**INSTRUCTION MANUAL**

**SMART SHOE RACK**

**Presented by**

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**SPECIFICATIONS**

1. Power supply: 12v
2. Control system: Esp 32 microcontroller with Blynk App.
3. Output data: stepper motor.
4. Capacity shoe: 9 pair of shoes

**ELECTRIC COMPONENT**

1. Esp32 -1 uint
2. Stepper motor -3 unit
3. Limit switch-3 unit
4. Relay -2 unit
5. Barcode scanner- 1 unit
6. Ir sensor – 1 unit
7. Pilot lamp-1 unit
8. Push start button- 1 unit
9. Switch on/off -1 unit
10. limit switch -3 unit

**SAFETY PRECAUTIONS**

Electrical safety: Use only the adapter.

Input 100-240v ~50/60Hz 2A.

Output :12v ~2500mA

Children supervision: Keep this application out of reach of children.

Moisture Protection: Do not place the device near water or any other liquid.

Avoid putting your hands where the motor.

**PART IDENTIFICATION**

A machine with a box and a box with a button

Description automatically generated with medium confidence

* **Main body:** shoe rack with 3D rail.
* **Control Panel:** Includes on/off switch.
* **ESP32:** Located inside the control compartment.
* **Ir sensor:** Detects have shoe box at home position or not.
* **Barcode scanner:** Scan the barcode data.
* **Stepper motor:** Take the shoe from the home position to the specified slot.
* **Power supply:** Provides the correct voltage and current for a device.
* **Limit switch:** To find 0,0,0 position.
* **Pilot lamp:** When the ir sensor have detect the pilot lamp will on.
* **Switch:** To switch on / off.
* **Push start button:** To give the motor back to home position (0,0,0).

**OPERATING INSTRUCTIONS**

**Before using:**

* Make sure the place is safety and stable surface.
* Ensure stable power supply.
* Make sure the wire is connected correctly.
* Make sure the input is AC / DC.

**Step-by-step guide:**

* **Power on**: Plug in the adapter into 100-240v outlet.
* Home: Pless the push start button to let motor back to home position (0,0,0).
* **Ir sensor:** If the ir sensor is detect the shoe box the pilot lamp will on.
* **Barcode scanner**: Pless the button of barcode scanner at blynk app .
* **Motor process**: The motor will take the shoe box to the specify slot.
* **Back to home position**: After the motor put the shoe box at the specified slot the motor will be back to home position (0,0,0).
* **Led at Blynk**: When the motor back to home position the led at Blynk App will be on.
* **Take the shoe from the slot**: Press the button at Blynk App after that the motor will go to the slot and take the shoe box back to home position (0,0,0).
* **Completion**: Once the process is complete, a notification will be sent to your smartphone.

**BLYNK INTERFACE FUNCTIONS**

A screenshot of a device

Description automatically generated

**Led slot 1/2**: when the slot has shoe box the led will on while no have shoe box the led will off.

**Button slot 1/2**: we press the button the motor will go to the slot and take the shoe box to home position.

**Button barcode scanner:** When we press the button the barcode scanner will scan the barcode data.

**CLEANING OF MAINTENANCE**

* Unplug the unit before cleaning.
* Use a damp cloth to wipe the exterior of the unit.
* Do not immerse the unit in water or any other liquid.
* Check the 3D rail regularly to avoid jamming.

**TROUBLESHOOTING**

|  |  |  |
| --- | --- | --- |
| Problem | Possible Cause | Solution |
| No power to the unit. | Not plugged in properly. | Check the power plug and socket. |
| No notification received. | Wi-Fi connection issue. | Check the Wi-Fi connection and restart the app. |
| Barcode scanner unfunctional. | Barcode data no have in the list. | Add on the barcode data in the list. |
| Push start button unfunctional. | The wire of it is issue. | Change the new wire. |

