these values will be correct for your printer. The values you see are, after all, the most common for that printer.

However, you will want to verify all the values. For example, some LaserJets have a Centronics (parallel) interface rather than a Serial interface; or your LaserJet may be connected to port COM2 instead of COM1. So check the printer manual and the configuration of your system to see what values are right for your printer.

If you think the values displayed are correct, choose **Test Device**. If the printer works properly, skip to step 11.

Note



While you may need to change the **Interface** and **Port** fields for your printer, the other fields (and function labels) on this screen are used less often. You will find instructions for using them in the sections titled "More about Printers" and "Advanced Printer Installation" later in this booklet.

For example, if your printer requires a modified character set (because you *must* be able to print "international" characters) or modified escape sequences, see "Advanced Printer Installation." If you need to change the serial interface configuration for your printer, see the same section for specific instructions.

9. The **Interface** field specifies the type of interface your printer uses. The choices are:

Centronics	This is the most common parallel interface.
HP-IB *	This is HP's proprietary IEEE-488 interface.
Network *	Use this interface if you are connected to a Local Area Network such as 3Com.
Remote *	Use this interface to connect to Print Central on an HP 3000.
Serial	This is the standard RS232C interface.

** Printers with these interfaces require additional software device drivers.*

If the value displayed is not correct, highlight the **Interface** field. Then choose **Next Choice** or **Previous Choice** to cycle through the values until you find the correct one for *your* printer.

If your printer uses a serial interface, additional fields will appear in the lower half of the screen, under the heading **Serial Interface Configuration**. The settings shown may be correct for the printer you are installing, but you'll have to verify this. If for some reason they are not correct, you will have to modify them. For instructions on how to do this, see the section titled "Installing an Unlisted Printer" later in this booklet.

10. The **Port** field indicates where your printer is connected (at the back of your computer). The choices are:

COM1

If you have a *serial* interface, you must choose one of these ports.

COM2

LPT1

If your interface is *not* serial, you can use these LPT choices.

LPT2

LPT3

If the value displayed is not correct, highlight the **Port** field. Then choose **Next Choice** or **Previous Choice** to cycle through the values until you find the correct one for *your* printer.

11. If you want to test this printer now, choose **Test Device**.
12. When you've satisfied with the values for your printer's interface and port, choose **Install Device**.

You will see this message:

A new device has been installed.

13. Choose **Device List**. From this screen you can select another printer to install. (Follow the instructions here, starting again at step 7.)
14. When you have installed all your printers, press **F8** repeatedly until you exit from the printer installation program. (Note: It may also be necessary to press **F1** once, for **Yes**, to confirm that you want to exit -- depending on what action you last took on the DEVICE SETUP screen.)

Next . . .

If you are in the process of installing ESS, continue to Phase 3 (beginning on the next page).

If you have been installing a printer independent of installing ESS, you are now finished.

Phase 3: Altering System Limits and Installing into PAM

As the final phase of installing ESS, the program is now ready to make some modifications to the disc operating system (DOS). In addition, if you have PAM on your system, the program will install ESS into PAM automatically for you.

The message on your screen now is:

Insert your DOS system disc into a drive.
This **MUST** be the same disc you routinely use
to start your computer. Then type the ID of
that drive.

1. What you do now may depend on whether you have a hard disc on your system and have copied your DOS program onto the hard disc.
 - If your DOS system disc is on a hard disc, you're all set.
 - If the DOS system disc you normally use to start your computer is a *flexible* disc, insert it into the same drive you usually use when you start your computer. (This may mean you have to remove the working copy of ESS and replace it with the DOS disc.) Make sure the DOS disc is *not* write protected.
2. Type the ID of the drive containing your DOS disc (for example, C:) and press .

If you're interested in technical details, here's what the installation program does:

- It increases the limit on the number of open files permitted to 20. (The command FILES=20 is placed in the CONFIG.SYS file.)
- It increases the number of disc buffers to 16. (The command BUFFERS=16 is placed on the CONFIG.SYS file.)
- It adds Executive Spreadsheet to PAM, HP's Personal Applications Manager (if your computer has PAM).

The changes to the FILES and BUFFERS limits improve the speed and performance of ESS. If you have already set these options at higher values (FILES=30, for example), the installation program will not change them.

PAM allows you -- more easily than DOS alone -- to see what all your applications are. And you can start ESS by simply choosing a function label. (If you don't have PAM, the installation program will skip this step.)



Starting Executive Spreadsheet

Now that ESS is installed, it's almost ready to use. The final thing you need to do is "re-boot" your system. Make sure your DOS system disc is in one of your drives. Then follow the appropriate directions in this message on your screen:

To run Executive Spreadsheet:

- 1) Re-boot by pressing [CTRL] + [Alt] + [DEL] simultaneously
- 2) Insert the ESS disc (if ESS is not installed on the hard disc)

If running from PAM:

- 3) Highlight "Exec Spreadsheet"
- 4) Choose "Start Applic"

If running from DOS:

- 3) Change logged directory to <path>
- 4) Type ESS and press [Enter]

UNLESS one of the situations below applies to you, you're ready to go. When you restart your system (by pressing **Alt** + **CTRL** + **DEL**), the installation will be in effect. You can begin using ESS.

First, if one of these special situations applies to you:

- ESS is in a subdirectory and you don't have PAM
- You use a mouse

...read the appropriate section in the next few pages.

Then you'll be ready to turn to your Executive Spreadsheet manuals and start reading *Learning Executive Spreadsheet*.



If ESS Is in a Subdirectory and You Don't Have PAM

If you installed ESS into PAM, you can skip this section. If you installed ESS into a subdirectory and plan to run the application from the DOS prompt, you may want to write a short batch file to simplify running ESS from the root directory.

With a hard disc designated C: and Executive Spreadsheet in the C:\ess subdirectory, you can write the batch file in this way:

1. At the C> prompt, type COPY CON ESS.BAT
2. Type CD \ESS and press .
3. Type ESS and press .
4. Press + ; then press .

Now the batch file ESS.BAT is in the root directory C:\. Whenever you see the DOS prompt (C>), you can start running the application by typing ESS and pressing .

If You Use a Mouse

If you have an HP Mouse or a Microsoft Mouse attached to your system, be sure that you have set it up properly.

If you are using a Microsoft Mouse, use the appropriate driver file or program file. Check the mouse manual to locate and use the right file.

If you are using an HP Mouse, see that it is properly attached to an HP-HIL interface, as described in that manual.

More about Printers

Once you have installed a printer to operate with ESS, you may want to modify some of the values you assigned to it -- for example, if you move it from port COM1 to COM2. Or you may disconnect a printer and want to delete it from the printer installation file altogether.

Modifying a Printer

To modify the values you have assigned to a printer you've already installed, start from the MANAGE DEVICES screen. (That's the screen that shows you the names of printers you *have* installed.) Then follow these steps:

1. Highlight the name of the printer you want to modify.
2. Choose **Modify Device**. This brings up the DEVICE SETUP screen.
3. Follow the steps you would usually follow when installing a device (as explained in Phase 2 of the installation procedure, earlier in this booklet).
4. When you are satisfied with the installation values, choose **Install Changes**.



Deleting a Printer

To delete a printer that has already been installed, start from the MANAGE DEVICES screen. Then:

1. Highlight the name of the printer you want to delete.
2. Choose **Remove Device**.
3. Choose **Yes** to confirm that you want to delete *this* printer.

That's all there is to it!

Advanced Printer Installation

In some cases, the usual printer installation procedures are insufficient. This section contains information for installing a printer when you want to:

- Install an unlisted printer
- Modify printer escape sequences
- Modify a character set to print "international" characters

Installing an Unlisted Printer

Some printers are not listed in the Printer/Plotter Install program. If you want to install one of those printers with ESS, you can do it in one of two ways:

- Install a printer that you know is similar to yours and modify the configuration values as needed.
- Install **Other Printer** and enter or modify the configuration values as necessary.

In this section, the example given is the latter alternative. In general, follow the instructions in "Phase 2: Installing a Printer." *These* instructions merely supplement those.

The Procedure

While installing a printer, display the DEVICE LIST screen. (Refer to page 19 if you don't remember how to do that.) Then:

1. Highlight **Other Printer**.
2. Choose **Device Setup**.

Now you see the DEVICE SETUP screen:

```
Printer/Plotter Install      DEVICE SETUP      Working Drive: C
Enter the correct information for your device and choose "Install Device."

Device Name  Other Printer      Graphics Support  No
Interface    Centronics                    Character Set     IBM-8
Port         LPT1

1 Install 2
Device
3
4
5 Modify 6 Start
  TacSeq  Over
7 Test 8 Device
  Device List
```

3. Type the name of your printer over **Other Printer**. (Press **DEL** to delete any unnecessary characters.)

Note



Throughout the rest of these instructions:

- To move the highlight to a different field, use the cursor keys or the **Tab** and **Shift** + **Tab** keys.
 - To change the value in a field, choose **Next Choice** or **Previous Choice**--repeatedly if necessary.
-

4. The **Graphics Support** options are "Yes" and "No" and are predetermined (depending on whether your HP application supports graphic output). This field is only for your information and cannot be changed.

Executive Spreadsheet does not support graphics output in any case (even though your printer may have the capability to print graphics). In the future, some HP applications will support graphics output on printers with that capability.

5. Highlight the **Interface** field and display the correct value in the field. These are the choices:

Centronics

HP-IB *

Network *

Remote *

Serial

**Printers with these interfaces require additional software device drivers.*

Again, consult your printer manual if you are not sure what interface to use.

If your printer has a **Serial** interface, five additional fields appear in the lower half of the screen, under the heading **Serial Interface Configuration**. You will have to select the appropriate settings for it from these possibilities:

Baud	This setting should show the baud rate appropriate for your printer. The options range from 110 (lowest) through 9600 (highest).
Parity	The setting for parity can be Odd, Even, or None -- depending on your printer.
Data Bits	The setting for data bits can be 7 or 8.
Xon/Xoff	The setting for Xon/Xoff can be Yes or No.
Stop Bits	The setting for Stop Bits can be 1 or 2.

6. Highlight the **Character Set** field and display the correct value. These are the choices:

HP Roman8

IBM-8

Modified IBM-8

The default provided is the standard character set for each printer. However, you may want to check your printer manual to verify that the default (Roman8 or IBM-8) is correct.

Some considerations:

- If your printer *only* accepts 7-bit characters, either Roman8 or IBM-8 will work (since for both sets the 7-bit characters 0 through 127 are identical).
- If your printer *also* accepts 8-bit characters (decimal numbers 128 through 255), you must choose between Roman8 and IBM-8, according to which is correct for your printer. (See your printer manual if you are unsure which character set to specify.)
- If your printer *only* accepts 7-bit characters *and* you need to print special "international" characters, you may have to choose **Modified IBM-8**. For detailed instructions on how to "modify" the IBM-8 character set, see "Modifying a Character Set" on page 43.

If you do modify characters, when you're finished return to this DEVICE SETUP screen by choosing **Device Setup**.

7. Highlight the Port field and display the correct value:

COM1

COM2

LPT1

LPT2

LPT3

Be sure to use either COM1 or COM2 for a printer with a *serial* interface.

8. You may want to modify the default escape sequences to match the values appropriate for your printer. If you do, consult "Modifying Printer Escape Sequences" (on the next page) and follow the directions in that section now. You can check the default values now by choosing **Modify EscSeq**, then choose **Device Setup** to display this screen again.

Now you have set all the values for your printer!

9. Choose **Test Device** to see if the values are correct.

10. Choose **Install Device**.

Your printer is installed.

Modifying Printer Escape Sequences

Some printers use escape sequences in order to provide certain print enhancements:

- Bold print
- Underlining
- Six or eight lines of print per inch
- Compressed print

If your printer is listed on the **DEVICE LIST** screen and uses escape sequences for these enhancements, the correct escape sequences have been predefined for you by HP. In most circumstances you have no need to change these predefined escape sequences.

In other words, if your printer supports compressed print, you can get it without making any adjustment to the default escape sequence predefined for you here. However, you will have to make sure that the printer configuration *within* ESS itself has been set to give you compressed print. (You must turn "on" the **Compress Print** feature on the **Printer Configuration** menu within ESS. See chapters 4 and 6 of *Using Executive Spreadsheet* for more information.)

Of course, if your printer does *not* support compressed print, no adjustment you try to make will change that fact.

Why Modify Escape Sequences?

Although changing the predefined sequences is not something you should do casually, there are occasions when it may be necessary:

- If you are a knowledgeable user, you may want to modify the predefined escape sequences for your own purposes.
- Also, if your printer is not listed on the DEVICE LIST screen, it is possible that you will have to modify the escape sequences to meet your printer's needs.
IMPORTANT: In this case you must depend on your printer manual to tell you exactly what escape sequences to type.

If you determine that you must modify the predefined escape sequences for your printer, the procedure is described below.

The Procedure

To modify escape sequences, begin with the DEVICE SETUP screen for your printer on display. Then:

1. Choose **Modify EscSeq**. The **PRINTER ESCAPE SEQUENCES** screen will appear:

```
Printer/Plotter Install  PRINTER ESCAPE SEQUENCES  Working Drive: C
Enter the correct information for your printer and choose "Save Changes."

Turn Bold Print On      ^[(s2B
Turn Bold Print Off     ^[(s0B
Turn Underline On      ^[(dD
Turn Underline Off     ^[(dE
Select 6 lines per inch ^[(l6D
Select 8 lines per inch ^[(l8D
Turn Compressed Print On ^[(k9H
Turn Compressed Print Off ^[(k12H

1 Save 2 3 4 5 6 Start 7 8 Device
Changes Over Setup
```

If your printer was named originally on the **DEVICE LIST** screen, you will see the predefined escape sequences for that printer in the column in the center of the screen.

If your printer was not listed, and you used the "Other Printer" values during the installation, the column in the center of the screen will be blank. (The "Other Printer" was set up with *no* escape sequences predefined. However, bold print and underlining will work with it; these commands default to multiple passes on the line.)

In either case, the assumption is that you want to modify or add to the escape sequence fields on this screen.

2. Move the cursor to the field you want to modify and type the changes you want. **REMINDER:** Be sure to check the printer manual for the correct escape sequences for your printer.

To type a control sequence, hold down **CTRL** and press the appropriate letter -- **CTRL** + **M**, for example. Do not type a caret and **M**, even though that's how the keystrokes are represented. To type the "escape" character, you only need to press the **ESC** key (even though it is represented by a caret and a square left bracket, []).

If you want to erase the contents of any of the fields, move the cursor to that field and press **ALT** + **L** (for "clear line").

3. When you have finished making changes, choose **Save Changes**.

If you change your mind and want to return the screen to its previous state, press **Start Over**.

4. Choose **Device Setup** to return to the DEVICE SETUP screen.

If you made some changes but did not choose **Save Changes**, the program will ask you to confirm that you want to exit without the "save."

- Choose **Yes (F1)** to exit this screen.
- Choose **No (F5)** if you do not want to lose the changes. Repeat steps 3 and 4.

5. On the DEVICE SETUP screen choose **Test Device** to verify that the printer works properly with the changes you've made.
6. To "complete" the installation of the changes, press **F1**. (The corresponding function label for **F1** will say either **Install Device** or **Install Changes**, depending on whether you were in the process of installing a new printer or simply modifying the configuration of one you'd already installed.)
7. When you are finished, choose **Device List**.

Now you can continue with the rest of your printer installation.

If you are finished with all modifications or installations, press **F8** twice to exit the printer installation program.

Character Sets and ESS

ESS uses both the Roman8 and IBM-8 character sets:

- Standard worksheet files (identified by the extension ".VC") are stored as Roman8 files.
- DIF files (used in worksheet consolidation) and PRN files (used when you print data from ESS) are stored as IBM-8 files.

Modifying the IBM-8 Character Set

As another feature of printer installation, the Utility disc allows you to modify (or "customize") the characters ESS sends to your printer. This should NOT be done casually and requires a fair amount of sophistication from the user -- so this explanation presupposes some technical understanding. If you want more detailed information, consult your printer manual.

Who Needs a Modified Character Set?

Most users of the modified IBM-8 character set will be found outside the U.S. in countries whose language or monetary system requires characters not normally found in USASCII. For example, the Spanish language sometimes uses a tilde over the "n," and the German language may require an umlaut over the "o." In order to produce such "international" characters from their printers, these users might have to use the modified IBM-8 character set.

Another factor in deciding whether the modified character set is necessary for you is your printer itself. If you have a daisywheel printer, you can obtain print wheels which already have "international" characters on them. In addition, some printers come with the capability to produce different character sets. For example, the HP 2225C ThinkJet can print in 8 different character sets (for USASCII and 7 other languages) which you can select by setting certain switches.

You will need to modify a character set for your printer's use only if:

- You want to print "international" characters. . .

AND

- Your printer cannot use either of the standard character sets, HP Roman8 or IBM-8, to do this.

If these statements do *not* apply to you, choose either Roman8 or IBM-8 for your printer. No modification is necessary, and you do not need to read this section.

You *can* modify your character set for other reasons, if you wish, but it is not necessary.

The Character Sets Provided

There are 3 character sets provided with the printer installation program:

- HP Roman8
- IBM-8
- Modified IBM-8

In each case, the first 128 characters (decimal numbers 0 through 127) are 7-bit, standard ASCII characters; they are identical for all three character sets. The next group of characters (128 through 255) are 8-bit characters, and the list for Roman8 is *different* from the list for IBM-8.

If your printer is one of the ones named on the DEVICE LIST screen, the appropriate character set has been selected as a default (during installation). Under most circumstances the default character set should serve your needs. In those cases where Roman8 or IBM-8 does not give you all the characters you need, you can use the **Modified IBM-8** character set. Follow the procedure on the next page.

The Procedure

To modify a character set, begin with the DEVICE SETUP screen for your printer displayed. Then:

1. Use the cursor keys (or **Tab** key) to move the highlight to the Character Set field.
2. Choose **Next Choice** until you see **Modified IBM-8** in the Character Set field.

As soon as **Modified IBM-8** shows in the field, a corresponding function label, **Modify IBM-8** will appear for the **F2** function key:

```
Printer/Plotter Install      DEVICE SETUP      Working Drive: C
Enter the correct information for your device and choose "Install Device."

Device Name  Other Printer_____  Graphics Support  No
Interface    Centronics_____      Character Set     Modified IBM-8
Port         LPT1

1 Install 2 Modify 3 Previous 4 Next 5 Modify 6 Start 7 Test 8 Device
Device   IBM-8   Choice   Choice   EscSeq   Over   Device   List
```

3. Choose **Modify IBM-8**.

This brings up the first screen of the CHARACTER SET TABLE:

```
Printer/Plotter Install   CHARACTER SET TABLE   Working Drive: C
Enter the correct information for your printer and choose "Save Changes."
```

IBM-8 Chars.			Decimal Replacement Values					
	Hex.	Dec.						
^@	00	0						
^A	01	1						
^B	02	2						
^C	03	3						
^D	04	4						
^E	05	5						
^F	06	6						
^G	07	7						
^H	08	8						
^I	09	9						
^J	0A	10						
^K	0B	11						
^L	0C	12						
^M	0D	13						
^N	0E	14						
^O	0F	15						

1 Save Changes 2 3 4 5 7-bit Values 6 Start Over 7 8 Device Setup

Notice that the first column contains an ASCII character; the second column, its corresponding hexadecimal number; and the third column, its decimal number. The fourth column, now blank, is available for replacement characters, each expressed as a decimal number.

You can type a decimal replacement value for any ASCII character, and your printer will print that replacement. But you will normally want to provide a replacement value only for a character that your printer would not otherwise be able to produce -- usually a character with a decimal value greater than 127.

For example, the IBM-8 character set includes the French capital "C" (with a cedilla) as 8-bit character number 128. If your printer cannot accept 8-bit characters, you can substitute a combination of 7-bit characters (0 through 127) to achieve an acceptable French "C" at position 128.

The actual substitution would consist of decimal numbers 67 8 44 to represent these 3 characters: C backspace , (comma). Since the "C" with a cedilla is character number 128 in the IBM-8 list, you must get to that part of the table to provide the replacement value.

4. Press **Pg Dn** 7 times, until you see "p" -- decimal number 112 -- on the first line of the table.
5. Move the cursor to the bottom of the screen to scroll up the French "C" (with a cedilla). (This is the IBM-8 decimal number 128.)

Your screen will look *something* like this:

```

Printer/Plotter Install    CHARACTER SET TABLE    Working Drive: C
Enter the correct information for your printer and choose "Save Changes."
7-bit replacement values have been entered starting at character 128 (decimal).

IBM-8 Chars.
Hex.Dec.  Decimal Replacement Values
q| 71| 113|
r| 72| 114|
s| 73| 115|
t| 74| 116|
u| 75| 117|
v| 76| 118|
w| 77| 119|
x| 78| 120|
y| 79| 121|
z| 7A| 122|
{| 7B| 123|
| 7C| 124|
}| 7D| 125|
~| 7E| 126|
^| 7F| 127|
_| 80| 128|
1 Save 2
Changes 3 4 5 7-bit 6 Start 7 8 Device
         Values Over Setup

```

6. Choose **7-bit Values** to insert the correct ASCII decimal replacement values (for characters 128 through 255 in the IBM-8 character set).

The replacement values for character 128 now appear in the fourth column: **67 8 44**.

7. Press **Pg Dn** again.

Now you see that the 7-bit substitutions for the remaining 8-bit characters have been filled in for you.

This example has been for the benefit of users whose printers *only* print standard ASCII characters (users content with "default" 7-bit substitution characters). If your printer can print international characters by another means (other 7-bit substitutions), you do not have to choose **7-bit Values**. You can elect to type other replacement values if your printer requires them.

8. If you are satisfied with the replacement values, choose **Save Changes**. Then choose **Device List**.

If you only wanted to "see" the 7-bit values, not to install them, you can press **Start Over**. Then choose **Device List**.

Now you can continue with the rest of your printer installation.

A Warning about Your Flexible Discs and Drives

The 360Kbyte flexible disc drive and the high capacity (1.2Mbyte) flexible disc drive are technologically different and are not completely compatible. The discs you purchase and use with these drives cannot be used interchangeably between the two drives.

The drives themselves may look quite similar, but you will have to be able to tell the difference between them. If you are uncertain about what drives you have, see the manuals that came with your system.

Note



On an HP Vectra the 360Kbyte drive has an identifying asterisk (*) embossed on it, beneath the disc-in-use light.

Hewlett-Packard strongly recommends that you use double-sided (360Kbyte) discs in your 360Kbyte drive and high capacity (1.2 Mbyte) discs in your 1.2Mbyte drive.

The table below shows how these discs can and cannot be interchanged between the drives:

Type of Disc	Used with a 360Kb Drive	Used with a 1.2Mb Drive
Double-sided (360Kbyte)	Read/Write	Read Only*
High capacity (1.2Mbyte)	_____	Read/Write

**If you write information on a double-sided (360Kbyte) disc while it is in a high capacity (1.2Mbyte) drive, the disc can no longer be read reliably by a 360Kb drive.*

Notice that it is possible to *read* a double-sided (360Kbyte) disc in a high capacity (1.2Mbyte) drive, but you should not use a high capacity disc in a 360Kbyte drive for any purpose. It is best to use your discs in the drives designated for them.



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Printed in U.S.A. 9/85
68332-90003