

RAIN HARVESTING
by Blue Mountain Co

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RAIN HARVESTING
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Wet-Dry Valve



Installation and Specification Guide

PRODUCT DETAILS

Automatically drain your charged lines after it rains using our wet-dry valve to prevent problems with tannin leaching and anaerobic fermentation.

DRYV01 100mm
DRYV101 4"

FEATURES AND BENEFITS

- For wet Rain Harvesting systems, the wet-dry valve makes draining charged-lines (water-filled pipes) easy
- The valve's drain size allows for efficient draining and minimises the risk of clogging
- The wet-dry valve's electronic auto-release timer allows you to set the frequency at which your charged lines are drained

Installation

WHAT'S IN THE BOX?

- 100mm (4") Multi-fit Threaded Coupling
- Transparent, Rapid Release Exit Funnel
- Advanced Release Valve
- Primary Filter Screen

TOOLS/MATERIALS YOU MAY REQUIRE

- 100mm pipe (for extension to valve location)
- 100mm T-junction
- 100mm various fittings (for extension to valve location)
- Tape Measure
- Marker pen
- Saw
- Solvent weld glue
- Bedding sand or similar
- 2 new 1.5 volt AAA batteries
- Stormwater / rainwater pit

WET-DRY VALVE

1. Select an installation point for your Wet-Dry valve. This should be at the lowest point in your wet or "charged" system. Your wet-dry valve and pipe work should be installed on a slope to ensure it drains correctly. The valve must also be accessible for maintenance and inspection. This may be achieved by running pipe to a location above ground or installing in an access pit (e.g. stormwater pit).
2. Using an appropriately sized T-junction, as a template, measure the pipes at your chosen installation point and cut to create space for the T-junction. If the lowest system point is located at the existing 90 degree bend in the pipe that feeds your tank, the T-junction can be used in place of the existing 90 degree bend to direct water vertically to the tank. Otherwise the T-junction can be installed in your existing horizontal pipework. Whichever installation option you choose, ensure all cut edges are clean and smooth.
3. Install the T-junction using solvent weld glue.
4. If termination is below ground level, extend outlet of T-junction to nearest stormwater pit and through pit wall. If outlet is to be terminated above ground, extend outlet of the T-junction to the sloping ground where pipe work becomes accessible.
5. Using solvent weld glue, attach the 100mm-90mm (4"-3") socket reducer to the end of pipe. Ensure the tapered section of the coupling faces up to allow all water to escape when draining.
6. Install the Primary Filter Screen, Transparent Rapid Release Exit Funnel, and Advanced Release Valve by following the instructions in Figure 1.

Figure 1

Installing and setting up the Advanced Release Valve

- 1a. Insert the Primary Filter into the end of the pipe. It should fit snugly into the socket on the end of the pipe.



- 1b. Install the Transparent Rapid Release Exit Funnel, ensuring the o-ring is seated correctly. It should be screwed up firmly to compress the o-ring.



- 1c. Attach the Advanced Release Valve by first installing the 25mm x 20mm (1" x 3/4") reducing adaptor and washer to the 25mm (1") thread of the screw cap.



- 1d. Remove the union from the valve and attach to the reducing adaptor with 20mm (3/4") washer in place.



1e. Attach the valve at the union and orientate dial for easy access.



1f. Remove the waterproof cover from the Advanced Release Valve.



1g. Ensure the reset interval and drain time control knobs are in the "RESET" and "CLOSED" positions. Carefully slide out the battery box and install two new 1.5-volt AAA batteries.



1h. Test the unit by turning the drain time knob to the "OPEN" position. You should hear the sound of the motor within 5 seconds. Turn the drain time knob back to the "CLOSED" position ready for setting.

NOTE: If you do not hear the sound of the motor, check that the batteries are installed correctly.



1i. Ensure that the reset interval and drain time knobs are in the "RESET" and "CLOSED" positions. Set your reset interval and drain time according to the tables in Figure 2, then replace the battery box cover.

NOTE: A long reset interval will mean that the wet system pipe empties less frequently. A short reset interval will mean that the wet system pipe empties more frequently.

Figure 2
Advance Release Valve Reset and Drain Time Settings

NOTE: The first time you program the Advance Release Valve it will not begin to operate until after a time delay equal to the setting of the reset interval knob you select. The Advance Release Valve starts to keep time when you set it. It is important that you set the timer at the hour you want it to operate. For example, if you want the Advance Release Valve to operate at 07:00AM, you must physically set it at 07:00AM.

| Suggested Reset Setting | Pollution Level | Recommended drain time setting | | |
|-------------------------|-----------------|----------------------------------|-----------|-------------|
| | | Approx. First Flush chamber size | | |
| 1 day | Very high | 5 minutes | 20 litres | 5.3 gallons |
| 2 days | Very high | 10 | 40 | 10 |
| 3 days | High | 20 | 80 | 20 |
| 4 days | Medium | 30 | 120 | 30 |
| 5 days | Medium | 45 | 180 | 50 |
| 1 week | Low | 60 | 240 | 60 |
| 2 weeks | Very Low | 75 | 300 | 80 |
| 4 weeks | Very Low | 100 | 400 | 100 |
| | | 125 | 500 | 130 |
| | | 150 | 600 | 160 |

MAINTENANCE

It's important to ensure that your wet-dry valve outlet remains clear of any debris. If your outlet becomes blocked, the chamber will not empty and the wet system will not drain down.

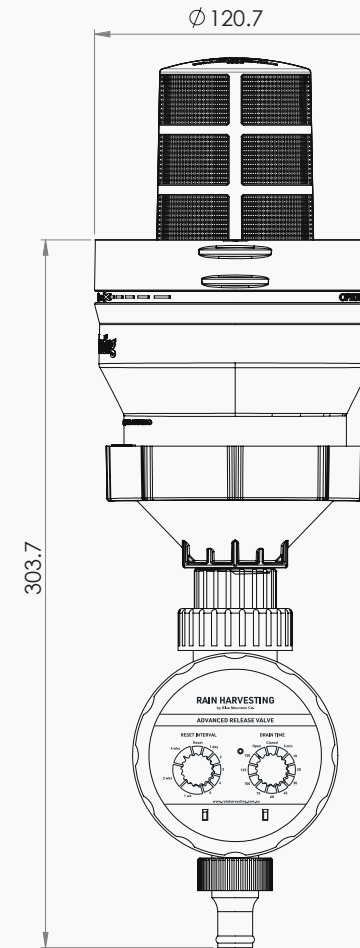
To ensure the flow of water out through your wet-dry valves outlet, periodically remove the transparent rapid release exit funnel to check for any build-up of matter (Remove primary filter and clean if required).

Periodically check that the wet-dry valve batteries have charge. This is indicated by the flashing light.

To protect your wet-dry valve from freezing or "winterising", remove the timer prior to the first frost or freeze and store it indoors until spring. Remember to remove the batteries from the battery compartment.

For best results and minimal maintenance, we recommend installing rain heads such as our Leaf Eater rain heads on all your downpipes to limit the volume and number of leaves and debris that reach your wet system and wet-dry valve.

PRODUCT DIMENSIONS



Pipe Fitment

| | | |
|---------|------------------|----------------------|
| DRYV01 | DN100 F | Fits over 100mm pipe |
| DRYV101 | 4" SCH40 / SDR35 | Fits over 4" pipe |

ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED.