

# AUTOMATIC COIN WRAPPING MACHINE

## MODEL **LPC-1**



## ANOTHER BIG HIT IN COIN WRAPPING!!

### FEATURES

1. Compact, easy to transport and service.  
The machine is divisible into three sections to help its portability.
2. Automatic Coin Feed. It continuously and automatically feeds coin from the hopper onto the coin table. It won't overfeed but just an optimal quantity of coin at a time, thanks to the self-regulating device.
3. Bagging Chute enables the bagging of coin a cinch!
4. Wrapping Paper Length is adjustable according to the size of the coin to be rolled.
5. All the user-admired features built in the heavy-duty "LAUREL" LAC-12 such as high-precision sorting mechanism, coin jam detection etc. etc. are also in this LPC-1, its sister unit.

### SPECIFICATIONS

Dimensions:	470mm(W)×985mm(H)× 470mm(D)
Weight:	110kg
Power Consumption:	250VA
Counting Speed:	Approx.1,300 coins per minute
Wrapping Speed:	Approx.12 rolls per minute
Hopper Capacity:	Approx.2,000 coins per load
Voltages:	Any voltage available. 50/60Hz

# LAUREL

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TOKYO, JAPAN

Printed in Japan



# LAUREL

## MODEL LPC-2 COIN WRAPPING MACHINE

Another Masterpiece of  
Light-Duty Coin Wrapper Developed on  
LAUREL's Peerless Technology!!

It's Compact Yet Incorporates  
All The Proven User-Friendly Features  
Plus Quite A Few Innovations.



### Simple to Operate

The revolutionary coin stacking mechanism frees the operator from the nuisance of replacing a coin tube when wrapping a different denomination coin. With the LPC-2, coin thickness adjustment, crimping hook adjustment and wrapping quantity presetting are no longer required. Just reset the denomination dial and wrapping paper. That's all.

### Useful Keypad & Display

The large LED display and the handy keypad are located in one place enhancing the operational ease. In case any abnormality develops, an alarm light goes on showing the cause of the problem in code on the display.

### Batching Flexibility

Bagging coins up to 9999 at one shot is possible through the ten keys. Batching coin rolls at a preset number is also available. Switching to the bagging mode is very simple and the built-in bagging chute sets in position automatically as soon as the lever is shifted to the bagging mode.

### Microprocessor Control

The microprocessor control assures ever-stable and fail-safe machine performance as well as easy maintenance.

### Wrapping Speed

The unique coin stacking mechanism and excellent magnetic count sensors ensure an average throughput of 15 rolls per minute which is unprecedented in this class of coin wrappers.

### SPECIFICATIONS:

Dimensions: 400 mm(W) x 1027 mm(H) x 550 mm(D)

Weight: 120 kgs.

Counting Speed: Approx. 1,500 coins/min.

Wrapping Speed: Approx. 15 rolls/min.

Hopper Capacity: Approx. 5,000 coins

Acceptable Stack Height: 35 mm — 110 mm

Voltages & Frequencies: Any voltage available, 50/60 Hz



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# LAUREL

## Coin Wrapping Machine

# MODEL

# LAC-10E



With Revolutionary New Features Engineered on LAUREL's  
Unsurpassed Mechatronic Expertise and Technology!!

The Versatile New LAC-10E Guarantees Completely Fail-Safe  
and Fool-Proof Operations with a Built-in Micro-Computer!!

It's so Simple Yet Reliable and It's Almost Fun to Count

or Roll Coins on the New LAC-10E!!

### FEATURES:

#### 1. AUTOMATIC SETTING OF WRAPPING PAPER AND WRAPPING Q'TY:

LAC-10E can accommodate up to six different sizes of wrapping paper. Wrapping paper and wrapping quantity for the target coin are automatically set when the denomination is set by Denomination Dial.

#### 2. AUTOMATIC JAM RECONCILIATION:

Should the coin flow from the coin table to the coin tracks fail, the coin table immediately runs "reverse" to reconcile the problem always assuring a smooth uninterrupted coin flow.

#### 3. DETECTION OF MISSETTING OF COIN STACKER:

If by mistake no coin stacker is set or a wrong one is set for the target coin, an alarm lamp lights, which goes off as soon as the right stacker has been set.

#### 4. DISPLAY OF ALARM CODES:

Should an irregularity develop during the operation, the pressing of "Stop" button displays the kind of problem by alarm codes.

#### 5. MICRO-COMPUTER CONTROL:

A built-in micro-computer control assures maximum operational stability and carefree reliability at all times.

#### 6. QUIET OPERATION GUARANTEED:

The unique electronic counting system combined with the noise absorbing construction reduces the level of operational noise to an absolute minimum (less than 70dB).

#### 7. WRAPPING SPEED: 20 ROLLS PER MINUTE:

Super-accurate electronic sensors and coin stopper are capable of developing the wrapping speed of up to 20 rolls per minute.

### SPECIFICATIONS:

#### Dimensions:

580mm (W) x 880mm (H) x 600mm (D)

#### Weight:

170 kgs (374 Lbs)

#### Counting Speed:

Approx. 1800 coins per minute

#### Wrapping Speed:

Up to 20 rolls per minute

#### Presettable Batch Stops:

100, 200, 250, 400, 500, 1000, 2000,  
2500, 4000, 5000 & Infinity (standard)

#### Hopper Capacity:

Approx. 5000 coins

#### Voltages:

Any voltage available, 50/60 Hz



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LAUREL

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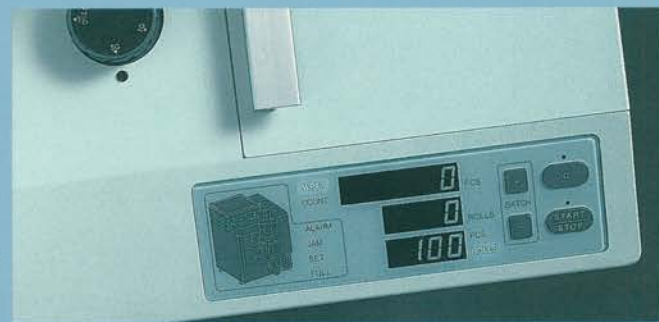
f i v e

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Model

# LAC-11

Coin Wrapping Machine



LED Display

Full Automatic Operation

Highly Reliable Machine Performance

Quiet Operation





# Simple is best! Simple operation is the Key to Success in the Coin Processing Job!!

"LAUREL" LAC-11 can free you from annoying operating noise and the reluctant job of changing wrapping paper rolls!

## Outstanding Features

### AUTOMATIC SETTING OF WRAPPING PAPER

The Model LAC-11 can accommodate up to 6 different sizes of wrapping paper rolls. The wrapping paper and number of coins per roll for the target coin are automatically selected when the denomination is set.

### QUIET OPERATION

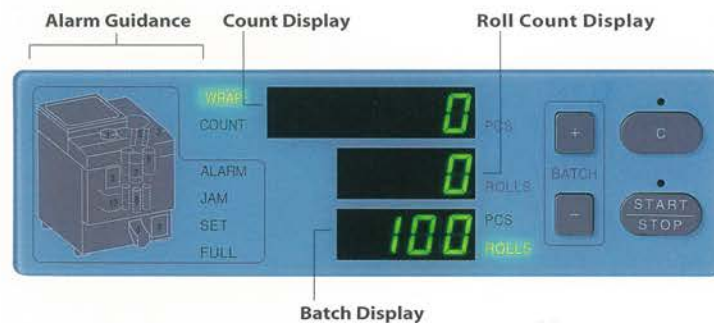
Thanks to the high technology and unique noise absorbing construction featuring an internal Automatic Paper Changer, the Model LAC-11 successfully reduces operating noise to the lowest level. The operator is free from uncomfortable noise.

### SIMPLE AND EASY OPERATION

The synergy achieved through Laurel's long experience in Coin Wrapping Machines has resulted in the development of a machine with simple operation. To start the wrapping operation all you have to do is simply set the Denomination Knob for any denomination and press the start switch.

### HIGH PRODUCTIVITY

The Model LAC-11 is capable of producing up to 20 rolls per minute reliably with less time spent changing wrapping paper and consequently, assures you of higher throughput with the effect of the Automatic Paper Changer.



## Specifications

Model	LAC-11
Dimensions	580mm(W) × 940mm(H) × 600mm(D)
Weight	Approx. 158 kg
Counting Speed (per min.)	1500 pcs.
Wrapping Speed (per min.)	Up to 20 rolls
Hopper Capacity	4000 pcs.
Acceptable Coin Diameter	15mm to 33mm
Acceptable Coin Thickness	1.0mm to 3.5mm
Max. Coin Specifications	Up to 12
Voltages	100-120VAC / 200-240VAC ±10%
Frequencies	50 / 60Hz
Power Consumption	220W(Wrap), 80W(Count)
Noise Level	69dB or Less
Conformity to EC Directives	EMC & Low Voltage

All data contained in this leaflet are subject to change without notice.

**Options :** Roll Height Detection Unit / Count Chute Unit / Mechanical Roll Counter

# LAUREL

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ISO 9001 Certificate NO. QSC-5242

The Model LAC-11 is manufactured at Laurel Precision Machines Co., Ltd., which meets the ISO 9001 Quality Systems requirements (BS EN ISO 9001, 1994=jis Z9901, 1994).

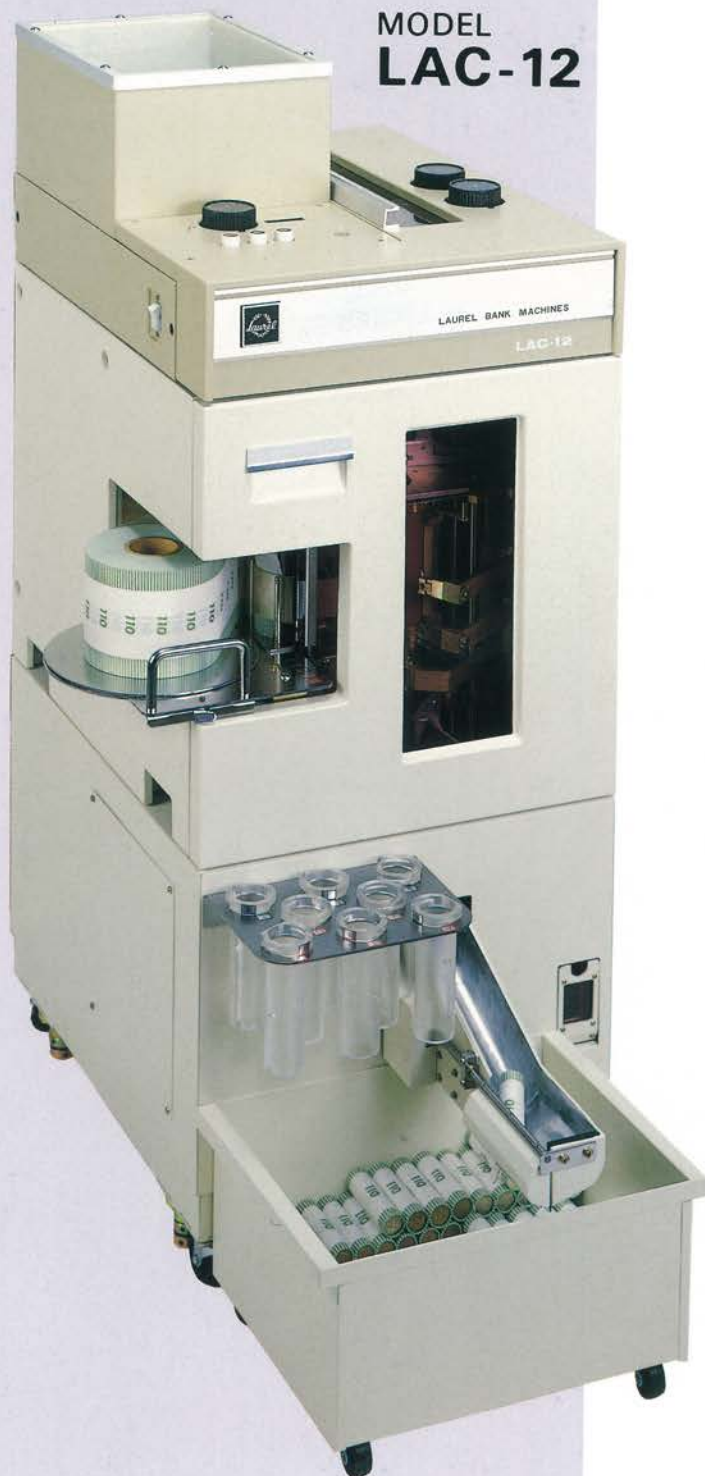




# "LAUREL"

**ANOTHER HIT IN  
OVERALL COIN  
PROCESSING!**

**MODEL  
LAC-12**



The new "LAUREL" LAC-12 Coin Wrapper is the most advanced machine available. The LAC-12 counts and wraps coins of any denomination faster, easier and more efficiently than any other coin handling machine. It's completely automatic, yet has fewer moving parts than other coin wrappers.

The "LAUREL" LAC-12 sorts, counts and wraps 18 to 22 rolls of coins per minute depending on the denomination being wrapped. When counting only, it averages over 2000 coins per minute.

Set the "LAUREL" LAC-12 for any single denomination. Simply place the coins in the hopper. And the rest is automatic! The coins are fed into a revolving tray which carries them first to a sorting station. As they pass over the sorting track, the coins that are bent or of a denomination different from those being wrapped are ejected. The larger coins are unable even to reach the sorting track and remain behind. The smaller coins are forced into the reject box.

The wrapping mechanism is uniquely designed to receive and wrap coins in a position directly below the receiving stacker. This simple and direct path of coin travel facilitates rapid movement of loose coins to finished wrap resulting in a 25% increase in throughput.

## **SPECIFICATIONS:**

Dimensions: 470mm(W) × 1197mm(H) × 600mm(D)

Weight: 138kg(304lbs)

Counting Speed: Approx. 2,100 coins per minute

Wrapping Speed: Approx. 18–22 rolls per minute

Hopper Capacity: 5,000 coins

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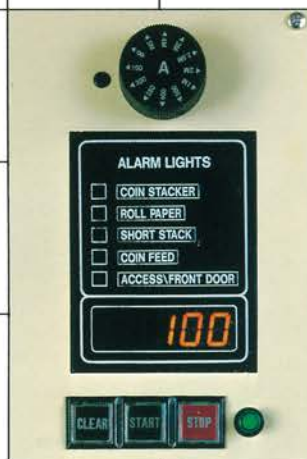
**LAUREL BANK MACHINES CO., LTD.**  
TOKYO, JAPAN

Printed in Japan



# LAUREL LAC-14

THE QUINTESSENCE OF  
COIN WRAPPING TECHNOLOGY!  
SO "USER-ORIENTED" THE MACHINE GUARANTEES  
COMPLETELY FAIL-SAFE AND FOOL-PROOF OPERATION  
AND INCORPORATES ALL ACCLAIMED FEATURES  
OF LAC-12, ITS PREDECESSOR.  
ONLY LAC-14 HAS ALL THESE EXCLUSIVE  
ADVANTAGES IN ONE!



## ALARM LIGHTS

### ● COIN STACKER

An alarm light will glow if the operator incorrectly sets the stacker and will go off as soon as the correct one is set.

### ● ROLL PAPER

An alarm light will go on notifying the operator of irregularities such as a missetting or a wrong denomination paper. The machine will not start operating unless everything is correct and ready.

### ● SHORT STACK

An alarm light will go on should any coins spill during wrapping or should short stacking of coins occur, stopping the machine immediately.

### ● COIN FEED

Should the coin flow from the coin table to the sorting tracks fail, the coin table automatically reverses to correct the problem. The coin table starts automatically to rotate the correct way 3 seconds after the reverse runs but stops if the problem remains unsolved.

### ● ACCESS/FRONT DOOR

Opening of any access/front door brings the machine to an immediate stop automatically. This is another built-in safety feature.

## FEATURES

1. All functions are controlled by the microcomputer built in the machine, assuring complete reliability.
2. If any problem develops, the machine displays it by an alarm code when the stop button is depressed.
3. High throughput, up to 30 rolls per minute.
4. A self-adjustable coin jam detector ensures smooth and uninterrupted coin flow without machine stoppage.
5. A wrapping paper knife automatically adjusts and keeps its optimal cutting position in accordance with the object

coin and the kind of wrapping paper on the master roll.

6. Wrapping rollers stop running automatically the moment a problem occurs with the paper feed.

7. Coin wrapping paper available in four cut lengths helps to save paper consumption, which is important in the long run.

8. This heavy-duty coin roller has a minimum life expectancy of 20 million wraps under the adverse conditions which include dirt, string, metal particles and operator indifference.

## SPECIFICATIONS

Dimensions: 470mm(W) × 1,197mm(H) × 600mm(D)

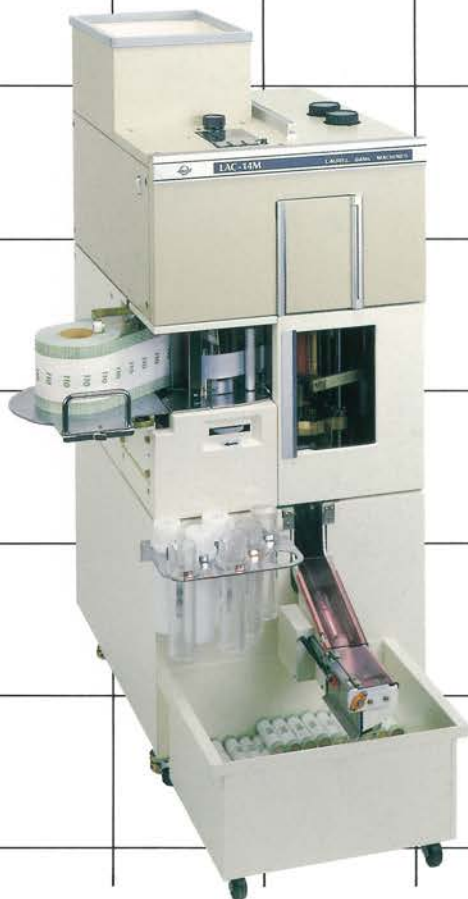
Weight: 170kg

Counting Speed: Approx. 2,300 coins per minute

Wrapping Speed: Up to 30 rolls per minute

Hopper Capacity: Approx. 5,000 coins

Voltages: Any voltage available, 50/60Hz



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Model

# LAC-15

**LAUREL**

## Coin Wrapping Machine





# THE SYNERGY OF LAUREL'S LONG EXPERIENCE, PRACTICAL INTELLIGENCE AND UNIQUE SENSOR TECHNOLOGY IN COIN WRAPPING// THE NEW "LAC-15" OPERATES WITHOUT LETUP WHILE DETECTING AND REMOVING PROBLEM COINS AND COIN ROLLS AUTOMATICALLY//

## ■WRAPPING SPEED

The high throughput of up to 33 rolls per minute.

## ■AUTOMATIC JAM RECONCILIATION

Should a coin jam occur on the Coin Sorting Tracks or around the exit from the Turn Table, the Mechanism along the coin path will automatically clear the jam and the LAC-15 will continue the operation without interruption.

## ■AUTOMATIC REJECTION OF LARGE SIZE COINS

On the LAC-15, any coin larger in size than the object coin and remaining on the Turn Table will automatically be ejected into the Reject Box.

## ■AUTOMATIC REJECTION OF SHORT/OVERWRAPPED ROLLS

Measuring the overall height of each coin roll during wrapping, the LAC-15 detects any shortwrapped/overwrapped coin roll and automatically rejects it into the Clear Box and continues wrapping without letup. The number of coins rejected will automatically be deducted on the Count Display.

## ■AUTOMATIC REJECTION OF DIFFERENT MATERIAL COINS

Any coin different in materials from the object coin will be detected and ejected into the Reject Box and the LAC-15 will resume the operation automatically.

## ■EASY-TO-SEE ALARMS

All illustration-guided Alarm LED's, Alarm Lamps and Alarm Codes showing on the Operating Pad are easy to see and understand.

## ■SIMPLE TO OPERATE

Simply set the wrapping paper and the Denomination Knob for any single denomination and depress the Start Switch. That's all you need to start wrapping operation.

## ■LOW NOISE LEVEL

By far the lowest operational noise for such high speed coin wrapping machine thanks to the totally enclosed structure.



## SPECIFICATIONS

Dimensions : 450mm(W)×570mm(D)×1070mm(H)

Weight : 153kg(337 lbs)

Acceptable Coin Diameter : 15mm~41mm

Acceptable Coin Thickness : 1.0mm~3.5mm

Acceptable Coin Stack Height : 35mm~110mm

Counting Speed : Up to 3000 coins per minute

Wrapping Speed : 28~33 rolls per minute depending on coin size and wrapping unit

Wrapping Specifications : Up to 12 different specifications

Hopper Capacity : Approx. 6000 coins

Power : 100/110/115/125/200/220/230/240V & 50/60Hz

Power Consumption : 315W



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MINATO-KU, TOKYO, JAPAN

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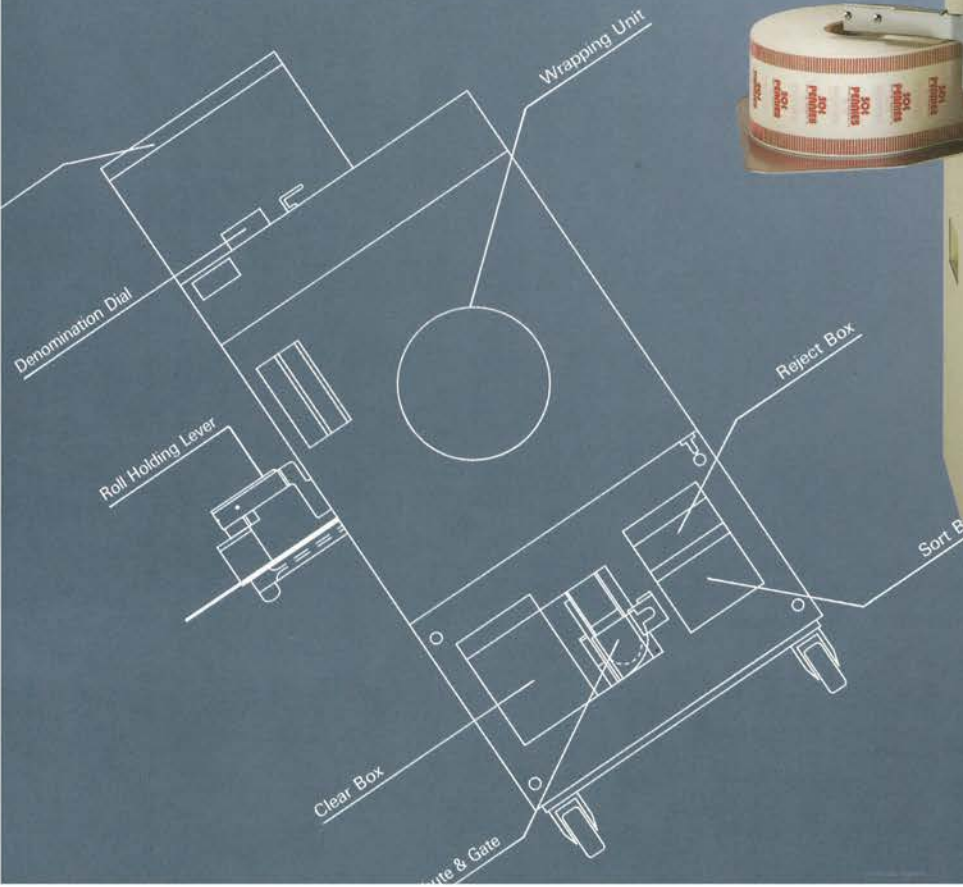


LAUREL

Model

# LAC-15 II

Coin Wrapping Machine





**TO THE OPERATORS ENGAGED IN COIN WRAPPING THE WHOLE DAY, THE WRAPPING SPEED PER MINUTE AND EYE-CATCHING FEATURES ON BROCHURES DO NOT MEAN VERY MUCH. THE BOTTOM-LINE IS THE MACHINE THROUGHPUT, I.E., FEWER PROBLEMS AND LESS DOWNTIME IF THE SPEED IS NOT SO HIGH. NOW, LAUREL'S TECHNOLOGY HAS SUCCESSFULLY ENGINEERED THE NEW MODEL LAC-15II WITH OUR WORLD-CLASS PRACTICAL COIN WRAPPING EXPERTISE.**

#### HIGHER DURABILITY & STABILITY

Durability study and testing were thoroughly conducted prior to redesigning its predecessor and have consummated the robust "Industrial Machine", the Model LAC-15 II which is capable of performing a real heavy-duty wrapping job with high and stable productivity.

#### IMPROVED SERVICEABILITY

Minimizing the maintenance needs and frequency was another target in the redesigning, which has also been accomplished with the Model LAC-15II. The sections requiring servicing have been drastically reduced in number and modified for easier access, repair and adjustments.

#### WRAPPING SPEED

The high throughput of up to 32 rolls per minute.

#### AUTOMATIC JAM RECONCILIATION

Should a coin jam occur on the Coin Sorting Tracks or around the exit from the Turn Table, the Mechanism along the coin path will automatically clear the jam and the LAC-15II will continue the operation without interruption.

#### AUTOMATIC REJECTION OF SHORT/OVERWRAPPED ROLLS

Measuring the overall height of each coin roll during wrapping, the LAC-15II detects any shortwrapped/overwrapped coin roll and automatically rejects it into the Clear Box and continues wrapping without letup. The number of coins rejected will automatically be deducted from the Count Display.

#### AUTOMATIC REJECTION OF DIFFERENT MATERIAL COINS

Any coin different in materials from the object coin will be detected and ejected into the Reject Box and the LAC-15II will resume the operation automatically.

#### EASY-TO-SEE ALARMS

All illustration-guided Alarm LED's, Alarm Lamps and Alarm Codes showing on the Operating Pad are easy to see and understand.

#### SIMPLE TO OPERATE

Simply set the wrapping paper and the Denomination Knob for any single denomination and depress the Start Switch. That's all you need to start the wrapping operation.

#### OPTIONAL ACCESSORIES

Large Hopper (Capacity: 10,000 coins approx.)

Mechanical Roll Counter

RS232C/RS422 Serial Interface Facility

#### SPECIFICATIONS

Dimensions: 450mm(W)×570mm(D)×1118mm(H) (Roll Chute exclusive)

Weight: 155Kg (341 lbs)

Acceptable Coin Diameter: 15mm~33mm

(15mm~38mm on Casino Version)

Acceptable Coin Thickness: 1.0mm~3.3mm

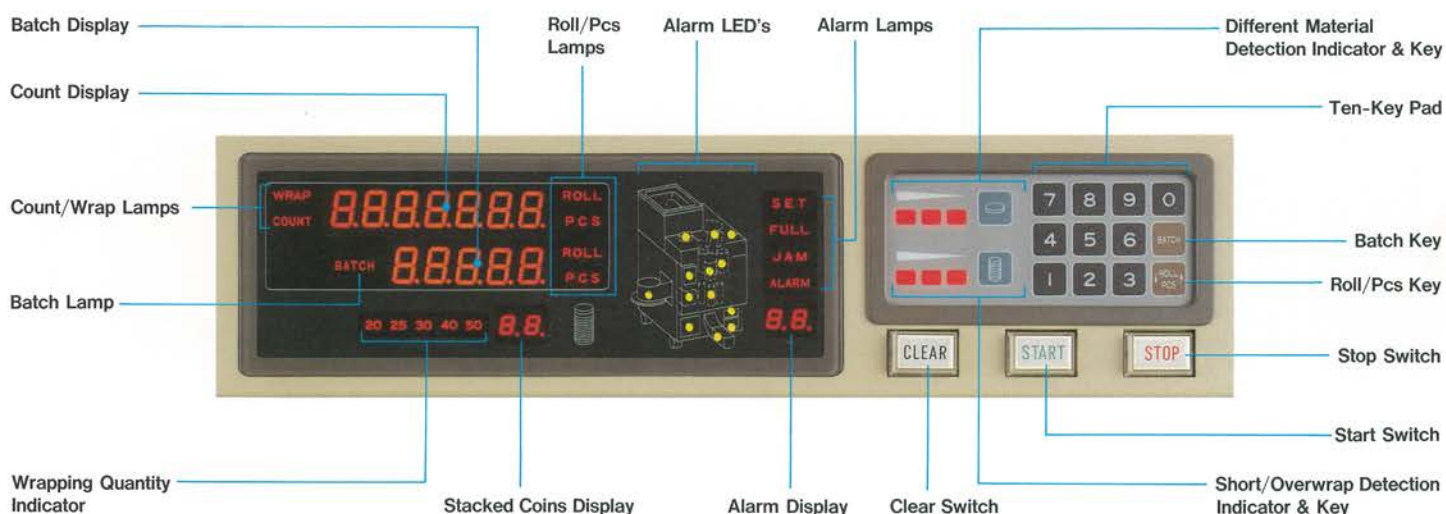
Wrapping Speed: Up to 32 rolls per minute

Wrapping Specifications: Up to 12 different specifications

Hopper Capacity: 5000 coins approx. (depending on coin diameter)

Power: 110/115/125/200/220/230/240V (Single Phase AC) & 50/60Hz

Power Consumption: 350VAC (315W)



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1-2, TORANOMON 1-CHOME  
MINATO-KU, TOKYO, JAPAN



**LAUREL**

The Autofeed Hopper holds up to 8000 pcs. of coin(φ24mm).

The User-friendly Operation Panel with the graphic LCD display gives an easy-to-see and fool-proof operation guidance.

The superheavy-duty construction and high speed mechanism insure wonderful productivity and efficient coin processing.

Model

**LAC-16**

**Coin Wrapping Machine**

**LAUREL**

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## FEATURES

### Model LAC-16

The Model LAC-16 is a consummation of Laurel's 35-year long technology and expertise in the R & D and manufacture of state-of-the-art, world-class coin wrappers and numerous other coin processing equipment and systems.

It is doubtless the fastest and most productive coin wrapper on earth!

Let the Laurel LAC-16 work for you!

We are confident that the Machine will give you not only full satisfaction in throughput and cost-performance but also a lot of pleasure in your everyday coin processing job.

### Graphic LCD Display

The User-friendly panel gives an easy-to-see and fool-proof, clear visual operational guidance. All counting and wrapping procedures are illustrated and instructed to the operator on the display.

### Highly Reliable Performance

The Machine's superheavy-duty robust construction and high speed mechanism always assure steady and efficient coin counting and wrapping productivity. Its unique 'Maintenance Mode' will help greatly reduce the delicate and time-consuming mechanical and electrical adjustments.

### Multicoin Processing Capabilities

The universal cams and memory card make it real quick and simple to change coin wrapping specifications. When a new coin or token starts circulating on the market, all you have to do is just install a new memory card from Laurel in which the necessary data of the new coin or token are registered and let the LAC-16 do the rest of the job.

### Automatic Jam Reconciliation & Rejection

With the LAC-16 a coin jam reconciliation is a cinch. Its unique mechanism clears the jam speedily and automatically and the Machine continues the job without interruption. On top of that, foreign coin, smaller / larger diameter coin, odd coin and irregular coin stack are automatically rejected into the Clear Box / Sort Box with the number of coin rejected automatically deducted and shown on the count display.

### Options

Coin Roll Height Detection Unit  
Coin Roll Chute Gate  
Mechanical Coin Roll Counter  
RS232C/RS422 Serial Interface Facilities



LAC-16 Panel

### After Sales Service

A worldwide network of "Laurel" authorized distributors assures you of high levels of support and after sales service.

### ISO 9001

The Model LAC-16 is manufactured at Laurel Precision Machines Co., Ltd., which meets the ISO 9001 Quality Systems requirements (BS EN ISO 9001, 1994 = JIS Z9901, 1994).



# "LAUREL" IS THE RIGHT CHOICE FOR YOUR COIN WRAPPING MACHINE.

### Specifications

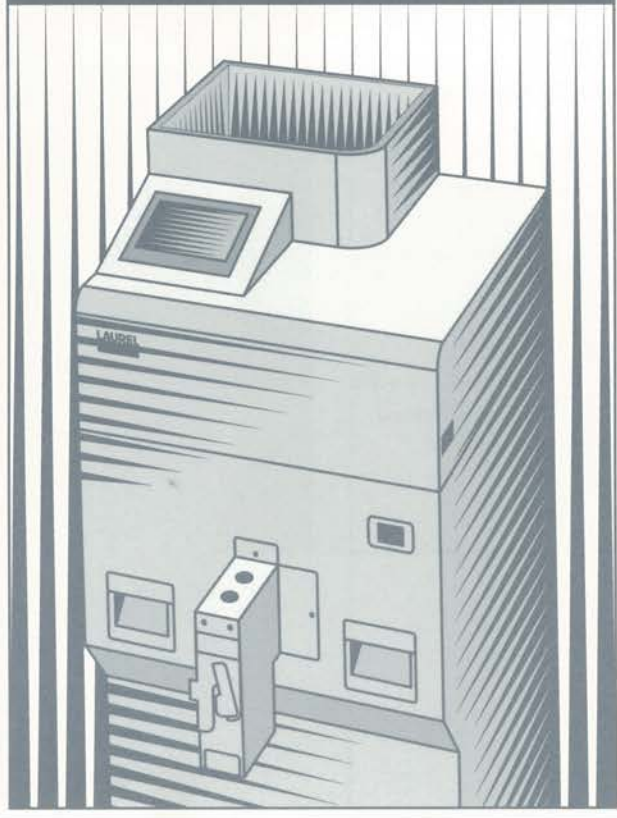
Dimensions	Height Width Depth	1150mm 410mm 600mm
Weight		Approx. 137Kg(304 lbs.)
Acceptable Coin Diameter Range		15mm ~ 38mm
Acceptable Coin Thickness Range		1mm ~ 3.5mm
Wrapping Speed		Up to 40 rolls per minute
Counting Speed		Approx. 3000 pcs. per minute
Acceptable Coin / Token Specifications		Max. 16
Hopper Capacity		Approx. 8000 pcs. (φ24mm coin / token)
Power Source		100 - 125V AC / 200 - 240V AC, 50 - 60Hz
Conformity to EC Directives		EMC & Low Voltage



**LAUREL**

**LAUREL'S  
NEW INVENTION  
LCC-20**

for High Speed Image  
Inspection of Coins





## Intelligence, Invention & Innovation!

The LCC-20 has been engineered by Laurel's own technology in software and electronics on their 50 years of practical experience in the cash handling equipment business.

## Specifications

- Dimensions : 410 (W)×630 (D)×900 (H) mm
- Weight : Approx. 90kgs
- Acceptable Coin Diameter : 15mm ~ 32mm
- Acceptable Coin Thickness : 1mm ~ 3.3mm
- Counting Speed : up to 1600 coins per minute
- Image Inspection Speed : up to 1200 coins per minute
- Hopper Capacity : approx. 4000 coins
- Sort Box Capacity : approx. 300 coins
- Reject Box Capacity : approx. 300 coins
- Power Supply : 100-120VAC / 200-240VAC, 50-60Hz
- Conformity to EC Directives : EMC & Low Voltage
- Quality Assurance System : ISO 9001 certified

## Features

### ● High Speed Image Inspection

Such tedious, painstaking and nerve-wracking job as visual inspection of volumes of coins is no longer necessary. The model LCC-20 is the first affordable product capable of inspecting images of coins at high speed. Foreign coins, different denomination coins, dirty coins, etc. will be automatically detected and rejected even if they are exactly the same in size and material as the genuine coin.

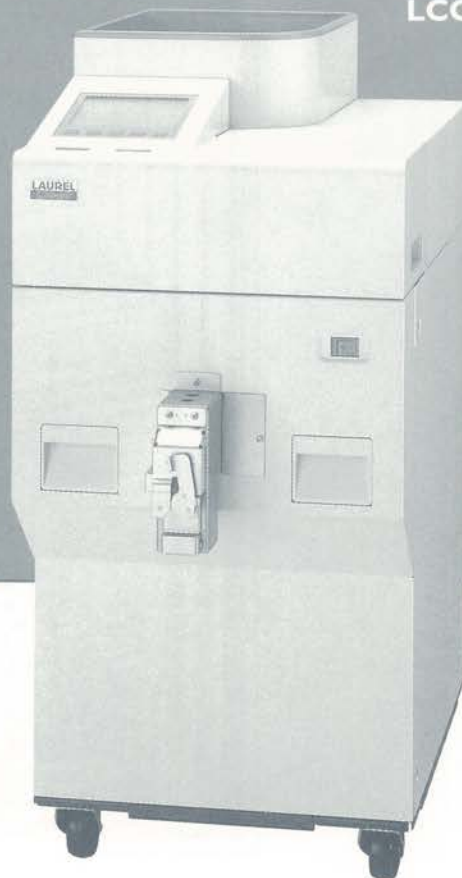
### ● User-friendly Operation

The large graphic LCD display gives the operator illustrated guidance for easy and foolproof operation.

### ● Magnetic Detection

The LCC-20 is also equipped with the Magnetic Detector for detecting forged coins.

LCC-20



# LAUREL

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# LAUREL

## Model

# EFF

**NEW GENERATION COIN COUNTER  
CREATED ON LAUREL'S UNSURPASSED  
MECHATRONIC EXPERTISE !!**

### FEATURES:

#### 1. Counting Speed up 20% -

**More Than 2,200 Coins Per Minute:**

Super-accurate sensors and high-sensitivity stopper have achieved the improvement over conventional machines in coin processing speed.

#### 2. Quiet Operation:

The unique electronic counting system combined with its noise absorbing construction assures less than 70-db operation.

#### 3. Clear and Bright Count Display:

The large 6-digit L.E.D. count display guarantees clear and pleasant reading at all times.

#### 4. Automatic Jam Reconciling Device:

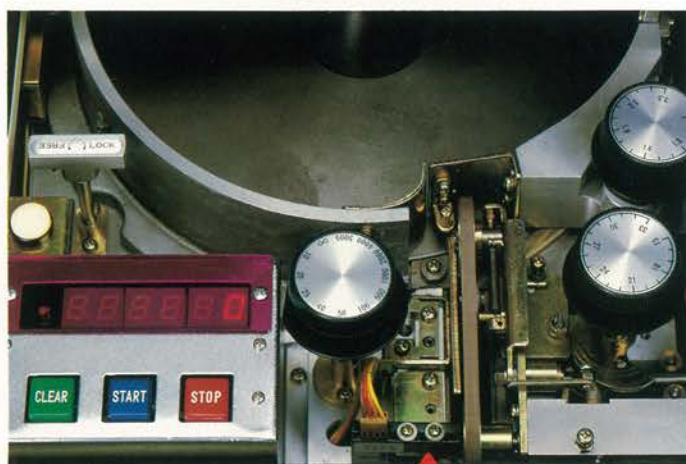
A coin jam can be reconciled in a jiffy and automatically as the coin table reverses the moment a jam occurs. Coin jamming on the sorting tracks is brought to the operator's attention by buzzer alarm and flashing of the L.E.D. display. This same alarm will alert the operator if the photocell counting sensors are affected by dust accumulation.

#### 5. Easy to Operate:

Mere feather-touch on the start-stop-clear panel switches assures instant response and smooth trouble-free operations.

### SPECIFICATIONS:

<b>Dimensions:</b>	330mm(W)×550mm(D)×370mm(H)
<b>Weight:</b>	37kg. (82 lbs.)
<b>Presettable Stops:</b>	10,20,25,40,50,100,400,500, 1000,4000,5000 & Infinity
<b>Counting Speed:</b>	Approx. 2,200 coins per minute
<b>Hopper Capacity:</b>	Approx. 5,000 coins
<b>Voltage:</b>	Any voltage, 50/60Hz



**Micro-Precision Sensors and Coin Stopper Mechanism**

Manufactured by:

**LAUREL BANK MACHINES CO., LTD.**  
TOKYO, JAPAN

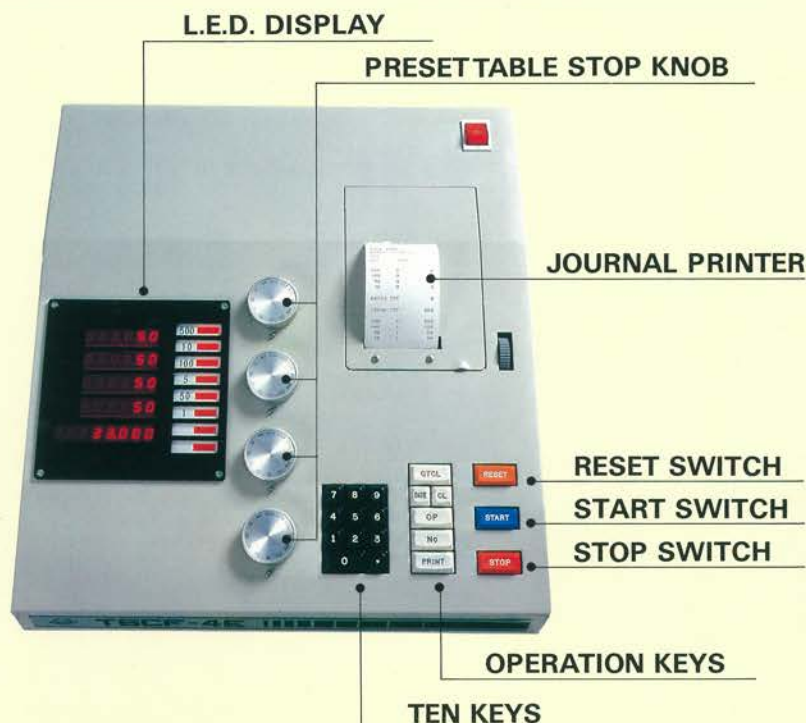
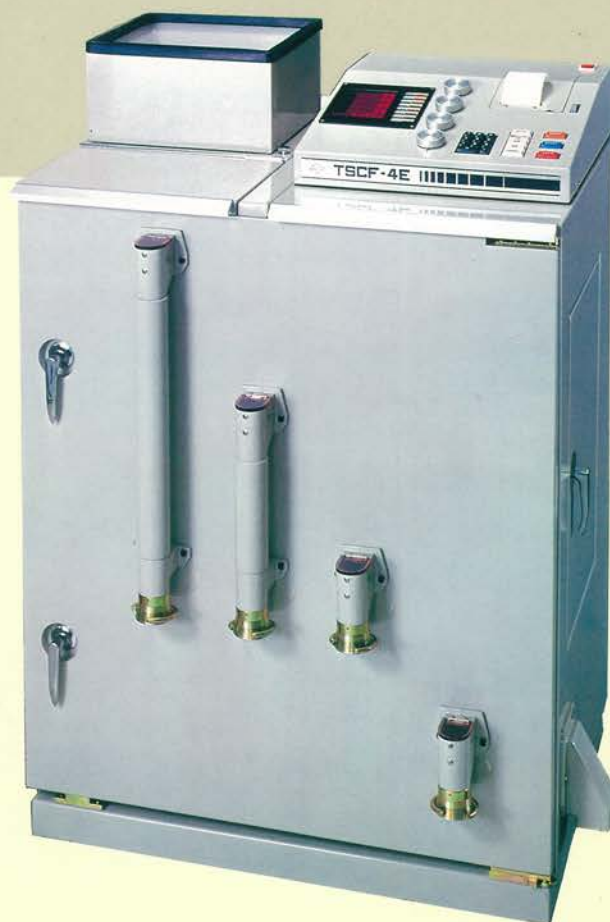
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# LAUREL "CASCADE" TYPE HEAVY-DUTY COIN SORTER-COUNTER

MODEL  
**TSCF-4E**

It's a revolution to the traditional  
"CASCADE" coin sorter-counter.  
LAUREL is the pioneer again in introducing  
this new concept machine.  
It's so fast, so quiet and so reliable!!



## FEATURES:

### 1. Ultra-Low Noise Operation:

The totally enclosed construction reduces the level of operational noise to absolute minimum (70 dB).

### 2. Simultaneous Coin Sorting and Counting:

The machine is capable of sorting and counting simultaneously 4 coin denominations out of 8 maximum.

### 3. 11 Presettable Batching Stops (10, 20, 25, 40, 50, 100, 400, 500, 1000, 4000 & 5000)

Simple to operate and the machine stops automatically on completion of processing a preset number of coins at any of these stops.

### 4. Automatic Journal Record Printer:

Each transaction is automatically recorded for audit convenience. The dot printer keeps a precise record of each transaction by Page No., Date, Transaction No., Operator No., Subtotals by denominations, Batch Total Amount and Grand Total Amount.

## SPECIFICATIONS:

Dimensions:	920mm(W) × 650mm(D) × 1220mm(H)
Weight:	220kg. (485lbs.) approx.
Sorting Speed:	Approx. 1,400 coins per minute
Hopper Capacity:	Approx. 4,000 coins
Voltage:	Any voltage, 50/60 Hz

Manufactured by:

**LAUREL BANK MACHINES CO., LTD.**  
TOKYO, JAPAN

Printed in Japan



# "LAUREL"

COIN COUNTER  
MODEL TSF  
COMPACT YET  
DEPENDABLE!

## FEATURES:

1. Compact size, large machine performance.
2. Simple to operate. One touch resetting of display.
3. Removal of bent coins is a cinch.
4. Vibration proof motor and totally enclosed construction assure quiet operation.
5. Automatic counting stop when preset number of coins are counted or wrapped.
6. Coin wrapping device available as an option.

## SPECIFICATIONS:

Dimensions: 260mm (W) × 250mm (H) × 480mm (D)  
Weight: 18 kg. (40 lbs.)

Presetable Count Stops: Up to 8 stops between 10 and 1,000 in multiples of 10 or 50

Counting Speed: Approx. 1,800 coins per minute  
Hopper Capacity: Approx. 1,200 coins

Distributed by:

Manufactured by:

**LAUREL BANK MACHINES CO., LTD**  
TOKYO, JAPAN.

Printed in Japan



# AUTOMATIC COIN COUNTING MACHINE

UP YOUR EFFICIENCY  
IN COIN COUNTING WITH  
THIS NEW AUTOMATIC  
TSF-A!!

# MODEL TSF-A

## FEATURES

1. Large hopper can accommodate up to 2,500 coins.
2. Automatic coin feeder supplies an optimum amount of coins from the hopper to the coin table without jamming.
3. Counting stops automatically when a preset number of coins are counted or wrapped.
4. Compact and serviceable on desk top.
5. Simple to operate. One touch resetting of display.
6. Vibration-proof motor and totally enclosed construction assure quiet operation.
7. Coin wrapping device available as option.

## SPECIFICATIONS

Dimensions: 260mm(W)X330mm(H)X  
490mm(D)  
Weight: 28Kg. (61 lbs.)  
Presetable Count Stops: Up to 8 stops between 5  
and 1,000 inclusive in  
multiples of 5.  
Counting Speed: Approx. 1,800 coins per  
minute.  
Voltage: Any voltage,  
50/60 Hz.



# LAUREL

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TOKYO, JAPAN.

Printed in Jap



# LAUREL ELECTRONIC COIN COUNTERS

# TSF-E & TSFA-E

The state of the art machines  
born out of ever-advancing  
mechatronic technology  
of LAUREL!!

Tough and rugged,  
yet so fast and quiet and  
most reliable ever!!



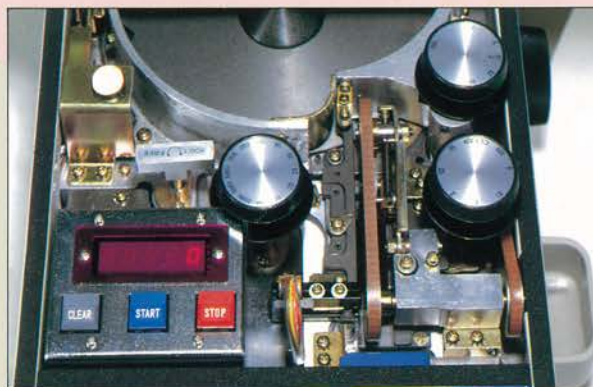
**TSF-E**



**TSFA-E**

## FEATURES:

1. Compact yet dependable.
2. Easy to operate. Quick start and stop with push buttons.
3. Quiet, smooth and accurate counting at all times thanks to the unique design concept.
4. 5-digit L.E.D. display gives clear and bright reading.
5. Up to 11 presettable count stops are available from 5 to 9995 (multiples of 5).
6. TSFA-E offers additional features - a) large hopper accommodating up to approx. 2,500 coins, and b) automatic coin feed for jam-free and properly controlled supply of coins from the coin hopper onto the coin table.



## SPECIFICATIONS:

	TSF-E	TSFA-E
<b>Dimensions:</b>	260 <sup>(W)</sup> mm × 400 <sup>(D)</sup> mm × 260 <sup>(H)</sup> mm	260 <sup>(W)</sup> mm × 490 <sup>(D)</sup> mm × 330 <sup>(H)</sup> mm
<b>Weight:</b>	24kg (53 lbs.)	28kg. (62 lbs.)
<b>Standard Presettable Count Stops:</b>	10, 20, 25, 40, 50, 100, 400, 500, 1000, 4000, 5000 & Infinity	
<b>Counting Speed:</b>	Approx. 2,100 coins per minute (with coin of 22mmφ)	
<b>Hopper Capacity:</b>	Approx. 1,200 coins	Approx. 2,500 coins
<b>Voltage:</b>	Any voltage, 50/60Hz	

**Distributed by:**

**Manufactured by:**

**LAUREL BANK MACHINES CO., LTD.**  
TOKYO, JAPAN

Printed in Japan



LAUREL

Model

C-600/800

COIN COUNTERS

the best solution in currency counting

technology  
COIN COUNTERS

LAUREL

LAUREL BANK MACHINES CO., LTD.  
1-1-2, TORANOMON, MINATO-KU, TOKYO 105-8414, JAPAN  
Fax: +81-3-3580-9362 E-Mail: int.opc.div@lbm.co.jp  
<http://www.lbm.co.jp>





C-600

*Laurel has developed the most excellent and sophisticated Machine.*



C-800

## Your "Best" Choice of Coin Counting/Packaging for Productive and Profitable Coin Processing!!

Another state-of-the-art "LAUREL" has launched with compact and stylish design !! Count a single denomination at 2000 coins per minute speed !!

### FEATURES

- Using Photo Sensor for rapid counting with high accuracy
- Quick, simple and quiet operation
- Simple adjustment for denomination Changeover
- Small Coin Off-sort Cup and Bag Attachment are standard.
- Off-sorts undersized coins during operation.
- Easy to read 5 digit green LED display
- Exact Pre-programmable Batch Stops (1~9999 variable batch preset)

- Light weight & Highly Portable Design
- Built-in Carrying Handle is standard for C-600.



### After Sales Service

A worldwide network of "LAUREL" authorized distributors assures you of high level of support and after sales service.

Specifications	C-600	C-800
Dimensions ( W X D X H )	242X340X166	242X400X324
Weight	Approx. 8kg	Approx. 9kg
Counting Speed ( per min.)	Approx. 2000 Coins	
Hopper Capacity	Approx. 1800 Coins	Approx. 4000 Coins
Acceptable Coin Diameter	14 ~ 34mm	
Acceptable Coin Thickness	1 ~ 3.4mm	
Voltage	120 / 220 / 240 $\pm$ 10%	
Frequencies	50 / 60 Hz	
Power Consumption	36W at Counting / 4.6W at Rest	
Options (s)	Coin Tube Holder for Manual Wrapping	

All data contained in this leaflet are subject to change without notice.



Printed in Japan



**LAUREL**

**Model**

# C-2000

**COIN COUNTER**



# We "LAUREL" THINK PROGRESS IS FOREVER!

The state of the art machine born out of ever-advancing mechatronic technology of LAUREL!!

Tough and rugged, yet so fast and quiet and most reliable ever!!

## Features

### HIGH SPEED OPERATION

The great efficiency in counting large volume of coins is brought by the impressive 3,000 coins per minute counting speed.

### QUIET OPERATION

The low operational noise of less than 70dB has been attained by Laurel accumulated technical expertise on cutting any noise from machine.

### HIGH PERFORMANCE

The most advanced Laurel technology ensures smooth operation and the most high quality components guarantee high output with great accuracy, which makes it possible to process high volumes.

### After Sales Service

A worldwide network of "LAUREL" authorized distributors assures you of high level of support and after sales service.



Specifications	C-2000
Dimensions	300mm (W) × 450mm (D) × 282mm (H)
Weight	Approx. 20 kg
Counting Speed ( per min. )	Approx. 3,000 coins
Hopper Capacity	Approx. 2,000 coins ( Ø 22mm )
[with Large Hopper]	[ Approx. 4,000 coins ]
Acceptable Coin Diameter	14.8mm - 34mm
Acceptable Coin Thickness	1.0mm - 3.4mm
Voltages	100 - 120 VAC / 200 - 240 VAC ± 10%
Frequencies	50 / 60Hz
Power Consumption	50W at Counting / 20W at Rest
Noise Level	Less than 70 dB at Counting
Conformity to EC Directives	EMC & Low Voltage
Options	Large Hopper, Coin Tube Holder for Manual Wrapping and Laurel Interface Link

All data contained in this leaflet are subject to change without notice.

# LAUREL

LAUREL BANK MACHINES CO.,LTD.  
1-1-2,TORANOMON, MINATO-KU, TOKYO 105-8414, JAPAN  
Tel:+81-3-3502-3318 Fax:+81-3-3580-9362 E-Mail:laurel@tb3.so-net.ne.jp



Printed in Japan



# LAUREL DESK-TOP FRICTION CURRENCY COUNTER

## MODEL FPAF-7



"The taste of the pudding is in the eating!"

Absolutely true and similarly the value of the machine is in the using!

Use the FPAF-7 and enjoy the unparalleled performance of a masterpiece.

### ■ FEATURES:

1. Fast accurate counting of new and used currency is guaranteed regardless of conditions, thanks to the 'Duplex Brake System', an unprecedented control device invented by LAUREL.
2. Speedy and efficient batching is possible with the automatic 'REPEAT' mechanism.
3. Progressive total of batching frequency is shown automatically on the LED display.
4. A variable thickness control allows the operator to adjust operating speed when processing poor quality currency or documents.
5. A built-in electronic 'doubles' detector instantly alerts the operator the moment more than one note at a time has gone through.
6. The machine stops automatically if any irregularity develops during the operation.

### ■ SPECIFICATIONS:

Dimensions	330mm(W)×330mm(H)×260mm(D)
Weight	16kg(35 lbs)
Counting Speed	100 currency notes in 6 seconds
Document Size	100mm×50mm min. — 195mm×100mm max.
Power Source	Any voltage, 50/60 Hz A.C.



Distributed by:

Manufactured by:

**LAUREL BANK MACHINES CO., LTD**  
TOKYO JAPAN.

Printed in Jap



Model

LAUREL

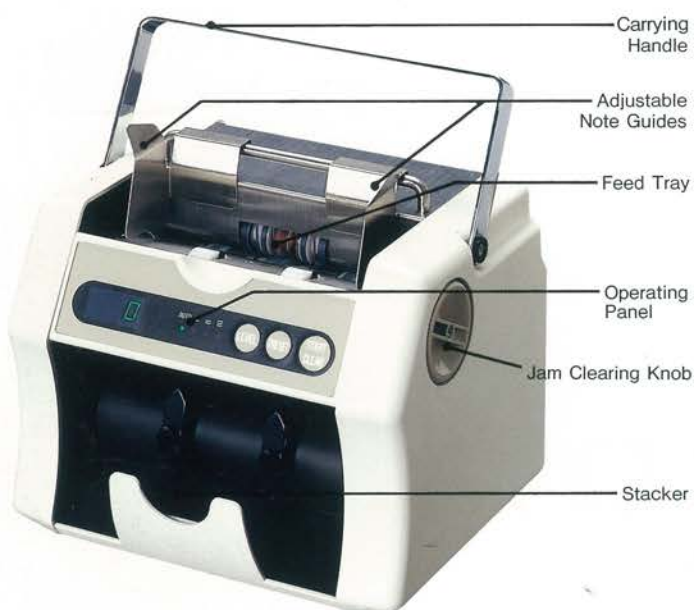
# FPAF-30

Mini Friction Currency Counter





**LAUREL'S LEADING TECHNOLOGICAL EXPERTISE IS SUPERBLY EMBODIED IN THE MODEL FPAF-30. THE MODEL FPAF-30 IS COMPACT AND LIGHTWEIGHT. IT FITS WHEREVER THERE IS NEED FOR FAST AND ACCURATE CURRENCY AND DOCUMENTS COUNTING AND BATCHING.**



#### ●SPECIFICATIONS:

Feed Tray Capacity	Upto 200 documents
Stacker Capacity	Upto 200 documents
Document Size Range	Min. 50mm x 100mm Max. 102mm x 194mm
Document Thickness Range	0.08mm to 0.12mm
Speed	950 documents/minute
Dimensions	212mm(H)x270mm(W)x225(D)
Power	100, 110/115, 220/240 VAC, 50/60Hz
Power Consumption	70 W (At Counting) 8 W (At Rest)
Weight	8 Kg

#### ■EVERYTHING FULLY AUTOMATIC

No onerous adjustments are needed. The intelligent FPAF-30 does the job fully automatic.

##### ●Automatic Density Level Adjustment:

The optimal doubles detection level is automatically set on the first counted note. The machine also allows manual selection of three density levels through a touch pad switch. Doubles detecting function can be switched on or off as required.

##### ●Pre-Adjusted Thickness Setting:

The delicate thickness adjustment for documents is no longer required.

##### ●Auto Start/Auto Stop:

Simply put documents on the feed tray, and the counting starts and stops automatically on completion of each transaction.

#### ■LARGE FEED TRAY

The large feed tray can accommodate documents 50~102mm wide and 100~194mm long.

#### ■MODES

##### ●Count:

The double sensors assure unsurpassed counting accuracy and reliability.

##### ●Preset:

The Pre-Programmed Preset Mode allows easy selection out of the most popular batching numbers i.e., 10, 20, 25, 50 & 100.

##### ●Preset Repeat:

The stacker sensors enable repeat batching automatically as soon as preset batch is removed.

#### ■EASY TO READ ERROR CODES

If any error occurs, the corresponding error code shows on the display and alerts the operator with audible signal.

#### ■EASY TO SERVICE

The simple structural design requires minimal service and makes it easy to maintain.

#### ■INTERFACE CAPABILITY

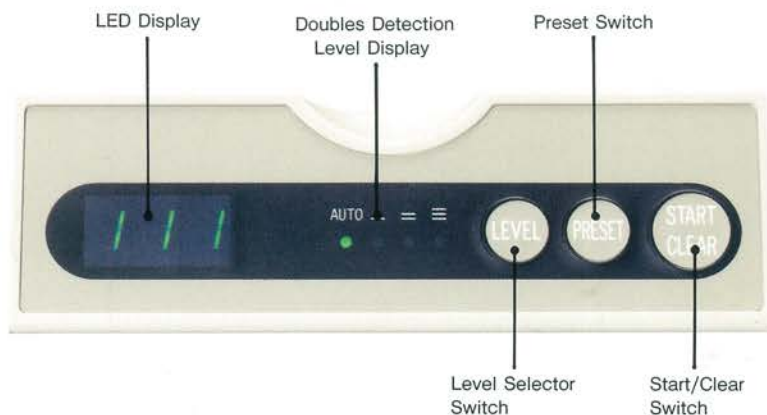
The FPAF-30 can interface with any cash settlement system. (Parallel interface is available as an option.)

#### ■EASILY ACCESSIBLE FEED UNIT

Rear Cover and Sensor Stay open easily giving free access to paper path.

#### ■OTHER FEATURES

- \* Jam Clearing Knob
- \* Adjustable Note Guides
- \* Built-in Carrying Handle



LAUREL BANK MACHINES CO., LTD.  
1-2, TORANOMON 1-CHOME  
MINATO-KU, TOKYO, JAPAN

Printed in Japan

# FPAF-30

## SERIES

Mini Friction  
Currency Counters



**LAUREL**

LAUREL BANK MACHINES CO., LTD.  
1-1-2, TORANOMON, MINATO-KU, TOKYO, JAPAN  
TEL. TOKYO(03)3502-3311 FAX. TOKYO(03)3580-9362

**LAUREL**



# CHOOSE "LAUREL" FOR YOUR CURRENCY COUNTING!

If you look for low cost and high performance in friction currency counting, why don't you choose "Laurel" who offers you a wide range of the most excellent and sophisticated Mini Friction Currency Counters in the world? We are quite sure you would be satisfied with the "Laurel" Friction Currency Counters FPAF-30 Series.

## Modes & Functions

### Counterfeit Detection by UV Light

The built-in UV light and sensor examine each banknote during counting as to its authenticity. If there exists any suspect banknote in a bundle, the machine automatically stops counting, alerting the operator with the error code "CF" and a beep.

### Size Check

If a note different in size (the shorter side of the note) happens to be in a bunch, the machine detects it with sure-fire accuracy and stops counting automatically. The size check function may be used in conjunction with the UV function in order to enhance the counterfeit detection.

### Count Mode

The two pairs of photo-sensors assure the unsurpassed counting accuracy and reliability.

### Preset Mode

The easy-to-touch ten-key pad enables the operator to preset any number from 1 to 999. The models without ten-key pad have the fixed batches 10, 20, 25, 50, and 100.

### Check Counting

The Check Counting Function in the Count Mode verifies whether the number of notes counted agrees with the preset number.

### Preset Repeat Counting

By the Repeat Counting Function in the Preset Mode, counting repeats automatically to batch off notes at the preset number as soon as the counted notes are removed from the stacker.

### Add Counting

By the Add Counting Function in the Count Mode, the number of counted notes automatically adds and shows on the Upper Display. This function may be used in combination with other mode and functions.

### Thickness Adjustment Dial

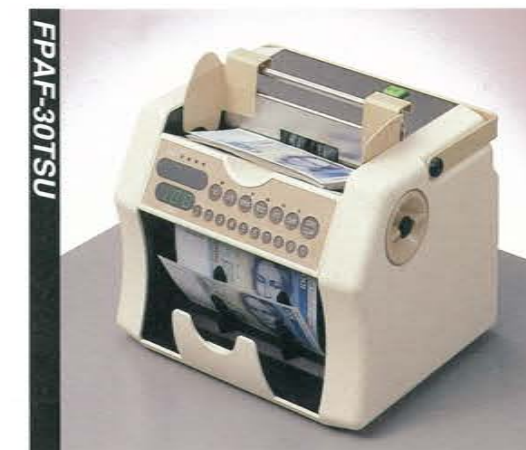
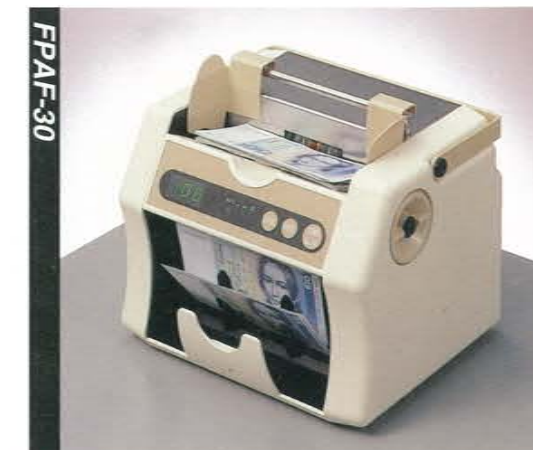
The Thickness Adjustment Dial is available to help smooth feeding of the brand-new and bad quality banknotes.

### ISO 9002

The FPAF-30 Series have been sold in over 100 countries since their introduction with deliveries of more than 70,000 units. They have been manufactured at the factory which meets the ISO 9002 Quality Systems requirement.

### EC Directives

The FPAF-30 Series comply with the EC Directives Low Voltage 73/23/EEC and EMC 89/336/EEC.



## Comparison Table

Model	30	30SC	30T	30TSC	30TU	30TSU	35	35T
Count	○	○	○	○	○	○	○	○
Preset	○	○	○	○	○	○	○	○
Repeat	○	○	○	○	○	○	○	○
Add	—	—	○	○	○	○	—	○
Check	—	—	○	○	○	○	—	○
Size Check	—	○	—	○	—	○	—	—
UV	—	—	—	—	○	○	—	—
Ten-Key	—	—	○	○	○	○	—	○
Thickness Dial	—	—	—	—	—	—	○	○

## Specifications

Model		30	30SC	30T	30TSC	30TU	30TSU	35	35T	
Dimensions (in mm)	Height	212								
	Width	270								
	Depth	225								
Counting Speed (notes per min.)		950	1,000							
Weight (in Kgs)		8.0			8.3					
Note Size Range (in mm)	Max.	102 × 194			90 × 194					
	Min.	50 × 100								
Note Thickness (in mm)		0.08–0.12								
Feed Tray / Stacker Capacity		Up to 200 notes each								
Voltages		110–115 / 220–240V ~								
Frequencies		50 / 60Hz								
Power	at Counting	70								
Consumption (W)	at Rest	8	10	8	10	8	10	8		
EC Directives		CE							★	

★ Under Preparation



Model

LAUREL

# FPAF-30SC

Mini Friction Currency Counter





# AN ACCURATE SIZE CHECK DETECTOR PLUS ALL USER-FRIENDLY FEATURES!! THE MODEL FPAF-30SC IS THE HANDY AND MOST RELIABLE CURRENCY COUNTER EVER!!



## ■ SIZE CHECK FUNCTION

If a note different in size (shorter side of note) happens to mix in a bunch, the FPAF-30SC detects it with a sure-fire accuracy and stops counting automatically.

## ■ EVERYTHING FULLY AUTOMATIC

No onerous adjustments are needed. The intelligent FPAF-30SC does the job fully automatically.

### ● Automatic Density Level Adjustment:

The optimal doubles detection level is automatically set on the first counted note. The machine also allows manual selection of three density levels through a touch pad switch. Doubles detecting function can be switched on or off as required.

### ● Pre-Adjusted Thickness Setting:

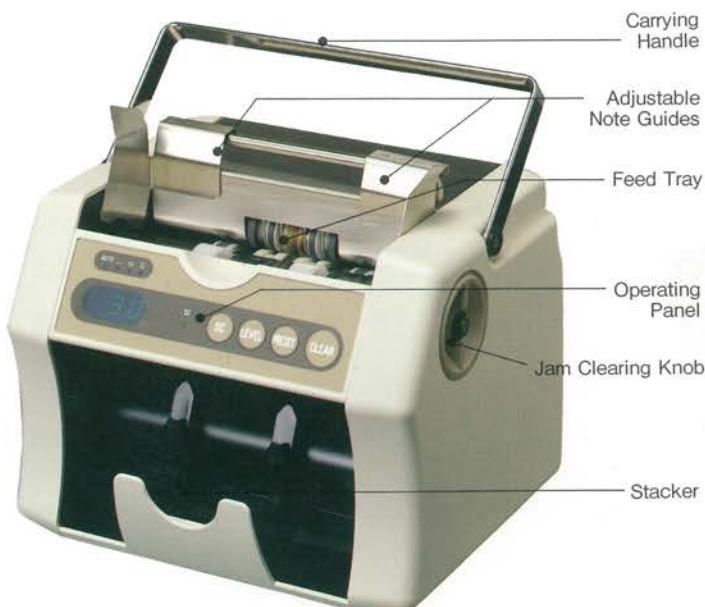
The delicate thickness adjustment for documents is no longer required.

### ● Auto Start/Auto Stop:

Simply put documents on the feed tray, and the counting starts and stops automatically on completion of each transaction.

## ■ LARGE FEED TRAY

The large feed tray can accommodate documents 50~102mm wide and 100~194mm long.



## ■ MODES

### ● Count:

The double sensors assure unsurpassed counting accuracy and reliability.

### ● Preset:

The pre-programmed Preset Mode allows easy selection out of the most popular batching numbers, i.e., 10, 20, 25, 50 and 100.

### ● Preset Repeat:

The stacker sensor enables repeat batching automatically as soon as a preset batch is removed.

## ■ EASY-TO-READ ERROR CODES

If any error occurs, the corresponding error code shows on the display and alerts the operator with audible signal.

## ■ INTERFACE CAPABILITY

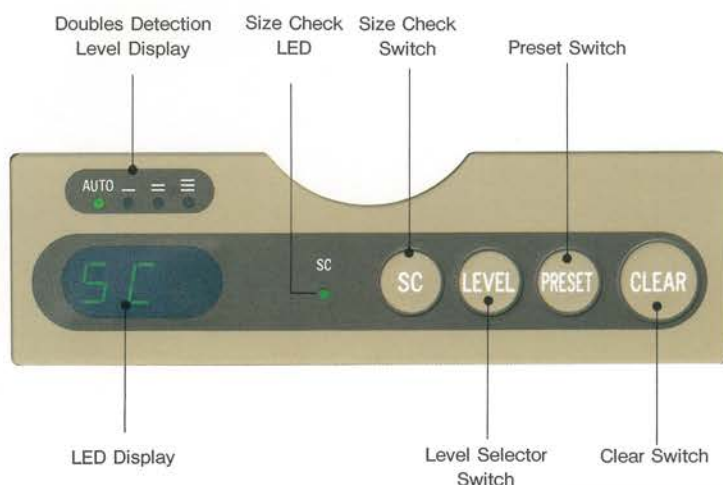
The FPAF-30SC can interface with any cash settlement system. (Parallel interface is available as an option.)

## ■ EASILY ACCESSIBLE FEED UNIT

Rear Cover and Sensor Stay open easily giving free access to paper path.

## ■ EASY TO SERVICE

The simple structural design requires minimal service and makes it easy to maintain.



## ● SPECIFICATIONS:

Feed Tray Capacity  
Stacker Capacity  
Document Size Range

Up to 200 documents  
Up to 200 documents  
Min. 50mm x 100mm  
Max. 102mm x 194mm

Document Thickness Range  
Counting Speed  
Dimensions  
Power  
Power Consumption

0.08mm to 0.12mm  
1000 documents/minute  
270(W)x225(D)x212(H)mm  
220/240 VAC, 50/60Hz  
70 W (At Counting)  
10 W (At Rest)

Weight

8 Kg



LAUREL BANK MACHINES CO., LTD.  
1-2, TORANOMON 1-CHOME  
MINATO-KU, TOKYO, JAPAN



Model

# FPAF-30T

Mini Friction Currency Counter

LAUREL





**THE COMPACT CURRENCY COUNTERS' "PRIMA DONNA", FPAF-30T, TURNS TELLER'S MONOTONOUS ROUTINE WORK INTO FUN THE "VERDI'S" WAY. TRY THE FPAF-30T AND ENJOY HER SPLENDID PERFORMANCE TO YOUR HEART'S CONTENT!!**



**AUTOMATIC DENSITY LEVEL ADJUSTMENT**

The optimal doubles detection level is automatically set on the first counted note. The machine also allows manual selection of three density levels through a touch pad switch. Doubles detecting function can be switched on or off as required.

**PRE-ADJUSTED THICKNESS SETTING**

The delicate thickness adjustment for documents is no longer required.

**AUTO START/AUTO STOP**

Simply put documents on the feed tray, and the counting starts and stops automatically on completion of each transaction.

**EASY TO READ ERROR CODES**

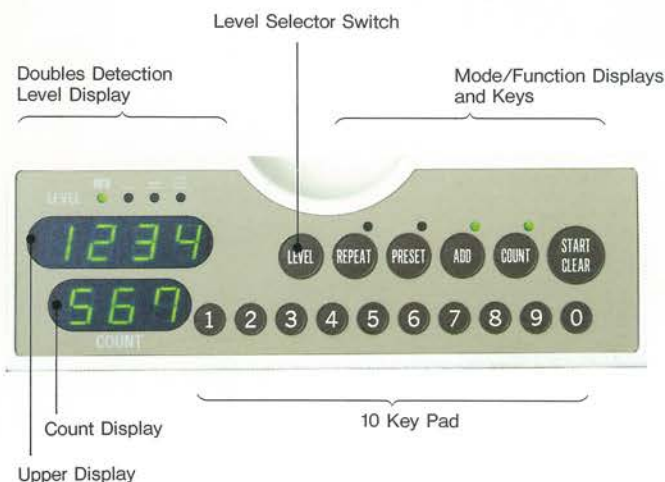
If any error occurs, the corresponding error code shows on the display and alerts the operator with audible signal.

**INTERFACE CAPABILITY**

The FPAF-30 can interface with any cash settlement system. (Parallel interface is available as an option.)

**EASILY ACCESSIBLE FEED UNIT**

Rear Cover and Sensor Stay open easily giving free access to paper path.



**Versatile:**

The FPAF-30T's principal functions are;

- ♪ Continuous Counting
- ff Preset Counting
- b Accumulative Counting
- ⌘ Repeat Counting
- # Check Counting

**Efficient:**

The feather-touch 10-Key pad enables the operator to preset any number from 1 to 999 ad libitum. By Repeat Counting Function in the Preset Mode, counting repeats automatically to batch off notes at a preset number.

**Reliable:**

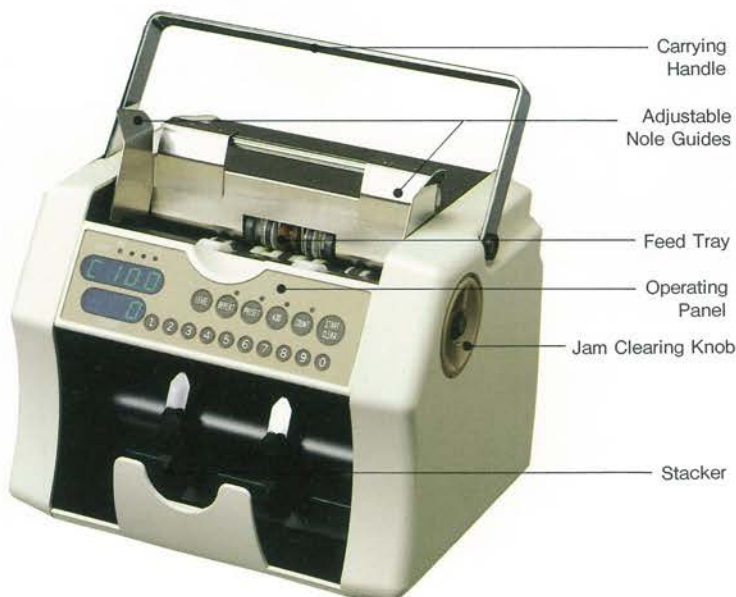
The FPAF-30T's counting performance is just as reliable as a Prima Donna's voice and is already well proved in the world marketplace.

**Durable:**

In the Laurel FPAF-30T, durability goes hand in hand with its compactness and high speed in all counting needs.

**Intelligent:**

The FPAF-30T is so intelligent that it never fails to alert the operator with beeps in case the number entered through the 10-Key pad disagrees with an actual count in Check Counting.



**SPECIFICATIONS:**

Feed Tray Capacity	Up to 200 documents
Stacker Capacity	Up to 200 documents
Document Size Range	Min. 50mm × 100mm Max. 90mm × 194mm
Document Thickness Range	0.08mm to 0.12mm
Speed	1000 documents/minute
Dimensions	270mm(W) × 225(D) × 212(H)
Power	110/115, 220/240 VAC 50/60Hz
Power Consumption	70W (At Work) 8W (At Rest)
Weight	8.3Kg.



LAUREL BANK MACHINES CO., LTD.  
1-2, TORANOMON 1-CHOME  
MINATO-KU, TOKYO, JAPAN



Model

LAUREL

# FPAF-30TSC

## Mini Friction Currency Counter





**IF YOU PURSUE PERFECTION IN FRICTION CURRENCY COUNTERS, THE FPAF-30TSC WOULD BE YOUR RIGHT CHOICE. IT IS ARMED WITH SELF-CONTAINED FEATURES WHICH ARE ALL FIRST CLASS IN EVERY WAY. WE RECOMMEND THE FPAF-30TSC TO THOSE WHO WILL NOT SETTLE FOR THE SECOND BEST.**



## MODES & FUNCTIONS

### Count Mode:

The double sensors assure unsurpassed counting accuracy and reliability.

### Preset Mode:

The silky-touch 10-Key pad enables the operator to preset any number from 1 to 999.

### Check Counting:

The Check Counting Function in the Count Mode verifies whether the number of notes counted agrees with the preset number.

### Preset Repeat Counting:

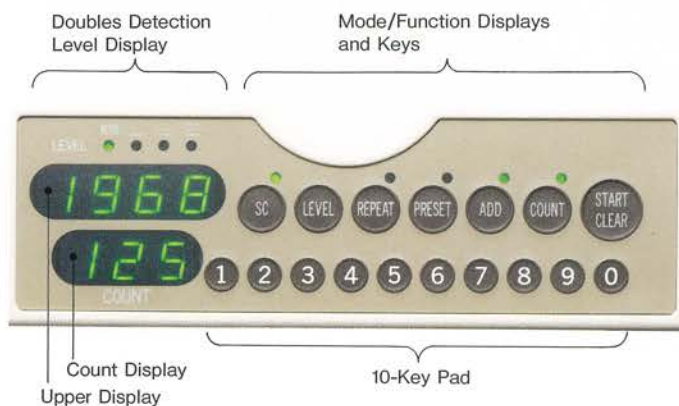
By the Repeat Counting Function in the Preset Mode, counting repeats automatically to batch off notes at the preset number.

### Accumulative Counting:

By the Accumulative Counting Function in the Count Mode, the number of counted notes automatically adds and shows on the Upper Display. This function may be used in combination with the Preset Mode or the Check Counting Function.

### Size Check Counting:

If a note different in size (the shorter side of the note) happens to be in a bunch, the FPAF-30TSC detects it with a sure-fire accuracy and stops counting automatically.



## EVERYTHING FULLY AUTOMATIC

No onerous adjustments are needed. The intelligent FPAF-30TSC does the job fully automatically.

### Automatic Density Level Adjustment:

The optimal doubles detection level is automatically set on the first counted note. The machine also allows manual selection of three density levels through a touch pad switch. Doubles detecting function can be switched on or off as required.

### Pre-Adjusted Thickness Setting:

The delicate thickness adjustment for documents is no longer required.

### Auto Start/Auto Stop:

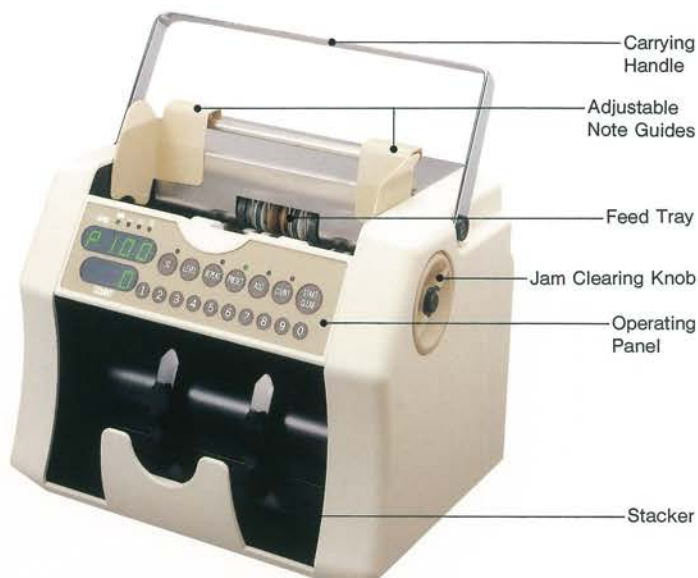
Simply put documents on the feed tray, and the counting starts and stops automatically on completion of each transaction.

## EASY-TO-READ ERROR CODES

If any error occurs, the corresponding error code shows on the display and alerts the operator with the audible signal.

## INTERFACING CAPABILITY

The FPAF-30TSC can hook up with cash settlement systems as an option. (LAUREL standard interface)



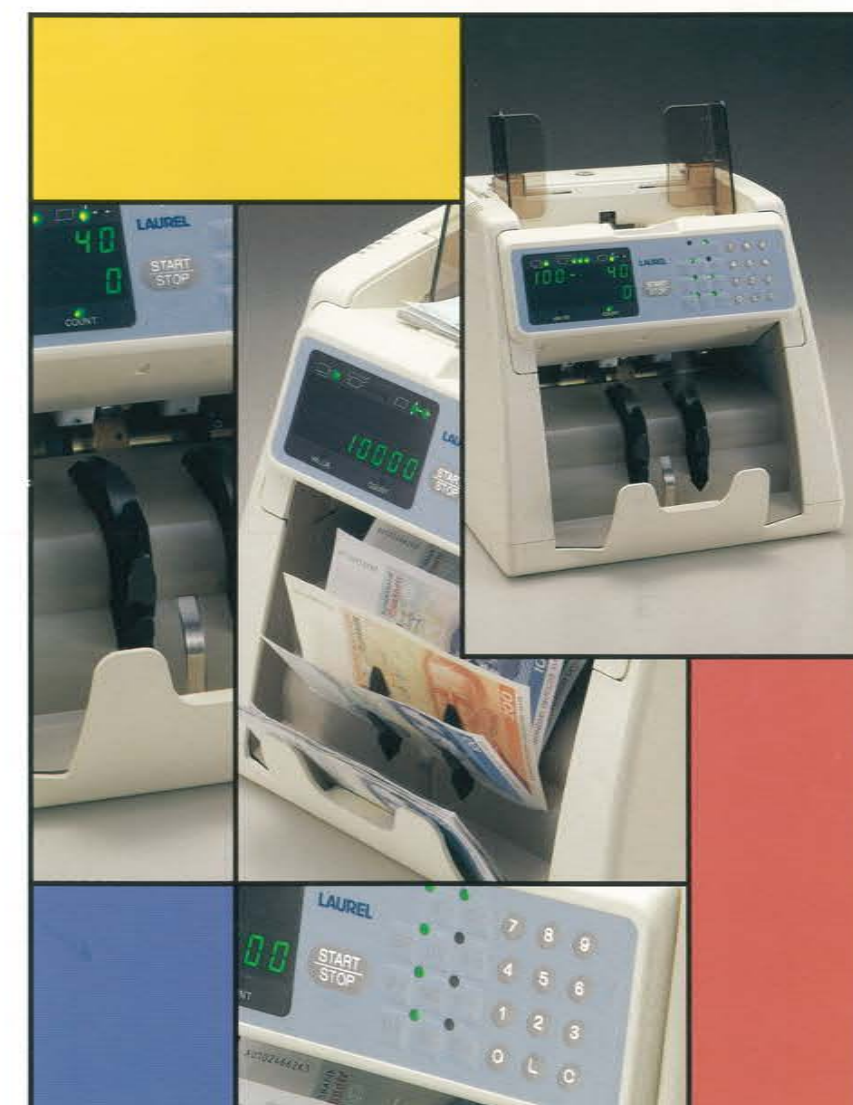
## SPECIFICATIONS

Feed Tray Capacity	Up to 200 documents
Stacker Capacity	Up to 200 documents
Document Size Range	Min. 50mm X 100mm Max. 90mm X 194mm
Document Thickness Range	0.08mm to 0.12mm
Counting Speed	1000 documents/minute
Dimensions	270(W) X 225(D) X 212(H)mm
Power	110/115, 220/240 VAC 50/60Hz
Power Consumption	110/115 VAC : 80W (At Counting) 8W (At Rest) 220/240 VAC : 70W (At Counting) 10W (At Rest)
Weight	8.3Kg



# FPAF-40 SERIES

**FPAF-40 SERIES** Friction Currency Counters



**LAUREL**

LAUREL BANK MACHINES CO.,LTD.  
1-2-1,TORANOMON, MINATO-KU, TOKYO, JAPAN  
TEL. TOKYO(03)3502-3311 FAX. TOKYO(03)3580-9362





# "LAUREL" IS THE RIGHT CHOICE FOR YOUR CURRENCY COUNTING!!

*If you are looking for higher throughput and more accurate counterfeit detection on counting multiple denominations in bulk, choose "Laurel" who offer you a wide range of real "World Class" Friction Currency Counters anywhere and any time. Now we offer "Laurel" Friction Currency Counters FPAF-40 Series. Try them out and make your day!!*

## FEATURES

### Value Counting

The FPAF-40 Series counters can be equipped with the Value Counting Function showing counts in value.

In the Multi-Denomination Mode, a pack of banknotes of multiple denominations will be processed and the value of each denomination can also be displayed.

In the Single Denomination Mode, any other denomination mixed with the target denomination is automatically detected. Value counting by presetting a total in value or quantity is also available.

### Size Check

The Size Check Function (SC) is another feature of the FPAF-40 Series counters. Both the length (longer side) and the width (shorter side) of individual banknotes will be automatically checked while they are going through the machine. It is to detect different denominations by size comparison with surefire accuracy.

### UV Detection

The FPAF-40 Series counters can be equipped with an Ultra-Violet Counterfeit Detection Function which detects counterfeits and suspicious notes by fluorescent reaction.

In addition to "Standard" UV detection, "Laurel" offer you "Double" UV detection (DUV) to meet more accurate detection requirements of counterfeits so "cleverly" prepared and difficult to catch, which is a function unique to "Laurel".

### MG Detection

The FPAF-40 Series counters also offer a Magnetic Counterfeit Detection Function for checking suspicious banknotes by examining the presence and level of magnetism in them.

### MT Detection

The Metal Thread (MT) Detection is also available to the FPAF-40 Series counters for checking the presence of a metal thread in banknotes. Combined with the UV and MG Detections, the MT Detection can maximise the security in counting against counterfeits.

### Counting Speeds Selection

The FPAF-40 Series counters are operational on 5 variable counting speeds (600, 800, 1000, 1200 and 1500 notes per minute), depending on the operator's needs and quality of the object banknotes.

### Physical Doubles Detection

To minimize doubles-feed problems due to the conditions of each banknote (colour, dust, etc.), the FPAF-40 Series counters are provided with the Physical Doubles Detection Function (PD), offering higher efficiency and security in counting.

### Options

Serial Interface (RS232C or RS422)  
Serial Printer Interface  
Parallel Printer Interface  
Laurel Interface

## Comparison Table

Model	FPAF-40-010	011	100	101	102	110	111	112	131
Count									
Preset									
Repeat									
Add									
Check									
Value									
PD									
SC (length)									
SC (width)									
MG									
UV									
DUV									
MT									

## Specifications

Dimensions	Height	265mm
	Width	280mm
	Depth	280mm
Counting Speeds (per min.)		600, 800, 1000, 1200, 1500 notes
Weight		Approx. 10Kgs
Note Size Range	Max. With Note Guide	102 × 188mm
	W/O Note Guide	102 × 192mm
	Min.	60 × 110mm
Note Thickness Range		0.08 ~ 0.12mm
Feed Tray / Stacker Capacity		Up to 200 notes each
Voltages		AC 85V ~ 132V / AC170V ~ 265V
Frequencies		50 / 60Hz
Power Consumption	at Counting	75W
	at Rest	15W

### EC Directives

The FPAF-40 Series comply with the EC Directives Low Voltage 73/23/EEC and EMC 89/336/EEC.



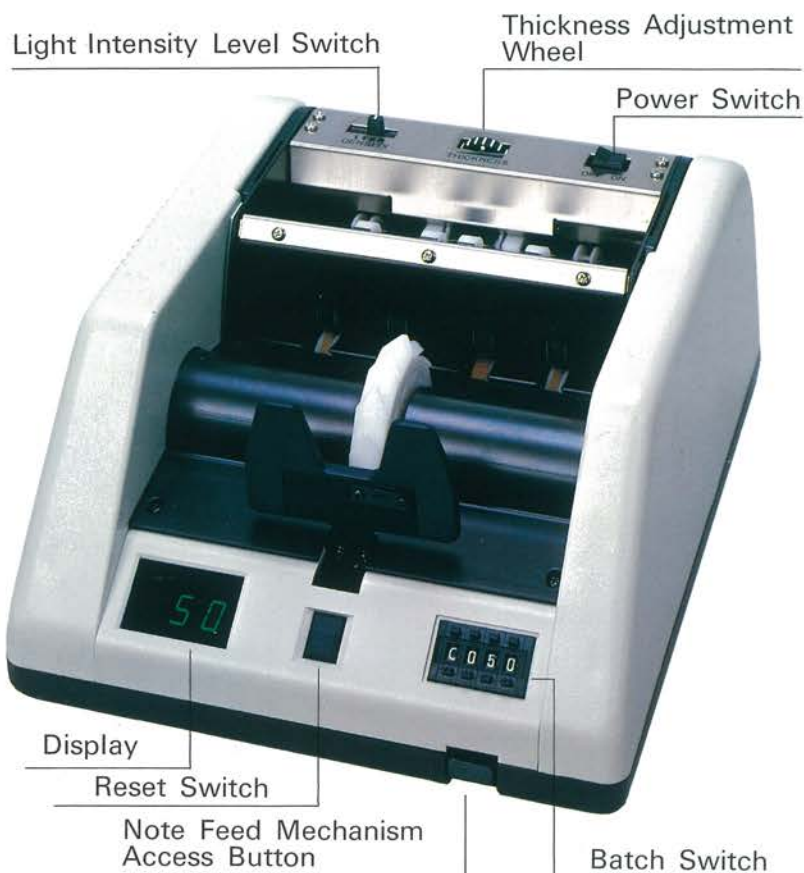
FPAF-40

### After Sales Service

A worldwide network of "Laurel" authorized distributors assures you of high levels of support and after sales service.



# **LAUREL** **MINI Friction Type Currency Counter** **Model FPAF-50**



**The most compact desk top type MINI Friction Currency Counter. A handy and yet reliable machine for every teller.**

**Simply place notes in the hopper and machine starts counting automatically. The counted notes are stacked neatly in exactly the same way and order that they were placed in the hopper.**

**Rapid counting...100 notes per 6 seconds. Lowest noise level machine in this class .**

## Features:

1. Speedy and accurate counting of new and used currency is guaranteed regardless of conditions.
2. Three modes of counting, i.e., "Count," "Preset" and "Adding" are available and sufficient for normal verification activities.
3. Automatic 'start' and 'repeat' functions further increase counting efficiency.
4. Thanks to the nine built-in error detecting devices, the machine stops automatically if any irregularity develops during operations and alerts the operator through audio-visual alarms.
5. A light intensity adjusting lever and a variable thickness control device allow the operator to fine-tune for and process a variety of currencies and documents.

## Specifications:

Dimensions	250mm [W] x 295 mm [D] x 135 mm [H]
Weight	9 kgs
Document Size	55mm x 120mm min.—100mm x 175mm max.
Power Source	Any voltage, 50/60 Hz A.C.

Distributed by

Manufactured by  
**LAUREL BANK MACHINES CO., LTD.**  
 Tokyo, Japan



# LAUREL

## MODEL **FPAF-55 SERIES**

### Desk-Top Friction Currency Counters



FPAF-55SCF(with "Size Check" and "Counterfeit Detection")

These little wizards pinpoint like magic "unwanted" currency such as counterfeits, wrong denomination or foreign notes by the sophisticated "Size Check" and "Counterfeit Detection" functions while doing regular counting jobs.

Use FPAF-55 Series and enjoy their wizard performance every way!!

#### Features:

1. The handy multipurpose keypad makes all operations easy and simple.
2. The large 4-digit main display and two auxiliary displays are clear and informative giving not only counts and error alarms but also other data critical to the operator.



FPAF-55SCF

3. The long and short beeps at the verifying(Ve) mode help ensure counting accuracy as well as alleviate stress on the operator.
4. The "Size Check" function of FPAF-55SC/SCF is invaluable in locating different-sized currency and documents that may exist in a bunch and even experienced bank tellers can often overlook.
5. The "Counterfeit Detection" function of FPAF-55CF/SCF is available against suspect USA or W. German banknotes and already has proved its excellent performance in the world marketplace.

#### Specifications:

Dimensions: 262 mm(W) x 348 mm(D) x 162 mm(H)  
Weight: 10.5 kg.  
Document Size: 55 mm x 120 mm min. ~ 100 mm x 175 mm max.  
Counting Speed: 1,000 pcs./min.  
Power Source: Any voltage, 50/60 Hz AC  
Interface Connector Port: Available

**Distributed by:**

**Manufactured by:**

**LAUREL BANK MACHINES CO., LTD.**  
TOKYO, JAPAN

Printed in Japan



Model

LAUREL

# FPAF-80SCF

Desk-Top Friction Currency Counter





# HERE COMES THE FRICTION CURRENCY COUNTER MASTERPIECE, THE LAUREL FPAF-80SCF, ANOTHER EPOCH-MAKER, WITH ALL THE USER-FRIENDLY FEATURES NO CONVENTIONAL CURRENCY COUNTERS CAN MATCH. LET THE FPAF-80SCF PROVE ACTIONS SPEAK LOUDER THAN WORDS. GIVE IT A TRY!!

## ■VALUE COUNTING FUNCTION

The FPAF-80SCF has the *Value Counting Function* showing counts in value. This function is also available for banknotes of multiple denominations. After the *Multi-Denomination Value Counting*, the FPAF-80SCF can display by turns the total amount of each denomination counted, forgoing the presorting of banknotes by denomination, and the calculation of their total value by multiplying and adding after counting.

The Value Counting Function may be used with the *Add. Count Mode* or *Check Count Mode*, or both. It is also possible to combine the Value Counting Function with the *Preset Function*.

## ■SIZE CHECK FUNCTION

The FPAF-80SCF is equipped with the *Size Check Function on the length* (longer side) of banknotes in addition to the ordinary Size Check Function on the *width* (shorter side) and can detect other denomination banknotes of different dimensions with much higher precision and security than conventional Size Check machines. In Value Counting, the Size Check Function is turned on automatically, and the FPAF-80SCF will check both the length and the width of each banknote against the official dimensional data of each denomination pre-programmed in the software.



A system example printing out multi-denominational value counts.

## ■OTHER FEATURES

- \* RS232C Serial Interface (as option)
- \* Easily Accessible Banknote Feed Path
- \* Self-Diagnostic Function & Error Codes

## ●SPECIFICATIONS

Feed Tray Capacity: Approx. 200 banknotes  
 Stacker Capacity: Approx. 200 banknotes  
 Banknote Size: Minimum 55 × 110mm ~ Maximum 102 × 192mm  
 Counting Speed: Approx. 1000 banknotes per minute  
 Dimensions: 320 (W) × 290 (D) × 285 (H) mm  
 Weight: Approx. 12.5kg  
 Power Supply: AC 110V, 220V or 240V & 50Hz or 60Hz

## ■COUNTERFEIT DETECTING FUNCTION

The FPAF-80SCF is equipped with the same *Counterfeit Detecting Function* by magnetism as is those of our other FPAF Series Friction Currency Counters, which are already proved very popular and highly evaluated in the world marketplace. In Value Counting, the FPAF-80SCF will check each banknote against the magnetic data of the corresponding denomination pre-programmed in the software.

## ■DOUBLES DETECTING FUNCTION

The FPAF-80SCF is equipped with the same handy *Automatic Doubles Detection Level Setting Function* as those already proved quite user-friendly with the FPAF-30 Series Currency Counters in use all over the world. The conventional *Manual Doubles Detection Level Setting Function* (three different levels plus OFF) is also provided. In Value Counting, the FPAF-80SCF will check each banknote against the doubles detection data of the corresponding denomination.

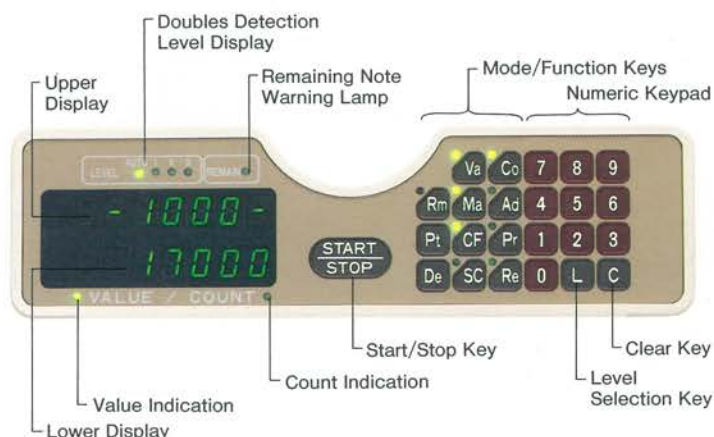
## ■INTERFACE WITH SERIAL PRINTER

As an optional function, the FPAF-80SCF will print out the result of each counting on a connected *Serial Printer* journal after counting. In Multi-Denomination Value Counting, for instance, the denominations, the number of banknotes counted of each denomination, the total value of banknotes counted of each denomination, and the grand-total value of all the banknotes counted will be printed.

## ■PARALLEL INTERFACE WITH EXTERNAL TERMINAL

The FPAF-80SCF is equipped with the *parallel interface* of the same specifications as those of our other FPAF Series Friction Currency Counters as a standard device.

When the FPAF-80SCF with optional software and hardware interfaces with a certain external terminal, setting on the external terminal of the denominations of banknotes to be counted on the FPAF-80SCF is unnecessary thanks to *denomination signals* issued from the FPAF-80SCF. This function simplifies the operations and reduces the operator's mental and physical burden, which will help minimise operational miscounts in cash settlement operations.

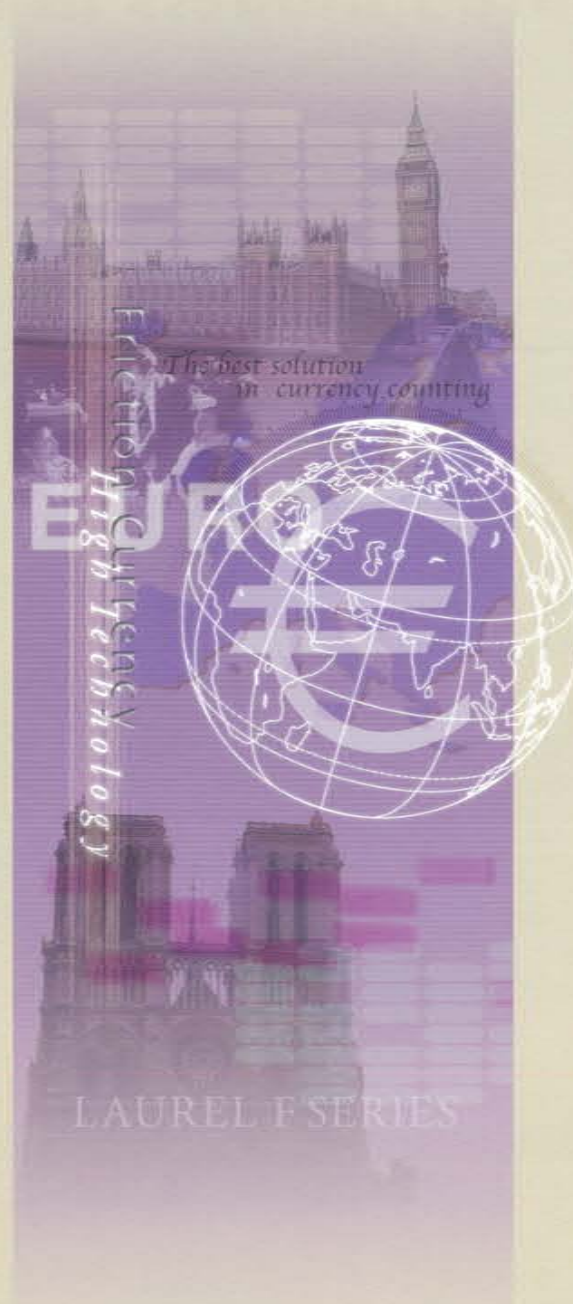




LAUREL

# F-2000/3000 SERIES

Friction Currency Counters



LAUREL F SERIES

**LAUREL**

LAUREL BANK MACHINES CO., LTD.  
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Fax: +81-3-3580-9362 E-Mail: int.ope.div@lbn.co.jp  
<http://www.lbn.co.jp>



*Laurel has developed the most excellent and sophisticated Machine.*

# Why don't you select "Laurel" Friction Currency Counters F-2000 Series & F-3000 Series, the most advanced Models in the World!

## FEATURES

### Value Counting

To show count result in value.

A pack of notes with multiple denominations can be counted with the total value displayed and each denomination's count result displayed as well. In single denomination mode, any other denomination mixed in the preset denomination is automatically detected. Value counting by presetting count number is available. Simple manual sorting of denomination is also possible Continuous Value Counting (CVC).

### Continuous Counting

To count notes continuously without recounting all the notes when an error occurs.

### UV Detection

To detect an Ultra Violet (UV) counterfeit and suspicious note by fluorescent reflection.

### IR Detection (F-3000 Series only)

To check IR-features on notes and detect suspicious notes by Infra-Red ray. This enhances the detection of counterfeit notes drastically.

### MG Detection

To detect a Magnetic (MG) counterfeit and suspicious note by examining the presence and level of magnetism in banknotes. In addition, F-3000 Series make the counterfeit detection securer especially in Euro notes by increasing number of Magnetic sensors.

### MT Detection

To check the presence of a Metal Thread (MT) in banknotes. Combined with the UV and MG detections, the MT detection can maximize the security in counting against various counterfeits.

### Size Check Detection

To detect the different sizes for both longer (length) and shorter (width) sides of notes from the target note by size comparison with accuracy.

### Physical Doubles Detection

To minimize doubles-feed problems due to the conditions of each banknote (colour, dust, etc.), this function is to detect doubles-feed not by optical sensor but by Physical Doubles (PD) detection sensors.

### Counting Speeds Selection

3 different counting speeds can be selected among 6 variable counting speeds (600, 800, 1000, 1200, 1400 and 1600 notes per minute), depending on the market needs and quality of the notes to be counted.

### Currency Selection

2 different currencies can be easily selected using the function key. You can set a secondary currency like Euro as well as local currency.

### Options

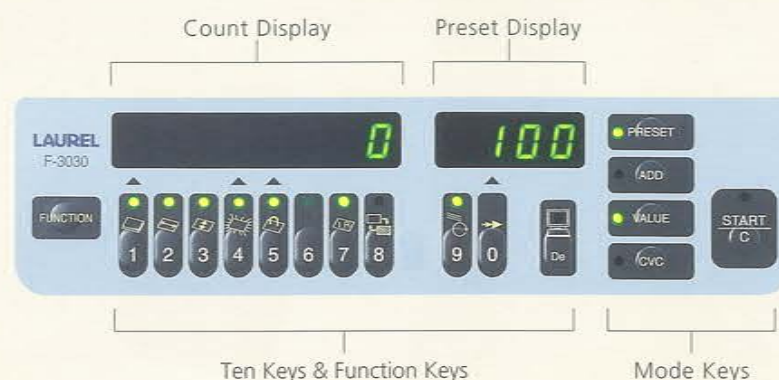
RS232C Interface  
Serial Printer Interface

### After Sales Service

A worldwide network of "Laurel" authorized distributors assures you of high levels of support and after-sales service.



## OPERATION PANEL



**EC Directives**  
The F-2000 / 3000 series comply with the  
EC Directives Low Voltage 73/23/EEC  
and EMC 89/336/EEC.



## COMPARISON TABLE

Model	F-2000	F-2010	F-2110	F-2111	F-3030	F-3050
Count	●	●	●	●	●	●
Preset	●	●	●	●	●	●
Repeat	●	●	●	●	●	●
Add	●	●	●	●	●	●
Check	●	●	●	●	●	●
Value	●	●	●	●	●	●
PD	●	●	●	●	●	●
SC (length)	●	●	●	●	●	●
SC (width)	●	●	●	●	●	●
UV		●	●	●	●	●
MG			●	●	●	●
MT				●		●
IR					●	●

## SPECIFICATIONS

Dimensions	Height	232mm
	Width	276mm
	Depth	274mm
Counting Speeds (notes per min.)		600, 800, 1000, 1200, 1400, 1600
Weight		Approx. 9kg
Note Size Range	Max.	94 X 181mm
	Min.	59 X 110mm
Note Thickness Range		0.08 ~ 0.15mm
Hopper Capacity		Up to 500 notes (50mm thickness)
Stacker Capacity		Up to 200 notes (50mm thickness)
Voltage		100-120 / 200-240V ~
Frequencies		50 / 60Hz
Power Consumption	at Counting	75W
	at Rest	20W
Standards & Regulations		EN55022 / EN55024 / EN61000-3-2 / EN61000-3-3



**LAUREL**



# F-2000

## SERIES

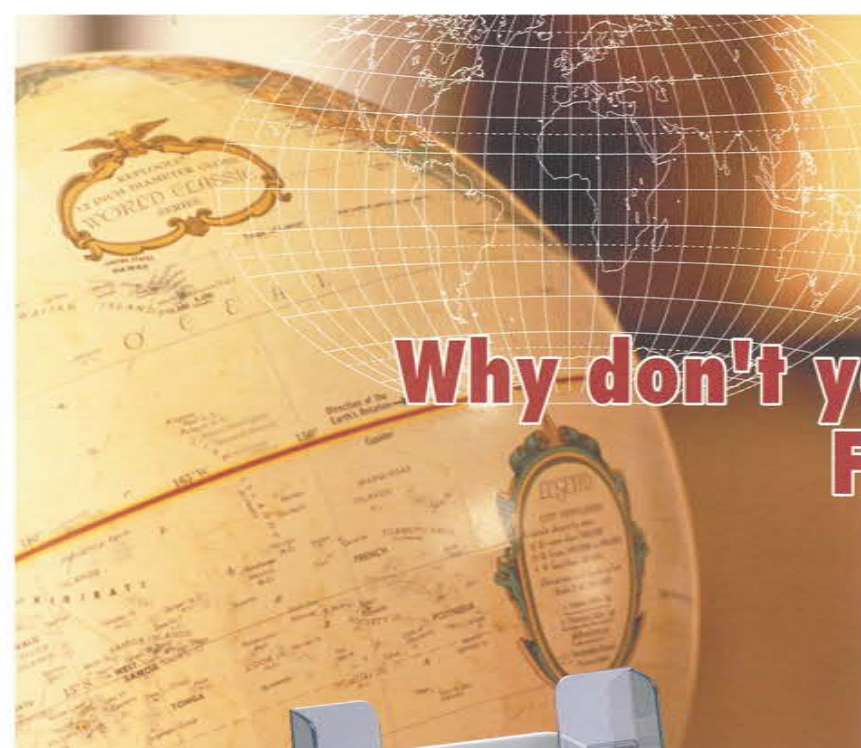
Friction Currency Counters



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To commemorate the new Millennium Laurel has developed the most excellent and sophisticated Machine.

# Why don't you select "Laurel" F-2000 Series, the Friction Currency Counters most advanced Models in the world!



Model F-2111

## FEATURES

### Value Counting

To show count result in value.

A pack of notes with multiple denominations can be counted with the total value displayed and each denomination's count result displayed as well. In single denomination mode, any other denomination mixed in the preset denomination is automatically detected. Value counting by presetting count number is available. Simple manual sorting of denomination is also possible in Continuous Value Counting (CVC).

### Continuous Counting

To count notes continuously without recounting all the notes when an error occurs.

### UV Detection

To detect an Ultra Violet (UV) counterfeit and suspicious note by fluorescent reflection.

### MG Detection

To detect a Magnetic (MG) counterfeit and suspicious note by examining the presence and level of magnetism in banknotes.

### MT Detection

To check the presence of a Metal Thread (MT) in banknotes. Combined with the UV and MG detections, the MT detection can maximize the security in counting against various counterfeits.

### Size Check Detection

To detect the different sizes for both longer (length) and shorter (width) sides of notes from the target note by size comparison with accuracy.

### Physical Doubles Detection

To minimize doubles-feed problems due to the conditions of each banknote (colour, dust, etc.), this function is to detect doubles-feed not by optical sensor but by Physical Doubles (PD) detection sensors.

### Counting Speeds Selection

3 different counting speeds can be selected among 6 variable counting speeds (600, 800, 1000, 1200, 1400 and 1600 notes per minute), depending on the market needs and quality of the notes to be counted.

### Currency Selection

2 different currencies can be easily selected using the function key. You can set a secondary currency like Euro as well as local currency.

### Options

RS232C Interface  
Serial Printer Interface

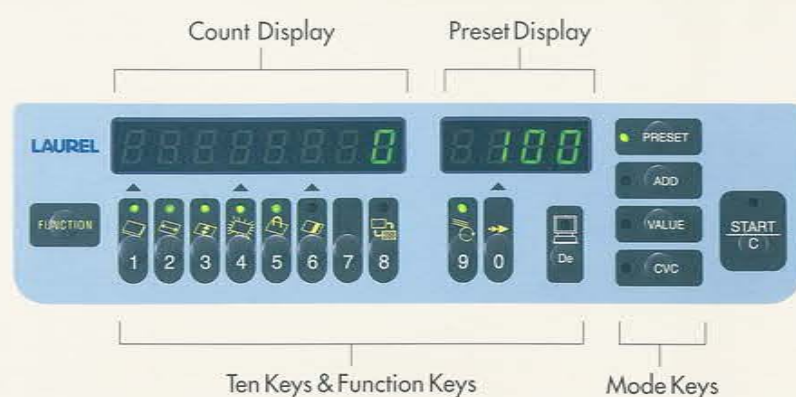
### After Sales Service

A worldwide network of "Laurel" authorized distributors assures you of high levels of support and after-sales service.

**EC Directives**  
The F-2000 series comply with the EC Directives Low Voltage 73/23/EEC and EMC 89/336/EEC.



## OPERATION PANEL



## COMPARISON TABLE

Model	F-2000	F-2010	F-2110	F-2111
Count	●	●	●	●
Preset	●	●	●	●
Repeat	●	●	●	●
Add	●	●	●	●
Check	●	●	●	●
Value	●	●	●	●
PD	●	●	●	●
SC(length)	●	●	●	●
SC(width)	●	●	●	●
UV		●	●	●
MG			●	●
MT				●

## SPECIFICATIONS

Dimensions	Height	232mm
	Width	276mm
	Depth	270mm
Counting Speeds (notes per min.)	600, 800, 1000, 1200, 1400, 1600	
Weight	Approx. 9 kg	
Note Size Range	Max.	94 × 181mm
	Min.	59 × 110mm
Note Thickness Range	0.08 ~ 0.15mm	
Hopper Capacity	Up to 500 notes (50mm thickness)	
Stacker Capacity	Up to 200 notes (25mm thickness)	
Voltage	AC 85V~265V	
Frequencies	50 / 60Hz	
Power Consumption	at Counting	75W
	at Rest	20W
Standards & Regulations	EN60950 / EN55022 Class B / IEC1000-4-2-4-3-4-4-5 / IEC1000-3-2-3-3	



# LAUREL

DESK-TOP CURRENCY COUNTER

MODEL

# PV-T2

LAUREL's Renowned  
Specialist Know-How and  
Expertise Now Presents  
A New Desk-Top Currency  
Counter Model PV-T2.  
It's The World's Smallest  
Yet Very Fast and  
The Most Reliable Ever!!  
It's Literally  
A State-Of-The-Art Machine.



#### Compact Yet Big in Speed

The PV-T2 is only about one fourth the conventional trolley-type currency counter. It works at the high counting speed of 100 notes every 4 seconds.

#### Versatile

In addition to the basic counting modes of "Count", "Add", "Batch" and "Check", the PV-T2 provides three other useful modes, i.e., "Check-Add", "Batch-Add" and "Big-Batch". As options, "Stamp" and "Stamp-Add" modes are also available.

#### Easy to Operate

The touch switches, ten-key and large LED displays are all located on the front panel enhancing the PV-T2's operational ease.

#### Accurate and Reliable

Employing a semiconductor pressure sensor instead of the conventional mechanical vacuum-switch, the PV-T2 guarantees trouble-free, accurate and reliable counting performance at all times. Only a limited number of mechanical parts are used to minimise potential mechanical problems, which further ensures top-notch reliability and serviceability.

#### Quiet and Healthful

The built-in auto-shutter, together with the dust collector and air filters protect the operator from operational noise and dust, creating an operator-friendly working environment. The average noise level is as low as 70 dB.

#### SPECIFICATIONS:

Counting Speed: 100 notes/4 seconds.

Countable Note Sizes:

55 x 85 ~ 94 x 182 (mm) (with shutter closed)

55 x 85 ~ 210 x 297 (mm) (with shutter open)

Noise Level: 70 dB

Dimensions: 350(W) x 400(D) x 200(H) mm

Weight: 28 Kg.

Voltages/Frequencies: 110, 220, 230, 240V / 50, 60 Hz

Options: Stamping Device, Note Tray & Turn Table



Distributed by:

Manufactured by:

**LAUREL BANK MACHINES CO., LTD.**  
TOKYO, JAPAN

Printed in Japan



# "LAUREL"

BANKNOTE COUNTING MACHINES

**FULLY  
AUTOMATIC  
COUNTING  
AND BATCHING  
EQUIPMENT  
MASTERPIECES!**

## MODEL PV-8B

(With Batching Device) ↓



↑  
**MODEL  
PV-8**



## FEATURES

1. Compact, free standing, attractive appearance. Both models are fitted with castors for ease of movement.
2. Handles both new and used bank notes or a mixture of both with high accuracy. Also ideal for cheques, vouchers, coupons, etc.
3. Select the automatic mode and the machine (both models) automatically starts counting as soon as notes are inserted. No special button-pushing is necessary. Also automatically stops when counting is finished.
4. Batching of any number of notes from 1 to 100 is possible with the Model PV-8B. This is an additional feature of Model PV-8B besides check-counting and cumulative counting.
5. When the number of notes reaches exactly 100 in check-counting, the counting head stops rotating and power feed opens for the removal of the notes. If the count is incorrect, the feed remains closed, locking the notes. Feed can be reopened by depressing the reset counter or manually if desired.
6. Fast counting — counts 100 sheets in 4 seconds.
7. Quiet operation.

## SPECIFICATIONS

Dimensions: 380mm(W) × 870mm(H) × 320mm(D)  
Weight: 50kg (110 lbs)  
Voltages: Available in any voltage 50/60Hz.

Distributed by:

Manufactured by:

**LAUREL BANK MACHINES CO., LTD**  
TOKYO, JAPAN

Printed in Japan



Model

# PV-9

Currency Counter

**LAUREL**

*Upgraded  
Technical Standards*





**OUR OVER 30 YEARS OF CURRENCY COUNTING EXPERTISE HAS BROUGHT ABOUT THE NEW "WORLD-CLASS" MODEL PV-9 AS THE SUCCESSOR TO MODELS PV-8/PV-8B WHICH HAVE LONG ENJOYED HIGH REPUTATION WORLD-WIDE. TRY THE PV-9 OUT AND SEE HOW IT WILL BENEFIT YOU IN YOUR DAILY CURRENCY PROCESSING OPERATIONS!!**



#### ■ HIGH RELIABILITY THROUGH FULL ELECTRONIC AND MICROCOMPUTER CONTROL

The PV-9 is designed and manufactured with minimal mechanical moving parts which assure trouble-free operations with a remarkably reduced operational noise level.

#### ■ EPOCH-MAKING "DIRECT COUNTING TECHNOLOGY"

The newly developed semi-conductor pressure sensor conducts direct surveillance of sucking and separating conditions of each note being counted by the spindle heads with outstanding counting accuracy.

#### ■ HANDY OPERATION SWITCHES AND LARGE EASY-TO-READ LIQUID CRYSTAL DISPLAY

The sensitive yet crisp action operation switches are user-friendly and well consolidated on the front operation panel. The easy batch number presetting enhances the handiness. The large liquid crystal display is easy to read and helps reduce the operator's eye-strain.

#### ■ HEAVY-DUTY CAPABILITIES / ENERGY SAVING

Thanks to the quick stop mechanism of the spindles at the home position, the operator can operate the PV-9 without letup in rigorous heavy-duty counting operations with superb reliability. The newly developed vacuum pump is compact in size yet guarantees high performance and efficiency.

#### ■ SELF-LEARNING AND-DIAGNOSTIC FUNCTIONS PLUS MEMORY BACKUP

The self-learning microcomputer automatically controls and maintains optimum counting conditions against variable machine conditions in work environment due to secular changes etc.. The self-diagnostic function automatically detects dust-affected photosensors, clogged filters etc. and warns such functional irregularities with the alarm codes for quick trouble-shooting and recovery. The built-in memory backup retains once-set counting mode and preset batching number when power is accidentally turned off.

#### ● VERSATILE MODES OF COUNTING

The following counting modes are available :-

- Check counting (CHECK)
- Cumulative counting (ADD)
- Straight counting (COUNT)
- Batch counting (BATCH)

#### ● SWIFT START OF COUNTING AND FAIL-SAFE AUDIO-VISUAL ALARMS

The optical sensor automatically starts counting currency/documents the moment they are placed on the note holder. (A manual start switch is also available.) Should under- or over-count occur, the note holder would stay closed and alerts the operator with a flicker on the display and a buzzer sounding at the same time.

#### ● NO ENVIRONMENTAL PROBLEMS

To protect the operator against dust problems, the easy-to-install/clean dust collector and the large heavy-duty air filters for the vacuum pump air inlet/outlet are provided as standard devices.



#### ◆ SPECIFICATIONS

Note Holder Capacity  
Counting Speed  
Dimensions

Weight  
Power Sources  
Power Consumption

150 notes max.  
100 notes / 4 seconds  
With the top cover closed : 380(W) × 320(D) × 794(H)mm  
With the top cover open : 380(W) × 459(D) × 883(H)mm  
42kg.  
AC 110/115/220/230/240V ± 10% 50/60Hz ± 1Hz  
During operation : 220W (230VA) at 50Hz  
280W (290VA) at 60Hz  
At rest or stand-by : 5W (5VA)



LAUREL BANK MACHINES CO., LTD.  
1-2, TORANOMON 1-CHOME  
MINATO-KU, TOKYO, JAPAN



# LAUREL

# PV-12A

THE STATE-OF-THE-ART IN  
CURRENCY AND DOCUMENTS  
PROCESSING!! THE VERSATILE LAUREL PV-12A  
IS THE WORLD'S FIRST MICROCOMPUTER-  
CONTROLLED MACHINE OF THE KIND!!  
YOU WILL SURELY MISS IT AND CAN'T GO  
WITHOUT IT, ONCE YOU HAVE USED IT!!  
A REAL EPOCH-MAKER!!



## FEATURES:

### 1/Microcomputer Control:

The built-in microcomputer always assures unsurpassed reliability and versatility.

### 2/Large 4-Digit Display:

Gives clear and bright L.E.D. readings at all times.

### 3/Automatic Large-Size Documents Detector:

Senses any document larger than the height of the shutters the moment it is placed on the machine and holds the shutters open while such documents are being counted.

### 4/Ultra-Low Operational Noise:

Not a single relay is used and fewer moving parts in its mechanism have made PV-12A the quietest machine ever.

The operational noise level is as low as 67 db.

### 5/Useful Optional Accessories:

#### Currency Tray

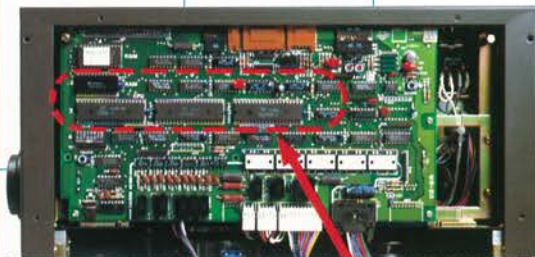
Both fixed and movable types are available for your choice.

#### Automatic Stamping Devices

Both side and bottom stamping devices are available for your choice.

#### Foot Switch

This zeroing switch in batch counting is a convenience and for the operator's hands for other manual work on the machine.



**MICRO-  
COMPUTER  
CONTROL**

## SPECIFICATIONS:

Dimensions:	380mm(W)×850mm(H)×345mm(D)
Weight:	61kg.
Count Speed:	100 currency notes in 4 seconds.
Voltage:	Any voltage, 50/60 Hz.

Distributed by:

Manufactured by:

**LAUREL BANK MACHINES CO., LTD**  
TOKYO, JAPAN

Printed in Japan



Model

LAUREL

# PV-30/PV-35

Currency Counter







PV-35

**We are ever in the vanguard of currency counting. We keep on innovating our products and technology with the phrase, "Customer Satisfaction" always in mind.**

**Now, these NEW vacuum currency counters are our another pride. Yes, in every way state-of-the-art. Do let them have a chance to prove it out !!**

## FEATURES

- Smaller, Lighter than Previous Models
- New Molding Design
- Easy-to-Read LCD Display with Back Light
- Automatic Pressure Adjustment with Self-Diagnosis System
- Built-in high efficiency dust collector
- Count method by Semi-Conductor Pressure Sensor
- High efficiency and energy-saving guaranteed by Newly Developed Vacuum Pump
- Versatile Counting Modes :  
[CHECK] [ADD-COUNT] [BATCH]  
[CHECK+ADD·COUNT] [BATCH+ADD·COUNT]
- Option : Bottom Stamping Device  
Note Tray, Turn Table

## SPECIFICATIONS

- Dimensions : 350×310×873mm (PV-30/31)
- Dimensions : 350×420×273mm (PV-35/36)
- Weight : Approx. 37kgs (PV-30/31)  
Approx. 23kgs (PV-35/36)
- Counting Speed : 100 notes / 4 seconds
- Note Holder Capacity : 150 notes max.
- Power Source : AC 110/115-127/220-230/240V ±10%  
50/60Hz ±1Hz
- Power Consumption : 300/350 VA (50/60Hz)
- Operating Conditions : Temperature 0 to 40°C  
Humidity 20 to 80%
- Countable Note Size : 90×35mm~185×95mm (with shutters closed)
- EC Directives : In accordance with Low Voltage 73/23/EEC and  
EMC 89/336/EEC
- Noise Level : 70 dB max.

Type	Shutters	
	Available	Unavailable
Console Type	PV-30	PV-31
Desk-Top Type	PV-35	PV-36



Operation Panel for PV-30/35



LAUREL BANK MACHINES CO.,LTD.  
1-1-2, TORANOMON, MINATO-KU, TOKYO, JAPAN  
TEL. TOKYO(03)3502-3311 FAX. TOKYO(03)3580-9362



**THE WORLD'S MOST  
ADVANCED CURRENCY  
COUNTER!!  
A PERFECTION BROUGHT  
ABOUT BY LAUREL'S  
ENGINEERING KNOW-HOW!!**

**BANKNOTE COUNTING MACHINES  
MODEL**

**PV-100**

**Features:**

**1. LARGE BRIGHT COUNT DISPLAY:**

Advanced L.E.D's give an easy-to-read count indication.

**2. STAMPING DEVICE:**

At the check counting mode a user-designated seal of verification is automatically stamped on the band when each count corresponds with the preset figures.

**3. CUTE AND COMPACT:**

Really compact-compact! The unit beautifully blends with the office environment.

**4. EASY TO OPERATE AND MAINTAIN:**

All controls are out on the front. The entire internal mechanism is accessible by loosening just a single screw.

**5. ALL FEATURES OF PV-8B ARE BUILT IN PV-100:**

Automatic Start Device, Full IC Electronic Control, High Efficiency Dust Collector, Heavy-Duty Dry Vacuum Pump etc.

**Specifications:**

Dimensions: 320mm(W) x 770mm(H) x 380mm(D)  
Weight: 55kg.(135 lbs.)  
Counting Speed: 100 sheets/4 sec.  
Voltage: Any voltage, 50/60Hz



**LAUREL**

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**Manufactured by:**

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