

# WATER WITCH INSTALLATION GUIDE

A fully automatic Pool and Spa water levelling system.

Follow these simple installation guidelines once and you will easily remember how to install the unit next time.

Full Electrical Certification  
(V99086)  
Inside & Outside Use

## THREE MAIN COMPONENTS

### Control Box

Co-ordinates the above items with visual indicators of status shown in diagram below.


### Level Sensor

Our patented levelling sensor designed to fit into 40mm class 9 pipe.

### Solenoid

Solenoid with indicator arrow that controls the flow of water.



	<p><b>When light is on status is as follows:</b></p> <p><b>ON</b> - Unit Operating</p> <p><b>SENSE</b> - In Sense mode waiting for drop in water</p> <p><b>FILL</b> - The unit has switched on the solenoid after sensing low water and is filling the pool</p>
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## INSTALLATION GUIDE

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|--------------------|--|
| <b>Control Box</b> | Mount the control box at least 1.2 meters off the ground using the steel bracket provided.                             |
| <b>Solenoid</b>    | The Solenoid must be installed in the water supply line using the flow direction arrow indicated on the solenoid body. |
| <b>Sensor</b>      | Refer to the diagrams 5 & 6 on page 3 for mounting of the Sensor.  |

### Pool Installers Sensor Pipe & Fill Plumbing

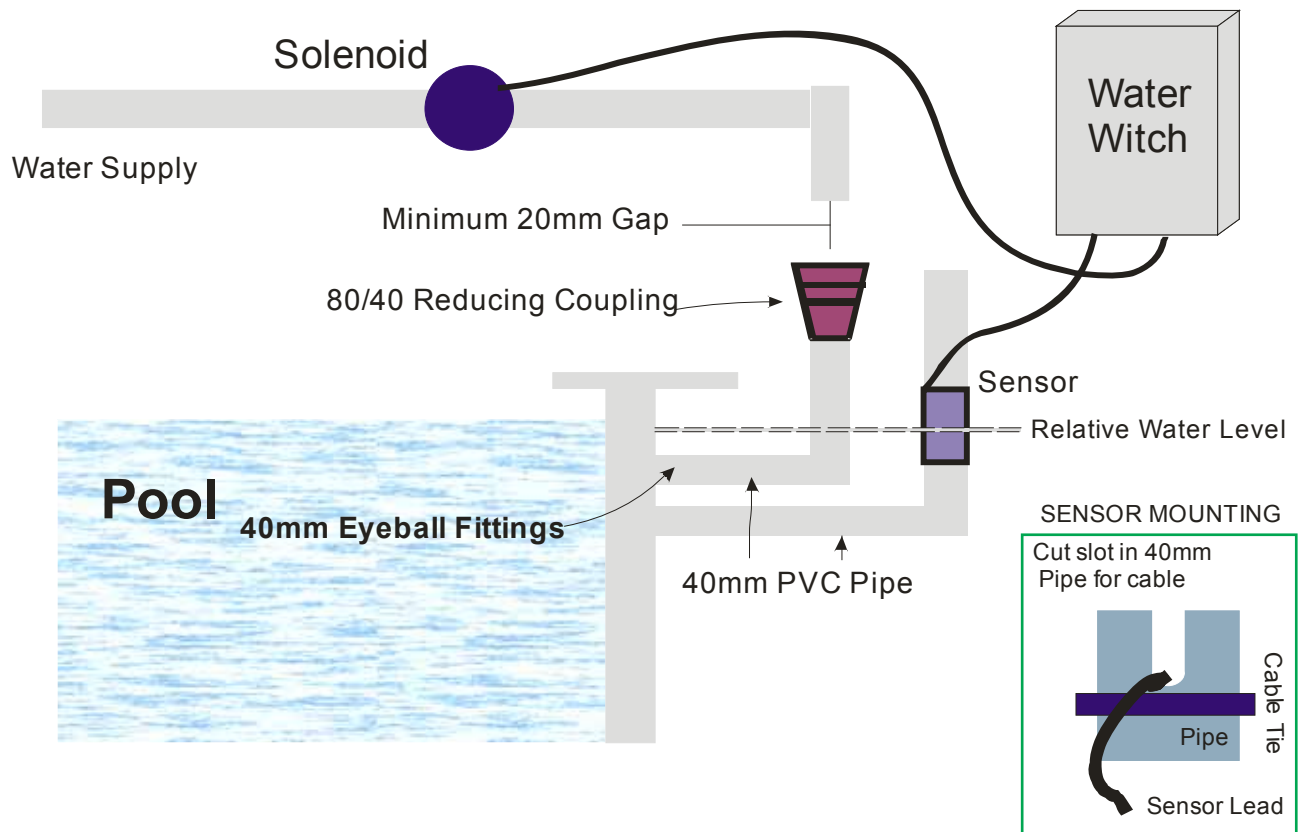
The suggested method of plumbing is two 40mm class 9 PVC pipes plumbed through the pool wall and returned to the pump and filter area.

These pipes are placed approximately 300mm below normal water level and finished off in the pool with push in eyeballs to match the other pool fittings. The pipes are usually run along the suction and return trench and elbowed up near the pool equipment.

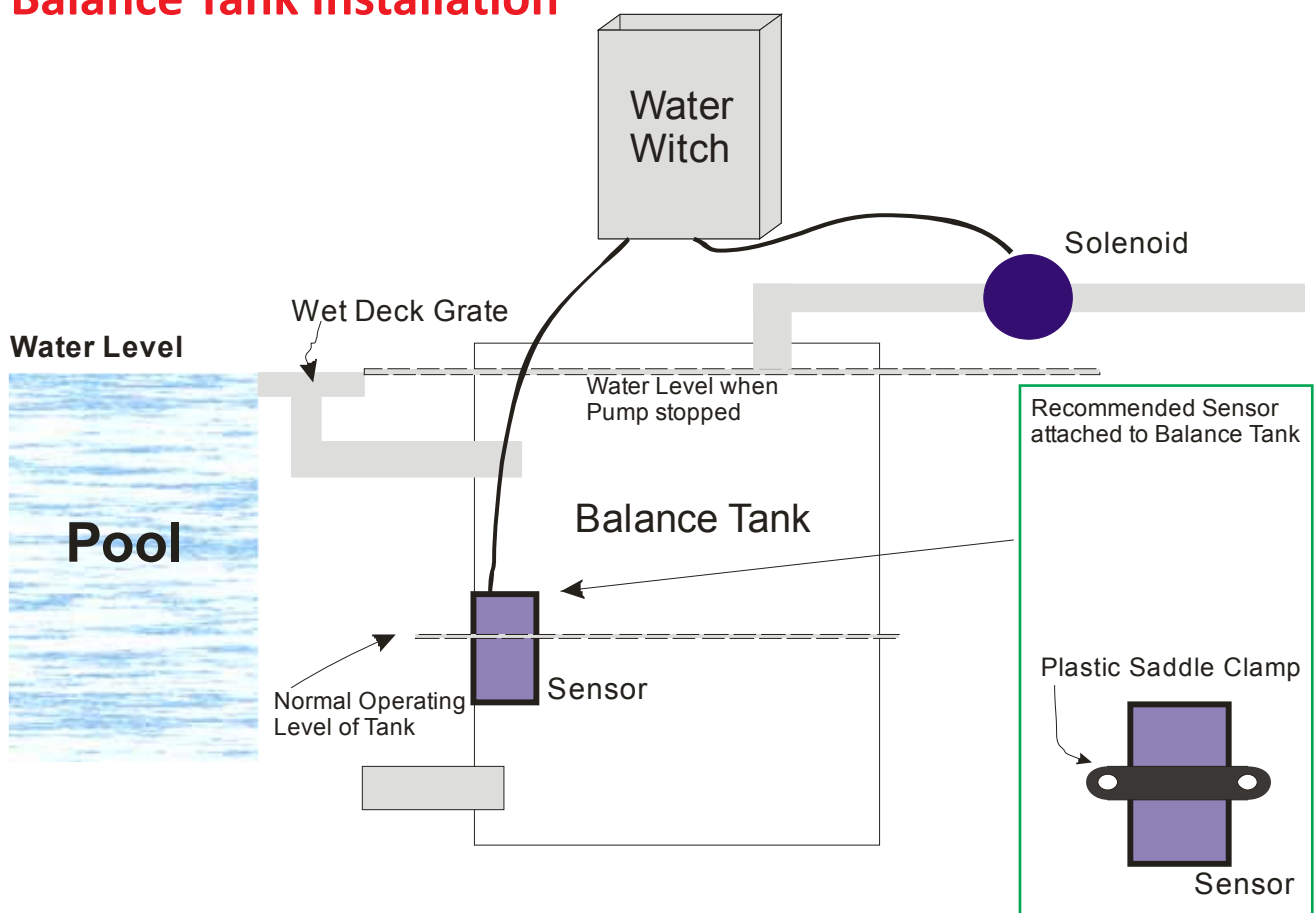
### IMPORTANT

These pipes must remain below the water level by a minimum of 200mm (more is better) until elbowed into a vertical position. A minimum vertical height of 300mm above the top of the pool is required for both pipes.

## Standard Installation



## Balance Tank Installation



## SENSOR & SOLENOID CONNECTIONS

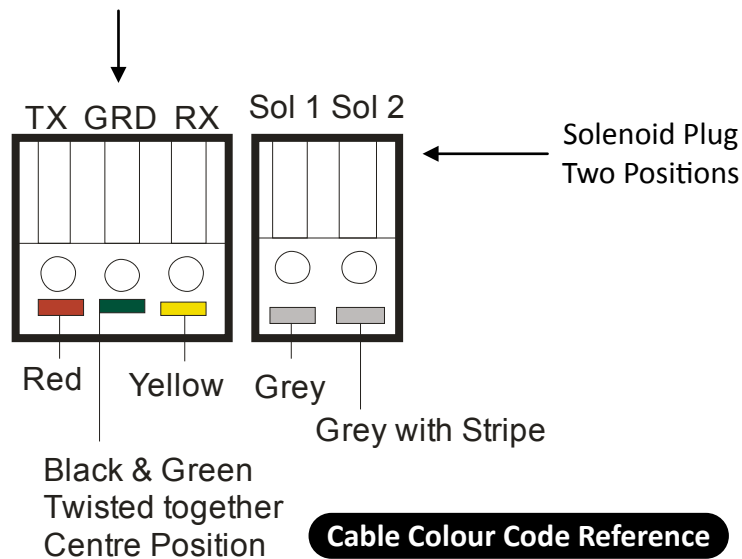


### Sensor Cable

If the standard cable length is insufficient contact your Distributor as 20 & 30 Meter cables are available ex Stock. Custom Made lengths above this can be manufactured.

**DO NOT JOIN  
THE CABLE**

Sensor Plug Three Position



The Water Witch is designed to be installed close to the pool equipment. Both the sensor and solenoid leads are normally 5 meters long with plugs attached for connection to the base of the control box as shown. (Water Witch 20 & 30 for Balance Tank installs come with 20 & 30 meter Sensor lead respectively).

## **INITIAL SETTING UP      Step by Step**

Ensure the pool water level is set to the required level

1. Disconnect the power lead from the mains (power off)
2. Connect the sensor and solenoid plugs to control box
3. Turn the water supply to the solenoid on
4. Remove control box cover and set dip switch to test mode as per Table 1 on Page 7
5. Replace control box cover, plug in power and turn on
6. Invert the sensor unit (sensor pointing skyward)
7. Switch the unit on and check the RUN & SENSE lights are flashing every two seconds.  
(refer Table 1 on Page 7 TEST MODE)
8. Lower sensor unit (Sensor pointing to ground). Now the RUN light should still flash every two seconds, and the FILL light should stay on continuously and water will flow through the solenoid.
9. Remember your pool water level must be correct to continue. Very slowly lower the Sensor into the 40mm PVC Pipe until the water flow stops and the RUN & SENSE lights flash every two seconds.

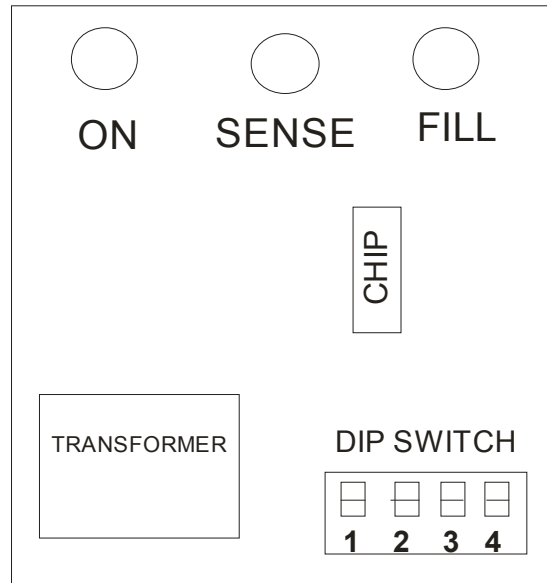
### **NOTE:**

You may need to repeat steps 1- 6 until satisfied. Now attach the sensor to the PVC Pipe as per Diagram 2 on Page 3. Switch power off and unplug the power cable. Remove control box cover and set Dip switches as per Table 1 on Page 7 relative to the pool size. Put cover back on, plug in and switch on power!

**The unit is now set to the correct water level  
with the new time delay settings.**

## **DIP SWITCH SETTINGS**

### **Internal Block Diagram of Control Box**



### **Dip Switch positions relative to Pool Size**

DESCRIPTION	SWITCH 1	SWITCH 2	SWITCH 3	SWITCH 4	Time Delay Before Switching Off
Test Mode	UP	UP	UP	UP	2 Seconds
Spa	UP	DOWN	UP	UP	13 Seconds
Medium	UP	UP	DOWN	UP	75 Seconds
Large/Balance	UP	UP	UP	DOWN	330 Seconds

### **PLEASE READ**

This completes the Water Witch installation guide. If the unit has been installed properly and the set up instructions on page followed the unit should now be automatically detecting the level of the pool and activation the solenoid accordingly.



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