

# The Everex Scheduler Program

OWNER'S MANUAL AND REFERENCE GUIDE (VERSION 3.0)

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MAN-00039-30

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# NOTICE

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Use this general purpose scheduler program to schedule an operation to perform automatically at a time that you specify. This program saves you time by allowing you to perform a utility operation, such as backing up your hard disk at night or some other convenient time when your system is not in use. Also use the Scheduler to repeatedly perform a function. For example, schedule your computer to use a modem to dial up and retrieve stock information every hour.

The Scheduler	You specify the operation that you want the Scheduler program to execute in terms of key stroke sequences. In other words, the operation occurs as if someone were sitting at the computer inputting the commands. This makes the Scheduler program extremely flexible since you can schedule anything an operator can do!
	The Scheduler program lets you set up <b>eight</b> <b>separate schedules</b> allowing you to arrange for eight different operations to occur automatically. You can schedule the operation to occur once or repeatedly. For example, schedule a tape backup to occur every day, every 2 days, every 7 days, etc. If you are working on the computer when a scheduled event is to occur, an audio alarm may signal you.
	By putting the Scheduler program into your AUTOEXEC.BAT file, the computer will automatically load the program each time it is started up.
The Clock Display	The Scheduler also allows you to display a clock on the screen during your every day operations. You can specify the location of this clock.
Help	If you run into any difficulties or have any questions while you are using the Scheduler, help is only a keystroke away. Push the [F1] function key, and the help text appears to guide you and to help you make decisions.



This section will guide you through your first use of the Scheduler program. You will learn how to set the clock and then schedule a simple operation to perform at a specified time.

We recommend that you make a backup copy of the Scheduler diskette and store the original diskette in  $\varepsilon$  safe place.

#### 1. a. For a Hard Disk User:

Copy all the files on the Scheduler diskette onto your hard disk drive. Insert the Scheduler

2.

diskette into floppy disk drive A, and close the drive door. Change to the drive and directory where the Scheduler is to be installed and at the DOS prompt, type (assuming drive C is selected):

COPY A: <b>*.*</b> C:	[Enter]
b. For a Diskette User:	
Copy all of the files on the Scheduler disk another diskette. To do this, type:	cette to
СОРУ А:*.* В:	[Enter]
Run the Scheduler by typing:	
SCHEDULE	[Enter]
Two menus appear on the screen. The me the top sets the date and time of your cloc	nu on k. The

- 3.
  - menu on the bottom sets up a schedule. Also notice the date and time display at the upper right-hand corner of the screen.
- 4. Check the date and time display in the upper right-hand corner of the screen. Are the date and time correct? If they are, go to step 10. If they are not, continue with the next step to set the correct date and time.
- 5. Press the [F2] key to move the cursor to the Clock Menu.

- 6. Enter the correct date and time in the appropriate places.
- Check that your date and time entries are correct. Remember, if you have any question, just hit [F1] to get help.
- 8. Press [F8]. A message appears indicating that you have set the correct time and date into the computer. You should notice the date and time display in the upper right-hand corner of the screen now shows the correct date and time. If you leave the date and time entries filled with zeros, you will not change the system clock.
- 9. Press [F2] to move the cursor to the Schedule Menu.
- 10. Let us set a schedule to instruct the computer to list the disk directory at a specified time.
- 11. The blinking cursor should appear in the area labeled *Input*. Enter the following command sequence in the highlighted area:

#### DIR;M

These five characters represent the exact keystrokes you normally press on the keyboard when you want to list the directory of the disk. The ;M characters represent pressing the [Enter] key on the keyboard. Notice that the M must be capitalized.

- Press the [Enter] key to move the blinking cursor to the next area labeled Activate Schedule. Press the [Y] key to activate this schedule.
- 13. Press the [Enter] key to move the blinking cursor to the area where you enter the date and time you want the event to occur. A good value to enter is the current date and time plus one minute. This gives you time to set up the schedule and wait for the event to occur. Enter the date and time now.
- 14. Check that all the values you entered are correct.
- 15. Press the **[F8]** function key. A message indicates that the schedule has been set into the computer.
- 16. Press the **[F10]** and **[Enter]** keys to exit the Scheduler program and return to DOS.
- 17. Wait a little while. Your computer will list the disk directory for you at the time you entered.

## Section



# **EXAMPLES OF SCHEDULES**

#### 

Example 1: Running CHKDSK Every Day In this example, you will set a schedule to instruct the computer to run the CHKDSK program every day at 5:00 PM for a month.

1. Get into the drive and directory where you store the Scheduler program. Run the program by typing:

#### SCHEDULE [Enter

2. Two menus appear on the screen. Check the date and time display in the upper right-hand corner of the screen. In this example, we assume they are correct and that you do not need to change them.

3. The blinking cursor should appear in the area labeled *Input*. Enter the following into the highlighted area:

#### CHKDSK;M

These eight characters represent the exact keystrokes you would normally press on the keyboard when you want to perform the DOS CHKDSK routine. The ;M characters represent pressing the [Enter] key on the keyboard. Notice that the M must be capitalized.

- 4. Press the [Enter] key to move the blinking cursor to the next area labeled *Activate Schedule*. Press the [Y] key to activate this schedule.
- 5. Press the [Enter] key to move the blinking cursor to the area where you enter the date and time you want the event to occur. Enter the current date in the date slot and 05:00:00PM in the time slot. This sets your schedule to run for the first time this evening at 5:00.
- 6. Press the [Enter] key to move the blinking cursor to the area where you enter the date and time for the event to end. Enter the date as one month from today. This causes the schedule to be in effect until that date.

7.	Since you want the schedule to repeat on a daily
	basis, press the [Enter] key until you position
	the cursor after the word Days. Enter [1], and
	use the delete key to erase any other numbers in
	the highlighted area. This sets your schedule to
	repeat every day.

- Move the cursor to set the days of the week that you want the Scheduler to activate automatically. For example, exclude Saturday and Sunday by entering [N] for Sun and Sat.
- 9. Check that all the values you entered are correct.
- 10. Press the [F8] function key. A message indicates that you have set the schedule into the computer.
- 11. Press the **[F10]** and **[Enter]** keys to exit the Scheduler program and return to DOS.

That's it! From now on, the DOS routine CHKDSK will operate every evening at 5:00 for one month.

Example 2:In this example, you will change the above scheduleRunningto operate every Friday for 6 years.CHKDSK

Once A Week

1. Get into the drive and directory where you store the Scheduler program. Run the program by typing:

#### SCHEDULE

[Ente

- 2. Two menus appear on the screen. Check the date and time display in the upper right-hand corner of the screen. In this example, we assume that they are not correct; you need to enter the Clock Menu and change the settings.
- 3. Press the [F2] key to move the cursor to the Clock Menu.
- 4. Enter the correct date and time in the appropriate places.
- Check that your date and time entries are correct. Remember, if you have any questions, hit [F1] to get help.
- 6. Press [F8]. A message appears indicating that you have set the correct date and time into the computer. You should notice the date and time display in the upper right-hand corner of the screen now shows the correct date and time.
- 7. Press [F2] to move the cursor to the Schedule Menu.
- 8. Find the schedule which you created to run CHKDSK every evening at 5:00. If this is the only schedule that you have created, it will display on the screen. If you have created another schedule since you set it, you will have to find it.

The program remembers eight different schedules. To see a schedule created prior to the one displayed on the screen, press the [PgUp] key. Repeat this action until the desired schedule appears on the screen.

NOTE: You will overwrite any schedule which appears on the screen when you press the [F8] key. If you want to maintain all of your previous schedules and create a new schedule, press the [PgDn] key until a blank page (or previously unset schedule) appears on the screen.

- 9. Press the [Enter] key until you position the cursor in the ending date space. Since you wish the schedule to run for six years rather than one, add five years to the ending date.
- 10. Press the [Enter] key until you position the cursor after the word *Days*. Enter a [7] and delete any other characters in the highlighted area.
- Press the [Enter] key four times. The cursor should now appear under the word Sun. Since you do not want the schedule to operate on any day except Friday; enter [N]. Repeat the process until the cursor appears under the word Fri. Since you want the schedule to operate every Friday, enter [Y]. Enter [N] for the word Sat also.

- 12. Check that all the values you entered are correct.
- 13. Press [F8]. A message appears indicating that you have set the schedule into the computer.
- 14. Press [F10] and [Enter]. You have now left the Scheduler program.

From now on, the CHKDSK program will operate every Friday evening at 5:00 for six years.



If you turn off or reset your computer, you need to put the Scheduler program into the system's AUTOEXEC.BAT file so that the schedules you have established activate again when you restart the computer. The AUTOEXEC.BAT file is a batch file which DOS automatically runs whenever you turn on or reset the computer. By placing the Scheduler program in the AUTOEXEC.BAT file, the computer automatically loads the program each time you turn the computer on. We recommend using a text editor or word processing program to create or modify the AUTOEXEC.BAT file. However, if you do not have a text editor or word processing program, use the DOS COPY CON command to add the Scheduler into the AUTOEXEC.BAT file with the following instructions. (These instructions assume that your computer boots from hard disk drive C.)

1. At the DOS prompt, type:

CD\

[Enter]

TYPE AUTOEXEC.BAT [Enter]

If the message "File not found" appears, go on to step 2.

If one or more command lines appear, get a pencil and paper and copy down the lines exactly as they appear on your screen.

 WARNING: This step overwrites any existing AUTOEXEC.BAT file! For the notation directory\_name below, substitute the specific directory or subdirectory where you store the Scheduler program. At the DOS prompt, type:

COPY CON: AUTOEXEC.BAT	[Enter]
CD\directory_name	[Enter]
SCHEDULE/L	[Enter]

If you wrote down the contents of a previous AUTOEXEC.BAT file, type those contents back in now. After you type in all the contents of your AUTOEXEC.BAT file, save the AUTOEXEC.BAT file by pressing the [F6] and [Enter] keys.

3. To confirm that the "SCHEDULE/L" line is now in the AUTOEXEC.BAT file, type:

## TYPE AUTOEXEC.BAT [Enter]

This command lists the contents of the file.

4. Reboot your system to automatically load the Scheduler program.



This section gives you detailed information on how to set the clock. The clock serves two purposes. First, the program uses the clock as a reference so that the scheduled event knows when to occur. Second, you can display the clock any time your computer is on. (Note that programs, such as Microsoft Word, which use graphics mode, may cause the clock to disappear.

1. Enter the schedule program by typing

SCHEDULE

[Enter

Two menus appear on the screen. The menu on the top sets the date and the time of the clock. The following pages discuss this menu in detail. The menu on the bottom sets the schedule. (Please refer to the Section 6 for a more detailed explanation of this menu.) Also, notice the date and time display in the upper right-hand corner of the screen.

Press [F2] to change to the Clock Menu.

2. The cursor appears in the *Set Date* position. If the date displayed in the upper right-hand corner of the screen is not correct, change this entry.

Enter the date. For example, if the date is May 5, 2000, enter 05, 05, 2000. (To move between the space in the highlighted area, use the right and left cursor arrow keys.)

3. Once you enter the correct date, the cursor moves so that you may enter the time. Follow the same procedure for entering the time as you did for the date. If you do not know a value, such as what second it is, press the [Enter] key and you will skip this selection.

#### NOTE: Do not forget to correct the AM/PM if it is wrong.

Display Clock	4.	Move the cursor to the display clock option. If you wish to display the clock on the screen at all times, enter a [Y]; if not, enter an [N].
		If you answered [N] and do not intend to display the clock, skip to step 7.
Long Format	5.	There are two options. The clock either displays both the time and the date or just the time. If you would like to display both the time and date, enter [Y]. If you want to display the time only, enter [N].
At Row/Column	6.	The clock automatically displays in the far upper right-hand corner (row 00 and column 59), however, you can display the clock any place on the screen.
		To display the clock lower on the screen, change the <i>at Row</i> value. The greater the value, the lower the clock's position on the screen. You may move the clock any place between the top row (row 00) and the bottom row (row 24). Enter the appropriate value.
		Similarly, you may position the clock on any column on the screen. To move the clock's position horizontally, change the <i>column</i> value. You can set this value anywhere between 0, at the far left of the screen, and 79, at the far right of the screen.

Set The 7. Press [F8] to set the clock. Clock

# Section SETTING THE SCHEDULER

This section gives you a detailed explanation of how to set the Scheduler program.

1. Enter the Scheduler program by typing:

#### SCHEDULE

[Enter

Two menus appear on the screen. The menu on the top sets the date and the time of the clock. (Please refer to Section 5 for a more detailed explanation on this menu.) The menu on the bottom sets the schedule. The following pages discuss this menu in detail. Notice the date and time display in the upper right-hand corner of the screen.

To move between the selections in the menu, press the up and down cursor arrow keys. To enter data, type in the desired information. If you need help at any time, press the [F1] function key and the help menu appears on the screen. To input information with the help menu still on the screen, push the [Alt] key and the [3] key simultaneously. The cursor then returns to the input window. When you finish using the help menu, press the [F1] function key to toggle the help menu off the screen.

Input 2. When you first load the Scheduler, the blinking Sequences cursor appears in the area labeled Input. Enter the command key strokes directly as if you were actually performing the operation that you are scheduling. Do not forget to include carriage returns (;M).

> NOTE: For non-alphanumeric entries, such as the [Enter] key, use the special escape codes. If you press the [Enter] key instead of entering its escape code ;M, the cursor moves and you cannot complete your entry. Refer to Table A-1 in Appendix A for the correct escape codes.

If you make a mistake or want to make any changes, use the delete key to remove the unwanted characters.

Once you enter the desired keystroke sequence, press the **[Enter]** key to move the blinking cursor to the next area labeled *Activate Schedule*.

Activate3.Under most conditions, you will want to have aSchedule[Y] after the entry Activate Schedule. When you<br/>enter an [N], the operation you have scheduled<br/>will not occur. You might enter [N] if you create<br/>a schedule to be used by someone else at an<br/>undetermined date.

Wait System4.If the system is in use when an event is<br/>scheduled to occur, the program will normally<br/>wait until the computer system is idle before<br/>commencing. This delay is the default setting of<br/>the Scheduler program. However, the event may<br/>be part of an on-going task that is already active<br/>in the system. In this case, you can instruct the<br/>Scheduler not to wait for the system to be idle.

If you would like the program to wait until the computer system is idle before performing the desired operation, enter a [Y]; if you prefer the operation to occur even when the computer is in use, enter an [N].

Starting5.Move the blinking cursor to the area where youDate/Timeenter the date and time for the event to occur.

Note that the three or four separate portions of
the date or time are considered as selections. Use
the right and left cursor arrow keys to move
between positions inside each selection.

- *Ending* 6. Enter the date and time for the event to end. The *Date/Time* schedule that you set will be in effect until the ending date and time are reached.
  - Repeat 7. You may set the schedule to operate once a Interval
    7. You may set the schedule to operate once a week, once a month, etc., by filling in the spaces under Repeat Interval. For example, if you would like the operation to occur every other day, position the cursor after Days, and enter the number [2]. (Use the delete key to erase any 0's that fill the highlighted area.)
- Days8.The choice of the weekdays to be included in theIncluded inschedule is up to you. The default setting for thethe IntervalScheduler automatically includes all the days of<br/>the week. When a scheduled event falls on an<br/>excluded day, that event is postponed until the<br/>next included day.

Put a [Y] under the days which you want the operation to occur and an [N] under the days which you wish to be excluded from the schedule.

Set Schedule 9. Check that all the values you entered are correct.

If you make a mistake, correct it before you activate the schedule. There are two ways to return to an entry:

- 1. Press the [Enter] key, or
- 2. Use the up and down cursor arrow keys.

When the information is correct, press the [F8] function key. A message briefly appears indicating that you have set the schedule into the computer.

10. Now, check the clock in the upper right-hand corner of the screen. If the time and/or date are not correct, reset the clock. Press the [F2] key to move the cursor into the Clock Menu. Turn to Section 5 for a detailed explanation of this menu.

#### NOTE: You must position the cursor in the menu which you are setting.

The Scheduler program allows you to set up eight separate schedules. Each of the eight schedules are controlled by a file named SCHEDULE.XXX with XXX equal to a number between 001 and 008. This file contains information about when the operation is to occur, how often it is to occur (if it is to be repeated), as well as the key stroke sequences that control the operation when it is updated after the Scheduler is run. This file is created when the Scheduler is used to set a scheduled operation.

The keystroke sequence allows you to store up to 512 characters. There are two ways to change the key stroke sequence in the file. You may either use an editor or a word processor to make changes to the file directly (once this is done, you must run the Scheduler program to set the schedule into the system), or you can run the Scheduler program and enter a new input key stroke sequence from the menu. The input menu displays the first line of keystrokes in the file. This sequence will replace the string in the file.

Setting theEnter the Scheduler program. The last scheduleOperationcreated displays on the screen. If you wish to alterUsing theanother schedule, press the [PgUp] key until theScheduleappropriate schedule appears on the screen. Note thatProgramby pressing [F8], any changes you make on thisschedule overwrite the preexisting information.

Enter any changes which you wish to make to the schedule. Once all of the information is correct, press **[F8]** to activate the schedule.

Setting the Operation Using a Text Editor

After you enter the text editor or word processing program you use, select the SCHEDULE.XXX program you wish to edit. The first line of the file is a series of numbers which contain the information about when the schedule is to occur; the second is a line identical to the data which you typed into the input line. To alter the operation that is to be performed, change the second line or add more lines to the file. Do not change the first line.

In the Scheduler program, you can display only one input line. If you edit the schedule using an editor or word processor, you can create multiple input lines. Note that the Scheduler program displays only the first of these input lines. Therefore, if you create more than one input line, use an editor/word processor for any input changes.

You can generate the special function keys that are normally available from the keyboard, but which do not have printable ASCII codes, by using special escape codes. The escape codes consist of a semicolon (;) followed by an ASCII character.

The program ignores all carriage returns and line feeds in the file. To generate a carriage return or a line feed, use the code ;M or ;J, respectively. The sequence should always end with ;k to switch the input back to the keyboard.



## **TABLE A-1** ESCAPE CODES

Keyboard Function	Escape
:	::
, F1	
F2	:2
F3	:3
F4	:4
F5	:5
F6	:6
F7	.7
F8	:8
F9	:9
F10	:0
Page Up	<
Page Down	;>

Keyboard Function		Escape Code
Cursor Right		;r
Cursor Left		;1
Cursor Down		;d
Cursor Up		;u
Del		;b
Print Screen		;P
Home		;h
End		;e
Switch to Keyboa	rd	;k
Insert	Off	;iO
	On	;i1
Caps	Off	;c0
-	On	;c1
Num Lock	Off	;n0
	On	;n1
Scroll Lock	Off	;s0
	On	;s1
Alt	Up	;a0
	Down	;a1
Ctrl	Up	;x0
	Down	;x1
Left Shift	Up	;{0
	Down	;{1
Right Shift	Up	;}0
	Down	;}1
Keyboard	Fscana	
Function	Code	Explanation
		•••••
Qualifiers	;q00000000	where 00000000 are the 8 bits
		defining the 0 or 1 status of above
<b>.</b>		8 keys in the order listed above.
Omit Characters	;000	where 00 is a 2 digit decimal value
		of the number of characters to
•		omit next.
Ignore to end	;:	Ignore all characters up to and
of line		including the next CR or LF.
Key Delay	;100000000.00	where 0000000000 is a decimal
		number specifying the number of
		seconds delay between each key
		input. The first seven digits are
		optional while the digit before the
		decimal and the 2 digits after the
		decimal are required.

Keyboard Function	Escape Code
BEL	;G
BS	H
НТ	I
LF	;J
VT	K
FF	L
CR	M
DC1	Q
DC2	;R
DC3	S
DC4	T
ESC	

#### The following are standard ASCII control codes:

## Appendix



# WINDOW OPERATIONS

This appendix offers some hints on moving in and between the windows.

- To move between entries in a window, use the up and down cursor arrow keys.
- To move between positions within an entry, use the right and left cursor arrow keys.
- To move the window, activate the scroll lock by hitting the [Scroll Lock] key. Use the arrow keys to move the window.

- To move a window away from the top of another window, press the [Ctrl] and [P] keys simultaneously.
- To move the window *n* on top of all the other windows, press the [Alt] and [*n*] keys simultaneously.
- To toggle the help window ON and OFF the screen, press the [F1] key.

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