GENERAL®

WK7200

USER'S MANUAL

Water Quality Test Kit

INTRODUCTION:

Thank you for selecting model WK7200 microprocessor-based waterproof Water Quality Test Kit. It is used to measure a wide range of pH, ORP, Conductivity, TDS, Salinity and Temperature with a replaceable electrode. Please read and follow the manual carefully.

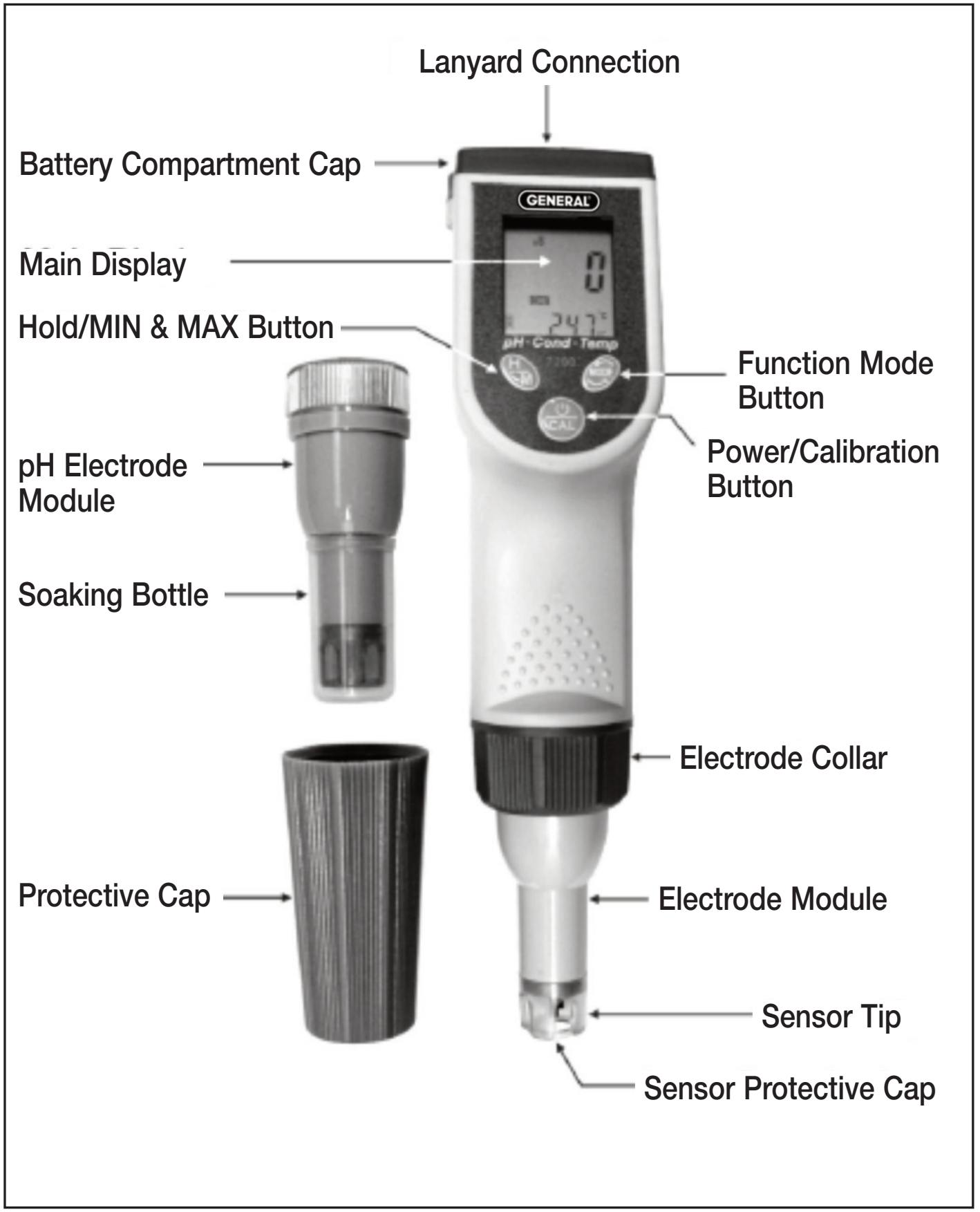
FEATURES:

- Large LCD displays Temperature along with either pH or ORP or Conductivity or TDS or Salinity simultaneously
- Waterproof to IP-57 standard
- It floats on water
- Automatic Temperature Compensation (ATC)
- Degree °F/°C switchable
- Icon PH ORP COND TDS Salt and unit pH, mV, µS, mS, ppm, ppt, °F, °C for easy recognition while selecting function modes
- Displays MIN/MAX value and Data hold
- Low battery indicator
- Automatically shuts off after 10 minutes of non-useage
- Easy to replace Conductivity cell, pH electrode or ORP electrode module

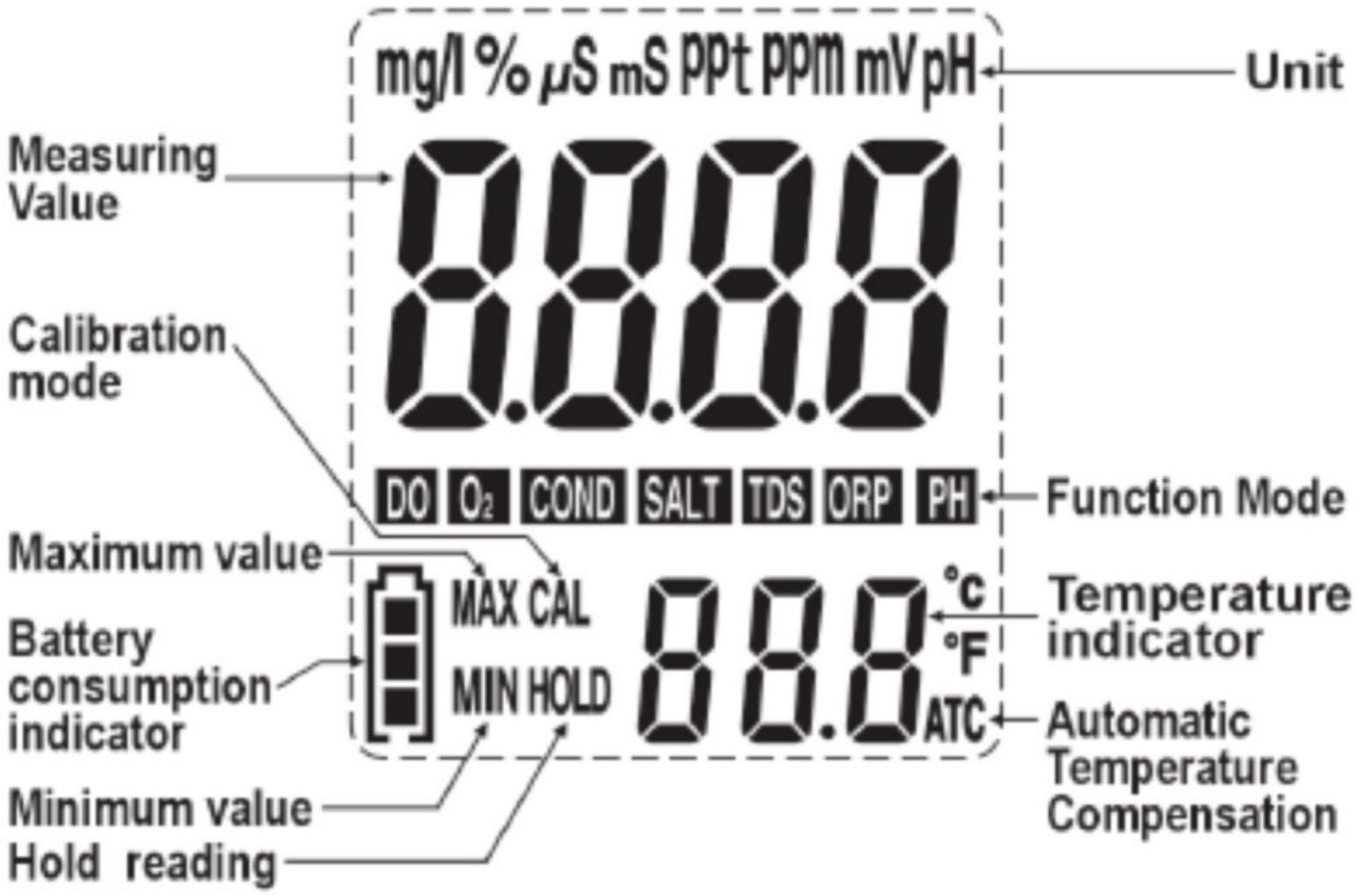
SPECIFICATIONS:

	pH	**ORP**	**Temp.**
Range	-2 to 16.00	-1000 to 1000	32° to 194°F (0 to 90°C)
Accuracy	± 0.01 + 1 digit	± 2 + 1 digit	± 0.4°F + 1 digit (± 0.2°C + 1 digit)
Resolution	0.01 pH	1 mV	0.1°F (0.1°C)
ATC	32° to 194°F (0° to 90°C)		
Calibration	4.00, 7.00, 10.01		
	Conductivity	**TDS**	**Salinity**
Range	0 to 2000 µS 2.00 to 20.00 mS	0 to 1300 ppm 1.30 to 13.00 ppt	0 to 1000 ppm 1.00 to 12.00 ppt
Accuracy	± 0.01 + 1 digit	± 2 + 1 digit	± 0.4°F + 1 digit (± 0.2°C + 1 digit)
Resolution	1 µS/0.01ms	1 ppm/0.01ppt	1ppm/0.01ppt
ATC	32° to 122°F (0 to 50°C)		
Calibration	0 µS, 1413 µS, 12.88 mS		
Power Source	4”AAA” batteries		
Dimensions	Meter: 7.7" x 1.6’" x 1.4" (195 x 40 x 36mm) Kit: 9.1" x 8.1" x 2’" (230 x 205 x 50mm)		
Weight	Meter: 4.8 oz (135 g) (with battery) Kit: 27.5 oz (780 g)		

DEVICE DESCRIPTION:



DISPLAY DESCRIPTION:



FUNCTIONS OF KEYBOARD:

POWER/CALIBRATION

1. Press button to switch power On or Off
2. Press and hold button to enter calibration mode

FUNCTION MODE

1. Press button to select the desired measurement mode Conductivity, TDS, or Salinity during insert Conductivity cell
2. Press and hold button to change degree °F or °C

HOLD/MIN&MAX

1. Press button to enter Hold mode
2. Press and hold down button to enter Minimum/Maximum mode
   Press button down lightly to get Minimum/Maximum value
3. Press and hold down button again to exit this mode and return to measurement mode

OPERATING PROCEDURE:

ACCESSORIES

Upon receiving the shipment, inspect the container and equipment for any signs of damage. Verify that you have received all the items listed below:

Meter, Conductivity cell, Buffer Solution pH 4 & 7, Standard Solution 1413 S/cm, Soaking Solution, Lanyard, Battery (installed), Instruction manual, Carrying case.

Optional: ORP electrode

PREPARATION

1. Remove the protective cap and unscrew soaking bottle #(pH, ORP only) from meter. Rinse the electrode with clean water and wipe it dry. Don't leak soaking solution from bottle and place the protective cap back on the bottle at the end of usage.
2. Press CAL button to turn the meter power on.

Note: Don't touch or wipe the surface of the inner black sensor of the conductivity cell.

CALIBRATION

＜pH＞

1. Make sure the sensor is pH electrode or check the icon **PH** shown on the LCD display.
2. Dip the electrode into the buffer solution pH 7. Stir gently and wait until the display is stabilized. Press and hold CAL button to enter calibration mode until the icon **CAL** appears on the display, and # flashes 7.00. When the display stops flashing and indicates "SA". It will be followed by "End" while calibration is ending, and then will return to measurement mode.
3. Rinse the electrode with clean water and wipe it dry. Dip the electrode into the buffer solution pH 4. Stir gently and wait until the display stabilizes. Press and hold CAL button to enter calibration mode until the icon **CAL** appears on the display, and flashes 4.00. When the display stops flashing and indicates "%" (percentage of slope), then "SA". It will then be followed by "End" while calibration is ending, and then return to measurement mode.
4. After slope calibration pH 4 or pH 10, the display will indicate percentage of slope (PTS) to show the status of electrode. If the PTS is below 70% or above 130%, the electrode must be replaced. A slope of 100% is ideal.

Note: (1) Icon "SA" will not appear if the calibration fails.
(2) When doing a 2 or 3 point calibration, Calibrate with buffer pH 7 first, and then follow with buffer pH 4 or pH 10.

< **Conductivity** >

1. Make sure the sensor is Conductivity cell, or check that the icon **COND** , **TDS** or **Salt** appears in the LCD display.
2. Dip the conductivity cell into the standard solution 1413 µS/cm. Stir gently and wait until the display is stabilized. Press and hold CAL button to enter calibration mode until the icon **CAL** appears in the display, and flashes 1413 µS/cm. When the display stops flashing and indicates "SA", it will be followed by "End" while calibration is ending, and then return to measurement mode.
3. If reading is not 0 µS/cm while the meter is in the air and is not dipped it into any solution, then calibrate it in the air to make reading becomes 0 µS/cm.

Note: (1) Calibration with a 12.88 mS/cm standard solution would be better for measuring high conductivity solution.
(2) The icon **COND** will appear automatically during calibration mode.
(3) "SA" will not appear if the calibration fails.

MEASUREMENT

< **pH** >

1. After calibration, rinse the electrode with clean water and wipe it dry. Dip the electrode into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.

< **ORP** >

1. Insert ORP electrode and the icon **ORP** will appear in the LCD display automatically.
2. Calibration is not necessary for ORP. But it could be tested with a specific ORP solution to check if the electrode is good or bad.
3. Rinse the electrode with clean water and wipe it dry. Dip the electrode into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.

Note: (1) "_ _ _ _" will appear in the display when it is over the measuring range.
(2) After measurement, rinse the electrode with clean water. Place the protective cap and soaking bottle back on. The soaking bottle should be always kept wet by adding soaking solution.

< **Conductivity** >

1. After calibration, rinse the conductivity cell with clean water and wipe it dry. Dip the conductivity cell into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.
2. Press MODE button to select the desired measurement mode Conductivity, TDS or Salinity.

Note: (1) "_ _ _ _" will appear in the display when it is over the measuring range.
(2) The unit will auto-range to µS/cm or mS/cm, ppm or ppt.
(3) After measurement, rinse the electrode with clean water and place the protective cap back.

FUNCTIONS MODE

1. Press H/M button to enter the Hold function mode. The icon HOLD will appear, and the reading value shown in the display can be locked. Return to measurement mode by pressing the button again.
2. Press and hold H/M button to enter the Maximum and Minimum function mode until the flash icon of **MAX** and **MIN** appears In the display. The value of maximum and minimum will show in the display while pressing button lightly. To exit this mode, press and hold H/M button until icon **MAX** and **MIN** disappears, and returns to measurement mode.
3. Press MODE button to select the desired measurement mode Conductivity, TDS or Salinity during insert Conductivity cell.
4. Press and hold MODE button to change Degree °F or °C.

Note: (1) The display can not auto shut off under the status of MAX/MIN mode.
(2) Change new batteries when the battery indicator is flashing.

MAINTENANCE:

BATTERY REPLACEMENT

1. Loosen the screw with a screwdriver on the battery compartment cap.
2. Replace with fresh 4 “AAA” batteries, and note polarity.
3. Place the battery compartment cap and tighten the screw.

Note: (1) Be sure the batteries are in correct position by polarity.
(2) Don’t loosen the O-ring which has been mounted on cap.

ELECTRODE REPLACEMENT

1. Unscrew the electrode collar counterclockwise, and remove it completely.
2. Pull the electrode module out from the tester.
3. Plug a new electrode module into the tester socket carefully.
4. Place and tighten the electrode collar to make a good seal.

APPLICATIONS

Agriculture • Anti-freeze recycling • Aquarium • Boiler • Chemical industry • Cooling tower • Drinking water • Fish farming • Food industry • Garden husbandry • Hydroponic Laboratory usage • Plating industry • Swimming pool & Spa • Water treatment

Calibration Certificate

This certificate guarantees that this product has been inspected and tested in accordance with the published specifications.

The instrument has been calibrated by using equipment which is already calibrated to standards traceable to International standards.

Model: WK7200

Serial no.: _____

Date: _____

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WK7200 User's Manual
Specifications subject to change without notice

MAN# WK7200 8/08