

## Data sheet

# Manual Ranging Tool Kit® DMM Model 2703C



The 2703C is a versatile low cost manual ranging DMM that combines performance, value and functionality. Value-packed features make this meter a must in every "Tool Kit"®.

### Features

- Magnetic hanger
- One-handed operation
- Measures up to 10 A (DC only)
- DC voltage to 1000 V
- AC voltage to 750 V
- Resistance to 20 MΩ
- Continuity test
- Diode test

## Specifications

model

2703C

### DC Volts

|                     |                          |
|---------------------|--------------------------|
| Ranges              | 2 V, 20 V, 200 V, 1000V  |
| Resolution          | 1 mV, 10 mV, 100 mV, 1 V |
| Accuracy            | ±(1.2 % rdg + 1 dgts)    |
| Input Impedance     | 10 MΩ                    |
| Overload Protection | 1000 VDC or 750 VACrms   |

### AC Volts (50 Hz-500 Hz)

|                     |   |
|---------------------|---|
| Ranges              | 200 V, 750 V  |
| Resolution          | 100 mV, 1 V   |
| Accuracy            | 200 V range: ±(2.0 % rdg + 5 dgts)<br>750 V range: ±(2.0 % rdg + 10 dgts) |
| Input Impedance     | 10 MΩ   |
| Overload Protection | 1000 VDC or 750 VACrms  |

### DC Current

|                  |   |
|------------------|---|
| Ranges           | 2 mA, 20 mA, 200 mA, 10 A   |
| Resolution       | 1 µA, 10 µA, 100 µA, 10 mA  |
| Accuracy         | 2 mA to 200 mA ranges: ±(1.5 % rdg + 1 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 10 min cooling period                            |

### Resistance

|                                |   |
|--------------------------------|---|
| 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: ±(1.5 % rdg + 4 dgts)<br>20 MΩ range: ±(3.0 % rdg + 5 dgts) |
| Open Circuit Voltage (typical) | 0.3 VDC (3.0 VDC on 200 Ω)  |
| Overload Protection            | 500 VDC/ACrms   |

### Diode Test

|                      |                       |
|----------------------|-----------------------|
| Test Current         | 1.0 mA (typical)      |
| Resolution           | 10 mV                 |
| Accuracy             | ±(3.0 % rdg + 3 dgts) |
| Open Circuit Voltage | 3.0 VDC (typical)     |
| Overload Protection  | 500 VDC/ACrms         |

### Continuity

|                     |                 |
|---------------------|-----------------|
| Audible Indication  | Less than 100 Ω |
| Response Time       | 100 ms          |
| Overload Protection | 500 VDC/ACrms   |

### General

|                         |   |
|-------------------------|---|
| 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 (spec. accuracy) per °C. (°C to 18°C, 28°C to 50°C)                         |
| Power                   | Single 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                            |

### One Year Warranty

#### Accessories

Supplied: One set test leads, 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

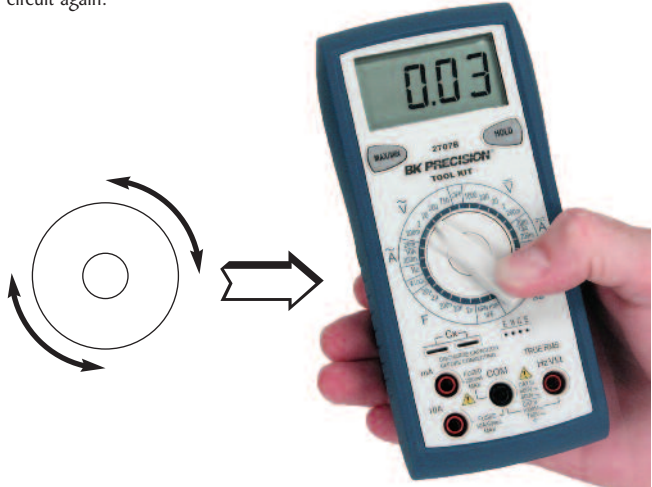


### Magnetic Hanging Strap

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

Model 2709B

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    | √           | √            | √           | -          | √            | √           | -          | -       |