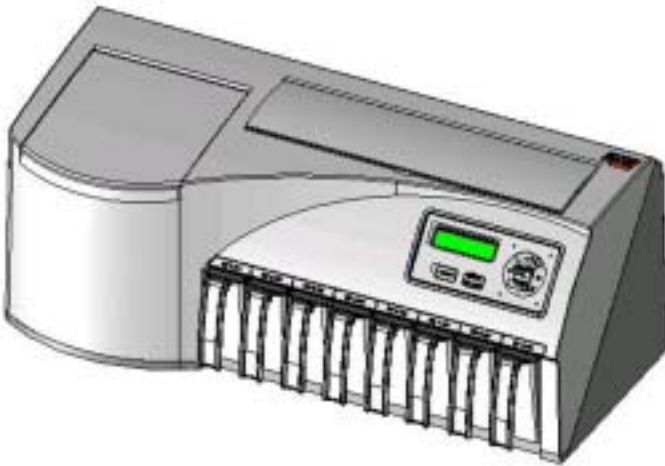


# GERBÔ COIN COUNTER AND SORTER



MODEL: 2380 Euro

Product Instruction  
Manual

**gerbô**

**CE**

10192-C



### PREFACE

Before installing and operating this equipment read carefully all of the information contained in this **PRODUCT INSTRUCTION MANUAL**, and keep it in a safe place for future reference.

This manual contains all of the basic information necessary regarding the specifications, installation and operation of the **Gerbô Coin Counter and Sorter Model 2380** for the European Common Market, allowing you to obtain maximum performance in its operation

This equipment should be installed and operated in accordance with accepted engineering standards and specifications.

Should any type of interference occur, that could be attributed to the equipment - as verified by simply turning on and off the equipment - the user or owner of the counter should immediately call the nearest Gerbô dealer or get in touch with Gerbô's Technical Assistance Department (tel.: 55 15 32351400).

Should it be determined that the cause for the interference and /or damage to other electronic equipment is due to the counter having been used incorrectly, lack of appropriate maintenance, or non authorized modifications to the product, Gerbô will not be liable for the damages, and the customer will lose all product warranties.

Gerbô reserves itself the right to introduce improvements to the product at any time, in software, components, materials and systems, without the implication that this may represent an obligation that said improvements be implemented in previously sold units.



#### **WARNING!**

This equipment was designed exclusively for the **COUNTING AND SORTING** of **“EURO” (E\$)** coins in circulation in the countries of the European Community.

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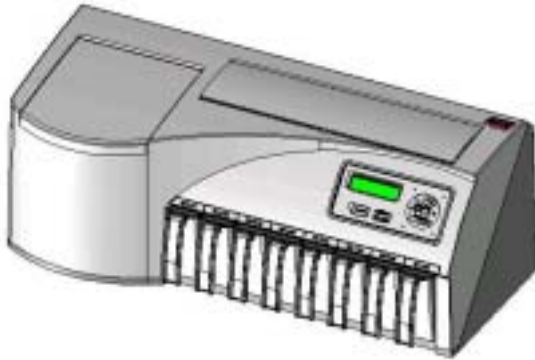
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## INTRODUCTION

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Congratulations for having purchased the Gerbô Model 2380 Coin Counter and Sorter, the most advanced and efficient Coin Counter and Sorter available in the market today.

This equipment was developed with state of the art technology in order to provide superior handling, flexibility and a wide variety of coin selection and counting modes for the “Euro” (E\$) coins .

In addition to simple operation, the Gerbô Model 2380 offers:

**Reduction in Execution Time:** This equipment is capable of selecting and counting 400 COINS PER MINUTE.

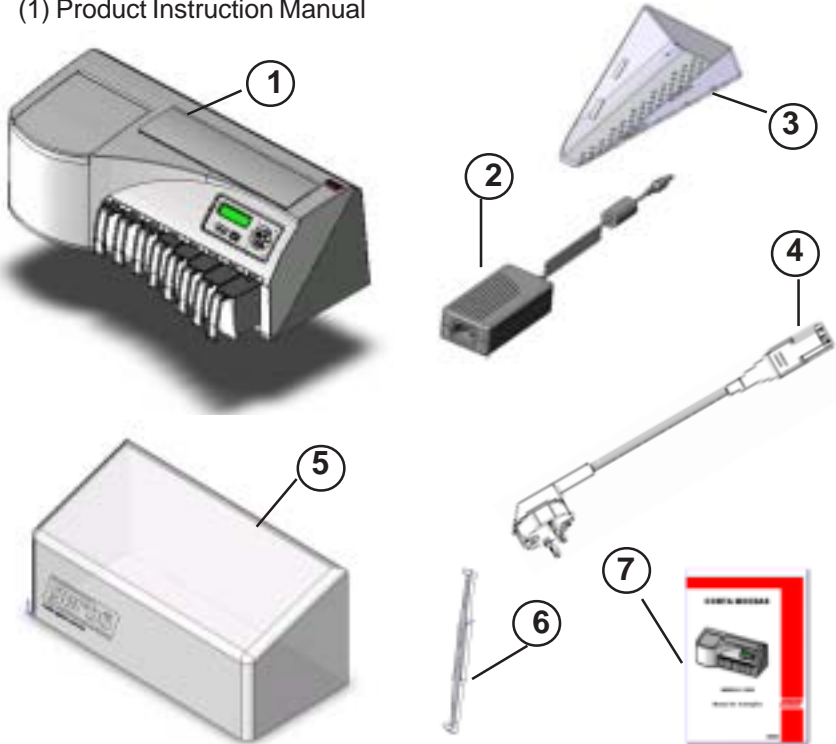
**Compactness:** Due to its modern design, this equipment may be installed in many locations, such as: banks, stores and offices;

**Ease of handling:** This equipment is capable of sorting and counting coins to a specific “Euro” value, in a single operation.

## UNPACKING PROCEDURE

Verify if the box contains all of the following items:

1. (1) "Standard" Coin Counter and Sorter
2. (1) Electrical Power Supply
3. (1) Cleanig Funnel
4. (1) AC Power Cord
5. (1) Plastic Cover for Protecting the Equipment
6. (1) Cleaning Brush
7. (1) Product Instruction Manual



### ATTENTION!

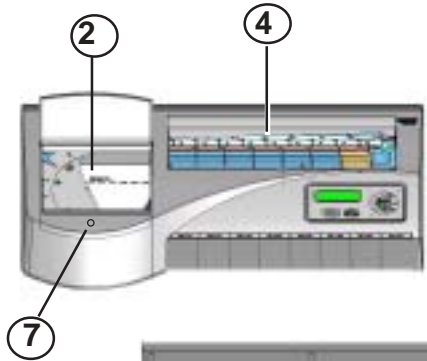
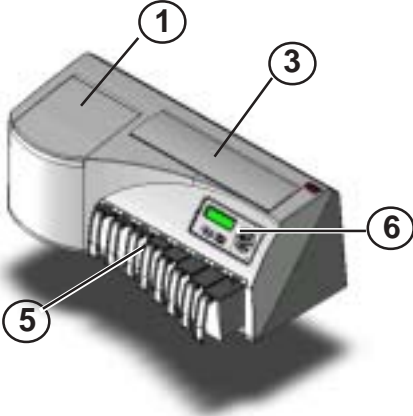
Place the equipment on a flat surface. Do not discard the packing box and packaging items until all of the verifications and functional testing have been completed. If the equipment shows any damage or malfunction, it should be repackaged in the original box and returned to an authorized Gerbô dealer.

# PRODUCT DESCRIPTION

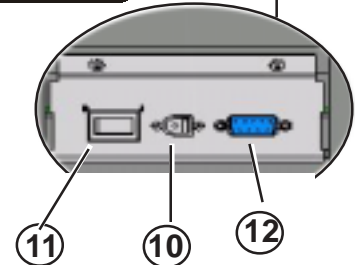
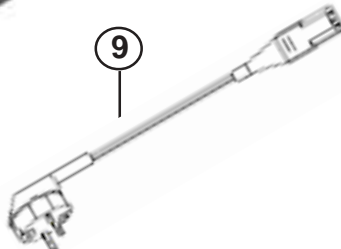
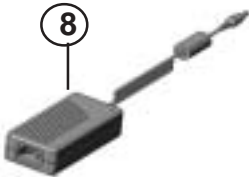
## PRODUCT DESCRIPTION

### "STANDARD" EQUIPMENT COMPONENTS

1. Coin Collector Cover
2. Coin Collector
3. Coin Conductor Cover
4. Coin Conductor
5. Coin Reservoirs (8)
6. Display Control Panel
7. Motor Shut Down Device
8. Electrical Power Supply
9. AC Power Cord
10. DC Power Jack
11. ON/OFF Switch
12. Data Out DB-9 Connector (RS-232)



**CAUTION!**  
USE ONLY MANUFACTURER RECOMMENDED  
POWER SUPPLY.  
REFER TO OPERATOR MANUAL.



Read carefully all of the following information referring to “Precautions, Warnings and Care” in order to fully understand the “Installation and Operation” functions of this equipment and user safety.



### **WARNING!**

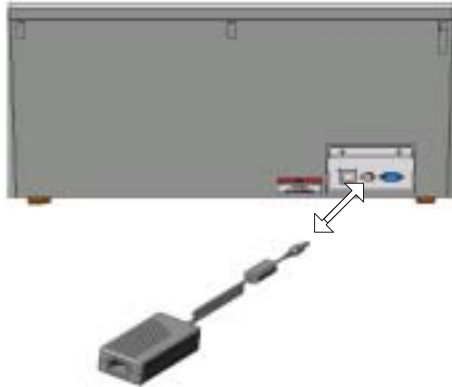
- Always shut down the equipment motor before opening the Coin Collector cover and Coin Conductor.
- As a safety measure, there is switch that automatically shuts down the motor when the Coin Collector cover is opened.
- After using the equipment, keep the plastic protection cover on the equipment, avoiding the accumulation of dust.
- Never remove the Coin Reservoirs while motor is running.
- Use only the same type of power supply and power cord as those supplied with this equipment (see **TECHNICAL SPECIFICATIONS**, page 27);
- Should you use an extension cord (provided with ground prong), make sure that the current usage of the equipment attached to the extension cord does not exceed its rating;
- Do not use the same electrical circuit that is being used by copier or air conditioner to plug in the equipment;
- Never introduce foreign objects of any sort into the interior of the counter through the openings and ventilation slots of the housing, as these objects could touch high voltage points causing short circuits resulting in fires, damage or hazardous electrical shocks;
- Do not place this equipment on a cart, support or unstable surface. A fall will likely cause severe damage;
- Do not put any objects other than coins in the collector – particularly paper clips, hairpins or adhesive tapes.
- Use only “**EURO**” currency to be counted and sorted, otherwise damage or errors in counting and selection may result. Should you need to sort and count coins from other countries, get in touch with your authorized dealer network or contact Gerbô Engenharia e Manufatura Ltda. directly.
- While loading or reloading the coin collector, do not exceed the limit line (MAX), by doing so the consequent overload may cause an obstruction/stoppage of the transporter chain or even cause some coins to fall off the collector.
- This equipment does not require lubrication. Therefore, do not use any type of oil / lubricant in the machinery of the equipment as this may cause damage to systems and reduce performance.
- Gerbô Engenharia e Manufatura Ltda. recommends periodic cleaning of this equipment, dependant upon usage and environment. (see **EQUIPMENT CLEANING** in this Manual).

# INSTALLATION

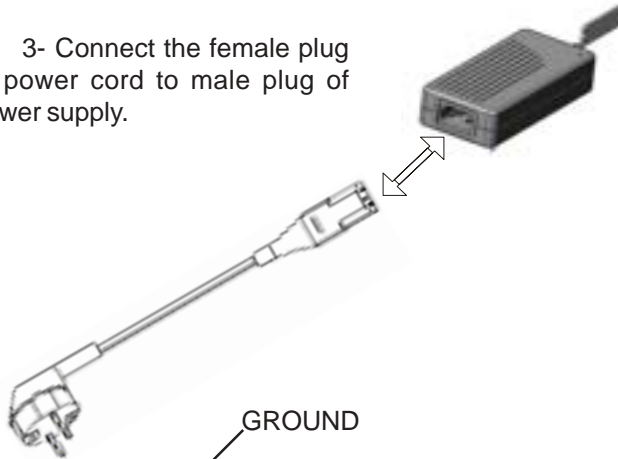
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1- Place the equipment on a flat surface.

2- Connect the DC Power Supply Plug to the DC Power Jack located in the rear of the cabinet.



3- Connect the female plug of power cord to male plug of power supply.



4- Connect the male plug of power cord to electrical outlet.



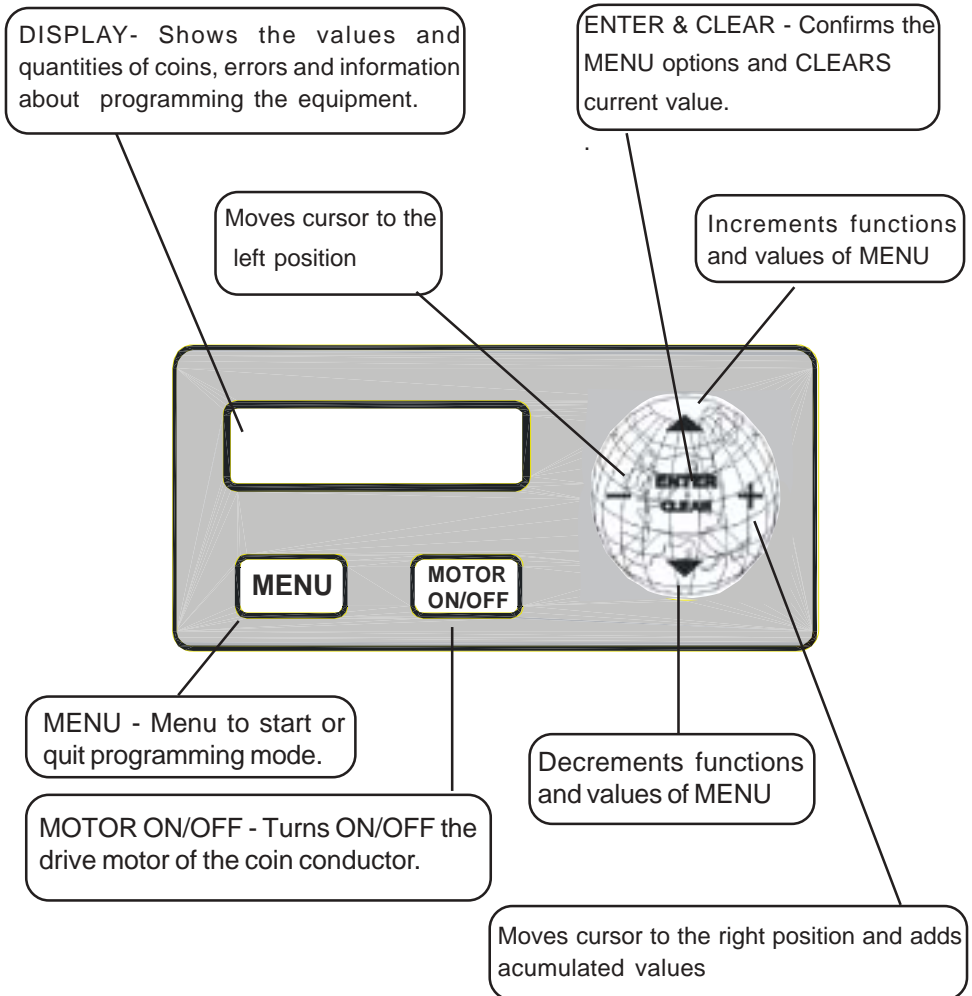
## WARNING !

Use only Outlets with the "GROUND" pin properly in place.

---

## CONTROL PANEL - FUNCTIONS

Before operating the Counter, read carefully all of the instructions in this section referring to the functions of each key and the respective indications registered on the control panel of the equipment.



### ATTENTION!

To activate a control key, press on it lightly with your fingers. Never use a pencil, pen, keys, or sharp objects that might damage the membrane or keys of the control panel, affecting the programs.

# OPERATION

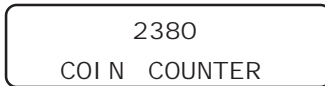
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## INSTRUCTION 1 - STARTING



• Turn the equipment on using the ON/OFF key located in the rear of the equipment:





The equipment will sound a “BEEP” and the following message will appear on the display:



You can clear the “**CURRENT VALUES**” and/or “**ACCUMULATED VALUES**” of coins processed in the last operation.

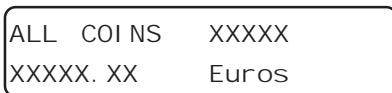
• After message  press  to clear the “CURRENT VALUES” of coins, otherwise press any key.

• After message  press  to clear the “ACCUMULATED VALUES” of coins, otherwise press any key

Display will show one of the following messages:



if the “CURRENT VALUE” was cleared.








if the “CURRENT VALUE” was not cleared.

**INSTRUCTION 2 – LOADING THE COIN COLLECTOR**

- Place the coins to be processed in the cleaning funnel. Remove dust, glue, tape and other debris that could cause poor functioning of the equipment.
- Load the collector with coins selected to be processed, insuring that the maximum limit/load (“MAX”) is not exceeded.
- Close the Coin Collector and Coin Conductor covers.


**INSTRUCTION 3 - SORTING AND COUNTING COINS**

STEP	MESSAGE/DISPLAY
<p>1 Press . At the end of the lot counting, press .</p>	<p>ALL COINS: XXXXX XXXXX.XX Euros</p>
<p>2</p> <p> Press  to view the values and quantities processed for each coin denomination: E\$0.01; E\$0.02; E\$0.05; E\$0.10; E\$0.20; E\$0.50; E\$1.00 and E\$2.00.</p>	<p>E\$ 0.01: XXXXX XXXXX.XX Euros</p> <p>E\$ 0.02: XXXXX XXXXX.XX Euros</p> <p>E\$ 0.05: XXXXX XXXXX.XX Euros</p> <p>E\$ 0.10: XXXXX XXXXX.XX Euros</p> <p>E\$ 0.20: XXXXX XXXXX.XX Euros</p> <p>E\$ 0.50: XXXXX XXXXX.XX Euros</p> <p>E\$ 1.00: XXXXX XXXXX.XX Euros</p> <p>E\$ 2.00: XXXXX XXXXX.XX Euros</p>

 If you wish to process VALUES and QUANTITIES “cumulatively”, repeat the **INSTRUCTION 2** on.

## OPERATION

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☛ If you wish to process with VALUES and QUANTITIES cleared, press the  key for 1 second or execute the **PROCEDURE FOR “CLEARING CURRENT VALUES”** (page 13) and repeat the **INSTRUCTION 2** on .


☛ To accumulate VALUES and QUANTITIES in memory, press the  key for 1 second or execute the **PROCEDURE FOR “ADD ACCUMULATED VALUES”** (page. 13).

### DISPLAY MESSAGES

COUNTING  
TIMEOUT


Within (8) seconds of the coin counter finishing the entire process of counting and sorting of coins, the motor will turn off automatically. The equipment emits 3 “BEEPS” and shows that message.

This function avoids turning of the motor when coins are not being processed.

- Press the  key to return to current operation mode.
- If you wish to continue the process, repeat from **INSTRUCTION 2** on.

FULL BOX E\$ X.XX  
REMOVE COINS!!

If during processing the equipment “STOPS”, emits 3 “BEEPS” and the message appears on the display, this means that the reservoir of coins of this denomination (**X.XX**) has reached maximum storage capacity (see FULL BOX configuration, page 24).

- Press the  key to return to “MENU OPTIONS”.
- At this time, unload the respective reservoir and repeat the process from **INSTRUCTION 2** on.

---

### WARNING!



Always keep the Coin Collector and Coin Conductor covers closed while processing coins.

While opening the Coin Collector cover, the motor will shut down automatically.

---

**OPERATIONS WITH THE COUNTING VALUES**

MENU OPTI ONS  
CLR CURRENT


**PROCEDURE TO “CLEARING CURRENT VALUES”**

**STEP**

**MESSAGE/DISPLAY**

1 Press  key

MENU OPTI ONS  
ACCUMULATED


2 Press  key to select


MENU OPTI ONS  
CLR CURRENT

3 Press  key for 1 second

“Returns to current operation mode with the quantities and values of coins cleared”

ACCUMULATED MENU  
ADD ACCUMULATED

**PROCEDURE TO “ADD ACCUMULATED VALUES”** 

Short-cut key 

**STEP**

**MESSAGE/DISPLAY**

1 Press  key

MENU OPTI ONS  
ACCUMULATED

2 Press  key

ACCUMULATED MENU  
VIEW ACCUMULATED

3 Press  key to select

ACCUMULATED MENU  
ADD ACCUMULATED

4 Press  key

“Returns to current operation mode with the quantities and values cleared”

# OPERATION


ACCUMULATED MENU  
VIEW ACCUMULATED

## STEP

1 Press  key

2 Press  key

3 Press  key

4 Press  key to view the accumulated quantities and values of coins: E\$0.01; E\$0.02; E\$0.05; E\$0.10 E\$0.20; E\$0.50; E\$1.00; E\$2.00 and all coins

## PROCEDURE TO “VIEW ACCUMULATED VALUES”

### MESSAGE/DISPLAY

MENU OPTI ONS  
ACCUMULATED

ACCUMULATED MENU  
VI EW ACCUMULATED

ALL COI NS      XXXXX  
XXXXX. XX      Euros

E\$ 0. 01:      XXXXX  
XXXXX. XX      Euros

ALL COI NS      XXXXX  
XXXXX. XX      Euros

ACCUMULATED MENU  
CLR ACCUMULATED

## STEP

1 Press  key

2 Press  key

3 Press  key to select

4 Press  key for 1 second

## PROCEDURE TO “CLEARING ACCUMULATED VALUES”




### MESSAGE/DISPLAY

MENU OPTI ONS  
ACCUMULATED





ACCUMULATED MENU  
VI EW ACCUMULATED

ACCUMULATED MENU  
CLR ACCUMULATED

“Returns to current operation mode”

MENU OPTI ONS PARTI AL COUNTER		PROCEDURE TO “VIEW THE PAR- TIAL COUNTING OF COIN VALUE”
STEP		MESSAGE/DISPLAY
1	Press  key	MENU OPTI ONS ACCUMULATED
2	Press  key to select	MENU OPTI ONS PARTI AL COUNTER
3	Press  key	PARTI AL COUNTER XXXXX. XX Euros

To CLEAR the “PARTIAL COUNTER”, proceed as follows:

STEP		MESSAGE/DISPLAY
1	Press  key	MENU OPTI ONS ACCUMULATED
2	Press  key to select	MENU OPTI ONS PARTI AL COUNTER
3	Press  key	PARTI AL COUNTER XXXXX. XX Euros
4	Press  key for 1 second.	“Returns to current operation mode”

## OPERATION






---

MENU OPTI ONS  
FULL BOX CHECK

### PROCEDURE TO “SET THE ACTIVE OR INACTIVE MODE OF FULL BOX”

**ACTIVE:** Coins are stored in reservoirs according to “FULL BOX” configuration (page 24)

**INACTIVE:** Coins are stored in reservoirs with unlimited quantities, for each coin denomination.

STEP	MESSAGE/DISPLAY
1 Press  key	MENU OPTI ONS ACCUMULATED
2 P r e s s  key to select	MENU OPTI ONS FULL BOX CHECK
3 Press  key	FULL BOX CHECK: “ACTIVE or INACTIVE”
4 P r e s s  key to set ACTIVE or INACTIVE mode	FULL BOX CHECK: “ACTIVE or INACTIVE”
5 Press  key	“Returns to current operation mode”.











### ATTENTION !

When programming the “SET LIMITS” (Quantity or Value), the “FULL BOX CHECK” function will be set according to the “SET LIMITS” procedures (pages 17 to 20).

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**PROGRAMMING THE COIN COUNTER AND SORTER**

**PROCEDURE TO "SET LIMITS"  
(QUANTITY OF EACH COIN DENOMINATION)**





STEP	MESSAGE/DISPLAY
<p>1 Press  key</p>	<p>MENU OPTI ONS ACCUMULATED</p>
<p>2 P r e s s  key to select</p>	<p>MENU OPTI ONS LI MI TS</p>
<p>3 Press  key</p>	<p>LI MI TS MENU SE T LI MI TS</p>
<p>4 Press  key</p>	<p>COI N SELE CT FB="A, I or L" COI N E\$ 0. 01</p>
<p>5 P r e s s  key to select the desired coin</p>	<p>COI N SELE CT FB="A, I or L" COI N E\$ X. XX</p>
<p>6 Press  key</p>	<p>COI N E\$ X. XX 00000 COI NS</p>
<p>7 Press  key to set the cursor position</p>	<p>COI N E\$ X. XX 00000 COI NS</p>
<p>8 Press  key to increase/decrease quantities</p>	<p>COI N E\$ X. XX XXXXX COI NS</p>

continues →

# PROGRAMMING

→ continued

## PROCEDURE TO “SET LIMITS” (QUANTITY FOR EACH COIN DENOMINATION)

	MESSAGE/DISPLAY
9 Press  key	COIN E\$ X. XX XXXXX. XX
10 Press  key	COIN SELECT FB= (“A, I or L”) COIN E\$ X. XX
11 Press  key to execute a coin count and sort program. To select other values to be counted and sorted repeat from step 5 on.	ALL COINS: XXXXX XXXXX. XX Euros
12 End of operation ( 3 BEEP’s)	LI MIT: XXXXX. XX XXXXX x X. XX
13 Press  key	MENU OPTI ONS ACCUMULATED

- FB=A ----> FULL BOX is “ACTIVE” to the respective coin denomination.
- FB=I ----> FULL BOX is “INACTIVE” to the respective coin denomination.
- FB=L ----> FULL BOX assumes the quantities or values programmed in “SET LIMITS” (pages 17 to 20)












### ATTENTION !

The maximum quantity of coins programmed for each coin denomination per operation is 50,000 coins. When attempting to program above that quantity, display will show the following message:

OVER 50000 COI NS  
PRESS ANY KEY. . .

**PROCEDURE TO “SET LIMITS”  
(VALUE OF EACH COIN DENOMINATION)**




STEP	MESSAGE/DISPLAY
<p>1 Press  key</p>	<p>MENU OPTIONS ACCUMULATED</p>
<p>2 Press  key to select</p>	<p>MENU OPTIONS LIMITS</p>
<p>3 Press  key</p>	<p>LIMITS MENU SET LIMITS</p>
<p>4 Press  key</p>	<p>COIN SELECT FB= (“A, I or L”) COIN E\$ 0.01</p>
<p>5 Press  key to select the desired coin</p>	<p>COIN SELECT FB= (“A, I or L”) COIN E\$ X.XX</p>
<p>6 Press  key</p>	<p>COIN E\$ X.XX 00000 COINS</p>
<p>7 Press  key</p>	<p>COIN E\$ X.XX 00000.00</p>
<p>8 Press  key to set the cursor position</p>	<p>COIN E\$ X.XX 00000.00</p>
<p>9 Press  to increase/decrease quantities.</p>	<p>COIN E\$ X.XX XXXXXX.XX</p>

continues →

# PROGRAMMING

→ continued

## PROCEDURE TO “SET LIMITS” (VALUE OF EACH COIN DENOMINATION)

STEP	MESSAGE/DISPLAY
10 Press  key	COIN SELECT FB= (“A, I or L”) COIN E\$ X. XX
11 Press  key to execute a coin count and sort program. To select other values to be counted and sorted repeat from step 5 on.	ALL COINS: XXXXX XXXXX. XX Euros
12 End of operation ( 3 BEEP’s)	LI MI T: XXXXX. XX XXXXX x X. XX
13 Press  key	MENU OPTI ONS ACCUMULATED

FB=A -----> FULL BOX is “ACTIVE” to the respective coin denomination.

FB=I -----> FULL BOX is “INACTIVE” to the respective coin denomination.

FB=L -----> FULL BOX assumes the quantities or values programmed in “SET LIMITS” (pages 17 to 20)








### ATTENTION!

The maximum quantity of coins programmed for each coin denomination per operation is 50,000 coins. When attempting to program above that quantity, display will show the following message:

OVER 50000 COINS  
PRESS ANY KEY. . .

LI MI TS MENU  
CLR LI MI TS

**PROCEDURE TO "CLEAR LIMITS"**

STEP	MESSAGE/DISPLAY
<p>1 Press  key</p>	<p>MENU OPTI ONS ACCUMULATED</p>
<p>2 P r e s s  key to select</p>	<p>MENU OPTI ONS LI MI TS</p>
<p>3 Press  key</p>	<p>LI MI TS MENU SET LI MI TS</p>
<p>4 P r e s s  key to select</p>	<p>LI MI TS MENU CLR LI MI TS</p>
<p>5 Press  key for 1 second</p>	<p><b>"Returns to current operation mode"</b></p>




# COMMUNICATION

## COMMUNICATION

This equipment has one (1) standard RS232 serial for unidirectional external communication (only sends database) which allows data obtained from processing of coins to be sent to PC (partial/total quantities and total values, in Euro).

### INSTALLATION AND OPERATION PROCEDURE

- Connect the communication cable (standard RS232 DB9-DB9) from PC to the Model 2380 Equipment.
- Access the control software
- After finishing the coin counting and selection process, follow the steps below:

STEP	MESSAGE/DISPLAY
1 Press  key	MENU OPTI ONS ACCUMULATED
2 P r e s s  key to select	MENU OPTI ONS COMMUNI CATI ON
3 Press  key	SENDI NG. . .
4 End of communication	SENDI NG. . . OK! PRESS ANY KEY
5 Press any key	<b>“Returns to current operation mode”</b>



#### ATTENTION !

If a database communication error occurs, the following message will appear on the display :

TIME OUT ERROR  
PRESS ANY KEY




**PRINTING**

This equipment can print a report with the data obtained from processing of coins (partial/total quantities and total values in Euro).

NOTE: Use dot-matrix printer (\*Epson ® standard) to print report.  
**\*Epson® is a trademark of Seiko Epson Corporation.**

**INSTALLATION AND OPERATION PROCEDURE**

- Connect the communication cable (standard RS232 DB9 DB9) from PC to the Model 2380 Equipment
- Turn the printer on.
- After finishing the coin counting and selection process, follow the steps below:

STEP	MESSAGE/DISPLAY
1 Press  key	MENU OPTI ONS ACCUMULATED
2 Press  key to select	MENU OPTI ONS PRI NT
3 Press  key	SENDI NG. . .
4 End of printing	SENDI NG. . . OK! PRESS ANY KEY
5 Press any key	<b>“Returns to current operation mode”</b>



**ATTENTION !**

If a database communication error occurs, the following message will appear on the display :

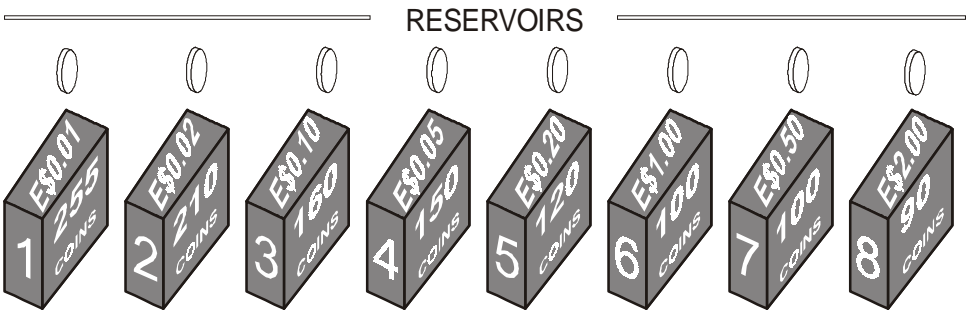
TIME OUT ERROR  
 PRESS ANY KEY

# COIN RESERVOIRS

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## SEQUENCE AND MAXIMUM CAPACITY OF COIN STORAGE IN RESERVOIRS - FULL BOX

The sequence and maximum capacity of coin storage in reservoirs (FULL BOX) are shown in the figures below:



### WARNING!


Always empty the coin reservoirs when the display indicates (FULL BOX message)

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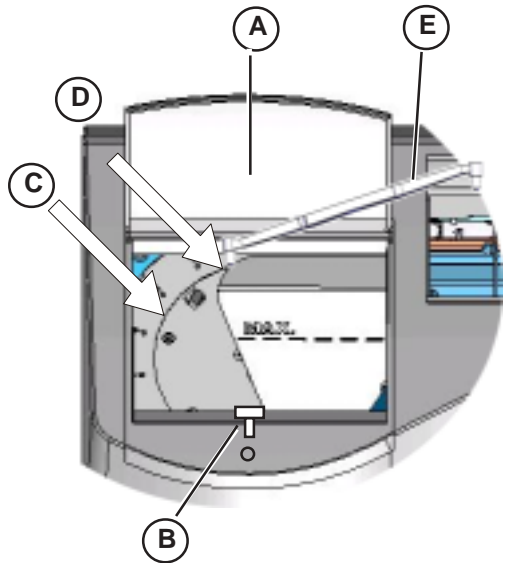
All coins over time and after usage will accumulate debris such as: dirt, dust and oil, etc., impurities that tend to be deposited on the transporter chain and internal mechanism of the equipment and are likely to be detrimental to the proper performance and functionality of the systems.

Its recommended that a complete cleaning of the mechanism be made every **“10 hours”** following operation of the equipment. For machines in heavy usage, the cleaning operation should be performed more frequently.

### CLEANING PROCEDURE

**2 - With the coin collector empty, turn the power “ON”. Put the motor drive pin in place (B) and press the key . With the machine in operation clean the projection of the collector wheel (C) and the coin rising guide (D), using the cleaning brush (E) until all of the dust and debris are eliminated.**

**1 - Lift the coin collector cover (A).**



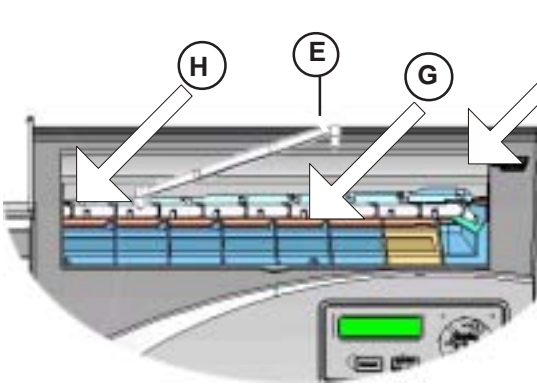
#### **WARNING!**

Always use protection gloves while cleaning the equipment.

## EQUIPMENT CLEANING

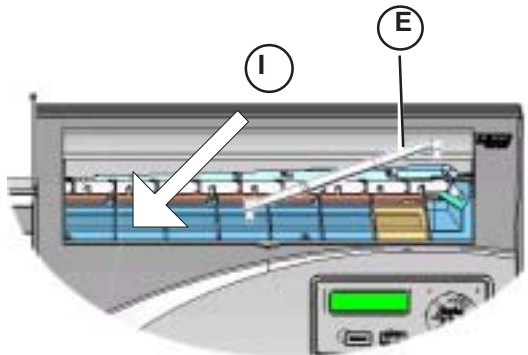
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3- Turn the equipment "OFF" and disconnect the power cord.

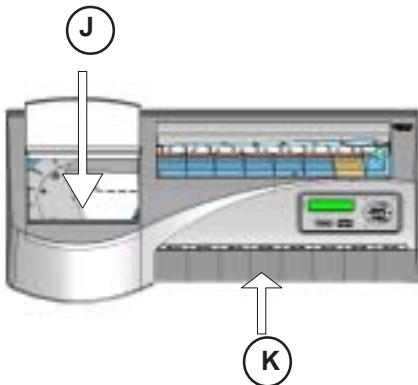


4- Remove the motor driver pin and remove all coin reservoirs. Lift the coin conductor cover (F) and continue cleaning, removing any dirt on the sliding rule (G) and on the carrier chain (H).

5- Finally remove dust and debris from the coin sorter channels (I).



6- Use a moist cloth to remove any dirt from the parts that were brushed in the coin collector (J) and coin reservoirs tracks (K).



### WARNING!

Use only the cleaning brush included with the equipment. Never use steel or any other metallic objects to clean the machine. Never use alcohol or any chemical products to clean the cabinet of this equipment.

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### DIMENSIONS:

Height: 229,3 mm

Length: 552,0 mm

Width: 256,8 mm

WEIGHT: 6,46 Kg

### CAPACITY:

Coin collector: limit line marked "MAX"

Counting/sorting speed: 400 coins/minute

### CONTROL PANEL:

Alpha numeric 2 lines X 16 columns LCD display

Seven (7) key membrane keyboard

POWER SUPPLY: Input: 100-240VAC, 0.8A, 50-60Hz

Output: +13,5VDC, 2A

POWER CORD: 3x18AWG – 10A / 250V

Female plug: IEC-320-C13

Male plug: CEE 7/7 European Plug "Schuko"

COMMUNICATION: One (1) RS232 serial for external communication with PC or dot-matrix printer (\*Epson®standard)

ENERGY USAGE: 12W (max)

TEMPERATURE RATING: 5°C to 40°C

HUMIDITY RATING: 10% to 90%

**\*Epson® is a trademark of Seiko Epson Corporation**

# TROUBLESHOOTING

DEFECT	CAUSE/SOLUTION	OTHER
Equipment does not turn on	Verify if the power supply is properly connected to the outlet (100-240VAC), as well as the output plug of the power supply (13.5 VDC) at the rear of the equipment	Check whether the electrical outlet from the power source provides 100-240 VAC
Coins clogging, obstructing flow	Verify whether the coin collector or coin conductor are dirty. Clean them according to "EQUIPMENT CLEANING" on this manual	Verify if any of the coins appear to be covered with glue, have adhesive tape, or are dirty. Clean coins before initiating the counting process.
Motor is locking, turning the equipment off	Deformed coins are locked in any part of the mechanism.	Remove all deformed coins from equipment.
Coins are being sorted / counted incorrectly	Verify if the coins being processed correspond to the currency that is specified for the equipment (Euro).	Check whether any of the coins appear to have glue, adhesive tape, or dirt on them



## ATTENTION!

If the suggested solutions above do not solve the problems, "DO NOT ATTEMPT TO REPAIR THE EQUIPMENT" yourself and immediately call the nearest authorized Gerbò representative.

### WARRANTY

Gerbô Engenharia & Manufatura Ltda warrants this product including any accessories against defects in material or workmanship as follows:

1. For a period of one year from the original date of purchase.
2. This warranty is valid only for the original purchaser and it is not assignable or applicable to any other purchaser or subsequent purchasers.
3. If required by Gerbô, the consumer should provide proof of date of original purchase.

### THIS WARRANTY DOES NOT COVER

1. Defects or damages caused by abnormal use, improper storage, non authorized modifications and improper installation and operation.
2. All plastic, painted or metallic surfaces and any other exposed parts that are damaged or scratched due to abnormal use by consumer.
3. Malfunction defects not reported to Gerbô Authorized Service Center during the warranty period.
4. Units whose serial number and warranty seal have been removed or are illegible.

Gerbô Engenharia & Manufatura Ltda reserves the right to implement product improvements in software, components, materials and systems at any moment without representing any obligation to install them in the units previously sold.

# CERTIFICATIONS

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## Declaration of Conformity

Manufacturer's Name: Gerbô Engenharia e Manufatura Ltda

Manufacturer's Address: Av. Paraná, 2879

Distrito Cajuru do Sul

Sorocaba - São Paulo

Brazil - CEP 18105-000

Declares, that the product:

Product Name: Gerbô Coin Counter and Sorter

Model: 2380

Conforms to the following Product Specifications:

Safety: IEC 60950-1: 2001

EMC: CISPR 22  
CISPR 14-1  
IEC 61000-4-2  
IEC 61000-4-3  
IEC 61000-4-4  
IEC 61000-4-5  
IEC 61000-4-6  
IEC 61000-4-11

Supplementary Information:

- The products herewith comply with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carry the CE marking accordingly.
- The product was tested in a typical configuration. Product has less than 50 Watts active input power.

Sorocaba, São Paulo, June, 2004



General Manager



**Master Contract: 213831**

**CB TEST CERTIFICATE**  
**Ref. Certif. No.: CA 3932**

**TECHNICAL ASSISTANCE**

For Technical Assistance contact the parent terminal, your Dealer or :

Gerbô Engenharia e Manufatura Ltda.  
Avenida Paraná, 2879 - Distrito Cajuru do Sul  
Sorocaba - SP - Brazil - Cep: 18105-000  
Tel/ Fax : 55-15-3235-1400  
[www.gerbo.com.br](http://www.gerbo.com.br)





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