

Usage, Maintenance & Application Of DR890 COLORIMETER



E i M A S

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SECTION 1 DESCRIPTION

- ◆ Source Lamp: Light Emitting Diode (LED)
- ◆ Operating Temperature: 0 to 50 °C
- ◆ Battery Power: (4) AA alkaline cells
- ◆ Battery Life: 6 months (typical)
- ◆ Water proof and sturdy instrument for site utility.



Instrument Check-List

- ◆ Sample Cells — (2) round, with 10-mL, 20-mL, and 25-mL marks
- ◆ COD/TNT Adapter for use with 16-mm vials used in COD and Test 'N Tube methods.
- ◆ Batteries — (4) AA alkaline
- ◆ Documentation package — includes Instrument Manual and Procedures Manual.



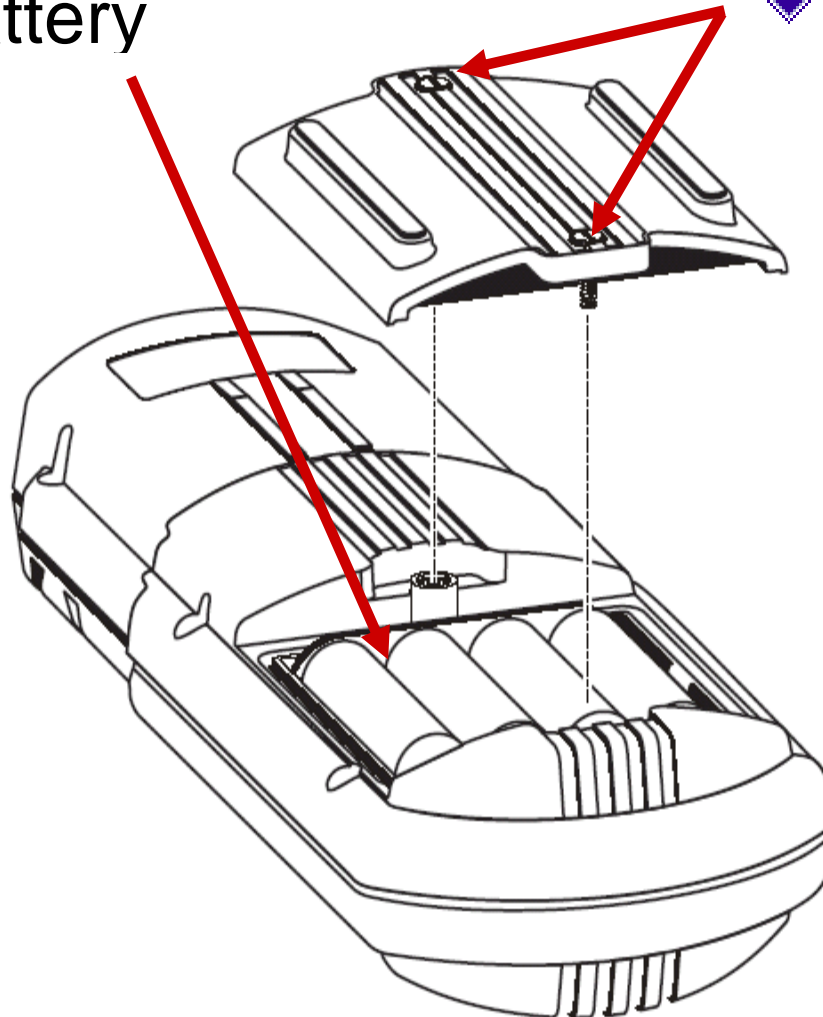
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Battery Installation

◆ 4 AA's
Battery

◆ Open with screw
driver





Screen Display

Light Shield



Power switch to turn instrument ON/OFF and Exit mode

ENTER key to accept the displayed value

ZERO Key for zeroing BLANK

READ key for sample reading



Measurement Notes

Sample Cell Insertion

- ◆ Wipe the sample cell with a lint-free cloth or tissue and insert the cell into the sample cell compartment with the diamond-shaped marker toward the keypad.





Measurement Notes

Sample Cell Adapter Installation

- ◆ Insert the adapter into the cell compartment and rotate until it drops into the alignment slots.
- ◆ Finish installation by gently pushing down on the adapter until it snaps into position.





Measurement Notes

Using the Instrument Cap as A Light Shield

- ◆ The colorimeter cap is removable (by sliding it away from the keypad) to expose the sample cell compartment.
- ◆ The instrument cap also functions as a light shield.





Measurements.

- ◆ Zero for blank.
- ◆ Read for sample.

Results appears in mg/L or other related units.



SECTION 5 MAINTENANCE

Cleaning the Colorimeter

- ◆ Use a damp cloth to wipe the outside of the colorimeter enclosure. Wipe up spills promptly.
- ◆ Use cotton swabs to clean and dry the sample compartment if any spillage occurs.
- ◆ Keep the colorimeter and sample cells clean at all times.
- ◆ Use a lens tissue or a soft, lint-free cloth (that will not leave an oil film) to wipe out the sample cell.



Sampel cells.

Sample Cells

- ◆ Clean sample cells with detergent, rinse several times with tap water, and then rinse thoroughly with deionized water.
- ◆ Some cells may require acid washing or other special cleaning procedures.
- ◆ Rinse sample cells used with organic solvents (chloroform, benzene, toluene, etc.) with acetone before the detergent wash, and again as a final rinse before drying.



Battery.

Battery Replacement

- ◆ When the **LOW BATTERY** icon appears in the display the batteries must be replaced or recharged as soon as possible to ensure proper instrument performance.
- ◆ Turn the instrument off before removing the battery compartment door.
- ◆ The correct date and time may need to be reentered after battery replacement.



Limit, over range.

Concentration Out of Range

- ◆ An out-of-range condition is indicated by the illuminated **LIMIT** icon. It means the sample concentration exceeds the range of the programmed calibration.



THANK YOU