Support Group Application Note
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Author:

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Connecting Joysticks To The BBC Micro

Applicable Hardware :
BBC B
BBC B+

Related Application Notes:

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Acorn Computers Limited
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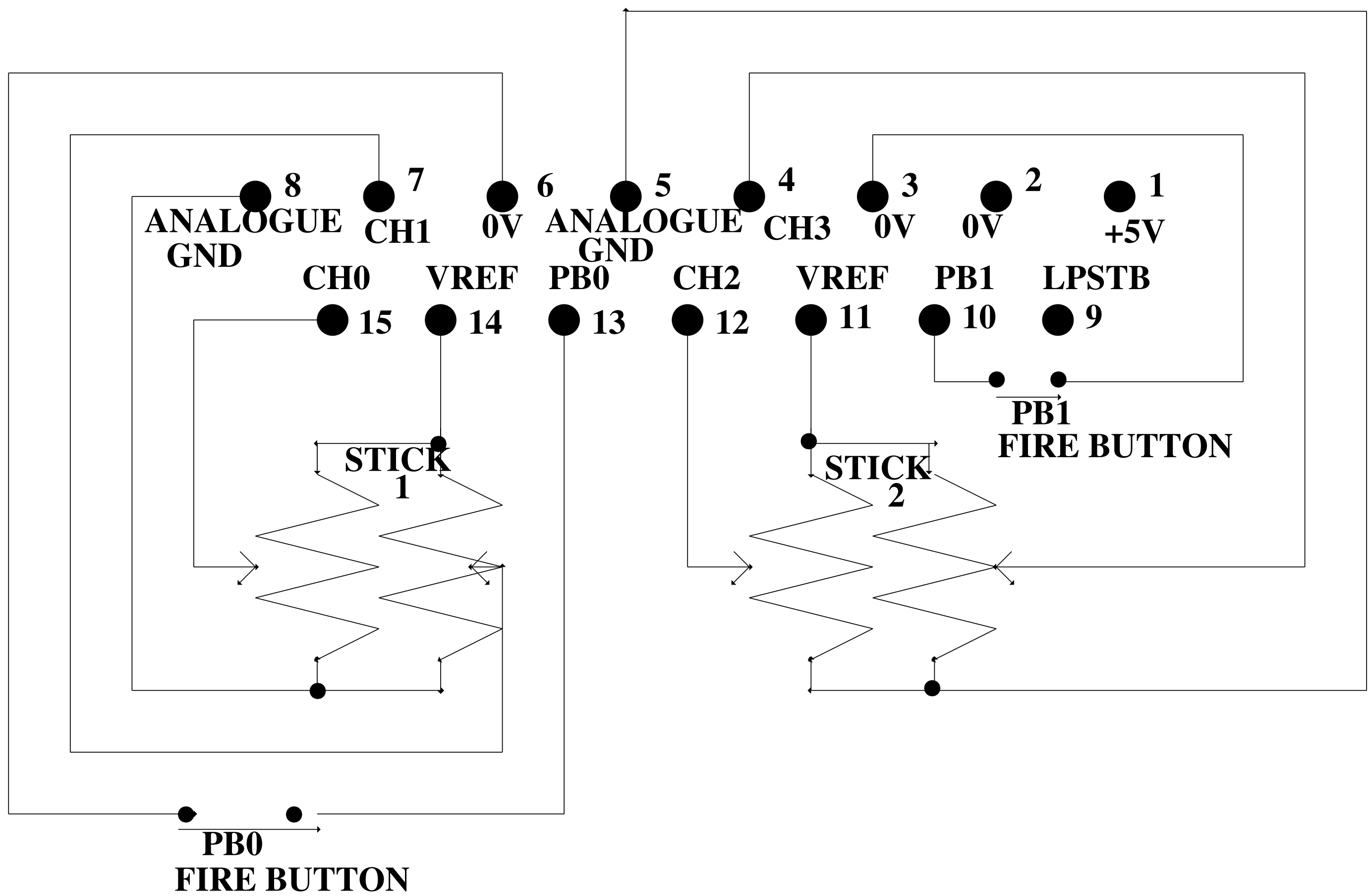
On the rear panel of the BBC Micro an Analogue port is provided for customers who wish to interface various peripherals to their machines, the most common of which are Joysticks or Games Paddles.

The circuit shown below is a view of the 15 way 'D' type connector seen from the outside of the machine, along with the connections for the four potentiometers and two fire buttons needed to configure a pair of joysticks.



The potentiometers shown in the diagram should be of approximately 10k in value and the fire buttons are simple switches which are open when at rest. The actual construction of the joystick itself is entirely at the users discretion but it is recommended that they are self centering.

To enable the use of the joysticks a full understanding of the "ADVAL" command is necessary, this is detailed on page 202 of the User Guide. There are also four OSBYTE calls that are used whilst reading from the ADC, these are OSBYTES &80, &BC, &BD and &BE (page 418 BBC User Guide). Only the first of these calls is documented in the User Guide, the other three enable you to read the ADC channel NO., read the maximum ADC channel No, and read the ADC conversion type, either 12 or 8 bits respectively.