INNOVATIVE NEW MICROBOT SYSTEM!

The PICAXE microbot system provides an exciting economical introduction to the world of robotics. The system can be fully customised by the end user, with the capacity to customise via different input sensors and output devices (in addition to the on-board motor/gearbox, LED and piezo outputs).

Microbot use a unique patented 'microbric' connector technology that means the robot can be easily reconfigured with use of just an allen key. The microbot chassis pack requires no soldering - just assemble the parts using the allen key supplied, insert the batteries and off you go!

Chassis set includes:
- PICAXE-20X2 based motherboard with battery holders and on/off switch
- 2 speed controlled gearbox / motors (with motor current feedback)
- 2 on-board LED 'eyes', on-board piezo sounder and push switch input
- 6 general purpose i/o connection points
- front bumper, line follower, microbric connectors and allen key
- connector PCBs for optional GBX013 servo and SRF005 ultrasonic sensor

Various 'add-on' modules for the microbot are also separately available (up to 6 modules can be used via the microbric connector points). These options include servos, wheel encoders, infra-red control and ultrasonic range finding options. Naturally the user can also build their own sensors if desired!

**MICROBOT CHASSIS SET**

The PICAXE microbot chassis set consists of everything you need to assemble the microbot - motherboard, microbrics, front bumpers, gearboxes, motors and line follower module. Also available in a starter pack containing a download cable and PICAXE CDROM.

**MICROBOT SENSOR PACK**

The sensors pack contains 2 infra-red transmitter LEDs, 1 infra-red receiver, 2 LDR light sensors and 2 extra microbric connectors. To add remote control capabilities the TV style remote control TVR010 should also be purchased. Supplied pre-assembled or in kit format.

**MICROBOT SERVO PACK**

The servo pack includes a GBX013 miniature servo, a servo extension cable, 2 servo connector PCBs and 2 extra microbric connectors. This pack also contains an adapter PCB to allow the SRF005 ultrasonic sensor to be mounted directly on the top of the servo. This allows the sensor to be rotated back and forth.

**ADVANCED CONTROL PACK**

The advanced control pack adds two wheel encoders that can accurately count the revolutions of the gearbox. This allows more accurate control of the microbot steering. Also included is a UNI/O memory module - ideal for micromouse maze solving competitions! Also includes 2 extra microbric connectors.

**ULTRASONIC SENSOR**

The ultrasonic range finder can detect obstacles from 3cm to 3m away. The required connector PCB is supplied in the main chassis set. Can also be mounted on the BOT123 servo pack so that the sensor can rotate back and forth. Can also be used in your own robot application.

**BATTERIES & SPARE PARTS:**

The microbot requires 3 AAA batteries:
- Alkaline AAA battery (single): BAT001

The infra-red remote requires 2 AAA batteries:
- Infra-red TV style remote: TVR010
- Alkaline AAA battery (single): BAT001

Radio-control style servos can be used to create mechanisms (e.g. a gripper) on your microbot.
- Miniature 9g servo: GBX013
- The microbric spares set contains 2 connector brics, 6 screws and 2 nuts.
- Microbric spares pack: BOT125
- The spacer set contains 9 spare spacers (3 each of 3 different sizes).
- Spacer spares pack: BOT126
- Spare allen key: BOT124

For more information please see www.picaxe.co.uk