

## RoboHAT - Complete Robotics Controller for Raspberry Pi

4TR ROBOHAT



RoboHAT is a complete robotics controller for your Raspberry Pi based mobile robot.

Supports all models of Raspberry Pi with 40 pin Connector: Model A+/B+ as well as Pi 2 and 3 Model B. Programming is fully supported in both Python and Scratch GPIO. Just look at the features provided in this small board:

1. Fully HAT specification compliant
2. 5V switching regulator to safely power the robot and the Pi from 7V to 10V batteries
3. LED indication of 5V power status
4. High efficiency, dual H-Bridge driver to drive 2 DC motors (or 2 sets of 2 if using paired motors on each side of the robot)
5. 6, 5V level shifted GPIO inputs with GVS 3-pin connectors (Ground, Volts, Signal)
6. 4, 5V level shifted GPIO outputs with GVS 3-pin connectors
7. 4-pin male header to directly plug in an Ultrasonic distance sensor. Only uses a single pin on the Raspberry Pi GPIO
8. Optional separate power for motors (up to 11V and 1.5A per motor)
9. The output connectors can be used directly to drive servos
10. I2C breakout connector (standard 4tronix I2C port)
11. Includes 2 mounting pillars and screws so it can be securely mounted to your Raspberry Pi
12. All of this is directly supported in Scratch GPIO 4 onwards - many thanks to Simon Walters for some excellent work
13. Python library module and examples freely available

This controller board is supplied fully assembled. No soldering is required.