## SCALE BLASTER®

The healthy alternative to water softeners

# **SB-75**Installation & Operation Manual





Residential Use • Indoor Installation

#### **IDENTIFY THE SB-75 COMPONENTS**

Your new ScaleBlaster SB-75 unit includes the following components:

- 1.) One (1) SB-75 power unit (for indoor installations only)
- 2.) One (1) AC adapter 120 volt class, UL approved transformer with 5volt DC output, use only Clearwater Enviro Tech part # CET-0978
- 3.) Signal Cable (46') and four (4) nylon cable ties
- 4.) Warranty Card
- 5.) Extended Warranty Card
- 6.) Installation & operation manual











#### - For indoor use only -

The ScaleBlaster unit can be installed on a horizontal or vertical Copper, PVC, CPVC and/or PEX pipe.

If a magnet will stick to your incoming water line, you have galvanized pipe. In this case, you will need to replace a small section of pipe, about 10-11 inches, with either pvc or copper pipe.









#### **Before You Start Installing**

#### Finding The Main Cold Water Pipe

The water shutoff valve is on the main cold water pipe. Install the **ScaleBlaster** unit on this pipe as close to where it comes into the house as possible. This will ensure that the outside spigots and kitchen are being treated.

#### Well Water Installation

For customers that are on a private well, the best place to install the **ScaleBlaster** unit is after the well's pressure tank. If that is not possible, the **ScaleBlaster** unit can be installed prior to the pressure tank.

#### **Softener Loop**

The **ScaleBlaster** unit can be installed on a softener loop. Installing on a softener loop gives treatment to all of the water that a softener would treat. Water to the kitchen faucet and outside spigots may not be treated when the **ScaleBlaster** unit is installed this way.

#### Find The Pipe Size

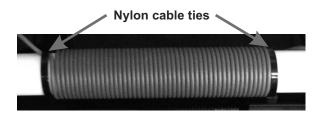
If you do not know the actual pipe size, place a ruler in front of the pipe and measure the outside diameter. Use **Table 1** to determine the size of the pipe. The actual pipe size is always rated by the inside dimensions of the pipe.

Tabl	e 1

COPPER PVC, CPVC & P		C & PEX	
Outside Diameter	Actual Size	Outside Diameter	Actual Size
5/8"	1/2"	.84"	1/2"
7/8"	3/4"	1.05"	3/4"
1 1/8"	1"	1.315"	1"
1 3/8"	1 1/4"	1.660"	1 1/4"
1 5/8"	1 1/2"	1.900"	1 1/2"
2 1/8"	2"	2.375"	2"

#### A Tight Wrap Is Very Important

It is extremely important to the effectiveness of your **ScaleBlaster** unit that the signal cable wire be wrapped correctly. If there are any gaps between the wraps, your **ScaleBlaster** unit will not work to its full capacity.



Example of a properly wrapped pipe. No gaps or loose wire wrappings allowed! See chart on pages 6 & 7 to wrap the coil and to determine the proper number of wraps.

#### LOCATION OF THE SB-75 UNIT

- 1.) The most desirable place to install the unit is on the main water line that enters the house.
- 2.) The power unit should be mounted on a wall or other solid surface within five feet from an electrical outlet and within ten feet from where the pipe will be wrapped.
- 3.) Once the main water inlet pipe to the house is located, identify a section of pipe that is at least 12 inches straight and at least two feet away from any major electrical interference, example an electric motor.

#### Installs on the incoming water supply line



signal cable as far away as possible from tees, elbows, couplings, valves and any curved pipe.

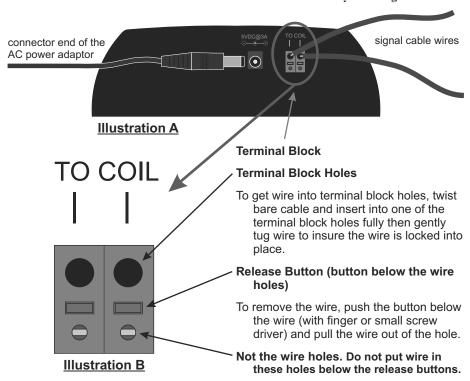
#### MOUNTING THE POWER UNIT

The unit must be mounted indoors in an upright vertical position on a wall or other non-enclosed area. The picture below shows the location of the mounting holes. The installer must supply the mounting screws for the type of surface the unit will be mounted on. (We recommended a number 8 screw.)



#### INSTALLING THE SIGNAL CABLE

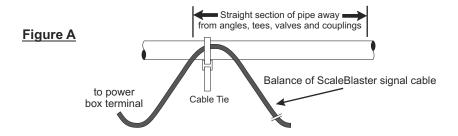
Bottom of unit in detail. This is where the power supply gets plugged in and the signal cable wires are inserted. Make sure the two bare wires do not short out by touching each other.



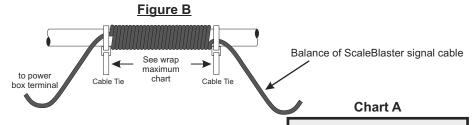
## Wrapping the pipe with the ScaleBlaster Signal Cable

#### PVC, CPVC, or PEX PIPE INSTRUCTIONS

- 1.) Fully insert the pre-stripped end of the signal cable into one of the two signal terminal block holes, then gently tug the wire to insure it is locked into place. (See **Illustration B** on page 5)
- 2.) Route the signal cable to the inlet pipe. Hold cable parallel and next to the pipe.
- 3.) Wrap one of the cable ties tightly so that the signal cable is secured to the pipe. (Figure A)



- 4.) Wrap the loose end of the signal cable securely around the pipe in any one direction the proper number of turns as noted in **Chart A.**
- 5.) Make sure the wraps are flush against one another, wrapped tightly and not overlapping. Continue until you reach the recommended number of wraps.
- 6.) Wrap a second cable tie at the end of the wrappings securing the signal cable tightly. (Figure B)



- Route the loose end of the signal cable back to the power box. Trim excess cable to length.
- 8.) Carefully strip the outer plastic shield from the end of the signal cable leaving 1/4" to 3/8" of bare cable. Twist the bare cable and insert the end in the other terminal block hole on the power box then gently tug the wire to insure it is locked into place. (see **Illustration B** on page 5)
- NOTE To remove the wire, push the button below the wire (with finger or small screw driver) and pull the wire out of the hole.

Never under wrap or over wrap the coil.

### Wrap Requirement PVC or PEX pipe\*

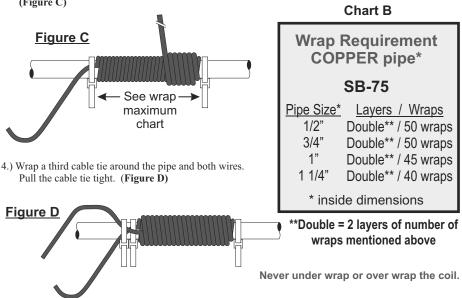
# SB-75 Pipe Size\* 1/2" Layers / Wraps 3/4" Single / 70 wraps 1" Single / 57 wraps 1 1/4" Single / 50 wraps \* inside dimensions

\*\*Double = 2 layers of number of wraps mentioned above

#### COPPER PIPE INSTRUCTIONS

- 1.) Follow the same instructions in steps 1-6 for PVC, CPVC and PEX pipe. Use Chart B for Copper
- 2.) Instead of a single coil wrapping around the pipe, a second one is added for copper pipe.
- 3.) YOU MUST KEEP THE SECOND WRAPPING IN THE SAME DIRECTION AS THE FIRST! Wrap right over the top of the first layer continuing in the same wrapping direction as the first layer clockwise or counterclockwise. This second layer must also be tight and touching the prior wrap.

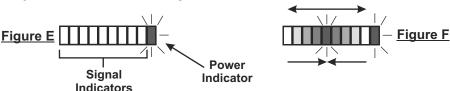
  (Figure C)



5.) Follow same instructions in steps 7-8 for PVC, CPVC and PEX pipe.

#### **ACTIVATING THE SYSTEM**

- Once the power unit has been installed and the pipe has been wrapped, insert the connector end of the AC power adaptor into the power unit. (See Illustration A on page 5)
- 2.) Plug in the transformer end of the cord into a 110-volt electrical outlet.
- 3.) Operation of the ScaleBlaster SB-75 system can be confirmed by observing the illumination of the LED indicator located on the face of the power unit. Power on - green light on far right side will stay lit (Figure E). When pipe is wrapped and unit is turned on the far right light will stay lit and the other lights will oscillate back and forth (Figure F).



#### **MAINTENANCE**

The best feature of the ScaleBlaster SB-75 is that there is NO MAINTENANCE REQUIRED. No salt, batteries, moving parts or costly repairs. Just check the LED light for proper operation.

#### WARRANTY & EXTENDED WARRANTY

This unit comes with a 3 year warranty to be free from defects in material and workmanship under normal use from the date of purchase. A 2 year extended warranty is available on this unit at a very minimal cost.

#### 120-DAY MONEY-BACK GUARANTEE

We are so sure you will be satisfied with **ScaleBlaster**, we are offering a 120-day money back guarantee from the date of purchase if you are not 100% satisfied with the product.

#### ENJOYING THE SCALEBLASTER SYSTEM

There is no maintenance with the **ScaleBlaster** unit itself! No bags of salt to haul around, wasted water or batteries to change. Best of all, you are protecting the environment!

Allow up to 90 days to realize the full effects. Initial descaling may make things worse for awhile, especially in the dishwasher and aerators. This is normal! Simply clean out the screens or aerators. With dishwashers, we recommend cutting back on soap usage (unless you have been using a water softener). In July of 2010, manufacturers of dishwasher soap detergents cut back on phosphates - resulting in an increase in spotting and cloudiness. We recommend using *Cascade Action Pacs with Dawn or Cascade Allin-one Action Pacs* for best cleaning results. Another product that works best is *Lemi Shine*. You may also add white vinegar in the rinse cycle.

After the first 90 days, we strongly recommend you drain out your water heater. You will be amazed at what **ScaleBlaster** has cleaned out of your pipes!



The healthy alternative to water softeners

Commercial & industrial models available for pipes up to 40"

#### Manufactured by

File No. E232081



BULDING COUNCE





Established 1989

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