



This kit consist of aluminum parts, assemblies , motors, wheels and tracks. Combining all these parts user can create a pick and place robot with gripper. Unique design of gripper allows it to hold object as huge as 10cms and as small as 1 cm in width. This kit gives the machine an additional 2 degrees of freedom. High torque motor at arm joint gives it ability to lift load of 200grams.

The controlling part of kit is based around 8051 microcontroller, equipped with motor drivers and ISP facility to program it on board.

Features of mechanical assembly:

- Lead screw arrangement for gripper
- Unique set of shaft couplers
- Rubber tracks for extra traction
- 4 wheel assemble extension for better stability

Features of Robot Controller:

- 8051 Core NXP P89V51RD2
- On-board motor drivers, for driving 4 DC motors or 2 stepper motors
- On board level converter for serial communication
- On board power regulator
- 16X2 LCD screen
- Terminal block for easy connection of motors
- Protection against noise and back EMF
- Protection against wrong polarity wiring of battery/power supply
- On-board LEDs for debugging and testing

Application Examples:

- Manually Controlled Robot
- Automated Guided Vehicle
- Wired Computer controlled Robot

Package Includes:

- Microcontroller: NXP 89V51RD2
- Pack of essential electronic components and ICs
- Robot Controller PCB:1
- Powder coated Aluminum partd1
- 100 rpm, 12VDC Geared Motors :3
- 5 rpm, 12VDC Geared Motors :3
- Plastic wheels:4
- Rubber track belts:2
- DPDT Switches :4
- Power supply components: 1 set
- Pack of Nuts and Bolts:1
- Manual in CD

Suggested other modules worth buying: (NOT included in Kit)

Other Modules Worth Buying(NOT included in kit):

1. Cellphone control Module: To make it move by keypress command from cellphone.
2. Line Sensor Array: To make it behave as line follower or grid follower
3. Wireless Computer Control Kit: To control this machine wirelessly through computer just like your video game. This modules also allows you to control machine through voice commands.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in