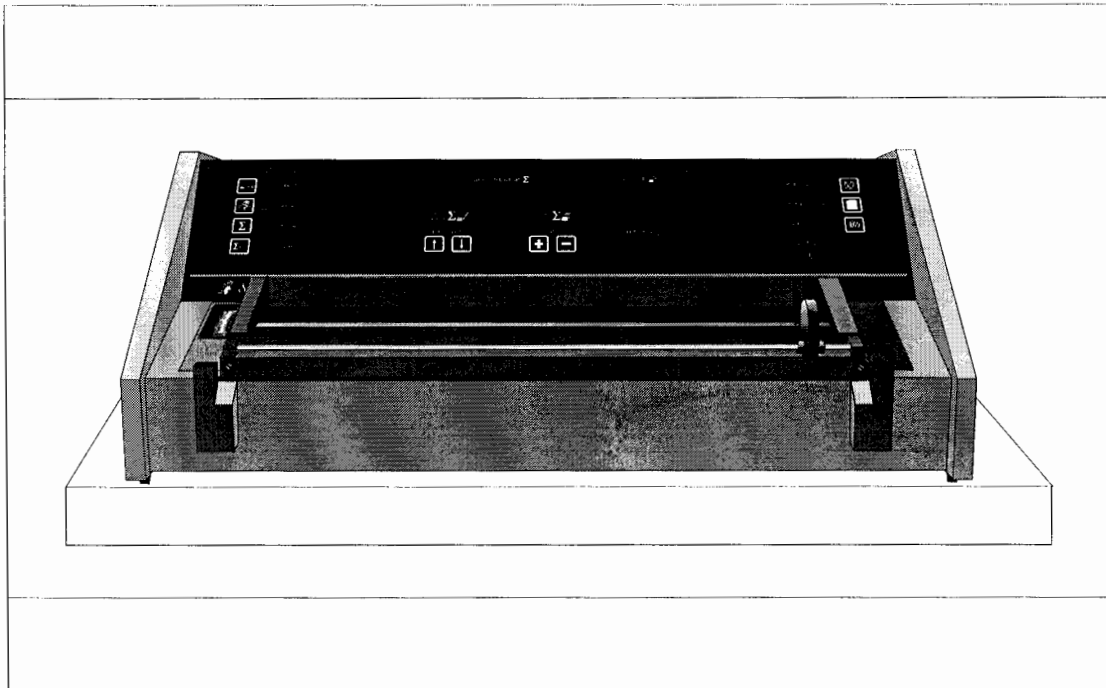


English



**Model-600 Series  
Kard-Kounter  
Operator Manual**



# Declaration of Conformity

We,

**Manufacturer:** Spartanics Ltd.  
3605 Edison Place  
Rolling Meadows, Illinois 60008  
USA  
phone: 847-394-5700  
Fax: 847-394-0409

*declare under our sole responsibility that the product,*

**Product:** Optical Card Counter  
**Model:** M600 Series

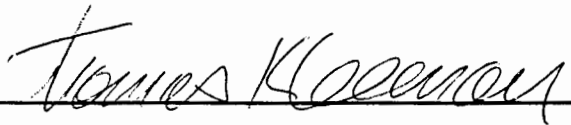
*conforms to the following standards*

Safety:	EN60204-1	Electrical Equipment of Industrial Machines
	EN292	Safety of Machinery
EMC:	EN50081-1	Electromagnetic Emissions (Residential, Commercial, and Light Industrial)
	EN50082-2	Electromagnetic Immunity (Heavy Industrial)

*following the provisions of*

Machinery Directive (89/392/EEC)  
Low Voltage Directive (73/23/EEC)  
EMC Directive (92/31/EEC)

**Authorized Signature:**

  
\_\_\_\_\_

**Authorized Representative:**

**Thomas Kleeman, Vice President, Engineering**  
\_\_\_\_\_

**Date of Issue:**

**19 December 1997**  
\_\_\_\_\_

 **Spartanics®**

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# 1. Introduction

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## 1.1. Spartanics

### 1.1.1.

#### Address:

Spartanics, Ltd.  
3605 Edison Place  
Rolling Meadows, IL 60008  
U.S.A.

### 1.1.2.

#### Sales

Tel: 847-394-5700  
Fax: 847-394-0409  
sales@spartanics.com

### 1.1.3.

#### Service

Tel: 847-394-5700  
Fax: 847-394-9349  
service@spartanics.com

### 1.1.4.

#### World Wide Web

<http://www.spartanics.com>

## 1.2. Safety

### 1.2.1.

#### General

This device conforms to established safety regulations. However, hazards are involved in the operation of this device if:

- The operation and safety guide lines in this manual are not followed.
- The device is not operated for its intended use

### 1.2.2.

#### Responsibilities

**The manufacturer** is responsible for delivering the device in a flawless state in terms of operation and safety regulations.

**The company operating the device** is responsible for;

- Ensuring that the device is used in accordance with its intended purpose;

- Training the personnel
- Providing any required protective gear
- Controlling that only authorized personnel work on the device;
- Meeting the required maintenance requirements;

**The operating personnel** is responsible for;

- Operating the device only when it is in a flawless state with all safety guards properly installed;
- Immediately notifying the supervisor in charge of anything affecting safety;
- Ensuring that no unauthorized persons are near the device during operation;
- The use and care of appropriate safety and protective equipment;
- Cleaning the device and the work area around the device.

### **1.2.3. Operator Requirements**

All persons involved in the operation of this device shall;

- Be of legal age to operate this type of machinery;
- Be adequately trained and instructed in the operation of this device;
- Have read and understood all operation and safety instructions in this manual;
- Have read and understood all local and regional safety instructions governing the use of this type of machinery.

Trainees shall only work on this device when supervised by an experienced operator.

### **1.2.4. Malfunction Procedures**

In the event of any malfunction, turn power off and contact qualified service personnel.

### **1.2.5. Safety Rules**

- The operation of this device is subject to the local, state, federal, and international regulations regarding safety at work and accident prevention.
- Read this manual before operating this device.
- For any operation or maintenance procedures that may be required, but are not covered in this manual, contact Spartanics Technical Service Department before proceeding.

- Before device is put into operation, always check the safety equipment and protective covers.
- Unauthorized modifications and changes to the device are not authorized.
- Accessories, replacement, or spare parts produced from other manufacturers may only be used when approved by Spartanics
- Before carrying out any maintenance, repair, or modification work, lockout mains supply voltage to prevent power from inadvertently being switching on.
- Never operate this device unless it is properly grounded according to local regulations.
- Never operate this device with any of its safety guards removed or improperly installed.
- Never operate this device in an explosive atmosphere.
- Never operate this device in a wet or moist environment.

### 1.2. 6.

### Warnings



#### **Warning**

Mains voltage is used to operate this device

#### **Possible hazards**

Death or injuries due to electrical shock

#### **Safety measures**

Covers containing electrical components, controls and distribution circuits may only be opened by authorized personnel.



#### **Warning**

Sensor moves during operation

#### **Possible hazards**

Pinch or compression injury if fingers are inserted into sensor slot during counting

#### **Safety measures**

- Do not insert anything into sensor slot at any time.
- Do not block or try to stop sensor during operation.

**1.2. 7. Danger Zones**

Sensor Slot area

**1.3. Safety Devices****1.3. 1. Protective Equipment**

- No special equipment required

**1.4. Technical Data****1.4. 1. Models**

Model 620 . . . . . Nonadjustable security counter

Model 625 . . . . . Non adjustable security counter

Model 640 . . . . . Adjustable counter

Model 650 . . . . . Adjustable counter

Model 632 . . . . . variable material counter

Model 632E . . . . . variable material counter

**1.4. 2. Pieces Per Count**

Minimum . . . . . 1

Maximum . . . . . 9,999

**1.4. 3. Accumulated Piece Count**

Minimum . . . . . 1

Maximum . . . . . 9,999,999

**1.4. 4. Accumulated Box Count**

Minimum . . . . . 1

Maximum . . . . . 9,999

**1.4. 5. Stack length**

Minimum . . . . . 1 card

Maximum . . . . . 450 mm

**1.4. 6. Counting Speed**

7 Seconds or less

**1.4. 7. Material edge**

Counted edge size . . . . . 57 mm to 100 mm

Condition . . . . . Clean and straight

**1.4. 8. Material Thickness**

Model 620	0.61 mm - 0.86 mm
Model 625	0.61 mm - 0.86 mm
Model 640	0.25 mm - 1.65 mm
Model 650	0.13 mm - 0.56 mm
Model 632	1.02 mm - 6.10 mm
Model 632E	1.02 mm - 5.08 mm
Model 632 CB	1.02 mm - 5.08 mm

**1.4. 9. Counting Applications**

## Model 620

- Standard credit cards
- High value cards

## Model 625

- Standard credit cards
- High value cards
- White core cards
- Shrink wrapped cards

## Model 640

- Adjustable for standard cards within its thickness range

## Model 650

- Adjustable for thin cards within its thickness range

## Model 632

- Variable thickness materials
- Package insert or outserts

## Model 632E

- A Model 632 with special tray for counting stuffed envelopes

## Model 632 CB

- A Model 632 with special tray for counting cello packed phone type cards

**1.4. 10. Weight**

Shipping weight	19 Kg.
Equipment weight	15 Kg.

**1.4. 11. Dimensions**

Shipping	863 x 432 x 457 mm
Equipment	711 x 292 x 279 mm

**1.4. 12. Mains Electrical Power**

(Set at factory per customer requirements)

Selectable Voltage	100, 120, 220, 240 VAC
Mains frequency	50 / 60 HZ

Phase ..... 1  
Power consumption ..... 60 VA  
Fuse rating ..... 2 Amps

**1.4. 13. Ambient Conditions**

Operating temperature .... +10°C bis ⇔ +32°C  
Storage temperature ..... -20°C bis ⇔ +52°C  
Relative humidity ..... 40% ⇔ 80%  
(Non condensing)

**1.4. 14. Parallel connection**

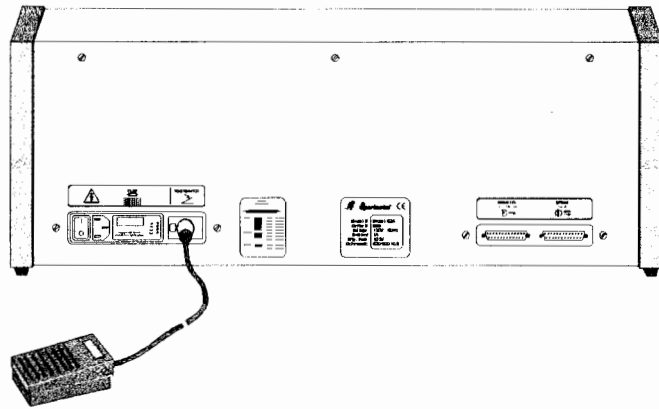
Located on rear of counter  
Standard centronics parallel interface  
Use shielded cable, 3 meters or less in length

**1.4. 15. Serial connection**

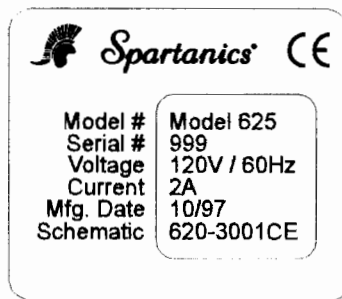
Baud rate: 4800  
Stop bits: 1  
Data bits: 8  
Parity: None  
Handshake: Hardware  
Use shielded cable, 3 meters or less in length

▲

## 1.5. System Identification



### 1.5. 1. Nameplate (sample)



## 1.6. Manual

### 1.6.1.

#### Symbols



#### **Warning**

Designation of a possible hazardous situation  
If this situation is not prevented, the consequences may be;

- Unhealthy effects
- Serious injuries

#### **Caution**

• Designation of a hazardous situation.  
If this situation is not prevented, the consequences may be;

- Slight or minor injuries
- Damage to the equipment



#### **Important**

Designation of special working instructions.



#### **Dangerous Voltages**

- Designates parts of the unit with a possible dangerous voltage



## 1.7. Document Identification

### 1.7.1.

#### Designation

Model 600 Series  
Kard-Kounter  
Operator Manual  
P/N 600-9000  
Revision 0

### 1.7.2.

#### Execution

This manual is compiled following the provisions of EC directive "Machines 89/392/EC \, app. 1 number 1.7.4 (operating Instructions)".

**1.7.3.****Copyright**

The information contained in this manual was derived in part from proprietary and patent data of Spartanics. The express purpose of this publication is to assist users in the installation of said equipment. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form without the prior written permission of Spartanics.

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3605 Edison Place  
Rolling Meadows, IL 60008  
U.S.A.  
*All rights reserved*

**1.8. Conformity**

- This device meets the applicable provisions of EC directives.
- CE mark is affixed to rear of device.
- Certificate of Conformity may be requested from the manufacturer.

## 2 Installation

---

### 2.1 Initial Inspection

#### 2.1.1 Shipping Damage

Check for visible damage to crate or equipment. Contact Shipping company to register claim.

#### 2.1.2 Concealed Damage

For any damage that was not apparent upon initial receipt, contact Spartanics or authorized representative before installing or operating the equipment.

### 2.2 Setup

---

***Installation of this equipment may only be conducted by qualified personnel of the manufacturer, personnel trained and authorized by the manufacturer, or by qualified personnel authorized by the customer***

---

#### 2.2.1

##### General



- The device is delivered with a preset mains voltage as indicated on the rating label on rear of device.
- The available mains voltage must correspond with the voltage indicated on the voltage selector on rear of device.

#### 2.2.2

##### Requirements

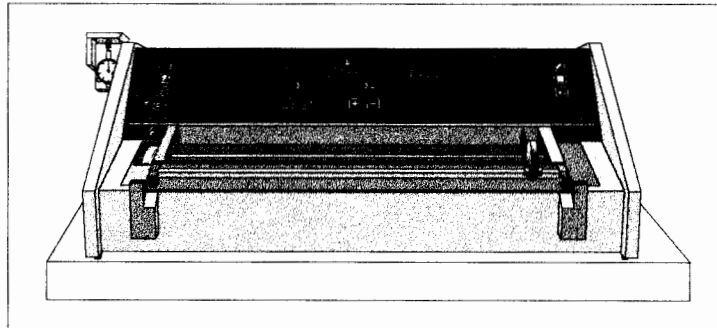
- Installation site free of dirt and dust.
- Power connection corresponding to the set voltage.

#### 2.2.3

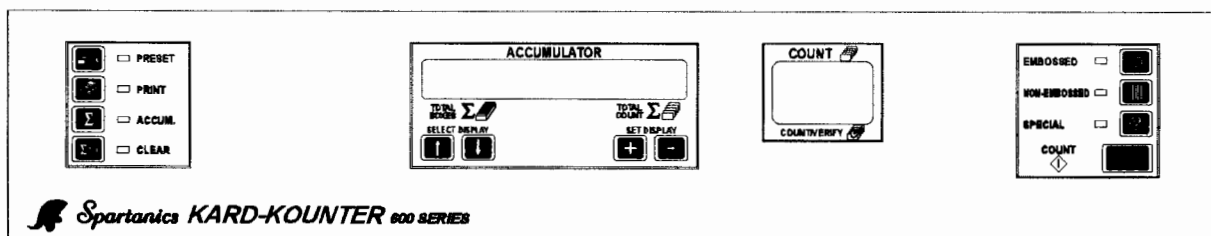
##### Power and foot switch

- Connect the power cord from rear of counter to correct mains supply.
- Connect foot switch, if desired, to rear of counter. (The front panel count switch performs the same function as the foot switch.)

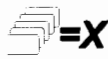
## 3. Operation



### 3.1. Controls



#### 3.1.1. Preset Button



- Used to specify the number of cards which must be verified before any accumulation can take place.
- Green light indicates Preset is on.

#### 3.1.2. Print



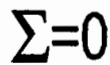
- Short press will print the results of a verified count.
- Press longer than 1.5 seconds will enable Auto Print and Auto Accumulate modes.
- Green light indicates auto print mode is on.

#### 3.1.3. Accumulate



- Short Press adds the latest count to the accumulator Display.
- Press longer than 1.5 seconds enables the auto Accumulate feature.
- Green light indicates auto accumulate mode is on.

3.1.4.

**Clear**

- Short Press clears Accumulate Display messages
- Long Press clears the contents of the accumulate display.

3.1.5.

**Embossed**

- Selects Embossed cards counting mode.
- Green light indicates embossed mode is on.

3.1.6.

**Non-Embossed**

- Selects non-embossed card counting mode.
- Green light indicates non-embossed mode is on.

3.1.7.

**Special**

- Selects optional categories in the menu system
- Red light indicates a special condition is set.

3.1.8.

**Count**

- Starts a count cycle.

3.1.9.

**Up Arrow**

- Scrolls up in the menu display

3.1.10.

**Down Arrow**

- Moves down in the menu system

3.1.11.

**Plus**

- Changes value in display

3.1.12.

**Minus**

- Changes value in display

▲

## 3.2. Display

### 3.2.1. Accumulator Section



- Menu
- Errors
- Total boxes / cards

### 3.2.2. Total boxes



- Displays total boxes counted

### 3.2.3. Total Cards



- Displays total cards counted

## 3.3. Setting Language

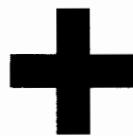
The counter is normally set to the national language of the customer at the factory before shipment.

The language can be changed subsequently;

- Press



- until LANG is displayed, then press

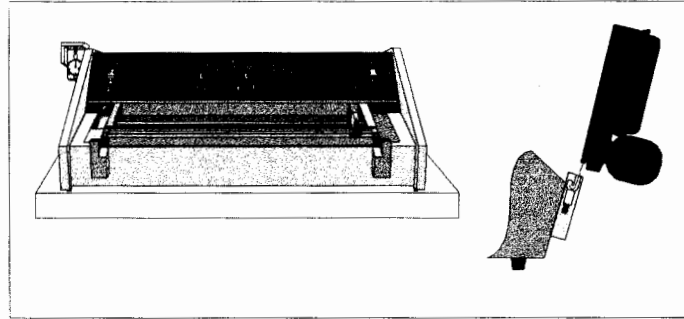


- Press any other key to save setting

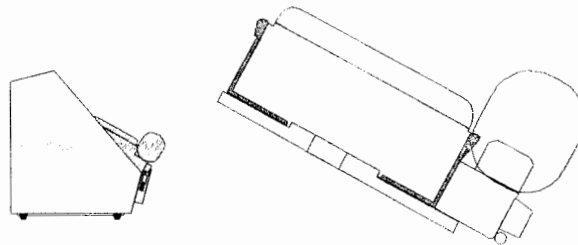
▲

### 3.4. Counting Tray Options

#### 3.4.1. Standard tray



#### 3.4.2. Standard tray (side view)



#### 3.4.3. Insert basket (front view)



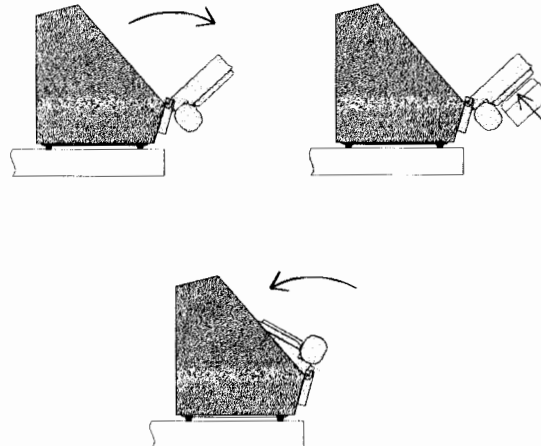
▲

**3.4.4. Power on**

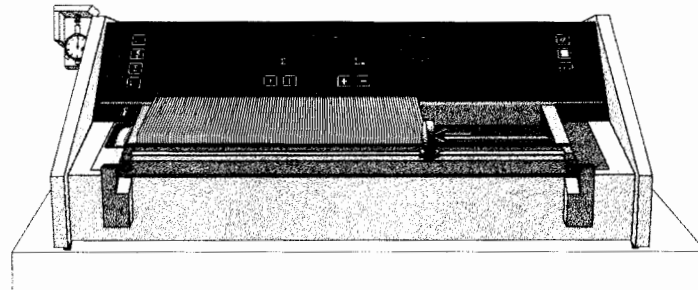
Turn counter on by switching on power switch on rear of counter.

**3.4.5. Loading material**

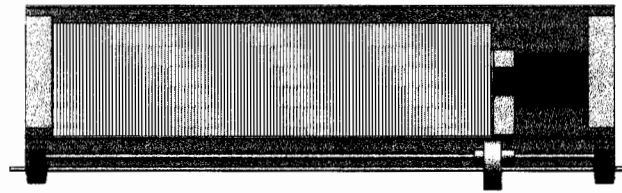
- Rotate basket forward
- Insert box
- Rotate basket back

**3.4.6. Material clamp**

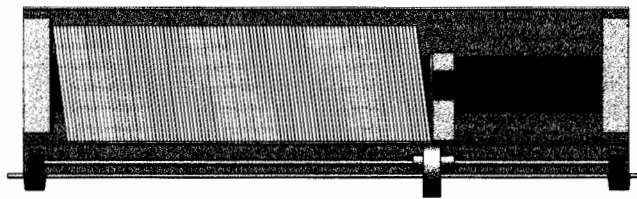
Slide clamp to hold cards securely.



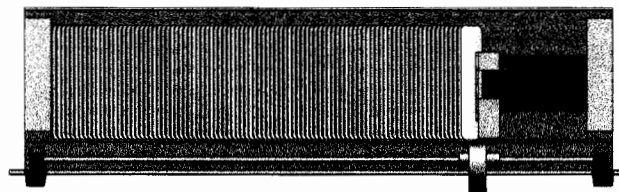
**3.4.7. Correct alignment**



**3.4.8. Incorrect alignment - Rotated**



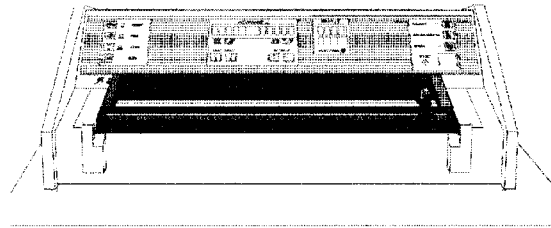
**3.4.9. Incorrect alignment - leaning**



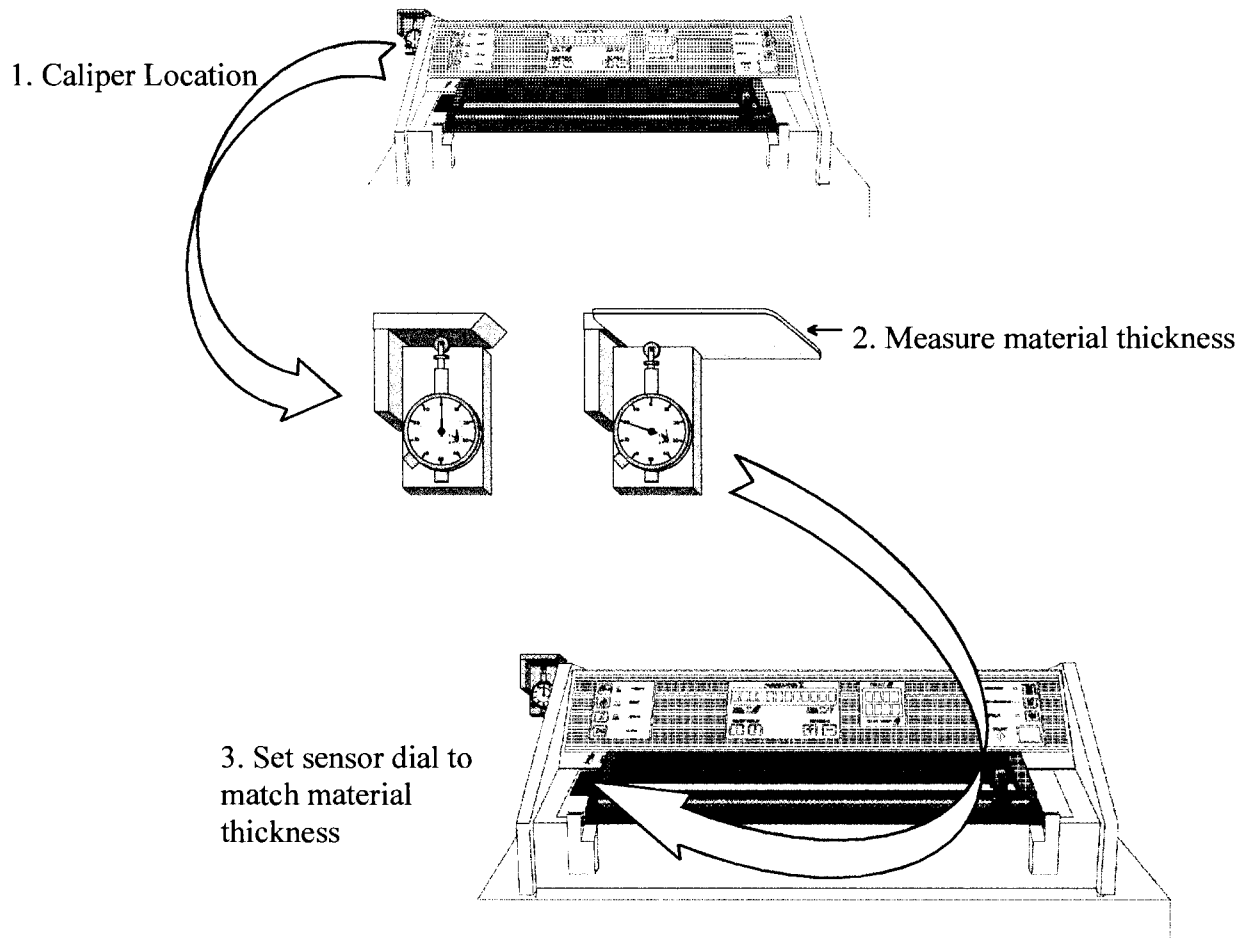
### 3.5. Counter setting

#### 3.5.1. Models 620 - 632

- No adjustments normally needed



#### 3.5.2. Models 640 and 650



## 3.6. Counting

### 3.6.1. Normal counting operation

- After material is loaded
- Press count button



### 3.6.2. Manual accumulate

- Press Accumulate button



### 3.6.3. Automatic accumulate

- Press and hold accumulate or longer than 1.5 seconds.



- Green light indicates auto accumulate is on.

### 3.6.4. Clear accumulate

Press and hold clear button for longer than 1.5 seconds.

