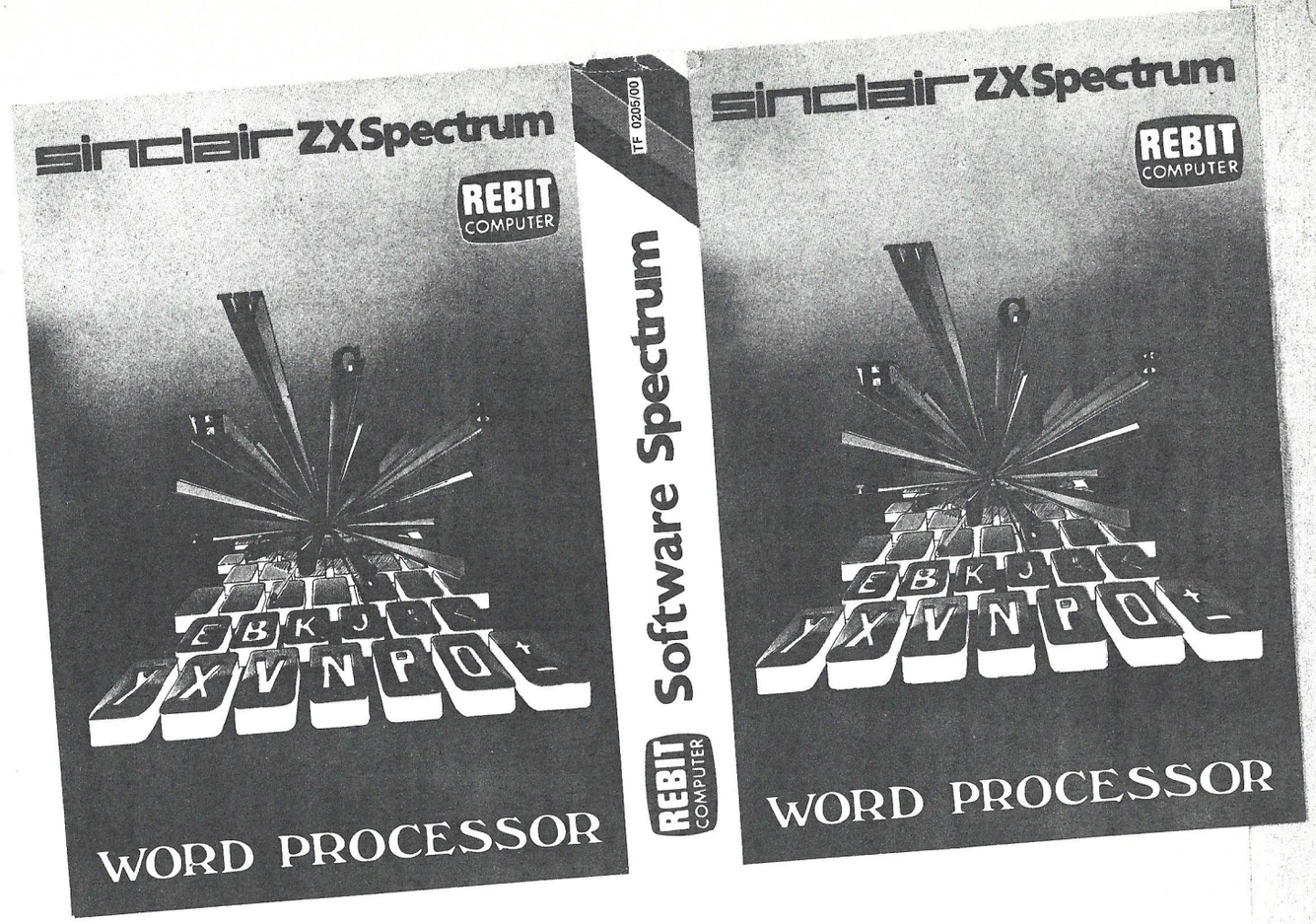

sinclair ZX Spectrum
REBIT COMPUTER
WORD PROCESSOR
TF 0205/00
Software Spectrum
REBIT COMPUTER
sinclair ZX Spectrum
REBIT COMPUTER
WORD PROCESSOR

WORD PROCESSOR

SPECTRUM 48K

La cassetta contiene sul lato A il programma ELABORAZIONE TESTI per lavorare con la stampante ZX-PRINTER a 32 caratteri, sul lato B il programma per lavorare con la stampante GP-100A SEIKOSHA collegata allo SPECTRUM con l'interfaccia CENTRONICS/RS 232.
Nel primo caso si possono trattare e stampare testi componendo righe di 31 caratteri; si ha quindi corrispondenza tra la riga sul video e la riga di stampa.
Nel secondo caso le righe di testo sono di 63 caratteri e una riga di stampa corrisponde a due righe sul video.

Per caricare e lanciare:
LOAD "wp" oppure
LOAD ""

Questo programma consente di preparare testi componendoli sul video, di memorizzarli su nastro e stamparli.

I testi possono essere richiamati da nastro per correggerli e modificarli. Ad ogni testo viene assegnato un nome quando si memorizza su nastro; tale nome serve per richiamarlo in memoria dal nastro. La lunghezza di ogni testo può essere:
- 1000 righe di 31 caratteri ciascuna per il programma del lato A,
- 500 righe di 63 caratteri ciascuna per il programma del lato B.

Le spiegazioni che seguono sono valide, salvo avviso contrario, per entrambe le versioni del programma.
L'utente è guidato nel suo lavoro dai messaggi che compaiono sul video. PRIMA DI INIZIARE A LAVORARE SI DEVONO LEGGERE ATTENTAMENTE QUESTE SPIEGAZIONI.
Il programma parte da solo dopo il LOAD. Viene subito chiesto il numero delle righe che si vuole trattare. Se non si conosce a priori questo dato è meglio rispondere:
- con 1000 per il lato A,
- con 500 per il lato B,

che sono i valori massimi consentiti.
In fase di memorizzazione sono conservate su nastro tutte le righe dichiarate all'inizio anche se non sono state usate. È una buona regola scrivere sull'etichetta della cassetta il nome del file e il numero di righe che lo compongono.
Il numero di linee dichiarato inizialmente deve essere mantenuto anche nelle successive fasi di aggiornamento del testo e quindi è bene prevedere a priori una lunghezza adeguata.

Dopo compare il MENU principale del programma:
0 FINE PROGRAMMA
1 INIZIO NUOVO TESTO
2 PREPARAZIONE TESTO
3 STAMPA TESTO
4 LETTURA DA NASTRO
5 MEMORIZZAZIONE SU NASTRO
e viene chiesto di scegliere la funzione desiderata.

.0 fa uscire dal programma, si perdono testo e programma.
Si deve usare questa funzione dopo aver memorizzato il testo che si è preparato.

.1 cancella il testo presente in memoria e fa ripartire il programma dall'inizio. Viene chiesto nuovamente il numero di righe da trattare.

.2 consente di preparare un nuovo testo o di modificare quello presente in memoria.

.3 stampa il testo che è in memoria sulla stampante.
La stampa può essere interrotta premendo un tasto.

.4 legge in memoria un testo da nastro dopo averne chiesto il nome.

.5 memorizza un testo su nastro e verifica la registrazione. Viene richiesto il nome da assegnare al testo. Durante la memorizzazione viene chiesto due volte di premere un tasto per avviare la registrazine; infatti sono memorizzati due file: il primo è il testo, mentre il secondo contiene le informazioni necessarie per rielaborare il testo stesso.

FUNZIONE 2: PREPARAZIONE TESTO

Durante la preparazione del testo appaiono alla linea 23 due indicatori:
LINEA = numero linea attuale
PUNTATORE = numero linea dove è posizionato il puntatore.

Inizialmente LINEA e PUNTATORE sono al valore 1. Mentre LINEA si modifica con lo sviluppo del testo o con appositi comandi, PUNTATORE si modifica solo con appositi comandi.

Il cursore lampeggia all'inizio della linea 20 e da questa posizione si sviluppa il testo effettuando uno scrolling verso l'alto quando una linea è completa. Quando una linea è completa essa viene sistemata inserendo tra le parole gli spazi necessari per avere l'allineamento a destra; tale operazione si chiama "giustificazione" del testo.
Se si va a modificare una linea di testo già accettata, con inserimenti o cancellazioni, il programma non rifà la sistemazione degli spazi e deve pensarci l'utente, a meno che riscrivendo non si superino le dimensioni della linea stessa. In questo caso si deve fare attenzione a non danneggiare con sovrascrittura la linea seguente.
Durante la scrittura del testo si usano i tasti in modo normale:
- senza SHIFT per le lettere minuscole e per le cifre;
- con CAPS SHIFT per le lettere maiuscole;
- con SYMBOL SHIFT per i caratteri grafici scritti in rosso sui tasti (non si possono ottenere i tre caratteri che si trovano sui tasti Q, W e E).
- i caratteri grafici che sono scritti in rosso sotto i tasti si ottengono usando SYMBOL SHIFT insieme a un tasto secondo lo schema che segue:

tasto I per © (copyright)
tasto S per
tasto U per]
tasto Y per [
tasto G per }
tasto F per {
tasto D per \
tasto A per ¬.

I tasti delle cifre nimeriche usati insieme a Caps Shift agiscono come comandi quando si usano, trovandosi con il cursore in una posizione qualunque del video. L'effetto è il seguente:
.1 cancella la linea attuale;
.2 fissa CAPS SHIFT in ON (lettere maiuscole);
.3 mette CAPS SHIFT in OFF;
.4 copia il video su printer;
.5 cursore a sinistra;
.6 cursore in giù;
.7 cursore in su;
.8 cursore a destra;
.9 crea uno spazio;
.0 cancella un carattere.

I comandi per controllare la stesura del testo possono essere dati solo all'inizio di una linea e devono essere preceduti dal carattere che si ottiene usando insieme i due SHIFT; dopo questo carattere si deve scrivere la lettera scelta in carattere maiuscolo e premere ENTER.
Il comando può essere dato anche scrivendo sopra i caratteri iniziali di una linea di testo; essa non viene danneggiata. I comandi Gn ed Mn sono validi solo se non sono seguiti da altri caratteri; se si usa una linea già scritta si possono cancellare i caratteri che seguono il comando senza danneggiare la linea di testo sulla quale si è posizionati.

I comandi disponibili sono:

- T cursore alla prima linea;
- B cursore all'ultima linea;
- Gn sposta il cursore alla linea n, questa diventa la linea attuale;
- Mn sposta il puntatore alla linea n; questo serve come punto di inizio o di fine per individuare la parte di testo da cancellare, che viene delimitata dal puntatore e dal cursore;
- D cancella le linee comprese tra il puntatore e il cursore;
- L lista il testo con continuità sul video, la lista si ferma premendo un tasto;
- I inizia l'inserimento di una parte di testo nel punto dove si trova il cursore (prima di inserire si deve posizionare il cursore all'inizio della linea dove si vuole scrivere). Dopo aver dato il comando I, si scrive il testo e, dopo l'ultimo ENTER, si deve dare il comando C di chiusura inserimento. Naturalmente inserendo non si può sovrapporre la parte nuova di testo a quello già esistente; questo potrebbe capitare per mancanza di linee disponibili;
- C chiude la parte di testo inserito. Questa funzione viene svolta automaticamente quando le linee disponibili sono terminate;
- E ritorna al MENU senza perdere il testo che è in memoria.

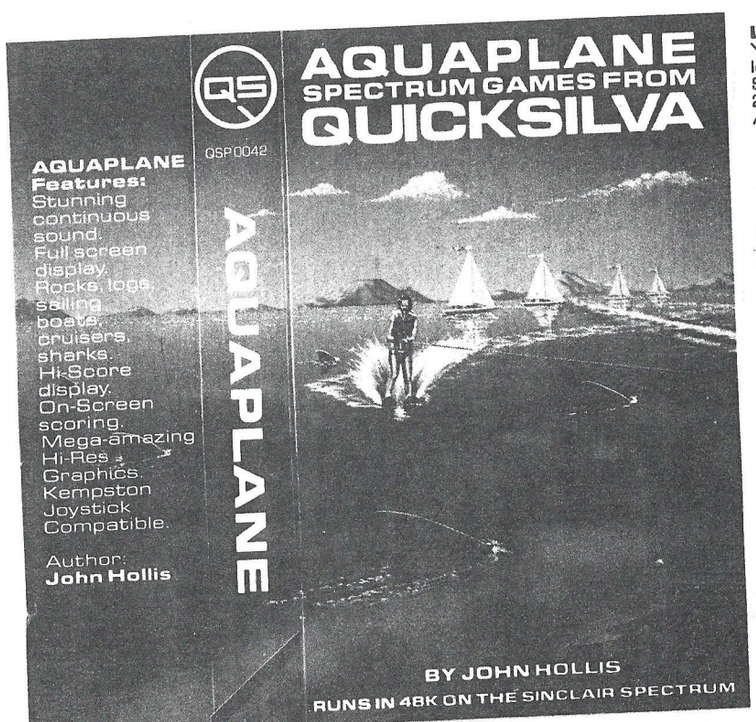
I messaggi che terminano con "?" aspettano come risposta "s" per "Si" e "n" per "No" anche in lettere maiuscole.
Se per una qualunque ragione o si preme il tasto BREAK (SHIFT + SPACE) o compare un messaggio del sistema: scrivere
GO TO 100 seguito da ENTER

per veder ricomparire il menu principale senza perdere il testo che è in memoria.
NON USATE IL COMANDO <RUN> poichè esso cancellerebbe il testo presente in memoria!

Per non avere problemi in fase di memorizzazione ricordatevi di scollegare la presa EAR almeno da una delle due parti. Per gli altri dettagli sull'uso del registratore attenetevi alla solita procedura.
Nella versione del lato B, quando si attiva la funzione di COPY, si può scegliere tra carattere normale e carattere ingrandito.
Si consiglia di mantenere sempre su cassetta la versione precedente di un file di testo che viene modificato, per ragioni di sicurezza.

TEMPO DI CARICAMENTO:
- lato A: 2' circa
- lato B: 2'15" circa

Per i file di dati il tempo di caricamento dipende dal numero di linee scelte; per il numero massimo di righe consentite è di circa 2'35".



LOADING THE PROGRAM

You will find the procedure for loading a program in the Spectrum basic manual, chapter 20. The procedure for loading Aquaplane is given below:

1. Connect the ear socket of the Spectrum to the ear socket of your cassette recorder.
2. Make sure that the tape is wound to the beginning.
3. Set the volume control to a suitable level.
4. Set maximum treble, minimum bass on the tone controls.
5. Type Load ""
6. Press ENTER
7. Start the cassette recorder.
8. The program will RUN itself once loaded and will provide instructions.

If the program does not load correctly try a different volume level.

SOFTWARE FOR THE SINCLAIR SPECTRUM FROM QUICKSILVA

AQUAPLANE

THE STORY

This morning I had risen early to take in the brilliant sunshine of the Cote d'Azur in the height of the season. The contrasting blues of sea and sky provide a perfect backdrop as I relax with a Pernod and lemonade and lots of ice. Only the occasional sound of seagulls disturbs my peace as I become engrossed in volume three of the Chronicles of the Faluvian Empire. What an epic book!

However, by 10.00 a.m. the temperature has reached the low nineties and the blistering hot sand is now unbearable to lie upon. I must cool off. My companion suggests water ski-ing. Well the sea seems calm enough for a mere novice like myself.

The boat is started and is soon skimming across the bay whilst I aquaplane along behind it, parting the still blue surface of the water like a giant cheesewire. I see rocks and driftwood ahead — we must have come too far. I shout to my companion, but my voice is lost beneath the steady throbbing of the speedboat's powerful engine. Soon we are both ducking, weaving, and threading our way through, fighting for survival.

Thank God! The rocks are gone, but ahead I see regatta day. Yachts follow eccentric tracks across our path, but miraculously we find a way through without fouling the line, only to be met by a flotilla of "gin and tonic" cruisers being driven by inexperienced rich kids who all seem determined to finish me off. Don't they know there's a speed limit this far inshore? Ahead I see sharks. We can't turn with so many "G and T's" in the way. I hope I live to regret this escapade, or will I provide these mean marine devouring machines with an early lunch?

MICROMEGA

STARCLASH

by
Derek Brewster

For 16k or 48k Spectrum

For 16k or 48k Spectrum

QTC 723

STARCLASH

- Four completely different enemy waves to battle.
- Twin reactor cores alternate in Mothership — you must hit the live one to destroy the ship.
- Arcade standard high resolution movement.
- Kempston joystick compatible.

STARCLASH by Derek Brewster

TO LOAD: Press J key then, holding down the red symbol shift, press the P key twice. Screen should show ***LOAD*** *" ". Hit ENTER key then press PLAY on cassette machine. After loading, choose joystick or keyboard control by pressing the appropriate key.*

N.B. *if you want to use the Kempston joystick it must be fitted* **before** *switching the computer on and loading the tape.*

Keyboard controls are: **Z** *= left;* **X** *= right;* ***BREAK/SPACE*** *— fire.*
Press **S** *to start or restart the game, and* **H** *to hold the action.*

You are test-flying a new Starfighter in a deserted sector of space . . . suddenly an Imperial Strike Force jumps from hyperspace in attack formation! Your Escorts are regrouping to defend the home base and you cannot out-run the enemy fleet . . . you must fight it out alone and do as much damage as you can before your own destruction . . .

The enemy Mothership is protected by four different waves of defence fighters — and each wave destroyed leads to the next. If, incredibly, you fight your way through, you then face the mighty Mothership. You must place a laserbolt in whichever of her two power-cores is active. She will explode and your laserbolt generators will be recharged by the radiation.

Your display shows at top laserbolt energy and which wave you are attacking, and at bottom right shields remaining . . . don't waste them!
Watch too for the fiery meteors, and the very best of luck . . .!

INSTRUCTIONS

To load program type **LOAD "MUSIC"** (or **LOAD " "**) and press **ENTER.**

Follow the screen instructions to select key and time signatures and set speed. If you are not familiar with musical notation, look at the first of the tunes printed on the back of this cassette inlay. The first thing you see is the treble clef, which the program prints automatically. Then comes the key signature, which in this case is E flat major, but you don't need to know that – just count up the flat symbols and use the cursor as directed to tell the computer you want three flats. The symbols in the key signature of the second tune are sharps.

Next comes the time signature – 6/8 in the first tune. The bottom figure tells you the value of each beat and the top figure tells you how many of them there are in each bar. This tune has six "eighth notes" (or quavers) in each bar, which is exactly what you will see in the fourth bar of the tune. Sometimes quavers have a bar joining their stems together instead of separate tails.

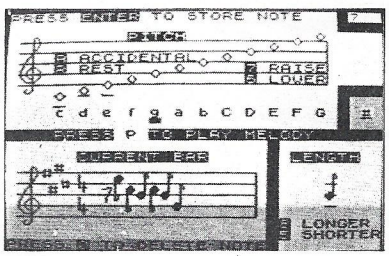
Other notes have longer time values, so fewer will fit in a bar. The first bar has two dotted crotchets (don't worry about the names, you don't need them to operate the program), which are each worth three quavers, and the last bar is filled by just one note – a dotted minim. A dot after a note (or rest) makes that note half as long again as it would normally be.

The second tune has a 4/4 time signature (sometimes written as a large C), which means each bar will take four "quarter notes" (or crotchets) or their equivalents. So, the second bar has three one-beat crotchets, followed by two half-beat quavers to make up the full four beats. The last bar has two minims – each as long as two crotchet notes.

The opening bar begins with a minim rest (two beats) and a crotchet rest (one beat). Each type of note has a corresponding rest which means pause for the length of time that note would last. If a tune starts mid-way through a bar you must remember to fill the empty space at the beginning with the appropriate rests, if they are not already printed in the music, so that the program will put the bar lines in correctly.

The third tune has no sharps or flats in its key signature, but it does have accidentals – extra sharp or flat notes not shown in the key signature – at various points. The second note in the fifth bar is an accidental – in this case a sharp, which makes the note slightly higher than it would normally sound. A flat would make the note slightly lower. Accidentals can also be naturals (a bit like a sharp sign with two legs missing). These are used to cancel out a sharp or flat in the key signature temporarily, making the note revert to its natural pitch.

After you have selected a speed, the main note selection screen will appear with the key and time signatures you have chosen at the beginning of the Current Bar section. To enter a note, set its Pitch, using the up and down arrow keys (**7** and **6**) to move the cursor until it is under the note in the correct position on the stave (the five horizontal lines). Then use the right and left arrow keys (**8** and **5**) to set the Length of the note. When you have the right combination of Pitch and Length, press **ENTER** and the note will appear in the Current Bar. Check carefully to make sure it is exactly the note you wanted. If it isn't, press the **DELETE** (0) key.



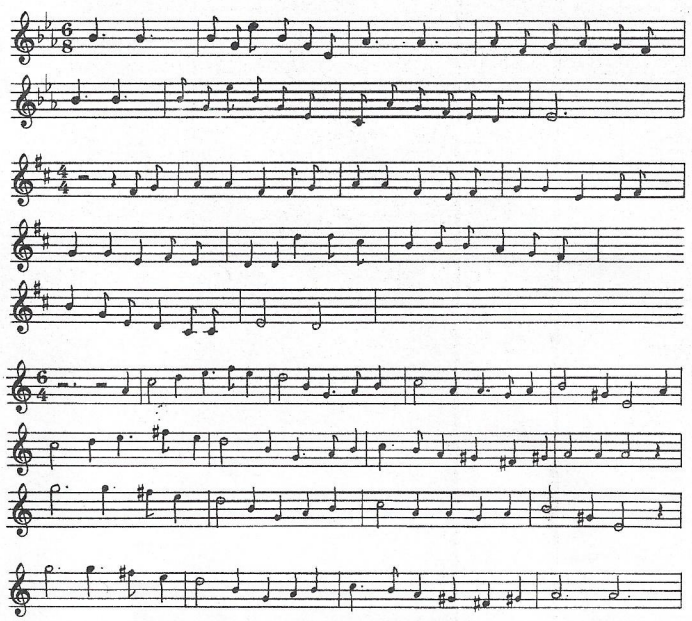
The accidental box on the centre right of the screen shows the normal state of each note in the chosen key. To print an accidental note press the **A** key until the required symbol appears in the box. To enter a rest, press the **R** key. Pressing the right and left arrows will now make the various rests appear in the Length box.

Every time you **ENTER** a note or a rest the counter in the top right hand corner increases by one – up to a maximum of 200. Bar lines are also counted and are drawn automatically when you enter the first note of the next bar. If you try to enter a note that is too long for the amount of time remaining in the Current Bar, an error beep will sound and the note will be ignored. As the program has already gone through the **DELETE** process for you, the delete key will have no effect in this situation.

If you want to enter the same note or rest twice (or more) consecutively, just keep pressing **ENTER** – nothing needs to be reset. When changing back from entering a rest to entering a note you must move the Pitch cursor (**7** or **6**) to get the Length display to turn back to notes.

To play the melody press **P.** Follow screen instructions to continue the tune, save it on tape, change its speed, play it in sound only, take a printer copy or start again.

Try out these three tunes on your Music Maker. They should sound familiar!



F2/24

 The object of the game is to rescue the pretty girl from the clutches of Kong and bring about his downfall.

LOADING Position the cassette in your tape recorder with the printed side upwards and make sure that it is rewound to the beginning. Ensure that the connection lead goes from the EAR socket on the recorder to the EAR socket on the Spectrum and that the MIC socket is disconnected.
TYPE LOAD "" <ENTER> [Note there is no space between the two quotes] the " is obtained by pressing the SYMBOL SHIFT and P KEY simultaneously. [for further instructions consult chapter 6 of your manual.]
NOW PRESS PLAY on the recorder. The screen message should appear and the game will load automatically. If this does not happen adjust the volume and tone controls until loading takes place. Follow instructions on screen.

PLAYING You must rescue the girl from the clutches of Kong. Run along the girders and climb the ladders to reach her but be careful, Kong has spotted you and will throw everything he can lay his hands on to stop you. You must jump over the obstacles or smash them with your hammer and when you succeed in reaching the top you progress to a more difficult screen. Only on the final play can you defeat Kong and bring him crashing down. Bonus objects appear at random and should be picked up for extra points.
Good Luck.

STATUS AND SCORING On screen scoring gives current score and bonus. You have 3 lives and a hall of fame.

POINTS Time constraint gives points for completion. 100 points for smashing barrels and 100 for the fire. 2000 bonus for completing 1st screen increasing by a further 1000 for each additional screen. Bonus gems 200 points.

CONTROLS Either keyboard or Kempston Joystick may be used.
Keyboard M – Right X – Down
N – Left A – Jump
S – Up
Kempston — follow screen instructions.

"KONG" written by Paul Owens is one of a number of exciting games produced by Ocean Software Limited. Please ask your local dealer for other titles in our range.
If you've written a good program why not contact us, without obligation, to discuss marketing. write to:
Ocean, Ralli Building,
Stanley St. Manchester M3 5FD.

F1/2

1

PSION software cassettes are manufactured by a fully automated process under the strictest quality control. Here are some details about the range of Psion software for the Sinclair Spectrum.

HORACE — **HORACE AND THE SPIDERS** is the most recent addition to the Horace series which began with **HUNGRY HORACE** in which our hero is chased by guards in the park, and includes **HORACE GOES SKIING** in which he faces all the dangers of the piste and more.

TRADITIONAL GAMES — Pit yourself against your Spectrum in these classic games of skill and tactics. Psion's **CHESS** has ten skill levels and **BACKGAMMON** has four, as does **Computer SCRABBLE®**, sufficient to match any opponent who cares to try his hand.

MODERN GAMES — Play those ever popular Space Games — **SPACE RAIDERS** and **PLANETOIDS** or turn your Spectrum into a Flight Simulator with **FLIGHT SIMULATION**, a sophisticated program which really tests your skill as a pilot. Take-off or land on a choice of two landing fields or fly around and survey the panorama, using your full instrument display, 3 dimensional view from the cockpit and detailed map of the local scenery.

APPLICATIONS — Get down to some serious business. **VU-FILE** is an all-purpose program for filing and information retrieval. Define your own records, add to them at will and find the information you require instantly. **VU-CALC** is the versatile spreadsheet program for producing and manipulating text, data and formulae in large tables. **VU-3D** is your own Computer Aided Design program. Create and design complex 3 dimensional objects, manoeuvre them as you please and display them at will from any perspective or with different shading.

2

sinclair®
ZX Spectrum® 48K RAM

CHEQUERED FLAG

from PSION

Load and run by typing LOAD "flag"

Chequered Flag is a fast moving motor racing simulation in which you have to negotiate some of the world's most famous racing circuits. From behind the wheel of your thoroughbred Formula 1 racing car you have a dynamic view of the outside world flashing past and of continuously changing instruments on your dashboard display. Watch the various landmarks appear over the horizon and snake towards you — trees, milestones, rocks, warning arrows, a lake, etc.. There are even hills to climb and descend. Keep an eye on your instruments to achieve maximum performance and avoid skidding or overheating.

Your car has been carefully programmed to model accurately the dynamics of a real racing car, and you even have a choice of cars. Peak power will be delivered at the appropriate revs, and drag and road traction are all evaluated. In order to achieve maximum performance you will need to change up and down through the gears to keep the revs at the optimum level, and if you take the corners too fast you will start to slip sideways. But don't worry, to make things a little easier you can opt for a car with an automatic gear box — at the cost of a little power of course.

3

Your dashboard display features full analogue speedometer, rev counter, fuel and temperature gauges along with a gear selection indicator — plus lap timer and lap counter. The steering wheel is also visible and turns in response to your commands.

Driving a racing car is a very skilled business, and apart from keeping on the road and trying to establish new lap or race records, you will have to avoid various hazards and look after your car.

OIL/ WATER — driving over oil or water on the road will dramatically reduce your grip and induce a skid if you try to turn.

OFF THE ROAD — if you put a tyre off the road your ride will get rather bumpy and the car's performance will be impaired. Don't go too far off the road or you'll crash!

GLASS — running over glass on the road will cause a tyre to burst, inducing a dramatic wobble and serious loss of performance. You must limp round to the pits to have a new tyre fitted.

OVERHEATING — constantly over revving will cause your temperature to rise, resulting in a blown-up engine if you don't take it easy. A visit to the pits will cool you down quickly. Take care that you don't change down a gear at high revs because this is also likely to cause severe overheating.

FUEL — if you undertake a very long race you will have to watch the fuel gauge. Stopping at the pits will refuel the car.

4

PIT STOP — just pull over to the side of the road by the pits and come to a halt. A full service will be performed, including new tyres, fuel and some engine cooling!

All that remains now is for you to select the circuit, car and number of laps, and there you are, on the grid waiting for the light to turn green.....

OPERATING INSTRUCTIONS

Accelerator:	key "0"
Brake:	key "I"
Gear change Up:	key "M" or any key to right of M
Gear change Down:	key "N" or any key to left of N
Steering Fast Left:	key "A"
Slow Left:	key "S"
Slow Right:	key "D"
Fast Right:	key "F"
Pause:	key "H": press again to continue
Abort the race:	key "H" and key "T" together

THE CIRCUITS

Ten circuits have been programmed into Chequered Flag, most of them modelled on world famous Grand Prix circuits. Your choice is between:

Brands Hatch	Monaco
Psion Park	Cambridge Ring
Silverstone	Paul Ricard (France)
Micro Drive	Saturn Sands
Osterreichring (Austria)	Monza

5

THE CARS

FERETTI TURBO
Immensely powerful, this turbo charged car develops 640 bhp between 8,000 and 10,000 revs, giving it superior acceleration. A very difficult car to handle, and only recommended to the more experienced racing drivers.

PSION PEGASUS
A new car featuring the latest technology and the highest standards of engineering. Develops 560 bhp between 5,000 and 10,000 revs and has an exceptionally low drag coefficient. A very fast car which is also reasonably easy to drive.

McFASTER SPECIAL
This car has an automatic gearbox, making it the ideal choice for the more inexperienced driver. Nevertheless it is still very fast and reliable, developing 500 bhp.

Psion cassettes for the Sinclair ZX Spectrum are designed to load over a very wide range of volume and tone settings on your tape recorder. If you have any difficulty, ensure that the head and pinch-roller of your tape recorder are quite clean. Cleaning kits for this purpose are widely available.

MADE IN UNITED KINGDOM

The procedure for loading a program is described in chapter 20 of the Spectrum manual. The steps are summarised below.

1. **Connect the ear socket on your Spectrum to the ear socket on your cassette recorder.**
2. **Position the tape before the beginning of the program that you wish to load.**
3. **Turn the volume control to ¾ of maximum or to a level which you have found to be reliable on your recorder.**
4. **Type LOAD "flag" and press the ENTER key.**
5. **Start the cassette recorder playing.**

SUPPLIED BY:
SINCLAIR RESEARCH
STANHOPE ROAD
CAMBERLEY,
SURREY GU15 3PS.

F1/14

48K SPECTRUM **3D COMBAT ZONE**

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3D COMBAT ZONE

GENERAL LOADING AND RUNNING INSTRUCTIONS

1 Assemble the cassette tape at the silent part before the program.
2 Connect the EAR socket on the SPECTRUM to the EAR or LOUD-SPEAKER socket on your cassette recorder.
3 Adjust the volume of the cassette recorder to ¾ maximum and the tone controls to maximum treble and minimum bass.
4 Type LOAD " " CODE (CODE — extended Mode l). Do not press ENTER yet.
5 Start the cassette recorder and now press ENTER. Instructions in Program.

3D COMBAT ZONE

After the century-long bloody battle fought across the plains of Lacentra, you alone must fight to live. As sole survivor of the once magnificent home battle fleet force, you must wander the radio-active wasteland and defend yourself against the remains of the ravished enemy. You are the commander of a tank, and must out-manoeuvre enemy tanks, flying saucers and super tanks while avoiding the structured obstacles for your solitary existence. Your heat-seeking missiles are all spent and only shell-blasters remain as your ammunition source. You may only use one shell at a time. The inferior invading clans, but as time goes by and your presence is detected, superior tanks appear.

A radar screen and location message readout are positioned above your sights to help you seek out the enemy.
The control keys are as follows:

FIRE	- SPACE
FORWARD	- SYMBOL SHIFT
BACKWARDS	- M
LEFT	- C
RIGHT	- V

Scoring

TANK	- 500
FLYING SAUCER	- 1000
SUPER TANK	: 2500

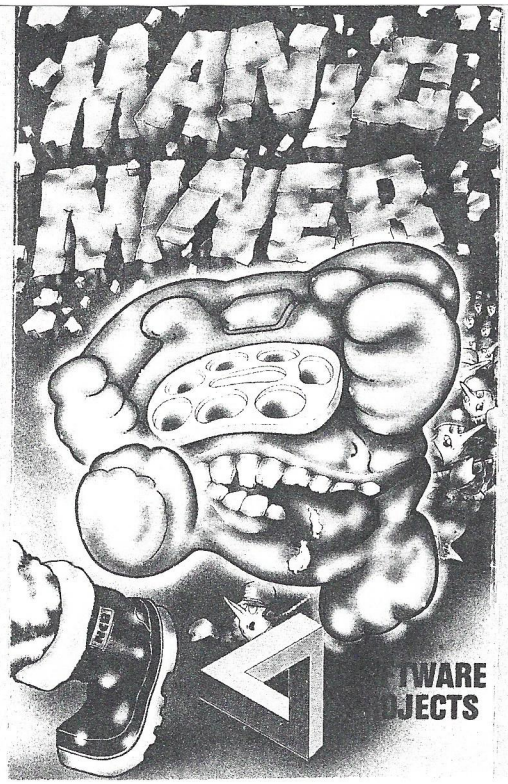
The game also works with the Kempston and Sinclair Joysticks.

4/19

SOFTWARE PROJECTS

MANIC MINER

48K SPECTRUM



SPECTRUM
MANIC MINER
(SECOND EDITION)

LOADING INSTRUCTIONS

1. Connect lead to ear socket of Spectrum from ear socket on recorder.
2. Rewind tape to beginning.
3. Set Volume Control to the required level.
4. Type LOAD "" or LOAD "MANICMINER".
5. Press key marked enter on your Spectrum.
6. Press play on your cassette recorder.
7. Your Program will now load.

If the program does not load first time, repeat instructions but try a different volume setting.

TO MOVE USE KEYS:

Q, E, T, U, or O	=	MOVE LEFT
W, R, Y, I or P	=	MOVE RIGHT
SHIFT TO SPACE	=	JUMP

MANIC MINER CAN ALSO BE USED WITH KEMPSTON, AGF AND PROTEK JOYSTICK INTERFACES AND IS ALSO COMPATIBLE WITH INTERFACE II

Author: MATTHEW SMITH

MANIC MINER

Miner Willy, while prospecting down Surbiton way, stumbles upon an ancient, long forgotten mine-shaft. On further exploration, he finds evidence of a lost civilisation far superior to our own, which used automatons to dig deep into the Earth's core to supply the essential raw materials for their advanced industry. After centuries of peace and prosperity, the civilisation was torn apart by war, and lapsed into a long dark age, abandoning their industry and machines. Nobody, however, thought to tell the mine robots to stop working, and through countless aeons they had steadily accumulated a huge stockpile of valuable metals and minerals, and Miner Willy realises that he now has the opportunity to make his fortune by finding the underground store.

In order to move to the next chamber, you must collect all the flashing keys in the room while avoiding nasties like POISONOUS PANSIES and SPIDERS and SLIME and worst of all, MANIC MINING ROBOTS. When you have all the keys, you can enter the portal which will now be flashing. The game ends when you have been 'got' or fallen heavily three times.

4/10

3-D SPACE WARS

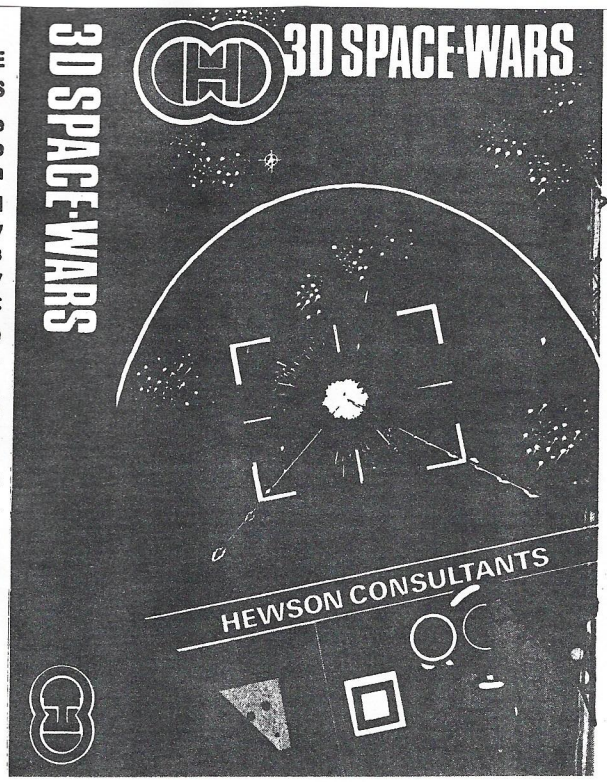
3D Space battle simulation

Seek out and destroy multiple fleets of enemy spacecraft

Deep space radar scan, digital scoring, fuel, speed displays, enemy kill and fleet count

Ever increasing difficulty – amazing colour graphics

Kempston/ AGF joystick compatible



3D SPACE WARS – INSTRUCTIONS

SCENARIO
You have assumed complete control of your world's last fighter-killer class spacecraft. It is only you who can prevent the ultimate disaster – the destruction of your civilisation by the SEIDDAB, an unscrupulous race of murderers intent on total control of your star system.

THE DISPLAY
The program provides you with an authentic view of your spacecraft's control centre. The Viewport is in the upper part of the screen and through it you can see a laser gun sight superimposed on a limited view of the galaxy showing stars, constellations, SEIDDAB spacecraft and a refuelling point.

Below the Viewport are the shipboard instruments. On the right are analogue displays of your fuel and speed, a digital readout of your total battle score and graphic displays of the number of enemy craft destroyed in the current fleet and the number of refuelling points used.

On the lower left your Deep Space Wrap Around Galaxy Scanner shows all the SEIDDAB spacecraft in the fleet. The refuelling point is also displayed but is indistinguishable from enemy craft.

PREPARATION
When a fleet of SEIDDAB are detected the Viewport flashes and then clears to show the enemy craft dispersing into battle formation. You can track the craft visually on the Viewport and more remotely on the Galaxy Scanner.

You can manoeuvre your ship and close on the SEIDDAB to reach firing range using any of the following groups of keys or AGF or KEMPSTON joysticks :

ACTION	GROUP OF KEYS	JOYSTICK
Move left	A,S, left arrow	Left
Move right	F,G, right arrow	Right
Move up	Q,W,E,R,T, up arrow	Forward
Move down	Z,X,C,V, down arrow	Backward
Accelerate	J,K,L	–
Deccelerate	N,M	–
Fire laser gun	U,I,O,P, zero	Fire button

To destroy a SEIDDAB ship you must have it centred in your laser sights. The closer you are the better chance you have of securing a hit but you are also more vulnerable to his laser bolts, although if you are fast enough you can dodge them.

TACTICS
To become an advanced player, you will find it essential to learn how to control your ship with precision. When a SEIDDAB craft is too far away for you to hit move towards him, fire and retire before he has a chance to retaliate.

When the game starts your ship is fully refuelled but the faster you travel, the more you fire and the more you are hit the faster your reserves are depleted. To refuel, find the refuelling point, approach it carefully and align its central cross with your laser sights. Remain aligned until your fuel banks are replenished.

When the refuelling point is exhausted it automatically detonates to prevent the SEIDDAB making use of the facility. When you have cleared the enemy fleet from the galaxy a new refuelling point is installed ready for the next wave.

THE SEIDDAB
Your enemy attack in waves of twenty-four and their usual strategy is to send in their slower, less heavily armed spacecraft first. This gives you an essential opportunity to develop your skills. If the SEIDDAB press their attacks successfully your fuel level will drop to zero, condemning you to drift blind and helpless in the void of hyperspace. To play the game again press the ENTER button.

Other great products for the ZX Spectrum from Hewson Consultants include :

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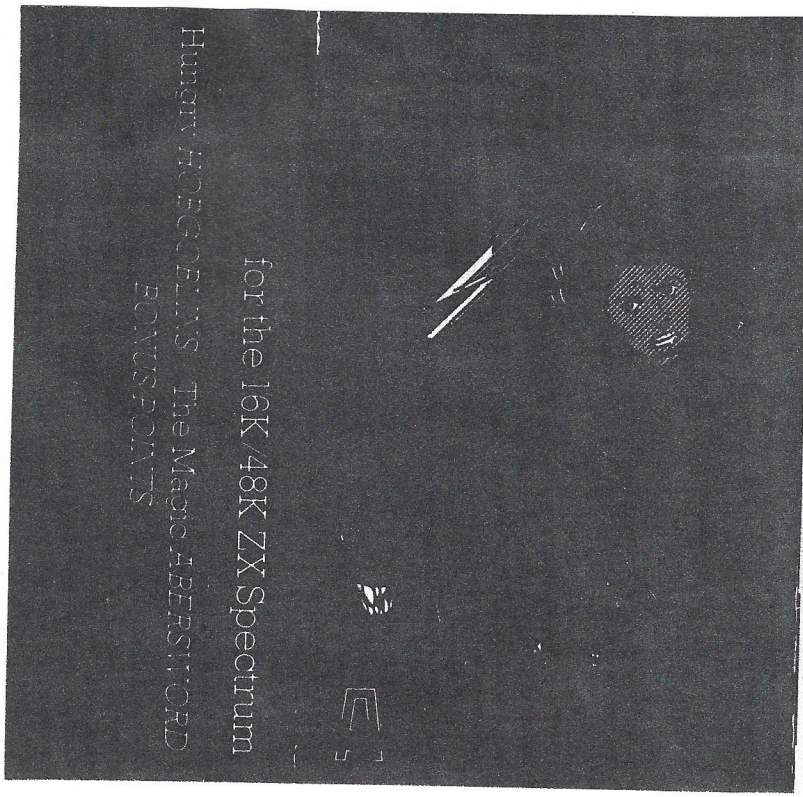
F2/4



MAZEMAN

for the 16K/48K ZX Spectrum

CONTROL the *MAZEMAN* using the arrow keys (5, 6, 7 and 8).

USE your skill to collect as many squares as you can (10 points for each). But beware the hungry *HOBGOBLINS!* They will chase relentlessly – and you only have three lives!

GRASP the magic *ABERSWORD* and you'll have approx. 10 seconds to counter-attack and slay as many of these fearsome monsters as possible to notch up bonus points.

PASS 10,000 points and gain an extra life.

ENJOY pitting your wits against the Hobgoblins – and remember, you aren't feeding the machine 10p pieces for each new game!

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5/26

QUICKSILVA
Enhancement

QSP 0005

SPECTRUM ENHANCEMENT FROM QUICKSILVA

EASYSPEAK
MAKE YOUR SPECTRUM TALK
Add speech to your own programs.
NO additional hardware required.
INCLUDES:
Speech Digitiser
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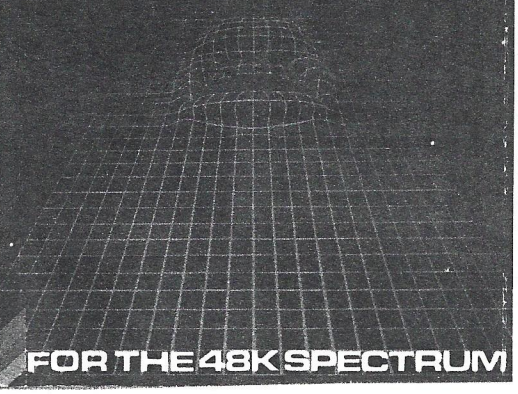
EASYSPEAK

EASYSPEAK

MAKE YOUR SPECTRUM TALK



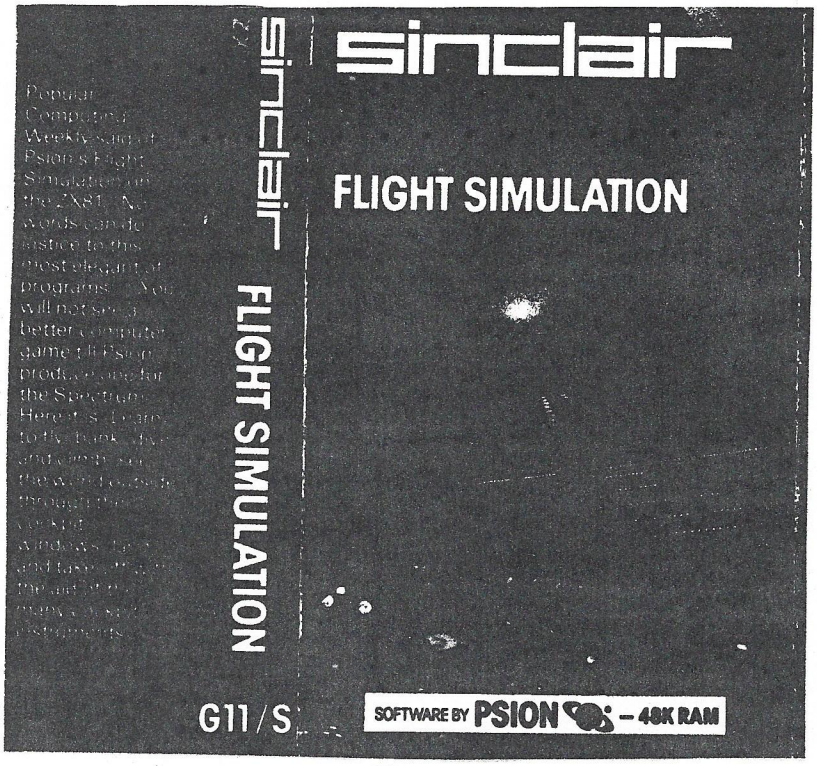
FOR THE 48K SPECTRUM

LOADING EASYSPEAK

You will find the procedure for loading a program in the Spectrum basic manual chapter 20. The procedure for loading Easyspeak is given below:

1. Connect the ear socket of the Spectrum to the ear socket of your cassette recorder.
2. Make sure the tape is wound to the beginning.
3. Set the volume control to a suitable level.
4. Set maximum treble, minimum bass on the tone controls.
5. Type LOAD "" CODE
6. Press ENTER
7. Start the cassette recorder.
8. The program will RUN itself once loaded and will provide instructions.

If the program does not load correctly try a different volume level.



Sinclair
ZX Spectrum with 48K RAM

FLIGHT Simulation

from PSION

Load and run by typing LOAD "flight"

Over the last decade, with the increasing power of computers, pilots have been trained to "fly" new airliners on large scale, computer-controlled simulators on the ground. Even on a small microcomputer like the Sinclair ZX Spectrum the essential parameters of flight, the dynamics of the airplane, the navigation of the airplane, the main instruments and the representation of the outside world can be portrayed in real-time.
"FLIGHT Simulation" includes these effects and represents a small, high-performance, two-engined, propeller-driven airplane.

ASPECTS OF FLYING

The essential controls of an airplane include the joystick, flaps, rudder and engine power. Moving the joystick sideways affects the ailerons on the wings causing the plane to bank to the left or right. Moving the joystick forwards and backwards affects the elevators on the tailplane so that the nose of the airplane moves down or up respectively.
The aerodynamics of an airplane are extremely complicated. Changing one control usually has more than one effect. For example the ailerons do not simply cause the plane to roll, but produce a sideways airflow which causes the plane to turn as well. You may learn and experience these effects in the simulation.
The attitude and motion of an airplane is shown by many instruments and navigational aids in the pilot's

cockpit, as discussed below. The pilot needs to use these instruments to navigate his airplane on to the right line or vector for approach to a runway, to fly his airplane on the right heading or bearing along that vector and to approach the runway with the right speed, attitude and descent angle to land the airplane. Typically, the correct approach angle of descent should be about 3° which implies an altitude of about 6,000 feet at 20 miles out, 3,000 feet at 10 miles out and 1,000 feet at just over 3 miles from the runway.
The rudder controls can contribute to the turning of the airplane. When on the ground, while taxi-ing the rudder controls also steer the direction of the airplane.

FLYING ON THE ZX SPECTRUM

Flight Simulation on the Spectrum is a full-feature program which mimics the piloting of a small airplane in real-time and in considerable detail. The detailed dynamics of an airplane are included and even looping the loop and rolling may be performed. You may land at either of two runways, take-off, navigate with the aid of beacons and in flight view the features of the world outside through the cockpit windows.
The main display is the pilot's cockpit view with a detailed instrument panel in the lower half of the screen and a view of the world outside through the cockpit windows in the top half of the screen. Through the cockpit windows you can see the horizon formed by the light sky and dark ground, the runway lights in three-dimensional perspective if you are in the vicinity of a runway, and features on the ground such as lakes, etc. As you bank, dive and climb, so the horizon and features on the ground will move accordingly through the cockpit windows.
You may switch the display however, to a navigational chart or map showing the beacons, runways and other features to help you navigate and land the plane.
After the program has been loaded from cassette, a

menu will appear asking you whether you wish to take-off, start in flight or practice the final approach for landing. Press the keys 1, 2 or 3 respectively. You will be asked whether you want to include the effects of wind. Answer yes if you are skilled and can cope with the effects of wind both in landing and navigation. Otherwise press "n" for no. The program will then change immediately to the pilot's cockpit view.

THE INSTRUMENT PANEL

In the lower half of the screen in the pilot's cockpit view is the instrument panel. There are five clock-like dials, a number of gauges, warning lights and a variety of digital read-outs. The five "clocks" from left to right are the instrument landing system (ILS), the airspeed indicator, the radio-direction-finding equipment (RDF), the altimeter and the rate-of-climb indicator (ROC).
RDF clock is the large dial in the centre of the instrument panel. A small airplane is drawn in the centre of the dial and points in the direction or heading of the plane. A digital reading on the clock gives the heading in compass degrees of the airplane. The RDF is the most important navigational instrument. At any stage the plane is logged on to one of a number of beacons on the ground. The position of the current beacon at any stage relative to the direction of the airplane is represented on the RDF clock as a flashing dot near the circumference. If you wish to head directly for a beacon, bank the airplane until the flashing dot moves round the circumference to the "12 o'clock" position.
Airspeed indicator is a clock with one needle immediately to the left of the RDF. The needle points to the airspeed of the airplane measured in knots x 10.
Altimeter is a clock with two needles immediately to the right of the RDF. The small needle gives the height in units of 1000 feet and the longer needle gives the next digit as hundreds of feet.
ROC or rate-of-climb indicator is the clock-like dial on the right-hand side. It measures the vertical speed of the

airplane in units of 1000 feet per minute. When the needle points upwards above the 0, the plane is climbing and vice versa.

POWER gauge on the bottom right measures the extent of the throttle. The thrust of the engines increases with throttle but reduces in the rarer atmosphere of higher altitudes.

FUEL gauge displays the fuel remaining in the tanks.

FLAPS shows the angle of extent of the flaps. The needle points downwards with maximum flap and is horizontal with the flaps retracted.

GEAR has a green and red panel. When the undercarriage or gear is up this will be indicated in the red panel, otherwise "down" will appear in the green panel.

BCN RGE BRG is a digital readout giving information on the current logged-on beacon. BCN gives the beacon call sign of the logged-on beacon. RGE gives its range in nautical miles and BRG gives the bearing of the beacon in compass degrees relative to the airplane.

ILS is the Instrument Landing System dial on the left of the panel. It is a guidance system which aids the pilot in the approach to the runway. A radio beacon at the start of the runway emits a signal, the position of which is displayed on the ILS as a flashing dot. When the airplane is on the correct approach to the runway, the flashing dot will be at the centre of the ILS. If it is not at the centre, you the pilot should steer towards the dot. Thus if the dot, representing the runway is on the left, the pilot should bank to the left until the dot moves to the centre. If it is above the centre, the plane is too low and the joystick should be pulled back.

Ra or Radio altimeter is a digital readout and part of the ILS system. A reflected radio signal from the ground measures the height in feet of the airplane from the ground to the wheels. It gives a precise measurement for landing.

THE PILOT CONTROLS

Joy stick — The joystick of the airplane is represented on the keyboard of the ZX Spectrum by the cursor arrows (keys 5, 6, 7 and 8). Press ← (key 5) to bank left. Press → (key 8), to bank right. Press ↑ (key 7) to move the joystick forward and point the nose of the plane down for diving. Press ↓ (key 6) to pull the joystick towards you so that the nose of the plane goes up for ascent.

Rudder — The rudder on the tailplane can help to turn the plane and is controlled by the keys "Z" to turn left and "X" to turn right. While taxi-ing on the ground, the gear is steered by the rudder controls.

Power — The engines' thrust or power is controlled by the keys "P" and "O". By pressing the key "P" the throttle is increased and the engines give more power while pressing key "O" reduces the throttle and engine power (note "O" is to the left of "P").

Flaps — The extent of the flaps on the wings is controlled by the keys "F" and "D". Press the key "F" to extend the flaps further and press the key "D" to retract, or partially retract, the flaps (note key "D" is to the left of key "F"). The flaps can be extended or retracted to a varying degree (as shown on the gauge) and should only be fully extended for the final stage of landing to avoid stalling at reduced speed. With the flaps retracted, the stall speed of the plane is 80 knots, while with full flaps, the stall speed is 60 knots. Extending the flaps while the plane is at high speed could possibly damage or tear off the wings of the plane.

Gear — The gear or undercarriage can be extended by pressing the key "G". If the gear is down pressing the key "G" will retract the undercarriage. The undercarriage should not be dropped at high speed as apart from increasing the drag on the plane you may damage or destroy the undercarriage.

Beacon — To change the current logged-on beacon, press the key "B". So long as you press the key "B" the current beacon will change sequentially until you obtain the navigational beacon you require.

Map — Press the key "M" to switch the display from the cockpit pilot's display to the map or to switch back from the map to the cockpit pilot's display.

You may press several keys simultaneously.

Never press the BREAK key.

THE MAP

If you press the key "M", the display will change to a navigational chart or map showing the runways, features on the ground such as lakes and the position of the navigational beacons. The map shows the four compass points of NORTH (N-0°), EAST (E-90°), SOUTH (S-180°), WEST (W-270°). There are two airports, a large international airport called MAIN and a small local airport called CLUB. MAIN has a long runway of over a mile in length and is therefore easy to land on in a small plane. CLUB however is a small local airport and therefore has a short runway of some 800 yards. The runway of MAIN lies along the line east to west (90°-180°). Therefore on your final approach for landing the plane must be travelling on a heading of exactly 90° or 270°. The runway of CLUB on the other hand, lies along the line north to south.

The map also shows the position of the various navigational beacons and a variety of landmarks and features on the ground. Near the airport MAIN, there are two beacons some three miles beyond each end of the runway with call signs of ME and MW. Airport CLUB has two beacons CN and CS two miles beyond each end of the runway. There are three other navigational beacons OA OB and OC.

NAVIGATION

The most difficult part of flying is the approach and landing at an airfield. You can experiment with the controls in varying the speed, altitude and direction of the plane at a reasonably high altitude without worrying about the navigation. If you wish to land the plane, however, you will have to navigate the plane on to the right vector and on to the right course, and you will have to approach the runway at roughly the right glide angle. This is a difficult task and requires a lot of practice and experience before you can achieve a landing successfully.

The map and instruments will help you to determine your position precisely. You will then need to think of the approximate manoeuvres and course to approach the airfield on the right flight path. The runway of airport MAIN lies east to west in the simulation on a line (or vector) from 90° to 270° or vice-versa. You may approach the runway from either end. For example, if you wish to approach the runway from the east to the west, you must first manoeuvre the airplane far to the east of the runway. If you use the beacon ME you will need to fly the plane until the beacon is on a bearing (or vector) of 270°. If you then bank on to this bearing on a course or heading of 270° you will be flying on exactly the right flight path for your approach to the runway. As you fly towards the beacon ME, to keep on the right flight path you must ensure that both the heading and the beacon coincide at 270°. As you fly over the beacon in the later stages of the approach, the bearing of the beacon will of course change to 90°. Similarly, you may use any of the other beacons to set a course for a particular flight objective. When heading directly for a beacon, remember that your heading and the beacon bearing must always coincide precisely. Flying is difficult for the uninitiated and if you have trouble navigating yourself to the runway for final landing you can always use the option at the beginning of the program to give you an automatic approach and allow you to experiment with the final touchdown.

Once you have touched down, you must reduce the power to zero to bring the plane to a halt. You may taxi and steer using the rudder controls and take off again.

Key	Pilot Control
↑	Joystick forward (dive)
↓	Joystick backward (climb)
→	Joystick to right (bank to right)
←	Joystick to left (bank to left)
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X	Rudder control (right)
P	Increase throttle (more power)
O	Decrease throttle (less power)
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D	Decrease flap extent
G	Lower gear (undercarriage) if up. Raise gear (undercarriage) if down.
B	Change beacon sequentially
M	Switch from cockpit display to navigational Map or back to cockpit.

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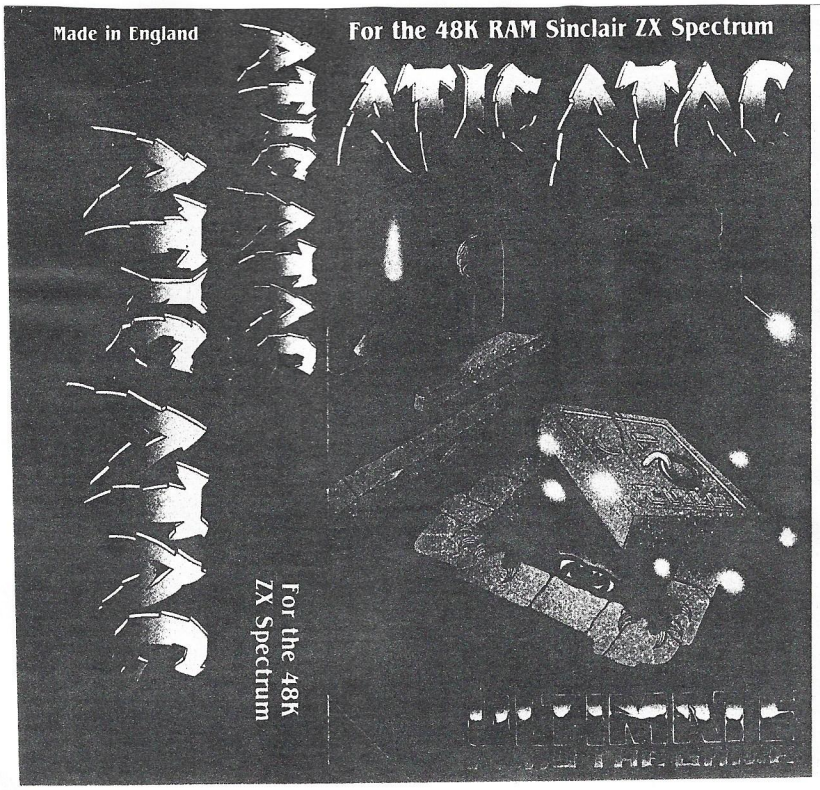

GUARANTEE

All ULTIMATE PLAY THE GAME software products have a 5 year unconditional guarantee. If this tape ever fails to load it will be replaced totally free of charge, if returned, with details, directly to ULTIMATE PLAY THE GAME, at the address shown above. If the tape shows any form of physical damage, please include £1.50 to cover replacement costs. This guarantee does not effect and is in addition to your statutory consumer rights.

I never did believe in Ghosts or Monsters . . . Not until now, not until the Main doors of the Castle closed and locked themselves behind me . . . There's no key here!!! I'm trapped!!! HELP!!! . . . HEELLLPPPP!!!! . . . No-one can hear me . . . I'm alone . . . Why do the doors open and slam shut??!! . . . Is anybody there?? . . . HHEELLLLPPPP!!!! . . . I can see strange shapes materialising on the other side of the room . . . Evil eyes glaring at me . . . Footsteps . . . Somethings coming down the corridor . . . Something large . . . Something cold . . . I must run quickly . . . QUICKLY . . . HHEELLLLPPPP!!!! . . . I must escape before it's too late!!!!!

THE CASTLE

Now that you have been trapped in the evil haunted Castle, your object is to find the hidden Golden Key of A.C.G. and escape via your only exit, the Main Doors.
The Castle consists of 5 floors, including the 'Atic' and the caverns, which contain countless rooms. Within the many rooms you may find furniture, food, drink, objects, Ghosts, Ghouls and Monsters. Eat and drink sparingly so that you do not deplete your food supply. Collect and utilise any objects you find to your best advantage, be wary of slamming doors and working trapdoors which will try to trap you and avoid contact with all the Ghosts and Monsters, as each of these will use their best endeavours to hamper your search.

YOUR WARRIOR

Each of the characters, Knight, Surf and Wizard, are armed with their own specific weapons, individual movement type and use of one set of secret passages, unbeknown to the others.

GOOD LUCK

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LEFT Your Warrior will move left using the **Q** key.
RIGHT Your Warrior will move right using the **W** key.
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UP Your Warrior will move up by using the **R** key.
FIRE Your Warrior will use his weapon when the **T** key is pressed.
PICK UP/DROP Your Warrior can pick up or drop an object using the **Z** or **SYMBOL SHIFT** keys.
PAUSE The whole game can be paused using the **CAPS SHIFT** or **SPACE** keys.

JOYSTICK CONTROLS

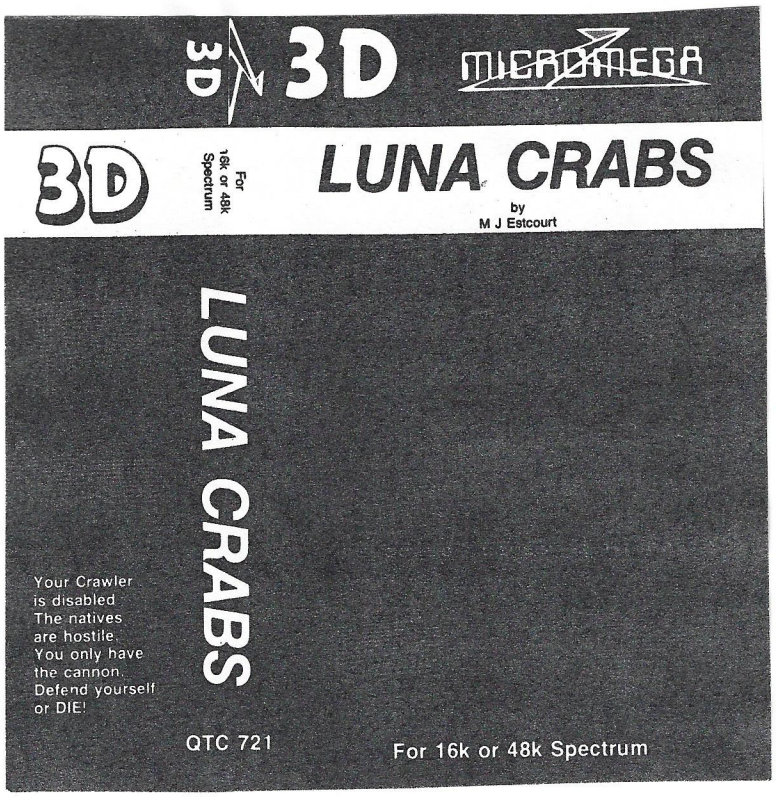
Your Warrior can be controlled using either the Kempston or Cursor controlled joysticks by replacing the Left, Right, Up, Down and Fire commands.

All software, graphics, and audio-visual by ULTIMATE, PLAY THE GAME Trade Name of Ashby Computers & Graphics Ltd. Made in England.
48 1006

FEATURES

3 Dimensional Scenario
Knight
Surf
Wizard
Full 8 way movement
On Screen Scoring
Superb Graphics
Amazing Animation
Grave Stones
Working Trapdoors
Secret Passages
Cross
Food
Valuables
Frankenstein
Mummy
Dracula
Devil
Witch
Monks
Ghosts
Ghouls
Hungry Monsters
Pumpkins
Spiders
Multi Lives
Incredible Sound Effects
Game Timer
Swag Display
% Adventure Score
On Screen Time Lapsed Clock
Keyboard/Joystick Select
Status Scroll
Pick Up/Drop
Continuous Pause Button
Furniture
Other Gubbins

F3/28



LUNA CRABS by M J Estcourt

As part of the Solar System Recources Research team you have landed on one of the Saturnian system moons. Prospecting for the precious minerals that Earth so desperately needs you have driven away from your lander craft to take readings and soil samples for analysis.

A routine enough task until . . . .

The bio-sensor flashes its warning - there are creatures moving nearby! You urgently head back for the lander . . . and getting CLOSER!

They dart nervously towards your crawler, spitting deadly acid-balls. There is nothing you can do but defend yourself for as long as you can with the crawler's cannon.

At least you can still turn the crawler with its one remaining track to aim the cannon, using console keys 1 and Ø for left and right.

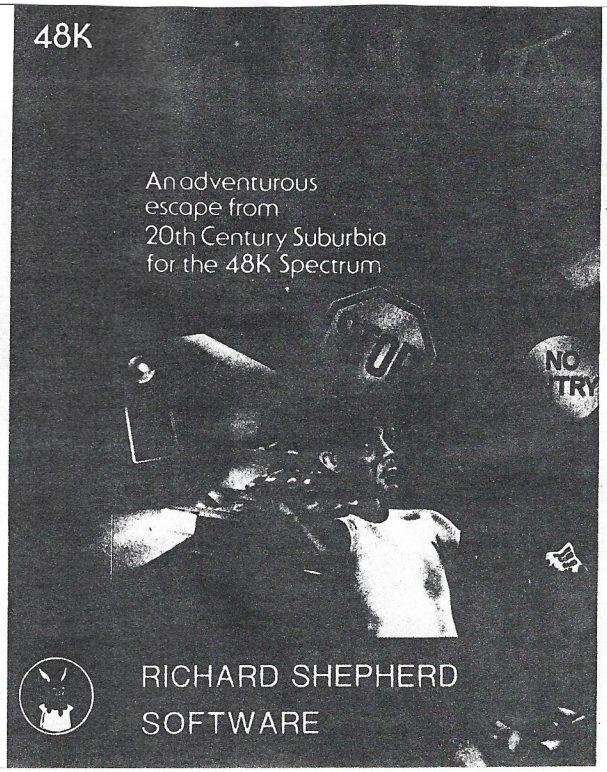
And the guided photon bolt still fires on the 9 key and is controlled by the 1 and Ø keys - things could just conceivably be worse (couldn't they?).

But the situation is desperate. Here they come, in innumerable waves. How long do you expect to survive before . . .don't even think about it!

T3/6

The church bells chime three in the morning ... the streets are deserted ... now's your chance to

ESCAPE FROM SCARTHORPE



URBAN UPSTART — A COMPLEX ADVENTURE WITH SPECTACULAR GRAPHICS.

48K SPECTRUM by Peter Cooke

Scarthorpe is the sort of town where even the dogs carry flick knives! Where there's only one road in, and that's a one way street!

The sort of town where rebuilding means a new coat of paint, and where people queue up to queue up for a job!

Not many people come to Scarthorpe, and even fewer leave.

The church bells chime three in the morning ... the streets are deserted ... now is your chance to Escape from Scarthorpe!

To help you on your quest, this program shows a graphic representation of every location you enter.

GOOD LUCK!

URBAN UPSTART

LOADING: To load Urban Upstart enter LOAD "upstart" CODE. CODE is obtained by pressing both shift keys until a flashing 'E' appears, then pressing CODE, which is located on the I key.

USING THE PROGRAM: To explore Scarthorpe you will need to move from location to location by entering North, South, East or West. You need only use the first letter, i.e. N for North. Follow all instructions by pressing Enter.

To give commands, use simplified English. The program has a large vocabulary including UP, DOWN, ENTER, LEAVE, IN, OUT, CROSS, EXAMINE, LOOK, EAT, DRINK and many others. It is also possible to string commands together, for example "TAKE DUNGAREES AND GO NORTH" or "KILL FAN AND TAKE TRAP". Remember to press Enter after each instruction.

There are also a number of special functions designed to help you. For example "TAKE" or "T" will allow you to pick up a useful object and carry it with you. Enter "DROP" and you will leave the object behind. If you are unsure of which items you are carrying, enter "I" for an inventory. To see how well you are doing, enter "SCORE" to be given points out of 22. If your game is going badly you can abandon it by entering "QUIT".

If you wish to save the game to be continued later, enter "SAVE" and follow the on-screen instructions. To re-load your game, load the original cassette, move to the first location and enter "LOAD" and follow the on-screen instructions.

Please note: IT IS IMPORTANT TO DISCONNECT ANY MICRODRIVE DEVICE BEFORE LOADING THIS GAME.

OTHER ADVENTURES INTO IMAGINATION FROM RICHARD SHEPHERD SOFTWARE

Invincible Island — Can you find the Seven Parchments of Xaro and their mystical meaning?

Transylvanian Tower — A spine chilling 3-D maze adventure.

Devils of the Deep — A real time graphic adventure among the Lost Columns of Atlantis.

Super Spy — A global spy chase through complex puzzles, coded messages and 3-D mazes.

Everest Ascent — A graphic simulation of man's ultimate endeavour.

Ship of the Line — Command a sailing ship in this naval strategy game.

Sinclair
ZX Spectrum with 48K RAM

FLIGHT Simulation

from PSION

Load and run by typing LOAD "flight"

Over the last decade, with the increasing power of computers, pilots have been trained to "fly" new airliners on large scale, computer-controlled simulators on the ground. Even on a small microcomputer like the Sinclair ZX Spectrum the essential parameters of flight, the dynamics of the airplane, the navigation of the airplane, the main instruments and the representation of the outside world can be portrayed in real-time.
"FLIGHT Simulation" includes these effects and represents a small, high-performance, two-engined, propeller-driven airplane.

ASPECTS OF FLYING

The essential controls of an airplane include the joystick, flaps, rudder and engine power. Moving the joystick sideways affects the ailerons on the wings causing the plane to bank to the left or right. Moving the joystick forwards and backwards affects the elevators on the tailplane so that the nose of the airplane moves down or up respectively.
The aerodynamics of an airplane are extremely complicated. Changing one control usually has more than one effect. For example the ailerons do not simply cause the plane to roll, but produce a sideways airflow which causes the plane to turn as well. You may learn and experience these effects in the simulation.
The attitude and motion of an airplane is shown by many instruments and navigational aids in the pilot's cockpit, as discussed below. The pilot needs to use these instruments to navigate his airplane on to the right line or vector for approach to a runway, to fly his airplane on the right heading or bearing along that vector and to approach the runway with the right speed, altitude and descent angle to land the airplane. Typically, the correct approach angle of descent should be about 3° which implies an altitude of about 6,000 feet at 20 miles out, 3,000 feet at 10 miles out and 1,000 feet at just over 3 miles from the runway.
The rudder controls can contribute to the turning of the airplane. When on the ground, while taxi-ing the rudder controls also steer the direction of the airplane.

FLYING ON THE ZX SPECTRUM

Flight Simulation on the Spectrum is a full-feature program which mimics the piloting of a small airplane in real-time and in considerable detail. The detailed dynamics of an airplane are included and even looping the loop and rolling may be performed. You may land at either of two runways, take-off, navigate with the aid of beacons and in flight view the features of the world outside through the cockpit windows.
The main display is the pilot's cockpit view with a detailed instrument panel in the lower half of the screen and a view of the world outside through the cockpit windows in the top half of the screen. Through the cockpit windows you can see the horizon formed by the light sky and dark ground, the runway lights in three-dimensional perspective if you are in the vicinity of a runway, and features on the ground such as lakes, etc. As you bank, dive and climb, so the horizon and features on the ground will move accordingly through the cockpit windows.
You may switch the display however, to a navigational chart or map showing the beacons, runways and other features to help you navigate and land the plane.
After the program has been loaded from cassette, a menu will appear asking you whether you wish to take-off, start in flight or practice the final approach for landing. Press the keys 1, 2 or 3 respectively. You will be asked whether you want to include the effects of wind. Answer yes if you are skilled and can cope with the effects of wind both in landing and navigation. Otherwise press "n" for no. The program will then change immediately to the pilot's cockpit view.

THE INSTRUMENT PANEL

In the lower half of the screen in the pilot's cockpit view is the instrument panel. There are five clock-like dials, a number of gauges, warning lights and a variety of digital read-outs. The five "clocks" from left to right are the instrument landing system (ILS), the airspeed indicator, the radio-direction-finding equipment (RDF), the altimeter and the rate-of-climb indicator (ROC).
RDF clock is the large dial in the centre of the instrument panel. A small airplane is drawn in the centre of the dial and points in the direction or heading of the plane. A digital reading on the clock gives the heading in compass degrees of the airplane. The RDF is the most important navigational instrument. At any stage the plane is logged on to one of a number of beacons on the ground. The position of the current beacon at any stage relative to the direction of the airplane is represented on the RDF clock as a flashing dot near the circumference. If you wish to head directly for a beacon, bank the airplane until the flashing dot moves round the circumference to the "12 o'clock" position.
Airspeed indicator is a clock with one needle immediately to the left of the RDF. The needle points to the airspeed of the airplane measured in knots x 10.
Altimeter is a clock with two needles immediately to the right of the RDF. The small needle gives the height in units of 1000 feet and the longer needle gives the next digit as hundreds of feet.
ROC or rate-of-climb indicator is the clock-like dial on the right-hand side. It measures the vertical speed of the

LOADING
SPACE INTRUDERS
You will find the procedure for loading a program in the Spectrum instruction book page 24. The procedure for loading Space Intruders is given below:

1. Connect the ear socket of the Spectrum to the ear socket of your cassette recorder.
2. Make sure the tape is wound to the beginning.
3. Set the volume control to a suitable level.
4. Set maximum treble, minimum bass on the tone controls.
5. Type LOAD "" CODE.
6. Press ENTER.
7. Start the cassette recorder.
8. The program will RUN itself once loaded and will provide instructions.
9. Good shooting!

If the program does not load correctly try a different volume level.

SOFTWARE FOR THE SINCLAIR SPECTRUM FROM QUICKSILVA

SPACE INTRUDERS

Excerpt from the 'Book of the Faluvian Empire'.
'I dropped out of hyperspace near the edge of the galaxy, the sharp light of stars glinting on the metal hull of my Calurian Cannon Ship.
Before me the massive Forts of Falnon, defence and refueling stations, hang ominously in the void reminding me of the message I received. A shiver crawls up my spine.
The message had asked for help, finishing with sounds of panic, of equipment falling and finally an abruptly cut off scream.
I check my instrumentation and move toward the nearest Fort, I can see some debris floating near it, the docking bay doors are open. Closer now, I can see bodies adrift in the docking bays. The inner hatchways are gaping wide, a little frozen air smeared on the doors. The other Forts are in the same condition. I switch my radio on, wide open on all frequencies; there are no voices, only the static hiss of the stars. The Forts of Falnon are now tombs to the people that worked on them.
A Warning light strobes in the controls before me, a message flashes onto the screen, "Unidentified Alien Intruders". The ship computer processes all incoming data and a display appears before me of the Intruders battle formation and the relative positions of myself and the Forts. A confusion of alien sounds from the radio assaults my ears and I breath in sharply at the sight of them, sweat breaks out on my forehead.
I manouevre my Calurian Cannon Ship to a position beneath one of the Forts.
Through a port I can see arms twitching back and forth as the fleet of intruding aliens lower towards me. Suddenly a curling cord of energy drops from one of the aliens and blossoms into a feverish explosion on one of the Forts of Falnon.
More writhing cords of energy drop, like a plague of coiling fluorescent cobras . . .
I swing my ship into action dodging to and fro beneath the Forts sending bolts of Caluric fire lasering upwards . . .
With massive spherical explosions I paint the black of space with clouds of debris from the destruction of intruding aliens.
One of the intruding crafts shimmers and distorts, mutating through lethal unstable forms, I move and fire . . .
A command saucer crosses above the fleet, a gibber of instructions coming from the speaker of my radio. The Intruders descent, accelerating; dodging back and forth I move and fire, move and fire . . ."

NON IN BIBLIO ?

3-D SPACE WARS

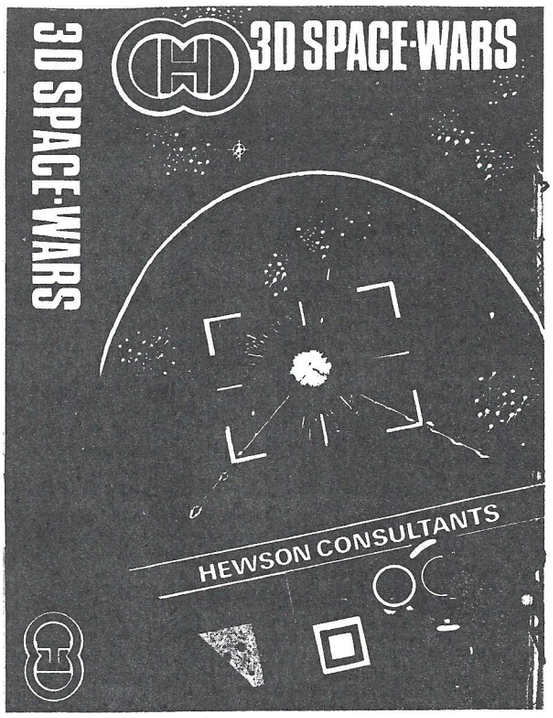
3D Space battle simulation

Seek out and destroy multiple fleets of enemy spacecraft

Deep space radar scan, digital scoring, fuel, speed displays, enemy kill and fleet count

Ever increasing difficulty – amazing colour graphics

Kempston/ AGF joystick compatible



3D SPACE WARS – INSTRUCTIONS

SCENARIO
You have assumed complete control of your world's last fighter-killer class spacecraft. It is only you who can prevent the ultimate disaster – the destruction of your civilisation by the SEIDDAB, an unscrupulous race of murderers intent on total control of your star system.

THE DISPLAY
The program provides you with an authentic view of your spacecraft's control centre. The Viewport is in the upper part of the screen and through it you can see a laser gun sight superimposed on a limited view of the galaxy showing stars, constellations, SEIDDAB spacecraft and a refuelling point.

Below the Viewport are the shipboard instruments. On the right are analogue displays of your fuel and speed, a digital readout of your total battle score and graphic displays of the number of enemy craft destroyed in the current fleet and the number of refuelling points used.

On the lower left your Deep Space Wrap Around Galaxy Scanner shows all the SEIDDAB spacecraft in the fleet. The refuelling point is also displayed but is indistinguishable from enemy craft.

PREPARATION
When a fleet of SEIDDAB are detected the Viewport flashes and then clears to show the enemy craft dispersing into battle formation. You can track the craft visually on the Viewport and more remotely on the Galaxy Scanner.

You can manoeuvre your ship and close on the SEIDDAB to reach firing range using any of the following groups of keys or AGF or KEMPSTON joysticks :

ACTION	GROUP OF KEYS	JOYSTICK
Move left	A,S, left arrow	Left
Move right	F,G, right arrow	Right
Move up	Q,W,E,R,T, up arrow	Forward
Move down	Z,X,C,V, down arrow	Backward
Accelerate	J,K,L	–
Decelerate	N,M	–
Fire laser gun	U,I,O,P, zero	Fire button

To destroy a SEIDDAB ship you must have it centred in your laser sights. The closer you are the better chance you have of securing a hit but you are also more vulnerable to his laser bolts, although if you are fast enough you can dodge them.

TACTICS
To become an advanced player, you will find it essential to learn how to control your ship with precision. When a SEIDDAB craft is too far away for you to hit move towards him, fire and retire before he has a chance to retaliate.

When the game starts your ship is fully refuelled but the faster you travel, the more you fire and the more you are hit the faster your reserves are depleted. To refuel, find the refuelling point, approach it carefully and align its central cross with your laser sights. Remain aligned until your fuel banks are replenished.

When the refuelling point is exhausted it automatically detonates to prevent the SEIDDAB making use of the facility. When you have cleared the enemy fleet from the galaxy a new refuelling point is installed ready for the next wave.

THE SEIDDAB
Your enemy attack in waves of twenty-four and their usual strategy is to send in their slower, less heavily armed spacecraft first. This gives you an essential opportunity to develop your skills. If the SEIDDAB press their attacks successfully your fuel level will drop to zero, condemning you to drift blind and helpless in the void of hyperspace. To play the game again press the ENTER button.

Other great products for the ZX Spectrum from Hewson Consultants include :

CASSETTES

Nightflite	£5.95
Heathrow Air Traffic Control	£7.95
Quest Adventure	£5.95
Countries of the World	£5.95
Backgammon	£5.95
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3D Space Wars	£5.95

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20 Best Programs for the ZX Spectrum by Andrew Hewson	£5.95
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Get them from your local dealer or by mail order from

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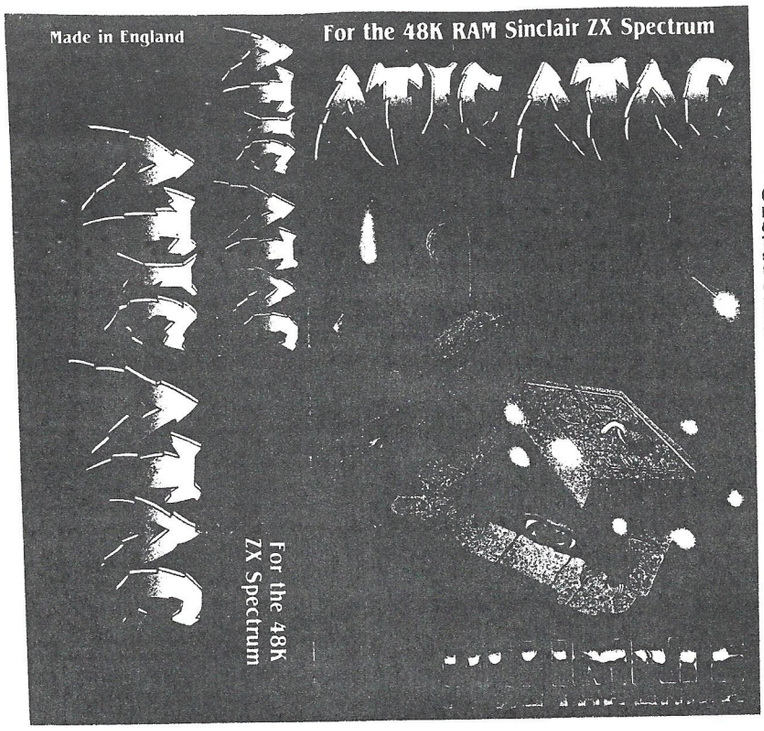
F2/4



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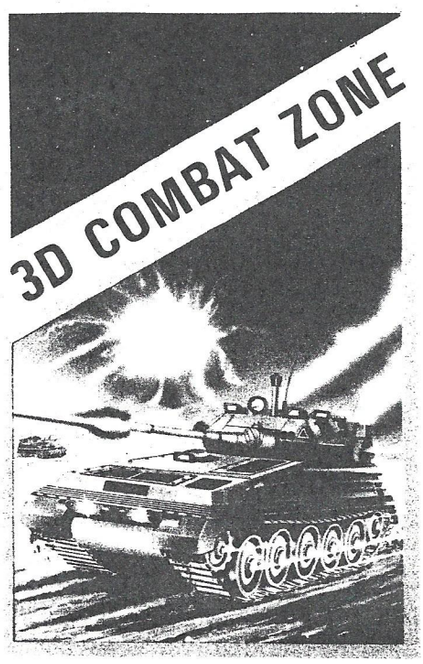

48K SPECTRUM **3D COMBAT ZONE**

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3D COMBAT ZONE

GENERAL LOADING AND RUNNING INSTRUCTIONS

1 Assemble the cassette tape at the silent part before the program.
2 Connect the EAR socket on the SPECTRUM to the EAR or LOUD-SPEAKER socket on your cassette recorder.
3 Adjust the volume of the cassette recorder to ¾ maximum and the tone controls to maximum treble and minimum bass.
4 Type LOAD " " CODE (CODE — extended Mode l). Do not press ENTER yet.
5 Start the cassette recorder and now press ENTER. Instructions in Program.

3D COMBAT ZONE

After the century-long bloody battle fought across the plains of Lacentra, you alone must fight to live. As sole survivor of the once magnificent home battle fleet force, you must wander the radio-active wasteland and defend yourself against the remains of the ravished enemy. You are the commander of a tank, and must out-manoeuvre enemy tanks, flying saucers and super tanks while avoiding the structured obstacles for your solitary existence. Your heat-seeking missiles are all spent and only shell-blasters remain as your ammunition source. You may only use one shell at a time. The inferior invading clans, but as time goes by and your presence is detected, superior tanks appear.

A radar screen and location message readout are positioned above your sights to help you seek out the enemy.
The control keys are as follows:

FIRE	- SPACE
FORWARD	- SYMBOL SHIFT
BACKWARDS	- M
LEFT	- C
RIGHT	- V

Scoring

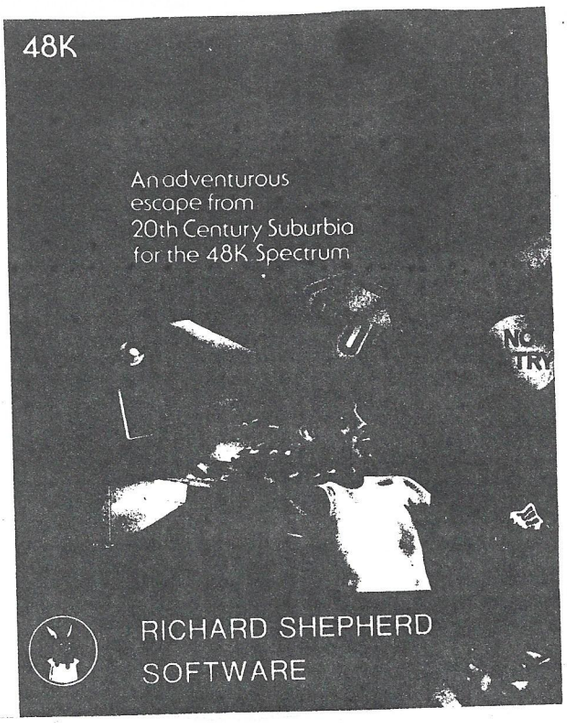
TANK	- 500
FLYING SAUCER	- 1000
SUPER TANK	: 2500

The game also works with the Kempston and Sinclair Joysticks.

BIBL. 4/19

The church bells chime three in the morning ... the streets are deserted ... now's your chance to

ESCAPE FROM SCARTHORPE



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LOADING: To load Urban Upstart enter LOAD "upstart" CODE. CODE is obtained by pressing both shift keys until a flashing 'E' appears, then pressing CODE, which is located on the I key.

USING THE PROGRAM: To explore Scarthorpe you will need to move from location to location by entering North, South, East or West. You need only use the first letter, i.e. N for North. Follow all instructions by pressing Enter.

To give commands, use simplified English. The program has a large vocabulary including UP, DOWN, ENTER, LEAVE, IN, OUT, CROSS, EXAMINE, LOOK, EAT, DRINK and many others. It is also possible to string commands together, for example "TAKE DUNGAREES AND GO NORTH" or "KILL FAN AND TAKE TRAP". Remember to press Enter after each instruction.

There are also a number of special functions designed to help you. For example "TAKE" or "T" will allow you to pick up a useful object and carry it with you. Enter "DROP" and you will leave the object behind. If you are unsure of which items you are carrying, enter "I" for an inventory. To see how well you are doing, enter "SCORE" to be given points out of 22. If your game is going badly you can abandon it by entering "QUIT".

If you wish to save the game to be continued later, enter "SAVE" and follow the on-screen instructions. To re-load your game, load the original cassette, move to the first location and enter "LOAD" and follow the on-screen instructions.

Please note: IT IS IMPORTANT TO DISCONNECT ANY MICRODRIVE DEVICE BEFORE LOADING THIS GAME.

OTHER ADVENTURES INTO IMAGINATION FROM RICHARD SHEPHERD SOFTWARE

Invincible Island — Can you find the Seven Parchments of Xaro and their mystical meaning?

Transylvanian Tower — A spine chilling 3-D maze adventure.

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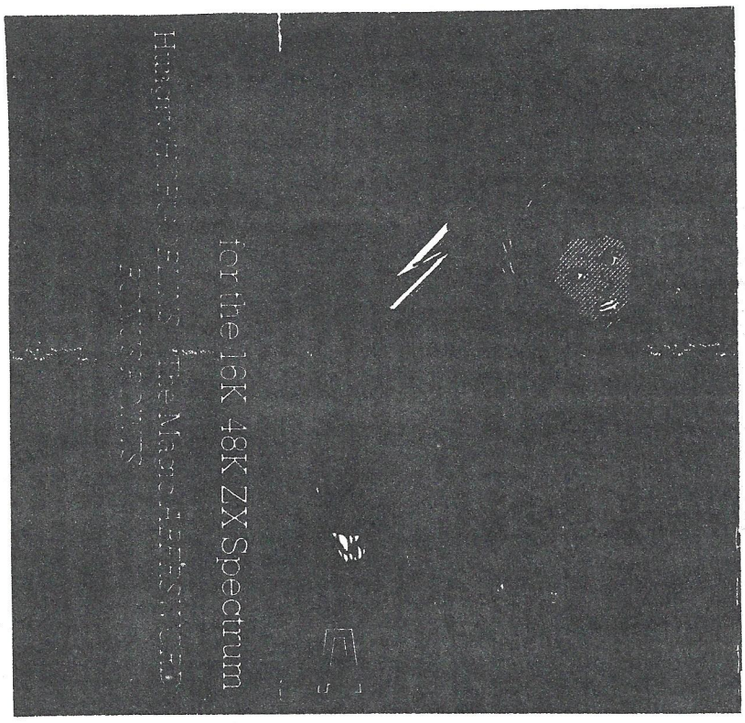
Ship of the Line — Command a sailing ship in this naval strategy game.



MAZEMAN

for the 16K/48K ZX Spectrum

CONTROL the *MAZEMAN* using the arrow keys (5, 6, 7 and 8).

USE your skill to collect as many squares as you can (10 points for each). But beware the hungry *HOBGOBLINS!* They will chase relentlessly – and you only have three lives!

GRASP the magic *ABERSWORD* and you'll have approx. 10 seconds to counter-attack and slay as many of these fearsome monsters as possible to notch up bonus points.

PASS 10,000 points and gain an extra life.

ENJOY pitting your wits against the Hobgoblins – and remember, you aren't feeding the machine 10p pieces for each new game!

ABERSOFT 7 Maesafallen, Bow Street, Dyfed SY24 5BA

LOADING
SPACE INTRUDERS

You will find the procedure for loading a program in the Spectrum instruction book page 24. The procedure for loading Space Intruders is given below:

1. Connect the ear socket of the Spectrum to the ear socket of your cassette recorder.
2. Make sure the tape is wound to the beginning.
3. Set the volume control to a suitable level.
4. Set maximum treble, minimum bass on the tone controls.
5. Type LOAD "" CODE.
6. Press ENTER.
7. Start the cassette recorder.
8. The program will RUN itself once loaded and will provide instructions.
9. Good shooting!

If the program does not load correctly try a different volume level.

SOFTWARE FOR THE SINCLAIR SPECTRUM FROM QUICKSILVA

SPACE INTRUDERS

Excerpt from the 'Book of the Faluvian Empire'.

'I dropped out of hyperspace near the edge of the galaxy, the sharp light of stars glinting on the metal hull of my Calurian Cannon Ship.

Before me the massive Forts of Falnon, defence and refueling stations, hang ominously in the void reminding me of the message I received. A shiver crawls up my spine.

The message had asked for help, finishing with sounds of panic, of equipment falling and finally an abruptly cut off scream.

I check my instrumentation and move toward the nearest Fort. I can see some debris floating near it, the docking bay doors are open. Closer now, I can see bodies adrift in the docking bays. The inner hatchways are gaping wide, a little frozen air smeared on the doors. The other Forts are in the same condition. I switch my radio on, wide open on all frequencies; there are no voices, only the static hiss of the stars. The Forts of Falnon are now tombs to the people that worked on them.

A Warning light strobes in the controls before me, a message flashes onto the screen, "Unidentified Alien Intruders". The ship computer processes all incoming data and a display appears before me of the Intruders battle formation and the relative positions of myself and the Forts. A confusion of alien sounds from the radio assaults my ears and I breath in sharply at the sight of them, sweat breaks out on my forehead.

I manouevre my Calurian Cannon Ship to a position beneath one of the Forts.

Through a port I can see arms twitching back and forth as the fleet of intruding aliens lower towards me. Suddenly a curling cord of energy drops from one of the aliens and blossoms into a feverish explosion on one of the Forts of Falnon.

More writhing cords of energy drop, like a plague of coiling fluorescent cobras . . .

I swing my ship into action dodging to and fro beneath the Forts sending bolts of Caluric fire lasering upwards . . .

With massive spherical explosions I paint the black of space with clouds of debris from the destruction of intruding aliens.

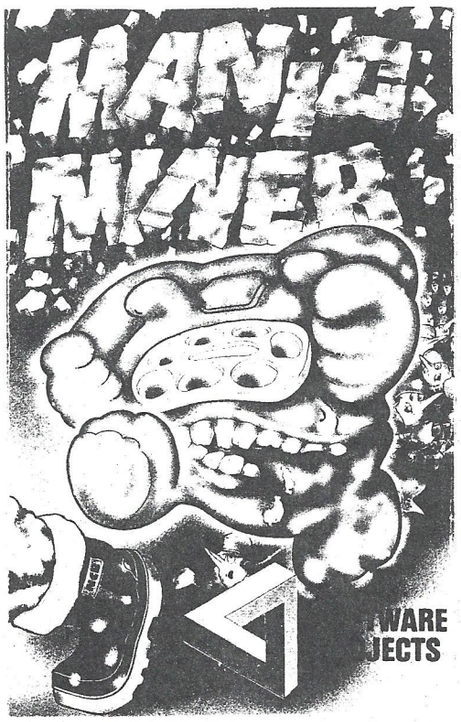
One of the intruding crafts shimmers and distorts, mutating through lethal unstable forms, I move and fire . . .

A command saucer crosses above the fleet, a gibber of instructions coming from the speaker of my radio. The Intruders descent, accelerating; dodging back and forth I move and fire, move and fire . . .'

SOFTWARE PROJECTS

MANIC MINER

48K SPECTRUM



SPECTRUM
MANIC MINER
(SECOND EDITION)

LOADING INSTRUCTIONS

1. Connect lead to ear socket of Spectrum from ear socket on recorder.
2. Rewind tape to beginning.
3. Set Volume Control to the required level.
4. Type LOAD "" or LOAD "MANICMINER".
5. Press key marked enter on your Spectrum.
6. Press play on your cassette recorder.
7. Your Program will now load.

If the program does not load first time, repeat instructions but try a different volume setting.

TO MOVE USE KEYS:

Q, E, T, U, or O	=	MOVE LEFT
W, R, Y, I or P	=	MOVE RIGHT
SHIFT TO SPACE	=	JUMP

MANIC MINER CAN ALSO BE USED WITH KEMPSTON, AGF AND PROTEK JOYSTICK INTERFACES AND IS ALSO COMPATIBLE WITH INTERFACE II

Author: MATTHEW SMITH

MANIC MINER

Miner Willy, while prospecting down Surbiton way, stumbles upon an ancient, long forgotten mine-shaft. On further exploration, he finds evidence of a lost civilisation far superior to our own, which used automatons to dig deep into the Earth's core to supply the essential raw materials for their advanced industry. After centuries of peace and prosperity, the civilisation was torn apart by war, and lapsed into a long dark age, abandoning their industry and machines. Nobody, however, thought to tell the mine robots to stop working, and through countless aeons they had steadily accumulated a huge stockpile of valuable metals and minerals, and Miner Willy realises that he now has the opportunity to make his fortune by finding the underground store.

In order to move to the next chamber, you must collect all the flashing keys in the room while avoiding nasties like POISONOUS PANSIES and SPIDERS and SLIME and worst of all, MANIC MINING ROBOTS. When you have all the keys, you can enter the portal which will now be flashing. The game ends when you have been 'got' or fallen heavily three times.

BIBL. 4/16

"KONG" its program code, graphic representation and art work are the copyright of Ocean Software Limited and may not be reproduced, stored, hired or broadcast in any form whatsoever without the written permission of OSL. The object of the game is to rescue the pretty girl from the clutches of Kong and bring about his downfall.

LOADING Position the cassette in your tape recorder with the printed side upwards and make sure that it is rewound to the beginning. Ensure that the connection lead goes from the EAR socket on the recorder to the EAR socket on the Spectrum and that the MIC socket is disconnected.
TYPE LOAD "" <ENTER> [Note there is no space between the two quotes] the " is obtained by pressing the SYMBOL SHIFT and P KEY simultaneously. [for further instructions consult chapter 6 of your manual.]
NOW PRESS PLAY on the recorder. The screen message should appear and the game will load automatically. If this does not happen adjust the volume and tone controls until loading takes place. Follow instructions on screen.

PLAYING You must rescue the girl frc m the clutches of Kong. Run along the girde·s and climb the ladders to reach her but be carefui, Kong has spotted you and will throw everything he can lay his hands on to stop you. You must jump over the obstacles or smash them with your hammer and when you succeed in reaching the top you progress to a more difficult screen. Only on the final play can you defeat Kong and bring him crashing down. Bonus objects appear at random and should be picked up for extra points.
Good Luck.

STATUS AND SCORING On screen scoring gives current score and bonus. You have 3 lives and a hall of fame.

POINTS Time constraint gives points for completion. 100 points for smashing barrels and 100 for the fire. 2000 bonus for completing 1st screen increasing by a further 1000 for each additional screen. Bonus gems 200 points.

CONTROLS Either keyboard or Kempston Joystick may be used.
Keyboard M – Right X – Down
N – Left A – Jump
S – Up
Kempston — follow screen instructions.

"KONG" written by Paul Owens is one of a number of exciting games produced by Ocean Software Limited. Please ask your local dealer for other titles in our range.
If you've written a good program why not contact us, without obligation, to discuss marketing. write to:
Ocean, Ralli Building,
Stanley St. Manchester M3 5FD.

1

PSION software cassettes are manufactured by a fully automated process under the strictest quality control. Here are some details about the range of Psion software for the Sinclair Spectrum.

HORACE — **HORACE AND THE SPIDERS** is the most recent addition to the Horace series which began with **HUNGRY HORACE** in which our hero is chased by guards in the park, and includes **HORACE GOES SKIING** in which he faces all the dangers of the piste and more.

TRADITIONAL GAMES — Pit yourself against your Spectrum in these classic games of skill and tactics. Psion's **CHESS** has ten skill levels and **BACKGAMMON** has four, as does **Computer SCRABBLE®**, sufficient to match any opponent who cares to try his hand.

MODERN GAMES — Play those ever popular Space Games — **SPACE RAIDERS** and **PLANETOIDS** or turn your Spectrum into a Flight Simulator with **FLIGHT SIMULATION**, a sophisticated program which really tests your skill as a pilot. Take-off or land on a choice of two landing fields or fly around and survey the panorama, using your full instrument display, 3 dimensional view from the cockpit and detailed map of the local scenery.

APPLICATIONS — Get down to some serious business. **VU-FILE** is an all-purpose program for filing and information retrieval. Define your own records, add to them at will and find the information you require instantly. **VU-CALC** is the versatile spreadsheet program for producing and manipulating text, data and formulae in large tables. **VU-3D** is your own Computer Aided Design program. Create and design complex 3 dimensional objects, manoeuvre them as you please and display them at will from any perspective or with different shading.

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2

sinclair®
ZX Spectrum® 48K RAM

CHEQUERED FLAG

from PSION

Load and run by typing LOAD "flag"

Chequered Flag is a fast moving motor racing simulation in which you have to negotiate some of the world's most famous racing circuits. From behind the wheel of your thoroughbred Formula 1 racing car you have a dynamic view of the outside world flashing past and of continuously changing instruments on your dashboard display. Watch the various landmarks appear over the horizon and snake towards you — trees, milestones, rocks, warning arrows, a lake, etc.. There are even hills to climb and descend. Keep an eye on your instruments to achieve maximum performance and avoid skidding or overheating.

Your car has been carefully programmed to model accurately the dynamics of a real racing car, and you even have a choice of cars. Peak power will be delivered at the appropriate revs, and drag and road traction are all evaluated. In order to achieve maximum performance you will need to change up and down through the gears to keep the revs at the optimum level, and if you take the corners too fast you will start to slip sideways. But don't worry, to make things a little easier you can opt for a car with an automatic gear box — at the cost of a little power of course.

3

Your dashboard display features full analogue speedometer, rev counter, fuel and temperature gauges along with a gear selection indicator — plus lap timer and lap counter. The steering wheel is also visible and turns in response to your commands.

Driving a racing car is a very skilled business, and apart from keeping on the road and trying to establish new lap or race records, you will have to avoid various hazards and look after your car.

OIL/ WATER — driving over oil or water on the road will dramatically reduce your grip and induce a skid if you try to turn.

OFF THE ROAD — if you put a tyre off the road your ride will get rather bumpy and the car's performance will be impaired. Don't go too far off the road or you'll crash!

GLASS — running over glass on the road will cause a tyre to burst, inducing a dramatic wobble and serious loss of performance. You must limp round to the pits to have a new tyre fitted.

OVERHEATING — constantly over revving will cause your temperature to rise, resulting in a blown-up engine if you don't take it easy. A visit to the pits will cool you down quickly. Take care that you don't change down a gear at high revs because this is also likely to cause severe overheating.

FUEL — if you undertake a very long race you will have to watch the fuel gauge. Stopping at the pits will refuel the car.

4

PIT STOP — just pull over to the side of the road by the pits and come to a halt. A full service will be performed, including new tyres, fuel and some engine cooling!

All that remains now is for you to select the circuit, car and number of laps, and there you are, on the grid waiting for the light to turn green.....

OPERATING INSTRUCTIONS

Accelerator:	key "O"
Brake:	key "I"
Gear change Up:	key "M" or any key to right of M
Gear change Down:	key "N" or any key to left of N
Steering Fast Left:	key "A"
Slow Left:	key "S"
Slow Right:	key "D"
Fast Right:	key "F"
Pause:	key "H": press again to continue
Abort the race:	key "H" and key "T" together

THE CIRCUITS

Ten circuits have been programmed into Chequered Flag, most of them modelled on world famous Grand Prix circuits. Your choice is between:

Brands Hatch	Monaco
Oulton Park	Cambridge Ring
Silverstone	Paul Ricard (France)
Micro Drive	Saturn Sands
Osterreichring (Austria)	Monza

5

THE CARS

FERETTI TURBO
Immensely powerful, this turbo charged car develops 640 bhp between 8,000 and 10,000 revs, giving it superior acceleration. A very difficult car to handle, and only recommended to the more experienced racing drivers.

PSION PEGASUS
A new car featuring the latest technology and the highest standards of engineering. Develops 560 bhp between 5,000 and 10,000 revs and has an exceptionally low drag coefficient. A very fast car which is also reasonably easy to drive.

McFASTER SPECIAL
This car has an automatic gearbox, making it the ideal choice for the more inexperienced driver. Nevertheless it is still very fast and reliable, developing 500 bhp.

Psion cassettes for the Sinclair ZX Spectrum are designed to load over a very wide range of volume and tone settings on your tape recorder. If you have any difficulty, ensure that the head and pinch-roller of your tape recorder are quite clean. Cleaning kits for this purpose are widely available.

MADE IN UNITED KINGDOM

The procedure for loading a program is described in chapter 20 of the Spectrum manual. The steps are summarised below.

1. **Connect the ear socket on your Spectrum to the ear socket on your cassette recorder.**
2. **Position the tape before the beginning of the program that you wish to load.**
3. **Turn the volume control to ¾ of maximum or to a level which you have found to be reliable on your recorder.**
4. **Type LOAD "flag" and press the ENTER key.**
5. **Start the cassette recorder playing.**

SUPPLIED BY:
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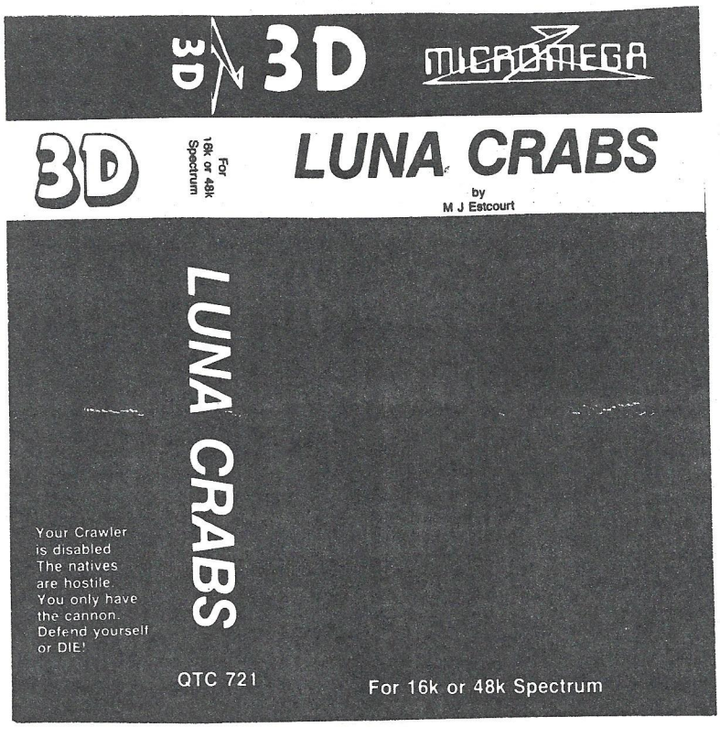
F1/14



LUNA CRABS by M J Estcourt

As part of the Solar System Recources Research team you have landed on one of the Saturnian system moons. Prospecting for the precious minerals that Earth so desperately needs you have driven away from your lander craft to take readings and soil samples for analysis.

A routine enough task until . . . .

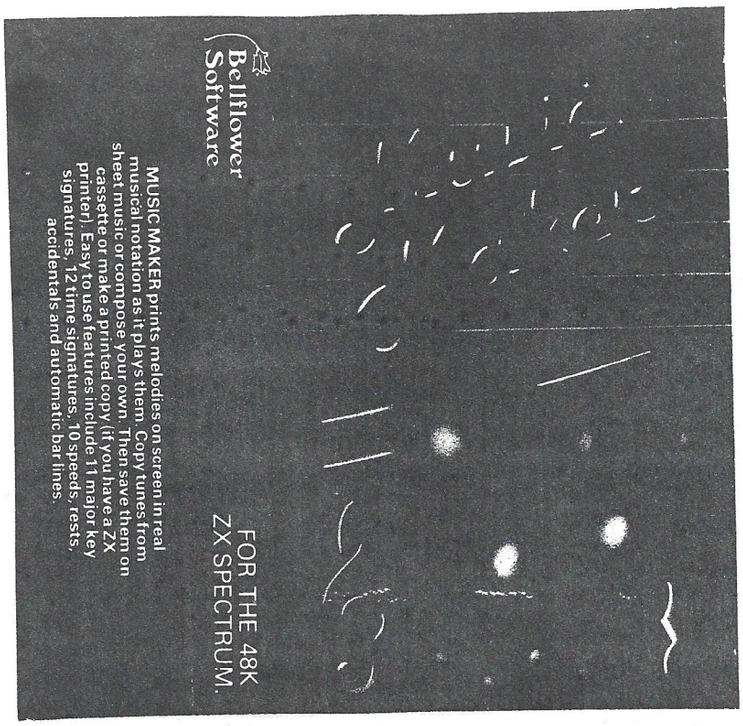
The bio-sensor flashes its warning - there are creatures moving nearby! You urgently head back for the lander . . . and getting CLOSER!

They dart nervously towards your crawler, spitting deadly acid-balls. There is nothing you can do but defend yourself for as long as you can with the crawler's cannon.

At least you can still turn the crawler with its one remaining track to aim the cannon, using console keys 1 and Ø for left and right.

And the guided photon bolt still fires on the 9 key and is controlled by the 1 and Ø keys - things could just conceivably be worse (couldn't they?).

But the situation is desperate. Here they come, in innumerable waves. How long do you expect to survive before . . .don't even think about it!



INSTRUCTIONS

To load program type **LOAD "MUSIC"** (or **LOAD " "**) and press **ENTER.**

Follow the screen instructions to select key and time signatures and set speed. If you are not familiar with musical notation, look at the first of the tunes printed on the back of this cassette inlay. The first thing you see is the treble clef, which the program prints automatically. Then comes the key signature, which in this case is E flat major, but you don't need to know that – just count up the flat symbols and use the cursor as directed to tell the computer you want three flats. The symbols in the key signature of the second tune are sharps.

Next comes the time signature – 6/8 in the first tune. The bottom figure tells you the value of each beat and the top figure tells you how many of them there are in each bar. This tune has six "eighth notes" (or quavers) in each bar, which is exactly what you will see in the fourth bar of the tune. Sometimes quavers have a bar joining their stems together instead of separate tails.

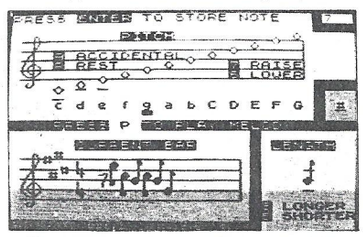
Other notes have longer time values, so fewer will fit in a bar. The first bar has two dotted crotchets (don't worry about the names, you don't need them to operate the program), which are each worth three quavers, and the last bar is filled by just one note – a dotted minim. A dot after a note (or rest) makes that note half as long again as it would normally be.

The second tune has a 4/4 time signature (sometimes written as a large C), which means each bar will take four "quarter notes" (or crotchets) or their equivalents. So, the second bar has three one-beat crotchets, followed by two half-beat quavers to make up the full four beats. The last bar has two minims – each as long as two crotchet notes.

The opening bar begins with a minim rest (two beats) and a crotchet rest (one beat). Each type of note has a corresponding rest which means pause for the length of time that note would last. If a tune starts mid-way through a bar you must remember to fill the empty space at the beginning with the appropriate rests, if they are not already printed in the music, so that the program will put the bar lines in correctly.

The third tune has no sharps or flats in its key signature, but it does have accidentals – extra sharp or flat notes not shown in the key signature – at various points. The second note in the fifth bar is an accidental – in this case a sharp, which makes the note slightly higher than it would normally sound. A flat would make the note slightly lower. Accidentals can also be naturals (a bit like a sharp sign with two legs missing). These are used to cancel out a sharp or flat in the key signature temporarily, making the note revert to its natural pitch.

After you have selected a speed, the main note selection screen will appear with the key and time signatures you have chosen at the beginning of the Current Bar section. To enter a note, set its Pitch, using the up and down arrow keys (**7** and **6**) to move the cursor until it is under the note in the correct position on the stave (the five horizontal lines). Then use the right and left arrow keys (**8** and **5**) to set the Length of the note. When you have the right combination of Pitch and Length, press **ENTER** and the note will appear in the Current Bar. Check carefully to make sure it is exactly the note you wanted. If it isn't, press the **DELETE** (0) key.



The accidental box on the centre right of the screen shows the normal state of each note in the chosen key. To print an accidental note press the **A** key until the required symbol appears in the box. To enter a rest, press the **R** key. Pressing the right and left arrows will now make the various rests appear in the Length box.

Every time you **ENTER** a note or a rest the counter in the top right hand corner increases by one – up to a maximum of 200. Bar lines are also counted and are drawn automatically when you enter the first note of the next bar. If you try to enter a note that is too long for the amount of time remaining in the Current Bar, an error beep will sound and the note will be ignored. As the program has already gone through the **DELETE** process for you, the delete key will have no effect in this situation.

If you want to enter the same note or rest twice (or more) consecutively, just keep pressing **ENTER** – nothing needs to be reset. When changing back from entering a rest to entering a note you must move the Pitch cursor (**7** or **6**) to get the Length display to turn back to notes.

To play the melody press **P**. Follow screen instructions to continue the tune, save it on tape, change its speed, play it in sound only, take a printer copy or start again.

Try out these three tunes on your Music Maker. They should sound familiar!