

PEMENOL GY19269

PEMENOL Musical Tesla Coil Instruction Manual

Model: GY19269

INTRODUCTION

The PEMENOL Musical Tesla Coil (Model GY19269) is a compact and interactive device designed for scientific demonstration and entertainment. It features dual modes for generating artificial lightning arcs and playing square wave music via Bluetooth, with a touchable arc for safe interaction. This manual provides essential information for safe setup, operation, and maintenance of your Tesla coil.

SAFETY INFORMATION

WARNING: Please read all safety instructions carefully before operating the device.

- When operating in music mode, avoid powering on the Tesla coil for extended periods without playing music. This can lead to overheating and potential damage to the device.
- Do not place large or conductive objects directly on the discharge needle. This can interfere with arc generation and may cause damage.
- Avoid placing LED bulbs directly on the surface of the Tesla coil's acrylic case, as the arc may cause damage to the case.
- Keep all flammable and explosive materials away from the Tesla coil during operation.
- The Tesla coil generates high-frequency currents that produce audible noise due to air ionization. Hearing protection is recommended during prolonged use.
- The discharge needle is very pointed. Handle with care to avoid injury.
- Minors should only operate the device under adult supervision.

PACKAGE CONTENTS

Verify that all items are present in your package:

- Tesla Coil module

- Power Adapter
- Discharge Needle
- Small Neon Lamps (for wireless lighting demonstration)

SETUP

1. **Install the Discharge Needle:** Carefully screw the discharge needle into the designated port on the top of the Tesla coil module. Ensure it is securely fastened.
2. **Connect Power:** Plug the power adapter into the Tesla coil module, then plug the adapter into a standard electrical outlet. The device will power on, indicated by blue LED lights.

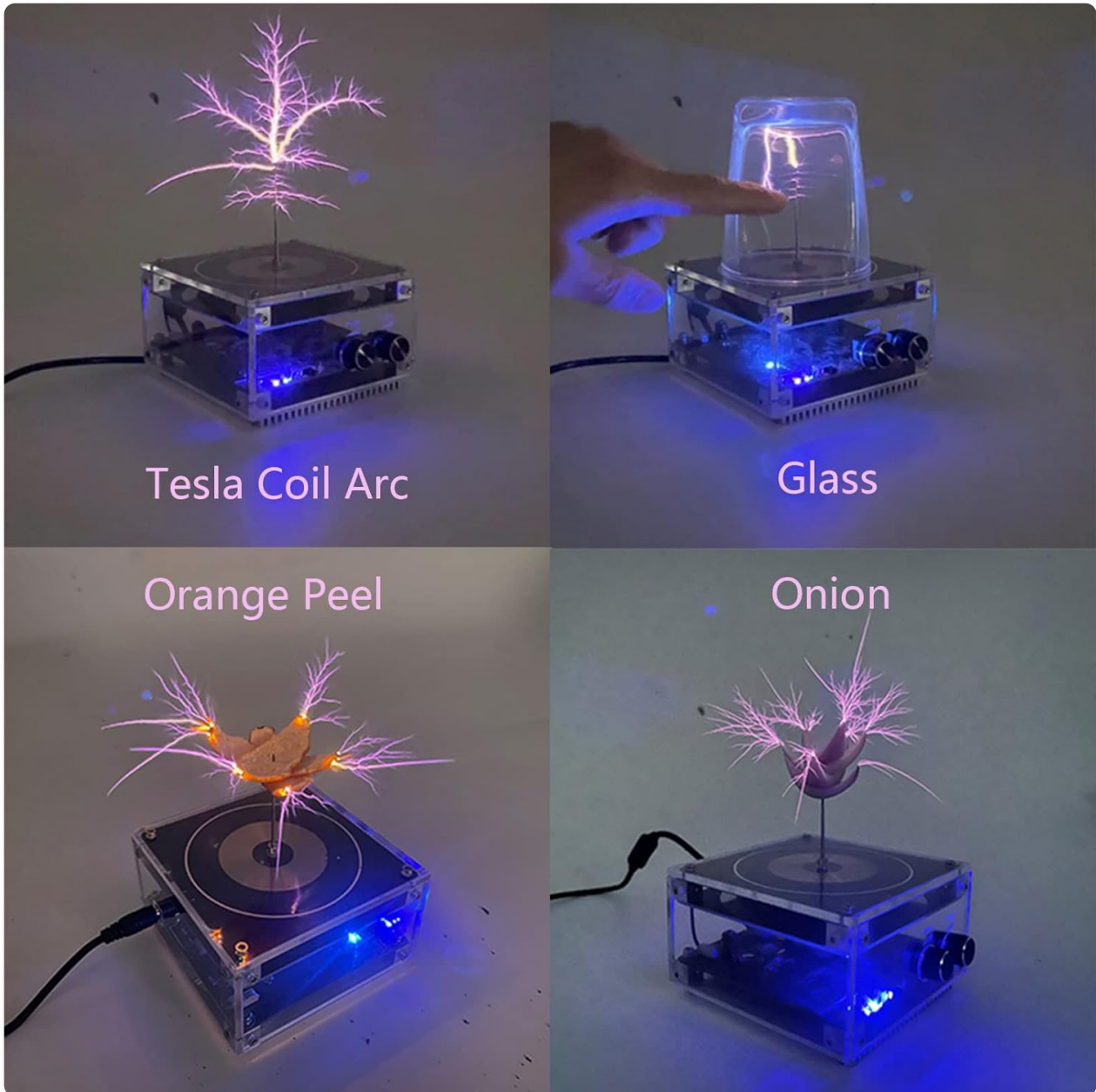


Image: Tesla Coil with discharge needle installed and power connected, ready for operation.

OPERATING INSTRUCTIONS

1. Frequency/Lightning Mode

- Ensure the mode switch is set to the lightning symbol (frequency mode).

- Turn the 'FREQ' knob to adjust the frequency of the arc. Turning it clockwise will increase the frequency and arc length.
- Turn the 'PWR' knob to adjust the power, which affects the intensity of the arc.
- Observe the artificial lightning arc emanating from the discharge needle.

2. Music Mode (Bluetooth)

- Switch the mode selector to the music note symbol (music mode).
- On your mobile device, enable Bluetooth and search for the device named "MH-M18" or similar. Pair with the Tesla coil.
- Play square wave music from your device. Square wave music is recommended for optimal performance and sound quality with the Tesla coil.
- Adjust the 'PWR' knob to control the sound quality and arc size. The music mode knob pointer should not exceed the 11 o'clock direction to prevent damage.
- The spark gap arcs will jump in rhythm with the music.



Image: The Musical Tesla Coil demonstrating its ability to produce arcs synchronized with music.

3. Touchable Arc

- In either mode, you can safely touch the arc with your finger. The sensation is described as a slight itch or tingling.
- You can also use various objects like glass, orange peel, or onions to interact with the arc, creating interesting visual effects.



Image: Demonstrations of the touchable arc feature using different materials to show interaction with the artificial lightning.

4. Wireless Lighting

- The Tesla coil can wirelessly light up gas tubes and various small bulbs (e.g., neon lamps, LED bulbs).
- Hold the bulb near the discharge needle to observe the wireless power transmission.



Image: A light bulb illuminating wirelessly when brought close to the Tesla coil's discharge point.

MEDIA DEMONSTRATIONS

How to Set Frequency and Music

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Video: A detailed guide on adjusting the frequency and setting up music playback on the PEMENOL Musical Tesla Coil.

Musical Tesla Coil Demonstration

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Video: A demonstration of the Musical Tesla Coil's capabilities, showcasing its arcs and sound.

MAINTENANCE

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid exposing the Tesla coil to moisture or extreme temperatures.

- Store the device in a cool, dry place when not in use.

TROUBLESHOOTING

- **No Arc/Weak Arc:** Ensure the discharge needle is properly installed. Check power connections. Adjust the 'PWR' and 'FREQ' knobs.
- **No Music/Poor Sound Quality:** Verify Bluetooth connection to "MH-M18". Ensure your audio source is playing square wave music. Adjust the 'PWR' knob.
- **Overheating:** Discontinue use immediately if the device feels excessively hot. Ensure adequate ventilation and avoid prolonged operation without music in music mode.

SPECIFICATIONS

Feature	Detail
Product Dimensions	4.17 x 4.17 x 2.4 inches
Item Weight	2 pounds
Item Model Number	GY19269
Manufacturer Recommended Age	12 years and up
Manufacturer	PEMENOL

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact PEMENOL customer service directly. Contact details are typically provided with your purchase documentation.