

ChemScan UV-6100
MANUAL INSTRUMENT ZEROING PROCEDURE

PURPOSE:

The ChemScan UV-6100 must be zeroed occasionally to correct for drift and flow cell fouling. The procedure simply involves rinsing the flow cell with deionized water, taking a zero reading and checking the zero.

ITEMS NEEDED:

1 GALLON OF DEIONIZED WATER

INTERRUPT ON-LINE MODE:

Press the **CLEAR** key on the keypad. The following message will appear:

ENTER SECURITY CODE

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Enter _____ and the **MAIN MENU** will be displayed:

MAIN: _ 1) RUN
2) SETUP 3) CAL

INSTRUMENT ZEROING:

Place the calibration/cleaning tube in one gallon of deionized water. Be sure the end of the hose is at the bottom of the container. Turn the hand valve to select the calibration/cleaning tube.

On the instrument keypad, press **3** for **CAL**. The **CAL MENU** will be displayed:

CAL: _ 1) ZERO
2)PC CNTRL 3)OFFSET

Press **1** for **ZERO**. The following will be displayed:

ZERO: 1) READ ZERO
2) TEST ZERO

Press **1** for **READ ZERO**. The following message will be displayed:

ZERO: + FLUSH - STOP
ENTER TO READ

Use the **+** key to begin flushing the deionized water. Allow the water to flush for 2 minutes and press the **-** key to stop flushing. Press **ENTER** to take the reading. The instrument will read the deionized water as a zero.

CHECKING THE ZERO:

Following the reading of the zero, the ZERO MENU will be displayed.

**ZERO: 1) READ ZERO
2) TEST ZERO**

Press 2 for TEST ZERO. The following will be displayed:

**TEST: + FLUSH - STOP
ENTER TO READ**

Using the + and - keys to control the pump, allow deionized water to flush for 8-10 seconds. Press the ENTER key to initiate the reading. Following the reading the READ ONCE RESULTS will be displayed. Record the concentration values in the log. Press the 2 key on the keypad. Record the values for:

MN	AV
MX	TL

Press the 3 key on the keypad. Record the values for:

230	424
248	448

Press CLEAR and MAIN MENU to return to the MAIN MENU.

If the MN value is less than -0.002 or if the MX value is greater than 0.002 repeat the Zeroing procedure. If the 230 or 248 values are less than 1000, the flow cell should be chemically cleaned.

RETURNING TO ON-LINE MODE:

Turn the hand valve to the sample line position. From the MAIN MENU, press 1 for RUN. The RUN MENU will be displayed:

**RUN: 1) READ-ONCE
2) ON-LINE 3) SAMPLE +**

Press 2 for ON-LINE. The instrument is now in the ON-LINE MODE.