AQUA CONTAMINATED WATER DIVERTER - MANUAL

Also known as the First Flush Diverter. Ensures your tank water is kept pure and free of sludge and debris.

DESCRIPTION

• The Contaminated Water Diverter (CWD) is a manual pre-tank filter – a first flush diverter

WHY DO I NEED IT?

• Over time a house’s guttering accumulates a lot of debris – dirt, leaf material, loose bird faecal matter etc. – when it rains that is all washed into your water tank.

• The Manual Contaminated Water Diverter Tank system prevents this material entering and contaminating your water tank by temporarily disconnecting the roof from your water tank. The contaminated water is siphoned off and goes to waste.

• It makes sense to prevent debris getting into your water tank – it saves on cleaning and maintenance, and means quality water from any tap in your home.

HOW DOES THE CWD WORK?

• There are two ways water gets from the roof of your house to your water tank. The first is a siphon system – the pipe work goes below ground then up into your water tank. The second is a direct system – the guttering pipe work runs from the roof overhead and straight into your water tank.

• The CWD can be connected to any water tank system preventing all those “gutter nasties” from getting into your drinking water. It can even be adapted to fit underground water tanks.

• In simple terms, when the CWD is in “flush mode”, the head of water between the water tank and the in-line filter, rushes down the downpipe. This rinses the in-line filter and drops all dirt and debris into the bottom of the sediment tank. This is then vacuumed out to waste by opening a slide valve.

• It’s simple, it saves on maintenance and cleaning and it gives great tasting water, making contaminated water a thing of the past.

FEATURES

• Manual open & close function (great when cleaning the roof).
• Self-rinsing in-line filter.
• Maintain with ease and upkeep is minimal.
• Can be fitted to both Syphon and Direct set ups, above or below ground water tanks.
**SPECIFICATIONS**

<table>
<thead>
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<tbody>
<tr>
<td>Dimensions</td>
<td>55cm W x 50cm D x 127m H for Sediment Tank</td>
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<td>+ Manual Contaminated Water Diverter</td>
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<tr>
<td>Variation</td>
<td>In-Line Filter Sock – Standard Micron of 200, however, can be redesigned to suit conditions</td>
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CAUTION: Protect against freezing to prevent cracking of the filter and water leakage. **The Manual Contaminated Water Diverter Tank System does not contain the CWD and CWD Controller Unit.

**MAINTENANCE**

The Manual Diverter Tank system has very little maintenance to carry out on an annual basis. The In-Line filter will need to be cleaned once every six months to ensure no sediment seeps through the In-Line filter. During the Pine Pollen season you will need to clean your In-Line Filter Sock at least once a month.

**SEDIMENT TANK ASSEMBLY DIAGRAM FOR SIPHON SYSTEM**

- Lid
- Galvanised Lock Ring
- Sediment Tank
- Inline Filter
- Tension Pipe
- Inline Filter
- Air Release Valve
- 90° Bend
- Siphon Pipe
- Ball Valve
- Manual Valve
- Outlet to waste
- Pipe work from under ground in front of sediment tank

**SEDIMENT TANK ASSEMBLY DIAGRAM FOR DIRECT FEED SYSTEM**

- Lid
- Galvanised Lock Ring
- Sediment Tank
- Inline Filter
- Tension Pipe
- Inline Filter
- Air Release Valve
- Drum Seal
- Top Cap
- Manual Diverter Valve
- Outlet to waste
- Ball Valve
- Pipe work out of sediment tank into water tank

**TYPICAL INSTALLATION SET-UP’S FOR THE CWD-M**

**Water Tank - Above Ground Installation Set-up**

- Sediment Tank
- Inline Filter
- Manual Diverter Valve
- Gully dish
- Away to waste
- Pipe from house roof catchment
- 90° bend
- T Junction
- 600mm high concrete ring with hard fill in the middle to ensure valve is below the bottom of the sediment tank

**Water Tank - Below Ground Installation Set-up**

- Sediment Tank
- Inline Filter
- Manual Diverter Valve
- Gully dish
- Away to waste
- Pipe from house roof catchment
- 90° bend
- T Junction
- 600mm high concrete ring with hard fill in the middle to ensure valve is below the bottom of the sediment tank

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PO Box 300419, Albany, Auckland 0752
**AQUA CONTAMINATED WATER DIVERTER - AUTOMATIC**

The only computerised first flush diverter on the market. Ensures your tank water is kept pure and free of sludge and debris.

**DESCRIPTION**
- The Contaminated Water Diverter (CWD) is a computerised pre-tank filter – the only computerised first flush diverter on the market today that we are aware of. Also comes in a manual (i.e. non-computerised) model.

**WHY DO I NEED IT?**
- Over time a house’s guttering accumulates a lot of debris – dirt, leaf material, loose bird faecal matter etc. – when it rains that is all washed into your water tank.
- The Complete Contaminated Water Diverter Tank system prevents this material entering and contaminating your water tank by temporarily disconnecting the roof from your water tank. The contaminated water is siphoned off and goes to waste.
- It makes sense to prevent debris getting into your water tank - it saves on cleaning and maintenance, and means quality water from any tap in your home.

**HOW DOES THE CWD WORK?**
- There are two ways water gets from the roof of your house to your water tank. The first is a siphon system – the pipe work goes below ground then up into your water tank. The second is a direct system - the guttering pipe work runs from the roof overhead and straight into your water tank.
- The CWD can be connected to any water tank system preventing all those “gutter nasties” from getting into your drinking water. It can even be adapted to fit underground water tanks.
- In simple terms, when the CWD is in “flush mode”, the head of water between the water tank and the in-line filter, rushes down the downpipe. This rinses the in-line filter and drops all dirt and debris into the bottom of the sediment tank. This is then vacuumed out to waste by the CWD controller through a siphon pipe.
- It’s simple, it’s automatic, it saves on maintenance and cleaning and it gives great tasting water, making contaminated water a thing of the past.

**FEATURES**
- Battery backup for power outages.
- Manual open & close function (great when cleaning the roof).
- Customisable programming – control interval timings between flushes.
- “Dry mode” for a complete manual flush when not triggered by rainfall.
- Self-rinsing in-line filter.
- The valve and actuator motor are 12v and CE Certified.
- Electricals are housed in aluminium and stainless steel components.
- Maintain with ease and upkeep is minimal.
- Can be fitted to both Syphon and Direct set ups, above or below ground water tanks.
SPECIFICATIONS

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CAUTION: Protect against freezing to prevent cracking of the filter and water leakage.

**The Manual Contaminated Water Diverter Tank System does not contain the CWD and CWD Controller Unit.

CWD CONTROLLER SPECIFICATIONS

- **Model:** DC-T1
- **PCB:** Rev. B
- **Software:** V2.1
- **Environment:**
  - Recommended Operating Conditions: 0 to +40°C
  - Storage Conditions: -10 to +50°C
  - Transport Conditions: -10 to +50°C
- **Mechanical:**
  - Dimensions: 270mm(L) x 140mm(W) x 72mm(H)
  - Weight: 3.62kg
  - Case: Aluminium Extrusion
- **Electrical:**
  - Input Power: 100-240VAC, 50-60Hz, Class II
  - Max. input current: 0.35A
  - Output Power: 9-15VDC
  - Max. output current: 5A
  - Fuse: 5A SMD mounted on PCB
  - Internal Battery: Low maintenance lead-acid battery type, VRLA, 12V
  - Recommended battery capacity: 3-12Ah
  - Typical run time on backup battery power: 7 days
- **Display:** Green two digit 7-Segment LED
- **Indicators:** Green and Red LED

WARNING — Keep Dry at all times

Only use 12V low maintenance lead-acid battery.

CONTROL EXAMPLES

- **= 48Hrs**
- **= 5Days**

= This symbol indicates the flush valve has been triggered by the dry timer.

= This symbol indicates the flush valve has been triggered by the wet timer.

= This symbol indicates a dry collection surface

= This symbol indicates a wet collection surface and water will be collected after the flush time has elapsed.

TYPICAL INSTALLATION SET-UP’S FOR THE CWD-A

- **Water Tank - Above Ground Installation Set-up**
  - 2mm vlue for float switch connect 2 mm<sup>2</sup> to computer marked float switch and red switch.
  - In-line filter & settlement tank
  - Filter sock
  - Inlet height varies to ensure flow divider
gate and in-line filter sock & settlement tank
  - Gully dish
  - Pipe from house roof catchment
  - 90º bend
  - 6mm bleed back pipe
  - 40mm below trigger
  - Ground Level

- **Water Tank - Below Ground Installation Set-up**
  - 2mm vlue for float switch connect 2 mm<sup>2</sup> to computer marked float switch and red switch.
  - In-line filter & settlement tank
  - Filter sock
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