Use your Joystick Controllers with this ATARI® Game Program.™ Be sure the Controllers are firmly plugged into the LEFT and RIGHT CONTROLLER jacks at the rear of your ATARI Video Computer System.™ Hold the Controller with the red button to your upper left toward the television screen.

Use a Joystick plugged into the LEFT CONTROLLER jack for one-player games. See Section 3 of your Video Computer System Owner's Manual for further details.

Note: Always turn the console power switch OFF when inserting or removing an ATARI Game Program. This will protect the electronic components and prolong the life of your ATARI Video Computer System.

INTRODUCTION

In this game there is a perspective drawing of four square boards or planes displayed on the screen, which is intended to create a three-dimensional effect. Each board is a $4 \times 4$ grid. The object of the game is to place four X’s or four 0’s in one horizontal, vertical, or diagonal row. To do this you may use one plane or all four planes.
You must place four markers in a row before your opponent does, or before the computer does, to win. There are nine games in all. The first eight games are for one player competing against the computer. Each game number (1-8) is a progressively harder skill level. Game 9 is for two players.

The following examples show some of the ways to win using only one of the four planes:
SKILL LEVELS

Each game number represents a progressively harder skill level. The game numbers and skill levels therefore are interchangeable. The only exception to this is Game 9. Game 9 is for two players, and the skill level is not applicable.

Game 1 is the least difficult to play against, Game 8 is the most difficult.

At level 1 the computer moves quickly and is fairly easy to beat. At level 8, the computer may think or "compute" for as long as 20 minutes before making its move and is very difficult to beat. Check the Game Matrix for the number of moves the computer looks ahead during each skill level, as well as the compute or move time for each level.

When the computer is working on its next move, the TIC-TAC-TOE boards are not displayed. Instead, various colors appear on the screen. Depressing the game reset switch or moving the difficulty switches when this is happening has no effect on the game. However, depressing the game select switch will cause the computer to move almost immediately, without changing the game number.

If the computer is NOT computing its next move, the skill level or game number may be changed during a game by depressing the game select switch.

DIFFICULTY SWITCHES

The right difficulty switch determines who will begin a game. For one-player games, when the switch is in the a position, you start; when the switch is in the b position, the computer starts. In two-player games the right difficulty switch determines whether X or O starts. In the a position, the X player, or the player using the Joystick plugged into the LEFT CONTROLLER jack starts. In the b position, the O player (using the RIGHT CONTROLLER jack) starts.

The left difficulty switch may be used to create a "set up" mode on the screen. To do this, put the switch in the a
position. You may then use the Joystick plugged into the LEFT CONTROLLER jack to place X's or O's anywhere on the screen. Press the controller button to place markers. Hold the button down and the cursor alternates between X's, O's, and blanks on the screen so that you may place whichever you wish in the desired square.

Whenever you place the left difficulty switch in the b position, TIC-TAC-TOE is ready for normal game play. After using the set up mode, either X or O may play first. This is determined by the position of the right difficulty switch, the same as at the start of the game.

**STRATEGY**

To beat the computer or another player, you must place two three-in-a-rows so that the opponent cannot block both of them. Occasionally, you may win when an opponent fails to see that you have three-in-a-row, but that method involves more luck than strategy.

At higher skill levels, placing three-in-a-row becomes difficult. One of the secrets to playing winning TIC-TAC-TOE is to play in the 16 “strong” squares at the beginning of a game. The 16 strong squares are the eight outside corner squares, and the eight inside center squares.

**“STRONG” SQUARES**

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X = outside strong squares
0 = inside strong squares
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Here are some of the ways to win using all four planes:

In total, there are 76 possible ways to win. It is not possible to win by using two or three planes, you must use one or all four.
TO BEGIN PLAY

After inserting the cartridge, turn your television on and then flip the console power switch on. The display will show the four square boards or planes and the number 1 will appear on each side of the top of the screen. The left number 1 represents the game number (or skill level), and may be changed by depressing the game select switch on the console.

The right number 1 corresponds to the number of players for each game. This number changes automatically to 2 when the ninth game is selected.

Depress the game reset switch to begin a new game. The game number remains the same when the game reset switch is depressed. The game number only changes when the game select switch is used, or when the power is turned on and off.

USING THE CONTROLLERS

To move your "cursor" (the blinking X or O) right or left, move the Joystick right or left. Your cursor will wrap around (disappear on one side of the level or plane and appear on the other side). Move the Joystick forward to move your cursor up from square to square or to a new level as it reaches the top of a plane. To move the cursor down in the same manner, move the Joystick back or toward yourself. Put the Joystick in a diagonal position and the cursor moves diagonally on the screen, and also moves from level to level.

To place an X or an O on the screen, press the controller button when the cursor is in the square you wish to occupy. The last move made is indicated by a blinking X or O in the appropriate square.

The computer will not allow a move to an occupied square. It will sound an error message when a player presses the controller button in an attempt to move into a square which is already occupied.
Try to take over or dominate planes. The four TIC-TAC-TOE boards represent horizontal, vertical, and diagonal planes. When you place three or four markers in one plane and your opponent has none, you can probably win. Continue to force the opponent to block until you have two three-in-a-rows which cannot both be blocked in one move.

When planning your moves during a game, don’t lose sight of the fact that your opponent is doing the same. Blocking your opponent’s markers is equally important to establishing a strategy of your own.

It has been proven that the first player to move can always win, provided he or she plays a perfect game. The computer on the other hand, has a degree of randomness programmed into its play, so it will not always play a perfect game, even at the highest skill level (8). This gives the opponent a chance to win, if he or she is a skilled player.

### GAME MATRIX

<table>
<thead>
<tr>
<th>Difficulty Level</th>
<th>Number of Moves the Computer Looks Ahead</th>
<th>Computer’s Approximate Move Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>½ second</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3 seconds or less</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1 minute or less</td>
</tr>
<tr>
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<td>3 minutes or less</td>
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<tr>
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<td>10 minutes or less</td>
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<tr>
<td>8</td>
<td>9</td>
<td>20 minutes or less</td>
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