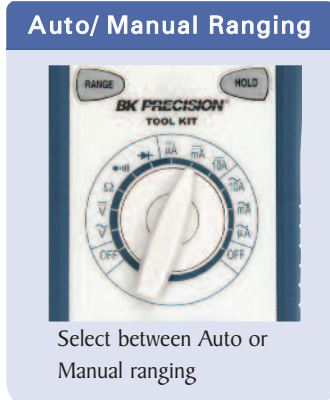
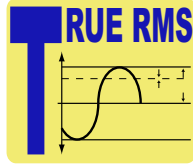


# Auto Ranging True RMS Tool Kit® DMM

## Model 2709B



The 2709B is a full featured auto ranging true RMS DMM that combines performance, value and functionality. The 6600 count LCD has a green back light that allows the meter to be used in dimly lit environments. The 2709B can measure resistance values up to 66 MΩ and capacitance to 66 uF. 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

- Magnetic hanger
- True RMS
- Auto/manual ranging
- DC voltage to 1000 V
- AC voltage to 750 V
- Capacitance to 66 uF
- Diode test
- One-handed operation
- Large easy-to-read LCD with backlight
- Auto power off
- Measures up to 10 A (AC & DC)
- Resistance to 66 MΩ
- Frequency counter to 66 MHz
- Continuity test

| Specifications                 |  | model |
|--------------------------------|--|-------|
|                                |  | 2709B |
| <b>DC Volts</b>                |  |       |
| Ranges                         | 660 mV, 6.6 V, 66 V, 660 V, 1000 V   |       |
| Resolution                     | 0.1 mV, 1 mV, 10 mV, 100 mV, 1 V   |       |
| Accuracy                       | ±(0.5 % rdg + 2 dgts)  |       |
| Input Impedance                | 660 mV: >100 MΩ; 6.6 V: 10 MΩ; 66 V to 1000 V: 9.1 MΩ  |       |
| Overload Protection            | 1000 VDC or 750 VACrms   |       |
| <b>AC Volts (50 Hz-500 Hz)</b> |  |       |
| True RMS                       | Applies  |       |
| Ranges                         | 660 mV, 6.6 V, 66 V, 660 V, 750 V  |       |
| Resolution                     | 0.1 mV, 1 mV, 10 mV, 100 mV, 1 V   |       |
| Accuracy                       | 660 mV range at 50 Hz to 60 Hz ±(1.5 % rdg + 8 dgts)<br>6.6 V to 660 V ranges: ±(1.5 % rdg + 8 dgts)<br>750 V range: ±(2.0 % rdg + 8 dgts) |       |
| Crest Factor                   | <3   |       |
| Input Impedance                | 660 mV: >100 MΩ; 6.6 V: 10 MΩ; 66 V to 750 V: 9.1 MΩ   |       |
| Overload Protection            | 1000 VDC or 750 VACrms   |       |

|  |   |
|--|---|
| <b>DC Current</b>  |   |
| Ranges   | 660 uA, 6600 uA, 66 mA, 400 mA, 10 A  |
| Resolution   | 0.1 uA, 1 uA, 10 uA, 100 uA, 10 mA  |
| Accuracy   | 660 uA to 400 mA ranges: ±(1.5 % rdg + 2 dgts)<br>10 A range: ±(3.0 % rdg + 3 dgts)   |
| Input Protection   | 0.5 A/500 V & 10 A/600 V fast blow ceramic fuses  |
| 10A Input  | 10 A for 60 sec max. followed by a 10 minute cooling period   |
| <b>AC Current (50 Hz-500 Hz)</b>   |   |
| True RMS   | Applies   |
| Ranges   | 660 uA, 6600 uA, 66 mA, 400 mA, 10 A  |
| Resolution   | 0.1 uA, 1 uA, 10 uA, 100 uA, 10 mA  |
| Accuracy   | 660 uA to 400 mA ranges: ±(2.0 % rdg + 10 dgts)<br>10 A range: ±(3.5 % rdg + 10 dgts)   |
| Crest Factor   | <3  |
| Input Protection   | 0.5 A/500 V & 10 A/600 V fast blow ceramic fuses  |
| 10A Input  | 10 A for 60 sec max. followed by a 10 minute cooling period   |
| <b>Resistance</b>  |   |
| Ranges   | 660 Ω, 6.6 kΩ, 660 kΩ, 6.6 MΩ, 66 MΩ  |
| Resolution   | 0.1 Ω, 1.0 Ω, 10 Ω, 1 kΩ, 10 kΩ   |
| Accuracy   | 660 Ω to 660 kΩ ranges: ±(1.2 % rdg + 5 dgts)<br>6.6 MΩ range: ±(2.0 % rdg + 5 dgts)<br>66 MΩ range: ±(3.5 % rdg + 5 dgts)              |
| Open Circuit Voltage (typical)   | -0.45 VDC (-1.2 VDC on 660 Ω range)   |
| Overload Protection  | 500 VDC/ACrms   |
| <b>Capacitance</b>   |   |
| Ranges   | 6.6 nF, 66 nF, 660 nF, 6.6 uF, 66 uF, 660 uF, 6.6 mF, 66 mF   |
| Resolution   | 1 pF, 10 pF, 100 pF, 1 nF, 10 nF, 100 nF, 1 uF, 10 uF   |
| Accuracy   | 6.6 nF range: ±(3.0 % rdg + 30 dgts)<br>66 nF to 660 uF ranges: ±(3.0 % rdg + 5 dgts)<br>6.6 mF to 66 mF ranges: ±(5.0 % rdg + 20 dgts) |
| Overload Protection  | 500 VDC/ACrms   |
| <b>Frequency</b>   |   |
| Ranges   | 660 Hz, 6.6 kHz, 66 kHz, 660 kHz, 6.6 MHz, 66 MHz   |
| Resolution   | 0.1 Hz, 1 Hz, 10 Hz, 100 Hz, 1 kHz, 10 kHz  |
| Accuracy   | ±(0.1 % rdg + 3 dgts)   |
| Sensitivity  | 10 Hz to 6.6 MHz: >2.5 Vrms, 6.6 MHz to 66 MHz:<br>>2.5 Vrms <5 Vrms  |
| Minimum Pulse Width  | >25 ns  |
| Duty Cycle Limits  | >30 % and <70 %   |
| Overload Protection  | 500 VDC/AC rms  |
| <b>Diode Test</b>  |   |
| Test Current   | 1.2 mA (typical)  |
| Resolution   | 1 mV  |
| Accuracy   | ±(3.0 % rdg + 3 dgts)   |
| Audible Indication   | <0.03 V   |
| Open Circuit Voltage   | 3.5 VDC (typical)   |
| Overload Protection  | 500 VDC/ACrms   |
| <b>Continuity</b>  |   |
| Audible Indication   | Less than 30 Ω  |
| Response Time  | 100 ms  |
| Overload Protection  | 500 VDC/ACrms   |
| <b>General</b>   |   |
| Display  | 3 3/4 digit, 6600 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 times per second  |
| Auto Power Off   | Approximately 30 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<br>Supplied: One set test leads(TL-35A), one spare fuse, 9V battery (installed) and instruction manual |   |

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

## Models 2703C, 2704C, 2705B, 2706B, 2707B, 2708B, 2709B & 2712

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

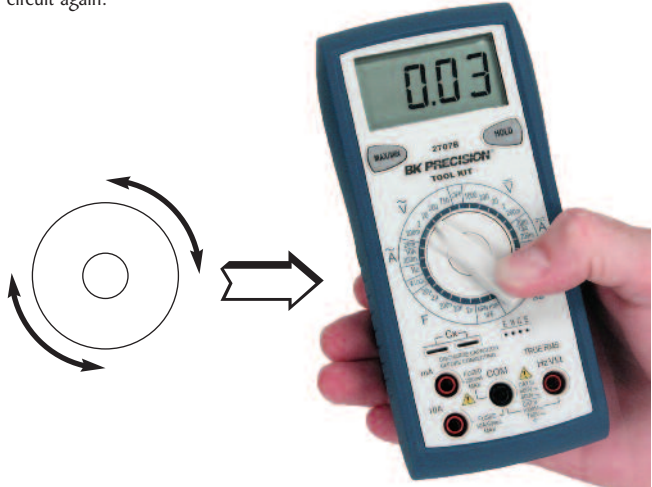


**Magnetic Hanging Strap**

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

### 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.



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

Model 2706B

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

Models 2709B & 2712

Large easy-to-read LCD with green LED backlight

| Features          | models      |              |             |            |              |             |            |         |
|-------------------|-------------|--------------|-------------|------------|--------------|-------------|------------|---------|
|                   | 2712        | 2709B        | 2708B       | 2707B      | 2706B        | 2705B       | 2704C      | 2703C   |
| Ranging           | Auto/Manual | Auto/Manual  | Auto/Manual | Manual     | Manual       | Auto/Manual | Manual     | Manual  |
| True RMS          | AC + DC     | √            | √           | √          | -            | -           | -          | -       |
| Current           | 10 A AC/DC  | 10 A AC/DC   | 10 A AC/DC  | 10 A AC/DC | 200 mA AC/DC | 10 A AC/DC  | 10 A AC/DC | 10 A DC |
| Capacitance       | to 40 uF    | to 66,000 uF | -           | to 20 uF   | to 20 mF     | -           | to 20 uF   | -       |
| Transistor Test   | -           | -            | -           | √          | -            | -           | √          | -       |
| Frequency Counter | to 500 kHz  | to 66 MHz    | -           | √          | to 40 kHz    | -           | √          | -       |
| Temperature       | -           | -            | -           | -          | √            | -           | -          | -       |
| Logic Probe       | -           | -            | -           | √          | -            | -           | √          | -       |
| Backlight LCD     | √           | √            | -           | -          | √            | -           | -          | -       |
| Analog Bar Graph  | √           | -            | √           | -          | -            | -           | -          | -       |
| Battery Test      | -           | -            | -           | -          | -            | -           | -          | √       |
| Auto Power off    | √           | √            | √           | -          | √            | √           | -          | -       |