

OUR LAB (9000 Level)

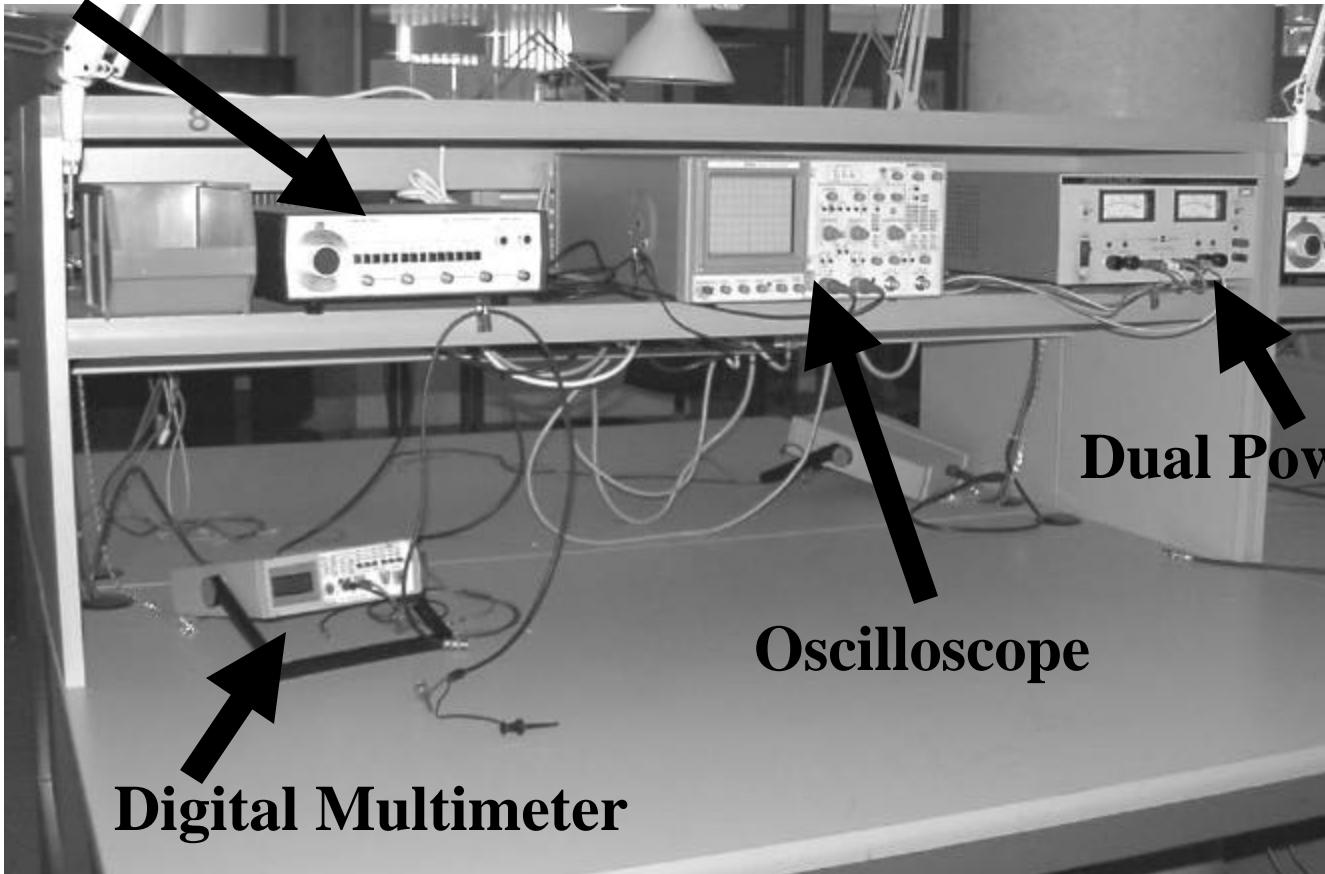


Component Rack



Lab Bench

Function Generator

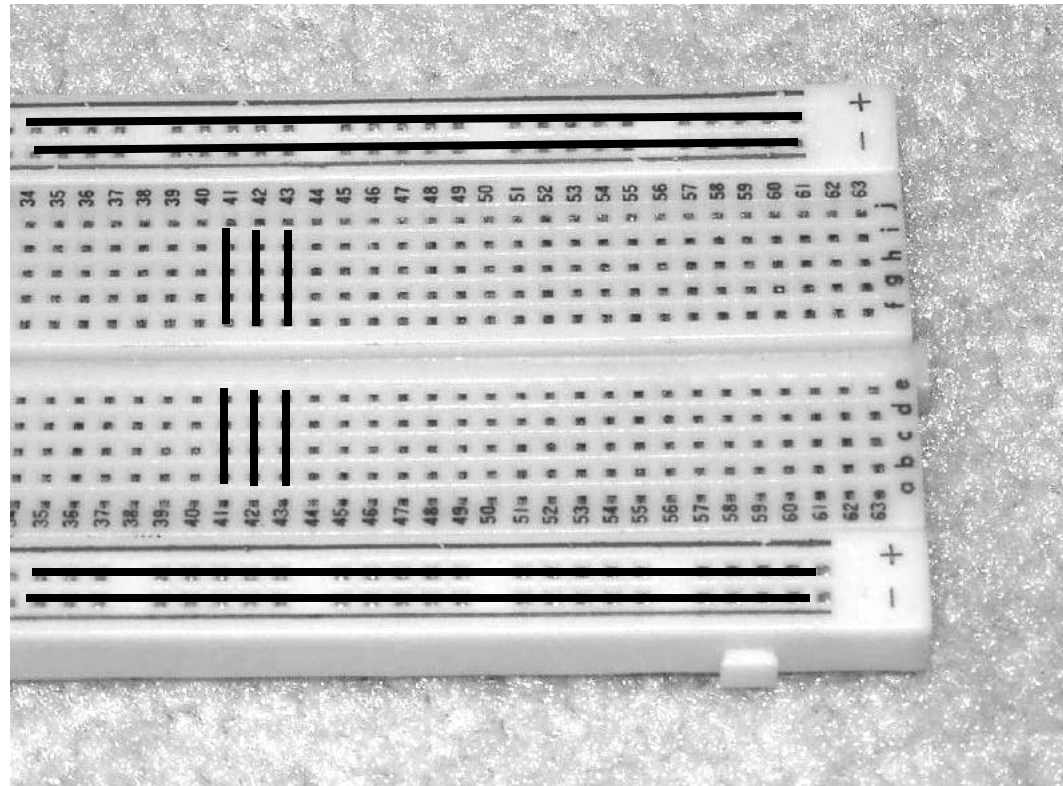


Dual Power Supply

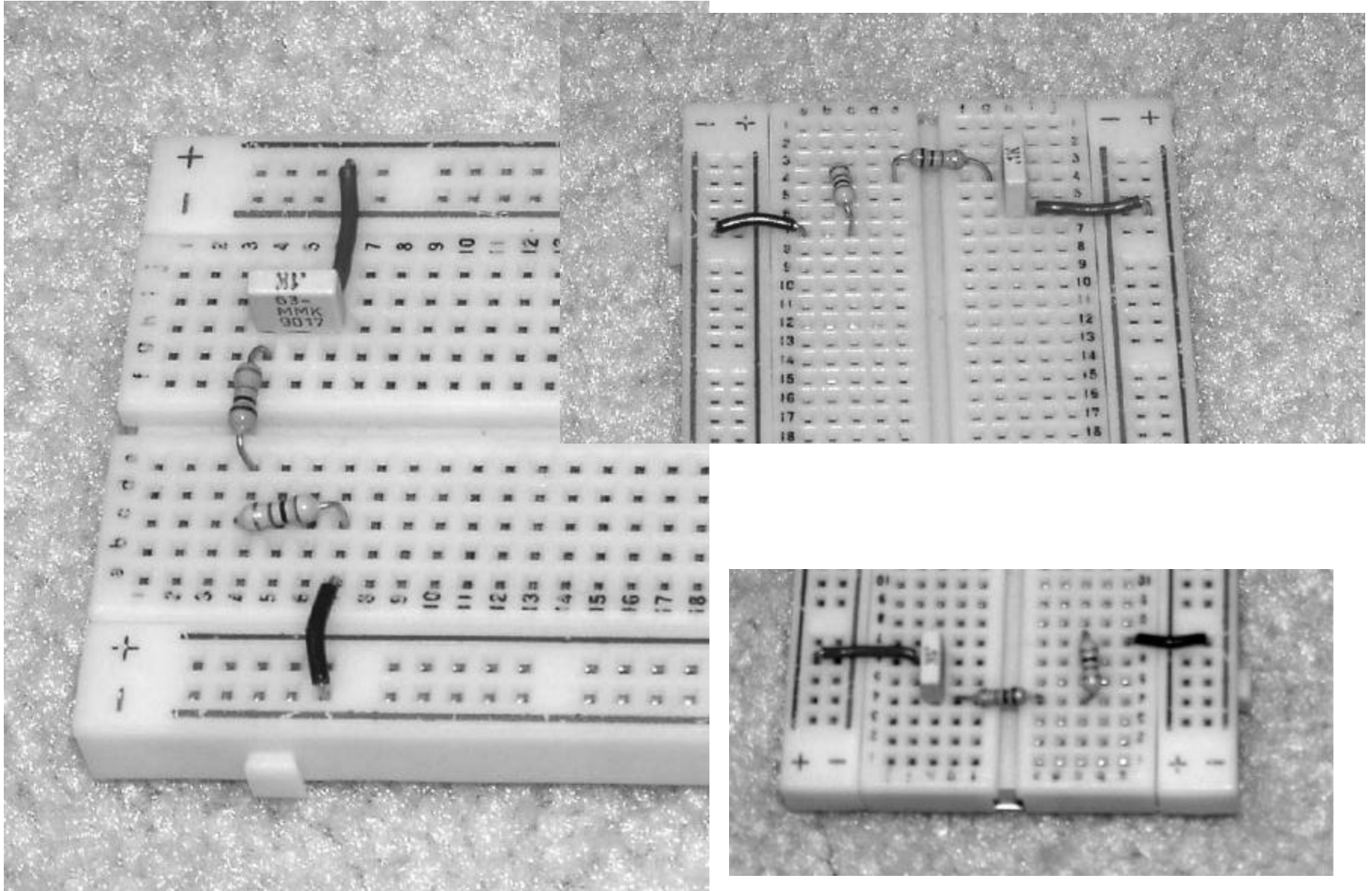
Oscilloscope

Digital Multimeter

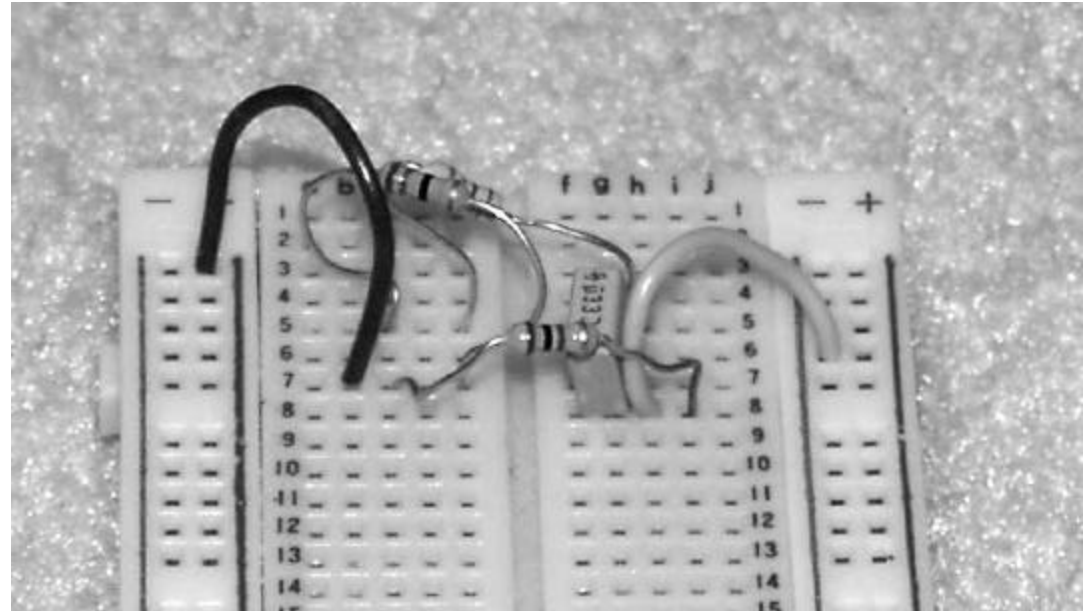
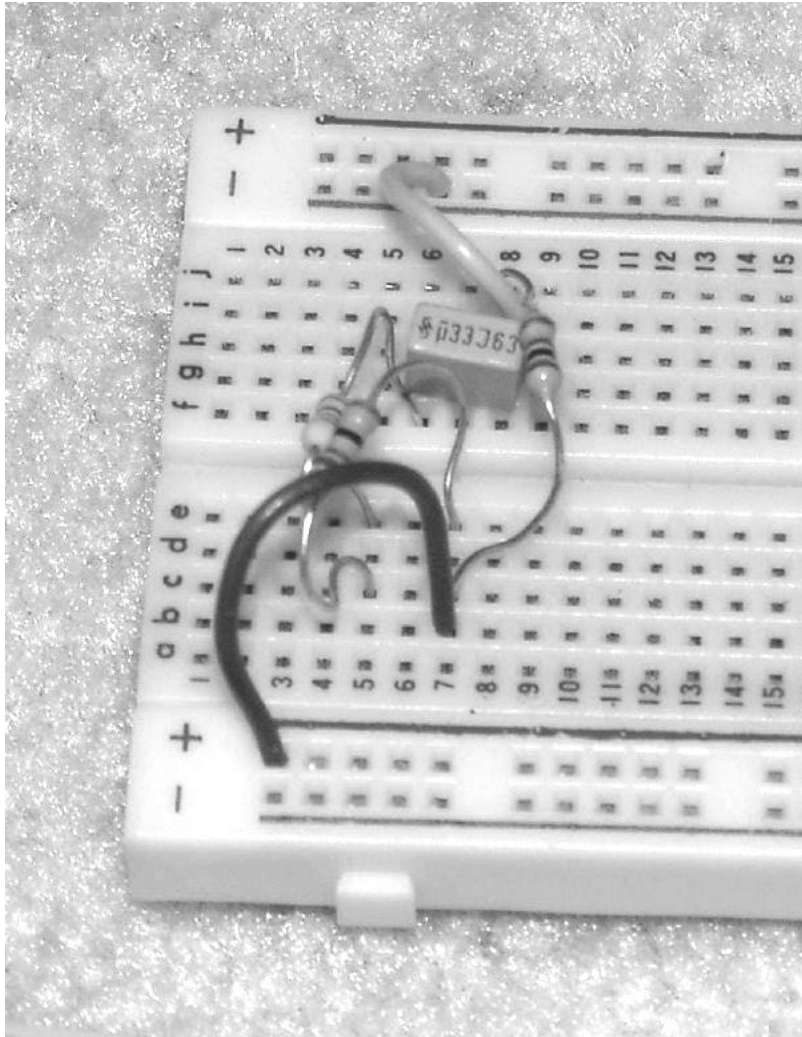
Bread Board



Good Wiring



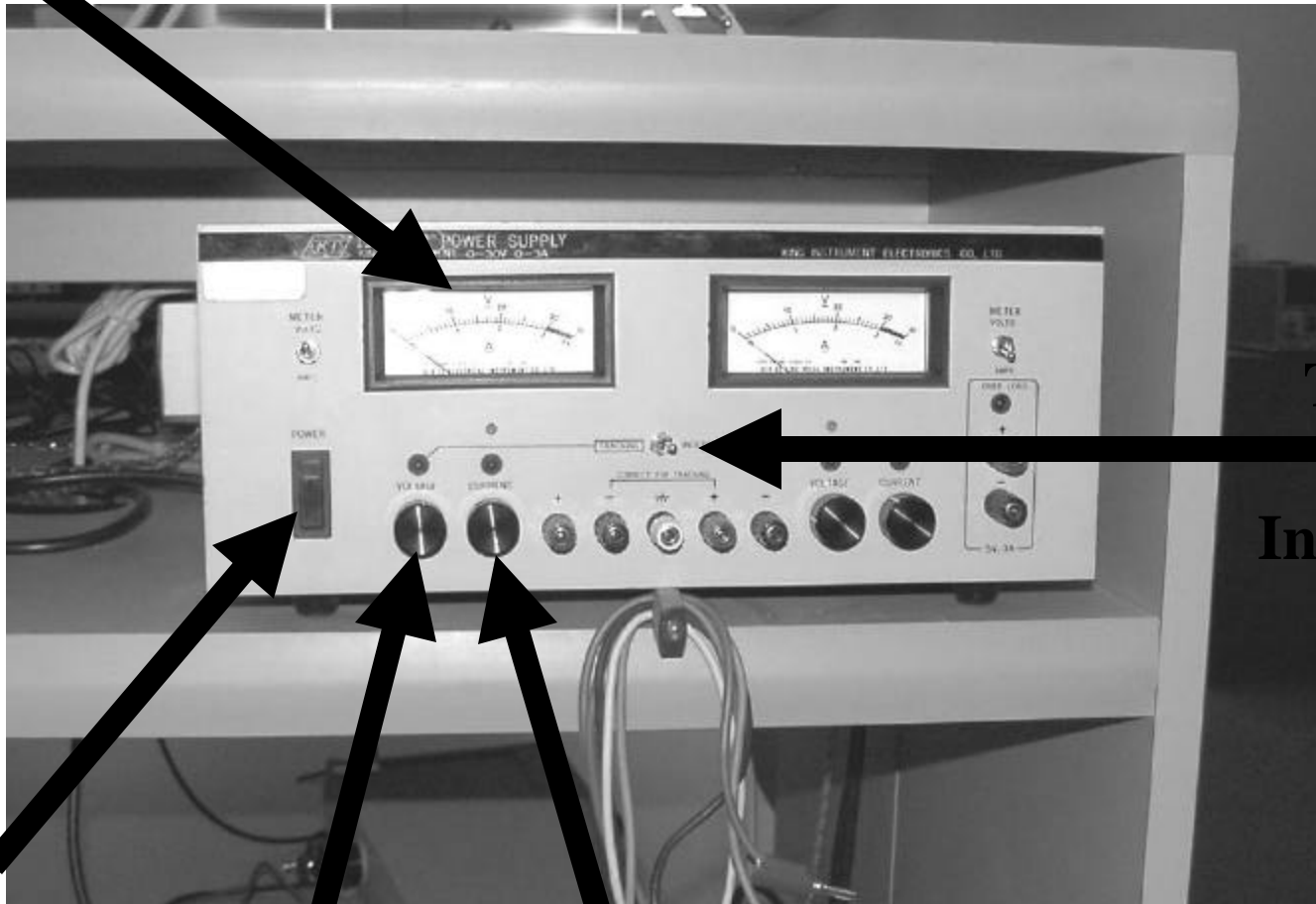
Horrible Wiring



**If you wire your circuit this way
Please don't bring it to me or to TAs
for trouble shooting**

Dual Power Supply

Voltage or Current Display



Tracking
(or)
Independent

Power
Switch

Voltage
knob

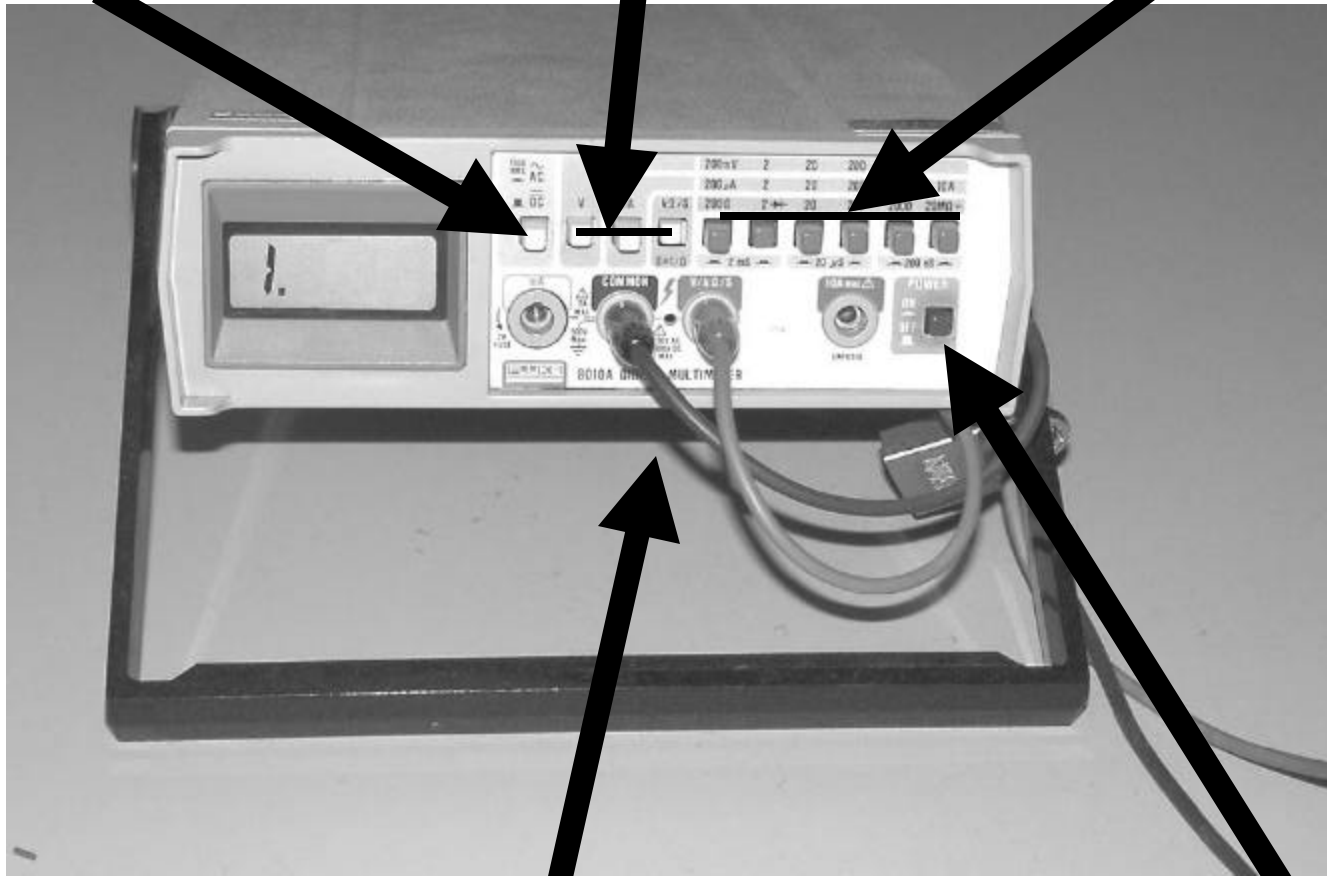
Current
Limit

Digital Multimeter

**AC/DC
Measurement**

Mode Select

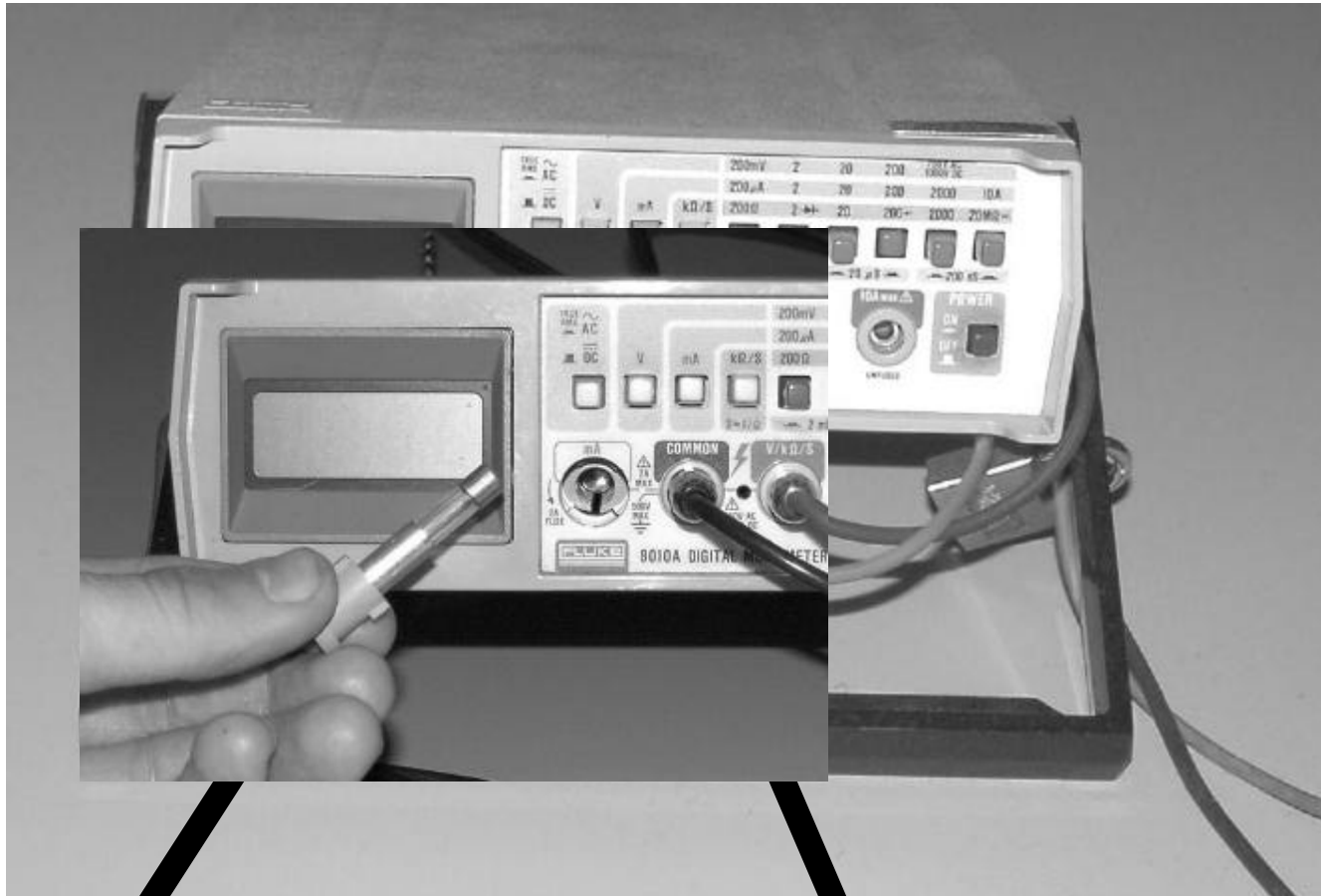
Range Select



**Voltage/Resistance
Measurement**

Power Switch

Digital Multimeter (current measurement)



**Fuse is inside this
socket**

**Current
Measurement**

DMM Specs



**FLUKE 8010A DIGITAL MULTIMETER OPERATOR'S GUIDE
SUMMARY SPECIFICATIONS**

ACCURACY: \pm (% OF READING + DIGITS) 1 YEAR - 18°C-28°C (64°F-82°F)

DC VOLTAGE: (0.1 + 1) | **DC CURRENT:** (0.3 + 1) EX (0.5 + 1 @ 10A)

AC VOLTAGE AND CURRENT: (BETWEEN 5% OF RANGE AND FULL RANGE)

RANGE	45 Hz - 10 kHz	10 kHz - 20 kHz	20 kHz - 50 kHz
200V AND BELOW	(0.5 + 2)	(1.0 + 2)	(5.0 + 3)
750V	(0.5 + 2), 45 Hz - 1 kHz ONLY		
200 mA AND BELOW	(1.0 + 2)	(2.0 + 2)	
2000 mA, 10A	(1.0 + 2), 45 Hz - 2 kHz ONLY		

	RESISTANCE	CONDUCTANCE	
200k Ω AND BELOW	(0.2 + 1)	2 mS, 20 μ S	(0.2 + 1)
2000k Ω , 20M Ω	(0.5 + 1)	200 nS	(1.0 + 10)

MAXIMUM RATINGS

VOLTAGE: 1000V DC OR PK AC, 750V RMS AC < 10 SEC, 200 mV, 2V RANGES
CURRENT: 2000 mA AND BELOW, 2A (FUSED); 10A, 12A MAX (UNFUSED)
RES-COND: ALL RANGES, 300V DC OR RMS AC
COMMON MODE VOLTAGE: (LO TERM TO GND) 500V DC OR PK AC

OPERATING NOTES

1. SELECT mA/A FCN, COMMON JACK AND 10A JACK FOR 10A CURRENT MEAS.
2. SELECT k Ω /S FCN, FOR ALL Ω , k Ω , M Ω & CONDUCTANCE MEAS.
3. SELECT INDICATED PAIRS OF RANGE BUTTONS FOR CONDUCTANCE
4. SELECT 2k Ω RNG FOR DIODE TEST (200k AND 20M MAY ALSO TURN ON DIODE)

POWER REQUIREMENTS

VOLTAGE: 90 TO 132 VAC 200 TO 264 VAC
FREQUENCY: (FOR BEST NOISE REJECTION)
 50 Hz 60 Hz
 -01 BATTERY MODEL (LINE FUSE, MDL 1/32A, INSIDE CASE)
POWER: 4 WATTS MAXIMUM
 SPECIAL - SEE MANUAL ADDENDA FOR MODIFIED SPECS

JOHN FLUKE MFG. CO., INC. SEATTLE, WA MADE IN U.S.A.

Specification and Accuracy