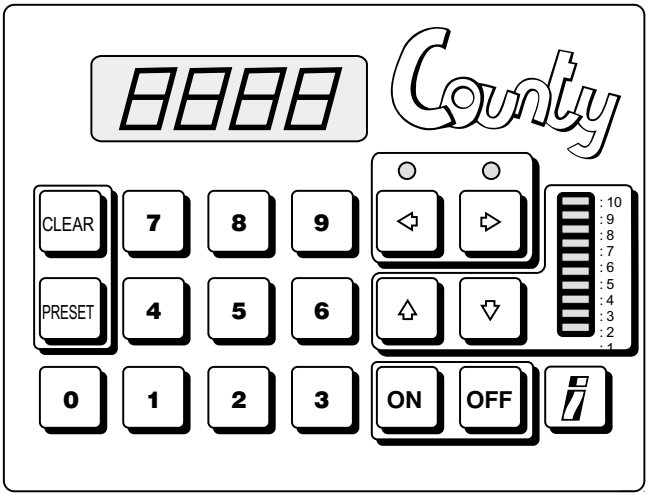
COUNTY mod.8301.05x/07x
REFERENCE MANUAL
software release 2.3x

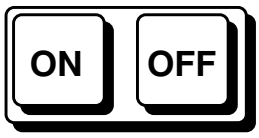
LIST OF CONTENTS

1 . . . . . TECHNICAL FEATURES

1.1 KEYBOARD



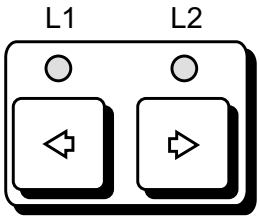
1.2 ON/OFF CONTROL

Keyboard section : 

On :. . . . . press the ON pushbutton
. . . . . and hold it until the County lights on.

Off :. . . . . push OFF

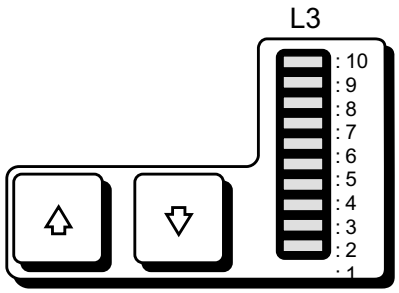
1.3 COUNTING DIRECTION

Keyboard section : 

◄ . . . . . = left counting direction (L1 is on)

► . . . . . = right counting direction (L2 is on)

1.4 COMPONENT LEAD NUMBER



Keyboard section :

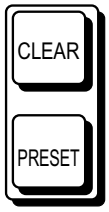
L3 led bar graph indicates the actual divider.

Press ▲ to increase component lead number.

Press ▼ to decrease component lead number.

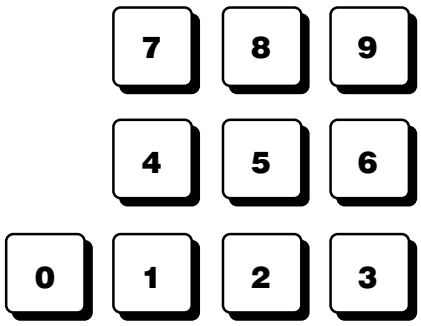
1.5 CONTROL SECTION

Press CLEAR to reset display and to set TOTALIZER mode counting.



Press PRESET to recall previous memorized preset value and to set PRESET mode counting.

1.6 PRESET DATA ENTRY



for preset value data entry

1.7 SPECIAL FUNCTIONS

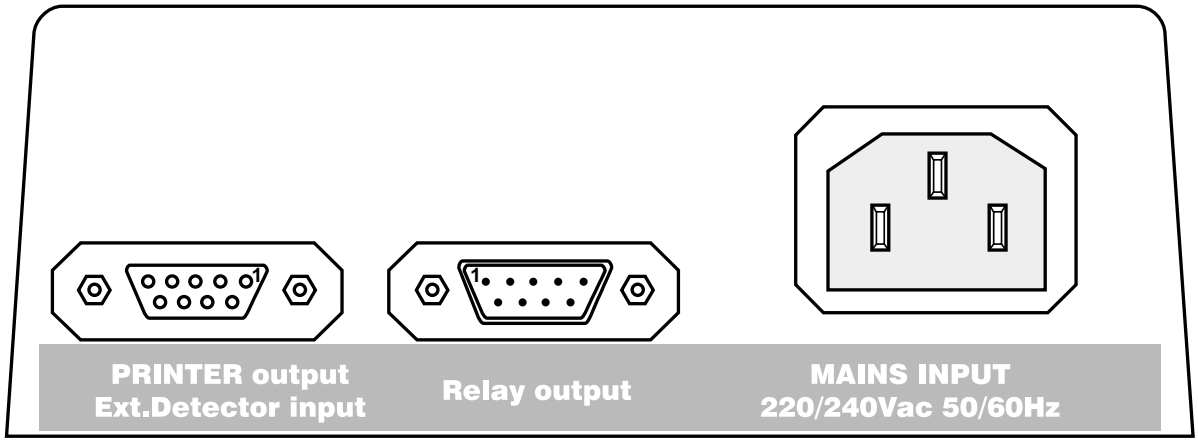
This key is reserved for special functions

1)During programmation:

Printer parameter setting: Country, date, time, Bar Code

2)During execution: thermal label printing.

1.8 BACK SIDE CONNECTIONS

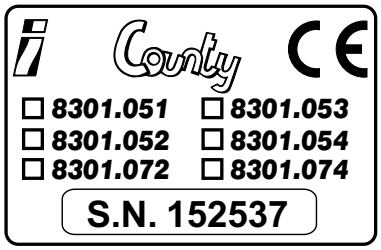


EXTERNAL DETECTOR input

PRINTER output

RELAY OUTPUT for SUPERFORM control
pin n.1 = N.C.
pin n.3 = Common
pin n.5 = N.O.

POWER SUPPLY input voltage



COUNTY model

Serial number

1.9 MODELS

8301.051 . . . . . 220Vac
8301.052 . . . . . County with battery, 220Vac
8301.072. . . . . 220Vac, with battery, relay , printer output, watch
8301.053 . . . . . 110Vac
8301.054 . . . . . County with battery, 110Vac
8301.072. . . . . 110Vac, with battery, relay , printer output, watch

1.10 OPTIONAL ACCESSORIES

8301.023 (optional) . . . . . Complete support for rolled bandolier
8301.025 (optional) . . . . . Bandolier handle

8301.031 (optional) . . . . . EXTERNAL PROBE
. . . . . to be fitted with SUPERFORM machines
8301.033 (optional). . . . . Connecting cable
. . . . . for SUPERFORM machine control

8301.018 (optional) . . . . . SMD adaptor
8301.028 (optional) . . . . . SMD rell support
8301.030 (optional) . . . . . Handle for SMD rell support
8301.090 . . . . . Thermal Label Printer
8301.091 . . . . . Thermo-adhesive roll paper, 20meters

2 . . . . . SET UP

2.1 UNPACKING

Open the carton and check to see all the following items are there :

1) COUNTY component counter corresponding to the model printed on the outside of the packing carton.
2) Power cord.
3) User's manual.(this manual)

WARNING:
As you unpack the County, set aside and save the packing materials.They will come in handy in case you need to transport it or send it back to recalibration.

2.2 LOCATING THE COUNTER

Choose the location for the County, using the following guidelines:

Choose a flat surface , with enough space for component handling
Avoid direct sunlight (display will be more readable)

Use the counter within the following ranges :

Ambient temperature:	0°C to 40°C
Relative humidity:	10% to 80% (non-condensation)

2.3 POWER SUPPLY

Attach first the power cord to the counter and then into an appropriate AC outlet.

WARNING:
The counters with rechargeable battery should be connectede to an AC outlet continuosly powered, in order to allow a complete recharge of the battery. (the medium recharge time is about 12 hours)

3 . . . . . OPERATIVE INSTRUCTIONS

3.1 PRELIMINARY OPERATIONS

Lighting: press the ON pushbutton and hold it until the County lights on.

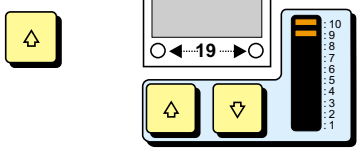
Counting direction : select the counting direction by pressing or . Counting direction is indicated by the LED placed upon the keybutton (L1 or L2).

Select the number of component leads by pressing :

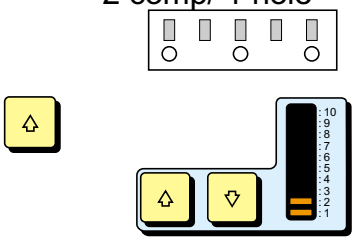
or (L3 led bar graph indicates the actual divider):

1 . . . . . 1 for resistances, etc.
2 . . . . . 2 for radial capacitors, etc.
3 . . . . . 3 for transistors, etc.

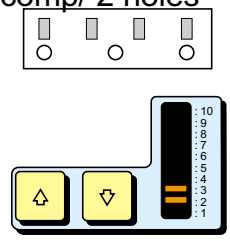
up to 19 for SMD components



SMDcomponents 2 comp/ 1 hole

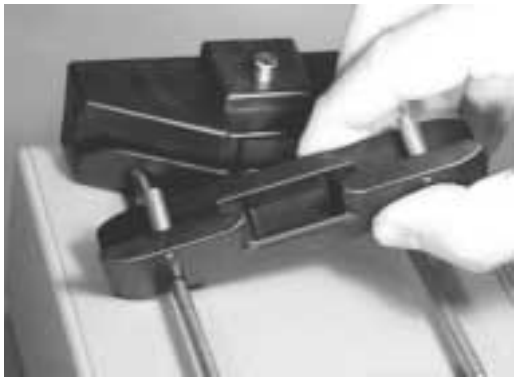


SMD components 3 comp/ 2 holes



AXIAL COMPONENT COUNTING

RADIAL COMPONENT COUNTING



1 - Pull up the tape guide

2 - Rotate the guide of 180°

3.2 TOTALIZER

Press 

to reset the display.

Pull through the component bandolier according to the feed direction.

After 10.000 counts and up to 899999 the two most significative digits will appear alternatively to the four least significative ones that are normally visible on the display.

3.3 PRESET MODE

Press 

to reset the display.

Digit the desidered component number.

Pull through the bandolier; the County will count down; the “undF”(underflow) message will appear if zero has been surpassed; an intermittent buzzing tone will signal, with different repetition frequency, the relative position with respect to zero.

To recall the previously set number press 

.

Preset mode counting is indicated by the divider LED blinking.

Press 

before setting a new number.

After 4 inoperative minutes the counter will be switched off automatically.

3.4 BATTERY

For recharging, keep the mains cable inserted with the counter in the OFF state.

For battery maintenance, please recharge at least once a month. Do not store the counter with the battery full down.

3.5 MAINTENANCE

Keep the lenses of the optical head clean with a cloth moistened with a cleaning product.

4 . . . . . SMD ADAPTOR

The County adaptor for taped SMD components counting is an option. Components counting is achieved by counting the punched holes on the SMD tape.

4.1 OPERATIVE INSTRUCTION

1)Insert the adaptor on the guide rods , apply a slight pressure until the adaptor is locked in place.
2)Push the adaptor in contact with the optical head.
3)Cut the tape to the middle of the first hole.
4)Select the correct number of holes per component by pressing :

 or  (L3 led bar graph indicates the actual divider)

5)Push trought the tape until the the hole of the first component to be counted is in correspondence with the center of the wheel then continue in the usual way(totalizer or preset mode).

NOTE: take care at the counting end not to take off the tape of the wheel because any free wheel motion will cause an excess of counts.

5 . . . . . EXTERNAL HEAD

An input for an external counting head is disposable on the DB9(JP15) connector.

In order to count with this external detector is sufficient to insert the head into JP15, the internal counting head will be disabled and counting functions will be performed from the external one.

6. . . . . SUPERFORM MACHINES CONTROL

(only for 8301.052/054/072/074)

6.1 TOTALIZER

TOTALIZER counting mode :

1) Insert the connecting cable between COUNTY and the SUPERFORM, and fit the external counting head to the left input guide of the SUPERFORM machine.

2)Push CLEAR

3) Pull trought the bandolier into the preforming machine, the COUNTY will totalize the component number.

6.2 PRESET MODE

PRESET counting mode :

1) Insert the connecting cable between COUNTY and the SUPERFORM, and fit the external counting head to the left input guide of the SUPERFORM machine.

2) Digit on the keyboard the desired component number or recall the previous presetted number by pushing the PRESET key.

3) Start the SUPERFORM motor by acting on the ON/OFF pushbutton.

4) Set the most suitable SUPERFORM speed.

5) COUNTY will automatically stop the SUPERFORM when the presetted component number will be reached.

NOTE: the component number at SUPERFORM stop could differ of some units from the actual presetted number; this is due to the absence of a low speed motor drive control by the COUNTY.

If the presetted value is to be reached exactly then you have to operate in “SLOW-DOWN” mode.

6.3 SLOW-DOWN MODE

1) In order to operate in PRESET mode with slow down motor control keep pressed the PRESET key for about 3 seconds, until the display of the COUNTY will show the message “SET LOW”, at this point push again the PRESET or the CLEAR key, now you are in “SLOW-DOWN” mode.

2) Digit on the keyboard the desired component number or recall the previous presetted number by pushing the PRESET key.

3) Start the SUPERFORM motor by acting on the ON/OFF pushbutton.

4) Set the most suitable SUPERFORM speed.

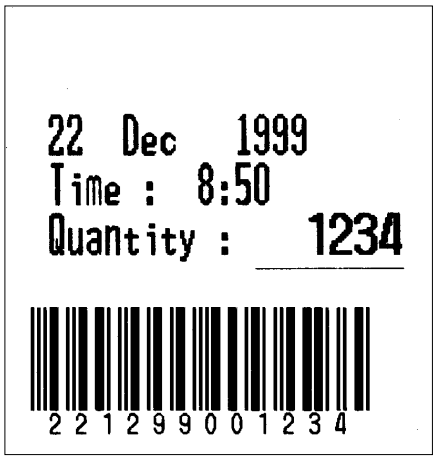
5) COUNTY will automatically stop the SUPERFORM some components before the presetted number and the display will show the message “SET LOW”.

6) Set the SUPERFORM motor drive speed at the minimum and restart the motion by acting on the ON/OFF pushbutton.

7) “SET LOW” message will get out and the COUNTY will stop the SUPERFORM exactly on the 0, that is the desired component number.

7 . . . . . THERMAL LABEL PRINTER

Only for 8301.072 and 8301.074 models.



Sample of a printed label , Bar Code included.

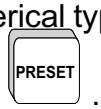
NOTE: fit togheter the printer and the counter with the data cable included and with the power supply off.

7.1 PARAMETER SETUP

With the counter in the “OFF” state keep the  button pressed while light on the counter with the  button.

Select the parameter to be modified by pressing  or 

To recall the previously set number press 

If you are editing a numerical type parameter (date, time, year, month) digit the new data and press  .

If you are editing a special type parameter (country, Bar Code) press keys from 0 on , until you will reach the desired value.

Press  in order to store the new value.

7.2 SETTABLE PARAMETERS

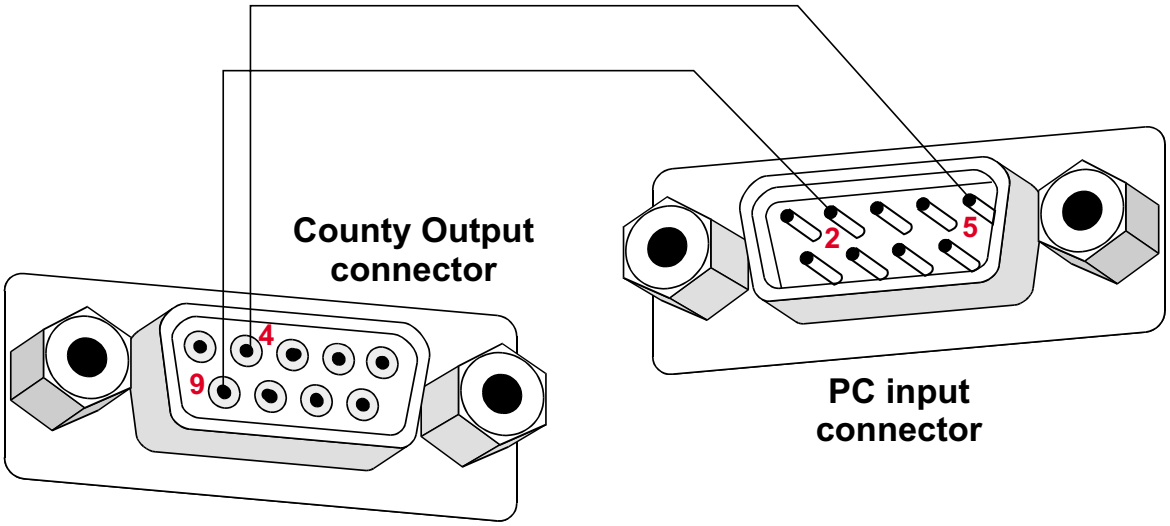
COUNtry	Language of the words in the label: **0=USA, 1=ENG, 2=ITA, 3=FRA, 4=GER, 5=SPA**
YEAR	year
MONTh	month
DAY	day of the month
HOURs	hour
MINUtes	minutes
BAR_CODE	Bar Code setting **0 = OFF** (Bar Code is not printed) **2 = CODE 39 T**, where “T” means that only the total number of pieces will be printed **3 = CODE 39 DT**, where “DT” means that the BarCode will be printed on 2 lines, one for the date and one for the total quantity. **4 = ITF** (interleaved 2 of 5) **6 = CODE 128 A** (code 128 character subset A))
PRINt_LABEL	**0 = ON**, the alphanumeric section of the label will be printed **1 = OFF**, only BarCode will be printed.
BAUD RATE	RS232C settings. **0 = OFF**, output is setted for the label printer **1 = 1200** bauds, **2=2400** , **3=4800** , **4=9600**

7.3 LABEL PRINTING

Press  key.

8. . . . . RS232C SERIAL OUTPUT

CONNECTION DIAGRAM AND TRANSMISSION PROTOCOL



TRANSMISSION PROTOCOL :

When the key is pressed the COUNTY transmits an ASCII bytes sequence with the following significance :

1	START	01H	(SOH)
2)	digit 6 (most significative digit)		
3)	digit 5		
4)	digit 4		
5)	digit 3		
6)	digit 2		
7)	digit 1 (units , less significative digit)		
8)	STOP	04H	(EOT)

PARAMETERS SETTING

BAUD RATE RS232C settings.
0 = OFF, output is setted for the label printer
1 = 1200 bauds, **2=2400** , **3=4800** , **4=9600**

8. . . . . CALIBRATION PROCEDURE AND TEST

8.1 AUTOMATIC RECALIBRATION

The 8301.05x models are provided with an intelligent self calibration routine that is performed automatically at power on.

If optical parameters go out of tolerance limits then is necessary a manual re-calibration and test.

If this happens the display will show the message : “Err_Cal” (calibration error)

8.2 MANUAL RECALIBRATION

Connect mains power cord. With the counter in the “OFF” state keep the PRESET button pressed while light on the counter with the ON button.

ATTENTION : be sure that no components or SMD adaptor are in the optical head.

Display will show alternatively the channel 1 and the channel 2 calibration values.

Check the two values and make this controls:

1)Values have to be >12

2)Difference between them should be

<0.25*channel 1 value and <0.25*channel 2 value

for example : channel 1=25

channel 2=24

difference=1

max.allowable difference=24*0.25=6

If step 1 or step 2 are not satisfied then the optical head should be mechanically recalibrated.(consult your own dealer for furter details)

To exit from the calibration procedure keep pressed the OFF button.

Then light again the counter and operate in the usual way.

EC CONFORMITY

Units 8301.051, 8301.052, 8301.053 and 8301.054 conform to EC directives 2004/108/EC and 2006/95/EC , the following harmonized standards are in use EN 60204-1, EN 61000-6-1, EN 61000-6-3.

A weighted sound pressure <70dB (A)
A weighted sound power < 85dB (A)

SAFETY INSTRUCTIONS

Attach first the power cord to the counter and then into an appropriate AC outlet.

The counter shall be connected to an electrical system having ground connection..

WARRANTY

This unit is guaranteed against all defects due to faulty materials and workmanship, within 12 months from the date of purchase.

A use not conforming to what specified might be dangerous to the safety of the operator and may damage the unit.

In such circumstances the manufacturer is relieved of any liability and the warranty itself will decay.

REPAIR

Repairs have not been attempted by anyone other than authorized repair distributors.

Do not try to repair the unit by yourself.

ATTENTION: Dangerous voltage is present inside the unit.

Protecting the environment

Separate collection.This product must not be disposed of with normal household waste.

Should you find one day that your product needs replacement,or if it is of no further use to you,do not dispose of it with household waste. Make this product available for separate collection.

Separate collection of used products and packaging allows materials to be recycled and used again.

Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household,at municipal waste sites or by the retailer when you purchase a new product.