

# **Brushes**

### **Brush Header**

b1 :  $n_8n_7n_6n_5n_4n_3n_2n_1$ b2 :  $l_8l_7l_6l_5l_4l_3l_2l_1$ 

 $n_8n_7n_6n_5n_4n_3n_2n_1$  unique brush id

 $1_81_71_61_51_41_31_21_1$  brush definition byte length

### **Brush Reference**

b1 :  $z_1 r_2 r_1 00010$ b2 :  $y_3 y_2 y_1 x_3 x_2 x_1 z_3 z_2$ b3 :  $e_8 e_7 e_6 e_5 e_4 e_3 e_2 e_1$ 

 $x_3x_2x_1$  x position  $y_3y_2y_1$  y position  $z_3z_2Z_1$  z position

 $r_2r_1$  screen rotation for brush

 $e_8e_7e_6e_5e_4e_3e_2e_1\quad \text{brush ref}$ 

#### **Basic Block**

b1 :  $z_1$  0000001 (standard square block)

b1 :  $z_1$  0000011 (trampoline) b1 :  $z_1$  1000000 (water) b1 :  $z_1$  1000011 (ice) b1 :  $z_1$  10001  $r_2r_1$  (arrow)

 $\mathbf{p}_1 : \mathbf{z}_1 \mathbf{10001} \mathbf{r}_2 \mathbf{r}_1 \mathbf{(anow)}$ 

b1 :  $z_1$  **00**  $t_3t_2t_1$   $r_2r_1$ b2 :  $y_3y_2y_1$   $x_3x_2x_1$   $z_3z_2$ 

 $t_3t_2t_1$  standard block type (t > 0)

 $x_3x_2x_1$  x position  $y_3y_2y_1$  y position  $z_3z_2Z_1$  z position

 $r_2r_1$  screen rotation for block

#### **Extruded Block**

b1 :  $z_1$  0100001 (standard square block)

b1 :  $z_1$  **0100011** (trampoline)

 $h_3h_2h_1$  column height from 0  $r_2r_1$  screen rotation for column

#### Column of Basic Blocks

b1 :  $z_1$  1100001 (standard square block)

 $b1 : z_1$  **1100011** (trampoline)

Brush data file layout:

#### **Brush Header**

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

...

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

**End of Brush Data** 

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#### **Brush Header**

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

...

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

End of Brush Data End of Brush Data

# Clue Block (triggers Puzzle Piece or Lift)

## **End of Brush Data**

b1 : 00000000 b2 : 00000000

# **Screens**

### Screen header

b1 :  $1_81_71_61_51_41_31_21_1$ b2 :  $0_{77}9_67_57_47_37_27_1$ b3 :  $0_{77}x_6x_5x_4x_3x_2x_1$ b4 :  $000_{1}c_4c_3c_2c_1$ 

 $1_81_71_61_51_41_31_21_1$  screen definition byte length

 $y_7y_6y_5y_4y_3y_2y_1$  y position  $x_7x_6x_5x_4x_3x_2x_1$  x position  $c_4c_3c_2c_1$  colour scheme

 $t_1$  clock speed, %0 | %1 = normal | slow

### **Floor**

The floor data comprises 2 bytes, which indicate either a basic block or a column of basic blocks. After decoding these bytes, the resulting structure must then be cloned over  $0 \le x \le 7$  then  $0 \le y \le 7$ , starting at the (x, y) position stated in the data.

### **Brush Reference**

b1 :  $z_1 r_2 r_1 00010$ b2 :  $y_3 y_2 y_1 x_3 x_2 x_1 z_3 z_2$ b3 :  $e_8 e_7 e_6 e_5 e_4 e_3 e_2 e_1$ 

 $x_3x_2x_1$  x position  $y_3y_2y_1$  y position  $z_3z_2Z_1$  z position

 $r_2r_1$  screen rotation for brush

 $e_8e_7e_6e_5e_4e_3e_2e_1$  brush ref

#### **Basic Block**

b1 :  $z_1$  0000001 (standard square block)

b1 :  $z_1$  0000011 (trampoline) b1 :  $z_1$  1000000 (water) b1 :  $z_1$  1000011 (ice) b1 :  $z_1$  10001  $r_2r_1$  (arrow)

b1 :  $z_1$  **00**  $t_3t_2t_1$   $r_2r_1$  b2 :  $y_3y_2y_1$   $x_3x_2x_1$   $z_3z_2$ 

 $t_3t_2t_1$  standard block type (t > 0)

 $x_3x_2x_1$  x position  $y_3y_2y_1$  y position  $z_3z_2Z_1$  z position

 $r_2r_1$  screen rotation for block

#### **Extruded Block**

b1 :  $z_1$  0100001 (standard square block)

 $b1 : z_1$  **0100011** (trampoline)

Screen data file layout :

#### Screen Header

**Floor** 

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

. . .

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

#### **End of Terrain**

[ Jewel | Lift | Enemy | Puzzle Piece ]

. . .

[ Jewel | Lift | Enemy | Puzzle Piece ]

**End of Objects** 

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#### Screen Header

**Floor** 

[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

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[ Brush Reference | Basic Block | Column of Basic Blocks | Clue Block ]

#### **End of Terrain**

[ Jewel | Lift | Enemy | Puzzle Piece ]

...

[ Jewel | Lift | Enemy | Puzzle Piece ]

**End of Objects** 

**End of Screens** 

 $h_3h_2h_1$  column height from 0  $r_2r_1$  screen rotation for column

### **Column of Basic Blocks**

b1 :  $z_1$  1100001 (standard square block)

 $b1 : z_1$  **1100011** (trampoline)

 $r_2r_1$  screen rotation for column

## Clue Block (triggers Puzzle Piece or Lift)

### **End of Terrain**

b1 : 00000000 b2 : 00000000

#### **Jewel**

 $b1 : Z_1 0000 001$ 

b2 :  $y_3y_2y_1 x_3x_2x_1 z_3z_2$ b3 :  $j_8j_7j_6j_5j_4j_3j_2j_1$ 

 $x_3x_2x_1$  x position  $y_3y_2y_1$  y position  $z_3z_2Z_1$  z position

 $j_8j_7j_6j_5j_4j_3j_2j_1$  unique jewel id

#### Lift

b1 :  $z_1 t_4 t_3 t_2 t_1$  **010** b2 :  $y_3 y_2 y_1 x_3 x_2 x_1 z_3 z_2$ b3 :  $p_2 p_1 n_3 n_2 n_1 m_3 m_2 m_1$ 

 $t_4t_3t_2t_1$  lift type  $x_3x_2x_1$  x position  $y_3y_2y_1$  y position

 $z_3z_2Z_1$  initial z position  $m_3m_2m_1$  min z position  $n_3n_2n_1$  max z position

 $p_2p_1$  pause amount at extents, %00 | %01 | %10 | %11 = 0 | 2 | 4 | 6 secs

## **Enemy**

b1 :  $Z_1$  **000**  $t_1$  **011** b2 :  $y_3y_2y_1 x_3x_2x_1 z_3z_2$ b3 : **0**  $i_7i_6i_5i_4i_3i_2i_1$ 

enemy type,  $\%0 \mid \%1 = \text{gyro} \mid \text{ball (when player is default model)}$ 

 $x_3x_2x_1$  initial x position  $y_3y_2y_1$  initial y position

 $z_3z_2Z_1$  z plane in which enemy moves

i<sub>7</sub>i<sub>6</sub>i<sub>5</sub>i<sub>4</sub>i<sub>3</sub>i<sub>2</sub>i<sub>1</sub> inertia, higher is less inertia, \$40 is normal, e<sub>2</sub>e<sub>1</sub> is ignored later

## Puzzle Piece (triggered by Clue Block)

b1 :  $Z_1 t_4t_3t_2t_1 \mathbf{1} r_2r_1$ b2 :  $y_3y_2y_1 x_3x_2x_1 z_3z_2$ b3 :  $b_8b_7b_6b_5b_4b_3b_2b_1$ 

 $\begin{array}{lll} t_4t_3t_2t_1 & \text{puzzle ID} \\ x_3x_2x_1 & \text{x position} \\ y_3y_2y_1 & \text{y position} \\ z_3z_2Z_1 & \text{z position} \\ \end{array}$ 

 $r_2r_1$  screen rotation for brush

 $b_8b_7b_6b_5b_4b_3b_2b_1 \quad \text{brush ref} \quad$ 

# **End of Objects**

b1 : 00000000

## **End of Screens**

b1 : **0000000**