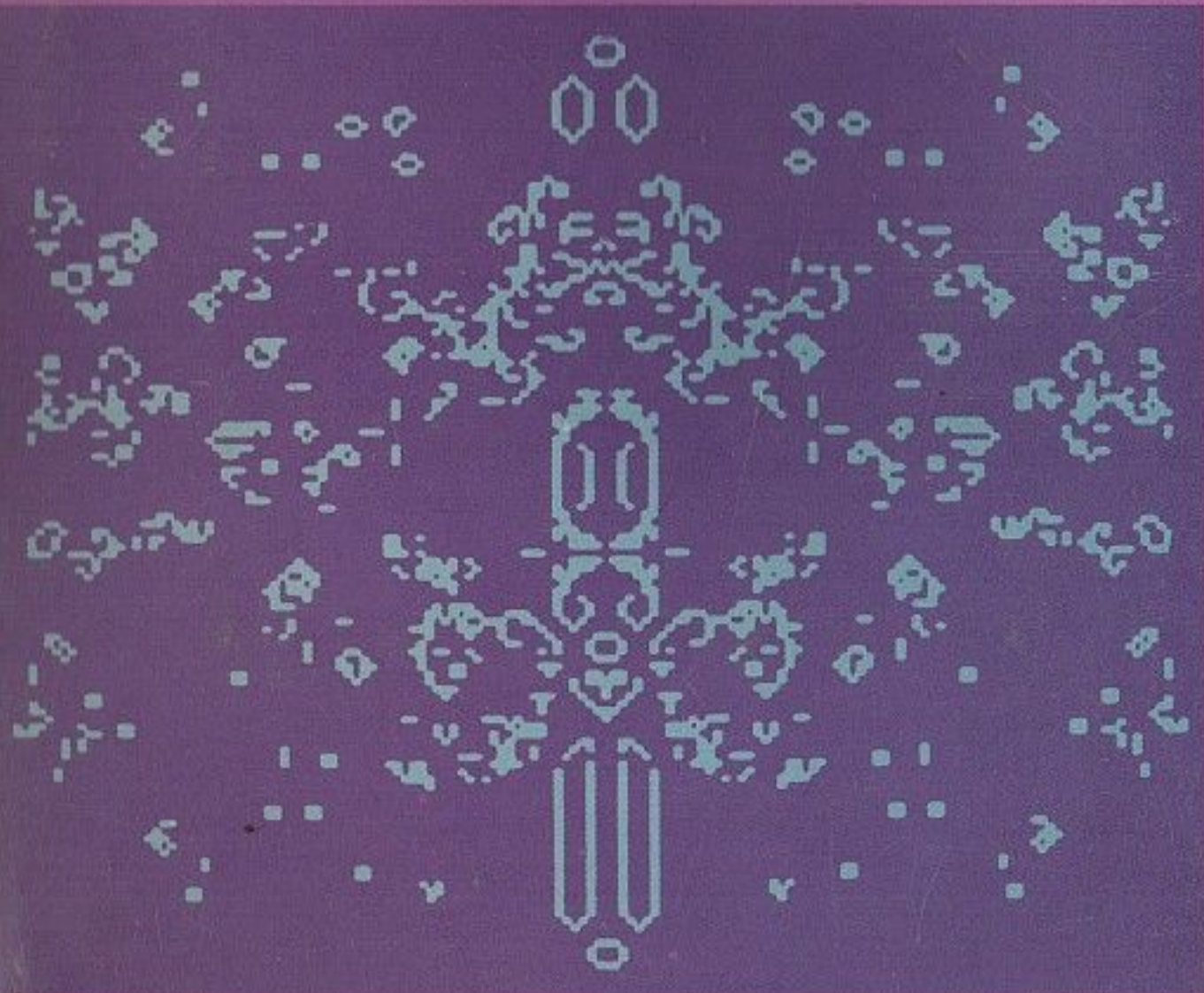


A fast game of LIFE using
high-resolution graphics

ACORNSOFT LIFE



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Entering the Colony

First the graphics mode should be selected. Lower modes cover a smaller area but are faster than higher modes.

Graphics modes

The following modes can be used:

Mode:	Resolution:		Generations/minute:
	X:	Y:	
1	128	64	122
2	128	96	89
3	128	192	47
4	256	192	36

The display will then clear, and a dot cursor will appear in the centre of the screen.

Cursor

The cursor can be moved with the following controls

Z : left [: up
X : right / : down

Holding the CTRL key at the same time draws a line in white and holding the SHIFT key draws a line in black.

Drawing Lines

A point can be marked by pressing '.' and a cross will be centred on that position. If after moving the cursor 'D' is pressed, a line will be drawn from the current position to the marked position.

Blank area

Areas of the screen can be blanked by moving the cursor to the bottom left-hand corner of the area and pressing '.', then moving to the top right-hand corner and pressing 'B'. This will remove the rectangle between the two points.

Generating New Colonies

To start the generation press RETURN. The generations will be displayed continuously, or suspended by holding the REPT key down.

If CTRL is pressed the program will wait after each generation for a key to be pressed. This mode can be stopped by pressing REPT.

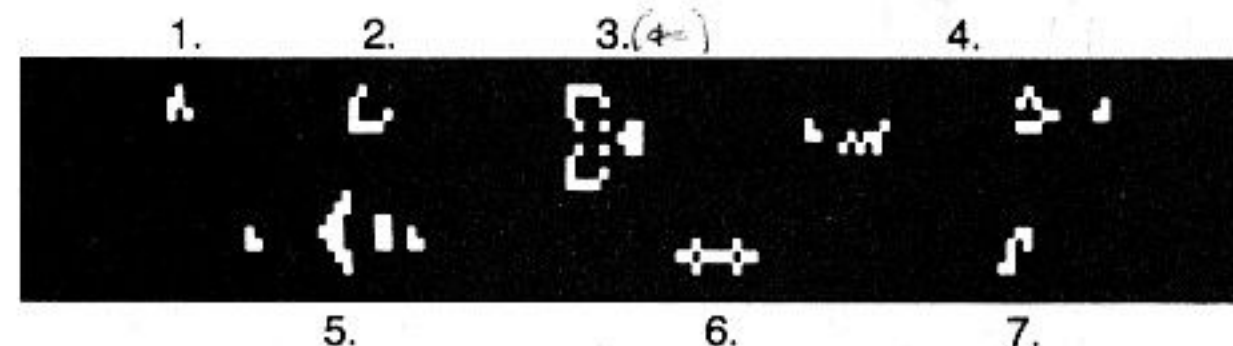
When REPT is pressed, or when in single-generation mode, the generation number is displayed in the top left-hand corner of the screen.

To return to edit mode press SHIFT. This allows alterations to be made to the pattern. RETURN will start the generation again.

Predefined Patterns

Several useful patterns are predefined, and can be recalled in any orientation at any position on the screen. Move the cursor to the required position, and press the number of the pattern followed by one of Z, X, [, or / to define the rotation of the pattern. Holding SHIFT at the same time reflects the pattern; thus all 8 orientations of each pattern can be obtained.

The program comes with 7 predefined patterns:



1. Glider – moves diagonally
2. Small spaceship – moves horizontally or vertically
3. Flying machine – moves horizontally or vertically
4. Glider gun – fires out gliders
5. Queen Bee – oscillating shape
6. 15 cycle – oscillator with a period of 15
7. Eater – eats various small blocks of life

Load and Save

The whole screen can be stored onto cassette by typing S. Start the tape recording and then type a character to identify the picture. The picture will be stored as LIFE Px where x was the character typed.

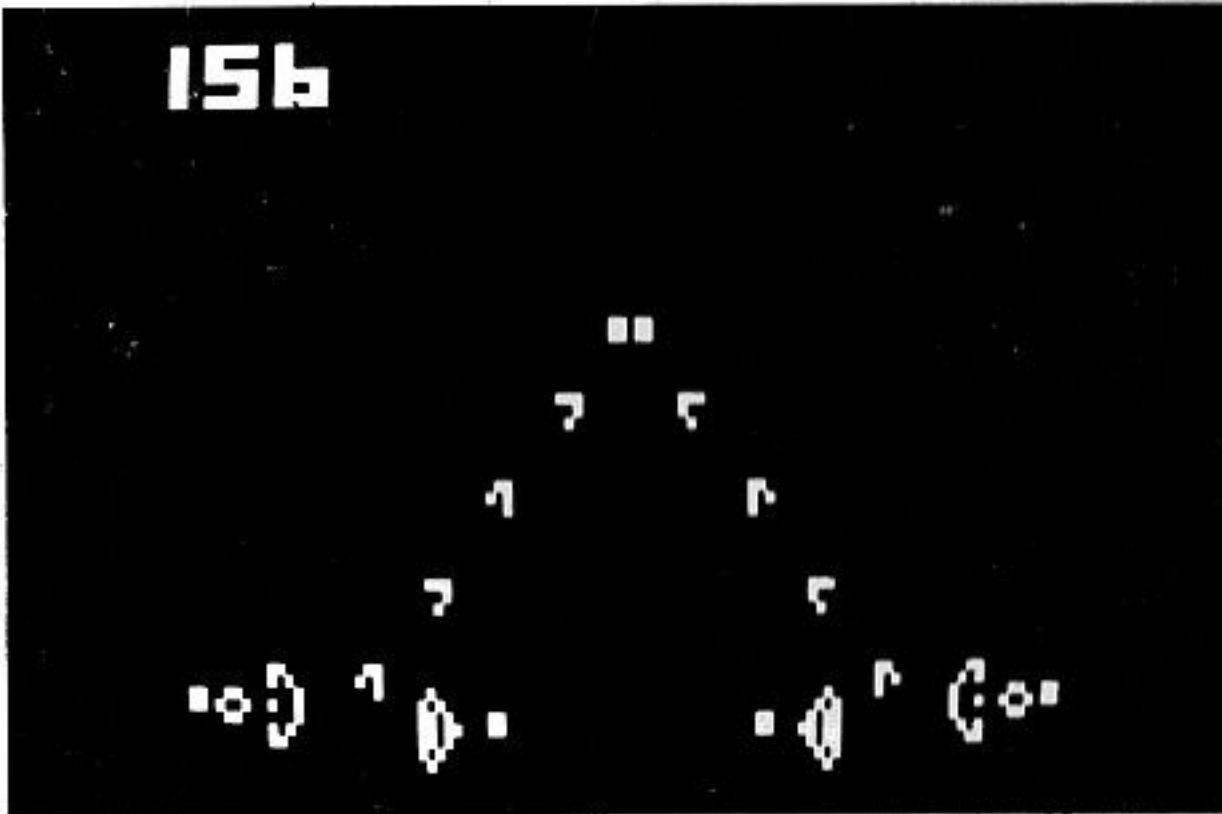
To load a picture from cassette type L followed by the last character of the title. Thus different pictures can be stored on the same cassette with different names. Always make sure that the right graphics mode has been selected before loading a saved picture.

Life Pictures

Five life patterns are provided on the ATOM LIFE cassette. These are:

Title:	Mode:	Description:
LIFEPA	1	Newgun – a different glider gun
LIFE PB	1	Oscillator
LIFE PC	1	Oscillator
LIFE PD	1	Poisoned cell
LIFE PE	4	Grid pattern – produces many pretty patterns

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The ATOM LIFE package is one of the fastest versions of Life available on any microcomputer, and will process a full 256×192 screen in less than 2 seconds, or an 128×64 screen in under $\frac{1}{2}$ second. It uses the standard set of rules for survival and reproduction. These rules, though simple, give rise to a very complicated and fascinating selection of patterns. Some patterns are stable, others die out, some oscillate between different states, and some (such as the glider and the spaceship) move with successive generations.

A cursor-drawing system allows any shape to be drawn on the screen. The program comes complete with 7 programmed shapes, which can be called up in any orientation at any position on the screen. These shapes are:

Glider, small spaceship, flying machine, glider gun, queen bee, 15 cycle, and eater.

Complex patterns can be saved to cassette and reloaded, and 5 interesting patterns are provided with the program:

Newgun, two oscillators, a poisoned cell, and a grid pattern.