

Note: The Utilities Diskette also includes `temms16.sys`, an extended memory manager. Refer to `Temms16` for more information about using the driver.

To copy `temms16.sys` and all the utilities in the preceding table to your hard disk, type:

```
copy a:*. * c: and press <ENTER>.
```

`Temms16` is an expanded memory manager driver. To use `Temms16`:

1. Use the MS-DOS copy `temms16.sys` to your hard disk.
2. Add a device command to your `config.sys` file:

```
device=\path\temms16.sys
```

Note: Refer to your MS-DOS documentation if you need more information about the copy command or the device command.

In order to understand the function of this driver, you need to know the definitions of shadow RAM, expanded memory, and extended memory.

`Temms16.sys` uses all extended memory beyond 1MB, plus any shadow RAM not allocated for other purposes, to emulate expanded memory as defined in the LIM (Lotus/Intel/Microsoft) memory specification.

To use `Temms16`:

1. Copy `temms16.sys` from the Utilities Diskette to your hard disk. To do this, insert the Utilities Diskette into Drive A and type the following command at the MS-DOS system prompt (A> or C>):

```
copy a:temms16.sys c: Then, press <ENTER>.
```

2. Add a device command for `Temms16` to your `config.sys` file. The format for the `Temms16` device command is:

```
device=temms16.sys [Iy] [Mz]
```

The following table summarizes the `Temms16` device command parameters:

Switch	Function
Iy	Identifies the I/O port addresses emulated by <code>temms16.sys</code> . If one or more hardware boards in your computer access port addresses that conflict with the addresses emulated by <code>temms16.sys</code> , use the following chart to select addresses that can be emulated without conflict. The default y value is 5.
y Value	Port Addresses Used (Hex)
0	208            4208            8208            C208
1	218            4218            8218            C218

5	258	4258	8258	C258
6	268	4268	8268	C268
A	2A8	42A8	82A8	C2A8
B	2B8	42B8	82B8	C2B8
E	2E8	42E8	82E8	C2E8
Mz	Specifies the base frame for temms16.sys to use for LIM page mapping. The default z value is 3.			
z Value	Frame Address (Hex)			
1	C0000-C3FFF			
2	C4000-C7FFF			
3	C8000-CBFFF			
4	CC000-CFFFF			
5	D0000-D3FFF			
6	D4000-D7FFF			
7	D8000-D8FFF			
8	DC000-DFFFF			
9	0E000-E3FFF			

Notes:

- \* Do not use temms16.sys with software that uses the protected mode of the 80386SX processor.
- \* If you want to use expanded memory with other device drivers the temms16.sys device command must be the first device command in your config.sys file. See your operating system documentation for more information.
- \* Do not use a frame address that overlaps addresses used by the hardware.

To run utilities from the MS-DOS diskette, insert the MS-DOS diskette into a diskette drive. Then, at the MS-DOS operating system prompt (such as A>), type the program name that corresponds to the desired utility. To run utilities from a hard disk, type the appropriate program name at the hard disk prompt (such as C>>). It is not necessary to enter the file extension, such as .com, to run a utility. The following utilities can be copied from the Utilities Diskette and run from the MS-DOS prompt:

Utility	Program Name
Setup	setups16.com
Keyboard password	kp.exe
CPU speed*	speeds16.com
Video mode control*	vga.exe
* Advanced utilities	