



## Dan and Kathe Spracklen

Winner of the software division of the First International Man-Machine OTHELLO™ Tournament



We apologize to our customers, but unfortunately there is an error on page 10 of this manual. The following information is to replace the section: To End a Game.

At any point in the game you can return to the initial list of options:

NEW GAME, CHANGE BOARD, MONITOR OR EXIT? (G, C, M, X):

If you have the text page displayed, this can be done by hitting CTRL R. If you have the board displayed, first hit the ESC key to bring you to the text page, then hit CTRL R to bring you to the options list. In either case, the program will respond at once, aborting even the deepest search (the game board will be re-arranged because of the search that was in progress).

## User's Guide to the Apple II Version of Reversal

REVERSAL is an ancient strategy game, popular for centuries, and a great pastime for young and old. Its rules are simple and easy to learn, but offer great challenge and excitement with every play.

#### **OBJECT OF THE GAME**

The object of the game is to trap your opponent and flip his pieces to your color so that when the board is filled your color has the majority of the squares.

### HARDWARE REQUIREMENTS

An Apple II computer with at least 32K of memory with one monitor or T.V. connected to your Apple and one disk drive.

#### LOADING INSTRUCTIONS

To load and run REVERSAL:

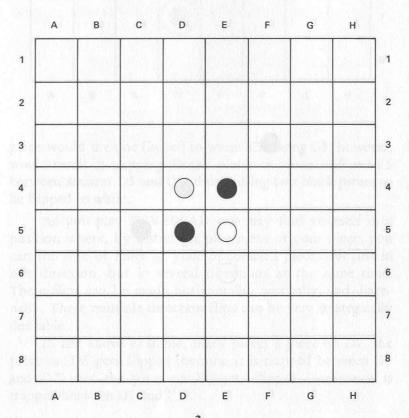
1. Power up your Apple.

Copyright © 1980, Hayden Book Company, Inc. All rights reserved.

- 2. If you are in either BASIC, boot up your disk by typing PR#(n) where (n) is the slot containing the disk drive card (usually this is slot number 6).
- 3. If you are in monitor mode, type (n) ConTRoL-P where (n) is the slot containing the disk drive card.

# **How to Play Reversal**

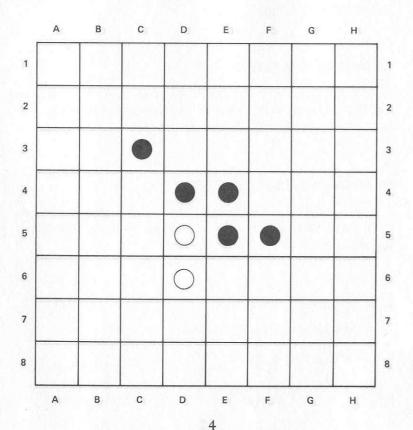
There are two players; one has the black pieces while the other player has the white pieces. The black pieces go first. The board is automatically set up with the four center squares filled as follows:

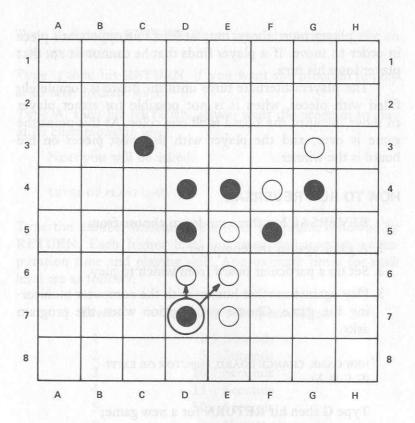


This is the starting position for every game.

On each turn you must place one of your pieces on a square that causes at least one of the opponent's pieces to be trapped between one of your squares and the square you just selected. All opponent's pieces that get trapped are "flipped" to your color.

In the following example it is White's turn. Black owns squares C3, D4, E4, E5, and F5, while White owns squares D5 and D6. White may place his next piece only on squares D3, F3, F4, or G5. Choosing square D3 would trap Black's piece on square D4 between D3 and D5, and this piece would then be flipped to white. Choosing F3 would trap Black's piece on Square E4 between F3 and D5, and this piece would then be flipped to white. Choosing square F4 would trap Black's piece on square E5 between F4 and D6, and this





piece would then be flipped to white. Choosing G5, however, would result in trapping Black's pieces on squares E5 and F5 between squares D5 and G5, thus causing two black pieces to be flipped to white.

As you play REVERSAL you may find yourself in a position where, by a strategic placement of your piece, you can flip one or more of your opponent's pieces not just in one direction, but in several directions at the same time. These flips can be made horizontally, vertically, and diagonally. These multiple direction flips can be very strategically desirable.

In the above example, Black places a piece on D7, the piece on D6 gets flipped (because it is trapped between D5 and D7) and the piece on E6 gets flipped (because it is trapped between D7 and F5).

A player must *always* trap at least one opponent's piece in order to move. If a player finds that he cannot do so, that player loses his turn.

The players alternate turns until the board is completely filled with pieces, when it is not possible for either player to move, or until the board is all one color. At this point the game is over, and the player with the most pieces on the board is the winner.

#### **HOW TO RUN REVERSAL**

REVERSAL has three modes to choose from:

- 1. A game against the computer
- 2. Set up a particular board from which to play
- 3. Play against another human with the computer monitoring the game. Choose your option when the program asks:

NEW GAME, CHANGE BOARD, MONITOR OR EXIT? (G, C, M, X):

Type G then hit RETURN for a new game;

Type C then hit RETURN to change the board;

Type M then hit RETURN for monitor mode;

Type X then hit **RETURN** to exit from the program.

## IF YOU HAVE CHOSEN NEW GAME

The program will now ask you:

YOUR COLOR? (B,W):

Hit B (for Black) or W (for White). Remember that black moves first! Complete your choice by hitting RETURN.

The program next asks:

STRATEGY? BEGINNER, INTERMEDIATE, ADVANCED (B,I,A):

Type B, then hit RETURN, if you want the program to be an easy opponent.

Type I, then hit RETURN, if you want the program to play at an intermediate level.

Type A, then hit RETURN, if you want the program to play at its championship level.

Next you will be asked:

LEVEL OF PLAY? (1-9):

Type the number indicating the level you want, followed by **RETURN**. Each higher level increases the program's computation time and playing skill. Approximate times for each level are as follows:

Level	Computer's Response Time						
1	2.5	Seconds					
2	5	Seconds					
3	10	Seconds					
4	15	Seconds					
5	30	Seconds					
6	1	Minute					
7	3	Minutes					
8	10	Minutes					
9	30	Minutes					

#### The Board:

When the program goes into execution you will see text on the screen but the board will not be visible. You can switch back and forth between the board and text simply by hitting the **ESCape** key each time you want to switch.

#### To Enter a Move:

When it is your turn to move, a cursor will be visible on the graphics board. The cursor blinks only on a square where it is legal for you to move. The cursor can be cycled through all your legal moves using the LEFT and RIGHT ARROW keys. When the cursor rests on the square to which you would like to move, hit RETURN. Your move will be played and all flips will be performed automatically.

## To Enter the Computer's Move:

When the program has selected its move it sounds an audible tone. It places its piece in the square to which it intends to move and blinks that square. To complete the computer's move, hit **RETURN**. The computer's move will be played and all flips will be performed automatically.

#### The Score:

At all times during the game the current score is displayed along side the board. For each color, white and black, the current number of playing pieces on the board is shown. The side currently ahead is also indicated by the facial expressions on the playing pieces. Both the numerical scores and the expressions are updated with each move played or withdrawn (see Take-Back Feature page 9).

#### The Move List:

The text screen contains the move list. Each move made by player and computer is recorded using chess notation. The columns are lettered A-H and rows are numbered 1-8. The coordinates of the board are:

A1	В1	C1	D1	E1	F1	G1	Н1
A2	B2	C2	D2	E2	F2	G2	H2
А3	В3	C3	D3	E3	F3	G3	НЗ
A4	B4	C4	D4	E4	F4	G4	H4
A5	B5	C5	D5	E5	F5	G5	Н5
A6	В6	C6	D6	E6	F6	G6	Н6
А7	В7	C7	D7	E7	F7	G7	Н7
A8	B8	C8	D8	E8	F8	G8	Н8

#### Kibitz:

A hint to the player, giving what the computer thinks is the best move, is available on levels 2-9. To get the computer's suggestions hit CTRL K.

### Take-Back Feature:

REVERSAL gives you the option of taking back any move of the game. At any time during the game (even when the game has ended) you can take back one or any number of moves. You can even back up all the way to the starting

position. To take back a move hit CTRL B. The last piece played will be removed and all flips will be undone. The score will be adjusted to reflect the changes.

Each take-back removes one piece and restores all flips for that piece. At any point you have the option of taking back more moves or of playing from that position. If you have taken back one of the computer's moves, you now have the option of making a move of your choosing in its place. The computer will accept your choice for him. It then becomes your turn to play one of your pieces. Play then resumes in the normal way.

NOTE: If you request take-back, while the computer is blinking its move choice, the computer's move choice is erased *and* your last move is taken back.

#### Level #:

You can change the level number at any point in the game by holding the SHIFT key down and entering the level number of your choice. If you select a new level while the computer is thinking, that level will not take effect until the following move. The level # is displayed on the text screen in the upper right hand corner.

#### To End a Game:

At any point during the play of the game, you can return to the initial list of option questions by hitting CTRL R. The program will respond at once, aborting even the deepest search (the game board will be re-arranged because of the search that was in progress). If you had the text displayed you will see:

NEW GAME, CHANGE BOARD, MONITOR OR EXIT? (G, C, M, X):

If you had the board displayed, you will see the board display vanish leaving only the board. To see the option list press **ESC ESC**.

You can now set up any board configuration you desire. If you were already in the middle of a game, the board will be displayed just as you left it. A square will be blinking. That's your signal that you can change the contents of that square by using one of the following:

Hitting the key leaves the contents of the square unchanged and blinks the next square to the right on the same row. If you are already at the rightmost square, it wraps around to the leftmost square in the same row and blinks that square.

Hitting the key leaves the contents of the square unchanged and blinks a square in the leftward direction. It wraps around to the rightmost square in a similar manner.

Hitting the ! key leaves the contents of the square unchanged and blinks the next upward square in the same column. If you are already at the topmost square it wraps around to the bottommost square in the same column and blinks that square.

Hitting the [?] key leaves the contents of the square unchanged and blinks the next downward square in the same column. It wraps to the top in a similar manner.

Hitting the W key will place a white piece on the square.

Hitting the B key will place a black piece on the square.

Hitting any key not otherwise listed here will empty the square. CTRL R returns to the initial option question.

Hitting the **RETURN** key will terminate the blinking cycle and return you to the text page. You will then be asked:

COLOR TO MOVE NEXT? (B,W):

Respond with B for Black or W for White. Next you will be asked:

MOVE NUMBER (NN):

The machine will start recording moves from this number on the text page. Your next prompt is:

YOUR COLOR? (B,W):

Hit B if you wish to play Black or W if you wish to play White. Next you are asked:

STRATEGY: BEGINNER, INTERMEDIATE, ADVANCED (B,I,A):

Enter B, I, or A for desired strategy. Finally you are asked:

LEVEL OF PLAY? (1-9):

Enter a number 1-9 for your desired level. You are now ready to play. Just hit the ESC key to return to the board display.

#### IF YOU HAVE CHOSEN MONITOR

Monitor mode permits game play between two humans. The play of the game is exactly as in New Game, but all move choices are left up to the players.

#### To Enter a Move:

Black moves first. A cursor will be visible on the graphics board. The cursor blinks a square where it is legal for black to move. The cursor can be cycled through all legal moves using the LEFT and RIGHT ARROW keys. When the RETURN key is hit, the move is played and all flips are performed automatically.

It is now White's turn. Again the cursor will be visible on the graphics board. The cursor blinks a square where it is legal for White to move. The cursor can be cycled as before and the move is entered in the same way. Play alternates between Black and White.

#### ADDITIONAL FEATURES

Smile Supression: Hitting CTRL F clears the faces; hitting it again restores them.

Cursor Supression: Hitting CTRL C stops the cursor from flashing; hitting CTRL C again restores the cursor.

#### STRATEGY TIPS

- 1. Do not always go for the move that flips the most pieces. Examine the board and check the consequences of a move before making it.
- 2. In general, the squares on the outside perimeter (with the exception of spaces adjacent to corners) are valuable since a piece there can be trapped in only two different directions.
- 3. The squares on the next to the outside rows are, in general, dangerous squares to move to since they give your opponent a chance to move to the outside row.
- 4. Try to get the four corner squares. A disk in the corner can not get trapped between two pieces and, therefore, *never* can get flipped. From this position, you have the ability to spread out from the corner and rapidly take control. However, possession of a corner is *not* a guarantee of winning, so be careful.
- 5. Be careful of moving into the squares directly adjacent to the corners. This gives the opponent easier access to valuable corner squares.

#### QUESTIONS AND COMMENTS

We at Hayden are constantly looking for ways to improve our products. We therefore welcome questions and comments, which should be sent to:

> Hayden Book Company, Inc. 50 Essex Street Rochelle Park, New Jersey 07662

Attention: Software Games Editor

## **Limited Warranty**

Subject to the below stated limitations, Hayden Book Company, Inc. hereby warrants that the program(s) contained in this unit will load and run on the standard manufacturer's configuration of the computer listed. Except for such warranty this product is supplied on an "as is" basis without warranty as to merchantability or its fitness for any particular use or purpose. The limits of warranty extend only to the original purchaser.

Neither Hayden Book Company, Inc. nor the author(s) of this program are liable or responsible to the purchaser and/or user for loss or damages caused, or alleged to be caused, directly or indirectly by this software and its attendent documentation, including (but not limited to) interruption of service, loss of business or anticipatory profits.

## **Return Policy**

If, during the period of ninety (90) days from the date of original purchase, a defect should occur in the recording medium of the program (disk or tape cassette), the medium may be returned to Hayden Book Company, Inc., 50 Essex Street, Rochelle Park, New Jersey 07662 or to an authorized Hayden Book Company, Inc. dealer for exchange after verification of the alleged defect. The purchaser's sole and exclusive remedy in the event of a defect is limited to replacement of the recording medium as provided above. Should a defect occur after this ninety (90) day period has elapsed, replacement will be made by Hayden under the same conditions for a nominal charge of five dollars (\$5.00).

For your protection, and to establish proof of original ownership, please complete and mail the included warranty card (when provided) to Hayden Book Company, Inc., within ten (10) days of the date of purchase.

In any event, should the cause of the defect in the medium, in the opinion of Hayden Book Company, be as the result of accident, abuse, or misapplication of the medium by the user, Hayden Book Company, Inc. will recognize no obligation to abide by the terms of this or any other warranty whether expressed or implied.