TEXAS INSTRUMENTS
HOME COMPUTER

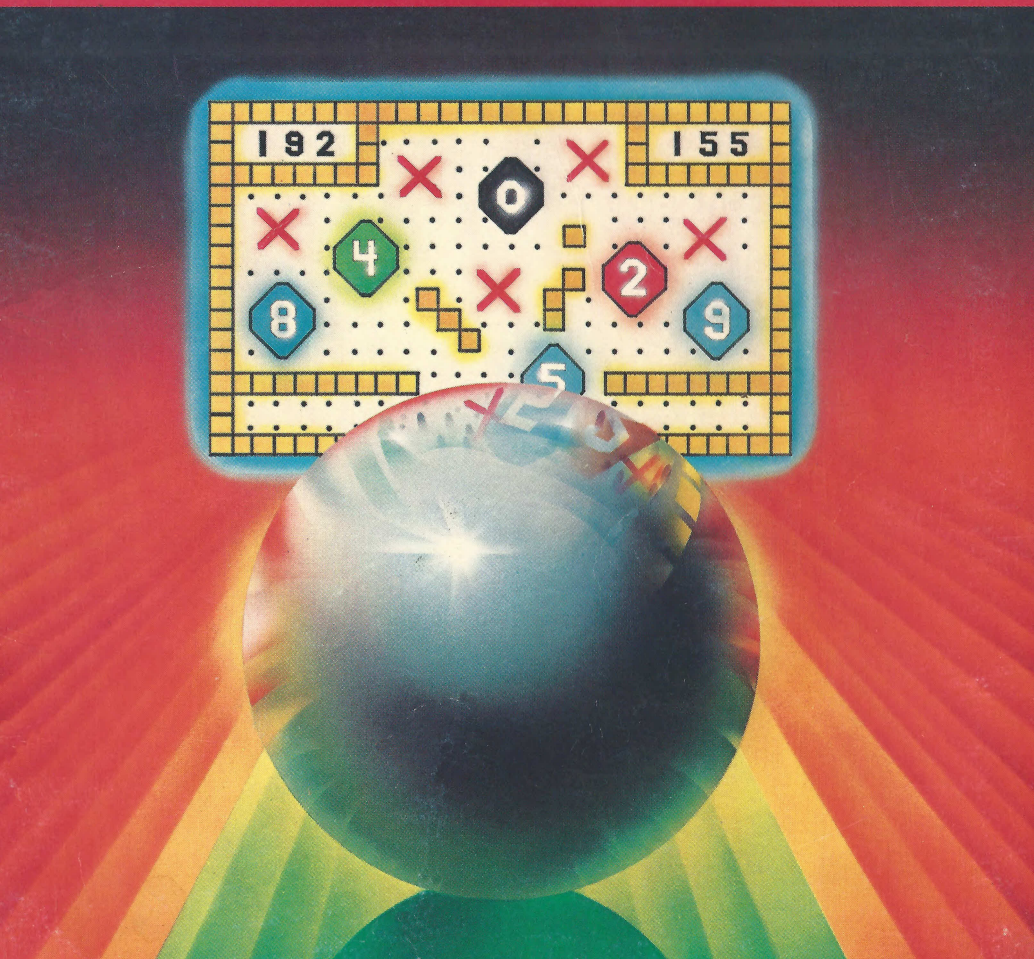
ZERO ZAP

ARCADE ENTERTAINMENT

SOLID STATE CARTRIDGE

This game can be played using the optional Wired Remote Controllers.

Have fun while becoming a pinball wizard!



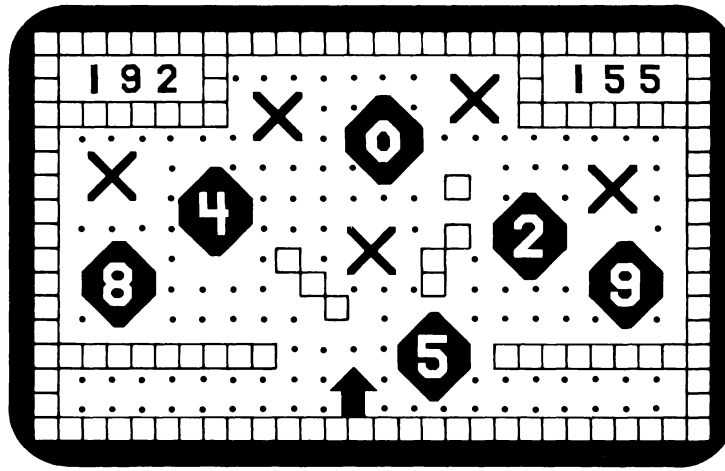
Quick Reference Guide

Note that the key sequences required to access special functions depend on the type of computer console you have. Important keystroke sequences are summarized here for your "quick reference."

TI-99/4	*TI-99/4A*	
← **S**	← **S**	Moves the arrow to the left.
→ **D**	→ **D**	Moves the arrow to the right.
↑ or **ENTER**	↑ or **ENTER**	Fires the arrow.
SHIFT 2 (@)	**SHIFT 2 (@)**	Returns to the game demonstration.
I	**I**	Inverts diamonds and crosses on the playing field.
M	**M**	Allows you to modify a playing field.
N	**N**	Displays the playing fields one at a time.
SHIFT Q (QUIT)	**FCTN = (QUIT)**	Returns the computer to the master title screen.

TEXAS INSTRUMENTS
HOME COMPUTER

ZeroZap*



This *Solid State Software*™ Command Module is designed to be used with the Texas Instruments Home Computer. Its preprogrammed solid-state memory expands the power, versatility, and capability of your Home Computer.

*trademark of the Milton Bradley Company

INTRODUCTION

It's easy to become a pinball wizard with the ZeroZap* *Solid State Software*™ Command Module. ZeroZap, developed for Texas Instruments by the Milton Bradley Company, lets you challenge the computer or a friend to a game of chance and foresight.

Depending on the type of game you select, you can

- Score points by hitting diamond targets with your five shots.
- Select a winning score total from 100 to 900 points and challenge a friend to see who can score the total first.
- Create your own scoring field for later play against the computer or a friend.

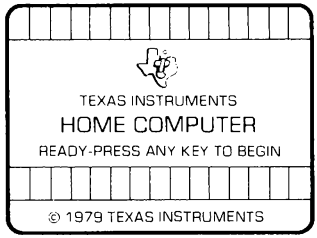
In addition, with a cassette tape recorder connected to your computer via the TI Cassette Interface Cable, you can save your own playing fields for later use.

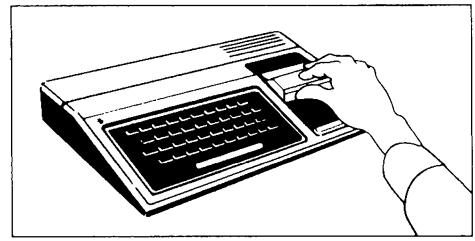
*trademark of Milton Bradley Company

USING THE *SOLID STATE SOFTWARE*™ COMMAND MODULE

An automatic reset feature is built into the computer. When a module is plugged into the console, the computer returns to the master title screen. All data and program material you have entered will be erased.

Note: Be sure the module is free of static electricity before inserting it into the computer (see page 7).





1. Turn the computer ON and wait for the master title screen to appear. Then slide the module into the slot on the console.
2. Press any key to make the master selection list appear. To select the module, press the key corresponding to the number beside ZERO-ZAP.

Note: To remove the module, *first* return the computer to the master title screen by pressing **QUIT**. *Then* remove the module from the slot. If you have any problem inserting the module, or if it is accidentally removed from the slot while in use, please see "In Case of Difficulty" on page 7.

GETTING STARTED

After you select the game from the master selection list, the next display asks you to push any key to play. To see a demonstration of ZeroZap, do not press any key. After a moment, a sample one-player game automatically begins.

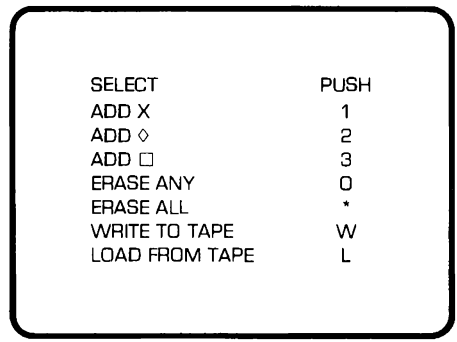
When you are ready to set up your own game, press any key and the option selection display appears. The display indicates that you use the left- and right-arrow keys to move the game arrow in the desired direction. When the game arrow is positioned, press the up-arrow key or **ENTER** to fire. To invert the playing field (change the X's into target diamonds and vice versa), press **I** before firing the game arrow.

When you finish looking at the option selection display, press **1** for a one-player game or **2** for a two-player game.

One-Player Game

If you choose a one-player game, you can press **ENTER** to play, **N** to select a different playing field, or **M** to modify the field.

- **ENTER** — When you press **ENTER**, the game begins.
- **N** — The program provides a choice of three playing fields. Press **N** to look at these fields one at a time. When you find the one you want to play, press **ENTER**.
- **M** — You can modify the field that is displayed by pressing **M**. A square cursor appears in the center of the playing field. To see the rules for modifying the field, press **R**. The following display then appears.



Move the cursor around the playing field by pressing the arrow keys. When you have positioned the cursor where you want to add an X, ◊, or □, press **1**, **2**, or **3**, respectively. To erase an object, position the cursor at the upper-left corner of the object and press **0**. To clear the field press **SHIFT 8** (*). You can also press **W** to save a playing field or **L** to load a field (see "Saving and Loading Playing Fields").

When you finish creating the playing field, press **ENTER**.

Two-Player Games

If you choose a two-player game, you can press **ENTER** to play, **N** to select one of three playing fields, or **M** to modify a playing field. **N** and **M** function as in a one-player game (see "N" and "M" in the "One-Player Game" section). When you finish selecting a new playing field or modifying a field, press **ENTER**.

Next, the program asks you to type the winning score. Select a multiple of 100 from 100 through 900 by typing a number from 1 through 9. After you select the winning score, press **ENTER** to begin the game.

PLAYING THE GAME

After you select the game options, the playing field appears. A red arrow is centered at the bottom of the field.

In a one-player game, you are alloted five shots in which to score as many points as possible. Your score appears in the upper left-hand score box. In a two-player game, players alternate turns trying to reach the winning score. The red arrow indicates Player 1. The score for that player appears in the upper left-hand score box. For Player 2, the arrow turns green and that player's score appears in the upper right-hand score box.

In either game, press **I** *before* firing the game arrow if you want to change the X's into diamonds and vice versa. When the game arrow is positioned, press ↑ or **ENTER** to fire it into the playing field. You can stop a game at any time and return to the demonstration by pressing **SHIFT 2** (@). To start another game, repeat the options selection procedure.

Scoring

After you fire the game arrow, it moves around the playing field by ricocheting off, horizontally or vertically, the objects on the field. When the arrow hits an X, the X turns into a diamond with a number from 0 to 9 inside. When the arrow hits a diamond, the number inside the diamond is added to your score and the diamond becomes an X. If the arrow hits a diamond that is black and contains a zero, the game arrow has been "zapped." No points are scored, and the arrow falls to the bottom of the display indicating the end of that turn. Your turn is also over if the arrow exits the playing field by ricocheting off an object.

END OF THE GAME

A one-player game is over after five game arrows have been shot. The total score appears in the upper left-hand score box. After an equal number of turns in a two-player game, the player who scored the winning number of points is the winner. In both games, the computer plays a victory tune.

To play another game with the same options, press **ENTER**. To change the options, press **SHIFT 2** (@). When you finish playing ZeroZap, press **QUIT** to return to the master title screen.

SAVING AND LOADING PLAYING FIELDS

To save or load a cassette-based playing field, be sure the cassette recorder is attached to your system correctly. After selecting a one- or two-player game, press **M** to modify the game. Then, to save a field, press **W** and follow the instructions that appear on the display. To load a field, press **L** when the modification instructions are displayed, and follow the instructions that appear on the display. (See the *User's Reference Guide* for information on attaching and using cassette recorders.)

CARING FOR THE MODULE

These modules are durable devices, but they should be handled with the same care you would give any other piece of electronic equipment. Keep the module clean and dry, and don't touch the recessed contacts.

> **CAUTION:**
> The contents of a Command Module can be damaged by static electricity discharges.

Static electricity build-ups are more likely to occur when the natural humidity of the air is low (during winter or in areas with dry climates). To avoid damaging the module, just touch any metal object (a doorknob, a desklamp, etc.) before handling the module.

If static electricity is a problem where you live, you may want to buy a special carpet treatment that reduces static build-up. These commercial preparations are usually available from local hardware and office supply stores.

IN CASE OF DIFFICULTY

If the module activities do not appear to be operating properly, return to the master title screen by pressing **QUIT**. Withdraw the module, align it with the module opening, and reinsert it carefully. Then press any key to make the master selection list appear. (*Note*: In some instances, it may be necessary to turn the computer off, wait several seconds, and then turn it on again.)

If the module is accidentally removed from the slot while the module contents are being used, the computer may behave erratically. To restore the computer to normal operation, turn the computer console off, and wait a few seconds. Then, reinsert the module, and turn the computer on again.

If you have any difficulty with your computer or the ZERO-ZAP module, please contact the dealer from whom you purchased the unit and/or module for service directions.

Additional information concerning use and service can be found in your *User's Reference Guide*.

THREE-MONTH LIMITED WARRANTY
HOME COMPUTER SOFTWARE MODULE

Texas Instruments Incorporated extends this consumer warranty only to the original consumer purchaser.

WARRANTY COVERAGE

This warranty covers the electronic and case components of the software module. These components include all semiconductor chips and devices, plastics, boards, wiring, and all other hardware contained in this module ("the Hardware"). This limited warranty does not extend to the programs contained in the software module and in the accompanying book materials ("the Programs").

The Hardware is warranted against malfunction due to defective materials or construction. **THIS WARRANTY IS VOID IF THE HARDWARE HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLECT, IMPROPER SERVICE OR OTHER CAUSES NOT ARISING OUT OF DEFECTS IN MATERIALS OR WORKMANSHIP.**

WARRANTY DURATION

The Hardware is warranted for a period of three months from the date of the original purchase by the consumer.

WARRANTY DISCLAIMERS

ANY IMPLIED WARRANTIES ARISING OUT OF THIS SALE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE ABOVE THREE-MONTH PERIOD. TEXAS INSTRUMENTS SHALL NOT BE LIABLE FOR LOSS OF USE OF THE HARDWARE OR OTHER INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES INCURRED BY THE CONSUMER OR ANY OTHER USER.

Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you in those states.

LEGAL REMEDIES

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

PERFORMANCE BY TI UNDER WARRANTY

During the above three-month warranty period, defective Hardware will be replaced when it is returned postage prepaid to a Texas Instruments Service Facility listed below. The replacement Hardware will be warranted for three months from date of replacement. Other than the postage requirement, no charge will be made for replacement.

TI strongly recommends that you insure the Hardware for value prior to mailing.

TEXAS INSTRUMENTS CONSUMER SERVICE FACILITIES

Texas Instruments Service Facility
P.O. Box 2500
Lubbock, Texas 79408

Geophysical Services Incorporated
41 Shelley Road
Richmond Hill, Ontario, Canada L4C5G4

Consumers in California and Oregon may contact the following Texas Instruments offices for additional assistance or information.

Texas Instruments Consumer Service
831 South Douglas Street
El Segundo, California 90245
(213)973-1803

Texas Instruments Consumer Service
6700 Southwest 105th
Kristin Square, Suite 110
Beaverton, Oregon 97005
(503)643-6758

IMPORTANT NOTICE OF DISCLAIMER REGARDING THE PROGRAMS

The following should be read and understood before purchasing and/or using the software module.

TI does not warrant that the Programs will be free from error or will meet the specific requirements of the consumer. The consumer assumes complete responsibility for any decision made or actions taken based on information obtained using the Programs. Any statements made concerning the utility of the Programs are not to be construed as expressed or implied warranties.

TEXAS INSTRUMENTS MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE PROGRAMS AND MAKES ALL PROGRAMS AVAILABLE SOLELY ON AN "AS IS" BASIS.

IN NO EVENT SHALL TEXAS INSTRUMENTS BE LIABLE TO ANYONE FOR SPECIAL, COLLATERAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE PURCHASE OR USE OF THE PROGRAMS, AND THE SOLE AND EXCLUSIVE LIABILITY OF TEXAS INSTRUMENTS, REGARDLESS OF THE FORM OF ACTION, SHALL NOT EXCEED THE PURCHASE PRICE OF THE SOFTWARE MODULE. MOREOVER, TEXAS INSTRUMENTS SHALL NOT BE LIABLE FOR ANY CLAIM OF ANY KIND WHATSOEVER BY ANY OTHER PARTY AGAINST THE USER OF THE PROGRAMS.

Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you in those states.

Texas Instruments invented the integrated circuit,
the microprocessor, and the microcomputer.
Being first is our tradition.

TEXAS INSTRUMENTS
INCORPORATED
DALLAS, TEXAS

PRINTED IN U.S.A

1053590-36