

## Data sheet

# Manual Ranging Tool Kit® DMM with Temperature Model 2706B



### LCD backlight



Ultra bright blue LCD backlight for low ambient light measurements

The 2706B is a versatile manual-ranging DMM with temperature measurement. The 2000 count LCD has a bright blue back light that allows the meter to be used in dimly lit environments. With the auto-power-off feature you won't have to worry about accidental battery consumption. Value-packed features make this meter a must in every "Tool Kit®".

### Features

- Auto power off
- DC voltage to 1000 V
- Resistance to 20 MΩ
- One-handed operation
- Magnetic hanger
- Bright blue LCD backlight
- AC voltage to 750 V
- Capacitance to 20 mF
- Continuity test
- Diode test

<b>DC Current</b>	
Ranges	200 μA, 20 mA, 200 mA
Resolution	0.1 μA, 10 μA, 100 μA
Accuracy	±(1.0% rdg + 1 dgts)
Input Protection	0.25 A/500 V fast blow ceramic fuse
<b>AC Current (50 Hz-500 Hz)</b>	
Ranges	200 μA, 20 mA, 200 mA
Resolution	0.1 μA, 10 μA, 100 μA
Accuracy	±(1.5% rdg + 5 dgts)
Input Protection	0.25 A/500 V fast blow ceramic fuse
<b>Resistance</b>	
Ranges	200 Ω, 2 kΩ, 200 kΩ, 20 MΩ
Resolution	0.1 Ω, 1.0 Ω, 100 Ω, 10 kΩ,
Accuracy	200 Ω to 200 kΩ ranges: ±(1.0 % rdg + 4 dgts) 20MΩ range: ±(2.0 % rdg + 4 dgts)
Open Circuit Voltage (typical)	0.3 VDC (3.0 VDC on 200 Ω)
Overload Protection	500 VDC/ACrms
<b>Capacitance</b>	
Ranges	200 μF, 2 mF, 20 mF
Resolution	0.1 μF, 1.0 μF, 10 μF
Accuracy	±(4 % rdg + 10 dgts)
Overload Protection	0.25 A/500 V fast blow ceramic fuse
<b>Frequency</b>	
Ranges	10 Hz to 40 kHz
Resolution	1 Hz
Accuracy	±(0.1 % rdg + 3 dgts)
Sensitivity	3.5 Vrms minimum
Overload Protection	500 VDC/AC rms
<b>Diode Test</b>	
Test Current	1.0 mA (typical)
Resolution	10 mV
Accuracy	±(1.5 % rdg + 3 dgts)
Open Circuit Voltage	3.0 VDC (typical)
Overload Protection	500 VDC/ACrms
<b>Continuity</b>	
Audible Indication	Less than 100 Ω
Response Time	100 ms
Overload Protection	500 VDC/ACrms
<b>Temperature</b>	
Ranges	-35°C to 750°C, -30°F to 1400°F
Resolution	0.1°C, 0.1°F
Accuracy	0°C to 400°C ±(1.0 % rdg + 1°C) -35°C to 0°C, 400°C to 750°C ±(3.0 % rdg + 3°C) -4°F to 750°F ±(1.0 % rdg + 2°F) -30°F to -4°F, 750°F to 1400°F ±(3.0 % rdg + 6°F)
Sensor Type	K-type thermocouple
Overload Protection	60 VDC or 30 VACrms
<b>General</b>	
Display	3 1/2 digit, 2000 count LCD
Polarity	Automatic, positive implied, negative polarity indication
Overrange	OL or -OL is displayed
Low Battery Indication	The battery symbol will display when battery voltage drops below operating levels
Measurement Rate	2.5 times per second
Auto Power Off	Approximately 25 minutes
Operating Environment	0°C to 50°C at <70 % relative humidity
Storage Environment	-20°C to 60°C at 0 to 80 % relative humidity
Accuracies	Stated accuracy at 23°C +5°C at <75 % relative humidity
Temperature Coefficient	0.1 x (specified accuracy) per °C. (°C to 18°C, 28°C to 50°C)
Power	Single standard 9 volt battery, NEDA 1604, IIS 006P, IEC 6F22
Battery Life	150 hours typical
Dimensions	165 mm (H) x 78 mm (W) x 42.5 mm (D)
Weight	Approximately 10.3 oz. (377 g) with battery and hanger
<b>One Year Warranty</b>	
Accessories	
Supplied: One set test leads, one spare fuse, 9V battery (installed), one K-type thermocouple and instruction manual	

\*= 600 VDC/ACrms for 15 seconds on 200 mV range

Specifications		model
		2706B
<b>DC Volts</b>		
Ranges	200 mV, 2000 mV, 20 V, 200 V 1000 V	
Resolution	0.1 mV, 1 mV, 10 mV, 100 mV, 1 V	
Accuracy	±(0.5 % rdg + 1 dgts)	
Input Impedance	10 MΩ	
Overload Protection	1000 VDC or 750 VACrms*	
<b>AC Volts (50 Hz-500 Hz)</b>		
Ranges	200 mV, 2000 mV, 20 V, 200 V 750 V	
Resolution	0.1 mV, 1 mV, 10 mV, 100 mV, 1 V	
Accuracy	200 mV & 20 V ranges: ±(1.2 % rdg + 5 dgts) 200 V & 750 V ranges: ±(2.0 % rdg + 5 dgts)	
Input Impedance	10 MΩ	
Overload Protection	1000 VDC or 750 VACrms*	

# B&K Precision's 2700 Tool Kit® Series

## Models 2703C, 2704C, 2705B, 2706B, 2707B, 2708B & 2709B

These excellent meters are for most jobs that require flexibility, accuracy and speed. Value-packed features make these meters a must for everyone's "Tool Kit®".

Common Features:

- DC Voltage to 1000V
- AC Voltage to 750V
- DC Current to 10A
- Continuity test
- Diode test
- Drop resistant case
- Magnetic hanging strap



### Magnetic Hanging Strap

This convenient feature allows you to hang your DMM on any magnetic metallic surface freeing up your hands for troubleshooting.

### Back Light / Easy-to-Read LCD

Model 2706B

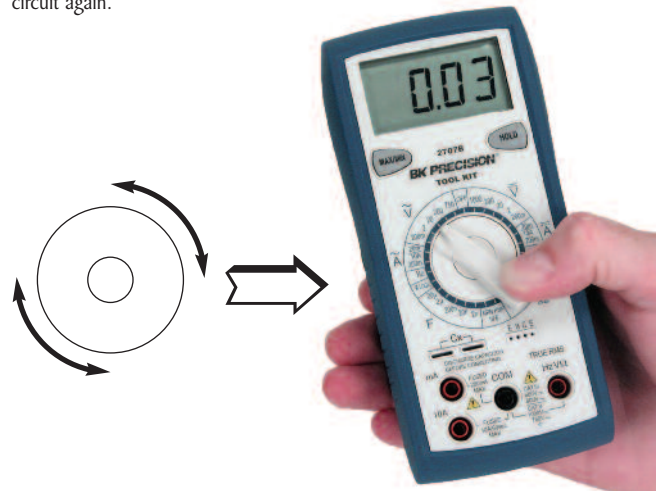
Ultra-bright blue LCD back light for low ambient light measurements

Model 2709B

Large easy-to-read LCD with green LED backlight

### Single-handed operation

The ergonomic design allows both left and right handed users to rotate the knob while holding the meter in one hand. While one hand keeps the probe on the circuit, the other hand changes the meter's function. This speeds up troubleshooting because you don't have to locate the probe point in the circuit again.



Features	models						
	2709B	2708B	2707B	2706B	2705B	2704C	2703C
Ranging	Auto/Manual	Auto/Manual	Manual	Manual	Auto/Manual	Manual	Manual
True RMS	√	√	√	-	-	-	-
Current	10 A AC/DC	10 A AC/DC	10 A AC/DC	10 A AC/DC	10 A AC/DC	10 A AC/DC	10 A DC
Capacitance	to 66,000 uF	-	to 20 uF	to 20 mF	-	to 20 uF	-
Transistor Test	-	-	√	-	-	√	-
Frequency Counter	to 66 MHz	-	√	to 40 kHz	-	√	-
Temperature	-	-	-	√	-	-	-
Logic Probe	-	-	√	-	-	√	-
Backlight LCD	√	-	-	√	-	-	-
Analog Bar Graph	-	√	-	-	-	-	-
Battery Test	-	-	-	-	-	-	√
Auto Power off	√	√	-	√	√	-	-