THE 2D GAME MAKER by Jonathan Small

Instruction Manual
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LOADING

To load the programme, firstly place the cassette into the cassette recorder and rewind the tape to the beginning.

On the 128K, +2 and +3, turn on the computer and press return so selecting the tape loader option. Now start the recorder.

On the 48K and Plus, turn on the computer and type LOAD "" by pressing the J key and then holding down the symbol shift key, then pressing P twice. Now press the return key and start the tape.

LOADING PROBLEMS?

Adjust the volume on your cassette recorder so that when the first sound on the tape is located (and blue and red bands appear in the border), change the volume until the bands are roughly the same height (the volume will usually be correct when the setting is about ¾ of the maximum setting for the recorder.

If you still cannot get the tape to load, try a different tape recorder. If the problem still persists, there could be a fault with your tape, in which case return it to CRL for an immediate replacement.

HOW TO USE THE PROGRAMME

Arrow control: The keys which are used on starting up the programme are,

Q (UP)
A (DOWN)
O (LEFT)
P (RIGHT)
M (FIRE)
N (FUNCTION)

The function key has little use in the editor, but in the game it is used for accessing the menu, picking up an object, using an object etc.

On entering the programme, a white screen is displayed with a bar on top of the screen displaying the main options. This stays intact always when using the editor, but is removed when playing the game.

To try the start demo in the game point the arrow to the icon of the joystick with the word GO beside it in small letters. When the arrow is in the correct position for the option to be selected the icon will invert. To select the option press the fire key.

At this point it would be useful to explain how to access other options, e.g. after accessing the option to the demo, you should now see a window in the centre of the screen with some options located inside. These include redefine keys, start and quit the game.

Quit returns you to the editor. Start game starts the game and redefine keys is used for changing the keys for controlling the character within the game. To redefine keys just enter the option by placing the arrow over the star in front of it and press fire. The computer will then prompt you on each of the keys (press the key you wish to use for each of the key choices as they are displayed.

Now you can start the game in the usual way by placing the arrow over the start game option star. If this is done correctly the inbuilt demo will start. In the game you must walk around rooms collecting objects and then use them to work your way to your goal, a room which can only be reached by using objects correctly.

Note the adventure has been designed so that you only have to be in the same room as an object to be able to pick it up. In your own adventure you may use the automatic pickup option where objects are picked up simply by running over them.

To select any of the options from within the game, the function key should first be pressed. Once this has been done a menu will appear containing all of the available options. To select an option just point the arrow at the star in front of the option required. To pick up or drop an item, just point at the object you wish to pick up or drop.

MAIN OPTIONS

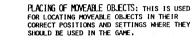The main options displayed on the top bar from left to right are as follows

OBJECT DESIGN: This is used for the designing of the blocks which when slotted together make up objects e.g. walls etc.

SCREEN DESIGN: Here the objects are slotted together to make up a screen.

DRAW SPRITES: This option is used for drawing your character and moveable objects.

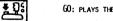**MAP DESIGN:** In this option the relative position of the room is set out in a grid.

MESSAGE DESIGN: This is used for writing scrolling messages for screens.

PLACING OF MOVEABLE OBJECTS: This is used for locating moveable objects in their correct positions and settings where they should be used in the game.

SPECIAL F.X.: This contains the options for changing how the character moves and other FX such as the sound definer, jump designer and redefiner of keys.

LOAD AND SAVE: Used for saving off and loading adventures. This is microdrive compatible.

SUPA NOVA INFO: Displays credits of producer.

GO: Plays the game

NEW: Deletes the current adventure.

Most of the options are self explanitory but here is a rundown on each of the options:

THE OBJECT DESIGNER

The line of characters at the top left hand part of the screen are individually known as blocks. The currently selected block is the one which has a small arrow beneath it. These are slotted together in the object box to the right hand top side. Block zero has a special function; its image cannot be redefined but the colours it is set to are the colours of the background of the screen. Since the character is the colour of the background this can be used to change the colour of the character. To place a block in an object, the arrow should be moved inside the object (this flashing image is that of the currently selected block).

To set this block in the image the fire key should be pressed. Notice the small word OBJ: in the bottom right hand part of the screen. This stands for object no. and is the number of the object currently in use and can be changed using OBJ LEFT and OBJ RIGHT functions. The box at the bottom left hand part of the screen is the block drawing grid. It is here wher the images of blocks are altered. To draw in the box just move the arrow within the box, press fire to draw and use the function key to erase.

When a block is finished it can be stored using PUT or a previously drawn block can be taken back into the grid using GET.

Of the options displayed, this is what each does:
LEFT scrolls the blocks displayed at the top left hand part of the screen. These blocks are used for building objects.
RIGHT is same as above except scrolls the blocks right.
GET takes the block which is indicated by an arrow underneath it and places it on the drawing grid in the bottom left hand part of the screen ready to redesign.
PUT stores the block displayed in the grid into the block indicated by an arrow.
INK changes the current ink value of a block.
PAPER changes the current paper value of a block.
TYPE is used for defining what physical attributes the blocks will have in the game (there are 5 different types explained later).
RESIZE : In the top right hand corner you have probably noticed a box containing the object currently selected, made from predefined blocks. This option allows you to change the size of an object, so allowing different object sizes. At most, a single object can contain 32 characters. Once this has been selected, the arrow is moved until the correct object size is obtained, at which point the fire button is pressed.
OBJ. LEFT stands for object left and is used for selecting a different object to redefine.
OBJ. RIGHT is same as above except moves the opposite direction through the objects.

BLOCK TYPES:

This is an important concept when using the programme that every block can be of a different type. This may mean that some blocks will kill the character on contact or could mean that these blocks vanish if an object is used correctly within a room.
NORMAL blocks do absolutely nothing to the character; they allow the character to move through them and he cannot stand on them.
SOLID blocks cannot be entered into by the character and can be stood upon.

KILL blocks kill the character on collision. The sensing is quite unusual in that if any part of the character is next to one of these blocks the character is killed, and since the character is treated as a 16 by 16 box of pixels, it can seem at times as if the detection is not working correctly. To avoid this problem it is suggested that normal blocks are placed above kill blocks that are to bee at ground level e.g. the fire used in the demo is 2 characters high (the top character is normal but the lower one kills, so that the character can stand off the edge of a block at the same level as the fire without being killed.
DISAPPEAR blocks are treated as solid blocks until an object is used in the correct way in the room in which the blocks are located. When this happens, the blocks vanish.
APPEAR blocks do not appear until an object is used correctly in a room where they are located; when this is done these blocks appear and behave as solid blocks.

THE SCREEN DESIGNER

The screen designer is used for the positioning of objects so as to make up a screen. Firstly the screen to be drawn must be selected by using the screen inc. and dec. functions. When the required screen number is displayed it can be selected using the select screen function. After selectin ga screen a new menu appears. In the top right hand corner the currently selected object is displayed. This is the object which will be positioned when the set object option is used.
SET OBJECT displays the current screen and allows you to position an object. The position of the object is altered by by the arrow and the size of the object indicated by 4 white squares. When the object is in the correct position it is set by a press of the fire key.

DELETE OPERAT.

This stands for delete last operation and removes the last object set on the screen.

QUIT exits the menu

DRAWING SPRITES

This option is the third along on the top of the screen. It is here where moveable objects and your character are defined. On entering this option you are asked to select which type of sprite you wish to draw. Select the required option. A screen is now displayed with a large box in the bottom left hand part. This is where objects are drawn as well as your character. To draw in the grid move the arrow inside the box, press fire to draw and the function key to rubout as used in the object designer.

DRAWING YOUR CHARACTER: Eight separate sprites are used for your character (four frames of animation in one direction and four frames in the other). Zero to three are the animation for your character when it moves left and four to seven when it is moving right.

DRAWING MOVEABLE OBJECTS: Thirty two moveable objects are allowed by the programme, each having a number from zero to thirty one.

OPTIONS AVAILABLE:

SPRITE INC. increases current sprite number.
SPRITE DEC. decreases current sprite number.
PUT stores the image in the grid into memory.
GET gets sprite from memory and places it on the grid.
MIRROR reverses the image in the grid from left to right.

MAP DESIGN

This displays a list of numbers representing the rooms within the map. To select a room, point to the appropriate room and press fire. The number will then invert. It is now possible to change the screen used at this position in the map and to view the screen. Also, positions in the map can be set as the start and end of your adventure.

FINISH SCREEN sets the currently selected room as the finishing screen (where the congratulations message is displayed).
INC NO. increases the number of the currently selected room.
DEC NO. decreases the number of the currently selected room.
VIEW SCREEN displays the selected room.
FIX allows another screen to be selected.

OPTIONS AVAILABLE:

START SCREEN sets the currently selected room as the starting screen.
FINISH SCREEN sets the currently selected room as the finishing screen (where the congratulations message is displayed).
INC NO. increses the number of the currently selected room.
DEC NO. decreses the number of the currently selected room.
VIEW SCREEN displays the selected room.
FIX allows another room to be selected.

MESSAGE DESIGNER

Here the scrolling messages that are seen on the top part of the screen can be changed. These messages can be used as clues for the uses of the objects or just the name of the room.
To use this option the screen you wish the message to appear in must be selected. This is done using the screen inc. and dec. options. To check that you have the right screen the view option can be used. When the correct screen is located the select message option should be entered. Now the message can be typed in and finished off with a press of the return key.
Note: If you make a mistake you cannot use delete (this is due to the way in which the data is stored).Also, the typing in of keywords produces some strange effects.

OPTIONS AVAILABLE:

INC SCREEN NO. increases the currently selected screen number.
DEC SCREEN NO. decreases the currently selected screen number.
VIEW SCREEN displays the currently selected screen.
SET MESSAGE allows you to type in a message to go along with a particular screen.

PLACING OF MOVEABLE OBJECTS

This option is used for the positioning of moveable objects and is also used for outlining exactly where they are supposed to be used.

OPTIONS USED...

CHANGE STATUS is used to set which room the object is to be used. It is this room only that the object will have any effect.
SET OBJECT is used if the object is actually in the game using the status "switch". From this option you can position the object.

SPECIAL EFFECTS

In this option all of the control features of the character can be changed so as to allow the character to be controlled in different ways. Also in this option you can access the sound definer and the jump definer. There are also some extra items included in this option which can be used to change the amount of points the user gains when an option is done correctly, and also allows the changing of the name of the game.

OPTIONS AVAILABLE:

CTRL IN JUMP stands for control in jump and is used to specify whether or not you require the character to be able to be controlled when it is not on the ground.

JUMP is used to specify whether or not you require the character to be able to jump.

EXTRA FUNCTION enters an extra menu which contains the options which allow the changing of the score and the changing of the name of the game.

UP/DOWN CTRL stands for up and down control. With this option it is possible to specify whether the character is able to move up and down the screen using the up and down keys.

GRAVITY when on will make the character fall until reaching a solid block. When off, the character will not fall. Note that when gravity is off then the jump control will not work, and also if gravity is off and up/down control is not on then there is no way of moving the character up and down.

FUNCTION KEY allows the removal of the function key menu if a game is being made where there is no need for a menu e.g. in games where you only need to pick up objects.

AUTO PICKUP if selected enables objects to be automatically when they are run over, and they cannot be picked up using the options menu.

SOUND DEFINER: here the sound effects for different actions are defined by changing the numbers next to options using the up and down stars on each side of the numbers. The starting point is where in a sound an effect starts from. The speed is how quickly or slowly a sound is played. The starting and finishing values are the starting and finishing tones of notes which make up sound effects; there are two starting and finishing tones because tones run together when a sound is played. The reverse is for how the note changes i.e. if its tone increases (1) or if it decreases (0).
The sound definer is very complex but there is little need to know what options do, just play around with them until you find something you like.

LOAD/SAVE

This option is used for the storing of adventures and the loading of previously created adventures. This option is microdrive compatible and can be changed to work with almost any disc interface by the changing of the basic part of the programme.

LOAD loads a game from cassette.
SAVE stores a file to cassette.
SAVE DRIVE stores a file on microdrive.
LOAD DRIVE gets a file from microdrive.

SUPA NOVA INFO

This displays the credits of the producer of this software and the operating system under which it operates (Icons and Arrows). This operating system is the user friendly interface that is made up of pull down menus, windows and the arrow.

GO

This option actually starts the game that you have created. To exit the game go to the quit option.

NEW

This option clears the adventure currently in memory.

CREATING A NEW SCREEN

When creating a new screen for the first time it is probably hte best idea to go into the block editor. From here you should define the blocks needed for the graphics you require. From here you should then also define the objects that are going to be defined.

It is probably a good idea for you to define a block which is solid and can be used for drawing platforms, then you should draw what you require to be at the bottom of the screen and what the character stands on.
Once all the platforms that are needed have been drawn along with any other object needed on a screen, you can now enter the draw screen option so as you can define where you want the objects to be placed.
Once in the screen definer select a screen which is not being used by the demo e.g. screen 20 and build up the screen using the objects you have already defined. If you make any mistakes, use the delete operat. function to remove the last object you have set.
When the screen has been finished go into the map option and place the screen where you require on the map. If you want your screen to be the starting screen select your room on the grid then point to the start room option. Now when the game starts it will start in your screen roughly in the centre.
Now that you have drawn a one screen game you may find that you wish to rename the game. To do this go to the FX option and then select extra options. From here you can rename the game and change the addition to score value.

CONCLUSION

The quickest way to learn how to use the programme is basically to mess around changing the built in demo until you have created a complete adventure....writing a whole arcade adventure from scratch is much more difficult. Enjoy yourself