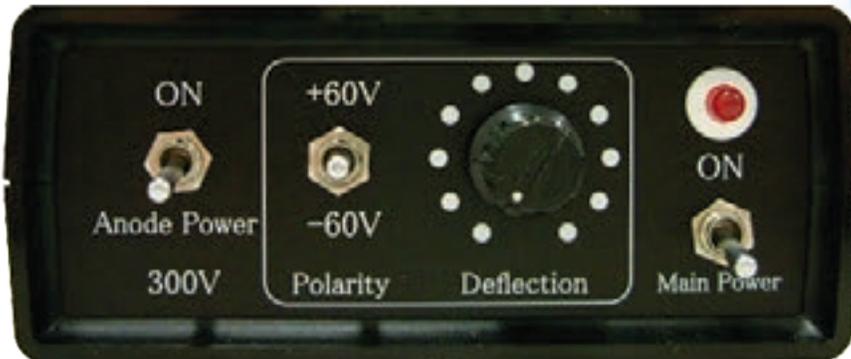
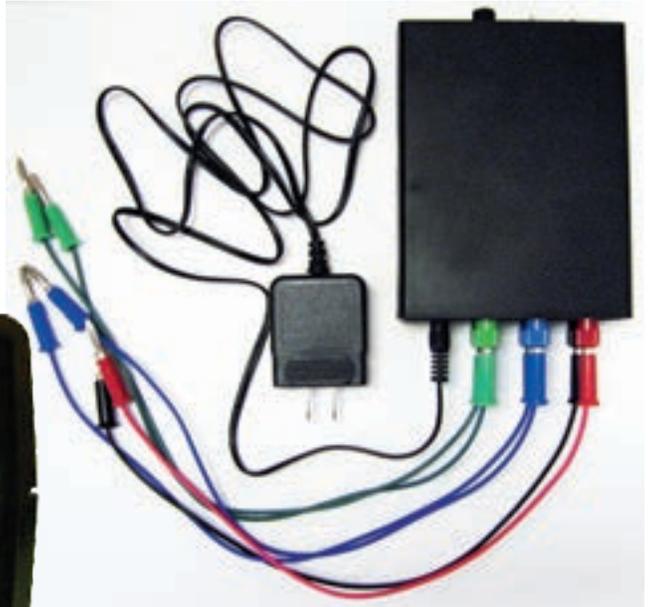


POWER SUPPLY for CROOKES TUBE

N99-B10-2483

This power supply operates with the attached 6V, 2.5A AC adapter. Always use the provided adapter (other adapters can cause damage to the unit). Since high voltage is generated (up to 300V), carefully read this instruction manual and use the power supply as instructed.



Front Panel

SPECIFICATIONS

The package includes the following items:

- Power Supply Unit
 - Heater Voltage: DC 6V
 - Anode Voltage: DC 300V
 - Deflection Voltage: DC $\pm 60V$
- Cables with Banana Plugs attached
 - Green Cable 2
 - Blue Cable 2
 - Red Cable 1
 - Black Cable 1
- AC Adapter 6V, 2.5A
- Instruction Manual



Back Panel



OPERATION METHOD

1. Set both the Main Power and Anode Power (acceleration voltage switch) to OFF, turn the Deflection Dial (deflection voltage adjustment) all the way to the left, set the Polarity Switch to the center position, and connect the AC adapter.
 2. Turn the Main Power ON. The red LED lights up indicating that the unit is live.
 3. Wait until the cathode becomes red-hot (30 seconds to 1 minute) and then turn the Anode Power switch ON. Emission of the electron beam starts and gradually stabilizes.
 4. When the Crookes Tube with deflection plates is used, check the deflection of the electron beam by turning the Deflection Voltage Adjustment Dial. The orientation of the beam can be checked by flipping the Polarity Switch up and down.
- When experimenting with a Crookes Tube with the deflection plates, the end of the cathode rays projected from the cathode to the glass screen may be split into two until the cathode is adequately heated. The cathode rays will be focused in one spot more than 3 minutes after the Main Power Switch is ON. You must wait to apply the acceleration voltage even if such phenomenon is observed.

Manual of Operations

IMPORTANT!
Read the following before using this equipment:
 Carefully follow all instructions and observe all precautions given in this manual

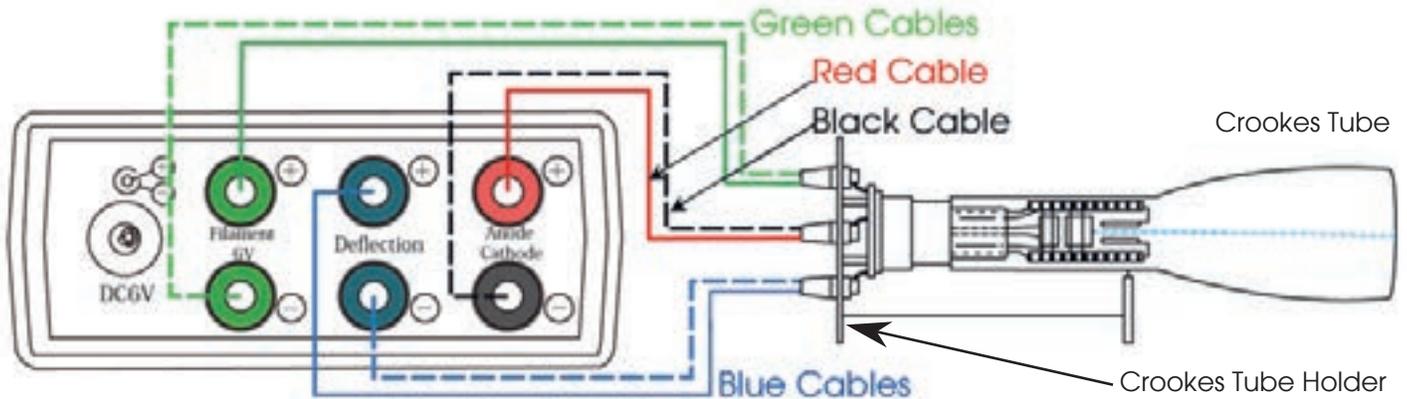
Version2.2.KR062416



LOOK US UP ONLINE

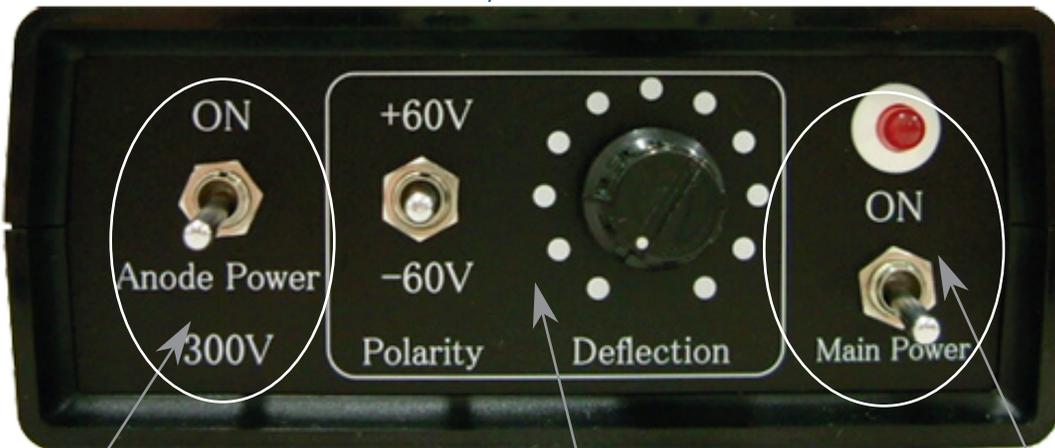
CONNECTING TO THE CROOKES TUBE

Connect the terminals of the Crookes Tube Holder marked (H) to the green terminals on the power supply rear panel (marked "Filament 6V"). Connect the terminals of the Crookes Tube Holder marked UP (上) and DOWN (下) with the blue terminals on the power supply (marked "Deflection"). Connect the P-terminal and K-terminal on the Crookes Tube Holder to the red terminal (anode) and the black terminal (cathode) on the power supply. The following diagram illustrates the identification and function of the components:



- No polarity applies to the Green Cables (for Filament).
- The (+) and (-) connectors of the blue terminals (Deflection) must be connected to the terminals of the Crookes Tube Holder indicated UP (上) and DOWN (下), by using the Blue Cables.

POWER SUPPLY FRONT PANEL / FUNCTIONS OF SWITCHES AND DIAL



Accelerating Voltage Switch

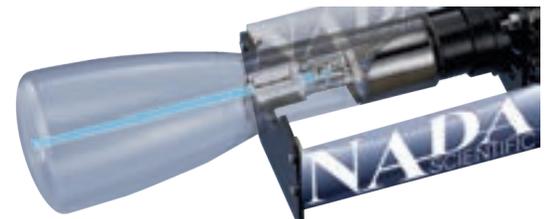
The switch is used to apply 300V acceleration voltage to the anode of the Crookes Tube. Make sure this switch is OFF before turning the main power switch ON.

Voltage Control Applied on Deflection Plates

Deflection voltage (0-60V) can be applied to the deflection plates when the Polarity switch is in the UP position. When the switch is at the center (neutral position), deflection plates are disconnected from the power supply. Deflection voltage is 0V when the dial is turned to the extreme left and it gradually increases as the dial is turned to the right.

Main Power Switch

The LED pilot lamp illuminates when this switch is turned ON.



PRECAUTIONS

- The power supply is powered by a separate AC adapter, which has an output power of DC 6V, 2.5A. Use of an AC adapter other than the supplied adapter may cause damage to the unit.
- The power supply incorporates a high voltage generator circuit which produces 300V. To avoid electrical shock, do not modify or expose the internal circuit. Do not touch the high-voltage output terminals while the unit is powered.
- The power supply is a sensitive instrument. Care must be taken to avoid exposing the unit to impacts, vibrations, humidity and extreme temperatures.