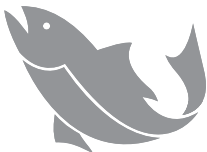


# USER'S GUIDE

## 1.5 KVA ELECTROFISHER



**SMITH-ROOT**

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## 1.5KVA Combo Package Includes the Following:

Qty	Description	Part #
1	1.5KVA Electrofisher Control Box	02908
1	15ft. Anode Cable w/Foot Switch	03703
1	15ft. Cathode Extension Cable	08447
1	Instruction Manual	07287
1	Electrofisher Safety Certification	05465

Items manufactured by companies other than Smith-Root carry the original manufacturer's warranty. Please contact product manufacturer for return instructions.

All Smith-Root, Inc. manufactured products are covered by a one year warranty.

**Credit & Refund Policy:** Customers returning equipment, in new condition, will be given credit five days from the date of the return. A return authorization must accompany returns. Valid equipment returns include, but are not limited to, ordering incorrect equipment, funding deficits, and defective equipment returned for reimbursement. All returns are subject to a restocking fee and applicable shipping charges. The restocking fee is figured at 10% of the purchase price but not less than \$20.00. Customers receiving equipment in damaged condition will be referred to the shipping company for insurance reimbursement.

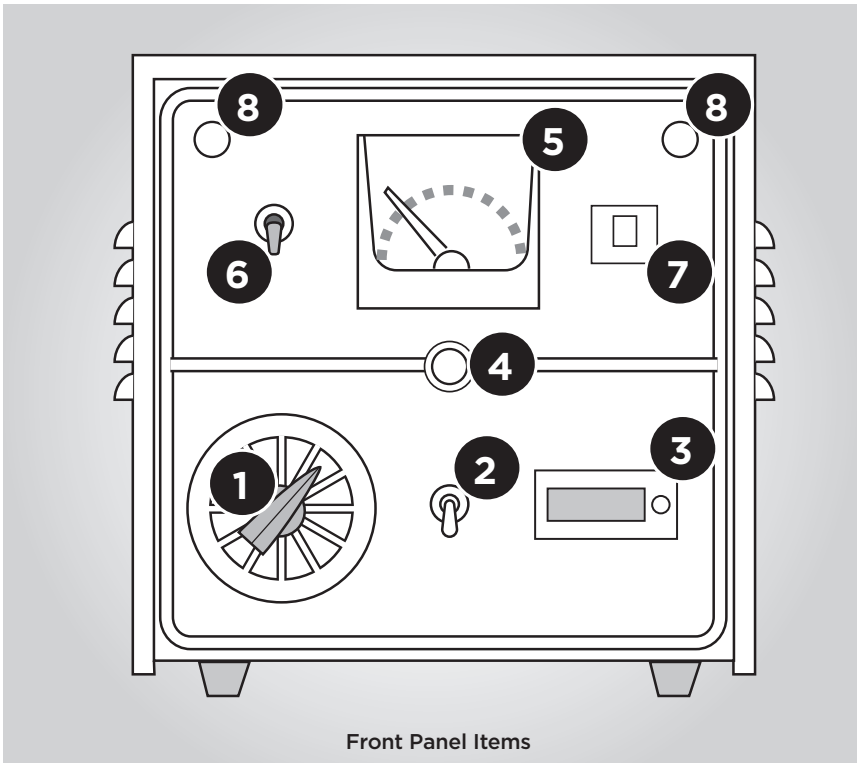
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## INTRODUCTION

The 1.5 KVA electrofisher is an economically priced, medium powered field unit. It is designed to handle moderately soft to relatively hard waters. Its light weight and small size make it ideal for both boat and shore-side operations.

## FRONT PANEL AND CONTROLS

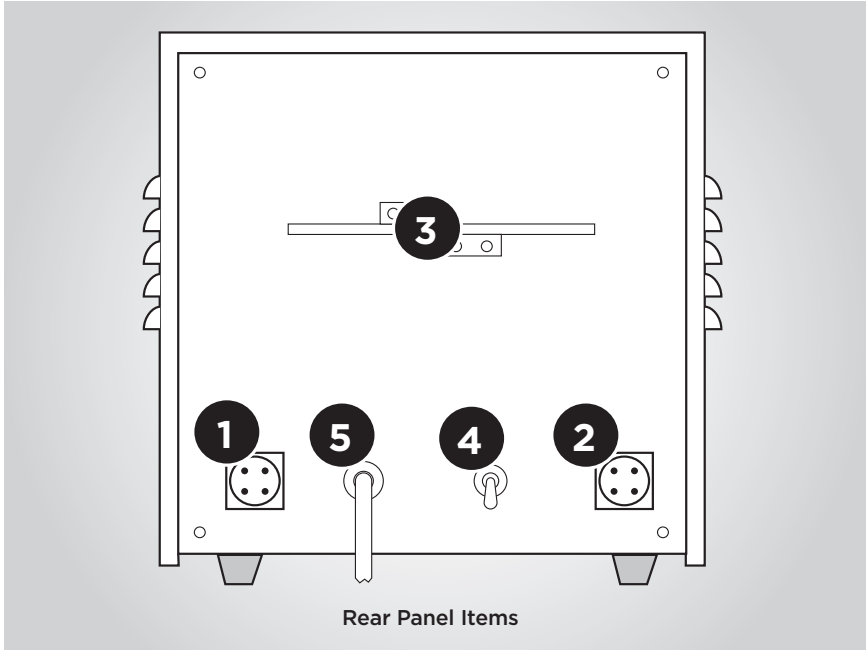
- 1. Output Voltage Switch:** Controls the output voltage in both AC and DC. The switch is calibrated in AC and DC voltages. AC voltages from 50 to 200 volts are selected in 25 volt steps, and voltages from 200 to 400 are selected in 50 volt steps. Peak DC voltages are 1.41 times the AC values, and are indicated around the switch perimeter. Warning, do not change the position of this switch while the output of the Electrofisher is on, as this will cause arcing on the contacts which may destroy the switch.
- 2. Power-on Switch:** This switch is the main power switch and also functions as a circuit breaker to protect the unit in an overload. Warning, avoid turning this switch off when output of the Electrofisher is on.
- 3. Time/seconds Counter:** Indicates electrofishing time in seconds. It may be reset by pressing the red button.
- 4. High Voltage Indicator Lamp:** Indicates output voltage at the electrodes and operates in parallel with the audio tone located within the electrofisher.
- 5. Meter:** Indicates output current in both AC and DC output modes. Warning, do not operate this equipment at output currents greater than 10 amps.
- 6. Output Mode Switch:** Selects the output mode. The AC position produces 60 Hz alternating current between the anode and cathode wires. The DC position produces direct current, pulsing at 120 pulses per second, with the anode wire positive and the cathode wire negative. The unit may be modified to produce 60 pulses per second, contact factory for information. Warning, do



not toggle this switch while the output of the Electrofisher is on.

7. **Output Overload Circuit Breaker:** Protects the unit from shorts and overload conditions. When it is tripped, the front will pop out and display a white indicator. The high voltage lamp and audio tone will still be on, however no current will be indicated on the meter and there will be no output. First clear the fault condition, by removing the short from the electrodes, or by reducing the output voltage. Make sure the foot switch is in the off position, and reset by pressing the button on the circuit breaker.
8. **Panel Lamps:** Two lamps illuminate the front panel for night operation. They are on whenever power is applied and the power switch is on.

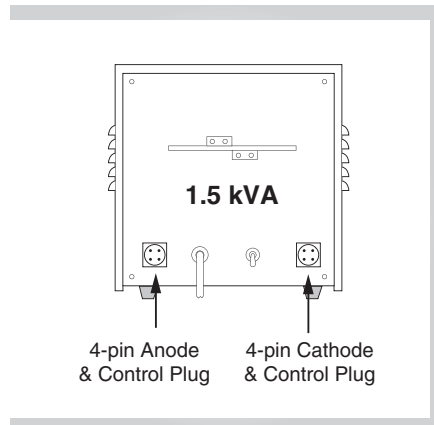
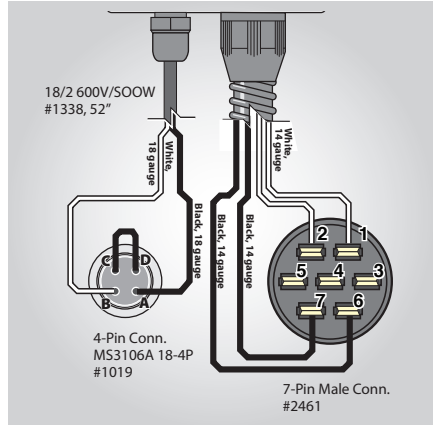
## REAR PANEL CONTROLS AND PLUGS



- 1. Anode Socket:** The anode cable plugs in to this receptacle. Pins A and D are used for anode output; pins B and C are connected for foot switch or anode pole switch remote control of electrofisher output. This is compatible with standard backpack anode poles and extension cables, contact factory for price and availability.
- 2. Cathode Output Socket:** The cathode cable connects to this receptacle. Pins B and C are for remote control. They are bussed together for single remote control operation. Pins A and D are used for output. A breaker protects the unit from shorts and overload conditions. When it is tripped, the a white indicator will pop out of the front of the circuit breaker. The high voltage lamp and audio tone will still be on, however, but no current will be indicated on the meter and there will be no output.

First, clear the fault condition by removing the short from the electrodes or by reducing the output voltage. Make sure the foot-switch is in the *OFF* position, and reset by pressing the button on the circuit breaker.

3. **Cord Retainer:** To hold excess power cord or to aid in neatly storing the 1.5 KVA
4. **Audio Alert Output Switch:** Mutes the audio tone when in the off position. The tone volume may be adjusted inside the unit if necessary, contact factory.
5. **Input Power Cord:** This cord connects the unit to a source of power; 120 VAC 60Hz.



## **SET-UP PROCEDURE**

Connect suitable electrodes to the cables provided with your electrofisher. The cable with the red end and the foot switch connects to the anode. The cable with the black end connects to the cathode.

## **ELECTROFISHING PROCEDURE**

Set the output voltage switch to 50 volts and the mode switch to AC or DC as desired. Turn on the main power switch, the panel lamps should come on. Step on the remote control foot switch or press the anode pole switch if used. An audio tone should be heard and the front panel high voltage indicator lamp should light. If the audio tone is not wanted, turn the audio enunciator switch to off. If the Ammeter does not show much current being drawn, let up on the foot switch and move the voltage range switch to the next higher range. Repeat the above steps until enough current is drawn to effect the fish satisfactorily. Generally 3 to 6 amps is sufficient. However, up to 10 amps can be drawn at voltages below 150 volts. On voltages higher than 150, less current is available without exceeding the 1500 watt power rating of the unit, see table below.

A certain amount of experimentation will be required to learn what mode and voltage settings are best for various water conditions and fish being stunned. Larger fish are stunned easier and require less power while small fish take higher settings. The AC positions cause much more severe action and are not normally used with sensitive species.

## SPECIFICATIONS

<b>Conductivity range</b>	20 to 1500 microSiemens/Centimeter
<b>Input voltage</b>	120 VAC 60 Hz
<b>Output voltage AC</b>	0 to 400 volts RMS
<b>Output voltage DC</b>	0 to 560 volts pulsating
<b>DC pulse frequency</b>	120 pulses per second
<b>Output power</b>	1,700 watts
<b>Output metering</b>	AC and DC, 0-10 amp
<b>Overload protection</b>	Circuit-breakers
<b>Output connectors</b>	MS enviro with 15' cables
<b>Weight</b>	39 pounds
<b>Dimensions</b>	16.75"L x 8.75"W x 10.5"H





[info@smith-root.com](mailto:info@smith-root.com)

(360) 573-0202

Vancouver, WA USA

[www.smith-root.com](http://www.smith-root.com)