`8M-2A-Project- Line Tracking Mouse

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`P044

`HOW IT WORKS

`The Mouse goes forward until it runs off the black line. The infra red photo interrupter

`senses no line and stops the appropriate motor until it gets back on to the black line track.

`See diagrams below,which explain how the tape and the Infrared Transmitters/Receivers work.

`Note- This program uses the Black Picaxe Experimenter Board [ AXE 023 ] hardware.

`This is a specifically designed Motor Driver Board.

`This board is needed as the motors draw too much current,unlike LED's etc.

output **0** ' Output only on pin 0

output **1** ' Output on pin 1

input **2** ' Input on pin 2

input **3** ' Input on pin 3

input **4** ' Input on pin 4

symbol SC=pin2 `Sets Left sensor to input2

symbol SR=pin3 `Sets Centre sensor to input3

symbol SL=pin4 `Sets Right sensor to input4

symbol MotorAforward=**0** `Sets motorA forward to output0

symbol MotorBforward=**1** `Sets motorB forward to output1

' 0 is black

' 1 is light

main:

 pause **1000** `wait 4 seconds

move:

 if SR=**1** then frontwards

 if SR=**0** then stop\_moving

 goto move

stop\_moving:

 low **0** `Motor A forward on

 low **1** `Motor B forward on

 goto move `Repeats forever

frontwards:

 high **0** `Motor A forward on

 high **1** `Motor B forward on

 goto move `Repeats forever

leftturn:

 low **0** `Motor A forward off

 high **1** `Motor B forward on

 goto move `Repeats forever

rightturn:

 high **0** `Motor A forward on

 low **1** `Motor B forward off

 goto move `Repeats forever