

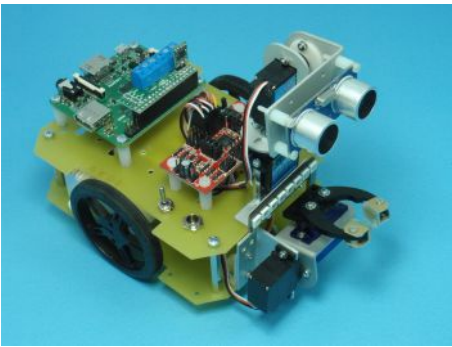


Research
Development of Electronics
Prototyping
Microcontroller education systems



AMEX Mini Robot

The mini robot educational platform



AMEX Mini Robot is a new, unique educational platform for building a mobile mini robot. The platform is designed in a way that provides a variety of configurations of mechanical and electronic part of the robot.

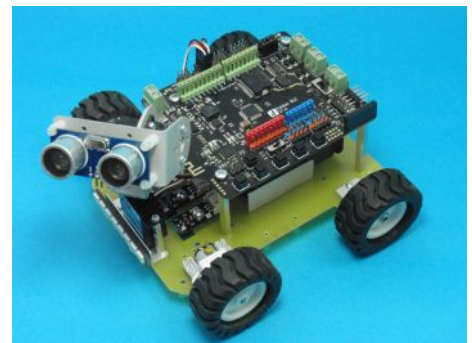
It gives the possibility of creating as many as seven different versions of the chassis mounted on the same mounting boards. The change of the chassis is made by using different motors, wheels, tracks and changing their geometry and their placement on the mounting board.

An additional and unique feature of the robotic platform is the possibility to build mini robot with the use of only one or two mounting boards (bottom and top board).

The mounting boards are offered in two versions:

- laser-cut, anodized and colored aluminium parts
- glass-reinforced epoxy laminate

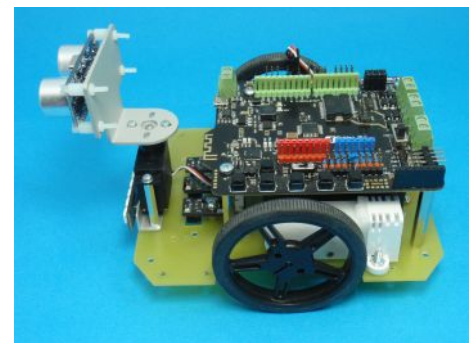
This new construction solution has not been used so far by other producers.



Particular robot versions differ in chassis configuration (2-wheel version, 4-wheel version and tracked drive system). Each configuration can be assembled on the same mounting board which is equipped with special spots and mounting holes to fasten the chosen motors and wheels. The user can choose two types of motors and different wheels. These are assembled on the same bottom mounting board.

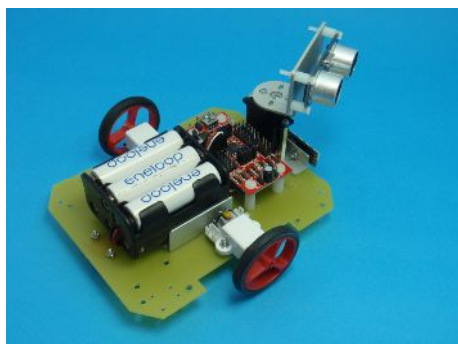
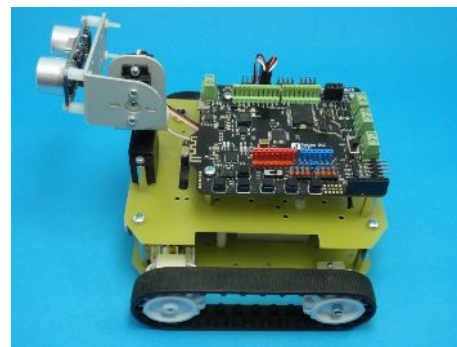
AMEX Mini Robot enables the choice of mechanical configuration of the mini robot without the need of purchasing separate versions of robots. It is only necessary to change the motors and wheels and mount them on the same mounting board.

The possibility of changing the chassis has great advantages because of possible modification of software used to control the motors. The type of the drive has influence on traction and movement dynamics of the robot.



All seven versions ensure good rigidity, reliability and aesthetics. All mechanical parts are very well matched which simplifies their installation.

Besides mechanical parts, motors, wheels, line sensors, encoders, ultrasonic distance meter with scanning mechanisms, mini gripper, power supply with embedded NiMH battery charger - the platform can be controlled by any microcontroller module with motors driver, for example *ARDUINO*, *DAGU S4A EDU*, *DFRobot RoMeo BLE*, *RASPBERRY Pi (A+, B+, Pi2)*, *Pololu A-Star 32U4 Robot Controller LV*. The above robot controllers have special mounting holes on the mounting boards.



The AMEX Mini Robot platform is intended for those who want to learn programming of the mobile mini-robot without the need of personal designing and time consuming of making the whole mechanical construction of the mini robot from scratch. It is only necessary to join all the mechanical and electrical parts, according to the instructions, by the use of screws and nuts and connect the sensors and power supply to the robot controller. The platform is an ideal solution for individual users, beginners and more advanced hobbyists, pupils and students.

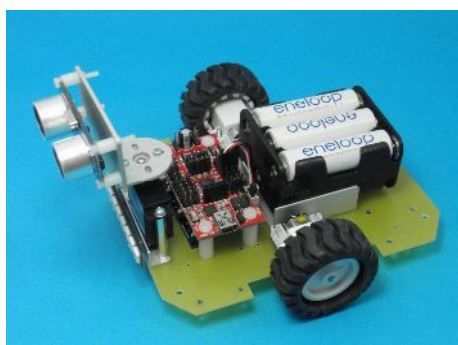
Detailed mini robot platform description can be found on producers' web site: www.amex.pl

The platform can be purchased as 2-wheel, 4-wheel version and also as tracked drive version without robot controller or with robot controller.

Customer can use any version and add other components (that is, wheels, motors, encoders, ultrasonic range measurement sensor module, camera module, scanning device, gripper, robot controller etc.). All versions contain 3 line sensors. Other components can be purchased separately.



Please contact the producer in order to get detailed offer for a chosen version of platform configuration and robot controller.



Producer:

AMEX Research Corporation Technologies

Address: Elektronowa Str. 6, PL 15-692 Bialystok (POLAND)

website: www.amex.pl e-mail: amexinfo@amex.pl

Basic prices (without robot controller and without scanning system):

Version: 2 or 4 wheels or track drive system	USD 85,00 - 125,00
Version completed: (2 boards, 4 motors, all wheels, tracs etc.)	USD 188,00

Options (paid separately):

- | | |
|--|-----------|
| 1. AMEX NiMH Charger Module | USD 20,00 |
| 2. AMEX scanning device
(Pan/Aluminium with 1 servo
with the metal gear) | USD 15,00 |
| 3. AMEX scanning device
(Pan & Tilt/Aluminium with 2 servos
with metal gear) | USD 25,00 |
| 4. AMEX Mini Gripper (with 2 servos) | USD 33,00 |