



mini Plasmasonic in action with rotating high voltage arc

## Introduction

With customers requesting a smaller version of our high power Class-E Audio Modulated Tesla Coil, we have delivered and are offering the mini Plasmasonic Musical Tesla Coil system. This full bandwidth plasma speaker utilizes high frequency solid state Tesla coil technology which can be audio modulated via the headphone output of most cell phones as well as with any RCA line level audio source. The mini Plasmasonic produces a mesmerizing dynamic circular arc which is created from the plasma jets of the virtually silent high voltage arc – no hissing. All sound and music that is heard from the mini Plasmasonic is created directly from the high voltage arc – there are no hidden speakers!

The Plasma Speaker 2.0 can also be used to wirelessly illuminate fluorescent bulbs and neon (as well as other noble gas) tubes. This is great for demonstration.

## Features:

- Completely built and tested – Ready to go
- Operates from 115VAC 50/60Hz
- Onboard audio synchronized LEDs
- Cooling fan
- Adjustable audio gain (potentiometer)
- Standard 1/8" audio jack

## Technical Specifications

- Arc length: ~ 1/2"
- Input voltage range: 18-26 VDC
- Input power: 50-100 Watts

## Input Connections

The following are the electrical input connections for the mini Plasmasonic Musical Tesla Coil:

Pin	Function
Power Input	5.5 x 2.1mm power socket 18-26VDC @ 3.5A maximum
Audio Input	1/8" Stereo jack Headphone / Line level

## Whats Included?

This fully completed unit includes the following components:

- mini Plasmasonic Assembly
- Pre-wound secondary coil
- High efficiency switching power supply
- 1/8" audio patch cord compatible with cell phones
- Printed instructions

## Instructions

1. Place main assembly on a flat surface at least 18-24" away from any nearby objects.
2. Ensure the top secondary coil electrode is pointing upward and away from the assembly.
3. Using the included audio cable, connect your cell phone or audio source to the main assembly using the onboard 1/8" audio jack.
4. Connect the 5.1mm barrel plug from the power supply into the power jack on the main assembly.
5. Plug in the AC power cord from the power supply into a nearby AC outlet. The onboard LEDs will illuminate and the high voltage arc will turn on within a couple of seconds.
6. Play a song with the audio source to start audio modulation of the high voltage arc.
7. Congratulations! You are up and running!

## Audio Gain Adjustments

To adjust the audio gain of your input audio source, use the small potentiometer on the bottom side of the main assembly. This is useful in the case where audio volume is too low, or audio volume is too high and "clipping." Be sure to only make adjustments when power is OFF.

## SAFETY

- The high voltage arc is very hot. DO NOT ATTEMPT to touch while in operation
- HIGH VOLTAGE: Do not attempt to touch any part of the main assembly when power is applied
- THERMAL HAZARD: The main assembly may get very hot during operation. Do not touch until adequately cooled down.
- Keep your audio source and any other electronics away from the unit during operation.
- Maintain at least 24" distance from the unit while operating.

## Technical Support

Please contact the technical support department at Eastern Voltage Research using the email address below for any questions or technical issues you may have.

Technical Support Department  
[support@easternvoltage.com](mailto:support@easternvoltage.com)