

# Ball and Plate

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# Hardware requirements

## Controller:

We will be using Arduino UNO (150 EGP)



## Plate:

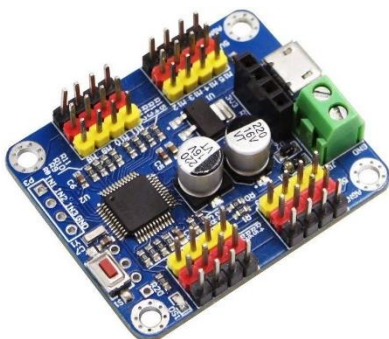
Resistive touch panel '4 wires' (100 EGP)



## Motion Control:

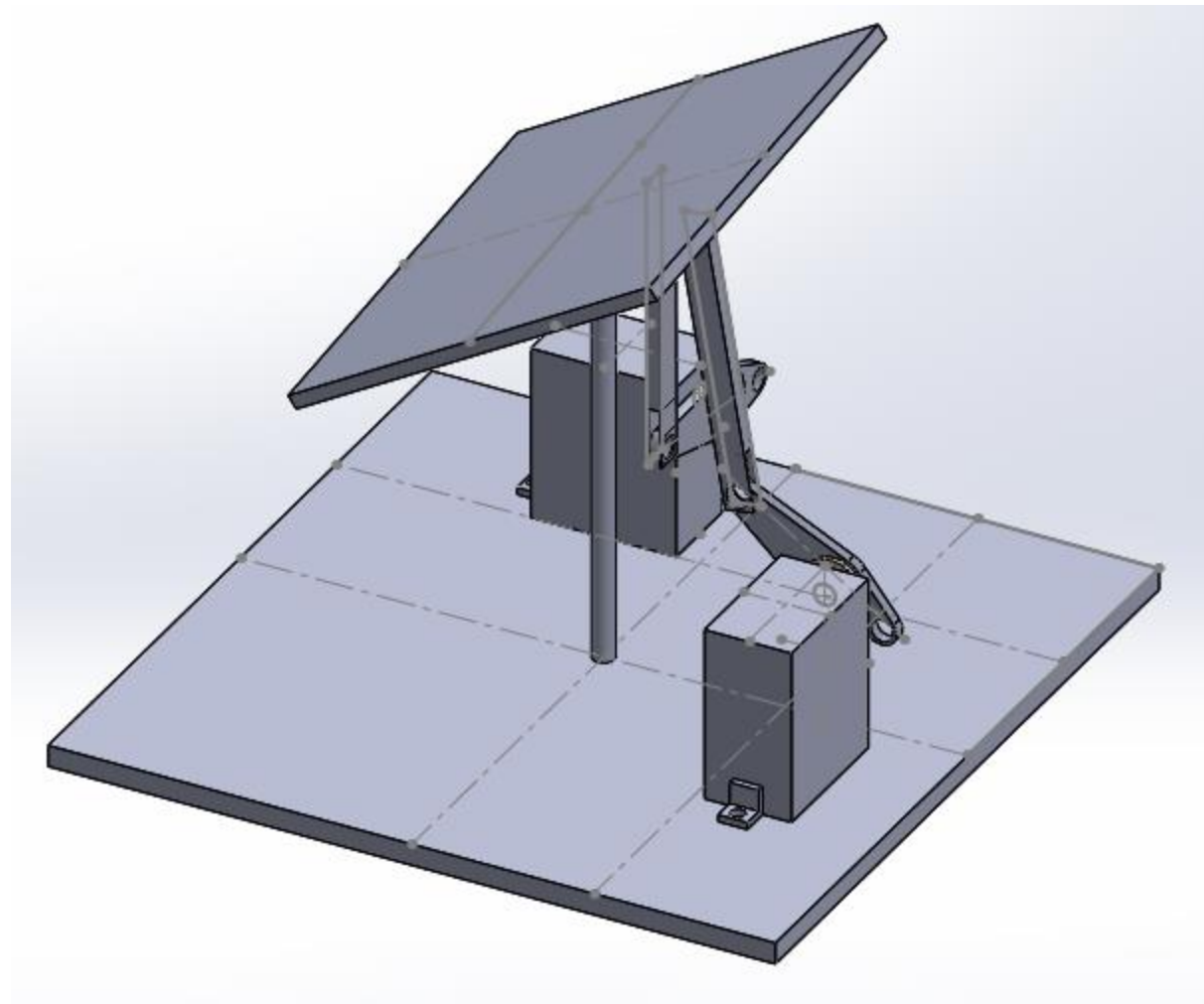
2 Servo motors (2 x 100 EGP)

With motor driver (150 EGP)



## Body:

- 1 Universal joint
- 2 Wooden sheets
- 1 Wooden support
- 4 Ball Joint Rod (4x 100 EGP)



## Software requirements:

- Touchpad interface with Arduino.
- Motors Control via Arduino.
- Implementing the PID concept on the entire system.
- Centering the ball on the plate.
- Making the ball go into different patterns.