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# **1.0 Safety Information**

It is recommended that this meter be used with an alkaline 9 volt battery. Such batteries can leak or explode if an attempt is made to charge them. **Do not recharge disposable alkaline batteries.** 

## **2.0 Introduction**

#### 2.1 Meter Diagram



### 2.2 Features

- Works with all tape widths, thicknesses and component types/pitches
- Works with both 7in (18cm) and 13in. (33cm) reels
- Estimates component counts to within 5%
- Self-contained, handheld, battery powered
- Patented Design (US Patent #8,245,412)
- CE and RoHS Compliant
- Made In USA

# **3.0 Specifications**

Tape & Reel Requirements: Requires standard 4mm pitch feed holes on tape and standard 13mm center hole in reel.
Fits Reel Sizes: 7in(18cm) and 13in(33cm) reels Note: 15in(38cm) reels possible with user supplied ruler
Fits Part Spacing: 2mm to 40mm part spacing on tape (Pitch)
Accuracy: +/- 5% on part count
Battery: One (1) 9 volt size alkaline battery 1 Year Battery Life or Approx 1000 readings
Meter Size: 7.5in(19cm) x 4in(10cm) x 1in(2.5cm)
Meter Weight: 0.4lbs(180 g)
Environmental: at 32-104\*F(0-40\*C) with 0-90% RH

# **4.0 General Operation**

Note: See Demo Video @ www.YouTube.com (Search: SpotCheck Reel Estimator)

### 4.1 Battery Replacement

Turn the meter on with ON/OFF button and read battery strength from LCD during power-up, replace battery if less than 10%. Use a 9 volt alkaline battery for best results and longest life. Rechargeable batteries will not indicate battery strength correctly on the LCD. A fresh alkaline battery should last for 1 year or approx 1000 readings. To save battery power the unit will automatically shut off after 2 minutes of non-use.



### 4.2 How to Enter Values

Select the value to be changed by pressing the CYCLE button until the desired value is highlighted with the <u>underline</u>. Any selected value can be adjusted up and down by pressing or holding either the UP or DOWN arrow buttons.



### 4.3 How to Count a Reel

- 1) Place GAGE PLATE into center hole of reel. Read the Outer Diameter of the tape wrapped on the reel. Enter this number as the OD value on the LCD screen.
- 2) Read the Inner Diameter of the first wrap of tape. This is also the diameter of the hub of the reel. Enter this number as the ID value on the LCD screen.
- 3) Count the number of feed holes between the centers of two consecutive parts and enter this as the HOLES value on the LCD screen. Very small parts will only have one hole per two parts so this would be entered as .5 on the LCD.
- 4) Use the gauge plate to measure the thickness of the tape. Be sure to be very accurate with this measurement and don't forget to measure the full thickness of the tape including the thickness including the removable cover film. For thin tape the slots in the gauge plate work well. For thicker tape use the ruler along the back edge of the gauge plate. Best results are achieved by unwinding a short leader of tape to accurately determine which slot is the best fit on the gauge plate. (NOTE: while estimates of thin tape are possible by visual comparison to slot widths without unwinding any tape, this method often leads to greater error in the count)
- 5) Once all measurements have been accurately set the PART COUNT will be correctly displayed on the LCD. To count another reel simply change only the values that differ on the LCD. (For similar parts it may only be necessary to change the OD value for each reel being counted.)



## **5.0 Troubleshooting**

#### Why can't I get more accurate readings?

The most common problem with accurate part counts is improper thickness measurement of the tape. Be sure to carefully measure the full tape thickness including the cover film. <u>Don't force tape</u> into gauge slots just find the slot that easily fits the tape but does not require a tight fit.

#### Why can't I get accurate values when using my own ruler?

If using your own ruler to measure reels be sure to measure from the edge of the 13mm center hole. All diameter measurements are from the edge of this hole and NOT the center of the reel. Also note that these measurements while referred to as diameters are simply a radius type measurement.

#### Why won't the meter turn on?

If unit does not power on when battery is installed be sure the polarity of the battery is correct by referencing the polarity markings molded into the battery compartment under the battery.

## 6.0 Declarations

#### **RoHS Declaration of Conformity**

Innoquest, Inc. 910 Hobe Road Woodstock, IL 60 USA	0098
Effective Date:	15 November 2011
Model Number:	25050
Description:	SpotCheck Reel Estimator
Type:	Electrical Equipment for Measurement, Control, and Laboratory Use
Directive:	2002/95/EC "RoHS Directive"

#### **CE Declaration of Conformity**

Innoquest, Inc. 910 Hobe Road Woodstock, IL 60098 USA Effective Date: 15 November 2011 Model Number: 25050 Description: SpotCheck Reel Estimator Electrical Equipment for Measurement, Control, and Laboratory Use Type: 2004/108/EC Directive: Standards: EN 61326-1:2006 EN 61000-4-2:1995, including A1:1998 and A2:2001 EN 61000-4-3:202 EN 55011:2007

With yh

William C. Hughes President

## 7.0 Warranty & Service

#### **One Year Warranty**

Innoquest, Inc. warrants this product to be free from defects in materials and workmanship under normal use and service for a period one (1) year from date of purchase. This warranty extends only to the original purchaser and shall not apply to any product which, in Innoquest's sole opinion, has been subject to misuse, alteration, abuse, or abnormal conditions of operation or handling. Innoquest's obligation under this warranty is limited to repair or replacement of the product which is returned to Innoquest. Innoquest accepts no liability for whatever damages may be caused by a malfunctioning product.

#### **Repair & Service Policy**

Product returned to Innoquest for repair or service must follow the guidelines set forth as follows: Return of the product for warranty or service repair will be the responsibility of the purchaser (Innoquest does not pay inbound shipping charges). All returns must receive an RMA number by **calling** Innoquest prior to return of the product. The RMA number must be clearly marked on the outside of the shipping carton. If the customer is returning product for non-warranty related repair or service, a minimum charge will apply for accessing the product's repair needs and further work will not be completed without the customer's approval.



910 Hobe Road Woodstock, IL 60098 Toll Free: 800-637-1623 Phone: 815-337-8555 Fax: 815-337-8556 Service@InnoquestInc.com www.InnoquestInc.com

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