# RICOCHET ROBOTS

by Alex Randolph for any number of players

GAME MATERIALS

- 8 board sections usable on both sides
- 1 centerpiece to connect the 4 board sections
- 4 robots in red, green, blue and yellow
- 4 square position markers in the colors of each robot
- 16 round target chips with 4 symbols – 4 each in red, green, blue and yellow
- 1 round „multicolored vortex" target chip
- 1 sand timer with a running time of about 1 minute
- 1 black robot with corresponding position marker for the variant
-    set of instructions
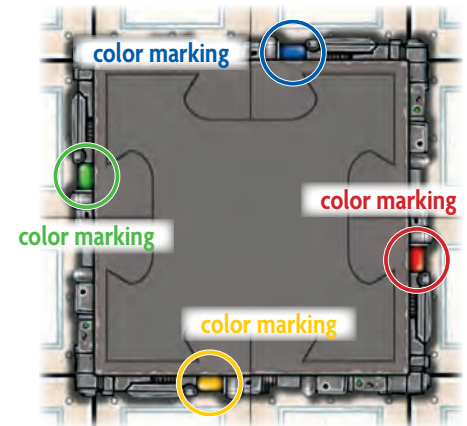
GAME SET-UP

Note: Before the first game, please punch out the game pieces carefully from the parts sheet.

To begin with, use the board sections to put the gameboard together. A valid gameboard consists of 4 board sections with 4 different color markings (red, green, blue and yellow). Overall, there are 1536 different possible combinations. The recessed corners of the board sections always have to be oriented toward the middle; then the board sections are connected with the centerpiece. The remaining 4 board sections are not needed and are put back into the box.

Note: For the first few games, we recommend that you do not use the board sections with the colored diagonal barriers.

Shuffle the 17 target chips and put them face down next to the gameboard. Place the sand timer within reach of all players. The target chips depict 17 different target spaces, each of which exists on the gameboard exactly once. Put the 4 robots on any 4 gameboard spaces not marked with a target symbol. After that, put the color-matching position marker under each robot.

OBJECT OF THE GAME

The object of the game is to collect a certain number of target chips. In order to obtain a target chip, you have to move a robot to the corresponding target space in as few moves as possible. What's special about this is that you first have to find a solution in your mind.

COURSE OF THE GAME

At the beginning of a round, you flip over one target chip and place it face up on the centerpiece of the gameboard. Each target chip shows a target space that exists only once on the gameboard. If the current target space has the color of one of the robots, you have to move the robot matching this color to this target space. If the target space is the „multicolored vortex," you move any robot to the „multicolored vortex." For getting a robot to the target space, you can also include all other robots. To begin with, the robots race around the gameboard only in the players' minds; each player tries to get to the target space in as few moves as possible without actually moving the robots on the gameboard.

THE ROBOTS' MOVES

The robots can move in any direction, but only vertically or horizontally, and they have no „brakes." Once a robot has been set into motion, it moves straight and cannot stop or change its direction anymore until it hits an obstacle. Obstacles are other robots and walls. The center and the edges of the gameboard count as walls, too.

Each movement of a robot to the next obstacle counts as 1 move.

If a robot encounters an obstacle, it can either stop or make another move. If it makes another move, it continues moving until it gets to the next obstacle, where, again, it can stop or keep moving, and so on.

Important details:

- 🔴 *If a player plans to move additional robots – using them as obstacles – the moves of these robots have to be included in the count as well. In doing so, a robot may stop, „wait" for the moves of other robots, and then continue its move.*

- 🔴 *On its way to the target, a robot must ricochet at least once, i.e., change its direction 90 degrees after a move. If a robot could move directly to the target space without ricocheting, it has to take another route.*
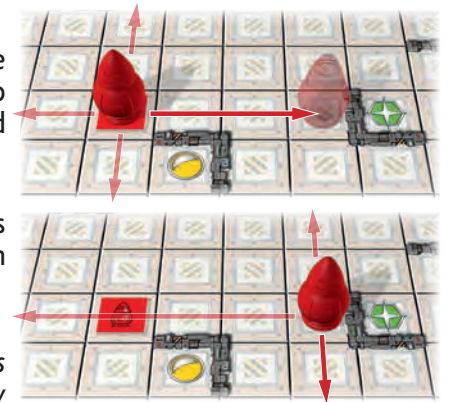
THE COLORED BARRIERS

A special feature is the diagonal colored barriers on 4 board sections. If a robot reaches a space that has a barrier of the same color, it just moves through it. Robots of other colors bounce off at right angles. A robot may not stop on a space that has a colored barrier but has to move on to the next obstacle. The entire movement counts as one move, no matter whether a robot moves through a colored barrier or bounces off it.

Attention: A robot's move that – due to an adjacent obstacle – would end on a space that has a colored barrier is not allowed.
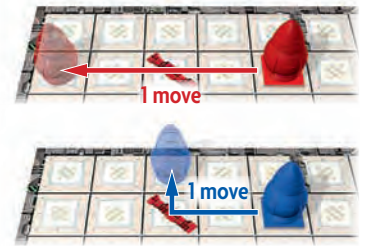
MAKING A BID

As soon as a player has figured out a route solution, he may bid aloud the number of moves he thinks are required – for example, „9." This means he claims to be able to move the robot from its current position to the target space in exactly 9 moves. The first player to make a bid turns over the sand timer. Now all other players have approximately 1 minute to bid a number of moves; this can also be the same or a higher number. A player may improve his own bid, but he may not bid a number higher than the one he bid before.

VERIFYING THE ROUTE SOLUTION

When the sand timer has run out, the player who was first to bid the lowest number of moves begins. Now, he has to actually move the robots and prove that he is able to reach the target space in the number of moves he bid. He moves the robots, counting out the moves aloud, so that all players are able to understand it. If he manages to get the robot to the target space in the number of moves bid, he obtains the target chip from the centerpiece of the gameboard.

If he fails, he puts the robots he has moved back onto their position markers. In case one or more players have bid the same number of moves, they now have their turns in order of the submission of their bids. Otherwise the first player with the next higher bid has his turn.

This goes on until one of the players succeeds in getting the target chip. If no player is successful, the target chip is not given out and is shuffled face down among the remaining target chips.

After the route solution has been verified, the current round ends, and the position markers of the moved robots are put underneath the corresponding robots in order to mark their new position. Then the next round follows.

Note: Most situations on the gameboard can be solved in less than 10 moves; but sometimes, a situation will arise that requires 20 or more moves. Such situations are interesting as solitaire problems, but in a game they hamper the game flow. If nobody has made a bid after 4 or 5 minutes, we recommend that one of the players turns over the sand timer; if there is no bid by the end of this minute, the players put the target chip back, reshuffle the chips and reveal a new one.
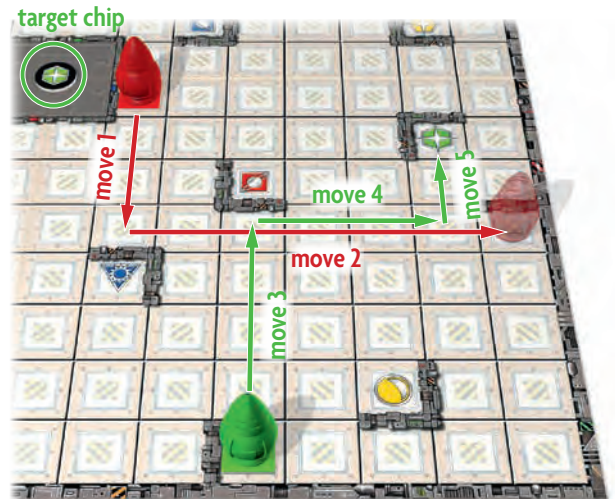
END OF THE GAME

With 2 players, the game ends as soon as one player has won 8 target chips; with 3 players, 6 target chips, and with 4 players, 5 target chips. If more than 4 players participate, play continues until all target chips have been given out. In case of a tie, the players involved share the win. Of course, players can agree on any number of target chips to determine the end of the game and the winner.

BLACK ROBOT VARIANT

In this variant, the black robot and the black position marker come into play. This robot works like any other and can also be used as an obstacle. If the „multicolored vortex" is the current target chip on the centerpiece, you can also move the black robot to the target space.

GAME FOR ONE PLAYER

At the beginning of the round, the player turns over one target chip as well as the sand timer. If he manages to find a solution before the timer runs out, he lays down the target chip face up in front of him. If he fails, he lays down the target chip in front of him face down. The game ends when all target chips have been used. If the player has more face-up target chips lying in front of him than face-down target chips, he wins the game. If a player considers this variant too difficult, he can let the sand timer run through twice per round.