PoolPro PS6FC^E Quick Start Guide

Handheld Conductivity, Mineral / Salt Concentration, TDS, ORP, Free Chlorine, pH and Temperature Meter

This Quick Start Guide is for the Myron L[®] Company Pool Pro Model PS6FC^E. Download the full PS6FC^E Operation Manual (P/N PS6FCEOM) from <u>www.myronl.com</u> to get a more detailed set of instructions for taking measurements, storing and recalling measurements, changing instrument settings, maintenance procedures, calibration procedures, Troubleshooting Guide and the FACTORY CAL reset procedure.



- 5. LCD DISPLAY Displays measurements, units of measure, active measurement mode, current solution mode setting, low battery warning (LOBATT), and other information (see below).
- 6. MEASUREMENT KEYS Press and release any of these to turn on the PS6FC^E and begin taking measurements.
- 7. FUNCTION KEYS Press and release to store the current measurement (MS), recall a stored measurement (MR). Also used to move between memory locations and to select various mode settings.
- 8. CAL/MEMORY CLEAR KEY Use to calibrate (CAL) the active measurement parameter, enter or clear the contents of the currently displayed memory location (MCLR).
- 9. BLUDOCK SYMBOL Indicates that this PoolPro PS6FC^E is equipped with Myron L[®] Company's optional wireless transceiver for wireless data download.

LCD DISPLAY

- 1. MAIN VALUE DISPLAY Displays the current measurement value or settings menu information.
- 2. UNITS OF MEASURE ICONS Appropriate icon appears to show the units of measure for the current measurement.
 - 3. TEMPERATURE UNITS OF MEASURE Displays °C (Celsius) or °F (Fahrenheit) based on setting selected for Temperature readings.
 - 4. MEASUREMENT ICONS Appropriate icon appears to show what type of measurement is being made.
 - 5. BUFFER ICON Appears when the PS6FC^E is in pH Calibration mode to indicate that the instrument is expecting a pH buffer solution.
 - 6. TEMPERATURE DISPLAY– Displays the temperature of the sample solution, memory location number (1 to 100) or buffer during pH calibration.
 - 7. SOLUTION MODE ICONS Appropriate icon appears to indicate the current solution temperature compensation mode setting for Conductivity, Min/Salt and TDS measurements.
 - 8. LOBATT ICON Appears when the PS6FC^E 's battery requires replacement.
- **9.** CAL ICON Appears when the $PS6FC^{E}$ is in Calibration mode.

9

8

COND ORP

KC

442

5

10

XX

IOB

°C

pH TDS

mS μS

10. MEMORY ICON – Appears to indicate that the values and icons being displayed are for a measurement stored in the PS6FC^E 's memory and are NOT a live measurement.

PS6FC^E DEFAULT SETTINGS

Temperature Units: °C (Temperature is displayed in Degrees Celsius) Solution Modes: Conductivity – KCl, TDS – 442; MIN/SALT – NaCl

OPERATING INSTRUCTIONS

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MEASUREMENT SETUP: Before you take a reading, make sure the PS6FC^E is clean, calibrated, and if measuring COND or TDS, that the desired solution mode has been selected (See Section II of Operating Instructions, below). The sample solution must also be within the specified range.

I. MEASUREMENT

- 1. Rinse and empty the appropriate sensor (conductivity or pH / ORP) 3 times with sample to be measured.
- 2. Fill with test sample.
- 3. Press appropriate Measurement Key:

COND to measure CONDUCTIVITY

2 0-9999 MICROSIEMENS (µS/cm), 10-200 (mS/cm)

- TDS TDS: Measures TOTAL DISSOLVED SOLIDS 0-9999 parts per million (ppm), 10-200 (ppt)
- - $\frac{N}{10}$ MIN / SALT: Same as TDS but displays in
 - 10-200 parts per thousand (ppt).
- (ORP) ORP: Measures Oxidation Reduction Potential (REDOX) \pm 999 mV
- pH) pH: Measures 0-14 pH

NOTES:

- When finished making Conductivity, TDS, or MIN/SALT measurements, rinse the cell cup with clean water (preferably DI, RO, or distilled).
- When finished measuring pH, ORP or FC^E, rinse sensor well with clean water (preferably DI, RO, or Distilled), refill it with Myron L Storage Solution then reinstall protective cap.



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II. Solution Mode Selection

- $\binom{\text{MIN}}{\text{SALT}}$ or (TDS), to select which parameter is having its 1. Press (COND) solution type changed.
- Press and hold $\frac{CAL}{MCLR}$ about 3 seconds or until "SEL" appears on the display.

CALIBRATION SOLUTIONS

Mode	Standard Solution or Buffer			
Conductivity KCI	KCI: 7000 μS			
TDS 442™	442™: 3000 PPM			
TDS NACL & MIN/SALT	Displays as 2027 ppm in TDS NaCl or MIN/SALT mode			
pH and FC ^E	4.0, 7.0 and 10.0 buffer			
Alkalinity	100 ppm Alkalinity Standard Solution			
Hardness	200 ppm Hardness Standard Solution			
FC ^E ORP calibration is electronic and based on pH Cal Results				

I. CONDUCTIVITY, MIN /SALT OR TDS CALIBRATION

1. Rinse cell cup 3 times with proper fresh, standard solution.

- 2. Refill cell cup with standard solution.
- Press (COND), (MIN) (SALT) or (TDS), then press (CAL) (MCLR), "CAL" will appear.
- 3.

we have a standard solution. 4 MS

 $\frac{(CAL)}{(MCLB)}$ to accept value. 5. Press

NOTE: A deviation of more than 10% from standard solution value will

produce a "FAC" on the display. Press $\binom{CAL}{MCLR}$ to accept factory calibration, or clean the cell and recalibrate.

II. pH/ CALIBRATION

1. Rinse sensor well 3 times with 7.0 buffer solution.

I. BATTERY REPLACEMENT (LOBATT)

- 1. Clean and dry Instrument THOROUGHLY. WARNING: ONLY open PS6FC^E in a clean, dry environment!
- 2. Remove the four (4) bottom screws.
- Open instrument CAREFULLY. 3.
- Carefully detach battery from circuit board. 4.
- Replace with 9-volt alkaline battery. 5
- Replace bottom, ensuring the sealing gasket is installed in the groove 6. of the top half of case.
- 7. Re-install the 4 screws, tightening them evenly and securely.

II. CAUTIONS

- Solutions in excess of 71°C/160°F should not be placed in the cell cup area; this may cause damage.
- The pH sensor may fracture if the PS6FC^E temperature is allowed to go below 0°C/32°F.
- The cell cup should be kept as clean as possible. Flushing with clean water following use will prevent buildup on electrodes. If very dirty samples (particularly scaling types) are allowed to dry in the cell cup, a film will form reducing accuracy.
- The pH sensor in your PS6FC^E should not be allowed to dry out.

- 3. Use the (MR) or (MR) key to select type of solution desired. The possible solution types are KCI, NaCl or 442™.
- 4. Press $\frac{CAL}{MCLR}$ to accept new solution type, or to turn on the SALt (salinity) mode.

CALIBRATION

- 2. Refill sensor well with 7.0 buffer solution.
- 3. Press (pH), then $\frac{CAL}{MCLR}$, "CAL", "7" and "BUFFER" will appear on the display
- until display agrees with buffer value. 4. Press
- **5.** Press $\binom{CAL}{MCLR}$ once to accept the value.
- Rinse 3 times with either ACID (Acd) (pH 1- 6) or BASE (bAS) (pH 8-6. 14) buffer solution.
- 7. Refill and repeat steps 4 & 5.
- Rinse 3 times with opposite buffer solution, refill and repeat steps 8. 4 & 5 or press $\frac{CAL}{MCLR}$ to exit.
- When calibration is complete, rinse sensor, then refill sensor well with 9. Myron L Storage Solution and reinstall cap.

III. ORP/ FC^E CALIBRATION

- ORP electrodes rarely give false readings without problems in the reference electrode.
- For this reason, and because calibration solutions for ORP are highly reactive and potentially hazardous, your PoolPro has an electronic ORP calibration.
- This causes the zero point on the reference electrode to be set whenever pH 7 calibration is done.

MAINTENANCE

 Whenever the pH sensor is not in use make sure it is filled with Myron L[®] Company Storage Solution and that the protective cap is in place.

III. CLEANING SENSORS

- A. Conductivity or TDS
- When there are visible films of oil, dirt, or scale in the cell cup or on the electrodes or if readings are not as expected, use isopropyl alcohol or a foaming non-abrasive household cleaner.
- Rinse out the cleaner, and your PS6FC^E is again ready for accurate calibration then measurements.
- If the pH sensor dries out or becomes dirty, it may be cleaned and/or Β. reconditioned. For instructions on preforming these operations, download the full PS6FC^E Operation Manual from the Myron L[®] Company website.

IV. pH Sensor Replacement

Order model RPR. Be sure to include the model and serial number of your instrument to ensure receipt of the proper type.

NOTE: Complete installation instructions are provided with each replacement sensor.

SPECIFICATIONS

Spec	рН	CONDUCTIVITY	TDS & MIN / SALT	ORP	FC ^E	TEMP
Ranges	0-14 pH	0 - 9999 μS/cm; 10 - 200 mS In 5 autoranges	0 - 9999 ppm; 10 - 200 ppt In 5 autoranges	± 999 mV	0.00 – 9.99 ppm ORP = 350mV - 725 mV, <9.9 pH ORP = 725 mV - 825 mV, <8.9 pH	0°C – 71°C 32°F – 160°F
Resolution	0.01 pH	0.01 < 100 µS 0.1 (<1000µS) 1.0 (<10 mS 0.01 < 100 mS) 0.1 mS (≥ 100 & < 200 mS)	0.01 < 100 ppm 0.1 (<1000 ppm) 1.0 (<10 ppt 0.01 < 100 ppt) 0.1 (≥ 100 & < 200 ppt)	±.1 mV	0.01 ppm	0.1 °C / °F
Accuracy	± 0.01 pH	±1% of reading		±.1 mV	±. 0.3 ppm <1.0 ppm; ±. 0.2 ppm ≥1.0 ppm	±0.1 °C / °F
COND/TDS Ratios		Programmed: KCl, NaCl or 442 [™] Adjustable 0.20 -07.99				
Temp Co	Auto: 0-71°C, 32-160°F Adjustable (COND & TDS) 0 – 9.99% / °C					

