

# ACUSTRIP® Conductivity Pen Specifications & Instructions

# ACUSTRIP®

www.acustrip.com

1-973-299-8237

## Acustrip 5113

Applications: Coolant Samples \* Swimming Pools \* Aquariums

**Please read all instructions and safety information prior to using product.**

### Specifications

- Range: 10 - 1990 ppm
- Resolution: 10 ppm
- Accuracy: +/- 2%
- Batteries: 4x1.5v (Toshiba LR44 or equivalent)
- Battery Life: 200 - 300 Hours
- Temp. Comp.: Auto from 5 to 55° C
- Dimensions: 150L x 32W x 15H mm
- Calibration: By Trimmer
- Weight: 60 Grams

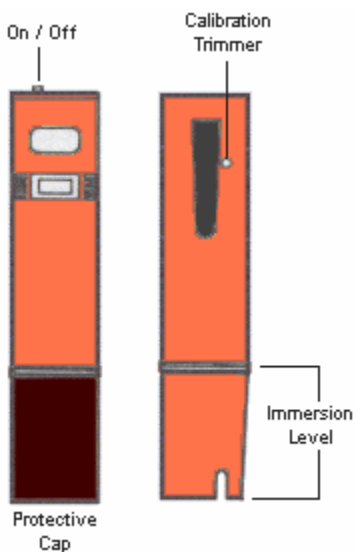


### Operating Instructions

Begin by removing the black protective cap. Turn on the conductivity pen with the on/off switch located on the top. Dip the conductivity pen into the standard solution. The solution level is to be below the display window. For best accuracy, rinse the sensing electrode area with the standard solution before dipping into the standard solution.

Stir gently to remove any air bubbles between the two electrode rods. Adjust the trimmer for a reading of 74 (x10 ppm). The conductivity pen is now ready for use.

The measured value in ppm is 10 times the displayed value. If the temperature of the solution is different from room temperature, wait for the reading to stabilize (for the sensing electrodes to reach thermo equilibrium with the solution).



## Meter Conversion Table

The Acustrip 5113 conductivity meter is able to acceptably report TDS in standard potassium chloride (KCl) aqueous solutions to two significant digits (see data table). If the meter is to be used in aqueous glycol solutions, the glycol will interfere (as with any conductivity meter). Estimation of TDS in engine coolant is accomplished by diluting the sample to 2% with distilled or deionized water, effectively suppressing the effect of the glycol. The resulting TDS reading of the 2% solution must then be multiplied by 50 to calculate the estimated TDS of the coolant sample.

Corning Laboratory TDS Meter (ppm KCl)	Acustrip 5113 (x 10 ppm KCl)
500*	50*
371	37
299	30
258	26
224	22
195	19
135	14
122	12
94	9
83	8
70	7
46	4
37	3
28	2
15	1
* Calibration	

The laboratory meter is a calibrated Corning TDS-60 instrument. A standard solution of DI water and 500 potassium Chloride (KCl) was prepared. Both meters were calibrated in the 500 ppm standard solution. The solution was progressively diluted with DI water to generate the chart. Both conductivity instruments were exposed in the coolant simultaneously to insure a direct comparison.



### **SAFETY WARNING: REMOVAL OF RADIATOR CAP IS DANGEROUS**

Radiators are under pressure. Hot coolant under pressure can cause severe burns. Do not remove the radiator cap on a hot engine. Wait until the temperature is below 50° Celsius (120° Fahrenheit) before removing the cap. Failure to wait may result in personal injury from hot coolant spray or steam. Remove cap slowly to relieve all pressure.

Dispose of your used antifreeze coolant in accordance with local regulations.