

MICROFEN™

ULTIMATE TANK

FEATURES:

- * Full Color
- * One or Two Players
- * Machine Code Subroutines for Speed
- * 5 Skill Levels







DESCRIPTION: The year is 1999. Earth is being overrun by mutant spiders and giant space eyes. In an attempt to confine the movement of these creatures, the earth has been divided into battle zones which are enclosed in impenetrable force fields. Each battle zone is patrolled by 1 or 2 nuclear tanks. Their mission is to search out and destroy any aliens which invade their battle zone. The battle zone is the field of play. Each time the game is played a new and randomly assembled battle zone is created. The battle zone can be thought of as a 22 x 22 grid enclosed by a boundary which cannot be crossed. Each square on the grid may contain one and only one object.

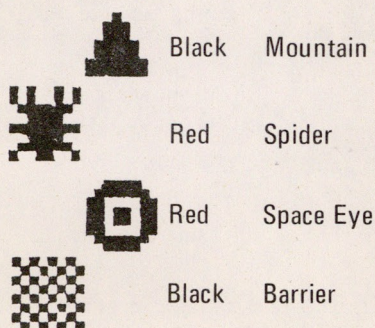
SCORING: 1 point is awarded each time a mutant spider is hit. Points are added at the end of each complete wave which is destroyed.

MEMORY: a 3K or 8K memory expander is required.

CONTROLS:	Function	Player 1 (joystick)	Player 2 (keyboard)
	Rotate left	Pull Left	"Z" Key
	Rotate right	Pull Right	"X" Key
	Move forward	Push forward	"." Key
	Fire Canon	Push Button	"/" Key
	Lay Mines & Cells	Pull Back	Space Bar
	Play Again		"G" Key

SPECIAL: There are two version of ULTIMATE TANK on this cassette. One for 3K expanders and one for 8K expanders. The 3K version appears as the first program on side 1 and the second program on side 2 of the cassette. The 8K version appears as the first program on side 2 and the second program on side 1 of the cassette.

OBJECTS:	Shape	Color	Description
		Blue	Tank Number 1
		Purple	Tank Number 2
		Blue	Energy Cell
		Blue	Atomic Mine
		Black	Crater
		Green	Tree



TANKS — Tanks are the good guys. There may be 1 or 2 tanks in a battle zone depending on the number of players. Tanks may shoot their nuclear canon a distance of 5 squares and they may lay or pick up atomic mines and energy cells.

ENERGY CELLS — When a tank enters a square containing an energy cell the tank will refuel if its energy is below 40 units. Otherwise, the tank is considered to be carrying the energy cell. A tank may only carry 1 energy cell. The energy cell may be dropped by the tank into any empty square immediately in front of the tank. When a spider enters a square containing an energy cell the spider will turn into a giant space eye. A new energy cell is transported into the battle zone with each wave of spiders.

ATOMIC MINES — An atomic mine may be dropped by a tank into any empty square immediately behind the tank. If a tank is carrying an energy cell it must be dropped before an atomic mine can be layed. Any spider or space eye entering a square containing an atomic mine will be destroyed. However, no points are awarded. Any tank entering a square containing an atomic mine will pick up that mine. Mines are replenished at the rate of 1 for each 4 waves of spiders destroyed.

TREES — A square containing a tree may not be entered by either tanks or aliens. However, trees may be destroyed by the aliens or shot down by the tanks. A crater will replace the destroyed tree.

MOUNTAINS — A square containing a mountain may not be entered by either tanks or the aliens. An alien may occasionally disintegrate a mountain.

SPIDERS — Spiders are the bad guys. They attack in waves of ascending strength, number and speed. When all the spiders in a wave are destroyed a new wave will replace them. Occasionally two spiders will fight each other instead of chasing the tanks. When this happens the spiders must be found and destroyed before a new wave will appear.

GIANT SPACE EYES — Giant Space Eyes are created when spiders enter a square containing an energy cell. Space Eyes must be hit 8 times by a nuclear canon or destroyed by an atomic mine before they are eliminated.

CRATERS — Craters are created by either a destroyed tree or an exploded mine. Craters are cleared when crossed by spiders, space eyes or tanks.

BARRIER — An impenetrable barrier surrounds the entire battle zone. It may not be crossed by the aliens or the tanks. The barrier also disrupts sensors; therefore, nothing but garbage will be detected outside the barrier.

THE DISPLAY — The display is divided into 4 areas.

TOP LINE — The top line contains the score for Tank 1 followed by the Wave indicator and the score for Tank 2. One point is awarded each time a player hits an alien with their nuclear canon. The Wave indicator is a 3 digit number. The first number indicates the level of play or speed of the aliens. The second number indicates the number of spiders in the wave. The third number indicates the number of times a spider must be hit to be destroyed.

TACTICAL SCAN — The center of the screen contains a 9 x 9 square representation of the area around each player's tank. The tank is offset slightly such that the player may see 5 squares ahead, 3 squares behind and 4 squares to either side of the tank. The tactical scan is unique in that the tank appears to remain stationary while the terrain around it moves. This provides the players with an "in the tank" feel. When the tank is rotated right the terrain around the tank is rotated 90 degrees left and vice versa. When the tank moves forward the visible terrain is shifted from top to bottom eliminating the bottom row and making a new row of terrain visible at the top. This type of display may make play difficult at first but you will get used to it. The excitement mounts when you do not get to see the entire battlefield all at once. You never know what is just outside your view.

STRATEGIC SCAN — The Strategic Scan aids in your sense of position and direction on the battlefield. It provides a compressed view of the entire battlefield as you might see it if you were flying above and watching the action. The relative location of your tank and its direction is displayed.

INDICATORS — The indicators display remaining energy and mines.

HOW TO PLAY

The display will ask for the level of play. A number from 1 to 5 may be entered. Entering any other number may require reloading of the cassette tape. The display will ask for the number of players. 1 or 2 players may play. Entering any other number may require reloading of the cassette tape. The display will ask if you want to sneak a peek at the battle zone. Enter a 9 if you do. Enter any other number if you do not. Be certain to push the RETURN key after each entry.

After a few seconds the game will begin. The game is played in turns. A signal will appear above the Tactical Scan when it is that tank's turn to move. There are 20 waves per level for a total of 100 possible waves if the game is begun at level 1. The game is more difficult to play if started at a higher level. Spiders attack and drain 8 times their strength from your energy when they collide. The game ends when either tank runs out of energy. The entire battle zone and scores will be displayed when the game ends.

TIPS ON TACTICS

Any game is more enjoyable if you can pound the bad guys a little. Here are a few tips:

1. Collect as many energy cells as possible. Store them in a corner of the battle zone in an area protected by mountains on both sides. Mine the mountain pass to keep spiders out. Pack the energy cells and mines tightly to avoid open squares which spiders can hyper-space into.
2. Don't waste mines. Save them to destroy space eyes or to get yourself out of a tight spot.
3. Trying to outrun spiders at level 3 and above is a mistake. They are more maneuverable than you. If you run you will only waste energy and they will catch you anyway. Blast them with your canon until they munch on you! Their ability to drain your energy, is reduced each time they are hit.

4. For 2 players - Restrict your movement as much as possible. There are twice as many energy guzzlers to feed on the same number of energy cells. Remember though, rotating uses no energy.
5. Stay together and form a crossfire so you can provide fire support for each other. Make sure you have a clear line of fire to the end of your display.
6. Stay near your base when the spiders are at strength 3 and 4. Search for energy cells when they are at strength 1 and 2.
7. If you cannot make it back to base, conserve your energy. Use mines to ward off spiders. Have your partner bring you a base.
8. Consider yourself an expert if you can turn the wave indicator over when starting at level 3.



HOW TO START PROGRAM

1. Turn off computer
2. Determine if any memory expansion devices should be plugged in.
3. Turn on computer.
4. Put cassette in cassette player.
5. Rewind cassette to beginning.
6. Hold down the left "SHIFT" key, then push the RUN/STOP key.
7. Push the "PLAY" button on the cassette player.
8. After the program has finished loading, push the STOP button on the cassette player (NECESSARY FOR PROPER OPERATION).
9. Follow any additional steps which may appear in the program instruction sheets.

WHEN YOU ARE FINISHED

You may find that you are not able to run your other programs after loading this cassette. The only way to return your computer to normal is to turn the power off and then back on again.

IN CASE OF TROUBLE

1. Make sure cassette is rewound to beginning.
2. Flip the cassette over and rewind it. There is a copy of the program on both sides.
3. Not all the cassette players are aligned alike. You may have to return your cassette player to your dealer to have the playback head realigned before this program will load.
4. If all else fails, the cassette may be returned to your dealer, for exchange only, within 30 days of purchase (Please test program as soon as you get it so we may exchange any defective cassette before warranty expires.) *

* NOTE: Cassettes will not be exchanged if difficulty is caused by cassette player head misalignment. All cassettes are produced using a single standard head alignment. Replacement cassettes would not function properly with a misaligned head.