CAR PARKING SYSTEM

- the module controls a mechanical arm (servo output)
- input for two TRCT5000 infrared sensors (included)
- servo range between 0-80 degrees
- including 0.91" OLED display
- name of the place on the screen
- fake time - changes when the arm opens or closes
- number of parking spaces: 5
- recommend power supply: 8-15V AC/DC

Description:
The display shows the place name and randomly changing time (each car modifies the time). When the car covers the 1st (entering) sensor, the servo-controlled arm goes up, and at the same time, the parking space is reduced by one. The arm goes down when the car covers the 2nd (leaving) sensor.

The same thing happens if the second car arrives.

When a car leaves the parking place and covers the second sensor, the arm goes up, increasing the parking space by one. The arm goes down when the car covers the 1st sensor.

If the parking place is full, the 6th car covers the entering sensor, the arm stays down and the display shows the parking space is full.

Setting:
- connect IR sensors following (picture 1)
- connect the servo and the OLED display (picture 2 and 3)
- connect power supply (picture 2)
- the display shows the place, time and free parking places
- cover 1st sensor - the servo moves the arm up
- cover 2nd sensor - the servo moves the arm down

TCRT5000 sensor connection:
- VCC to +5V
- GND to GND
- D0 to Sensors input (each sensor to a different input)
- A0 not connected

OLED

AC/DC
AC/DC
+5V

GND
Sens1
Sens2

**Servo
(signal, +5V, GND)**

DUBLIN SQUARE   0:12

Free place: 5