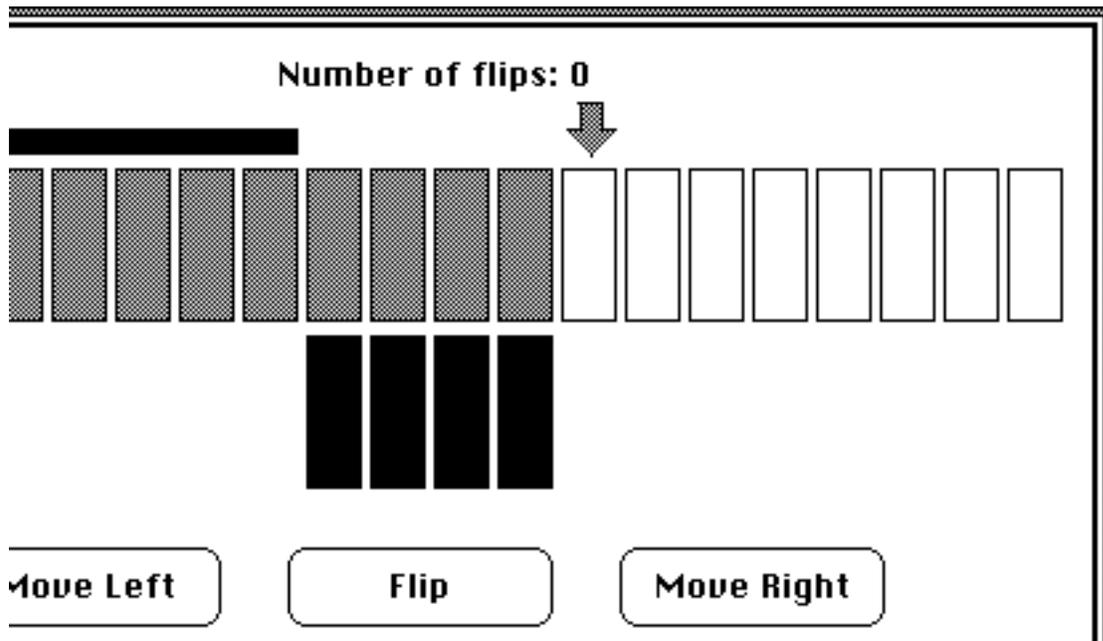# HexPuzzle Documentation

By Kenneth J. Brody [71455,225]

The screen represents a board with 20 slots filled with 8 pieces. The pieces can be flipped to be either black or white. An unfilled slot is represented as gray. All the pieces move as a single unit. The object is to move all the pieces to the left edge of the board.
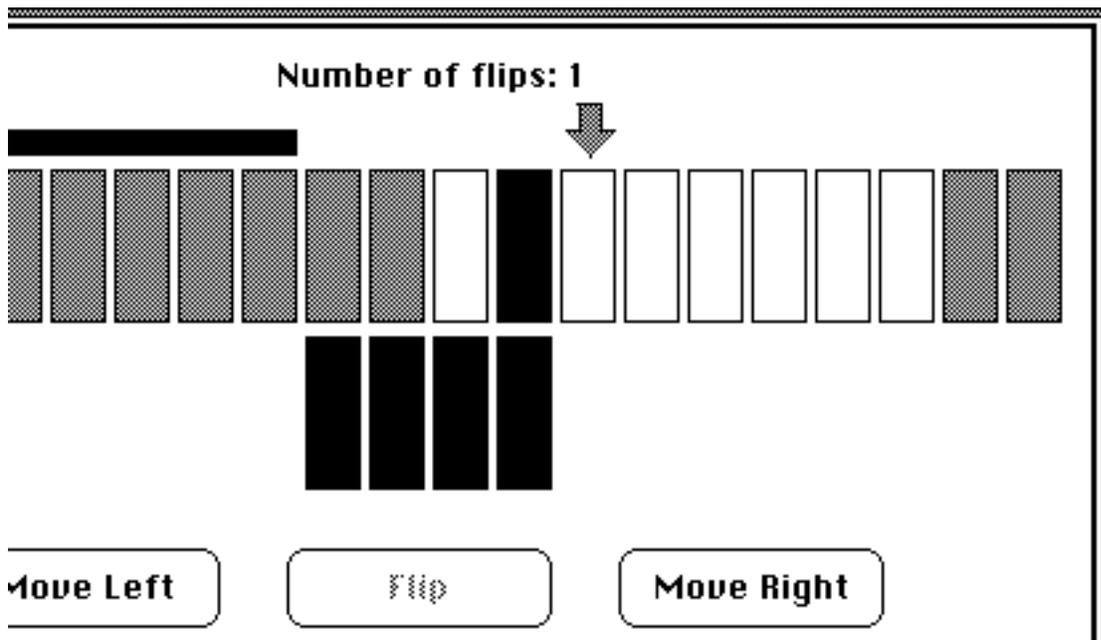
Of course (as the airlines say) some restrictions apply. The first is the black bar over the left 8 slots: only black pieces can be moved under it. Notice in figure 4 that, because the second piece is white, you cannot move to the left.

The second restriction is where and whne you can flip a piece. Pieces can only be flipped at the slot marked with the arrow. Also, you can only flip a piece when all non-empty slots over the four "key" pieces match the key. Notice that in figure 2, one of the pieces does not match the key, so you cannot flip the piece at the arrow. However, in figure 4, all the pieces match, and you can flip.
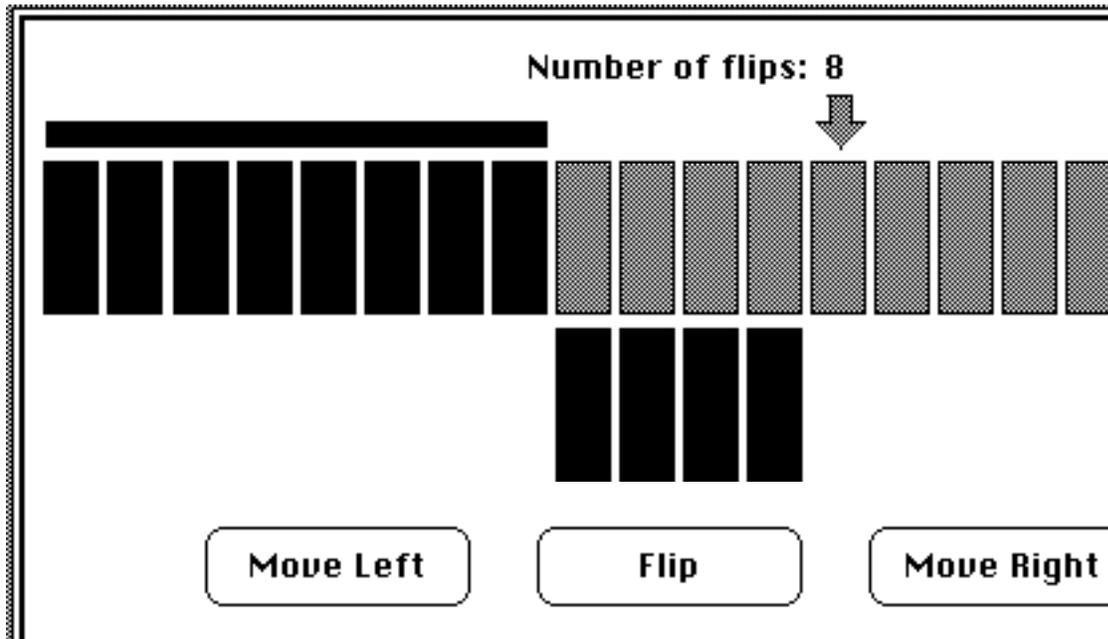
Game 1111 is the easiest, requiring only 8 flips, while game 1110 is the hardest, requiring more that 100.
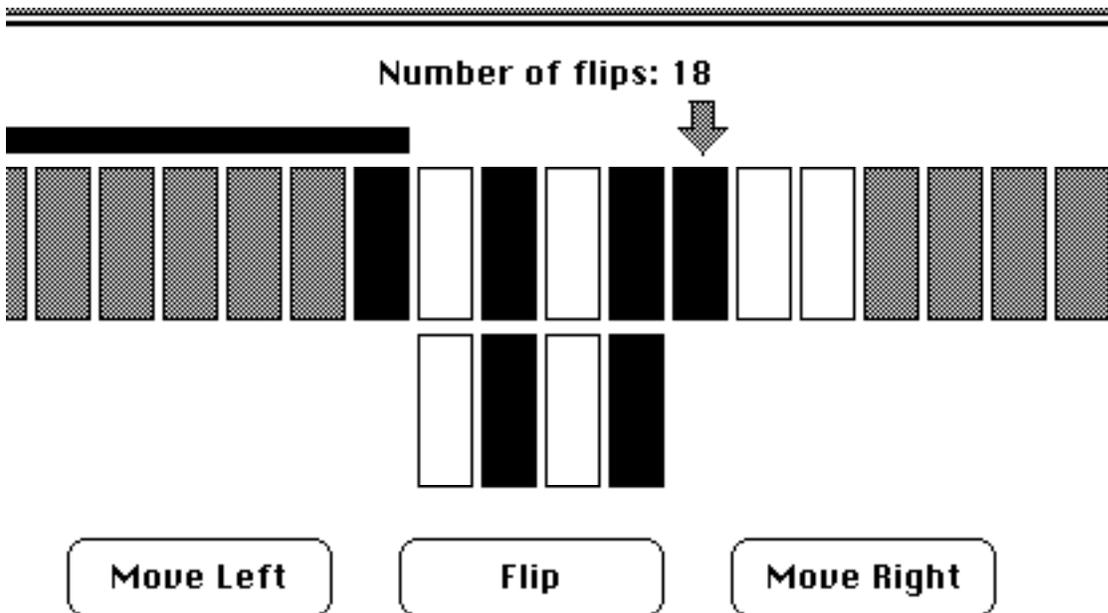
Number of flips: 0

Figure 1: Starting position

Number of flips: 1

Figure 2: Intermediate Position

Number of flips: 8

Move Left   Flip   Move Right

Figure 3: Final Position

Number of flips: 18

Move Left   Flip   Move Right

Figure 4: A Typical Game In Progress