Endless Orgasm Machine

Please read this manual carefully, paying special attention to any warnings and highlighted information.

DO NOT OVER INFLATE YOUR BUTT PLUG. As with any insertable sex toy, please use caution and operate responsibly. If you experience pain or discomfort during use, immediately stop before you hurt yourself.

Be sure to clean the insertable components and sex toys after use, follow proper hygiene with your toys, and never store them wet. That is how you get mold. You can wipe the electronics down with a damp isopropyl alcohol wipe.

Use lube if this is your first time inserting something in your butt. Take it slow and easy, and do not hurt yourself. With great butt plug comes great responsibility.

Table of Contents

Initial Setup

ESP32 Setup:

- Install VSCode with the PlatformIO extension on your computer
- Open this repo and let all the PlatformIO dependencies download
- Configure your wifi ssid and password at the top of src/config.c
- Under PlatformIO -> Project Tasks -> esp32dev -> Platform choose Build Filesystem Image then Upload Filesystem Image
- Under PlatformIO -> Project Tasks -> esp32dev->General choose Build then eventually Upload and Monitor
- Watch for the IP address to be displayed in the serial monitor window

Browser setup:

- In your browser visit https://your.device.ip.address/ui
- You should see the chart connect and populate. If it is sluggish you can reduce the number of seconds it displays.

Device Setup:

- For a quick way to figure out which ESP32 pin goes to the pressure sensor lightly touch each pin until you see the pressure reading spike in the UI.
- When you are done testing this way, wire the Vout of the pressure sensor to that pin. Vin and Gnd on the pressure sensor should be wired to 3v3 and GND on the ESP32.
- Remove the inflation bulb from your inflatable buttplug or add in a splitter so it can be connected to the stem of the pressure sensor.
- You should now see the pressure reading in the UI chart spike when you squeeze the plug. If it spikes down instead of up connect the tube to the other stem of the sensor.

Configuring Wireless

Wireless network configuration must be done by setting your Wi-Fi credentials in the **config.json** file. This file is located in the **data** directory and must be uploaded to your device for changes to take effect.

Your Wi-Fi SSID (network name) and encryption key (password) should be set in the following fields between normal double quotes. You can leave the rest of the formatting of this file alone:

```
{
  "wifi_ssid": "<Network Name>",
  "wifi_key": "<Network Password>",
  ...
}
```

Once Wireless is configured, you can connect to the UI through your home internet.

First Session Setup

Some calibration may be required for your first session. When you are ready to go, fetch your device, vibrator/stroier, butt plug, and lube. Now is a great time to go re-read the safety precautions on the first page just in case you might have skimmed past those.

1. Insert the butt plug into your butt and partially inflate the plug. **One pump or less is sufficient!** If it is inflated too much it will be difficult to sense orgasm, resulting in a ruined orgasm or no detection at all.
2. On the main screen you should see green line representing presssure. Ideally this should be around 60% and is adjusted in settings (Edging Settings > Sensor Sensitivity). Do not inflate the plug to reach this number, please adjust this using the sensitivity adjustment in settings. (See #1 on why overinflating is bad.)
3. It starts in Automatic mode by default. If you want it calm while you set up you can click the arousal percentage box for a few seconds of cooldown or the pleasure percentage box to stop it indefinitely by switching to manual mode.
4. This is where you would connect your motor if you have wired one up, or use a wireless control method like Xtoys.app to coordinate your toys with the pleasure level.
5. While in Automatic mode, the Arousal level will rise as pre-orgasmic contractions are detected. When the level reaches the threshold line, pleasure will be stopped. You can adjust the threshold line using the slider below the graph until it is at a level tha will stop before you orgasm.

Manual Operation

Manual mode disables the auto-ramping feature and auto-cutoff, giving you complete control of the pleasure intensity. During Manual operation, you can drag the pleasure slider in the UI to adjust intensity. Clicking the “Pleasure: %” readout will set the vibrator speed to 0% and enter Manual mode.

Orgasm detection will NOT stop the pleasure in manual mode, so try not to ruin your session!

To return to Automatic mode, press the “Automatic” button on the UI. Automatic control of pleasuring will resume.

Automatic Edging Mode

During Automatic Edging Mode, the pleasure will ramp up to a set maximum during a set time period. While in this mode, the device monitors pressure changes and attempts to detect orgasm. When an orgasm is detected, pleasure is stopped or decreased for a moment to allow the user to cool off, then the ramp-up restarts.

It is important that the butt plug is properly inserted and inflated, and the sensitivity is calibrated to optimal peak detection. Please see “First Session Setup” for details on setup and calibration.

Once pressure sensitivity is adjusted properly, orgasm detection can be adjusted on the fly by using the Arousal cutoff to allow for more arousal before stopping pleasure. This is done by dragging the Arousal Threshold slider in the UI.

Edging Settings

Edging Settings controls the automatic orgasm detection parameters and behavior of the auto-ramping vibration modes. They can be accessed by clicking the gear icon in the top right of the UI. You can see descriptions by hovering your mouse over the slider. Their positions are automatically saved to the ESP32 memory but will be overwritten if you upload your **config.json** again.

Motor Max Speed – The maximum speed the vibrator motor will ramp up to in Automatic mode.

Motor Ramp Time – The time (in seconds) that it takes for the vibrator motor to fully ramp up to in Automatic mode.

Arousal Limit – The Arousal threshold before orgasm is detected. This can be changed on the Automatic mode home screen.

Sensor Sensitivity – This value will amplify the signal coming in from your butt plug. If you find that your pressure is reading low, adjust this value to increase the pressure reading without increasing the butt plug pressure. Ideally, you want to adjust this so that the pressure reading is around 60%.

When you edit a numeric setting, you can use the scroll wheel to adjust the value. To save it, press “Save” or press the scroll wheel. Data is automatically written to the SD card and updated.

Serial Port Communication

ESP32s offer serial port communication over a USB cable. You may need to install specific device drivers like FTDI's for this to work, after which the device should show up as a native serial port on your computer.

FTDI Driver Download: www.ftdichip.com/Drivers/VCP.htm

Baud Rate: 115200

Classic Serial Mode

If "classic_serial" is enabled in your config, the output of the serial console will resemble the original NoGasm. This is useful for backwards compatibility with existing monitoring applications designed for the NoGasm V1. To enable/disable Classic Serial mode update the config.json file, setting "classic_serial" to true.

The setting "update_frequency_hz" changes the rate of serial output as well as sensor updates.

WebSocket Communication

The Endless Orgasm Machine serves as a WebSocket host for streaming data over wireless networks. The integrated UI and the NoGasm UI project make use of this, but you are free to develop your own interface.

The WebSocket interface uses JSON serialization for both sending and receiving packets. The structure of a payload sent TO the Edge-o-Matic is a key-value object with each key corresponding to a command, and a value corresponding to the arguments to that command. Responses streamed from the device should be handled similarly.

An example request sent to the WebSocket channel:

```
{
  "configSet": {
    "motor_max_speed": 255
  },
  "configList": {
    "nonce": 1234
  }
}
```

The associated response:

```
{
  "configList": {
    "nonce": 1234,
    "config": {...}
  }
}
```

Multiple commands can be sent in either direction, but only one of each command type can be specified. It is recommended that you send only one command per request. To track responses to commands, you can use the “nonce” parameter, which some commands support. This is a numeric identifier that is returned with the associated response and can be used to filter duplicate responses.

Server Commands

These commands are recognized by the WebSocket server running on the Endless Orgasm Machine:

configSet Sets one or more configuration values.

Arguments:

*	<any>	Config keys / values

Example:

```
"configSet": {
   "motor_max_speed": 255
}
```

configList Requests all config values to be sent.

Example:

```
"configList": {}
```

getWiFiStatus Requests the Wi-Fi status to be sent.

Example:

```
"getWiFiStatus": {}
```

setMode Sets the current run mode.

Arguments:

mode	String	<automatic|manual>

Example:

```
"setMode": "automatic"
```

setMotor Sets vibration speed. Will enter manual mode.

Arguments:

speed	Byte	0-255 motor speed

Example:

```
"setMotor": 128
```

Server Responses

Your application should be prepared to handle these messages streamed from the server. The actual data may change as this is a printed document and not live documentation. See GitHub for more up-to-date details.

configList A listing of the current configuration.

Parameters:

*	<any>	Current serialized configuration

Example:

```
"configList": {
   "motor_max_speed": 255,
   "wifi_on": false
}
```

wifiStatus The current Wi-Fi connection status.

Parameters:

ssid	String	The connected network SSID
ip	String	Device IP Address
rssi	Numeric	RSSI Value (signal strength)

Example:

```
"wifiStatus": {
   "rssi": -56,
   "ssid": "FBI Spy-Fi",
   "ip": "10.0.102.192"
}
```

readings A collection of current readings and device status. This is streamed at the global update frequency, unless disabled, and is used for providing real-time updates to your application.

Parameters:

pressure	Numeric	Current pressure reading
cooldown	Bit	Is pleasure currently on hold because the user was close to orgasm
pavg	Numeric	Rolling pressure average
motor	Numeric	Current vibrator speed
denied	Numeric	The number of denied orgasms
arousal	Numeric	Current arousal value
millis	Numeric	Millisecond timestamp
sensitivity	Numeric	The current sensor multiplier
threshold	Numeric	The current arousal threshold
runMode	String	e.g. “Automatic” or “Manual”

Example:

```
"readings":{
   "arousal": 50,
   "cooldown": 0,
   "denied": 4,
   "millis": 78732,
   "motor": 50,
   "pavg": 1061,
   "pressure": 0,
   "runMode": "AUTOMATIC",
   "sensitivity": 32,
   "threshold": 1000,
}
```