

MODEL AT-1

INSTRUCTION MANUAL

© 1985 SOUNDSOFT, Inc.

ATARI[®] is a registered trademark of Atari Corp. SOUNDMOUSE^{T.M.} is a trademark of SOUNDSOFT, Inc.

INTRODUCTION

SOUNDMOUSE^{T.M.} is a simple yet versatile peripheral that allows your Atari[®] computer to be controlled by sound. The accompanying program disk demonstrates its use as a game controller and as a "color organ," an application that synchronizes the movement of a wide variety of computer graphics displays to the beat of music from sources such as a home stereo, thereby visually enhancing the listening experience.

Used as a game controller, the SOUNDMOUSE permits game activities to be controlled by the player's voice or other sounds, such as a hand clap or the tap of a foot. Both the color organ and game control applications can be incorporated in user programs, as explained in the programming section.

The SOUNDMOUSE connects to the computer's controller (joystick) port and has a sensitivity control for increasing or decreasing its response, depending on the

i

loudness of the sound source. It can be used with all Atari 8-bit computers having at least 48K of internal memory and a disk drive.

TABLE OF CONTENTS

(Letters Designate Menu Options)	
SECTION PAGE	Ξ
INTRODUCTION	. i
SYSTEM REQUIREMENTS AND DISK LOADING INSTRUCTIONS	.1
SENSITIVITY CONTROL	.4
MAIN MENU	.7
GRAPHICS MENU A-J Color Organ Patterns K-R Line/Pixel Art	.9 11
S Pixel Change	12
U Color Speed V Program Option W Demo	13
X Return to Main Menu	

GAMES MENU
A Soundcannon
B Soundman
C Bugsquasher
D Reaction Timer
E Trampoline22
F Diver
G Soundlaser23
X Simon Sounds23
I Footfall Monitor24
J Return to Main Menu25
SOUNDMOUSE BAND
PROGRAMMING INFORMATION27
APPENDIX- KEY FUNCTIONS
WARRANTY

SYSTEM REQUIREMENTS AND DISK LOADING INSTRUCTIONS

The SOUNDMOUSE^{T.M.} and demonstration program designated AT-1 can be used with Atari[®] 8-bit computers having at least 48K of memory and a disk drive. These include the 800, 800XL, 1200XL and 130XE, and also the 400 and 600XL if upgraded to 48K. The SOUNDMOUSE Model AT-1 cannot be used with the 16-bit Atari 520 ST. If used with the upgraded 400, the 800, or the 1200XL, the computer's BASIC cartridge must be inserted. A color TV or monitor is also recommended to fully display the SOUNDMOUSE's capabilities.

The SOUNDMOUSE should be connected and the demonstration program loaded in the following sequence:

> 1. Turn the computer off and insert the BASIC cartridge if the computer is an Atari 400, 800, or 1200XL.

- 2. Connect the SOUNDMOUSE to joystick port No. 1 and set the SENSITIVITY CONTROL all the way to the left (next to the small dot). Refer to the SENSITIVITY CONTROL section for placement instructions.
- Turn the disk drive on and wait for its red busy light to go off.
- 4. Insert the SOUNDMOUSE program disk in the disk drive, label side up, and close the disk drive door or latch.
- 5. Turn the TV or monitor on.
- 6. Turn the computer on. Program loading will begin and take about one minute to complete. (To speed up loading by omitting the

title screens, hold down the computer's SPACE BAR for a few seconds while turning on the computer.)

Following program loading, the screen prompt "CALIBRATION CHECK" may appear if the SOUNDMOUSE'S SENSITIVITY CONTROL has not been at its minimum. In response to set this prompt, the SENSITIVITY CONTROL should be set all the way to the left (next to the small dot) until the MAIN MENU appears. The SENSITIVITY CONTROL should then be adjusted in accordance with the instructions in the next section.

SENSITIVITY CONTROL

The SENSITIVITY CONTROL is used to adjust the response of the SOUNDMOUSE to the loudness of the sound source, and must be set with some care to achieve the best performance. When using the SOUNDMOUSE in its color organ application, the SENSITIVITY CONTROL also allows placement of the SOUNDMOUSE at convenient locations away from the sound source, which need not be close to the SOUNDMOUSE unless the loudness of the source is relatively low.

The sensitivity of the SOUNDMOUSE is decreased by moving the SENSITIVITY CONTROL to the left (toward the small dot) and increased by moving it to the right (toward the large dot). In general, the SOUNDMOUSE'S sensitivity should be decreased if the sound source is loud and increased if it is soft.

When using the SOUNDMOUSE with the GRAPHICS MENU, the SENSITIVITY CONTROL should initially be set all the way to the left.

After the volume of the sound source (a home stereo, for example) has been set to the desired listening level, the SENSITIVITY CONTROL should be slowly moved to the right until the COLOR ORGAN pattern displayed on the TV or monitor screen expands to its maximum size, or the LINE/PIXEL ART display reaches its maximum size in synchronization with the beat of the music or other musical accents.

At normal listening levels the setting of the SENSITIVITY CONTROL should be near the midpoint of its range. Small additional adjustments may then be made to increase or decrease the "liveliness" of the display, as desired by the listener. Too low a setting, however, will reduce the display movement, and if the setting is too high, synchronization with the music will be lost.

If the volume of the sound source is relatively low, or if the source is lacking in bass, or low frequency response, the SOUNDMOUSE should be moved closer to the source to achieve the best response. If the source has a bass tone control, the

SOUNDMOUSE'S response at low listening levels will generally be improved if the bass control is turned up, as the SOUNDMOUSE is designed to respond preferentially to low frequencies.

When using the SOUNDMOUSE as a game controller, the SENSITIVITY CONTROL should first be set at the midpoint of its range, and then adjusted as necessary until the game function controlled by the SOUNDMOUSE responds properly to the sounds made by the player. As noted in the introduction, these may be voice commands, or hand and foot taps.

If voice commands are used to control the game function, the SOUNDMOUSE should be held in the hand and spoken to as if it were a microphone. A midpoint setting of the SENSITIVITY CONTROL is usually all that is necessary for the SOUNDMOUSE to respond properly to voice commands, but further adjustment may be required, depending on how close the SOUNDMOUSE is held to the speaker's mouth. Additional instructions for individual games are included in the GAMES section of the manual.

MAIN MENU

After the demonstration program has loaded, the MAIN MENU will appear. This menu permits access to the GRAPHICS and GAMES sub-menus, and SOUNDMOUSE BAND described in the following sections. The sub-menus and SOUNDMOUSE BAND are accessed from the MAIN MENU by pressing the computer's SELECT and START keys, and if after making a selection from the MAIN MENU a different selection is desired, the MAIN MENU must first be returned to by choosing the MAIN MENU option from the sub-menus, or pressing the computer's SPACE BAR if the SOUNDMOUSE BAND has been selected. Additionally, when returning to the MAIN MENU from the GRAPHICS MENU, the demonstration program disk must be re-inserted in the disk drive, label side up, as indicated by the screen prompt.

GRAPHICS MENU

General

After selection from the MAIN MENU, the GRAPHICS MENU will load in about one minute. A prompt will then appear, indicating that the demonstration disk should be removed from the disk drive and re-inserted on its flip side (label side down). Alternatively, a disk containing user-created COLOR ORGAN patterns may be inserted in response to this prompt. Any key may then be pressed to call the GRAPHICS MENU.

From the GRAPHICS MENU, 18 graphics displays that move in synchronization with the beat of music can be selected. The displays can either be shown one at a time or continuously in any sequence programmed by the user. How fast the display colors change, the direction of display movement, and how long a given display is shown can also be specified by the user. To select a display, press the computer's letter key corresponding to that display in response to the "SELECT ITEM?" prompt. The display movement should then be synchronized to the music by setting the SOUNDMOUSE'S SENSITIVITY CONTROL in accordance with the instructions in that section of the manual.

Although the SOUNDMOUSE will generally respond to all types of music, it performs best with music that has a pronounced bass beat, and the visual impact of the displays is enhanced by turning down both the TV or monitor screen brightness and the room illumination.

Options A-J: COLOR ORGAN Patterns

These menu options list the COLOR ORGAN patterns contained on the flip side of the demonstration program disk if that disk is in the disk drive, or, as explained in the section on PROGRAMMING INFORMATION, the user's COLOR ORGAN patterns (file names) if the user's disk is in the disk drive. The pre-programmed patterns on the flip side of

the demonstration disk are:

A-	COSMOS	F-	COLORFAN
B-	SPIRAL	G-	STAR
C-	ICON	Н-	SKYLINE
D-	SPHERES	I	CIRCLES
E-	FIREWORKS	J-	COLORAYS

Of these, an individual pattern is selected for display by pressing the computer key having the same letter as the pattern. The pattern will then load from the disk and remain on display until the GRAPHICS MENU is returned to by pressing the computer's SPACE BAR.

If the direction of pattern movement and color speed have not been set by the user by means of the DIRECTION and COLOR SPEED options, the patterns will move in the forward direction (from the center of the TV or monitor screen to its edges in response to the beat of the music), and the pattern colors will change randomly twice a second. These are the direction and color rate-of-change options the demonstration program will default to in the absence of a user selection.

Options K-R: LINE/PIXEL Art

Like the COLOR ORGAN patterns, the LINE/PIXEL art displays move in synchronization with the beat of music, and the same setting of the SENSITIVITY CONTROL will generally be sufficient for both. A total of 8 displays can be selected, as follows:

к-	LINE TRACE	0-	COLOR	DOTS	II
L-	COLOR BAR	P-	COLOR	DOTS	III
M-	TURBO BALL	Q-	COLOR	DOTS	IV
N-	COLOR DOTS	R-	SNOWFI	AKES	

Option S: PIXEL CHANGE (K)

This option increases the pixel size in the LINE TRACE display (option K), and is selected by choosing "O" in response to the screen prompt, "PIXEL CHANGE (O)-ON, (F)-OFF." After setting this option, another menu selection should be made in response to the "SELECT ITEM?" prompt.

Option T: PATTERN DIRECTION (A-J)

This option controls the direction in which the COLOR ORGAN patterns (options A through J) move, and once set, will apply to all pattern options except DEMO. The direction of pattern movement can either be FORWARD (selected by pressing the computer's "F" key in response to the screen prompt) or REVERSE (selected by pressing the "R" key).

If the FORWARD direction is selected the COLOR ORGAN patterns will pulse outward from the center to the edges of the TV screen in response to sound. If the REVERSE direction is selected, the patterns will pulse inward from the edges to the center of the screen.

After the direction of pattern movement has been set, the screen prompt, "SELECT ITEM?" will appear, indicating that a COLOR ORGAN pattern or other option should now be selected from the GRAPHICS MENU.

Option U: COLOR SPEED (A-J)

This option controls the rate at which the colors of the COLOR ORGAN patterns change. The pattern colors themselves are determined randomly by the computer, but the rate at which they change is user-selectable, ranging from approximately once a second to 10 times a second.

A total of 9 speeds can be chosen by pressing the computer's number keys from 1 to 9. The lower the value, the slower the rate at which the colors will change. Conversely, choosing a high value will speed up the rate of change.

After the color change rate has been set, the colors of all COLOR ORGAN patterns except DEMO will change randomly at the selected rate. Following the setting of the color change rate, the "SELECT ITEM?" prompt will appear, indicating that another menu option should now be selected.

Option V: PROGRAM Option

This option lets the user select and

program all or a portion of the COLOR ORGAN and LINE/PIXEL art displays for continuous display one after the other in a pre-determined sequence. How long a given pattern is displayed can also be specified by the user.

After the PROGRAM option is selected, the prompt, "(A)-ALL PATTERNS OR (S)-SET SEQUENCE?" will appear. If "A" is selected, all patterns (menu options A through R) will be displayed continuously in sequence, from 1 to 9 minutes each, as chosen by the user in response to the "HOW MANY MINUTES?" prompt that follows the "A" selection.

If "S" is selected, the prompt, "ENTER PATTERN, MINUTES, SPACE TO START" will appear. For each pattern the user wants displayed, the letter corresponding to that pattern and the number of minutes, from 1 to 9, it is to be displayed should be entered. Entries can be changed or corrected by BACKSPACING to the entry to be changed or corrected, and then entering the desired new value. When all desired patterns have been selected, the SPACE BAR is pressed to start the sequence, which will run continuously until the SPACE BAR is again depressed to return to the GRAPHICS MENU. Note that a sequence cannot be started unless both a pattern and the length of time it is to be displayed have been entered.

Option W: DEMO

The DEMO, or demonstration option gives the user a preview of the graphics displays (options A through R) by briefly displaying each one in sequence until all have been displayed, at which time the GRAPHICS MENU is returned to. In the DEMO mode, the direction of pattern movement is automatically set to FORWARD and the COLOR SPEED to 2. When the GRAPHICS MENU is returned to, however, the COLOR SPEED and DIRECTION options selected by the user, if the user has set these options, are restored.

Option X: MAIN MENU

This option will return the user to the MAIN MENU following an affirmative ("Y") response to the prompt, "EXIT, ARE YOU SURE? (Y)-YES, (N)-NO." Additionally, in returning to the MAIN MENU from the GRAPHICS MENU, the demonstration program disk must be re-inserted in the disk drive, label side up, and the computer's RETURN key pressed.

Return to GRAPHICS MENU

To return to the GRAPHICS MENU from an option selected from the GRAPHICS MENU, press the computer's SPACE BAR.

GAMES MENU

General

A total of 9 sound-controlled games can be chosen from this menu. A game is selected by pressing the computer key having the same letter as the game, and play is started by the player making a sound in response to the prompt, "MAKE SOUND TO BEGIN."

The game activity under control of the player (the firing of a laser, for example) is initiated by the SOUNDMOUSE in response to a sound made by the player. The sound can be a voice command such as "FIRE," a hand clap, a tap of the hand on a surface such as a table top, or a foot tap on a bare or lightly carpeted floor. The SOUNDMOUSE can also be held like a joystick and tapped lightly with a fingertip to control game activity.

In several games, control by foot or hand taps is especially well suited to the nature of the game (squashing bugs in BUGSQUASHER, for example), and a midpoint setting of the SOUNDMOUSE'S SENSITIVITY CONTROL is usually sufficient for the SOUNDMOUSE to respond to these sounds. The SENSITIVITY CONTROL may, however, have to be increased, depending on the distance the player is from the SOUNDMOUSE, and the loudness of the sound he makes.

If voice commands are used, the SOUNDMOUSE should be held in the hand and spoken to as if it were a microphone. The SENSITIVITY CONTROL should first be set at its midpoint, and adjusted as necessary, depending on how close the SOUNDMOUSE is held to the speaker's mouth.

When playing the games, if the TV or monitor volume is too loud, the SOUNDMOUSE may respond to the game sounds as well as sounds made by the player. If this occurs, either the TV volume or the SOUNDMOUSE'S SENSITIVITY CONTROL should be decreased until the SOUNDMOUSE responds only to the sounds made by the player.

Options A-I: GAMES

These options list the games available from the demonstration disk, each of which will be described in the remainder of this section. The games are:

- A- SOUNDCANNON F- DIVER
- B- SOUNDMAN G- SOUNDLASER
- C- BUGSQUASHER H- SIMON SOUNDS
- D- REACTION TIMER I- FOOTFALL MONITOR
- E- TRAMPOLINE

Option A- SOUNDCANNON

In this game, the player is in command of a sound-controlled cannon that is under attack by enemy warplanes and tanks. The game's objective is to shoot the planes down before they bomb the cannon, while at the same time preventing the tanks from breaking through the protective mine field. Points are scored for each plane or tank hit, and the further away a plane is when hit, the higher the score. Bonus points are awarded for destroying both a plane and a tank on the same cannon shot. The cannon has 3 lives before the game, which includes a wave of faster attacking planes, is over.

Option 8- SOUNDMAN

The object of this game is to guide the SOUNDMAN through the maze, clearing dots as he goes along, while avoiding capture by the pursuing ghosts. The SOUNDMAN'S direction of movement is controlled by a rotating arrow at the top of the maze, which points in the direction the SOUNDMAN will move if the player makes a sound at that instant. If the player successfully clears all the dots before the SOUNDMAN'S 9 lives are gone, he will advance to a second maze, in which the speed of the pursuing ghosts accelerates.

Option C- BUGSQUASHER

As its name suggests, in BUGSQUASHER the objective is the squashing of pesky bugs that try to sneak through the jaws of a plunger that close in response to sounds made by the player. Controlling the plunger motion by foot-stamping is usually the most satisfying

way of playing this game, which continues until 9 bugs have managed to escape through the plunger's jaws.

All of the bugs feature different evasive tactics, which will be left to the player to discover. Additionally, a centipede, whose length is exactly the same as the width of the plunger jaws, will appear at random, and must be completely squashed in order for the full bonus of 100 points to be awarded.

Option D- REACTION TIMER

This game measures how quickly each of two players responds to a beep sounded randomly by the computer. After the beep, the player must make a sound as quickly as he can. The computer measures how long it takes the player to respond, and displays the result in "jiffies," or sixtieths of a second, at the top of the screen. It also scrolls a red bar across the screen, the length of which is proportional to the player's response time. The winner is the player who achieves the lowest response time, which the computer displays as "BEST" during the game.

Option E- TRAMPOLINE

In this game, the player assists the trampoline jumper in his quest to ring the bell at the top of the TV screen. After the player starts the game by making a sound, the jumper will begin jumping, but can only go higher if the player makes a sound at the exact moment the jumper's feet touch the trampoline. As long as the player's sounds remain synchronized with the jumper's landings on the trampoline, the jumper will jump higher and higher until he finally reaches the bell and rings it with his protective helmet. The object of the game is accordingly to ring the bell as many times as possible within the allotted time of 99 seconds.

Option F- DIVER

After the player makes a sound to start the game, a diver will run out from the platform at the left of the TV screen and onto the diving board, with the objective of diving into the pool at the right of the screen. However, without an assist from the player during his preparatory run on the board, the diver will fall short. The player must therefore make a sound at the right moment so that the diver will jump up and land precisely on the edge of the diving board, attaining the maximum spring and propelling himself into the pool. The score is based on the number of successful dives the diver makes before his 3 lives are lost.

Option G- SOUNDLASER

In this game, a laser that fires in response to sounds made by the player moves up and down at the right of the TV screen. The objective of the game is to score points by blasting as many invading aliens as possible within the time available (initially 99 seconds). Ten seconds are added to the player's time for every 1,000 points scored.

Option H- SIMON SOUNDS

In this game, which is most conveniently

played by tapping on a table top with the hand, the computer sounds a series of beeps that vary both in number and the time interval between beeps. After the screen prompt, "YOUR TURN" goes off, the player must duplicate the beep sequence, which starts with two beeps and progressively increases by one beep each time a sequence is duplicated correctly. The game also has a visual cue option, which if selected displays a ball that bounces in synchronization with the beeps.

Option I- FOOTFALL MONITOR

While not actually a game. FOOTFALL MONITOR will detect and display footfalls occurring in the room in which the SOUNDMOUSE is located (and in many cases adjacent rooms), provided the room floor is bare or lightlu carpeted. For best results, the SOUNDMOUSE on the floor should be placed and its SENSITIVITY CONTROL set at maximum. As a person walks around the room, his or her footfalls will be monitored and displayed on the TV screen.

Option J- MAIN MENU

This option returns the user to the MAIN MENU, and in returning to the MAIN MENU from the GAMES MENU, the demonstration program disk need not be re-inserted in the disk drive, as it is already label-side-up.

Return to GAMES MENU

To return to the GAMES MENU from an option selected from the GAMES MENU, press the computer's SPACE BAR.

SOUNDMOUSE BAND

The SOUNDMOUSE BAND, the third option selectable from the MAIN MENU, is a rock group consisting of a drummer, guitar and keyboard players, who will play along with music, provided it has a pronounced bass beat, as the group is not classically trained. To get the band to perform, the SOUNDMOUSE'S SENSITIVITY CONTROL should first be set all the way to the left, and then slowly increased until the band plays in synchronization with the beat of the music. To return to the MAIN MENU after selecting the SOUNDMOUSE BAND, press the computer's SPACE BAR.

PROGRAMMING INFORMATION

It is very easy to incorporate the SOUNDMOUSE peripheral into a user-created program. This section will explain how to read the values returned by the SOUNDMOUSE, and how to create COLOR ORGAN patterns that can be displayed using the GRAPHICS MENU. This section does, however, assume that the user has some familiarity with the BASIC programming language.

Reading the SOUNDMOUSE Value

The value the SOUNDMOUSE returns is read using either BASIC'S PADDLE(X) function, or reading the controller port registers from machine language. The SOUNDMOUSE will be read as PADDLE(O) when plugged into controller (joystick) port No. 1. The values returned by the PADDLE function can range from 0 to 228, and will be in the range of 95 to 120 (the "no signal" range) when no sounds are present. On bass, or low frequency sounds and transients, such as drum beats or vocal commands, the value will increase and usually reach the

maximum of 228. In general, the value returned will be proportional to the loudness of the sound, and will also occasionally dip below the SOUNDMOUSE'S no signal value.

Program Uses

An obvious use of the SOUNDMOUSE is to start a specific program activity, such as the firing of a laser in a sound-controlled game. This is accomplished by requiring the PADDLE value to be at some level above the SOUNDMOUSE'S no signal value before the controlled activity is initiated. How much above will depend on how sensitive the user wants the SOUNDMOUSE to be for his application.

The initiating value must, however, be higher than the SOUNDMOUSE'S no signal value, and an additional margin is usually required to prevent extraneous noise from triggering the program activity.

To determine the no signal value of your

SOUNDMOUSE, plug it into joystick port No. 1 and set its SENSITIVITY CONTROL all the way to the left (next to the small dot). Then type in the following program:

```
10 GRAPHICS 2
20 POSITION 8,0:? #6;PADDLE(0);" "
30 GOTO 20
```

The number appearing on the TV screen is the no signal value of your SOUNDMOUSE, and for game control applications an initiating level about 20 to 30 higher than this is usually high enough to prevent false responses, but not so high as to unduly reduce the sensitivity of the SOUNDMOUSE.

The optimum level for a given application is probably best determined by experimentation, as illustrated by changing the initiating value (the number that follows the PADDLE(0) function) in the following simple program:

> 10 PRINT "MAKE A SOUND" 20 IF PADDLE(0)<140 THEN 20

30 PRINT "YOU MADE A SOUND": END

After typing in the program, set the SOUNDMOUSE'S SENSITIVITY CONTROL to the halfway point. Then type "RUN". The program should print "MAKE A SOUND" and wait until the user makes a sound before continuing. If it doesn't, try making a louder sound or increasing the SOUNDMOUSE'S SENSITIVITY CONTROL.

Once the program responds by printing "YOU MADE A SOUND," the initiating value can be changed to see its effect on the SOUNDMOUSE'S sensitivity. Lowering the initiating value to say, 130, will increase the sensitivity, and raising the value will reduce it. In general, a low initiating value is preferred, provided it does not result in false responses (triggering of the sound-controlled activity by extraneous noise).

Creating COLOR ORGAN Patterns

Before selecting from the GRAPHICS MENU,

the user was instructed to either re-insert the demonstration program disk on its flip side, or insert a user-created pattern disk in the disk drive. The GRAPHICS MENU would then list as its first 10 options the COLOR ORGAN patterns pre-programmed on the demonstration disk, or the file names of the user-created COLOR ORGAN patterns on the user's disk. This section will accordingly explain how the user can construct his own COLOR ORGAN patterns and display them using the GRAPHICS MENU.

The COLOR ORGAN patterns use graphics mode 10, the eight-color mode, and create their effect by lighting from one to eight colors, depending on the value returned by the SOUNDMOUSE. For example, pixels (small dots) or lines drawn in COLOR 8 will be lighted on low volume sounds, and pixels or lines drawn in COLOR 1 will be lighted on louder sounds bass beats. The as pronounced such intermediate colors will be lit proportional to the SOUNDMOUSE'S values between these extremes, thereby achieving the effect of motion.

To draw a COLOR ORGAN pattern, use GRAPHICS 10, and draw lines and/or pixels in 8 colors. The BASIC COLOR X statement determines what color a plotted pixel or line will be, with X the color number from 1 to 8. When the pattern is displayed using the GRAPHICS MENU, colors 8 to 1 will be lit successively as the SOUNDMOUSE value increases. If the pattern DIRECTION option is set on REVERSE, the order in which the colors are lit is reversed, with colors 1 through 8 lit successively as the SOUNDMOUSE value increases.

When the pattern has been completely drawn, it should be saved to a disk using the screen save routine provided at the end of this section. The disk filename MUST end with the extender .PAT or the pattern will not appear on the GRAPHICS MENU. The GRAPHICS MENU will display up to ten pattern names from one disk, and all COLOR ORGAN options (DIRECTION, COLOR SPEED, PROGRAM and DEMO) will work with user patterns as well as those on the flip side of the SOUNDMOUSE disk.

The following routine will save any

GRAPHICS 10 pattern to disk with the filename specified by the user on line 32000. To use the routine, add it to the end of your graphics drawing routine. The REM statements are comments only; they need not be entered in order to use the program.

> J2000 DATA D:PATTERN.PAT J2005 REN The above is the filename that your saved pattern will have. J2010 REM J2020 DATA 104,162,16,169,11,157,66,3, 165,88,157,68,3,165,89,157,69,3,169,0, 157,72,3,169,30,157,73,3,76,86,228 J2030 DIM F\$(14):READ F\$:FOR T=0 TO 30 :READ A:POKE 1536+T,A:NEXT T J2040 OPEN #1,8,0,F\$:A=USR(1536):CLOSE #1:END

APPENDIX-KEY FUNCTIONS

SPACE BAR

- Bypasses title screens if held down while turning on computer.
- Returns user to GRAPHICS MENU from GRAPHICS MENU option.
- Returns user to GAMES MENU from GAMES MENU option.
- Starts PROGRAM SET SEQUENCE option.
- Returns user to MAIN MENU from SOUNDMOUSE BAND.

RETURN

- Escapes from a prompt and returns user to a menu or previous prompt.

- Returns user to MAIN MENU from GRAPHICS MENU following selection of MAIN MENU option and re-insertion of demonstration disk label-side-up.

SELECT

- Selects GRAPHICS or GAMES sub-menu or SOUNDMOUSE BAND from MAIN MENU.

START

- Loads GRAPHICS or GAMES sub-menu or SOUNDMOUSE BAND after selection from MAIN MENU.

WARRANTY

Both the SOUNDMOUSE and demonstration program disk are guaranteed to be free of defects in material and workmanship for period of one year from the date of purchase. If either should become defective within that period, it will be repaired or replaced at the option of SOUNDSOFT, Inc. at no charge to the purchaser, provided the defective unit is returned to SOUNDSOFT, Inc. Additionally, although SOUNDSOFT, Inc. cannot assure the purchaser that the program on the demonstration disk is completely bug-free, the program is guaranteed to boot and perform as described in this manual. If it does not, the demonstration disk should be returned to SOUNDSOFT. Inc. for a free replacement.

REPLACEMENTS FOR DAMAGED DISKS

Should the demonstration disk become unuseable from causes other than defects in material and workmanship, replacement disks are available from SOUNDSOFT, Inc. for a charge of \$5.00 postpaid.

MAILING ADDRESS

The mailing address and phone number of SOUNDSOFT, Inc. are:

SOUNDSOFT, Inc. Box 740, 10 Maple Ave. Andover, NJ 07821

(201) 786-6060

onstge of \$5.00 postoetd. MALLING ATTFEDD

Technic end profession and profession of the second profession and profession and

Bulayasorn inc. Bax 740, 10 Maple Ave Andover, NJ 07821

(2013) 286-6060



Box 740, 10 Maple Ave., Andover, N.J. 07821 (201) 786-6060