OPERATION

This section contains basic operating instructions, to insure accurate results and for more advanced functions, refer to the additional sections that follow.

1. Remove the protective cover from the probe head.
2. Turn the meter on by pressing the "ON" button.
3. Place the probe head into the solution to be measured.
4. To insure Automatic Temperature Compensation, immerse the probe head and temperature sensor completely. For accurate Automatic Temperature Compensation, the temperature sensor must reach equilibrium with the liquid being measured, this could take several minutes.
5. Insure that there is adequate movement of the liquid around the tip of the probe head (0.2 - 0.3 meters per second minimum). This can be achieved by stirring the meter in the liquid.

The meter will automatically select the range that is the most appropriate for the value being measured. For example, when measuring a 500 µS solution, the meter will select the µS range and display 500 µS as opposed to displaying 0.50 mS. To manually select the range, press and hold the "button for approximately three (3) seconds, if the value being measured is able to be displayed in the alternate range, the meter will switch ranges (see the "Range Mode Selection" section).

SELECTING °F OR °C

1. Turn the meter on by pressing the "button.
2. Press and hold the "button for approximately three (3) seconds, P 1.0 will appear at the top of the display.
3. Press the "button two (2) times, P 4.0 will appear at the bottom of the display.
4. Press the "button, P 4.1 will appear at the bottom of the display. The top of the display will show the value that the meter was calibrated to for the range of 0 to 19.99 mS. (If no user calibration has been performed, "- - -" will appear.)
5. Press the "button, P 4.2 will appear at the bottom of the display. The top of the display will show the value that the meter was calibrated to for the range of 0 to 19.99 mS. (If no user calibration has been performed, "- - -" will appear.)
6. Press the "button, P 4.0 will appear at the bottom of the display.
7. Press and hold the "button for approximately three (3) seconds, the meter will return to the measurement display.

SELECTING TEMPERATURE NORMALIZATION VALUE

Conductivity is greatly influenced by temperature. Most fluids increase in conductivity as temperature increases. To preserve battery life, always turn the meter off when not in use. 8. Rinse the probe head with distilled/deionized water and store the protective cover. Always replace the protective cover to prevent damage to the probe head. If no button is pressed for twenty (20) minutes, the meter will turn off automatically to preserve battery life (see the "Automatic Shutoff" feature).
SETTING TEMPERATURE COMPENSATION COEFFICIENT
Conductivity is greatly influenced by temperature. Most fluids increase in conductivity as temperature increases. The value set here will determine how much the Automatic Temperature Compensation (ATC) feature will adjust the value for every 1 °C in order to automatically make corrections to the reading and display a value as if the sample was 25 °C or 20 °C (see the “Selecting Temperature Normalization Value” section), no matter what the actual sample temperature is.

Although every fluid will have a different temperature coefficient, a temperature compensation coefficient of 2.0% is a generally accepted standard compensation value. If the temperature coefficient of the solution being measured is known, that value should be entered in order to obtain the most accurate results. To take non-temperature compensated measurements, a temperature compensation coefficient of 0.0% should be entered.

The following procedure is used to set the temperature compensation coefficient.

1. Turn the meter on by pressing the (POWER) button.
2. Press and hold the (SET) button for approximately three (3) seconds, P I.O will appear at the bottom of the display.
3. Press the (TEMP) button three (3) times, the temperature coefficient value will flash on the display.
4. Press the (1) button to adjust the display to the desired temperature coefficient value.
5. With the desired temperature coefficient value appearing, press the (UP) button (1) time, P I.O will appear at the bottom of the display.
6. Press and hold the (SET) button for approximately three (3) seconds, the meter will return to the measurement display.

The temperature coefficient value selected will be the default value until changed.

RESET TO FACTORY DEFAULTS
Resetting the meter will clear all calibration data and reset the user selectable values to the factory defaults. Factory defaults are as follows:
- Temperature display: 25 °C
- Temperature Coefficient: 2.1%

The following procedure is used to reset the meter to the factory default values:

1. Turn the meter on by pressing the (POWER) button.
2. Press and hold the (POWER) button for approximately three (3) seconds, P I.O will appear at the bottom of the display.
3. Press the (TEMP) button (1) time, P I.O will appear at the bottom of the display.
4. Press the (SET) button, the n will flash on the display.
5. Press the (SET) button, the v will flash on the display.
6. With v appearing, press the (SET) button, P I.O will appear at the bottom of the display and the values will have been reset to the factory defaults.
7. Press and hold the (SET) button for approximately three (3) seconds, the meter will return to the measurement display.

DISPLAY MESSAGES
Upper Display Messages:
- Indicates that the meter is in the manual range selection mode and the value being measured is higher than 1999 μS.
- Indicates that the value of the solution being measured exceeds the measurement range of the unit.
- Indicates that the value of the solution being measured exceeds the measurement range of the unit based on a temperature measurement error (see the “Lower Display Messages” section).

Lower Display Messages:
- Indicates that the temperature sensor is damaged.
- Indicates that the temperature of the solution being measured is below the measurement range of the unit.
- Indicates that the temperature of the solution being measured is above the measurement range of the unit.

ALL OPERATION DIFFICULTIES
If this meter does not function properly for any reason, replace the batteries with a new, high quality batteries (see the “Battery Replacement” section). Low battery power can occasionally cause an error or success in operational difficulties. Replacing the batteries with new fresh batteries will solve most difficulties.

BATTERY REPLACEMENT
An erratic display, faint display, no display, or a battery symbol appearing on the display are all indicators that the batteries need replacement. The battery cover is located at the top of the unit. Unscrew the battery cover by turning it counter-clockwise. Remove the exhausted batteries and replace them with four (4) new #357/LR44 size silver oxide batteries. Make certain to insert the new batteries with the proper polarity as indicated by the + and − symbols in the battery compartment. The + side of the silver oxide battery is the flat side with the engraving. Replace the battery cover and tighten securely.