# LCM-2000

LogiKhron

Clock

Module

IMI

FOR THE ATARI ST™ SERIES OF PERSONAL COMPUTERS

#### INTRODUCTION

Congratulations on your selection of the Shanner LCM-2000 LogiKhron Clock Module $^{\rm TM}$ . With this new peripheral, you can eliminate the aggravation of constantly setting and resetting your ST computer's date and time.

The LogiKhron Clock Module plugs into your ST's cartridge port. Once set, it keeps perfect time and date, even if unplugged from the computer for months at a time. Whenever you start up your system, special software provided with the LogiKhron Module reads the correct date and time from the cartridge and sets the system clock/calendar, located in the ST's keyboard. From then on, whenever you create or replace a file, its directory entry on the disk contains an accurate record of the exact date and time of creation.

### INSTALLATION - GENERAL

When you open your LogiKhron package, you should find both a cartridge and a 3 1/2" floppy disk. If either is missing, contact your dealer right away. Next, before you do anything else, make a copy of your LogiKhron diskette and store the original in a safe place. If you're unsure of the correct procedure, refer to the instructions in your ST Owner's manual for backing up the system diskette.

There are three programs (plus accompanying support files) on the LogiKhron software diskette. Two of the programs let you set the time and date in the LogiKhron module, and then use that setting to set the ST's internal clock. After the first time, the only time you need to change the LogiKhron setting is on Leap Day (February 29 in Leap Years), and when Daylight Savings Time goes into and out of effect each year. The battery contained in the LogiKhron module maintains the correct date and time whether or not it is plugged into a computer.

The two programs that perform both functions are described in the following sections entitled Desk Accessory Method and Manual Method. Once you've used either of these methods to set the date and time, we recommend that you follow the procedure described in

the third section below, entitled AUTO Folder Method, to set the system clock/calendar automatically from the LogiKhron module whenever you start your system.

Before you begin, make sure your computer is turned off, then insert the LogiKhron module into the ST's cartridge port with the label facing up.

NOTE: Never insert or remove the clock cartridge while the computer is on!

## DESK ACCESSORY METHOD

This is probably the most versatile method of using your LogiKhron module, since you can always reset the clock/calendar or just check the settings whenever you have access to the Desk menu. However, disadvantages of this method are that extra memory is taken up by the always-present accessory, and the fact that a Desk menu entry is used by the accessory (GEM allows a maximum of only six desk accessories at one time). To install the LogiKhron software as a desk accessory, follow this procedure:

- 1. Load the GEM desktop according to the instructions in your ST Owner's Manual. Even if you have TOS in ROM, you probably use a special "system start-up disk" containing desk accessories and your preferred desktop configuration. Start the system with this disk. Then remove the system disk from drive A and insert the LogiKhron disk.
- 2. Open the icon for drive A from the desktop so that you can see the directory of the LogiKhron disk. Then copy the files named DESK5.ACC and CLOCK.RSC onto your system start-up disk. If you already have a desk accessory file with the same filename, you may want to change one of the filenames so that the destination file is not erased. (In the original disk-loaded version of TOS, a desk accessory's filename must start with the prefix "DESK" followed by a number from 1 to 6, inclusive, followed by the filename extender ".ACC").

- 3. Turn your computer off and insert the "system start-up" disk that you prepared in step 2 into drive A, and turn the computer back on.
- 4. When the desktop reappears, set the cartridge's date and time. Use the mouse to select the "Clock" option from the File menu. You will see a dialog box with lines for the date and time. Enter these as you would enter the date and time in the ST's Control Panel (but note that you don't have to click the fields "on" and "off"). Press the Esc key to clear a field, and use the Tab or up and down arrow keys or the mouse to move between fields. Correct typing errors with the Backspace and Delete keys. If you need to enter one digit figure into a two-digit blank, type 0 first. For instance, to enter the first day of the year in 1987, click once on the date field, then press Esc to clear the field, then type 010187 (you need not enter the slashes). When you enter the time, type A or P in the last blank before the M for morning or afternoon. When you've entered the correct date and time, press Return or use the mouse to click on the OK button. To retain the date and time shown when the dialog box was first opened, click on the Cancel button.

## MANUAL METHOD

The program SETCLK.PRG on your LogiKhron disk performs the same functions as the Clock desk accessory — that is, it lets you set the date and time in the LogiKhron module, then sets the ST's system from the module. Unlike the desk accessory, it does not remain in your computer's memory after being run, so you must run the program again to reset the LogiKhron module.

If you have a LogiKhron Module plugged into your ST computer, and have started the system using neither the Desk Accessory method nor the AUTO folder method, you can set these manually by this method:

1. Use your backup copy of the LogiKhron disk, or copy the files SETCLK.PRG and CLOCK.RSC to another disk that you use often. Place this disk in your disk drive and open to the directory.

- 2. Run the program SETCLK.PRG by double-clicking on or Opening (from File menu) its icon or filename.
- 3. Set the date and time according to directions given in step 4 of the Desk Accessory section, above.

#### AUTO FOLDER METHOD

Note: If you wish to use this automatic method for setting your ST's system clock, you should use SETCLK.PRG (see Manual Method, above) first, once, to set the LogiKhron module to the correct date and time.

The ST operating system, TOS, has a special AUTO folder feature that allows you to run programs automatically upon starting the system. If the disk in drive A contains a folder named AUTO when the computer is first turned on, any program files contained in the folder that have the extension ".PRG" are run by TOS in the order that they were copied into the folder.

Once you've set the correct date and time in the cartridge, using this method lets the system clock set itself from the LogiKhron module automatically upon boot-up, without using a desk accessory. The advantage to this method is that the AUTOTIME program is removed from memory immediately upon accomplishing its task, thus freeing up memory for other purposes. Also, since you're not using a desk accessory, the full Desk menu is available for other accessories. The only disadvantage is that you cannot readily reset the LogiKhron module without running SETCLK.PRG.

1. AUTOTIME.PRG is already contained in an AUTO folder on your LogiKhron disk. If there isn't already an AUTO folder on your system disk (see step 1 in the Desk Accessory section), simply copy this folder to your disk. If you are using the original version of the Control Panel desk accessory, named DESK1.ACC, also see Step 2. If using CONTROL.ACC, disregard Step 2.

If there is already an AUTO folder on your system disk, copy it to another disk, then delete it from the system disk, then copy the AUTO folder from the LogiKhron disk to your system disk, then copy the contents of your original AUTO folder to the new one on the system disk. This allows AUTOTIME.PRG to run before the other programs, ensuring that any files that are created subsequently have the correct time and date stamp.

2. There are two versions of the Control Panel desk accessory. The original is named DESK1.ACC and the most recent version is named CONTROL.ACC. If the DESK1.ACC version of the ST Control Panel accessory is installed on your system disk, also copy the file named DESK6.ACC to your system disk. However, the DESK1.ACC file should be placed on the disk after DESK6.ACC. The easiest way to do this is to delete DESK1.ACC from your system disk, then copy DESK6.ACC onto it, then copy DESK1.ACC from your original system disk or another copy back onto the system disk for use with LogiKhron.

AUTOTIME.PRG and the optional DESK6.ACC read the correct date and time from the LogiKhron module and place them in the computer. Once loaded and run, both programs erase themselves from memory automatically. Use this method if you experience problems with other programs not recognizing the proper date and time.

## IMPORTANT NOTES

If you view the time and date from the Clock dialog box (from the desk accessory or SETCLK.PRG) for a few minutes, you will notice that the displayed time does not change as the minutes roll by. Despite this, the LogiKhron Module is maintaining the correct time and date internally. In such a case, select the Cancel option and the internal time won't be altered. You can verify this by reselecting Clock from the Desk menu (if using the Desk Accessory installation method), or by opening the Control Panel or any other accessory that displays the time.

In some versions of TOS, when the system is first started the time and date are not immediately reflected in the Control Panel — there is a 30-second delay. However, if within this same 30-second time frame, you select Clock from the Desk menu (if using the Desk Accessory installation method), you can see the correct time and date. Also, if you save a file during the first thirty seconds after starting the system, it is saved with the correct date and time information. This also applies to changing resolutions (with a color monitor).

The computer has an internal clock/calendar which is used by the Control Panel (and most other accessories and applications) to obtain the displayed date and time. The LogiKhron software only updates this internal clock when you start the system or change resolution. Thus, if you deliberately change the time and/or date in the Control Panel, the change is reflected in the Control Panel from then on. Restarting the system by one of the above methods restores the Control Panel to the correct settings.

Because your ST computer shares time between many of its internal components, it is not unusual for there to be a slight difference between the time displayed in the Clock accessory (or using SETCLOCK.PRG) and that shown in the Control Panel. This interval may range between 1 and 59 seconds.

REMEMBER: In order for the LogiKhron module to work properly, its software must be present on any disk you use to start up your system, unless you use the Manual Method of setting the system clock. It is this software that reads the time from the LogiKhron Module. If the LogiKhron software is not properly installed, the computer cannot read the correct time and date from the cartridge.

We hope that with this innovative and useful product, you will enjoy using your Atari ST computer more than ever before.

Warranty

This product is warranted from defects in workmanship for a period of 30 days from date of purchase. Should product prove to be defective within the warranty period, return to place of purchase with original sales receipt for full replacement.

#### License

You have the non-exclusive right to use the enclosed program. The program must be used only on a single computer. You may physically transfer the program from one computer to another, provided that the program is used on only one computer at a time. You may use the software on any computer owned by you but extra copies cannot be made for this purpose. You may not electronically transfer the program from one computer to another. You may not modify or translate the program or related documentation without the prior written consent of Shanner International Corp.

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**Note:** The battery in your LogiKhron Module should last at least three years. In the event the clock stops, contact Shanner at the above address to have your battery replaced.

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