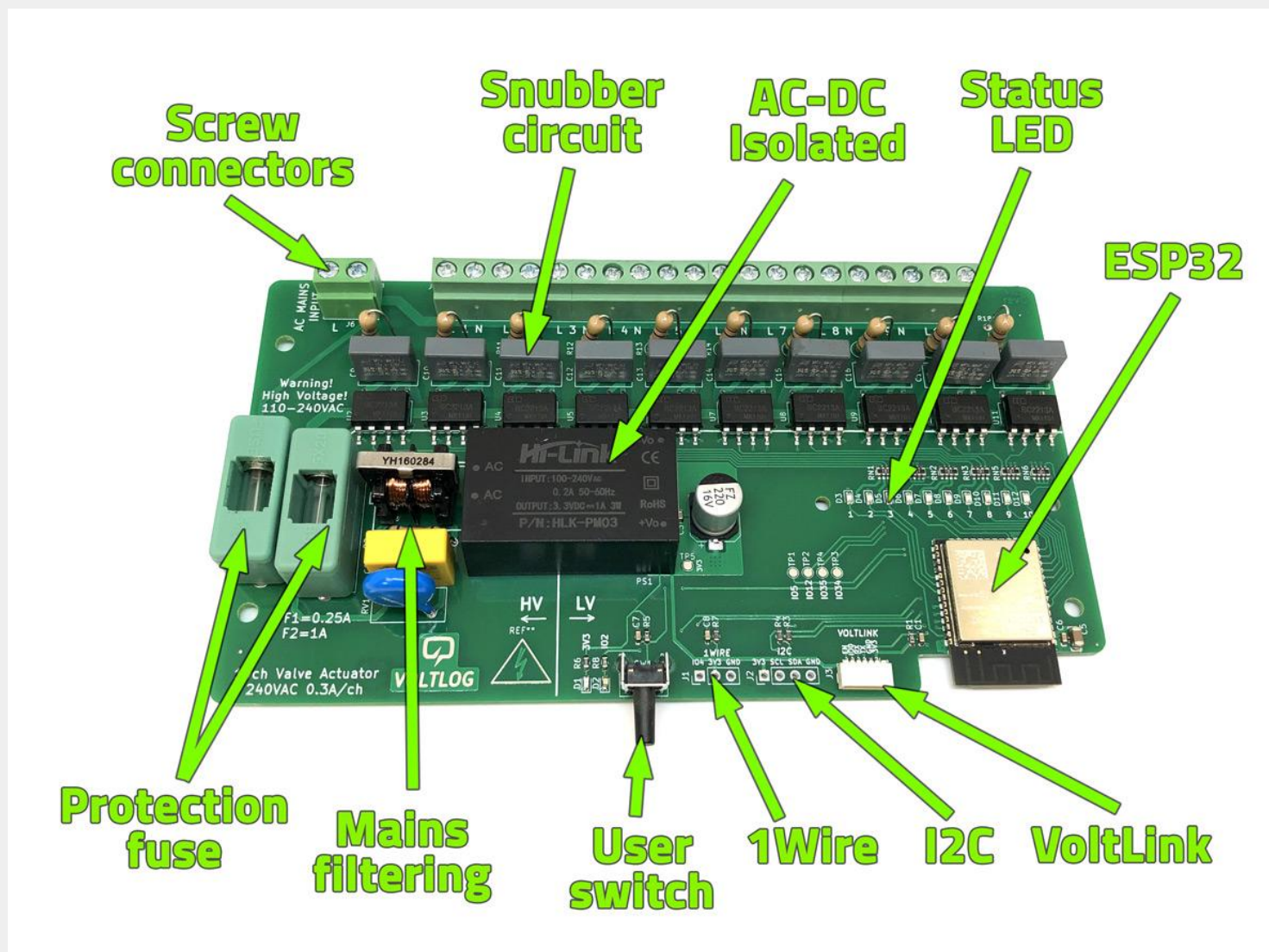


ESP32 Tasmota/ESPHome Compatible Valve Controller

Quick Start Guide



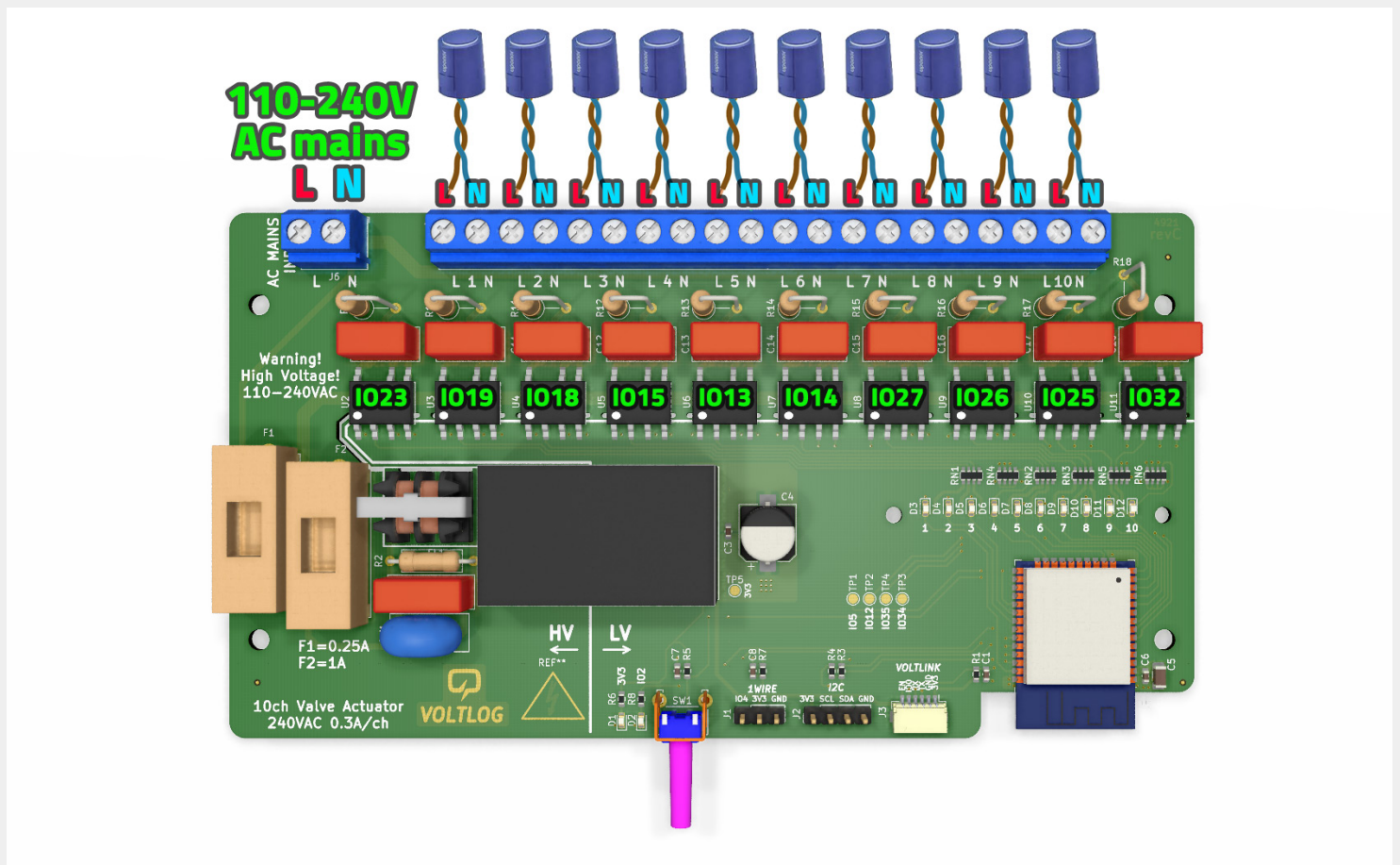
Electrical Specs

- Input voltage: 110V-240V AC.
- Output current: up to 0.9A RMS per triac output and up to 2A total combined.
- Low voltage side over-current protection: 0.25A slow blow.
- Operating temperature range (ambient): 0-70°C relative humidity 10-80%.
- Screw connector applicable wire: 24-14AWG.

Firmware

Board comes pre-flashed with Tasmota, just apply power and connect to the wireless access point named tasmota_XXXXXX then in your browser go to <http://192.168.4.1> to access the Tasmota WebUI.

Wiring diagram



Safety Warnings

This controller board is a DIY type of system and not a ready to go solution. There is an effort required on your side to configure this and get it working in your particular setup. Because this is a DIY project with no safety ratings or approvals, it's best if you don't leave it running unattended as I am not responsible for any consequences it might cause.

This controller board uses mains voltage so you need to know what you are doing, otherwise, there is a high risk of electrical shock and/or fire. This is a serious topic, if you are not sure what you are doing, ask for help from an electrician. Every connection should be double checked before applying mains power.

Operation of this equipment in a residential environment could cause radio interference.

If you plan to use the board on a different mains voltage, like 110V or with a different valve actuator with different specs, fuses will need to be adjusted accordingly and F2 can be increased up to 2A which is the limit of the PCB traces.

The 3V3 power brick which powers the control board is isolated and the triacs also provide optical isolation between the ESP32 and the mains side however if you want to be absolutely sure there is no risk of electrical shock I would recommend keeping the board disconnected from mains power during wired programming and supplying external 3V3 power via the Voltlink connector.

More info like schematics, board files, Tasmota template can be found on Github:
<https://github.com/voltlog/Valve-Actuator>