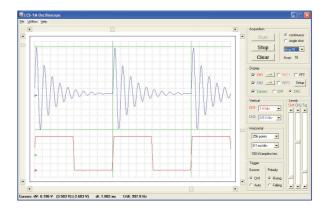
# KIT120 OSCILLOSCOPE KIT





## Oscilloscope Kit:

Thank you for purchasing this PICAXE based oscilloscope kit.

The development of the oscilloscope was by Wolfgang Maichen and further information (including all schematics, PICAXE programs and the Windows based software to use with the oscilloscope) are available free of charge from his website at: http://www.pdamusician.com/lcscope/index.html

This oscilloscope has been programmed and fully tested prior to despatch. The PICAXE-28X1 program that has been pre-programmed into the oscilloscope is also available in the /samples folder of the PICAXE Programming Editor software (v5.2.3 or later) as file 'KIT120 Oscilloscope.bas'

#### Power Supply

The oscilloscope requires a 9V 300mA regulated DC supply (2.1mm tip positive connector J4). Alternately power can be connected via the screw terminal block J3.

#### Probes

The oscilloscope will function with all normal oscilloscope probes and clips. Alternately simple wire connections may be made via the screw terminal headers J1 & J2.

### Support Posts

The oscilloscope is supplied with 4 support posts - please fit these in each corner so that the solder joints do not rest on the table surface. The red protective layer around the holes (if present) is a by-product of the manufacturing process and can be simply peeled off.

#### Communication

As supplied, the board communicates via the normal AXE026/AXE027 PICAXE programming cable via the PICAXE sertxd/serrxd pins and so the jumper JP7 can be left permanently in the DL position for both communication and reprogramming the PICAXE chip.

However it is also possible to add an optional MAX202CPE chip in position CONV1 (unpopulated by default). In this case resistor R26 (beside C30) MUST be removed. This modification redirects the serial communication to the PICAXE hardware serial port, which can increase the oscilloscope's performance. Once this modification is made JP7 must be placed in position TX for communication and position DL for PICAXE program downloads.

## Also required (not included within kit):

- 9V 300mA DC power supply (e.g. part PWR009A (UK only))
- PICAXE programming cable, either the AXE027 USB cable or AXE026 serial cable
- Oscilloscope probes

