



WDMP sc Panel Installation and Setup

Safety Information

Please read this entire document before unpacking, setting up, or operating this equipment. Pay attention to all danger and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

To ensure that the protection provided by this equipment is not impaired, do not use or install this equipment in any manner other than that specified in this document.

This guide is not a substitute for the WDMP sc User Manual (DOC026.53.00773). The User Manual should be followed for all installation, operation and maintenance information.

Use of Hazard Information

DANGER

Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation that may result in minor or moderate injury.

***Important Note:** Information that requires special emphasis.*

***Note:** Information that supplements points in the main text.*

Precautionary Labels

Read all labels and tags attached to the instrument. Personal injury or damage to the instrument could occur if not observed. A symbol, if noted on the instrument, will be included with a danger or caution statement in the manual.

Introduction

The Water Distribution Monitoring Panel sc (WDMP sc) is designed to combine established instrumentation into a pre-configured system for water monitoring. The WDMP sc provides continuous surveillance of drinking water distribution systems. The panel monitors multiple “indicator” parameters (chlorine, conductivity, pH, turbidity, pressure and temperature) that can signal changes in the water quality profile.

Unpacking the WDMP sc

The components of this WDMP sc system have been configured and packaged at the factory under one serial number. Note the serial number on the label of each box in your shipment and keep boxes with the same serial number together.

***Important Note:** Do not connect parts together that have different serial numbers. If parts with different serial numbers are connected together, the sc1000 controller sensors will have to be installed again. If sensor installation becomes necessary, refer to the steps in the [sc1000 Sensor installation procedure on page 5](#).*

Before removing the panel from the shipping carton, install the probes into the probe manifold to prevent probe damage. Refer to [Figure 1](#) and the following instructions:

1. Insert the L-shaped conductivity probe into the bottom probe holder on the probe manifold (item [1](#)). Refer to the WDMP sc user manual for probe plumbing and connection details.
2. Insert the pH probe in the probe holder above the conductivity probe (item [2](#)).

3. Insert additional probes into the top probe holder. The top probe holder is available for additional probes required for specific applications. If no additional probes will be used, insert the supplied plug into the top probe holder (item 3).

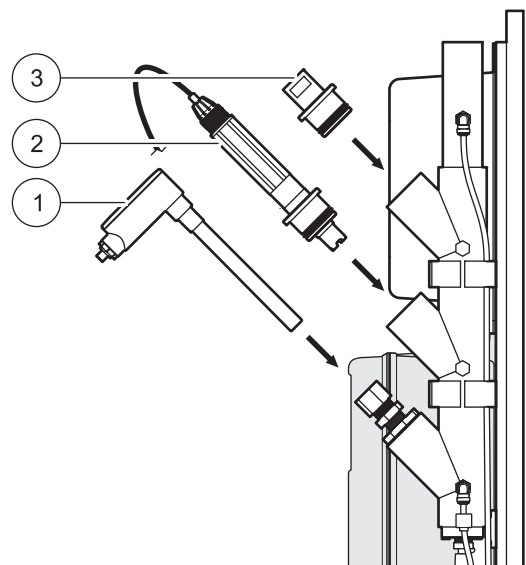


Figure 1 WDMP sc probe location

1	Conductivity probe	3	Plug for optional probe holder
2	pH probe		

Mounting and installing the WDMP sc

DANGER
The Water Distribution Monitoring Panel sc is not suitable for installation in hazardous locations.

CAUTION
The WDMP sc weighs approximately 29.5 kg (65 lb). Do not attempt to unpack, carry or move the WDMP sc without proper equipment and sufficient people to do so safely. Always use safe lifting technique: Lift with the legs, not with the back. Individuals with a history of back problems or cardiovascular problems should not attempt to unpack or lift the WDMP sc.

1. Select a sampling point and mount the panel and the sc1000 controller to a wall. Refer to section 3.1 of the WDMP sc user manual (DOC026.53.00773) for mounting considerations.

***Note:** The WDMP sc can be mounted to an optional panel rack (Cat. No. 6846800). The sc1000 controller can be mounted to the optional panel rack with the sc1000 mounting plate (Cat. No. 6846700).*
2. Hard-wire the panel to AC power. Refer to section 3.2 of the WDMP sc user manual for wiring instructions.
3. Hard-wire the sc1000 (section 3.1 through 3.3 of the sc1000 manual) to AC power and connect the controller data cable to the junction box on the panel.
4. Orient the drain manifold so the outlet drains down. Connect the three drain tubes. **Do not supply water to the panel.** Make sure the sample flowing into the WDMP sc has pressure greater than 20 psi. For sample pressure greater than the maximum

specified pressure (125 psi), use the optional pressure regulator (Cat. No. 6846600) to bring the sample pressure back to an acceptable range for the WDMP sc panel.

5. Connect the conductivity probe to the junction box with the cable provided.
6. Apply power to the WDMP sc and the sc1000 controller (section 3.4 of the sc1000 user manual, DOC023.54.03260). The sc1000 controller will search for the devices.
7. Access the menu on the controller by pressing the touchscreen interface ([Figure 2](#)). Press the menu key to access the display and set-up options on the controller. Set the time and date on the sc1000 controller. The controller may reboot. Refer to the sc1000 user manual for detailed information about data logging. The sc1000 will hold approximately 26 days of data with all six parameters logging once a minute. See section 5.1.7 of the sc1000 user manual for details about display settings.



Figure 2 sc1000 menu icon

8. Prepare the probes for operation:
 - a. Remove the pH probe from its secured position and remove the plastic cap from the end of the probe. Ensure the O-ring is in place on the adapter fitting. Return the probe to the manifold.
 - b. Configure each probe with the sc1000. Refer to the digital probe manual provided with each probe for configuration instructions.
9. Use the calibration solutions, calibration cylinder and beaker provided to calibrate the 1720E turbidity sensor and the pH and conductivity probes. Refer to each probe manual (included) for calibration instructions. [Figure 3](#) shows the sc1000 controller calibration menu options for the pH probe.
10. Prepare the CL17 for operation:
 - a. Prepare and install the reagents ([Figure 4](#)), stir magnet and pinch plate. See the CL17 user manual (Cat. No. 5440018) for detailed instructions.
 - b. Prime the CL17 Chlorine Analyzer reagents according to the instructions in the CL17 user manual.
11. Supply water to the panel by opening the valve on the lower right corner.
12. Allow a minimum of two hours for instrument stabilization.

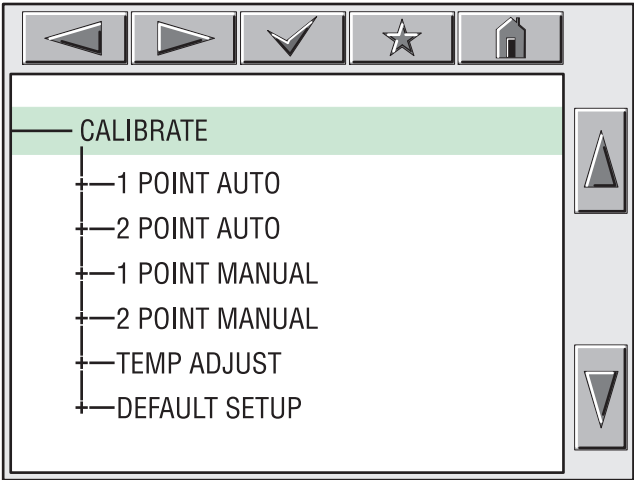


Figure 3 sc1000 controller—pH probe calibration screen

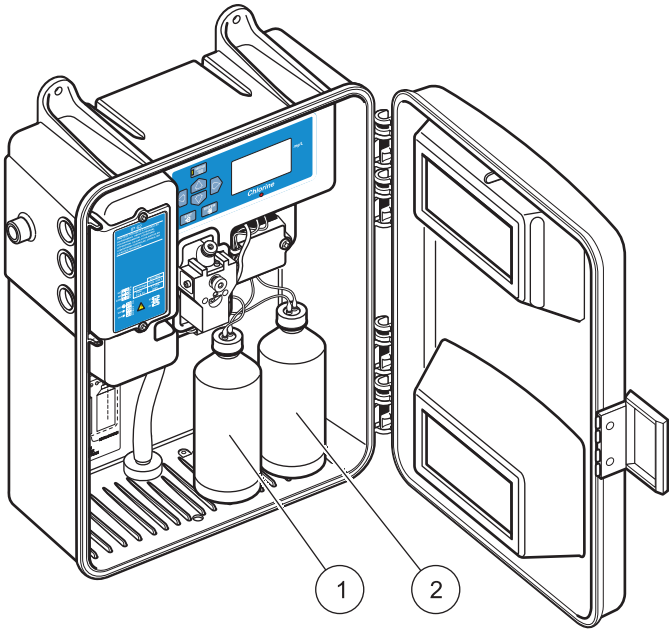


Figure 4 CL17 reagent location

1	Buffer solution	2	Indicator solution
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sc1000 Sensor installation procedure

To install the sc1000 sensors, do the following:

1. On the sc1000, touch the bottom of the screen, then touch the Menu icon at the bottom left of the screen.
2. Touch System Setup, then touch the green check.
3. Touch Device Management, then touch the green check.
4. Touch Delete Devices, then touch the green check.
5. Select all devices, then touch the green check.
6. Touch Scanning for New Devices, then touch the green check.
7. Touch Back until you see the main display screen.

For GuardianBlue systems, refer to Appendix C in the GuardianBlue manual for setting up the sc1000 telegram for communication to the GuardianBlue Event Monitor.

Technical Support

For maintenance and troubleshooting support for the WDMP sc, refer to the WDMP sc manual or call 1-800-604-3493 and press option 3.



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:

In the U.S.A. – Call toll-free 800-227-4224

Outside the U.S.A. – Contact the HACH office or distributor serving you.

On the Worldwide Web – www.hach.com; E-mail – techhelp@hach.com

HACH COMPANY

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