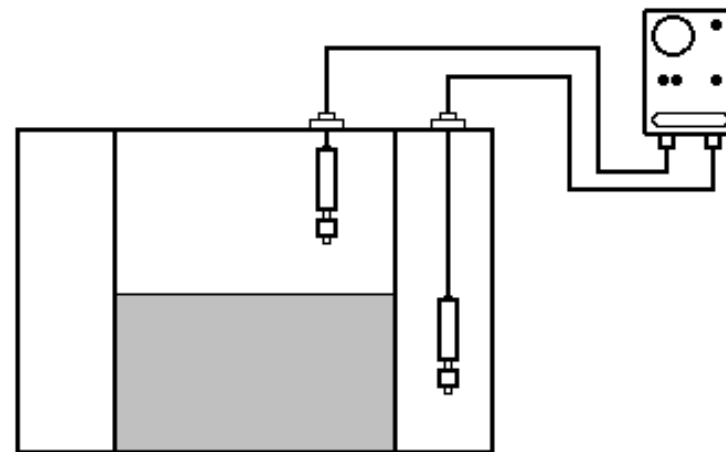




# Universal Atkinson Tank Alarm Instructions



## Extension of Cables

If you wish to extend the cables on your alarm:

**Power extension to 230V versions** – from the mains power supply running to the alarm box unit can be as far as the cable specification that you are using allows.

**Extension to probes supplied with either mains or battery versions** – although in theory it may be possible to obtain a working signal from probe to the alarm unit with up to 100 metres of cable we would recommend a practical maximum of 60 meters due to the possibility of increasing interference to the signal. Bunching of cables together if long extensions are used should also be avoided as this may also increase the likelihood of interference. It is always recommended that the probes switching activation is tested before the installation is finalised.

**The Unit should be tested before every fill and every 30 days.**

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The Bund, Overfill or combined Bund & Overfill Alarms are powered either by a PP3 block 9V battery or the 230V mains supply.

***IMPORTANT NOTE - ALL ELECTRICAL WIRING SHOULD BE CARRIED OUT BY A COMPETENT ELECTRICIAN.***

Ensure that the battery is connected when commissioning the tank. To check or replace the battery, slide the unit up and away from the fixed mounting plate that it is attached to and then remove the four corner screws.

If the Alarm is a mains 230V version then the power should run to the alarm box using a **MINIMUM OF 3AMP ( 0.5mm CONDUCTOR ) CABLE.** It is always recommended that a **3A FUSE** is fitted.

L= Live (240v AC)    N= Neutral (240v AC)    E= Earth

Bund Alarm – one probe fitted

Overfill Alarm – one probe fitted

Bund & Overfill Alarm – two probes fitted.

Each probe is marked accordingly.

The overfill probe should be installed in the top of the tank and set to a suitable level that will give adequate warning before any fuel can reach the tank vent. The level can be adjusted by loosening off the cable gland in the support plate and then retightening it having reset the level.

The Bund probe should be installed between the primary tank and the bund wall. The probe height should be adjusted so that it is just off the base of the bund and not in direct or near contact with anything which would prevent it moving freely. Height adjustment is again by loosening ( *important – and retightening* ) the cable gland.

### **Commissioning Your Alarm**

With the battery or mains power supply connected turn the switch to **TEST** and the sounder should be heard. Turn the switch to **FILL** and the sounder should be silenced. If the equipment has been installed correctly the sounder should remain silent when the switch is turned to **BUND** and **OVERFILL**.

**NOTE :-** if the sounder is heard at **BUND** or **OVERFILL** settings then check that the probes are set correctly. In particular the probes floats must be able to move freely and are not touching the tank mouldings etc.

### **Filling the Tank**

Before filling the tank the switch must be turned to **TEST** to check the battery/power supply and that the unit is working correctly.

If the sounder is heard then turn the switch to **FILL** for the combined Bund & Overfill unit. The sounder should now be silenced and filling can commence ( *with caution* ). For single probe units ( Overfill or Bund Alarm only ) see the relevant section **Single Probe Alarm Units.**

If the sounder is activated whilst the tank is being filled,  
**STOP FILLING IMMEDIATELY**

**Troubleshooting** - to identify why the sounder has been activated when using a combined Bund & Overfill alarm unit, the following procedure should be followed :-

1. Turn the switch to **BUND**. If the sounder is silenced then the bund is dry. If the bund has fluid in it then the sounder will continue to be heard.
2. Turn the switch to **OVERFILL**. If the sounder is heard then the tank has been filled beyond the probe level.
3. If the sounder is heard at Both **BUND** and **OVERFILL** settings then the tank has been overfilled and there is also fluid in the bund.

4. If the **OVERFILL** alarm has been activated but the tank has not been overfilled then the sounder can be silenced by turning the switch to **BUND**.

### **Primary Tank Failed**

If the primary tank fails or there is a leak from the tank fittings into the bund then the sounder will be heard. To silence the sounder turn the switch to **OVERFILL**.

**To test that the bund is free of fluid.** Turn the switch to the **BUND** setting. If the bund is dry the sounder should stay silent. If at any time fluid enters the bund then the sounder will be heard.

### **SOUNDER GOING OFF AT ALL SWITCH SETTINGS.**

If the sounder is heard at all switch settings ( and the probes are confirmed to have been installed correctly) then the level of fuel in the tank is above the probe level and there is also fluid in the bund. To stop the sounder, **disconnect the battery or turn off power supply.**

### **Single Probe Alarm Units**

Regardless of power type, Bund Alarm or Overfill Alarm only versions have 3 switch position: **TEST**, **MONITOR** and **MUTE**.

To test the warning sounder move the switch to **TEST**.

If the sounder is heard then turn the switch to **MONITOR**,

The unit will either be monitoring the bund or the fill, dependant on which unit is fitted.

If the sounder is activated check the causes listed above and turn the alarm to **MUTE** to silence the sounder.

### **Conversion for use as a Low Level Alarm**

If you wish to use any of our probes as a low level switch then simply remove the circlip at the base of the probe, slide off the float, rotate the float so that the bottom is now at the top then replace the float and the circlip. Be aware that the buzzer/sounder will work in exactly the same way and will require manual intervention to mute the alarm once activated.

### **Alarm Placement**

The alarm box together with cable glands is sufficiently IP rated for external use. However, the internal sounder / buzzer is not IP rated and for this reason an alarm box fitted in a position exposed to the elements could, after time, experience failure of the buzzer/sounder. To avoid problems due to exposure to the elements we would recommend at the very least that a shelter to be constructed to protect the buzzer but preferably a weatherproof enclosure..