

*Technical Solutions*

AUSTRALIA PTY. LTD ABN 14 063 349 502  
109 FERNDALE ROAD  
SILVAN VIC. AUSTRALIA 3795  
PHONE (03) 9737 9000 FAX (03) 9737 9111

## Information Sheet

# **Wet Pants Alarm**

### **Catalogue Numbers:**

WPA	<i>Wet Pants Alarm Module</i>
WPC	<i>Wet Pants Alarm Charger</i>
WPL	<i>Wet Pants Alarm Leads</i>
WPAS	<i>Wet Pants Alarm full System</i>

### **Wet Pants Alarm**

Technical Solutions' Wet Pants Alarm is an electronic device, which gives immediate feedback when an individual urinates into a nappy or pants. It is designed as a tool to assist a professionally planned and organized toilet training program.

*Please Note: This device will not toilet train children on its own. If you are not sure if the Wet Pants Alarm is appropriate, return it to Technical Solutions before it is used for a refund.*

When designing the Wet Pants Alarm, we aimed for:

- A long battery life
- A small compact unit
- Easily serviceable equipment

To this end, we set up the circuit to use virtually no power when not buzzing, and we made the buzzer pulse, making a more noticeable sound, and almost halving battery consumption. We used surface mount components to reduce the size of the circuitry. The most common point at which these alarms break down is the leads between buzzer and nappy. We can't make the leads any stronger without making them bulky and inconvenient, however we've made them easy to change in the field. Anyone with a small screwdriver can change the leads instead of sending them back to our workshop for service.



## **OPERATION**

### **How does the Alarm Work?**

The purpose of a wet pants alarm is to let the wearer and usually parents or teachers know the instant pants or a nappy is wet. This information is used as part of a structured toilet training program. Technically, the alarm detects urine by measuring the electrical resistance between two points on the nappy. A dry nappy has a very high resistance, while a urine soaked one is quite low. (A sweaty nappy is somewhere in between.) The alarm sounds if the resistance drops below a pre-set level.

## Setting Up The Wet Pants Alarm

- **Positioning the Leads**

The leads should be incorporated into the folds of the nappy, and not in direct skin contact. If using pants or training pants, it may be necessary to use two pairs with the leads in the outer pair. The leads should be placed about 30mm apart on a part of the nappy that will get wet from urine. Usually this means placing them in line with the crotch, with one lead forward of the other. If you are confident the leads will not get pulled, you can simply lay the leads into the folds of the nappy. A more reliable method is to sew the clip studs ('poppers') into position, and unclip the leads from the stud when washing the nappy. A number of nappies will have the studs sewn on. Extra studs are easily available from sewing shops and some supermarkets.

- **Positioning the Alarm Unit**

The alarm unit can be velcroed or pinned with a nappy pin to the nappy or clothing. *It should be attached where it is not likely to get wet.* E.g. To the waist or higher.

- **Testing**

To test the Wet Pants Alarm, firmly push the leads onto a wet sponge or cloth about 30mm apart. If the buzzer does not sound, charge the battery as described below and try again. The buzzer should stop the moment the leads are removed from the cloth, and start again as soon as they are pressed on again. The buzzer will also sound if the leads are both held in wet hands.

- **Battery Life/Recharging**

A fully charged battery will last around a month in 'quiet' mode, however it will only last around thirty hours sounding the alarm.

A flat battery should be charged for 14 hours. Overcharging will eventually cause deterioration of the battery. We estimate the alarm will only need charging once every 2 weeks.

To charge the battery, place it in the charger with the flat base towards the brass contacts and check the indicator lamp is glowing. If the lamp is not glowing, the battery is not charging.

- **Replacement Parts**

All elements of the Wet Pants Alarm are available individually. To expand a toilet training program, you only need to purchase more alarm modules - the one charger can service a number of alarms.

- **Changing the Nappy Leads**

Should the Nappy Leads break, replacements can be ordered from Technical Solutions.

Use a small flat blade screwdriver to replace the leads. Undo the two screws holding the leads in place. (These are special stainless steel screws - if you lose them, order replacements from Technical Solutions. Don't use non-stainless replacements.) Fit the replacement leads and tighten the screws firmly.