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Microbes are one-celled organisms in the form of bacteria. Some Microbes are a health necessity. These Microbes are a threat to survival.
Equipment Requirements

The realm of Microbes can only be entered if you have a TRS-80 Color Computer with at least 16K, a color television, and two Joysticks (optional).

Loading Microbes

1. Make sure that the Color Computer is connected to the television set according to the specifications listed in the Color Computer Operations Manual. Make sure that your Color Computer is turned off.

2. Connect the television to the Color Computer.

3. Insert the Microbes Program cartridge into the slot on the right side of the computer.

4. Turn on the computer and television. (Make sure the television is tuned to channel 3 or 4.)

5. (Optional) Connect Joysticks at the rear of the computer.
Playing the Game

Now that you have the program loaded, the screen will show:

MICROBES
COPR. 1981 SPECTRAL ASSOCIATES
LICENSED TO TANDY CORP
WHAT'S YOUR NAME?

You have ten spaces where you can type your name and press (ENTER). Just press (ENTER) if you do not want to identify yourself. Fill all ten spaces and your name will automatically be entered.

Next, you will be asked to enter a Skill level. You have the choice of 16 Skill Levels (0-15). Skill Level 0 is the easiest. Skill Level 15 is the most difficult. The difficulty factor controls the number of X-Factors you encounter in a game. The higher the Skill Level, the more X-Factors will appear.

Choose a Skill Level by selecting any number from (0)-15 and press (ENTER). If you accidentally enter a (1), you may clear it by using the ( ) key to backspace or by entering an illegal digit (6-9) after it. For example, if you enter 16 as a Skill Level, you will have to reenter the Skill Level.

Next you will be asked to make the control selection from three options.

The screen will show: MODE? (ENTER, 1, 2)
You have two options of controlling your bacteria Disinfector’s defense mechanisms. You can either use your Keyboard controls or Joysticks.

The Keyboard Controls

Press **ENTER** when asked for MODE to use the Keyboard to control your Disinfector. The Disinfector shoots antibiotics which kill the Microbes.

Firing Antibiotics

To fire antibiotics, press the Space Bar. Without getting penalized, you can hold down the Space Bar, which fires a constant stream of antibiotics, or you can press and then release the Space Bar for individual shots. If you miss your target, the antibiotic will reappear on the opposite side of the screen. Don’t worry though, you cannot shoot yourself.

Rotating Your Disinfector

You will find it necessary to rotate your Disinfector to fire at an approaching Microbe or X-Factor. Use the ← and → keys to rotate your Disinfector. The → key rotates the ship clockwise. The ← key rotates the ship counterclockwise.
Invisibility

Becoming invisible lets you avoid a Microbe or X-Factor which is approaching too fast to be destroyed. To become temporarily invisible, press the CLEAR key. When you release the CLEAR key, the Disinfector will have moved to a different area on the screen. You do not have control over the position, so the new position may be a total surprise. The Invisibility control can be used whenever you feel it is necessary; however, your Disinfector will be destroyed if you use it too often.

Accelerating

When the X-Factors attack, your quick reaction time is of utmost importance. Remaining in one position makes you a “sitting duck” unless you accelerate and evade the deadly X-Factor’s antibodies. To accelerate, press D. Simultaneously holding the D key, the Space Bar, and either the ← or → key will produce a pinwheel effect. Your Disinfector will rotate and emit a furious antibiotic barrage. Using the Acceleration mechanism to your advantage may require...
some practice. If you Accelerate and reach the edge of the screen, your Disinfector will reappear at the opposite side of the screen.

**Applying the Joysticks**

Using the Joysticks is not as easy as using the keyboard mechanisms (unless you were born with four hands or can play the clarinet and the piano in unison). It takes both Joysticks to activate the keyboard features as explained above. You and a friend can join forces and share the Joysticks to effectively operate the defense mechanisms.

Connect the Joysticks at the rear of the computer. At the beginning of a game when you are asked for your MODE choice, press the 1 or 2 key for Joystick control and the game will automatically begin.

Each Joystick has its own attributes. When you choose Mode 1, press the Right Joystick button to fire antibiotics. Use the Right Joystick lever to control Acceleration and Rotation. Press the Left Joystick button to achieve Invisibility.

When you choose Mode 2, the Left Joystick lever will rotate the Disinfector. Press the Left Joystick button for Invisibility. Press the Right Joystick button to fire antibiotics. Use the Right Joystick lever to Accelerate.

After you have chosen either of the Modes, the screen will show:
The Disinfector

The Disinfector is in the middle of the screen. At the lower left corner of the screen is your current number of Disinfectors (including the one already in the center of the screen). Each time you are hit by a Microbe or an X-Factor's antibody, you will lose a Disinfector. When all of your bacteria Disinfectors have been destroyed, either through collisions with Microbes or the X-Factor's antibodies, you lose.
The Microbes

Your score depends on the number of Microbes and X-Factors successfully destroyed with your missiles. There are three sizes of Microbes—large, medium, and small.

The X-Factors

An X-Factor attack will be unexpected. There is no way to predict from what direction the X-Factors will appear.

Scoring

Large Microbes = 20 points
Medium Microbes = 50 points
Small Microbes = 100 points
X-Factors = 1000 points

When you hit a large Microbe, it will divide into two medium-sized Microbes. Hitting a medium sized Microbe divides it into two small-sized Microbes.

For each 10,000 points, you will be awarded a new Disinfector and you will advance to the next Skill Level. You can accumulate up to 10 Disinfectors.
After you lose all of the Disinfectors, the screen will show the scoring results:

<table>
<thead>
<tr>
<th>NAME</th>
<th>SCORE</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JACKIE</td>
<td>10940</td>
</tr>
<tr>
<td>2</td>
<td>JACKIE</td>
<td>07640</td>
</tr>
<tr>
<td>3</td>
<td>BOBBY</td>
<td>05490</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>00000</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>00000</td>
</tr>
<tr>
<td>6</td>
<td></td>
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<td>7</td>
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<td>00000</td>
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<tr>
<td>8</td>
<td></td>
<td>00000</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>00000</td>
</tr>
</tbody>
</table>

NEW GAME (Y OR N)?
You can see that player identification, score, and Skill Level for the top nine players are shown. The scores will always be listed in descending order with the highest score in Row 1.

To continue playing, press **Y**. You will be playing at the Skill Level attained in the previous game. To change player identification, Skill Level, and/or Controls, press **N**. Again, you will be asked to enter player identification, Skill Level, and Mode. Using this feature lets you play tournaments with your friends. After entering a new player identification, Skill Level choice, and Mode choice, the Score roster will reflect the results of each player's game.

**Note:** If you wait approximately one minute to answer whether you do or do not want to play another game, something interesting happens—the demonstration screen appears. The demonstration screen shows the Microbes and X-Factors involved in playful banter and has no effect on your score. To return to the player selection screen, press the **CLEAR** key.
Starting Over

To erase all previous scores and player identifications from the Score roster, press the Reset button at the rear of your Color Computer. Pressing the Power button will also produce the same result.