“Parking5” - 11 places

The computer program (Visual BASIC for Arduino – B4R) is saved in the card. It can only be cleared when sending new data through the USB port of the ARDUINO board.

The USB port can also be used to supply the circuit with electricity in the absence of a battery (printer type USB cable).

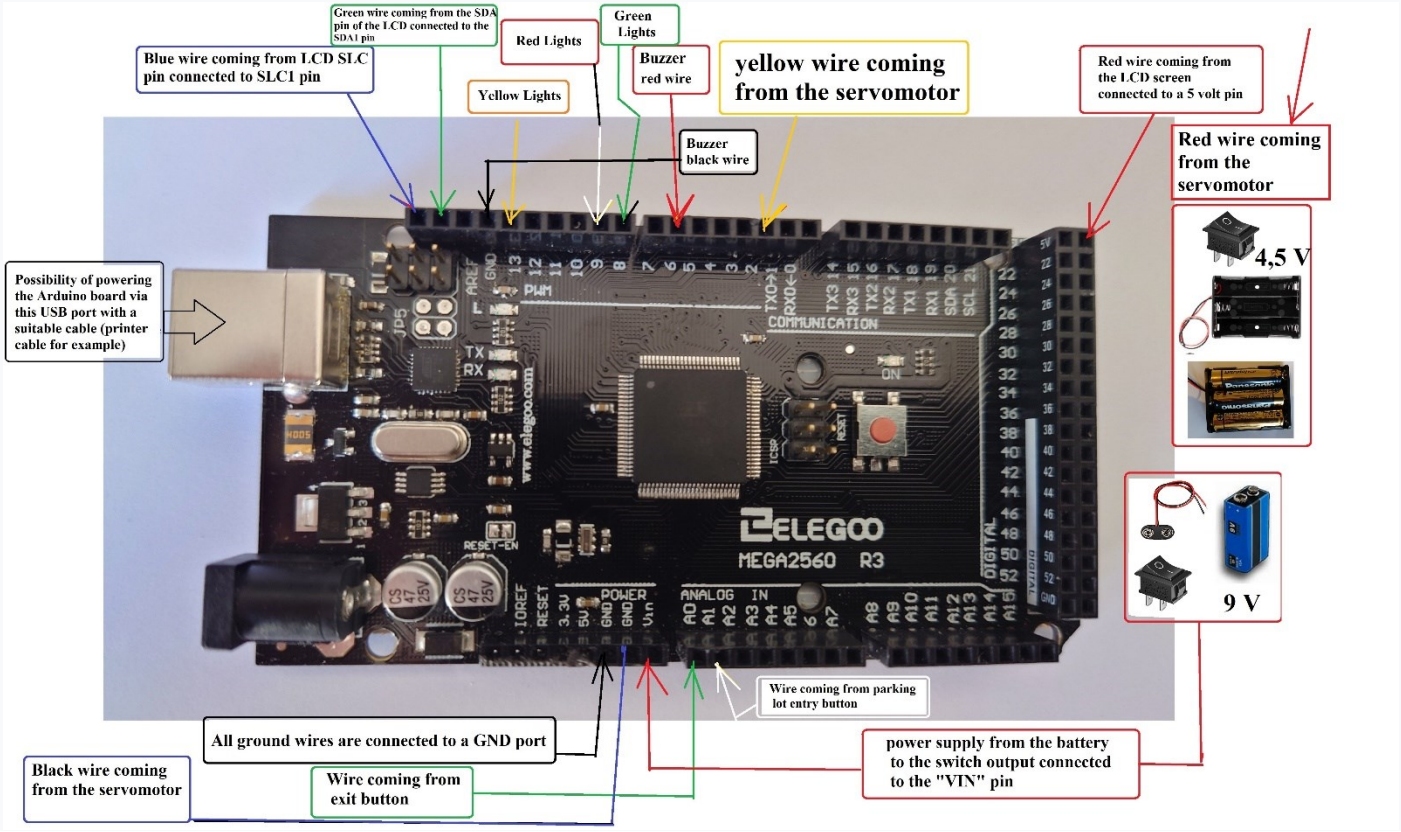
The 9 Volt current from the battery enters the circuit via the “VIN” terminal. Then the ARDUINO card transforms this current into 5 Volts for all accessories. The servomotor is directly connected to three 1.5 volt batteries, giving a voltage of 4.5 volts

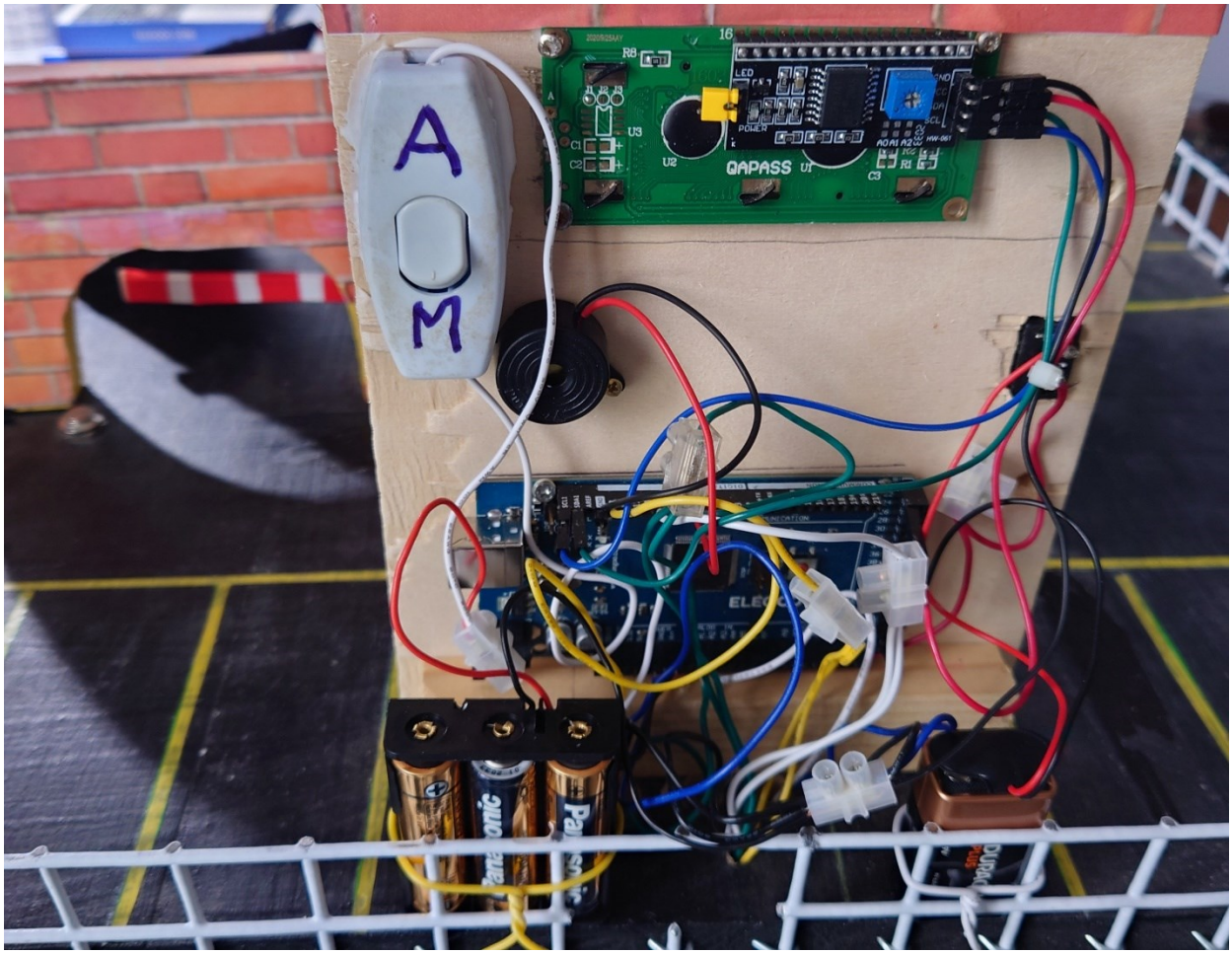
Components used

- 1 ARDUINO MEGA2560 R3 card where the algorithm written in B4R language is recorded
- An MG996 servomotor which controls the parking barrier
- A 2-line, 16-character LCD screen and its I2R connection interface
- 2 push buttons to control vehicle entrances and exits
- 2 LED traffic lights protected by built-in resistors
- 1 audible buzzer
- 2 switches
- 1 snap connector for the 9 Volt battery
- 1 connection support for the three 1.5-volt batteries
- 1 pile de 9 volts (NB – If the battery is too weak, operating errors will occur)
- 3 AA LR6 1.5-volt batteries
- Electrical wires of various colors to connect all these components together.

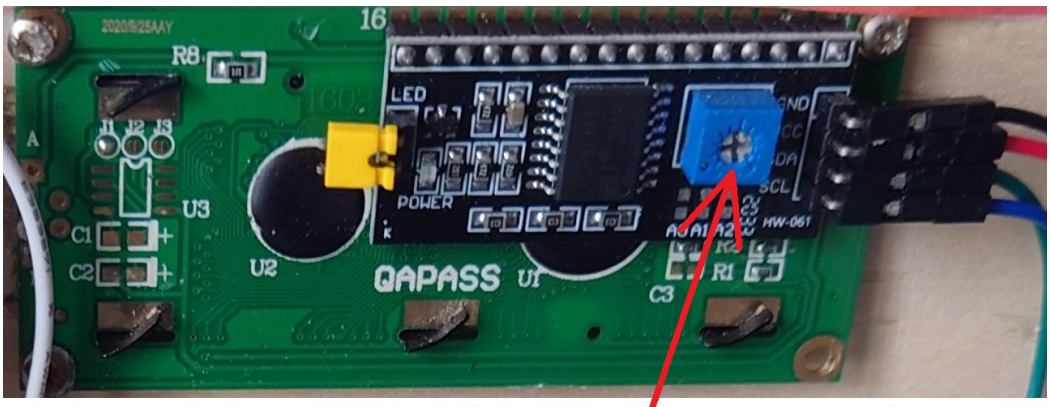
No breadboard is used thanks to the numerous pins available on the MEGA2560 card.

Various connections around the ARDUINO MEGA2560 board





Back of panel with connected components



Adjust the sharpness of the display on the LCD screen with a mini screwdriver by operating this small blue potentiometer