Use the Keyboard Controllers with this Game Program™. These Controllers must be purchased separately. Be sure to plug the two controller cables firmly into the Video Computer System™ jacks. For one-player games use the left hand controller.

NOTE: To prolong the life of your Atari Video Computer System and to protect the electronic components, the Console should be OFF when inserting or removing a Game Program.

HOW TO PLAY

The computer or another player has created the secret code, and your mission is to guess the code. The code’s identity is affected by:

- The Number of Digits. Games feature codes with three or four digits.
- The Number Span. Games feature codes with numbers from 1 to 9 or 1 to 6.

You have 12 guesses to identify the secret code with the Keyboard Controller. Use the controller to enter the number digits of your guess onto the screen. The computer will then analyze each number digit of your code guess.

CODEBREAKER GLOSSARY

Left hand score: During Codebreaker™ games the upper left number refers to the number of guesses players have made during the present game. At the end of the game, the left controller player’s score appears in this position.
Right hand score: In one-player Codebreaker games, this number appears throughout the game to show the number of consecutive games of Codebreaker you've played.

In two-player games, this number refers to the right controller player's score.

Computer secret code: The Secret code will appear above the list of Player Guesses at the end of the game.

Player guess: The number code guess you enter into the computer appears on the left side of the screen.

Computer symbols: After you register your Player Guess with the computer, the computer will respond with symbols that analyze your guess:

- **Black Line**: Signifies that one of the number digits is the **correct identity** and in the **correct position**.
- **White Line**: Signifies that one of the number digits is the **correct identity** but in the **incorrect position**.

Cursor: This flashing square appears in the position of the next number entry into the computer.

Player indicators: In two-player games, the color of the line and its position indicate whose Keyboard Controller must register the next guess. A white line appears on the far right of the playfield, meaning the right controller player must enter a guess. A black line appears to the left of this position during the left controller player's turn.
1-Player Codebreaker Games

The computer selects the secret number code. You have 12 guesses to identify the code. Your number of guesses equal your point score. For example, if you guess the secret code at the fourth guess, you score four points.

2-Player Codebreaker Games

There are two ways for two players to play Codebreaker:
1 The computer selects the secret number code. You and your opponent take turns making guesses. In the first game of a series of consecutive games, the right controller player always makes the first guess. The first player to match the secret number code scores one point and starts the next game.
2 The player creates the secret number code using the Keyboard Controller. The opponent then tries to guess the secret code in the least number of guesses. When the opponent guesses the secret code, his score is equal to the number of guesses. For example, a player scores four points when he guesses the secret code on the fourth guess. During the next game, the roles are reversed and the player who tried to guess the code becomes the player who creates the secret code.

NOTE: Only the player who is guessing the secret code has a chance to score points. When playing a series of consecutive games, begin the first game with the left controller player who tries to guess the secret code.

CODEBREAKER SCORING

1-player Codebreaker:
A player’s score during one game is determined by the number of guesses needed to identify the secret number code. For example, if a player guesses the code on the sixth guess, the score is six. Your object is to score the lowest possible score. Your cumulative score appears in the upper left corner of the screen at the end of the game.
Hint: In one player Codebreaker games, divide your score by the number of consecutive games for an average skill score.

2-player Codebreaker:
When the computer selects the secret code for both players to guess, the player scores one point when he guesses the code.

When one player creates the secret code, the object is to score the least number of points. For example, if a player guesses the secret code on the fourth guess, he scores four points.

**USING THE KEYBOARD**

1-player Codebreaker:
Use the left Keyboard Controller to play one-player Codebreaker games. To make a guess, press the number digits on the Keyboard. Then press the enter (#) button. The digits you have entered will appear on the left side of the screen. The computer will then analyze your guess with computer symbols.

2-player Codebreaker:
A series of two-player games begins with the right Controller player. In Codebreaker games where a player must create the secret code, press the digits of the secret code on the Keyboard Controller. Those digits appear in the upper left corner of the screen. Press the enter (#) button and the digits disappear. Now your opponent
starts to make guesses using the same procedure as in one-player games.

To change a digit in your guess, move the cursor to the digit to be changed. Press the new number you want on the Keyboard Controller. The new number will appear in the position.

**NOTE:** The computer will not accept a digit whose numerical value is more than defined by a particular game. For example, if the number span of the secret code is between 1 and 6, the computer will not accept a number 7.

To play a consecutive game of Codebreaker, press any number on the keyboard to clear the screen. To begin a new series of consecutive games and scores, press the reset button on the console.

**HANDICAP Difficulty switch**

During Codebreaker games, when the right Difficulty switch is in the "A" position, you have 8 guesses. In "B" position, you receive 12 guesses.

**SAMPLE GAME 2-player Codebreaker**

**Two-Player Codebreaker**

The Player Indicator shows that it is the right player's turn.
Using the Keyboard Controller, the player enters the digits 1, 2, 3, and 4. The number of guesses for this game (1) appears on the upper left corner of the playfield. The white Computer Symbols appear on the screen to show that the player has guessed two digits of the Computer Secret Code correctly, but that they are in the wrong position. The Player Indicator now shows that it is the left player's turn.

The left player enters his guess of 2, 1, 5 and 6. Since this is the second guess, the number 2 appears in the upper left corner. The Computer Symbols show that the left player has guessed three numbers in the secret code and they are in the correct position. The Player Indicator shows that it is the right player's turn.

The right player now enters a guess of 2, 1, 5 and 7. The Computer Symbols show his guess is correct and the Computer Secret Code appears at the top of the Player Guesses. The right player scores one point and the cumulative score of both players appears (left player, upper left; right player, upper right.)

The left player starts the next game.
HOW TO PLAY NIM

Nim is the oldest mathematical game known to man. In this computer version of Nim, there are one to four Stacks of objects. You must take turns with the computer or another player removing any number of objects from any Stack. During a turn you must take at least one object, and can take objects out of only one stack.

NOTE: During a series of consecutive two-player Nim games, you and your opponent must take turns removing the first object.

There are two kinds of Nim games:
- **Regular Nim**: You win the game when you remove the last object from the screen.
- **Nim Misere**: You lose the game when you remove the last object from the screen.

There are two kinds of Nim game set-ups:
- **Computer Set-Up**: Three Stacks of objects appear on the screen. One stack has three objects. The second Stack has four objects, and the third Stack features five objects.
- **Player Set-Up**: Using the Keyboard Controller, a player can create a Nim set-up. Create up to four Stacks with up to nine objects in each Stack.

NIM GLOSSARY

**Stacks**: The Stacks of objects appear on the left side of the screen.

**Cursor**: The Cursor is used to remove objects from each Stack. Use the Keyboard Controller to move the Cursor directly over the Stack where you want to remove objects.

**Scores**: In two-player games, the score of the left Controller player is in the upper left corner; the right Controller player score is in the upper right corner. In one-player games, your score is in the upper left corner; the computer's score is in the upper right corner.
NIM SCORING

A player scores one point when he wins a Nim game. In regular Nim games, you score one point when you remove the last object from the screen. In Nim Misere games, you score one point when you force your opponent to remove the last object from the screen. Scores will accumulate as you play consecutive games of Nim.

USING THE KEYBOARD

To start a new Nim game:
- Press any key on the Keyboard Controller at the conclusion of a game. The set-up from the previous Nim game will appear on the screen.

NOTE: In one-player games, use the left Keyboard Controller.
To remove objects from a particular Nim Stack:

- Press the Keyboard Controller **Cursor** (*) button to move the Cursor on the screen. The number of times you press the button determines the Stack where the cursor will appear. For example, press the button three times to move the Cursor to Stack 3.

- After you have moved the Cursor to the Stack where you intend to remove objects, press any **Number** button on the Keyboard Controller, and that number of objects will blink and then disappear from the Stack. When you are satisfied with all the moves you've made at each Stack, press the **Enter** (#) button.

**NOTE:** You may change your move any time before you press the **Enter** (#) button. For example, after taking three objects from a Stack, you may decide to take only two. Move the Cursor to the Stack, then press number 2 on the Keyboard Controller. One object will reappear in the Stack.

To create a player set-up:

Press the **Cursor** (*) button to move the Cursor to a Stack. The number of times you press the button determines the Stack where the Cursor will appear. For example, press the Cursor button three times to move the Cursor to Stack 3.

Once the Cursor is directly over the particular Stack location, select the number of objects in each Stack. Press a **Number** button on the Keyboard. The number you press determines the number of objects in the Stack. For example, press the number 3 and three objects will appear in the Stack. When you have selected objects for each stack, press the **Enter** (#) button and the game begins.
NIM HANDICAP Difficulty switch

In one-player Nim games, you can improve the playing ability of the computer by sliding the Right Difficulty switch to the "A" position.

There are no Handicaps in two-player Nim.
Remove Last Object to Win

Computer Sets-up

Number of Players

Game

NIM

6 6 6 6 6 6 9 9 9 9 9 9

Number Field Span

Computer Enters Code

Number of Players

Game

3-Digit Code

4-Digit Code

CODE BREAKER™

Hand controller. For one-player games use the Left

Puter System™ Jacks. For one-player games firmly into the Video Com- To plug the two controllers separately. Be sure

These controllers must be purchased separately. Be sure

Use the Keyboard Controllers with this Game Program™.