

Advanced Modulator Board Specification



Advanced Modulator System (shown with Front Panel)

The Advanced Modulator Board Kit contains the PCB board required to build the Advanced Modulator system. This board has been professionally designed and thoroughly tested to ensure maximum performance.

[Click here to visit the ordering page for this board kit](#)

Image coming soon

Advanced Modulator Board

3.8" x 2.5" x 0.062"

Double-sided

FR-4 Laminate, 1 Oz. copper (1.25 Oz. after plating)

RoHS Lead Free

Silkscreen / Soldermask

The Advanced Modulator board is the most advanced and featured interrupter system your money can buy for your DRSSTC or SSTC system. It features four unique modes of operation and when used with the continuously variable control potentiometers, can create an infinite number of different effects.

Features:

- Normal Mode (Adj Pulsewidth / Adj PRF)
- Burst Mode (Adj Pulsewidth / Adj PRF / Adj Burst PW) – Single shot
- Long Pulse Mode (Adj Pulsewidth) – Single shot
- Aux. Mode – Low Frequency Mode (Adj ON time, Adj OFF time)
- Single-shot Lock-out feature (prevents retriggering due to switch bounce)

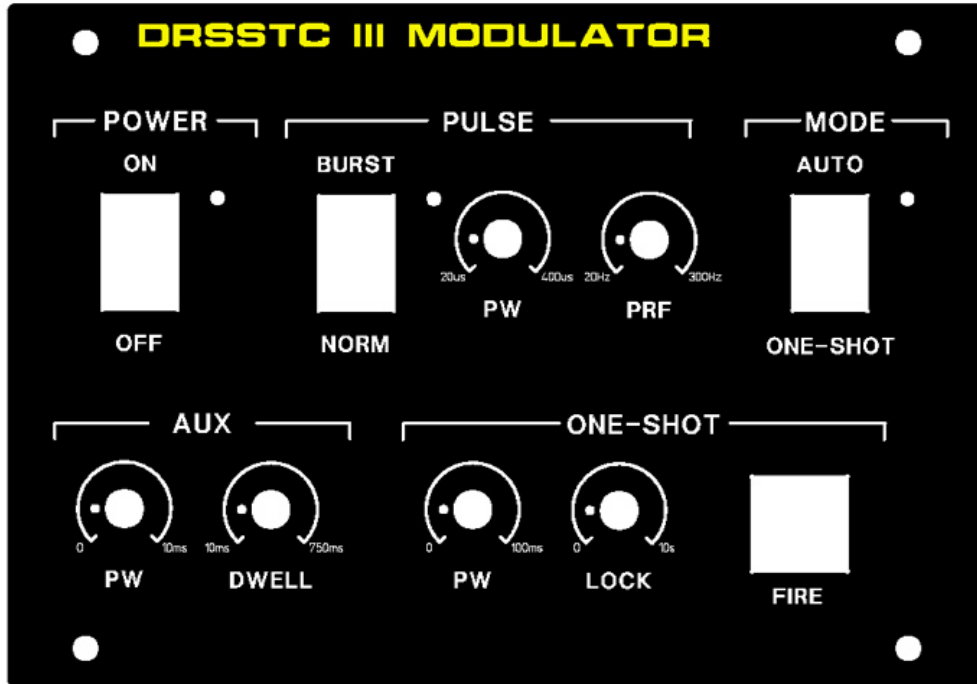
THE AUTHOR OF THIS DOCUMENT IS AN AMATEUR, NOT A PROFESSIONAL. THE INFORMATION, BOTH TECHNICAL AND SAFETY RELATED, PROVIDED IN THIS DOCUMENT SHOULD BE INTERPRETTED WITH THIS CLEARLY IN MIND. THE AUTHOR HEREBY DISCLAIMS ANY LIABILITY FOR INJURY TO PERSONS OR PROPERTY THAT MAY RESULT DUE TO THE CONSTRUCTION OF SOLID STATE TESLA COILS AND OTHER RELATED ELECTRONICS. THIS PUBLICATION IS FOR INFORMATIONAL PURPOSES ONLY, AND MAKES NO CLAIMS TO ITS COMPLETENESS OR ACCURACY. SOLID STATE TESLA COILS ARE INHERENTLY VERY DANGEROUS DEVICES AND SHOULD ONLY BE CONSTRUCTED AND OPERATED BY INDIVIDUALS FAMILIAR ENOUGH WITH THESE DANGERS. THE AUTHOR IS NOT OBLIGATED TO PROVIDE ANY ADDITIONAL SUPPORT FOR THIS PRODUCT OTHER THAN WHAT IS SHOWN IN THIS DOCUMENT.

Operational Specifications

Normal Mode	Pulsewidth Adjust PRF Adjust	20us to 430us (continous) 22Hz to 318Hz (continous)
Burst Mode	Pulsewidth Adjust PRF Adjust Burst Length Adjust Lock-out Adjust	20us to 430us (continous) 22Hz to 318Hz (continous) 20us to 100ms (continous) 100ms to 10s (continous)
Long Pulse Mode	Pulsewidth Adjust Lock-out Adjust	20us to 100ms (continous) 100ms to 10s (continous)
Aux. Low Frequency Mode	ON time Adjust OFF time (Dwell) Adjust	0 to 10ms (continous) 9ms to 768ms (continous)
Output 1 (Normal, Burst, Long Pulse)	Output Voltage (High) Output Voltage (Low) Output Drive Current	9V output (nominal) ** 0V output (nominal) ** 200mA maximum (source / sink)
Output 2 (Aux. Mode)	Output Voltage (High) Output Voltage (Low) Output Drive Current	9V output (nominal) ** 0V output (nominal) ** 200mA maximum (source / sink)
Battery Type		Standard 9V Battery

Notes:

1. ** See LM555 Timer datasheet for exact specifications on output voltage / currents.
2. All frequency and pulsewidth ranges can be custom set by the user by changing the values for the associated timing resistors and capacitors.



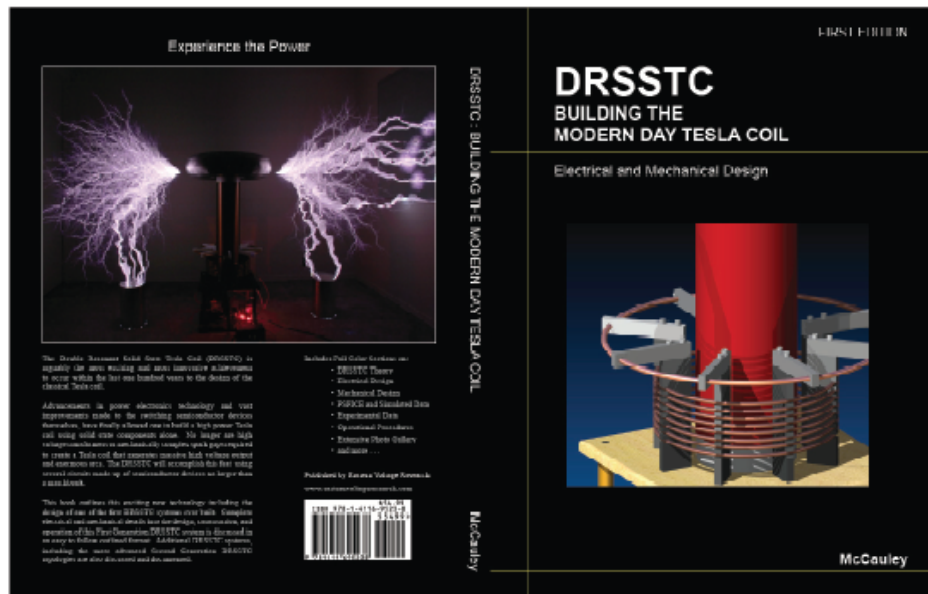
Advanced Modulator Front Panel (Black anodized aluminum shown)

The custom designed Advanced Modulator front panel adds that professional touch to your interrupter controller. This front panel is compatible with the parts (switches, LEDs, potentiometers) as defined in the parts list for the Advanced Modulator.

The yellow text shown on the front panel above can be CUSTOMIZED to your own text. Specify when ordering. Also, the panels are available in a variety of different anodized aluminum colors.

** Please note that the panel shown above is the actual front panel. The front panel shown in the photo on the first page of this document shows a prototype version of the front panel design.

[Click here to visit the ordering page for this front panel](#)



FEATURES

239 Pages, 8.75" x 11.25", Perfect Binding

80# interior paper, full-color interior ink

100# exterior paper, full-color exterior ink

200+ FULL COLOR Photographs, Illustrations, Drawings, and Diagrams

Photo Gallery containing 30+ FULL PAGE, FULL COLOR Photographs

Complete Electrical and Mechanical Design Sections complete with schematics, parts lists, detailed drawings, templates, assembly views, and instructions

ISBN: 978-1-4116-9523-8

Professional Printed and Bounded by Lulu Press, Inc.

To order this book, please visit the following link:

[DRSSTC: Building the Modern Day Tesla Coil by Daniel McCauley](http://www.easternvoltage.com)