

**Unit Installation:**

With the exception of characteristics for the manual features or automatic filter systems with the BBController, the installation procedure is the same for the BB500, BB600, BB900, and BB1000.

**1. The mounting space.**

theBlackBox Series Filtration Units will comfortably fit in a 3' x 4' area. If you use the BBController, 4' x 4' is comfortable for installation.

**2. BB filtration system - found in Box 1**

The core of theBlackBox filtration systems comes assembled to an Anchor Plate (AP), 26" or 27", depending on your installed system.

This plate can be mounted to a flat wood or concrete surface or a raised rail frame. Holes for screw and anchor locations are prelocated in the 1/4" ABS panel top and sides. Use your choice of mounting screws or bolts according to your mounting surface.

The Lower Support Bracket (LSB) secures plumbing connections for the Clean and Dirty Discharge ports and has the same prelocated holes as the Anchor Plate. Insert the bulkhead at the bottom of the discharge tubes and secure them with the plastic bolt. Connect the Union connectors as shown. This will locate the anchor points for the LSB to be screwed onto the mounting surface.

**3: Locate the 10" Filter Chamber Assemblies - found in Box 3**

**BB500/600 - Box 3a & 3b - 10" filters, Lower Tank, 2.75" - 2" PVC tube, O-ring**

- a. Insert the 10" filters into the chamber heads mounted in the upper assembly.
- b. Insert the 2.75" - 2" PVC tubes into the lower tanks.
- c. Place the rubber gasket in the space 3/4" inside the top of the lower tank. Slip the lower tanks over the filters and thread them onto the chamber heads.

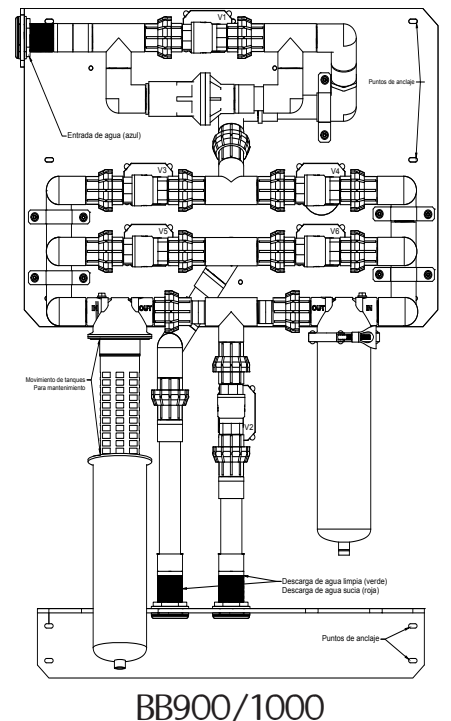
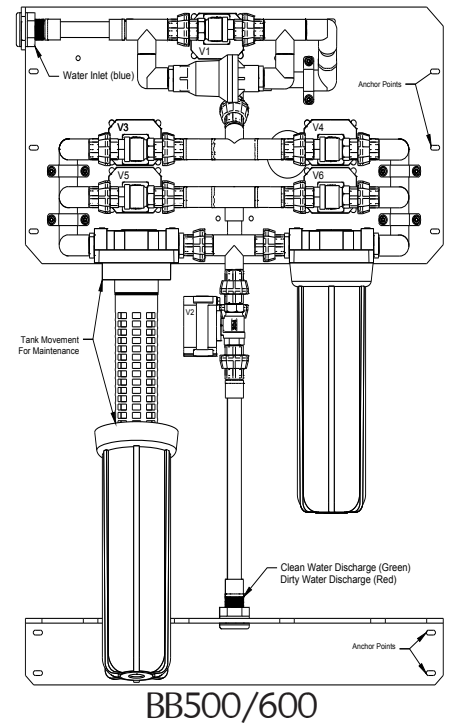
**For the BB900/1000 - Box 3a & 3b - 10" filters, Lower Tank, White Rubber Gasket, Locking Bracket**

- a. Insert the 10" filters into the chamber heads mounted in the upper assembly.
- b. Placing the rubber gasket between the upper head and lower tank, slip the lower tanks over the filters. Secure these with the metal bracket.

**4. Entry and Discharge Points**

With the unit firmly mounted, connect the water line and discharge points. The BLUE port on the top left corner is the water inlet. The GREEN discharge port is your clean water outlet. The RED discharge port is not for consumption and connects to a disposable water location.

Turn on the water. Water leaving the GREEN discharge port is filtered, 99.9999%, clean water.



## BBController Box - found in Box 2

The BBController operates the automatic valves of the BB600 and BB1000 during their back-flush cycle.

**Step 1:** Attach the Brackets – **Found in BBController Box** – to the four corners on the back of the controller.

**Step 2:** Locate the box within 2 feet of the center of your filter system.

This can be to the left, right, or above the center of the Anchor Plate. The cable length from the automated valves is nominally 3.5 feet and will determine the proximity of the controller to the filtration system.

Be aware of your nearest 110v power source or the cable run needed for the 10-watt solar panel, as the length of the cabling may determine the location of your filtration unit. While the BBController is battery-powered, the battery charges using the 1 amp Wall Plug – **Found in BBController Box**, the 10-watt solar panel – **Found in Box 4**, both provided. Connect the preferred charging method to the bottom of the port of the BBController Box

**Step 3:** Connect the Valve cables.

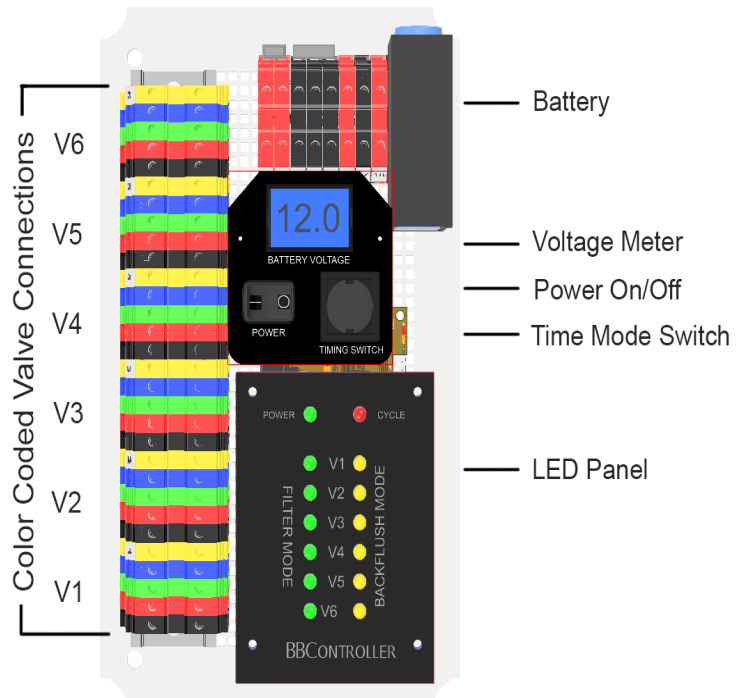
- Remove the controller plate screws and locate the controller's colored din strip for easier access. (The charge input wires will limit how far the controller electronics will lift out.)
- Run the cable wires through the lower cable glands. **Secure the wire sets to their respective valve number and matching wire color.**
- Relocate and secure the controller plate.

**Step 4:** Turn on the system. The controller will initiate a back-flush cycle when power is activated. This action also starts the system clock. The controller will initiate a back-flush cycle depending on the time setting chosen with the TIME MODE SWITCH. In the left position is the shorter time. The default programming is 12 or 24 hours. AThis can be modified as needed

The GREEN Power LED indicator will flash.  
The RED cycle LED indicator will activate.  
The valves will change their orientation, as shown by the change from the GREEN LEDs to the YELLOW LEDs.

The back-flush cycle is 5 minutes. Once completed, the Diagnostic panel will show all GREEN LEDs, and all valves are in filter mode.

**Visit the Better Things website  
for more information about  
theBlackBox Series point-of-use clean  
water filtration systems.**



[betterthingsllc.com](http://betterthingsllc.com); [blackboxseries.com/downloads](http://blackboxseries.com/downloads)