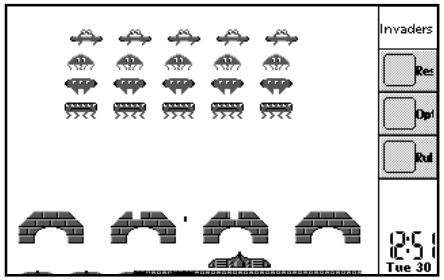
Invaders: First Wave

Damian Walker reviews Invaders, a good first effort by Hungarian author MaSterV.

Space Invaders should need no introduction. Not only is it one of the earliest video games created, but it has been converted to every computer imaginable, and it has spawned countless clones over a period of more than three decades. It's virtually impossible to know of the existence of computers without having heard of Space Invaders.

In case you need a reminder, the object of the game is to shoot down a horde of alien space ships which are slowly descending from the sky. To do this you control a ship of your own, which sits at the bottom of the screen and can move left and right, and fire missiles at the invaders. You have four defence bases which you can hide behind as the descending aliens fire missiles at you, but these will gradually get shot away by the aliens. Occasionally a mother ship flies across the sky beyond the descending horde, and shooting this down will gain extra points. You have three ships, and if you let the aliens hit them all your defence fails.



Invaders running on the Osaris

It is a popular game, and should be reasonably straightforward to program, making it a good choice as one's first full EPOC program. This is what the Hungarian author known as MaSterV has done, and readers of my comments about the quality of the game should bear in mind that this is the author's first release.

What's impressive for a first release is that this game runs on any EPOC32 device from the Osaris to the netBook. This is done by keeping the number of alien ships down: there are 20 instead of the 56 of the original arcade game. This makes the game seem optimised for the Osaris screen, as the aliens get lost on larger displays. A toolbar is used, but has blank rectangles where the icons should be, making the game look unfinished. Other than this the graphics look good, with textured defence bases and animated aliens.

Sound is limited to occasional beeps and the odd sampled sound. If you have an Osaris, these need to be switched off before you begin, otherwise you'll hear the default Chimes sound the first time you hit an alien. This is a defect of many games, the authors of which didn't know about the Osaris's lack of sound and its unusual way of trying to play samples—including my own early games.

Unfortunately the positives are outweighed by a big negative—speed. The game is completely unplayable on the Geofox, Series 5 and the Osaris. It is somewhat sluggish even on the Series 5mx. Only on the netBook will things move along at a reasonable rate. This problem could have been solved by making things move in bigger jumps, rather than one pixel at a time.

Playing on the netBook brings to light another problem—the game supports larger screens simply by providing more space for the same small block of aliens. As I mentioned earlier, they seem to get lost on the larger screen, and your missiles take quite a while to reach them. On the other hand, the four defence bases packed into the Osaris screen provide more than 50% cover, which I'm sure isn't what the original Space Invaders designers intended.

Again, one has to consider that this is the author's first EPOC program before taking these criticisms into account. But nevertheless the game isn't playable as it stands, and I wish the author had given it a bit more polish before release—or released the source code with it.

Author	MaSterV
URL	psion.cyningstan.org.uk
Licence	Freeware
Systems	All EPOC32 machines
Rating	☆

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In this issue: Mole Hunt

Welcome to another, late, issue of *EPOC Entertainer*. This month I was involved in the local and national elections here in Britain, which have consumed all the time I would have spent on the magazine. Now they're out of the way and I am no longer on the local council, I have plenty of free time to spend playing with my little Psions. So, while I'm not promising anything, I'm confident that there should be no more late issues for a while!

My plea for help in the last issue has been answered, as you'll read below. While I don't yet have all Eric Schrafstetter's games on the EPOC Game Database, I am well on the way.

Games programming tutorials have made a return this month, with the first in a series on pen-based input. Those who follow this tutorial will end up with a playable game that can be expanded into something more presentable.

The reviews this month are biased towards the arcade style of game. *Klax5* is an action game, and *Invaders* is a clone of the famous arcade game of yesteryear.

As always, comments and contributions are welcome. If there's anything you want to see added to the magazine, or anything you want to add, then please get in touch at the usual address.

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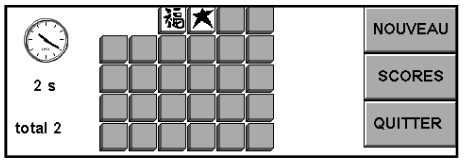
Software News

With readers's help, more information on Eric Schrafstetter's games is being added to the EPOC Games Database.

In last month's *EPOC Entertainer*, I asked for readers' help in locating the games of Eric Schrafstetter. Some corrupt versions of these games had been floating around and these were the only version I had been able to obtain.

Until now. Thanks to the help of Thomas Ulrich, Richard van Stappershoef, and John Spillett, I now have a working version of *Blocks*, which has been added to the EPOC32 Games Database.

I'm chasing up leads for *La France* and *Labyrinthes*, which should hopefully be added to the games database soon. I'll keep you informed in these pages, and the games may at some point be the subject of review.



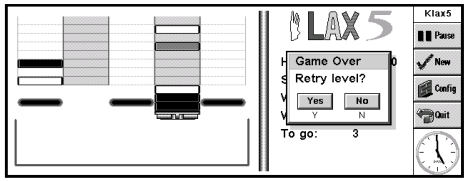
Blocks running on the Revo.

Unduly Klax

Damian Walker reviews J S Greenwood's Klax5 version of the popular arcade game..

In 1989 arcade giant Atari wanted a new game to succeed Tetris. The game Klax was developed by Dave Akers and Mark Stephen Pearce, and released into the arcase by Atari in 1990. Shortly afterwards it was released on various consoles and computers and became quite popular, though it never did supersede Tetris. Klax5 is a port by J. S. Greenwood for the Psion Series 5.

The game is said to be inspired partly by Tetris and partly by Noughts and Crosses. Coloured blocks, or shaded or patterned blocks on monochrome machines, approach along a conveyor belt towards a paddle which the player controls. If the player fails to catch a block with the paddle, it falls and is lost. When a block is caught it can be deposited neatly onto one of five piles.



When rows of three or more blocks of a given colour are laid on the piles, those blocks disappear, increasing the score and leaving more room to deposit more blocks. Rows can be formed vertically, diagonally or horizontally. The game continues until a set number of blocks have been dropped, mimicking the lost lives of other types of arcade game.

This is one game where the instructions do need to be read. Where in some other games it becomes quickly obvious what the point is, in Klax there are numerous ways to lose the game before you even notice blocks have to be lined up in rows.

In Klax5 a simple approach to presentation has been taken. While the original Klax featured a 3D perspective view of the conveyor belt, in Klax5 it is 2-dimensional, and the blocks appear to be falling down Tetris-style rather than being carried out of the screen. This approach was also taken for the monochrome Gameboy version of Klax, but I think the wide screen of the Series 5 would have better suited a perspective view. It might have been more difficult to draw, but it would have been well worth the effort.

On a more positive note the graphics are clear, and a combination of shades and patterns have been used to make one "colour" easily distinguishable from another. The game fares well with sound, and some interesting effects have been added to spice up the game.

A minor complaint about the user interface is that not all the keys are listed in the game or the help file, but are relegated to a text file in the application directory. The user interface is further spoilt by a speed problem. The game appears sluggish and sometimes unresponsive even with the speedy processor of an Ericsson MC218. Sometimes menus take a while to appear, and the game pauses when a row of blocks is being removed from the piles. Sometimes toolbar buttons fail to register when pressed.

Despite its problems with presentation, Klax5 is still an exciting game to play. It seems to reproduce well the game play of its original, and I found it difficult to put it down to get on with the rest of this review. Like all action games, if you enjoy it then you can play it over and over again, with the presence of a high score table urging you to try and improve your performance each time you play.

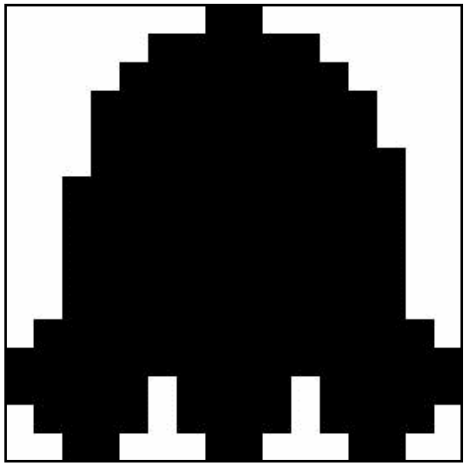
With better speed and presentation it might have been a four-star game, but as it is I can still give it a respectable score and recommend that you give it a try.

Author	J S Greenwood
URL	psion.cyningstan.org.uk
Licence	Shareware
Systems	Series 5/5mx
Rating	☆☆☆

Mightier than the Sword

The start of a brand new programming tutorial on pen input, by Damian Walker.

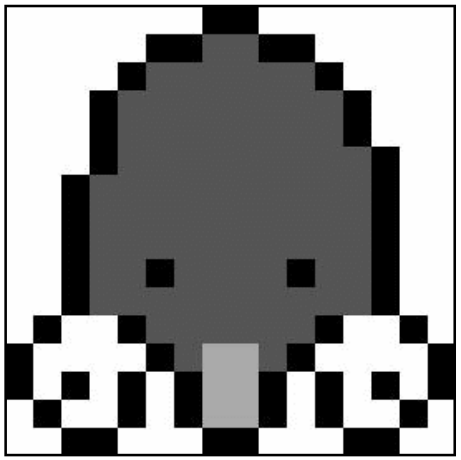
You might remember in *EPOC Entertainer* 8 there began a programming tutorial on reading the keyboard, called *Taking Control*. This is good for some types of game, like action games where a character moves in four directions around the screen. But other games are better suited to control with the stylus, or pen, and that is what this tutorial is all about.



The by-product of this tutorial will be a playable game, similar to the old *Prairie Dog Hunt* games of yesteryear. The game will be called *Mole Hunt.* The object of the game is to watch for moles popping up on the lawn, and hit them with your pen. If you miss three, the game is over and your score is shown.

The principles of pen input are based on those for keyboard input. The keyboard is best read with the keywords *GETEVENT32* and *GETEVENTA32* as explained in the *Taking Control* tutorial. These are also able to read pen events, so you'll see them again here.

Another previous tutorial I'll be drawing on is *The Small Screen*, which showed how to write games that will work properly on any size of screen from the Osaris to the netBook. I've taken a simplistic approach here: all machines will show a 320×160 window in the middle of the screen. This is partly so that this tutorial's example isn't taken over by a lot of screen-drawing code. And it's partly because the *Mole Hunt* game would probably be more difficult on larger screens if the display is expanded to fit. As in previous tutorials, you're invited to make good the program's deficiencies and to expand it as you like.



Before we begin the task of programming this masterpiece, we must draw the graphics. For this you need to use Sketch, built into every EPOC32 machine except the Revo, whose owners can download it from the *EPOC Entertainer* web page. The game needs just two 16x16 pixel graphics: the mole and its mask (for an explanation of masks see *EPOC Entertainer* 1). The graphics I have used look similar to the ones reproduced here.

I would recommend you create a folder for these, say *C:\Documents\MoleHunt*. The mole graphic needs to be exported as an EPOC picture file named *Mole.mbm*. The silhouette mask needs to be similarly exported as *Mask.mbm*.

In next month's tutorial I'll be giving you the first part of the program, its main procedure, and I'll be explaining the game logic.