

**INSTALLATION & USE MANUAL** 

SWIRLFLO® Refrigerated fountains with FLEXI-GUARD® and ezH2O<sup>®</sup> Bottle Filler



RESTROOMDIRECT 🚯

704.937.2673

1000002504 (Rev. F - 03/19)



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WWW.RESTROOMDIRECT.COM 704•93

704•937•2673 129 Oakpark Dr., Unit A, Mooresville, NC 28115



Figure 2 - EZWS-ERPB Tube Routing



Figure 3 - LZWS-LRPB Tube Routing

## REQUIRED TOOLS AND MATERIALS

These tables show special tools and/or additional materials (not provided) which are necessary to complete installation of these units:

Special Tools				
ltem	Description	Quantity		
	NONE			

Additional	Materials	Not Included
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ltem	Description	Quantity
1	Unplated copper inlet pipe	1
2	Service Stop/Shut-off Valve	1
3	90° 1-1/4" Drain Line	1
4	1-1/4" Tee Drain Line	1

1. **Make water supply connections.** Install a shut-off valve and union connection to building water supply (valve and union not provided). Turn on water supply and flush the line thoroughly.

**Caution:** DO NOT SOLDER tubes inserted into the strainer or filter head as damage to the o-rings may result.

- 2. Install mounting frame (instructions supplied with mounting frame.
- 3. (For EZWS-ERPBM8K) Install the strainer on the inlet tube of the chiller. Install 1/4" x 1/4" x 3/8" tee on outlet tube of the chiller per (Fig. 2).
- 4. (For LZWS-LRPBM8K) Install the filter head to the bracket then install bracket to side of chiller (Fig. 9). Next install filter to filter head and plumb from filter outlet to the chiller inlet with 1/4" poly tubing and 1/4" x 1/4" union per (Fig. 3).
- 4a. Install chiller on shelf, install 1/4" X 1/4" x 3/8" Tee on chiller outlet tube. With the back panel standing close to the frame, connect the 3/8" poly tube coming from the bottle filler to the tee (Fig. 3).

**Note:** Building construction must allow for adequate air flow on both sides, top & back of chiller. A minimum of 4" (102 mm) on both sides & top is required. See chiller installation for additional instructions.

5. Hang main panel on mounting frame hanger. Plug bottle filler into

wall box receptacle. Make sure the power cord, reset switch wire & poly tube do not get pinched between the panel & mounting frame. Ensure the panel engages at the top. Align fountain holes with mounting frame holes.

6. Remove protective coating from main panel.

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 Install reset switch for bottle filler (Fig. 4A). Snap the switch into position after locating wires through slot. Wrap up the excess cord.

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## Figure 4 - Fountain Installation



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- 8. Install fountains with (4) 5/16-18 HHMS, (4) 5/16-18 nuts & (2) support brackets (provided) (Fig. 4). Connect the ¼" water line from fountain to the remaining opening on the tee at the remote chiller (cut lines to fit as needed), (Test fit refrigerated panel to make sure there is a tight joint between it & the main panel before fully tightening mounting screws.)
- 9. Attach waste tubes (1-1/4" O.D.) to 1-1/4" O.D. slip trap. Trap on the bottle filler side must be 1-1/2" O.D. (provided by others).
- 10. Make final water supply connections.
- 11. These products are designed to operate on 20-105 PSI supply line pressure. If inlet pressure is above 105 PSI, a pressure regulator must be installed in the supply line. (Caution: Any damage caused by connecting these products to a supply line with pressure lower than 20 PSI or higher than 105 PSI IS NOT covered under warranty.)
- 12. **Make electrical connections** to the bottle filler and remote chiller. The LCD Bottle counter should illiminate.
- 13. Verify proper dispensing from the bottle filler by placing a cup, hand or any opaque object in front of sensor area and verify water dispenses. Note: the first initial dispenses might have air in the line which may cause a sputter. This will be eliminated once all air is purged from the line. A steady stream of water assures all air is removed. The sensor has a 20 second maximum ON time. It may be necessary to step away from the beam a few times to purge all air. Check for leaks.
- 14. Check stream height from bubbler. Stream height is factory set for 35 PSI supply. If supply pressure varies greatly from this, remove push button (Item 7 Fig. 8) and adjust the screw on the regulator (Item 8 Fig. 8). To remove push but ton, remove setscrew from bottom of sleeve (Item 21). Insert a small punch in screw hole and push up while grasping the push button and pull forward removing the push button. Clock wise adjustment will raise stream height and counterclockwise movement will lower stream height. For best adjustment stream should hit basin approximately 6-1/2" from the bubbler. Reassemble the push button by pushing in on button until the push button catches in the sleeve. Reinstall the setscrew (Item 21) in the sleeve (Item 6).

#### 15. Install the cover plate.

16. Install the bottom panel, tighten screws (Fig. 5).



## Figure 6 - Flexi-Guard Bubbler Detail

#### NOTE:

When installing replacement bubbler and pedestal tighten locknut only to hold parts snug in position. **Do Not over-**tighten.



Figure 7 - Fountain Body Assembly



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## BF11 - BF12 PROGRAM SETTING THE CONTROL BOARD

#### VERIFY CONTROL BOARD SOFTWARE

- To verify the software program of the control board the unit will need to be shut down and restarted. The chiller (if present) does not need to be shut down and restarted.
- 2) Shut down the unit by unplugging the power cord from the wall outlet or switching off the circuit breader to the unit..
- Restart the unit by plugging the power cord back into the wall outlet or by switching on the circuit breaker to the unit.
- 4) Upon start up, the bottle count display will show the software designation of BF11 or BF12.

#### ACCESSING THE PROGRAMMING BUTTON

1) To access the program button, remove #8-32 screw, pull back cover plate on fountain arm (Fig. 4A). Reset button is located above fountain arm.

#### **RESET THE FILTER MONITOR**

- 1) Instructions apply to filtered units only.
- Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:

"RST FLTR" – Reset Filter Monitor

"SETTINGS" – System Settings Sub Menu

If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.

- 3) When the display changes to "RST FLTR", depress the button again. The display will change to show "FLTR =". Depress the button again and the display will show "FLTR =0"
- 4) The Green LED should be illuminated indicating that the visual filter monitor has been reset.

#### SETTING RANGE OF THE IR SENSOR WHERE APPLICABLE

 Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:

"RST FLTR" – Reset Filter Status LED

"SETTINGS" – System Settings Sub Menu

If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.

- When the display changes to "SETTINGS", depress the button again. The display will change to show "RNG SET" - Range set for IR sensor.
  - "UNIT TYP" Type of unit (REFRIG or NON-RFRG)
  - "FLT SIZE" Select filter capacity
  - "RST BCNT" Reset bottle count
- When display shows "RNG SET" push program button once the display will show current value (can be 1 – 10) e.g. "RNG = 3".
- 4) Once display shows current value push the program button to scroll through value of 1 – 10. Select the desired range setting, "1" being closest to sensor and "10" being farthest away.
- 5) Once range is selected allow approximately 4 seconds to pass and then the display will go back to bottle counter and be in run mode.
- Test bottle filler by placing bottle or hand in front of sensor to make sure water is dispensed.

#### SETTING UNIT TYPE

 Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:

"RST FLTR" – Reset Filter Status LED

"SETTINGS" – System Settings Sub Menu

If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.

2) When the display changes to "SETTINGS", depress the button again.

The display will change to show

"RNG SET" - Range set for IR sensor.

"UNIT TYP" - Type of unit (REFRIG or NON-RFRG)

- "FLT SIZE" Select filter capacity
- "RST BCNT" Reset bottle count

Continued from below:

- When display shows "UNIT TYPE" push program button once the display will show current value. Can be REFRIG or NON-RFRG
- 4) Push button once to change value. Once value is selected the display will show the new value. (Can be REFRIG or NON-RFRG)
  "REFRIG" - stands for refrigerated product. In this setting the flow rate is estimated at 1.0 gallon per minute.

"NON-RFRG" - stands for nonrefrigerated product. In this setting the flow rate is estimated at 1.5 gallons per minute. Both "REFRIG" and "NON-RFRG" simulate 1 bottle equal to 20 oz.

5) Allow approximately 4 seconds to pass and the display will return to bottle counter and be in run mode.

#### **RESETTING BOTTLE COUNT**

- Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:
  - "RST FLTR" Reset Filter Status LED
  - "SETTINGS" System Settings Sub Menu

If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.

2) When the display changes to "SETTINGS", depress the button again. The display will change to show:

"RNG SET"- Range set for IR sensor.

"UNIT TYP" - Type of unit (REFRIG or NON-RFRG)

"FLT SIZE" - Select filter capacity

"RST BCNT" - Reset bottle count

If the button is not pushed again the display will scroll through the four messages above for three cycles and return to run mode.

- When display shows "RST BCNT" push program button once the display will show current value, e.g. "0033183".
- 4) Once display shows current value push the program button once more to reset back to 0. The display will show BTLCT = 0 for approximately 2 seconds and then return to run mode showing 00000000 bottles. NOTE: Once the bottle count is reset to zero there is no way to return to the previous bottle count.
- 5) Testing the bottle counter:
- REFRIG units: Place bottle or hand in front of sensor for approximately 9 seconds to see bottle counter count 00000001, (This is based on filling a 20 oz. bottle). NON-RFRG units: Place bottle or hand in front of sensor for

approximately 6 seconds to see bottle counter count 00000001, (This is based on filling a 20 oz bottle).

#### SETTING FILTER CAPACITY

- Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:
  - "RST FLTR" Reset Filter Status LED
  - "SETTINGS" System Settings Sub Menu

If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.

- 2) When the display changes to "SETTINGS", depress the button again. The display will change to show:
  - "RNG SET"- Range set for IR sensor.
  - "UNIT TYP" Type of unit (REFRIG or NON-RFRG)
  - "FLT SIZE" Select filter capacity
  - "RST BCNT" Reset bottle count

If the button is not pushed again the display will scroll through the four messages above for three cycles and return to run mode.

- When display shows "FLT SIZE" push program button once. The display will show current value. Can be 3000GAL or 6000GAL.
- 4) Push program button again to display the desired "FLT SIZE".
- 5) Allow approximately 4 seconds to pass and the display will return to bottle counter and be in run mode.

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Figure 12 – Water Supply Connections

PARTS LIST		
ITEM NO.	PART NO.	DESCRIPTION
1	56073C	Kit - Bubbler Assy
2	28708C	Basin - Swirlflow
3	28473C	Lower Shell
4	45767C	Fountain Body
5	28343C	Cover Plate
6	45781C	Sleeve
7	98871C	Kit - Swirlflo Pushbutton/Spring
8	98530C	Kit - Regulator/Spring/Nut
9	56163C	Gasket - Drain
10	000000930	Assy - Drain/Tailpipe
11	45768C	Drain - Plug 1-1/2"
12	56092C	Poly Tubing (Cut To Length)
13	99003C	Reset Switch
14	55996C	Strainer (Provided with Chiller)
15	0000001144	Tee - 1/4 x 1/4 x 3/8
16	26833C	Lower Panel
17	111008343890	Screw - #10-24 x .62 HHSM
18	70432C	Screw - #8-32 x .38 THSM
19	38417001	Screw - #8-18 x .37 HHSM
20	75560C	Screw - 5/16-18 x 1.00 HHMS
21	75632C	Setscrew - #10-32 x .38
22	70817C	Fitting - Elbow 1/4 x 1/4
23	111577343890	Nut - Serrated Hex 5/16-18
24	28395C	Bracket - Support
25	70683C	Fitting - Union 1/4 x 1/4

## BOTTLE FILLER REPLACEMENT PART KITS

ITEM NO.	PART NO.	DESCRIPTION
26 27 28 29 30	98543C 98544C 98545C 98546C 98546C 98549C	Kit - Electrical Package Kit - EE Sensor Kit - Solenoid Valve Replacement Kit - Aerator Replacement Kit - Hardware & Waterway Parts



Note: Screw the locknut hand tight to seal

Figure 13

# **Installation Package**

The components for installation are packed in three separate boxes, regardless of the type of unit being installed. The boxes contain the following:

Box No. 1: Wall Frame(s) Box No. 2: Remote Chiller, ECH8 Box No. 3: Fountain(s), Arm(s) and Panels

Additional materials, as noted in the Parts List, are also shipped in these boxes.

## **TROUBLESHOOTING & MAINTENANCE**

Orifice Assembly: Mineral deposits on orifice can cause water flow to spurt or not regulate. Mineral deposits may be removed from the orifice by poking with a small round file not over 1/8" diameter, or using a small diameter wire.



material

**Stream Regulator:** If orifice is clean, regulate flow as in Step 14 of the installation instructions. If replacement is necessary, see parts list for correct regulator part number.

Actuation of Quick Connect Water Fittings: Cooler is provided with lead-free connectors which utilize an o-ring water seal. To remove tubing from the fitting, relieve water pressure, push in on the gray collar while pulling on the tubing. (See Fig. 14) To insert tubing, push tube straight into fitting until it reaches a positive stop (approximately 3/4").

## OPERATION OF QUICK CONNECT FITTINGS



PUSHING TUBE IN BEFORE PULLING IT OUT HELPS TO RELEASE TUBE

Figure 14 – Quick Connect Fittings

FOR PARTS, CONTACT YOUR LOCAL DISTRIBUTOR OR CALL 1.800.834.4816 REPAIR SERVICE INFORMATION TOLL FREE NUMBER 1.800.260.6640

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