SIXTY FOUR PIXELS

For full build instructions and step-by-step guides, please check out
https://github.com/hotchk155/AVRGame/wiki

Your kit includes:

- **Printed circuit board**
- **IC1, IC2** - TPIC6B595N power logic shift register
- **IC3** - ATMEGA328P-PU microcontroller
- **R1-R8** - 220R resistor (red-red-black code). *Fit these to the back of the board.*
- **R9** - 1K resistor (brown-black-red code)
- **C1, C2** - 33pF ceramic capacitor (33 code)
- **C3, C4, C5, C6** - 100nF cap (104 code)
- **C7** - 4.7uF Electrolytic capacitor. *The longer leg goes through the hole marked "+"*
- **X1** - 16MHz crystal
- **PWR** - Miniature slide switch
- **LED1** - 3MM standard LED. *The longer leg is the anode (+ terminal)*
- **SPK1** - 5V piezo transducer. *The anode (+ terminal) is identified on the label. Remove the label after fitting.*
- **A,B,C,D,RESET** - 6mm tactile switch
- **SERIAL -** 6 pin male header 0.1" pitch. *This is intended to fit a standard FTDI USB-to-TTL serial programming cable (not supplied)*
- **DISP1** - 8x8 red/green LED matrix. *Pin 1 is indicated with a coloured label. Please ensure correct fitting to the board – it is very difficult to remove if soldered incorrectly!*
- **IC sockets** (20 and 28 pin). *Line up the notch on the end with the image on the board*
- **3xAAA battery box** with flying leads. *Trim leads to required length. Please see web site for advice*
- **Double sided foam pads** to fix battery box to reverse of PCB. *These need to be cut to fit. Please see web site for advice.*

Once the console is running, you can press the B and D buttons to navigate between games and use C to start a game.

Press and hold buttons A+C together to return to the menu while a game is in play. If a game is over, press RESET to restart the game, then hold A+C if you wish to return to the menu.

Select the speaker icon from the game to enable or disable the sound.

For troubleshooting and more, please see
https://github.com/hotchk155/AVRGame/wiki

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