

Parts Names

HOLD Button

- Holds the measurement value (**HOLD** lights up).
- Cancels the Auto-Power Save function (APS). (Turn on the power while pressing **HOLD**.)
- Turns on the light. (Press **HOLD** for at least 1 second.)

Select Button

- Selects DC/AC ($\text{---}/\sim$ V) (Press the select button for at least 1 second in manual ranging mode.)
- Selects mode ($\Omega/\rightarrow/\rightarrow$). (Press the select button for at least 1 second in manual ranging mode.)
- Changes to the manual range function. (Turn on the power while pressing the select button.)
- Selects range (in manual ranging mode).

Hole for attaching your own strap for greater portability.

Penlight

Test Leads

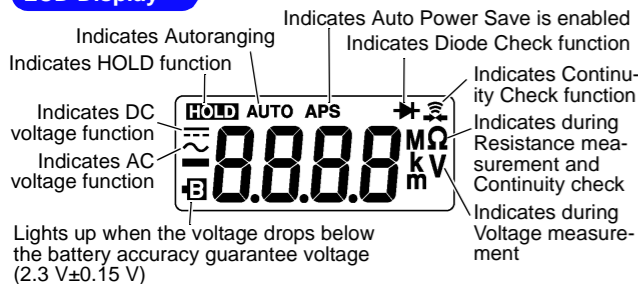
Function Selector

LCD Display

OFF Power Off (Power is turned ON in any position other than OFF.)

- V --- : DC voltage function (DCV) Select with the select button
- V \sim : AC voltage function (ACV)
- Ω Resistance function Select with the select button
- \rightarrow Continuity Check function
- \rightarrow Diode Check function

LCD Display

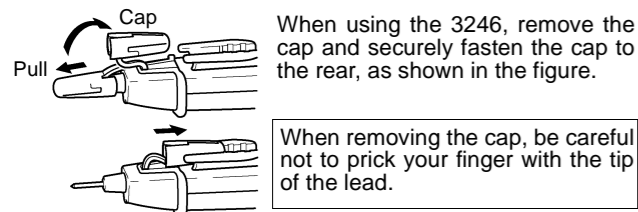


Handling the Cap

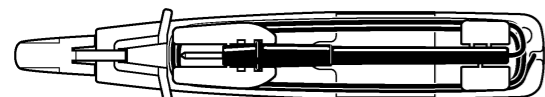
CAUTION

Observe the following to avoid damage to the product.

- Do not pull the cap with excessive force.
- Replace the cap when not using the product.



Handling the Test Leads



When storing the 3246 test lead (black), be sure to wind the lead around the protrusion on the rear.

Functions

Auto/Manual Range Function ($\text{---}/\sim$ V, Ω only)

Autoranging: The Autoranging function automatically selects the optimum measurement range. Turning on the power also switches Autoranging on (**AUTO** lights up). The range automatically switches up when the display shows 4200 counts or more, and down when the display shows less than 400 counts. (A beep sound is generated when the 3246 is switched to a different range.)

Manual ranging: Set a range manually.

Turn on the power while pressing the select button (**AUTO** is turned off).

Range selection: Each pressing of the select button selects the next larger range. After the largest range, pressing the select button again returns you to the smallest range.

Press and hold down the select button (for about 1 second) to select AC or DC in manual ranging mode, or select between resistance measurement, continuity check, and diode check in manual ranging mode.

The Manual ranging function is active until the 3246 is turned off.

Hold Function [HOLD] (Available for any measurement function.)

Press **HOLD** to hold the measurement value (**HOLD** lights up). In hold mode, the select button operation, the warning beep for voltage measurement overflow, and beep for diode check judgment are disabled.

To cancel the hold mode: Press **HOLD** again.

Auto Power Save Function [APS] (Available for any measurement function.)

When the measurement product is turned on, it automatically enters Auto Power Save mode (**APS** lights up). Approximately 10 minutes after completing final operation, the measurement product automatically enters Power Save mode with a beeping sound.

Exiting the Power Save State: turn off the power once.

Disabling Auto Power Saving: turn on the power while pressing **HOLD**. (**APS** is turned off)

Overflow Warning Function [OF] ($\text{---}/\sim$ V only)

When the measured value exceeds the maximum indication, a beep sound is generated (**OF** lights up). This function is disabled in hold mode.

Penlight/LCD Backlight Function

- ON: Press and hold down **HOLD**. The penlight and LCD backlight will light. (The hold mode is not influenced)
- OFF: The lights will go off automatically in about 10 seconds. Operating the Function Selector or a key will turn off the lights in about 10 seconds after the last key operation.
- Hold down **HOLD** to keep the lights on.

Measurement Procedures

DANGER

Observe the following precautions to avoid electric shock.

- Do not grip the 3246 or test lead between the barrier and the tip during operation (See "Parts Names").
- Disconnect the test leads from the measurement object before handling the Cap.
- Always verify the appropriate setting of the Function Selector before connecting the test leads.
- Disconnect the test leads from the measurement object before switching the Function Selector.
- Never apply voltage to test leads when the Resistance, Continuity or Diode Check functions are selected. Doing so may damage the product and result in personal injury. To avoid electrical accidents, remove power from the circuit before measuring.

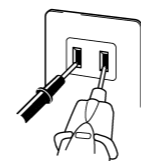
Voltage Measurement

DANGER

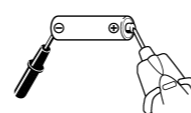
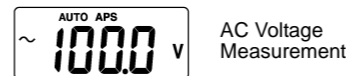
- The maximum input voltage is 600 V DC/ 600 Vrms(sin) or 3×10^6 V \cdot Hz. Attempting to measure voltage in excess of the maximum rating could destroy the product and result in personal injury or death.
- To avoid electrical shock, be careful to avoid shorting live lines with the test leads.
- For safety, test lead connections must always be made at the secondary side of a circuit breaker.
- The maximum rated voltage between input terminals and ground is 600 V DC/AC. Attempting to measure voltages exceeding 600 V with respect to ground could damage the product and result in personal injury.



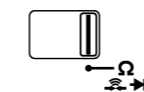
1. Move the Function Selector to the V position. To select DC or AC ($\text{---}/\sim$), use the select button. (During manual ranging, press the select button for at least 1 second.)



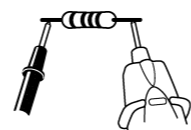
2. Connect the test leads to the measurement object, and read the indicated value.



Resistance Measurement



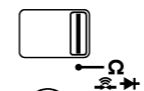
1. Move the Function Selector to the Ω position.



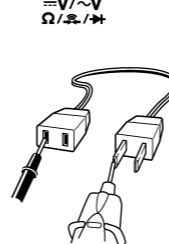
2. Connect the test leads to the measurement object, and read the indicated value.



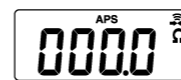
Continuity Check



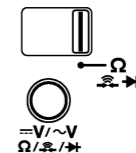
1. Move the Function Selector to the Ω position and press the select button. (\rightarrow lights up) (During manual ranging, press the select button for at least 1 second.)



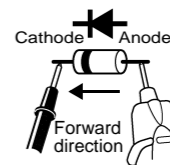
2. Connect the test leads to the measurement object. When the continuity (threshold: $50 \pm 30 \Omega$ or less) is established, the beeping sounds.



Diode Check



1. Move the Function Selector to the Ω position and press the select button twice. (\rightarrow lights up) (During manual ranging, press the select button for at least 1 second.)



2. Connect the test leads to the measurement object.



NOTE

When the diode is connected in the forward direction, the display shows "-00-" with a beeping sound. (When the forward voltage is out of the 0.3 V to 2.0 V range, the results may be incorrect.) When connection is reversed, the display shows "----." If displays for both directions are the same, the following may have occurred:

- The diode has malfunctioned.
- The forward voltage of the diode is out of the measurement range.

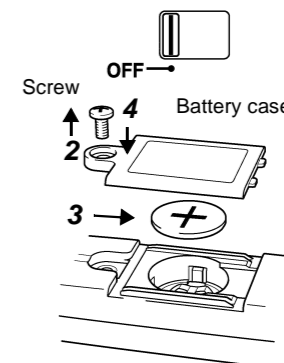
Replacing the Batteries

WARNING

- To avoid electric shock when replacing the batteries, first disconnect the test leads from the object to be measured.
- Before replacing the batteries, make sure that the Function Selector is OFF.
- When replacing the batteries, be sure to insert them with the correct polarity. Otherwise, poor performance or damage from battery leakage could result.
- Replace batteries only with the specified type. (Coin-shaped lithium battery CR2032)
- After replacing the batteries, replace the cover and screws before using the product.
- Keep batteries away from children to prevent accidental swallowing.
- To avoid the possibility of explosion, do not short circuit, disassemble or incinerate batteries.
- Handle and dispose of batteries in accordance with local regulations.

Necessary tool:

- Phillips screwdriver
- Coin-shaped lithium battery (CR2032)



1. Turn OFF the power.

2. Turn the 3246 over and use a Phillips screwdriver to remove the one retaining screw from the battery case.

3. Remove the battery case and mount a new CR2032 battery. Make sure the polarity is correct.

4. Mount the battery case and tighten the retaining screw.