

Total Control Quick Start

Using the 75001 - Chemistry Controller Unit, 75003 - Power Center, and Stenner Acid Pump

What is ORP?

ORP or oxidation reduction potential is a measurement of free or "active" oxidizer (**chlorine**) present in the water measured in millivolts (MV). Many water balance parameters, including chlorine level, pH, cyanuric acid, alkalinity, and water temperature affect the "activity" of the chlorine, and in turn the ORP reading.

Because these variables are different for each pool, and are changing throughout the day, it is nearly impossible to assign an ORP level to any particular chlorine level in ppm. The factory default setting of 650 mv is considered an "industry standard" and will provide a sufficient chlorine level for most "properly balanced" pools. This guide will allow you to customize your Total Control settings for your pool application.

Please note - it is normal for the ORP level to fluctuate over a wide range throughout the day.

Disabling ORP

If the pool water has not been properly balanced, prior to start up, the ORP sensor can be temporarily disabled. The unit will produce chlorine and function as a standard purifier. The unit will measure and maintain the desired ph. In the maintenance menu, use arrows to find disable ORP, press select to save.

1 Start With A Clean Balanced Pool

pH, Alkalinity, Calcium Hardness, Cyanuric Acid and Chlorine levels must all be at desired levels before starting the Total Control System.

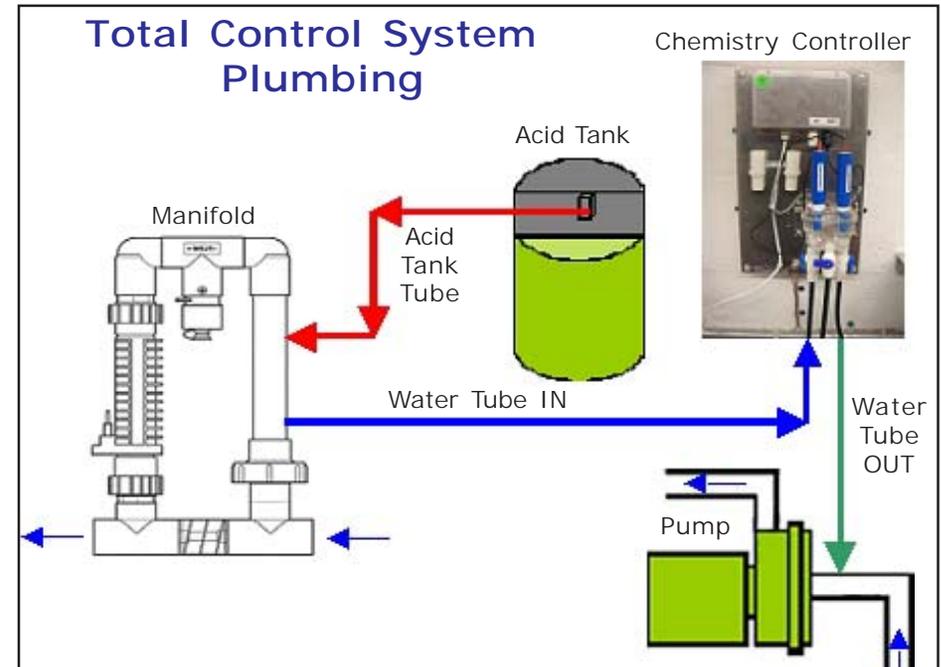
- Recommended CYA level for outdoor pools: 30-50 PPM.
For indoor pools: 0 PPM. CYA levels higher than 50 will result in a lower ORP reading during daylight hours.
- If necessary the system may be operated as a purifier with the ORP disabled (See "Disabling ORP") until the pool water can be balanced.
- Failure to properly balance pool water before enabling the ORP sensor or operating the unit in Total Control Mode will result in difficulty in finding the correct ORP setting for that particular pool. (See "What is ORP")

2 Choose System Type (Total Control)

- a. Press the menu button on the touch pad. Use the arrows (triangles) to scroll through the menu until the words "Installer Menu" are displayed on the screen.
- b. Press and hold the select button for 15 seconds until "Select Language" is displayed. Use the arrow keys to navigate through to set the system as a total control system as follows:
 - i. Find "**Select System**" in the menu and press select
 - ii. Using the arrows, select "**Total Control**" and press select to save.
 - iii. The unit will then show "Has Sensor Flow" – press select. Please Note: the unit will now reset itself. This is normal. You will need to enter the installer menu again to complete the next step in setting up the system.

3 Set Pool Volume

- a. Use arrows to find "**Set Pool Volume**". Press select.
- b. Using arrows, choose the correct pool volume. Press select to save. Please note - If you do not enter the correct pool volume, the unit will not accurately display how much salt to add!!!!



4 Set Cell Type

- a. Use arrows to find "**Set Cell Type**" and press select
- b. Use arrows to set the cell that you have installed – you can find your cell type on the cell body. Press select to save.

5. Set Cell Power

- a. Using arrows find "**Set Cell Power**" and press select
- b. The three power levels – 1, 2 and 3, correspond to an increasing level of chlorine production. Factory default is 1. Use the arrows to change this number to 2 and press select to save. It is recommended starting out on power level 2, and if the chlorine level is consistently low raising the power level setting.

6. Set Relay 1

Using arrows, find "**Set Relay 1**" and press select.

- If you are controlling a "**One Speed Pump**" with the total control choose this option and push select to save. (auxiliary relay #75008 is required to control the acid pump)
- If you are controlling a "**Two Speed Pump**" with the total control choose this option and push select to save. (auxiliary relay #75008 is required to control the acid pump)
- If you are using an "**External Timer**" or controller to operate the circulation pump, and are controlling the acid pump with the total control, choose the "Acid Pump" option and push select to save.

Please note - this is not recommended as the external timer will never be used with a total control application.

7. Prime the Acid Pump

- a. Make sure that the toggle switch, located under the rain shield on the top of the acid pump, is in the "ON" position.
- b. In the maintenance menu, use the arrow keys to find "**Prime Acid Pump**" and press select.
- c. Press the up arrow to begin pump operation. The pump will run for 3 minutes. Pressing any button will stop acid pump operation.
- d. Add approximately two gallons of water to the acid reservoir. Disconnect the outlet side of the acid pump while the unit runs and wait for water to come out of the hose.
- e. Stop the unit by pressing any button. Reconnect the hose. Add the desired acid / water ratio. Note: the recommended 4 to 1 ratio (4 parts water to 1 part acid) may be too dilute for some large, new, or recently refinished pools with cementitious finishes. It may be necessary to use a stronger ratio during the initial curing phase.
- f. After the initial curing phase increase the water to acid ratio for personal safety.

8. Set pH Minimum and Maximum

- It is recommended leaving the system at the "**pH Min**" default setting of 7.0, and "**pH Max**" default setting of 8.0.
- For new cement pool finishes with a high acid demand the pH maximum may be temporarily increased to 8.5. The acid dilution ratio may also be decreased, (see Set Prime Acid Pump) and the circulation pump run time (see Set Pump Program) may be increased. Note: any increase in pH maximum must be a temporary increase, it is important that the pH maximum be returned to the factory setting of 8.0 as soon as possible.
 - i. In maintenance menu, use the arrow key to find set "**pH max**".
 - ii. Use the up arrow to increase pH maximum setting and push select to save.

9. Set Pump Program

If the total control system has been set up to control the circulation pump, (auxiliary relay #75008 is required to control the acid pump) the pump operating times must be programmed. There are two on / off programs available - the programmed times must not overlap.

- a. In the owner, maintenance, or installer menus find "**Pump Program 1**". Push select.
- b. Use the arrows to set the desired on/off times, push select to save.
- c. Proceed to "**Pump Program 2**" if an additional on/off cycle is desired.

10. Setting Desired pH and ORP

- a. The Total Control will display the ORP and pH set points (in parentheses) with the current reading to the left of the parentheses.
- b. Adjust the desired pH settings by using the up or down arrows.
- c. Start with a properly balanced pool as described on page 1. In the morning before the sun comes up, or after the sun has gone down, operate the system for at least 1/2 hr.
- d. Note where the ORP reading has "settled" and use this number as the ORP setting inside the parentheses.