

# Money Counter

Coin and banknote counter



Manual

# Money Counter for Coins and Banknotes

## Introduction

Thank you for choosing the Money Counter series. The Money Counter is an invaluable tool for supermarkets, restaurants and other retail environments. It is designed to quickly and accurately count both coins and banknotes. With the Money Counter it takes only minutes to count your cash drawer. The Money Counter supports 3 default currencies. Other currencies can be uploaded through the built-in USB interface. The intuitive user interface takes you through all coin and banknote denominations automatically, from the smallest coin to the largest banknote. The screen will display the quantity and amount for each denomination as well as the total amount for all denominations. The results are stored in memory and can be viewed at all times during and after the counting session. The Money Counter features uploading of the counting results through its RJ 45 serial connection for direct printing.

## Warning

### General

- Only use sorted coins and banknotes, do not mix notes and coins.
- Use on a flat and stable surface and keep the area around the money hook clear.
- Do not use the machine near fans or air-conditioning.
- Do not disassemble the machine, its sensitive weighing element may be damaged.

### Power

- Only use the machine with the factory supplied power adapter.
- Do not use a damaged or wet power adapter or mains cord.
- Do not connect the power adapter with wet hands.

### Batteries

- Use a good quality 9 Volt Battery (IEC Type 6LR61). Dispose of used batteries in accordance with local regulations.
- Remove the batteries during long term storage.

### Maintenance

- Always switch the power off before cleaning the machine. Clean the machine with a dry cloth. Do not use wet or damp cloth or cleaning products.
- Do not spill any liquid or chemical spray over the equipment. If any liquid is spilled on it, disconnect the power cable from the supply, remove the battery and contact your dealer.




## 1.0 PACKAGE CONTENTS

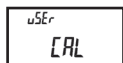
- Money Counter machine
- Money hook
- Coin cup
- Power adapter with suitable plug
- Manual
- USB update cable
- 500g Weight


## 2.0 BEFORE YOU START

### Calibrating the Money Counter


The Money Counter uses a high precision load cell. In order to ensure accurate counting results, it is required to calibrate the device before taking it into operation. To calibrate your Money Counter follow the procedure below:

1. Install the money hook on the machine. Do not use the coin cup. Connect the power supply or place the battery. Use the calibration weight of 500gram supplied with the machine.
2. Make sure the machine is powered OFF.
3. Press ,  and  key together and hold for 3 seconds. The screen will now display [USER] and [CAL].



4. Press the  key once and release. The screen will display: [ZERO] and then it will display the required calibration weight of 500.0g



5. Place the calibration weight of 500.0 g on the money hook. Please make sure that the coin cup is NOT on it, wait 1 second, then press and release the  key. The display will show [CAL] followed by [PASS].



6. The Money Counter is now successfully calibrated and ready to be used. The default counting screen will be displayed.



## 3.0 ASSEMBLY

### 3.1. CONNECT THE POWER ADAPTER OR PLACE A 9 VOLT BATTERY (NOT INCLUDED)



1. Open lid



2. Insert battery








3. Close lid

### 3.2. INSERT THE MONEY HOOK

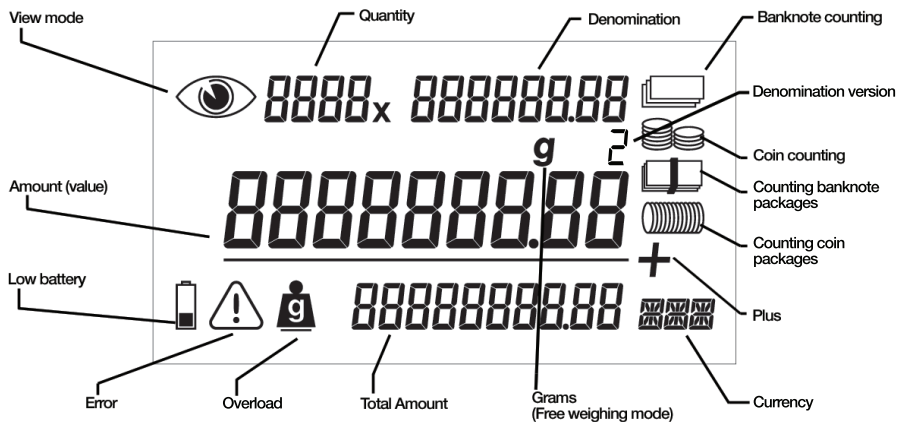


## 4.0 FUNCTION KEYS AND DISPLAY

### 4.1. FUNCTION KEYS

■ (Press and hold 3 seconds) ● (Press and release)					
FUNCTION	ON/OFF	BACK	PLUS	NEXT	VIEW
Power ON/OFF * Press and hold 3 seconds	■				
Clear counting results and reset to zero	●				
Previous denomination		●			
Store counting results in memory – Store settings			●		
Enter free weighing mode * Press and hold 3 seconds			■		
Enter free count function		● (2 <sup>nd</sup> press)	■ (1 <sup>st</sup> press)	● (2 <sup>nd</sup> press)	
Next denomination				●	
View counting results					●
Change currency * Press and hold 3 seconds					■
Load factory default settings * Press and hold 3 seconds	■				■
Re-calibrate coin cup or currency denomination * Press and hold 3 seconds			■		■
Connect with PC Software			● (2 <sup>nd</sup> press)		● (1 <sup>st</sup> press)
Print counting results			● (2 <sup>nd</sup> press)		● (1 <sup>st</sup> press)


### 4.2. DISPLAY



## 5.0 OPERATING THE MACHINE

### 5.1. POWER ON

**IMPORTANT:** Make sure that the money hook is always empty before you Power ON the machine. Do not switch the machine on with the coin cup or banknotes on it.

Press and hold the  key for 3 seconds to switch the power on. When the machine is ready for use, it will make a short 'beep'.



Right







Wrong

### 5.2. SELECT CURRENCY

The Money Counter supports 3 counting currencies. The factory default currency is the position 1 currency.

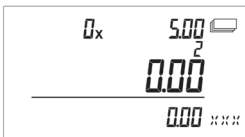
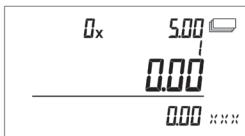
With the software you are able to upload currencies on the device.



- To select another currency, press and hold the  key for 3 seconds. The ISO code of the 1st position currency will flash in the display.
- Use the   keys to select another currency (GBP/CHF/...).
- Press the  key to store selected currency in memory.

### 5.3. START COUNTING

The Money Counter uses an intuitive user interface which takes you automatically through all coin and banknote denominations, from the smallest coin to the largest banknote.



The Money Counter is also able to count multiple versions of denominations. The machine will display an extra number if more than 1 version of a denomination exist. This number will appear under the denomination indication. The machine will display the number 1 for the oldest denomination version in use and the number 2 for the next (newer) denomination version. This number will increase with every new denomination version in use.

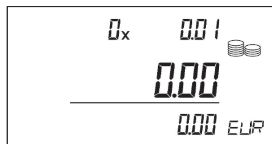
**Important:** All different denomination versions must be sorted and counted separately.

You can use the   at all times to skip a denomination or to return to an already counted denomination.

Total amount is displayed throughout the counting and quantity and amount for each denomination can be read from the display at all times during and after the counting.

### 5.3.1. COUNTING COINS

When counting coins, always use the factory supplied coin cup. This cup is calibrated for your specific machine and cannot be used on other machines without prior recalibration (see chapter 8.0 recalibration).



- The machine starts with the smallest coin denomination (€ 0.01).  
Put the € 0.01 coins in the cup and place the coin cup on the money hook.
- Wait until you hear a 'beep'.
- Press **+** key to store the counting result. The machine will make two short 'beeps' to confirm that the counting result is correctly stored in memory.  
The **+** symbol will appear on the screen.

- Remove the cup from the machine. The machine will automatically switch to the next denomination. Use the **◀▶** keys at any time to return to a denomination to add another counting or to skip a denomination.
- Continue counting until all your coins are counted.

### Overload

**When counting coins, please make sure not to exceed the maximum weight of 1 kg on the scale. When the maximum weight is exceeded, the machine will make a warning beep and the **g** symbol will appear on the screen. In this case, reduce the coins in the cup and weigh again. Store the results with the **+** key and use the **◀▶** keys to return to the same denomination to count and store the remaining coins.**

### 5.3.2. COUNTING BANKNOTES



For counting banknotes, the machine will use a unique procedure to ensure maximum accuracy of your counting results. This procedure ensures always accurate counting results even when there are small weight differences between banknotes due to dirty or damaged notes. Before placing banknotes on the scale make sure that the money hook is empty and never use the coin cup to count banknotes.

- Use the **◀▶** keys to select the banknote denomination (i.e. € 5)
- Place banknotes on the money hook in little stacks (max. 15 to 20 notes). After a short confirmation beep, the machine is ready to receive the next stack of the same denomination that is currently being used. Wait for another beep to place the next stack on top. Repeat this procedure until all notes of the selected denomination are counted.

- Press **+** key to store the counting result. The machine will make two short 'beeps' to confirm that the counting result is correctly stored in the memory. The **+** symbol will appear on the screen.
- The machine will automatically switch to the next denomination. Use the **◀▶** keys at any time to return to a denomination, add another counting or skip a denomination.
- Continue counting until all your banknotes are counted.

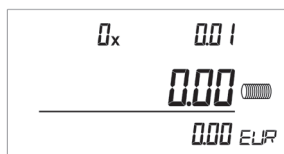
### 5.3.3. COUNTING MONEY PACKAGES

It is possible to count coin and banknote packages with the Money Counter. To activate this function you need PC software. Please contact your distributor for more information..

### 5.3.4. COUNTING COIN PACKAGES

After counting all loose coins and banknotes the machine starts with counting coin packages (only when coin packages are loaded on the machine with the PC software).

**PLEASE NOTE: For accurate counting results it is only allowed to count full packages.**

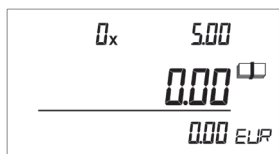


- The machine starts with the smallest coin denomination (i.e. €0.01).
- Place one or more full € 0.01 coins packages on the money hook.
- Wait until you hear a “beep”.
- Press **+** key to store the counting result. The machine will make two short ‘beeps’ to confirm that the counting result is correctly stored in memory. The **+** symbol will appear on the screen.
- Remove the coin packages from the money hook. The machine will automatically switch to the next denomination. Use the arrow keys at all times to return to a denomination to add another counting or to skip a denomination.
- Continue counting until all your coins packages are counted.

### 5.3.5. COUNTING BANKNOTE PACKAGES

After counting all coins packages the machine starts with counting banknote packages. (Only when banknote packages are loaded on the machine by the PC software).

**PLEASE NOTE: For accurate counting results it is only allowed to count full packages.**



- Use the **◀▶** keys to select the banknote denomination (i.e. € 5)
- Place one or more banknote packages on the money hook.
- Wait until you hear a “beep”.
- Press **+** key to store the counting result. The machine will sound two short ‘beeps’ to confirm that the counting result is correctly stored in memory. The **+** symbol will appear on the screen.
- Remove the banknote packages from the money hook. The machine will automatically switch to the next denomination. Use the **◀▶** keys at any time to return to a denomination, add another counting or skip a denomination.
- Continue counting until all your banknote packages are counted.

### 5.3.6. VIEW COUNTING RESULTS

- When all the money is counted, press the **👁** key to view the counting results. Use the **◀▶** keys to skip through the denominations and view the quantity and amount stored for each denomination.
- When you are finished viewing, pressing the **👁** key again to return to the counting mode. If you wish to continue counting, use the **◀▶** to select the appropriate denomination and place the money on the machine. Press the **+** key to add the results to the counting results stored in memory.

### 5.3.7. CLEAR COUNTING RESULTS

To clear all counting results press the **🔌** key. All counting results will be cleared from the memory and the machine is ready to start a new counting session.

### SUMMARY


- When counting coins always use the coin cup supplied with your machine.
- Do not switch the machine on with the coin cup placed on the hook.
- Do not use the coin cup to count banknotes.
- Do not count mixed coins or mixed banknotes.
- Place banknotes in small stacks of 15-20 notes on the machine, wait for the beep and place the next stack of 15-20 notes on top. When all notes of a single denomination are counted, press the **+** key to store the results.
- Only count full coin or banknote packages.

## 6.0 FREE WEIGHING FUNCTION


The Money Counter can be used for weighing objects with a maximum weight of 1 kg.



- Press and hold **+** key for 3 seconds to enter the weighing mode. The grams symbol will appear in the display.
- Place the object on the hook and the machine will calculate and displays its weight in grams.
- When finished, press and hold the **+** key for 3 seconds to return to the money counting mode.

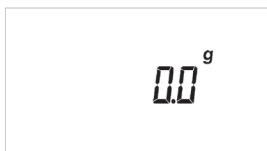
**Overload: When an object of more than 1 kg is placed on the machine, a long beep will sound and the overload symbol  will flash in the screen.**



### Tare function

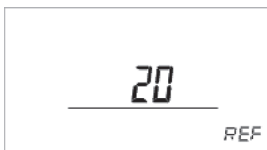
The Tare function will set the machine to zero in the free weighing mode. Place an object on the machine and press the  key. The machine will be reset to 0 and you can now place another object to determine its weight



## 7.0 FREE COUNT FUNCTION

The Money Counter can be used for Free counting objects with a total weight of 1 kg.



- Press and hold **+** key for 3 seconds to enter the weighing mode. The grams symbol will appear in the display.
- Press the   keys to activate the free count function.



- Press the   keys to select the reference quantity of free count items. (For example 20 pcs)
- Place 20 pcs free count items on the money hook.
- Press **+** key to confirm the reference quantity.
- The free count function is ready for usage. Place items to count.





**Please note: Free counting items should have identical weight for accurate count results.**

## 8.0 RECALIBRATION FUNCTION

Please be careful when using the recalibration procedure. This procedure will change the weights of coins, banknotes or the money cup in the machine's weight table. When incorrect weights are stored, it will result in inaccurate and unreliable counting results. You can always restore the original weight table by loading factory default settings.

### Recalibration procedure for banknotes and coins







- Press and hold the **+** and  key for 3 seconds. This will activate the recalibration function. The screen will display: CAL, 20x and the smallest denomination.
- Use the   keys to select the denomination you wish to recalibrate.
- Place 20 banknotes or coins on the machine. For coins, make sure to use the coin cup. The machine will make a beep.
- Press the **+** key to store the recalibration result in the weight table.
- Press the  key to exit the recalibration function.



**Please note: Do not use the calibration function in the Money Counter to calibrate coin rolls and money packages. Coin rolls and Money packages should be calibrated via PC software only.**

#### Recalibration procedure for the coin cup



When the factory supplied coin cup is damaged or you wish to use another coin cup, this function modifies the default weight for the coin cup stored in the weight table. The procedure is the same as for banknotes and coins as described above.

- Press and hold the **+** and  key for 3 seconds. This will activate the recalibration function. The screen will display CAL and 20x and the denomination 0.01.
- Use the   keys to select the coin cup calibration function. The screen will display: CAL, cup and 1x.
- Place the new cup or the damaged cup on the machine. The machine will make a beep.
- Press the **+** key to store the new cup weight in the weight table.
- Press the  key to exit the recalibration function.

## 9.0 RETURNING TO FACTORY DEFAULT SETTINGS

This function resets the machine and reloads factory default settings.


This function will reset all user modified settings and will restore the original weight table for all currencies.

- Press and hold the  and  key for 3 sec. The machine will make 3 beeps followed by 2 short beeps to confirm factory default settings are restored. The machine is ready for use.


## 10. AUTO POWER OFF

When the machine is not used for 10 minutes, the power will be switched off automatically.




## 11. CONNECT WITH PC

Connect the USB cable (included in the box) to the device and the PC. Press  followed by **+** to establish connection.

## 12. PRINTING COUNTING RESULTS WITH A THERMAL PRINTER


Connect a serial cable (optional) to the RJ45 connector of the device and the printer. Press  followed by **+** to print the counting results.

## 13. TROUBLESHOOTING

SYMBOL	PROBLEM	SOLUTION
	Overload condition: Too much weight is placed on the money hook.	<p><b>Free weighing mode:</b> Do not exceed the maximum weight of 1 kg</p> <p><b>Counting coins:</b> When the max weight is exceeded, take some coins off the cup to reduce the weight. Wait for the beep and press the <b>+</b> key to store the results. Use the <b>◀▶</b> keys to return to the same coin denomination to count and store the remaining coins.</p> <p><b>Counting banknotes:</b> Place a stack of 15-20 banknotes on the scale, wait for the beep and place the next stack of 15-20 notes on top of the previous stack, wait for the beep. Repeat until all notes of the denomination are counted. Press <b>+</b> key to store the results.</p>
	The 'Warning' symbol will appear on the display if you press any key before the currently counting process is finished.	Take the money off the hook and the machine will reset automatically.
	The 9 Volt Battery (IEC Type 6LR61) is low on power.	Replace the battery or use the adapter.
OUT2	At start up the scale displays: Out 2.	Follow the calibration procedure (See: 2.0 BEFORE YOU START).
UNST	The money counter is not placed on a stable and level surface.	Make sure the machine is placed on a level surface and that no surrounding objects have direct contact with the money hook or coin cup.

## 14. TECHNICAL SPECIFICATIONS

- Currency: All banknotes and coins.
- Display: 2,2 inch LCD display with white backlight.
- Max weighing capacity: 1 kg
- Machine size: 230(L) × 140(W) × 100(H) mm.
- Net weight: 0,7 kg
- Power Source: 9V DC adapter or 9 Volt Battery (IEC Type 6LR61)
- Print port: RJ45 Serial, Baud rate 9600
- RoHs/CE/EMC

<b>RJ 45 WIRING DIAGRAM</b>			
			
1	RXD	5	X
2	TXD	6	X
3	GND	7	X
4	X	8	X

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.