



Tamiya 72005 6-Speed Gearbox Kit

The Tamiya 72005 6-speed gearbox is a versatile, high-efficiency gearbox that you can build in one of the following gear ratios: 11.6:1, 29.8:1, 76.5:1, 196.7:1, 505.9:1, and 1300.9:1. Whatever your application, chances are that one of the configurations will do the job. A clutch gear protects the gearbox in high-gear-ratio configurations so that the gearbox does not rip itself apart if the output shaft gets stuck.

The low-voltage motors in the 6-speed gearbox run on 1.5-4.5 volts and draw up to a few amps, making them perfect candidates for the Pololu low-voltage dual serial motor controller and the DRV8833 motor driver carrier. Motor overheating can be caused by excessive stalling, even at very low voltages. We recommend that you use stall-detection sensors, or just watch your robot, to make sure that it doesn't stall for more than a few seconds at a time.

This gearbox has a 4 mm diameter, round output shaft, which works with the wheels that are compatible with Tamiya 4 mm, round shafts. Our 3 mm universal mounting hub also fits on the smaller threaded end of the shaft, although it is not specifically intended to work with this type of shaft (the hub's set screw could damage the thread on the shaft).

For motor specs, see the Mabuchi motor RE-260 (#2295) data sheet (59k pdf). To compare all Tamiya gear box kits, see the Tamiya Gearbox Gear Ratio Comparison.



Note: The 6-speed gearbox is a kit; assembly is required. To use the kit in robotics projects, you need to connect the motors to your own robot controller.

[Documentation on producer website.](#)