

Instruction Manual
for
Model 2835
Bench Type 3-3/4 Digit
MULTIMETER

BK PRECISION®

6470 W. Cortland St. · Chicago, IL 60635

TABLE OF CONTENTS

	Page		Page
TEST INSTRUMENT SAFETY	Inside Front Cover	Adapter Measurements	11
INTRODUCTION	1	Min/Max Mode	12
SPECIFICATIONS	2	Data Hold	12
CONTROL AND INDICATORS	5	Delay Hold	12
OPERATING INSTRUCTIONS	8	Relative Measurement	12
Power Sources	8	Test Leads and Carry Strap	12
Function Selection	8	MAINTENANCE	13
Range Selection	9	Line Voltage Selection	13
Use of Analog Bargraph	9	Fuse Replacement	13
Voltage Measurements	9	Battery Installation	14
Resistance Measurements	9	Test Leads	14
Continuity Measurements	10	Instrument Repair and Calibration Service	15
Diode Testing	10	Servicing Information	15
Capacitance Measurements	10	ACCESSORIES	16
Frequency Measurements	11	WARRANTY SERVICE INSTRUCTIONS	17
Current Measurements	11	LIMITED ONE-YEAR WARRANTY	18

INTRODUCTION

The **B+K Precision** Model 2835 bench-type 3-3/4 digit multimeter is highly versatile instrument which offers portability as well as precision. In addition to the usual digital multimeter functions of AC & DC voltage, AC and DC current, and resistance measurements, the Model 2835 also measures capacitance, frequency, and features a diode test and continuity test function, and an adapter range.

The instrument is easy to use, as all basic functions are selected by a single rotary **Function** switch and autoranging. Push button switches are used to operate special features. The 3-3/4 digit backlit LCD display features automatic minus sign, low battery indicator, unit of measure annunciators and provides overrange indication. Annunciators are also displayed to indicate when one of the special features has been activated. These features include **data HOLD**, **MIN/MAX**, **RELative**, **DELAY Hold**, and manual **RANGE** selection. In addition a 42-segment analog bar graph is provided in the display. The unit is housed in a rugged, attractive plastic case, with an

integral carrying handle and storage compartment. The storage compartment stores the test leads and a carrying strap when not in use. A sturdy tilt stand positions the unit for easy access to controls and to viewing the LCD display. The tilt stand can be folded under the instrument to allow stacking with your other instruments.

Although the instrument is a bench unit with the features expected in a bench unit, the instrument can also be operated from six AA batteries, providing full portability.

Safety features include safety jacks, safety test leads and extensive overload protection, including high energy fuse protection on both mA and 10A ranges when measuring current.

B+K Precision offers a full line of optional accessories for the Model 2835 which can further expand the capabilities and usefulness of the instrument.

SPECIFICATIONS

Accuracy is specified for a temperature range of +18°C to +28°C (70% max RH)

GENERAL SPECIFICATIONS

Display:

3-3/4-digit LCD. Displays to 4000 counts, (9999 counts frequency mode), with analog bar graph and function/units annunciators.

Measurement Rate:

2 times per second, nominal. 1 Time per second, Capacitance and Frequency mode.

Analog Bar Graph:

42 segments; Measurement rate, 20 times per second.

Backlight:

LED illumination.

Polarity:

Automatic, Negative (-) polarity indication.

Over Range Indication:

MSD (Most Significant Digit) blinks

Ranging:

Automatic and Manual ranging

Operating Temperature:

0°C to 50°C at <70% RH.

Storage Temperature:

-30°C to 70°C at <80% RH.

Temperature Coefficient:

0.15 x (specified accuracy) / °C (< 18°C or > 28°C).

Power Requirements:

90-264 VAC, 50/60 Hz, 10 W or 6 AA batteries.

Maximum Voltage to earth:

1000 VDC or AC peak from any terminal.

Battery Life:

1800 typical with alkaline battery.
80 hours with continuous backlight.

Size:

2.87" x 8.58" x 7.68" (73 x 218 x 195 mm)

Weight:

3 lb (1.3 kg) without power cord

Accessories Supplied:

Carrying Strap
AC Power Cord
Test Leads
Instruction Manual

DC Voltage (Manual and Auto Ranging)

Range	Resolution	Accuracy	Input Impedance
400 mV	100 μV	±(0.75% rdg + 2 dgts)	>10 MΩ
4 V	1 mV	±(0.5% rdg + 2 dgts)	10 MΩ
40 V	10 mV	±(0.5% rdg + 2 dgts)	10 MΩ
400 V	100 mV	±(0.5% rdg + 2 dgts)	10 MΩ
1000 V	1 V	±(0.5% rdg + 2 dgts)	10 MΩ

Overload Protection:

1100 VDC or peak AC

NMRR:

>40 dB (50/60 Hz)

CMRR:

>100 dB (50/60 Hz)

AC Voltage (Manual and Auto Ranging, Average Sensing, RMS indicating)

Range	Resolution	Accuracy (50/60 Hz)	40 Hz to 1 kHz
400 mV	100 μV	±(1% rdg + 5 dgts) typical	Unspecified
4 V	1 mV	±(1% rdg + 5 dgts)	±(1.5% rdg + 5 dgts)
40 V	10 mV	±(1% rdg + 5 dgts)	±(1.5% rdg + 5 dgts)
400 V	100 mV	±(1% rdg + 5 dgts)	±(1.5% rdg + 5 dgts)
750 V	1 V	±(1% rdg + 5 dgts)	±(1.5% rdg + 5 dgts)

Input Impedance:

Same as DCV function with less than 100 pF

Overload Protection:

1100 VDC or peak AC

DC Current (Manual Ranging)

Range	Resolution	Accuracy	Burden Voltage
4 mA	1 uA	±(0.75% rdg + 2 dgts)	800 mV
40 mA	10 uA	±(0.75% rdg + 2 dgts)	800 mV
400 mA	100 uA	±(0.75% rdg + 2 dgts)	800 mV
10 A*	10 mA	±(1.5% rdg + 4 dgts)	1000 mV

* 10 A continuous, 20 A for 30 seconds

Overload Protection:

1 A/600 V fuse on mA inputs (fast blow ceramic fuse).

15 A/600 V fuse on 10 A input (fast blow ceramic fuse).

AC Current (Manual Ranging; Average sensing, RMS indicating)

Range	Resolution	Accuracy (40 Hz to 1 kHz)	Burden Voltage
4 mA	1 uA	±(1.5% rdg + 5 dgts)	800 mV
40 mA	10 uA	±(1.5% rdg + 5 dgts)	800 mV
400 mA	100 uA	±(1.5% rdg + 5 dgts)	800 mV
10 A*	10 mA	±(1.5% rdg + 5 dgts)	1000 mV

* 10 A continuous, 20 A for 30 seconds

Overload Protection:

1 A/600 V fuse on mA inputs (fast blow ceramic fuse).

15 A/600 V fuse on 10 A input (fast blow ceramic fuse).

SPECIFICATIONS

Resistance (Manual and Auto Ranging)

Range	Resolution	Accuracy	Open Circuit Voltage
400 Ω	0.1 Ω	$\pm(0.75\% \text{ rdg} + 4 \text{ dgts})$	0.4 VDC
4 k Ω	1 Ω	$\pm(0.75\% \text{ rdg} + 2 \text{ dgts})$	0.4 VDC
40 k Ω	10 Ω	$\pm(0.75\% \text{ rdg} + 2 \text{ dgts})$	0.4 VDC
400 k Ω	100 Ω	$\pm(0.75\% \text{ rdg} + 2 \text{ dgts})$	0.4 VDC
4 M Ω	1 k Ω	$\pm(1\% \text{ rdg} + 3 \text{ dgts})$	0.4 VDC
40 M Ω	1 k Ω	$\pm(2.5\% \text{ rdg} + 5 \text{ dgts})$	0.4 VDC

Overload Protection:

600 VDC or peak AC

NOTE

Some instability may be noted on 40 M Ω range when operating from AC power. Improved stability may be obtained by using battery operation.

Continuity Test

Range	Audible Threshold	Response Time	Open Circuit Voltage
400 Ω	Approx. 50 Ω	Approx. 50 ms	0.4 VDC

Overload Protection:

600 V DC or RMS AC

Diode Test

Range	Resolution	Test Current	Open Circuit Voltage
4 V	1 mV	~ 0.6 mA	3.0 VDC typical

Overload Protection:

600 V DC or RMS AC

Capacitance (Manual and Auto Ranging)

Range	Resolution	Accuracy (with film capacitor or better)
4 nF	0.001 nF	$\pm(1\% \text{ rdg} + 40 \text{ dgts})$ in Relative Mode
40 nF	0.01 nF	$\pm(1\% \text{ rdg} + 4 \text{ dgts})$ in Relative Mode
400 nF	0.1 nF	$\pm(1\% \text{ rdg} + 4 \text{ dgts})$
4 μ F	0.001 μ F	$\pm(1\% \text{ rdg} + 4 \text{ dgts})$
40 μ F	0.01 μ F	$\pm(1\% \text{ rdg} + 4 \text{ dgts})$ at <20 μ F $\pm(5\% \text{ rdg} + 8 \text{ dgts})$ at >20 μ F

Frequency (Auto Ranging)

Range	Resolution	Accuracy	Trigger Level
100 Hz	0.01 Hz	$\pm(0.1\% \text{ rdg} + 4 \text{ dgts})$	40 μ V rms
1 kHz	0.1 Hz	$\pm(0.1\% \text{ rdg} + 4 \text{ dgts})$	40 μ V rms
10 kHz	1 Hz	$\pm(0.1\% \text{ rdg} + 4 \text{ dgts})$	40 μ V rms
100 kHz	10 Hz	$\pm(0.1\% \text{ rdg} + 4 \text{ dgts})$	400 μ V rms
1 MHz	100 Hz	$\pm(0.1\% \text{ rdg} + 4 \text{ dgts})$	400 μ V rms

Overload Protection:

600 VDC or peak AC

ADAPT RANGE:

Display:

10 counts per 1mV DC

Accuracy:

$\pm(0.75\% + 4 \text{ dgts})$

Input Protection:

600 VDC or rms AC

CONTROLS AND INDICATORS

1. **Display.** 3-3/4 digit LCD display with automatic decimal point, minus sign and 42 segment bar graph. Indicates to 4000 counts, 9999 counts in frequency mode. Annunciators for all functions, units of measurement and for low battery. Overrange indicated by blinking of MSD (Most Significant Digit).
2. **BACK LIGHT Switch** (yellow). Turns display backlight on or off.
3. **HOLD Switch.** Toggles the data hold feature on or off except in the MIN/MAX mode. In the MIN/MAX mode, hold also turns the recording function off.
4. **MIN/MAX Switch.** Activates minimum and maximum record feature.
5. **Function Switch** (blue). On those dual-function positions of the rotary Function/range switch marked with green or blue, this pushbutton selects the blue function. Toggles between AC and DC for current measurements, toggles between ohm and continuity checking, or toggles between frequency and ADP measurements.
6. **Function/Range Switch.** Rotary switch, selects function for autoranging modes; selects function and range for current measurement modes. In dual-function positions marked in green and blue, the green function is initially selected.
7. **VΩHz ↔ Input Jack.** Input connector for AC and DC Volts, resistance, frequency, continuity, capacitance or diode test.
8. **A Jack.** Input for 10 A DC or AC current range. For measurements greater than 3 A high current test leads are recommended.
9. **mA Jack.** Input for DC or AC current up to 400 mA.
10. **COMmon Jack.** Input for common or reference test lead for all measurements.

CAUTION

Connect to earth ground or reference point not more than 1000 volts (DC + ac peak) from earth ground.

11. **RANGE Switch.** Manual ranging selector switch. Advances selection to next higher range until highest range is reached, then advances to lowest range. Hold 1 second to revert to Autoranging.
12. **DELAY H Switch.** Delays turn on of hold feature for 10 seconds.
13. **REL Δ Switch.** Sets initial reading as the zero reference for making relative measurements.
14. **Tilt Stand.**
15. **Power Input.** Input connector for power cord.
16. **Power On/Off Switch.** Press "I" to turn on ac power. Press "O" to turn off ac power.
17. **Line Voltage Selector.** Selects 90-132 VAC or 198-264 VAC input power.
18. **Storage Compartment.** Stores test leads and carrying strap. Also provides access to fuses and batteries.

CONTROLS AND INDICATORS

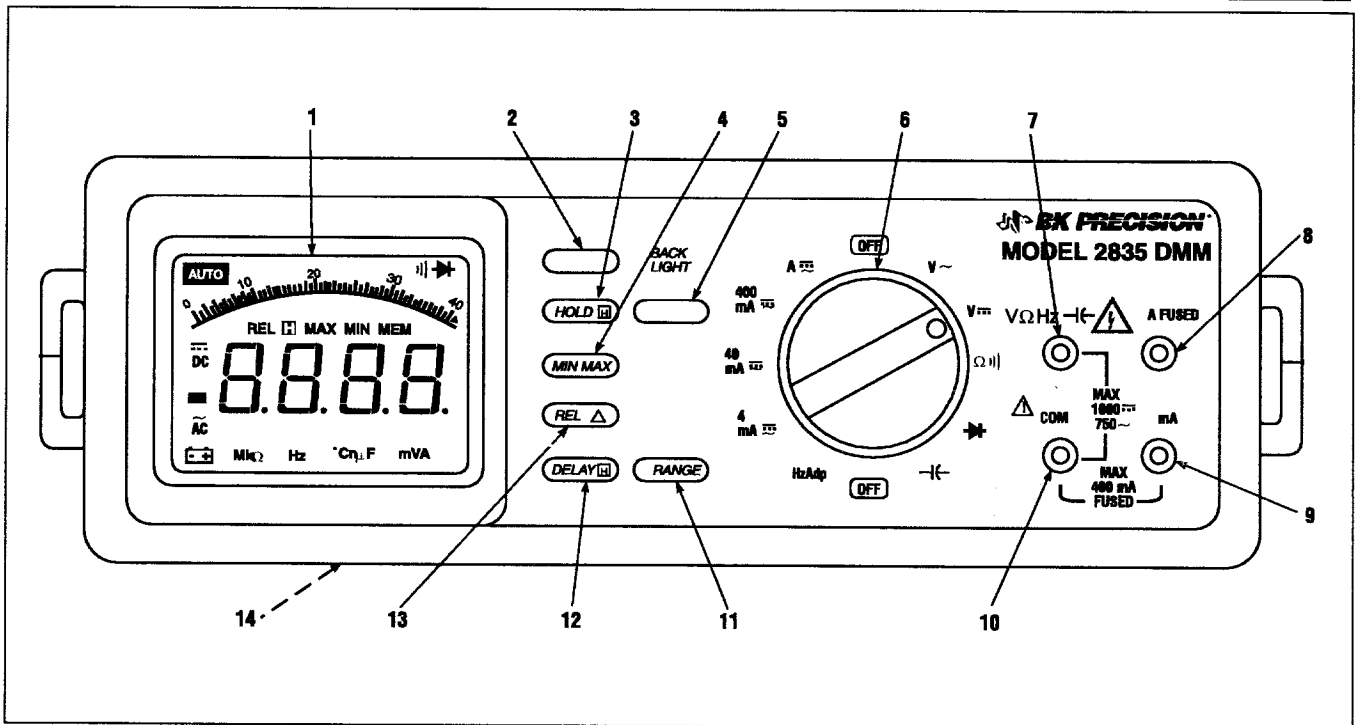


Figure 1. Front Panel Controls and Indicators

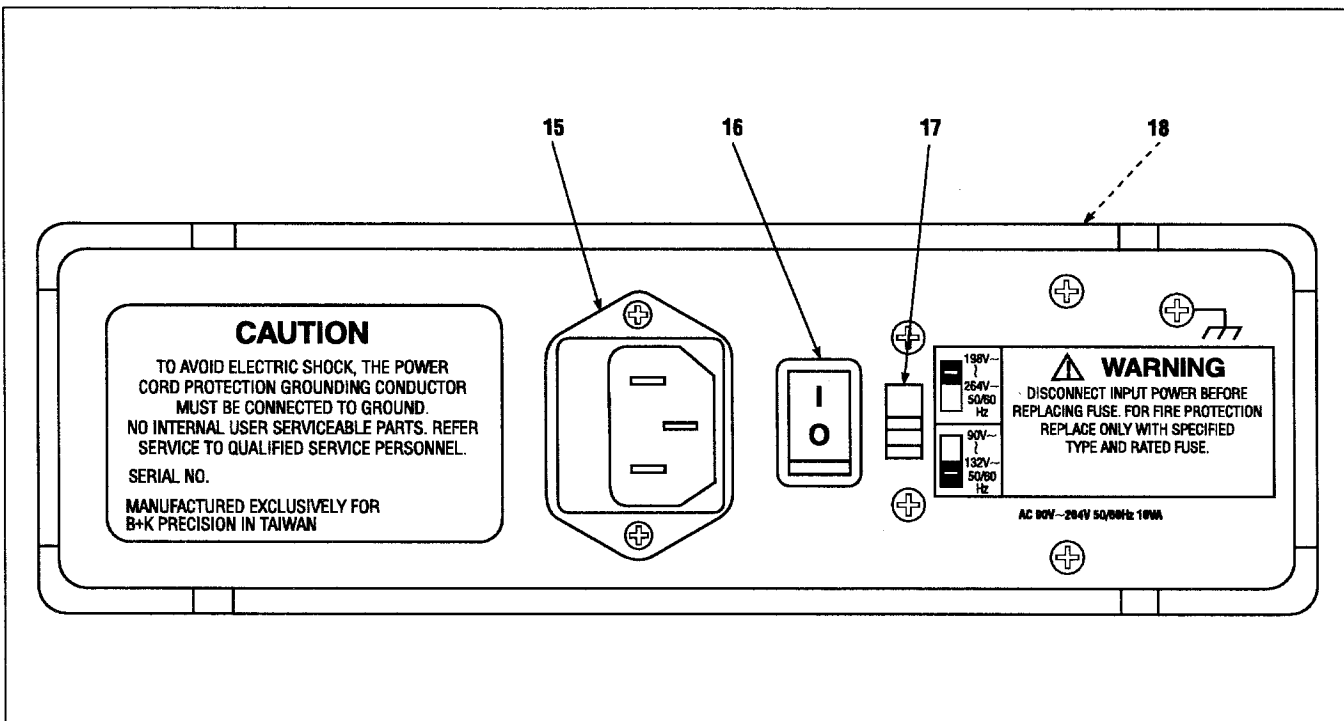


Figure 2. Rear Panel Controls and Connectors

OPERATING INSTRUCTIONS

WARNING

Use of test equipment may expose the operator to electric shock hazards. Observe all instructions contained in the TEST INSTRUMENT SAFETY section of this manual before using this instrument.

CAUTION

The TEST INSTRUMENT SAFETY section of this manual lists maximum voltage and current input limits which must be observed. Failure to adhere to these limits may result in damage to the INSTRUMENT.

POWER SOURCES

The Model 2835 can be used as a bench instrument, powered from an ac power source of 90-264 volts. Additionally, the instrument can be operated in field applications, powered from six internally contained "AA" batteries (not supplied).

AC Power Operation

CAUTION

Line Voltage Selector must be set to proper operating voltage before connecting power cord to ac power source.

1. Set Voltage Selector Switch to match input power source.
2. Connect power cord to power input receptacle.
3. Set rear panel on-off switch to on (1) and leave on. Use the front panel Function/Range switch for subsequent power on-off applications.
4. Press yellow BACK LIGHT switch to turn on LCD backlight.

Battery Operation

Install batteries (refer to "battery installation" instructions in the MAINTENANCE section of this manual. When AC power is applied, the batteries are not used. When no AC power is applied, batteries continue to operate the meter. To prolong battery life minimize the use of backlighting for the LCD display.

FUNCTION SELECTION

The rotary Function/Range switch selects the function such as V ~ or V $\overline{\sim}$ and for current it also selects the range. Some positions are dual-function and are marked with one function in green and another function in blue. When the rotary switch is first turned from OFF to the dual-function position, the function marked green is initially selected. The function marked in blue is selected by pressing the blue Function switch. For example, when the rotary Function/Range switch is set to 400 mA, the AC current (-) function is automatically selected. To change to DC current ($\overline{\sim}$) press the blue Function switch. Watch the function annunciators of the LCD display to confirm the desired selection.

RANGE SELECTION

1. Autorange mode is automatically selected when unit is turned on and whenever the rotary Function/Range switch is set to a new position (except current ranges).
2. To change ranges manually, momentarily depress **RANGE** switch. The **AUTO** annunciator will turn off indicating the meter is in the manual mode. Press again to advance to next higher range. When the highest range is reached, the next push advances to the lowest range.
3. To return to autoranging mode depress and hold **RANGE** switch for one second or longer.
4. If quantity to be measured is unknown start with highest range, or use autoranging mode.
5. When an overrange is indicated (MSD blinking and beep signal) switch to the next highest range.
6. The Hz function is autoranging only, and manual ranging cannot be selected.

CAUTION

Do not switch between ranges while connected to high voltage.

USE OF ANALOG BARGRAPH

The analog bargraph feature is activated for measurements of voltage, current, resistance, frequency, and capacitance. Its update speed of 20 measurements/sec is 10 times that of the digital display. This makes it suitable for

measuring coarse adjustments of these parameters, or indicating the direction of change of a varying quantity.

VOLTAGE MEASUREMENTS

1. To measure DC voltage set **Function/Range** switch to **V** $\overline{\text{---}}$.
2. To measure AC voltage set **Function/Range** switch to **V** \sim .
3. Connect the red test lead to **V Ω Hz** \rightarrow \leftarrow jack and the black test lead to **COM** jack.
4. Connect test leads to points of measurement.
5. For DC measurements a (-) sign is displayed for negative polarity; (+) positive polarity is implied and is not displayed.

RESISTANCE MEASUREMENTS

1. To measure resistance set **Function/Range** switch to Ω \bullet press the blue **Function** switch.
2. Connect the red test lead to **V Ω Hz** \rightarrow \leftarrow jack and the black test lead to **COM** jack.
3. Connect test leads to points of measurement.
4. For highest accuracy when measuring low resistances, press **RANGE** to set unit to the **400 Ω** range, short test leads together and press **REL** Δ switch. This zeroes the meter to compensate for the resistance of the test leads.
5. For measurements above 20M Ω , the reading may be somewhat unstable. Stability may be improved by using battery operation rather than AC operation.

OPERATING INSTRUCTIONS

CONTINUITY MEASUREMENTS

1. To measure continuity set **Function/Range** switch to Ω .
2. Connect the red test lead to **V Ω Hz** jack and the black test lead to **COM** jack.
3. Connect test leads to points of measurement. Buzzer sounds when resistance is less than approximately 50Ω .

DIODE TESTING

1. Set **Function/Range** switch to $\rightarrow +$.
2. Connect the red test lead to **V Ω Hz** jack and the black test lead to **COM** jack. Red lead is (+) polarity.
3. To check forward voltage (V_f), connect the red lead to anode and black lead to the cathode. Diodes and semiconductor junctions with normal V_f of less than approximately 3.0 V can be checked.
4. Display indicates the forward voltage. Normal diode voltages are approximately 0.4 V for germanium diodes, 0.7 V for silicon diodes, and 1.6 V for light emitting diodes (LED). A shorted diode reads near 0 V. An open diode reads the same as with open test leads.
5. Reverse test lead connections to diode. Reading should be the same as with open test leads. Lower reading indicates a leaky diode.

CAPACITANCE MEASUREMENTS

1. Set **Function/Range** switch to $\rightarrow \leftarrow$ (capacitance).
2. Connect the **COM** and the **V Ω Hz** leads to the capacitor. Observe polarity when measuring polarized capacitors.
3. Read the capacitance directly from the display. A shorted capacitor will indicate an overrange. An open capacitor will indicate near zero on all ranges.
4. For maximum accuracy, step to the desired range in manual ranging, then press **REL** Δ switch to zero out test lead capacitance before measurements. Always use the REL Δ mode for readings on the 4nF range.

USEFUL CONVERSIONS

pF	nF	μ F
1,000	1.0	0.001
10,000	10.0	0.01
100,000	100.0	0.1
1,000,000	1,000.0	1.0
	10,000.0	10.0
	100,000.0	100.0

pF = picofarads (10^{-12})

nF = nanofarads (10^{-9})

μ F = microfarads (10^{-6})

FREQUENCY MEASUREMENTS

NOTE

When measuring frequencies below 1 kHz or above 20 kHz, the last one or two digits on the display may be unstable.

1. Set the **Function/Range** switch to **Hz** for frequency measurements.
2. Press blue **Function** Switch to select Hz.
3. Connect the red test lead to **VΩHz** → (← jack and the black test lead to COM jack.
4. Connect the test leads to the point of measurement and read the frequency from the display.

CURRENT MEASUREMENTS

WARNING

For current measurements, the meter must be connected in series with the load. If incorrectly connected (in parallel with the load), the meter presents a very low impedance (almost a short), which may blow the fuse or damage the meter or equipment under test.

For current measurements greater than 3 A, high current test leads should be used. High current measurements with standard test leads could cause the leads to heat up. This not only affects the accuracy of the measurement but could result in injury to the operator.

1. To measure current, set the **Function/Range** switch to the desired **A** $\overline{\sim}$ or **mA** $\overline{\sim}$ range.
2. Press blue **Function** Switch to select **AC** or **DC**; watch annunciators in the LCD display to confirm the desired function.
3. For current measurements under 400 mA, connect the red test lead to the **mA** jack and the black test lead to the **COM** jack.
4. For current measurements above 400 mA, connect the red test lead to the **A** jack and the black test lead to the **COM** jack. For current measurements greater than 3 A, high current test leads are recommended.
5. Remove power from the circuit under test and open the normal circuit path where the measurement is to be taken. Connect the meter in series with the circuit.
6. Apply power and read the value from the display.

ADAPTER MEASUREMENTS

The Model 2835 permits the use of external adapters for other measurements. Adapters are commercially available using transducers that convert variable quantities such as temperature, flow, pressure, or rpm to a dc voltage. The adapter function of Model 2835 provides 10 counts on the digital display for each 1 mV of dc input voltage. For example, an external adapter that provides 1 mVdc per degree of temperature would produce 25 mV at 25°C. Since the meter provides 10 counts per mV, the LCD display would read 250. **B+K Precision** offers two optional temperature adapters, Model TP-28 with semiconductor sensor and Model TP-30 with type K thermocouple sensor. The TP-28 provides 10 mV per degree (25°C temperature reads 2500 counts) and TP-30 provides 1 mV per degree (25°C temperature reads 250 counts).

OPERATING INSTRUCTIONS

MIN/MAX MODE

1. **MIN/MAX** mode will store and display the minimum or maximum values measured by the meter.
2. Select the desired function (**MIN/MAX** is not operational in **Hz** function).
3. Connect the meter to the point to be measured before selecting the **MIN/MAX** mode. Otherwise the minimum stored value will be zero.
4. To observe the minimum value recorded, momentarily depress the **MIN/MAX** switch. The "**MIN**" and "**H**" annunciators will be displayed along with the minimum recorded reading. The meter will record and hold any new minimum that occurs during the measurement.
5. To observe the maximum value recorded, momentarily depress the **MIN/MAX** switch again. The "**MAX**" annunciator will be displayed along with the maximum recorded reading. The meter will record and hold any new maximum that occurs during the measurement.
6. To exit the **MIN/MAX** mode, press the **MIN/MAX** switch again. Neither the **MIN** or **MAX** annunciators will be displayed.

DATA HOLD

Data hold can be used when making voltage, current, or frequency measurements. When **HOLD** is pressed the display will freeze and an "**H**" will be displayed. The test leads can then be disconnected and the reading will remain on the display. Pressing **HOLD** again will exit the **HOLD** mode.

DELAY HOLD

Pressing the **DELAY H** switch will cause the **HOLD** function to be turned on after a delay of 10 seconds. Exit the delay hold mode by pressing the **HOLD** switch.

RELATIVE MEASUREMENT

When the **REL** Δ switch is pressed the present reading becomes the zero reading and all subsequent readings are displayed relative to this value. This function is cleared by pressing the **REL** Δ switch and holding it for 2 seconds.

TEST LEAD AND CARRYING STRAP STORAGE

The test leads and carrying strap can be stored in the storage compartment located on top of the meter as shown in figure 3.

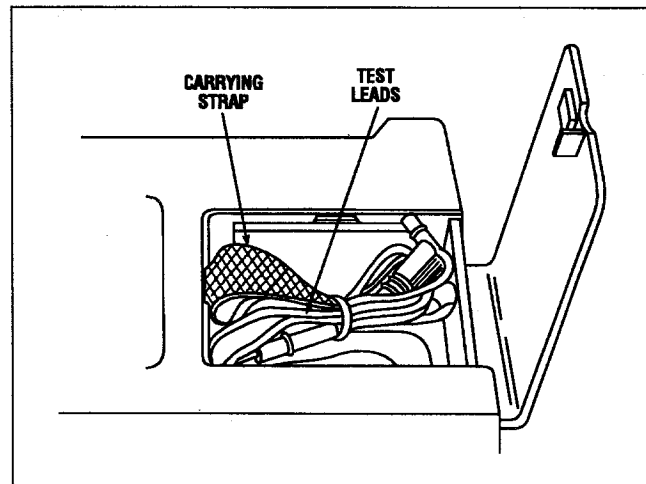


Figure 3. Storage Compartment

MAINTENANCE

WARNING

The following instructions are for use by qualified service personnel only. To avoid electrical shock, do not perform servicing other than contained in the operating instructions unless you are qualified to do so.

Remove test leads from instrument and point of measurement before performing any servicing.

LINE VOLTAGE SELECTION

The line voltage selector switch is located on the rear panel of the instrument (refer to figure 2) and may be operated by a small flat-blade screwdriver or similar tool. Set the line voltage switch to the correct position before connecting the AC power cord. For 100 or 120 VAC, 50 or 60 Hz power, set the switch to the lower position. For 220 or 240 VAC, 50 or 60 Hz power, set the switch to the upper position.

FUSE REPLACEMENT

Two fuses are located on a printed circuit board accessible through the storage compartment as shown in figure 4. Fuse F1 is used in the mA test circuit. If measurements cannot be made in mA ranges check for a blown overload protection fuse F1. Fuse F2 is used in the 10 A test circuit. If measurements cannot be made in the A range check for a blown overload protection fuse F2. Replace only with original type fuse. Fuse F1 is a 1A, 600 V fast blow ceramic fuse (B+K Precision part number 194-046-001).

Fuse F2 is a 15A, 600 V fast blow ceramic fuse (B+K Precision part number 194-047-001). Replace fuses as follows:

1. Open storage compartment.
2. Remove test leads and carrying strap if present.

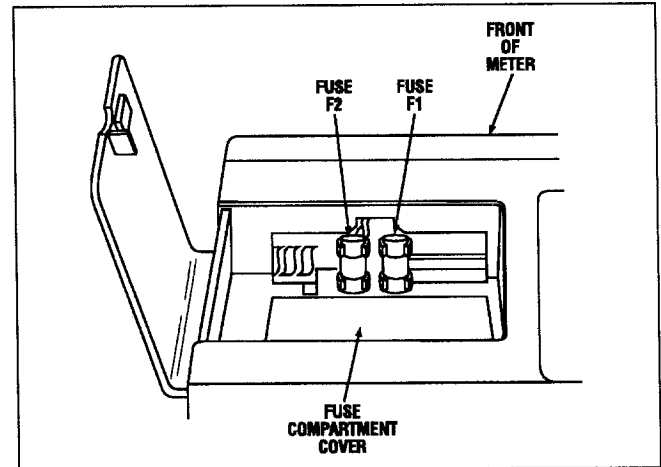



Figure 4. Fuse Location

MAINTENANCE

3. Use a coin or a screw driver to open the fuse compartment access cover toward the front of the meter and remove cover.
4. Remove defective fuse from fuse clip and replace with a new fuse.
5. Install fuse compartment access cover.
6. Close storage compartment lid.

BATTERY INSTALLATION

The six AA batteries are contained in a battery holder located in a compartment inside the storage compartment. New batteries are required when the  symbol in the lower left corner of the display is on. Replace batteries as follows:

1. Open the storage compartment.
2. Remove test leads and carrying strap if present.
3. Use a coin or a screw driver to open the battery compartment access cover toward the rear of the meter and remove cover.
4. Pull battery holder out of the compartment then disconnect battery clip from battery holder.
5. Remove discharged batteries from battery holder and replace with new AA batteries. Be sure to observe battery polarity as marked on holder. Replace all six batteries at the same time.
6. Reconnect battery clip to battery holder then slide battery holder with batteries into battery compartment.
7. Install battery compartment access cover.
8. Close storage compartment lid.

TEST LEADS

Use only shrouded safety type test leads, like those supplied. Periodically examine the test leads to ensure that the conductors are not intermittent or broken. Also make sure that good contact pressure exists at the test lead receptacles, and keep this area free from dirt and corrosion. For safety from electrical shock, periodically check for evidence of damage to the insulation. Never use test leads with exposed bare wires, cracked insulation, or burned spots on the insulation. Use only high-current leads for measurements above 3A.

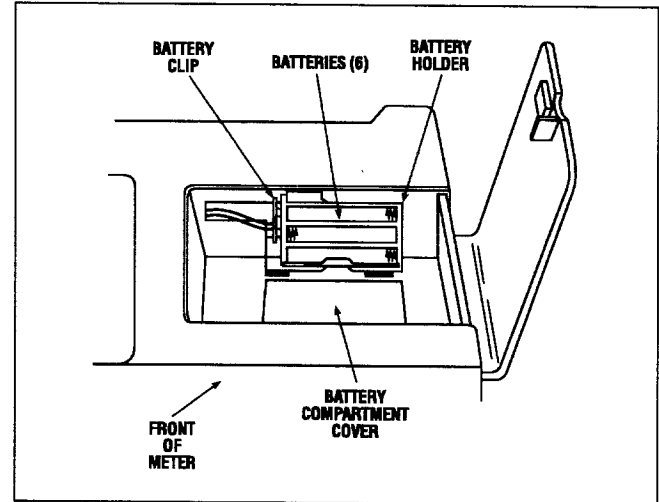


Figure 5. Battery Compartment

INSTRUMENT REPAIR AND CALIBRATION SERVICE

Because of the specialized skill and test equipment needed for instrument repair and calibration, many customers prefer to rely upon B+K Precision authorized service agencies for this purpose. To use this service, even if your multimeter is no longer under warranty, follow the instructions given in the **WARRANTY SERVICE INSTRUCTIONS** portion of this manual. There is a nominal charge for instruments out of warranty.

SERVICING INFORMATION

Requests for servicing information should be directed to Factory Service Operations at the address listed in the **WARRANTY SERVICE INSTRUCTIONS**. Be sure to specify Model 2835.

ACCESSORIES

ACCESSORIES SUPPLIED

Carrying Strap
AC Power Cord
Test Leads
Instruction Manual

OPTIONAL ACCESSORIES

Clamp On AC Current Probe	Model CP-1
High-Current Test Leads	Model FP-10
Demodulator Probe	Model PR-23
High Voltage Probe (40 kVDC)	Model PR-28
High Voltage Probe (6 kVDC)	Model HV-6
Replacement Test Leads	Model FP-30
Temperature Adapter, K Type Thermocouple	Model TP-30
Temperature Adapter, Semiconductor Type	Model TP-28

WARRANTY SERVICE INSTRUCTIONS

(For U.S.A. and its Overseas Territories)

1. Refer to the MAINTENANCE section of your **B+K Precision** instruction manual for adjustments that may be applicable.
2. If the above-mentioned does not correct the problem you are experiencing with your unit, pack it securely (preferable in the original carton or double-packed.).
3. Enclose a letter describing the problem and include your name and address.
4. Enclose proof of purchase date, that is, a dated copy of the sales receipt.
5. Deliver to, or ship PREPAID (UPS preferred in the U.S.A.) to the nearest **B+K Precision** authorized service agency (see list enclosed with unit).

If your list of authorized **B+K Precision** service agencies has been misplaced, contact your distributor for the name of your nearest service agency, or write to:

B+K Precision, Factory Service Operations
Maxtec International Corporation
6470 West Cortland Street
Chicago, Illinois 60635
Tel (312)889-1448

Also use this address for technical inquiries
and replacement parts orders.