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Walfront Walfronty05xwco6zv

Walfront High Voltage Pulse Transformer Module Instruction Manual

Model: Walfronty05xwco6zv

1. INTRODUCTION

This document provides instructions for the Walfront High Voltage Pulse Transformer Module, a compact and efficient high-voltage generator designed for scientific experiments and electronic applications. This module is a finished transformer/booster unit capable of outputting high voltage pulse current with a simple external circuit power supply.

2. SAFETY INFORMATION

High voltage can be extremely dangerous and cause severe injury or death. Always exercise extreme caution when working with this module.

- **Do not touch the output terminals when the module is powered.**
- Ensure proper insulation and safety measures are in place before operation.
- Keep the module and any associated circuitry away from children and unauthorized personnel.
- This module is designed for intermittent operation. **Do not operate for extended periods** due to internal heat generation, which can lead to damage.
- **Never connect this module to an AC (Alternating Current) power source.** It is designed for DC (Direct Current) input only. Connecting to AC will destroy the unit.
- The output ends of the cable should be adjusted properly before power on. The arc distance depends on battery voltage and capacity.
- When creating an arc, start with a short arc distance and gradually increase it. Do not attempt the longest arc immediately, as this may damage the module.

3. PRODUCT OVERVIEW

The Walfront High Voltage Pulse Transformer Module is a compact device designed to convert low DC

voltage into high DC pulse voltage. It is suitable for various scientific experiments, electronic instruments, and anion generators.

The module features input wires (typically red for positive, green/blue for negative) and output wires for generating the high voltage arc.

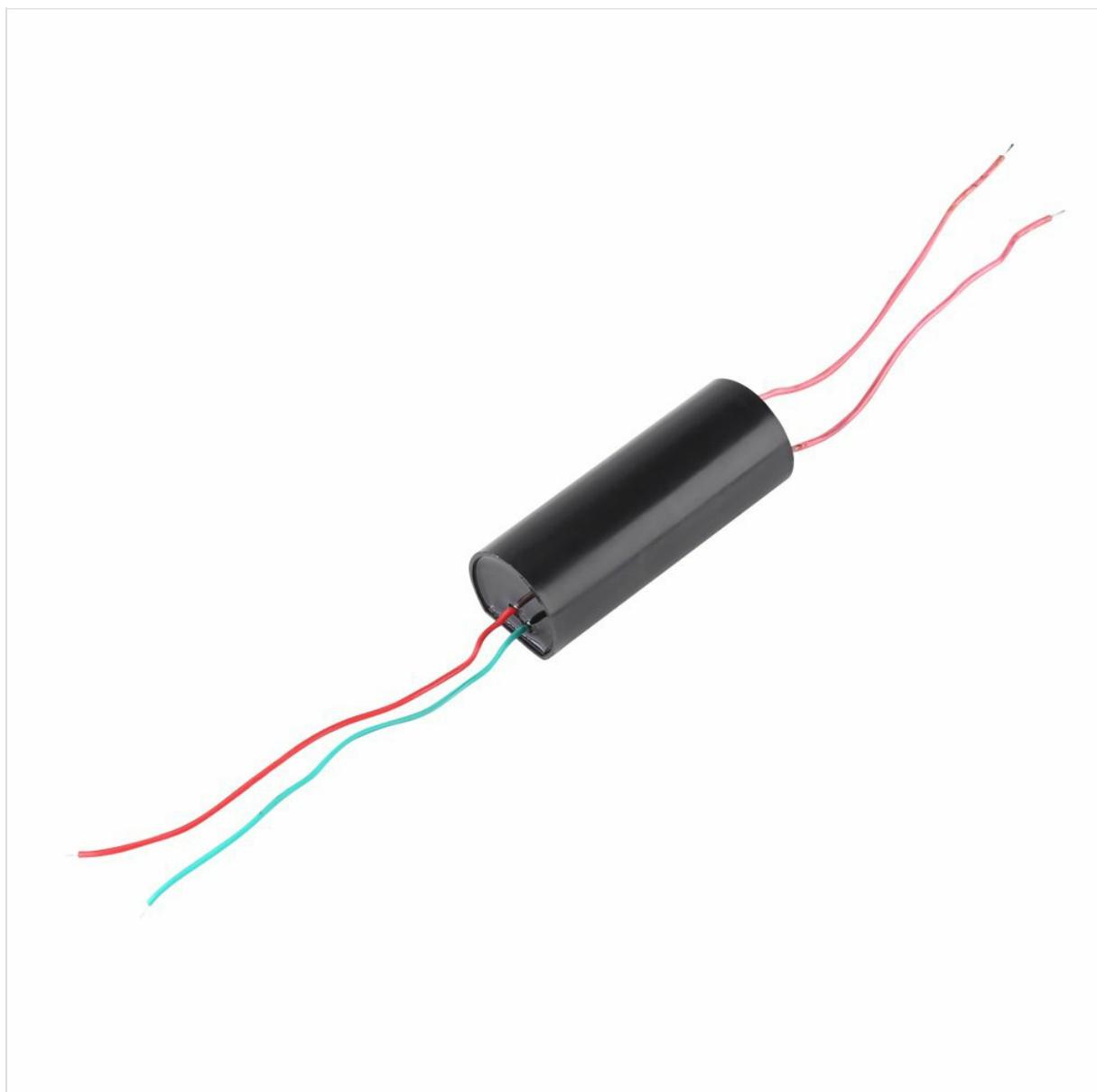


Image: The Walfront High Voltage Pulse Transformer Module, showing its compact size and approximate dimensions (64mm length, 22mm width, 24mm height).

4. SPECIFICATIONS

Parameter	Value
Model Number	Walfronty05xwco6zv
Size	64mm x 22mm x 24mm (2.52" x 0.86" x 0.94")
Input Voltage	3.7V - 6V DC
Input Current	0.5A - 1A
Input Cable Length	Approx. 11cm (4.33")

High Voltage Type	Pulse DC
Output Voltage	Approx. 50KV
Output Current	0.5A - 1A
Output Cable Length	Approx. 10cm (3.93")
Arc Discharge Distance	0.5cm - 1.5cm (0.19" to 0.59")
Recommended Power Supply	3.7V Li-ion battery, Ni-Cd/Ni-mh battery pack, 4V or 6V battery (6V is better). Li-ion battery of 2000mA, 4000mA or more is suggested.
Item Weight	1.58 ounces
UPC	663862204872

5. SETUP

Follow these steps to set up your high voltage pulse transformer module:

- 1. Identify Input and Output Wires:** The module has two sets of wires. The shorter, thicker wires are typically the input (red for positive, green/blue for negative). The longer, thinner wires are the high voltage output.
- 2. Connect Input Power:** Connect the input wires to a DC power source within the specified range of 3.7V to 6V. Ensure correct polarity (red to positive, green/blue to negative). A 6V power source is recommended for optimal performance.
- 3. Prepare Output Terminals:** Before applying power, ensure the output ends of the cable are properly positioned and insulated. The arc discharge distance should be set appropriately for your application, starting with a short gap.
- 4. Power Source Recommendation:** For best results, use a high-capacity battery such as a 3.7V Li-ion battery with 2000mA, 4000mA, or more. This will ensure sufficient current for a strong arc.

High Voltage Arc Module

- Transformer For Scientific
- High Voltage Power Source
- School Science Experiment

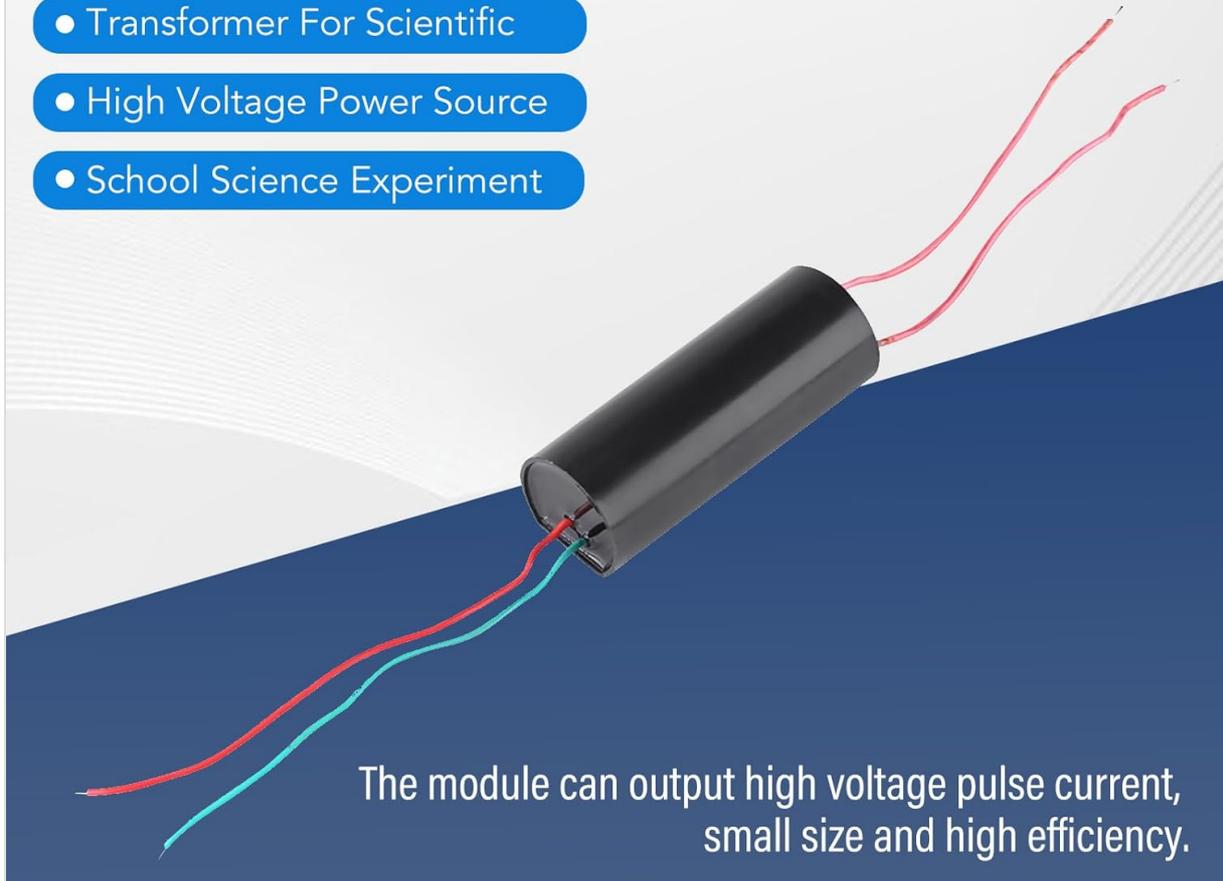


Image: The module showing its input and output wires, illustrating how to connect a power source.

6. OPERATING INSTRUCTIONS

Once the module is correctly set up and connected to a power source:

1. **Apply Power:** Turn on your DC power source. The module will immediately begin generating high voltage pulses at its output terminals.
2. **Observe Arc Discharge:** If the output terminals are close enough, an arc will form between them. The length of the arc will vary based on the input voltage and the capacity of your power supply.
3. **Adjust Arc Distance:** When experimenting with arc length, always start with a short distance (e.g., 0.5cm) and gradually increase it. Attempting to create the maximum arc distance immediately may stress and potentially damage the module.
4. **Intermittent Operation:** Due to the high power output and internal heat generation, this module is not designed for continuous operation. Use it for short bursts or intermittent periods to prevent overheating and damage.

DC3.7-6V High Voltage Pulse Module Generator Capacitor LG-105 Super Arc 50KV

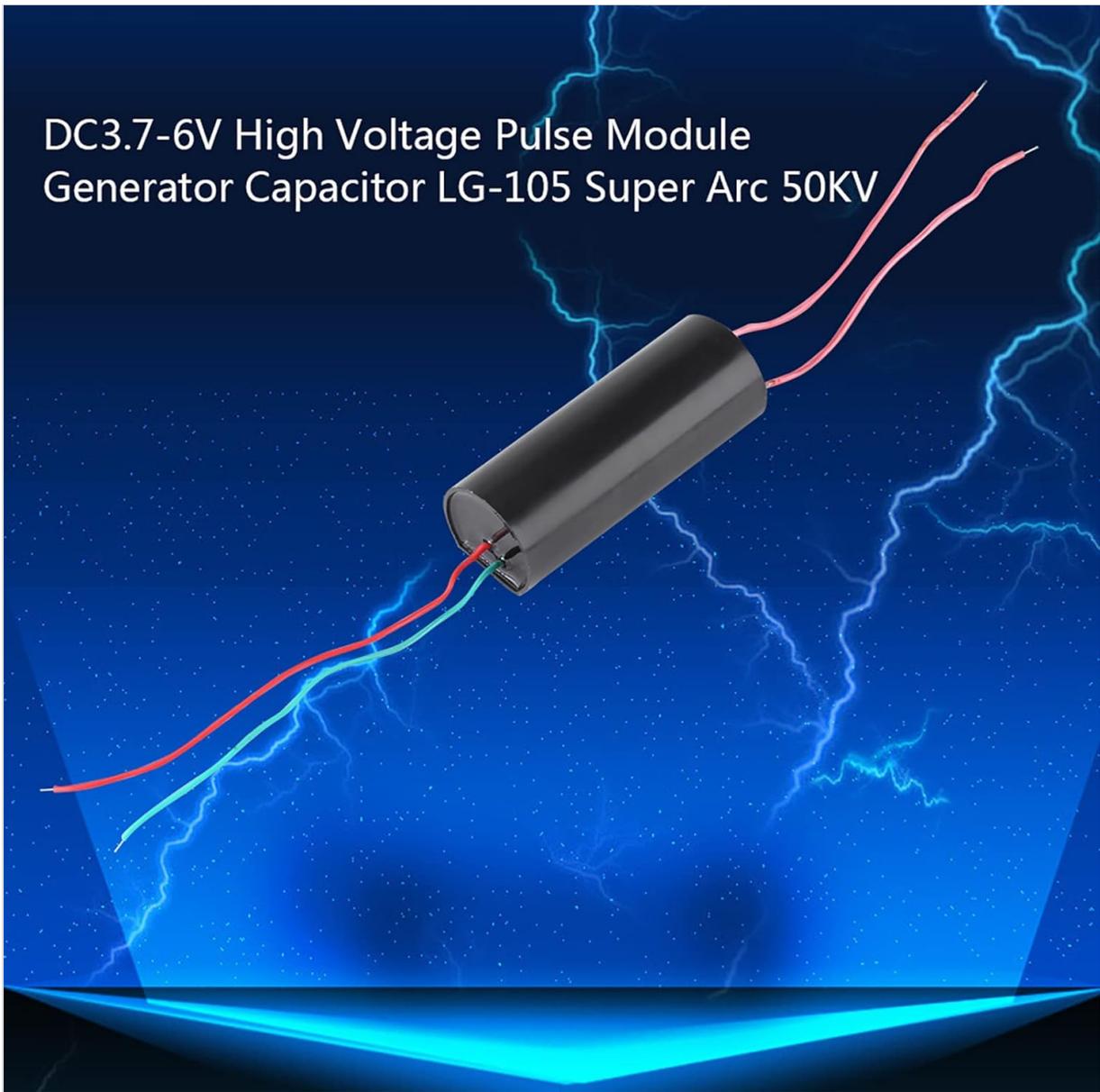


Image: The high voltage module in operation, demonstrating the electrical arc generated at its output terminals.

7. MAINTENANCE

To ensure the longevity and proper functioning of your module:

- **Keep Clean and Dry:** Protect the module from moisture, dust, and corrosive substances.
- **Storage:** Store the module in a cool, dry environment when not in use.
- **Inspect Wires:** Periodically check the input and output wires for any signs of damage, fraying, or loose connections. Replace or repair damaged wires immediately to prevent hazards.
- **Avoid Physical Shock:** Handle the module carefully to prevent physical impact or dropping, which could damage internal components.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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No output arc	Incorrect input voltage or insufficient current; loose connections; module damage.	Verify input power supply is within 3.7V-6V DC and provides adequate current (0.5A-1A). Check all wire connections for security. If still no arc, the module may be damaged.
Weak or inconsistent arc	Low capacity battery; input voltage too low; excessive arc distance.	Use a higher capacity battery (e.g., 2000mA+ Li-ion). Ensure input voltage is closer to 6V. Reduce the arc discharge distance.
Module gets hot quickly	Normal operation for high power output; prolonged continuous use.	This is expected. Avoid continuous operation for extended periods. Allow the module to cool down between uses.
Module damaged after connection	Connected to AC power source; incorrect polarity; exceeding input voltage.	This module is for DC input only. Connecting to AC power will cause irreversible damage. Always double-check polarity and input voltage before powering on.

9. WARRANTY AND SUPPORT

No specific warranty information is provided for this product within the available documentation. For product support, technical assistance, or inquiries regarding potential defects, please contact your retailer or the manufacturer, Walfront, directly through their official channels.