

BLUETOOTH-CONTROLLED TABLE TENNIS SERVE MACHINE



PROBLEM

- ✚ Practicing table tennis serves alone can be difficult, as players often struggle to maintain consistency variety in their practice session.
- ✚ Without training partner to provide feedback and variations in serves, players may find challenging to improve their skills effectively.

SOLUTION

- ✚ Developed a solution, “BLUETOOTH-CONTROLLED TABLE TENNIS SERVE MACHINE”.
- ✚ This can automatically serve table tennis balls with adjustable parameters such as speed, spin, and placement.
- ✚ It can create a wide range of serve types.



KEY FEATURES

- ✚ Bluetooth Connectivity
- ✚ Customizable Settings via Mobile
- ✚ Automated Ball Feeding
- ✚ Durable
- ✚ Light weight Design

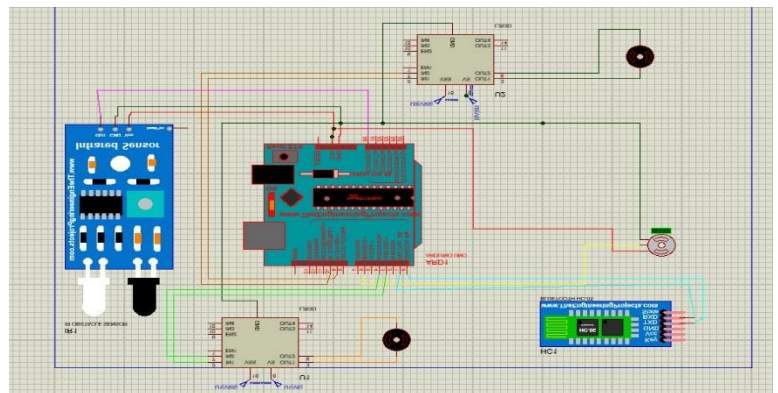


BENIFITS

- ✚ Can improve your reaction time and shot selection.
- ✚ Can develop your serve skills with consistent, reliable ball delivery.
- ✚ Can enjoy endless practice sessions without the need for a playing partner.
- ✚ Can bring the table tennis court to any location.

COMPONENTS

- ✚ DC 550 (22000 RPM)
- ✚ Servo motor (SG90)
- ✚ Tt motor (gear)
- ✚ IR sensor
- ✚ Potential meter (KY040)
- ✚ Arduino mega, uno
- ✚ L293d motor controller
- ✚ Bluetooth Arduino module (HC-05 or HC-06)
- ✚ Buzzer module
- ✚ 12V power supply



TECHNICAL SPECIFICATIONS

- ✚ Signal range
 - 10-20 m
- ✚ Serving speed range
 - 20 – 35 km/h
- ✚ Ball capacity
 - 100 balls
- ✚ Operating voltage
 - 3.6 – 6.0 V



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