CONTROL PANEL DESIGN SPECIFICATION

REQUIREMENT

1. 10 toggle switches perfectly aligned meaningfully
2. Pot meter to vary frequency range
3. Lcd display of 16x2
4. Keypad for entering the cheat codes (kept outside the control panel)

**Cheat code : (example : #A1B0 is a encrypted code for moving forward generated by command module)*

Types of switch required with priority order / alignment order

Align No. Switch title. Switch mode (upward push / downward push)

1. Main power (ON / OFF)
2. Primary Engine (ACTIVATE / DEACTIVATE)
3. Secondary Engine (ACTIVATE / DEACTIVATE)
4. Override (MANUAL / AUTO)
5. Detection coil (ACTIVATE / DEACTIVATE)
6. Robotic arm (ACTIVATE / DEACTIVATE)
7. Weapon System (ONLINE / OFFLINE)
8. Backlight (ON / OFF)
9. Alarm system (ON / OFF)
10. Exhaust system (ON /OFF)

Align No. Pot Title. Frequency range (Min to max)

1. Brightness level (Min … … . max)
2. Frequency (Min- , 20+Hz , 40+Hz , 60+Hz, 80+Hz, 100+Hz , 120+Hz , 140+Hz , 160+Hz, Max+)

Align No. LED Title Color code

1. Error (RED)
2. Warning (GREEN)
3. Stall (BLUE)

Design considerations :

Have to build a control panel of dimension 15 x 12 cm (L X B) or less which looks professionally designed for the robotic system

Each toggle switch should be place in the order that the button should be upside down orientation and normally upward switch defines the ON Stage and Downward switch means OFF Stages

When toggled upward a led of RED should glow
In downward motion there is no need of led in downward switching

There is 3 dedicated led of R G B which ressembles error , Warning and stalls of the system

Two potentiometers attached should vary from min to max . there is no need of led for pot system

Keypad can be kept outside the control panel for saving spaces.

System outlook: