



Kessler-Ellis Application Note F045

## Ten SQUIRT Frequently Asked Questions and Best Kept Secrets

### Q1: How do you scale a 4-20mA Current Span on the Squirt?

A1: The 4-20mA current span is the span you expect the SQUIRT to interpolate between. The Squirt is scaled by assigning a "Low Range" and a "High Range" to the Analogous Low and High inputs. Let's say that the sensor gives off an output of 4mA (milliamps) when it measures "0" gallons and 20mA when it measures "10" gallons. Through the keyboard you dial in "0" for 4mA (Rate Low), and "10" for 20mA (Rate High) and you have completed scaling the unit. Typically the customer will tell you the range they would like to use for their application.

### Q2: What is the Battery Life Expectancy of the SQUIRT?

A2: The battery standby life expectancy on the SQUIRT is 2 years.  
The battery type is: 3V 250mA-H Lithium (2yr. Standby life).

### Q3: What is the factory code to unlock the SQUIRT should I forget my password?

A3: The Factory back door code for the SQUIRT can be obtained by contacting the factory.

### Q4: What is the operating temperature of the SQUIRT?

A4: The Operating Temperature of the SQUIRT is listed below.

OPERATING TEMPERATURE  
-4°F (-20°C) to + 158°F (70°C)  
Extended Temp: -22°F (-30°C) to + 158°F (70°C)

### Q5: What is the accuracy of the SQUIRT?

A5: The accuracy of the SQUIRT is listed below.

**Accuracy:** (Rate @ 20° C)  
0.1% Full Scale Resolution, +/-1 Count  
Temperature Drift:  
50 ppm/°C Typical  
200 ppm/°C Worst Case

### Q6: Is the SQUIRT Nema 4x Rated?

A6: Yes, The SQUIRT front panel is Nema 4X rated. This rating is also comparable to the European standard IP65.

**Q7: Why does the Display Flash?**

A7: The Display flashes when the Pulse output is exceeded. When the output is exceeded the data from the pulse output is then unreliable. If the customer is not using this feature it can be turned off. If the customer needs the output he/she will have to set the pulse output divider for a higher value.

**Q8: What type of memory does the SQUIRT use?**

A8: The SQUIRT has a battery backed memory and is capable of storing program and count data for the life of the battery. The unit also has a "BAT" warning that will activate on the display when the battery reaches the end of its useful life.

**Q9: How Do I reset the SQUIRT ?**

A9: The flow total may be cleared by the front panel or by a contact closure on the remote reset between terminals 3 & 4. To reset the unit from the front panel, the following sequence is required:

- Press **M** "CLr tot" will be displayed (if the panel lock is on, the display will prompt "Ent Code". Enter the proper code to advance to the **CLr tot** prompt)
- Press **E** To clear the total. Unit will return to operation

**Q10: How do I Wire the Flow Inputs on the SQUIRT?**

A10: Below you will find typical wiring diagrams to help you wire a flowmeter to the SQUIRT.

**TYPICAL WIRING**

