







**Operating Manual** 

Cod. DMMBIZ0001.0EN

Rev. 1.0 10 - 11 - 2015

## GUIDE TO THE SYMBOLS IN THE MANUAL

The following symbols are used in this manual in order to facilitate its understanding.



Important information



Read carefully before use



Warning!

# DECLARATION $\mathbf{C}\mathbf{E}$ of conformity

THE MANUFACTURER: Comesterogroup s.r.l. via M. Curie 8,20060 Gessate MI

DECLARES That the product:

TYPE: Cash-in machine TRADEMARK: Comestero MODEL: Swing

Complies with that foreseen by the following EU directives, including the latest amendments, and with relative national legislation of transposition:

2004/108/EC 2006/95/EC

And that the following harmonised standards were applied:

EN 55014-1 EN 55014-2 EN61000-3-2 EN61000-3-3 EN62233 EN 60335-2-82 used in conjunction with EN 60335-1

Gessate, 14/12/2011 Riccardo Chionna, Managing Director Comesterogroup s.r.l.

Maler

## SAFETY INFORMATION

This machine is equipped with safety devices in order to prevent damage due to short circuits and fire.



These devices must not be bypassed, removed or disabled for any reason.

If it is absolutely necessary to disable the devices to carry out maintenance or servicing, operate on the appliance only when the power supply has been switched OFF.



The safety devices have been constructed in compliance with existing regulations.

We recommend that the operator periodically carries out checks to make sure the devices are in good working order.

## Risks deriving from using the machine

## The device is intended exclusively for indoor use.

If maintained in good operating conditions and installed correctly (according to the instructions of this manual), the machine does not pose any danger for the operator. Personnel in charge of charging the dispensers, switching the device on and of servicing the machine must be aware that all movable parts, doors, cash point, can cause injuries if not properly handled; it is also recommended to disconnect power when performing any operation with the device open (maintenance, etc.)



Electrical hazards: direct contacts during connection to the main power supply.

Operations must be carried out by a **qualified technician**.



Crushing hazards during movement of movable parts of the device.

The compartments must be opened and closed slowly and carefully.

## Hazards during machine installation and setup

Follow the machine installation instructions provided in this manual so that risks for people and property are minimal.



**Crushing risk** when handling and positioning the equipment. All equipment transport operations must be carried out by a **qualified technician** specialized in load handling operations (forklift operators, etc.).

Caution:

- Use lifts and equipment with suitable harnessing.
- Perform these operations with the area clear of obstacles or people.
- Before lifting the machine, always make sure that the load is stable and perform movements with extreme caution to keep it away from swaying.



**Crushing risk** when handling and positioning the equipment. All equipment transport operations must be carried out by a **qualified technician** specialized in load handling operations (forklift operators, etc.). Caution:

- Make sure that the distribution line is sized according to the intensity of the current absorbed by the machine
- Set up the grounding system before connecting the machine and its accessories.

## Hazards during machine maintenance



Electrical hazards: direct contact with live parts within the electrical cabinet.

Operations carried out by a qualified technician.

Caution:

• Service the machine only after the main power supply has been switched OFF.

## Signs

The device is supplied with signs composed of warning labels bearing conventional danger indication pictograms with reference symbols and/or wording. The labels are positioned near the danger zones.



# GENERAL WARRANTY

# Please read the following carefully in order to understand the general warranty conditions for this product.

## ART. 1 - Scope of application

These general terms and conditions shall apply to all the goods and services provided by our company. Placed orders shall imply the full and unconditional acceptance of these general terms and conditions of sale. The contract of sale shall be considered perfected when the Purchaser receives the order confirmation from the Seller.

## ART. 2 - Electromagnetic compatibility and safety

Our company certifies that the supplied goods comply with the standards concerning electromagnetic compatibility and safety; mandatory declarations are indicated in detail in the plates and labels affixed on the products and in the technical documentation attached or available at our premises. The recipients of the supply undertake to use or market the supplied goods, ensuring the integrity, completeness and usability of such information.

## ART. 3 – Warranty

Except in cases where the mandatory provisions in Leg. Decree No. 206/2005 ("Consumer Code") or in other relevant laws are to be applied, the goods and services are supplied under warranty by our company for a period of 12 months. This period starts from the date of purchase of the product. The warranty is exclusively limited to the normal operation of the goods supplied and to the result of the service provided. The warranty exclusively involves the repairs or replacement of the goods. Restoration of the goods to their normal operative state shall be carried out in our factory. Although not provided for here, Art. 1512 CC is also applicable in terms of revocation and limitation.

Our company shall not be liable in any way for operation of goods supplied in environmental conditions or technical conditions other than those established by our specifications, usually set out in the technical documentation. Any liability for direct or indirect damage not deriving from a malfunction is expressly excluded.

The warranty is void and null if the purchaser is insolvent in paying the established price.

The warranty does not apply in the following cases:

- 1. lack of or improper maintenance, even if carried out by qualified personnel;
- 2. repairs or alterations made by the purchaser on his unilateral initiative;
- 3. inadequate or irregular voltage in the power lines, insufficient flow rate and abnormal electrical systems;
- 4. corrosive action of detergents;
- 5. poor or non-functioning software or hardware or loss of data recorded by the purchaser as a result of storms, lightning, high temperature or voltage variations of the electric current, earthquakes, fire, etc.;

- 6. with reference to all the electrical components and mechanical plastic moving parts subject to normal wear, which must be replaced during routine maintenance;
- where the products have been used in conjunction with or incorporated into equipment or materials whose specifications have not been approved in writing by the selling company;
- 8. tampering with the label showing the serial number of the machine;
- 9. fault or breakage due to transport, acts of vandalism, natural calamities or wilful damage;
- 10. wrong or bad installation of the product;
- 11. carelessness, negligence or lack of skill in using the product;
- 12. failure to comply with the operating instructions in the technical manual;
- 13. interventions for alleged defects or casual checks;

#### 14. repairs carried out without our authorization.

Malfunctioning of the machine due to the software not being upgraded is not considered a defect. Comestero is not obliged in any way to upgrade the software free of charge or upgrade the mechanical components which may be necessary due to new coins or banknotes being introduced by the Italian and European authorities, when repairing a product that is covered by the warranty. However, such upgrades could still be requested from Comestero and the company is obliged to send a quotation to the customer prior to intervention.

Any repair or tampering carried out on the supplied goods by subjects who are not authorized by us will render the warranty null and void.

We declare to have carefully considered, to the best of our knowledge and manufacturing practices, the issue related to preventing the goods supplied from being violated by persons who intentionally intend to alter their operation. However, we shall no assume any liability for illegal conduct or damage that may result fraudulent use of the goods supplied. All required repairs not covered by the warranty must be paid for and the Comestero price list shall apply whose updates are regularly communicated.

## ART. 4 - Limitation of Liability

Notwithstanding the hypotheses in art. 1229 of the Italian Civil Code and notwithstanding the mandatory provisions of law, for every damage caused directly or indirectly by failures or delays of the Seller or by the purchased products to objects or persons, including but not limited to lost profits and damage to the corporate image, the compensation payable by the Seller shall not exceed, in any case, 10% of the amount paid by the Purchaser for the product that caused the damage.

#### ART. 5 – Delivery

The goods subject of the supply are considered delivered at the time and in the place they are passed on to the carrier; therefore, our company shall not be held liable for total or partial shortages, damage or delays related to transport. Upon delivery, the recipient must duly note any errors or damage on the bill of lading. The Purchaser's refusal to accept or collect all or part of the ordered goods does not suspend obligation to pay. The terms of delivery indicated in the order confirmation allow for a grace period of 60 days. Upon delivery, the Purchaser must carry out a complete technical verification of the quality and functionality of the product within eight days. If not, the product shall be considered accepted without reservations or objections by the Purchaser.

## ART. 6 - Retention of Title

The supplied goods shall remain the property of our company until full payment of the price has been made. In the event of termination of the contract for non-payment, the Seller is entitled to claim the unpaid items held by the Purchaser, which must be returned at the Purchaser's expense. All sums already paid will be retained by the seller as compensation and penalty.

## ART. 7 – Terms of payment

Invoices must be paid in accordance with the agreements and within the deadline specified on the invoice. Any delay in payment will automatically result, without the need of formal notice, the application of interest at the rate stipulated in Legislative Decree no. 231 of 9.10.2002, unless agreed otherwise. If the purchaser delays, each benefit in the terms and conditions that may have been granted shall be deemed null and void and the seller may demand immediate payment of all outstanding amounts as well as of additional orders on receipt of the goods.

## ART. 8 – Returns

Return of faulty goods or of goods requiring our assistance must be expressly authorised by us. Therefore, we reserve the right to reject the return or ask you to return the good to another destination other than our headquarters. We shall be liable for the goods only when it will be delivered to the indicated address.

## ART. 9 - Applicable law and court of jurisdiction

The supplies regulated by these general terms and conditions are governed by Italian law. Any dispute shall be resolved by the Court of Milan.

Dear customer,

Thank you for choosing a Comestero product; by following the instructions of this manual carefully you will be able to appreciate and be satisfied by its quality.

Please read the operation and maintenance instructions carefully, in compliance with the safety provisions, before using the machine and store this manual for future reference.

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# **1. Introduction**

This manual and its annexes provide all information required to handle, install, operate and dispose of the product including a number of simple indications to carry out basic maintenance of the equipment.

The information contained in this manual can be modified without prior notice and does not constitute a commitment on behalf of Comestero. Please refer to our website at <u>http://www.comesterogroup.com/cms/download.html</u> to download the latest version of this manual.

The information contained in this manual has been collected and verified with utmost care; however, Comestero cannot be held liable for any claim deriving from using the manual.

When not specified otherwise, all references to companies, names, contacts and addresses used in the examples are purely fictional and have the aim of illustrating the operation of the product.

It is prohibited to reproduce this document, even partially, in any form without express authorization by Comestero.

# **2. Product Presentation**

Swing is the new compact winnings cash-in machine with noteworthy performance.

Suitable for any type of environment, thanks to its small size, Swing has not rivals in terms of reliability and safety.

Technologically advanced, it's the perfect answer to every needs: in a small space, in fact, it performs all the normal functions of a cash-in machine, ensuring the operator with a high speed validation and counting (4 coins per second) and a great ease of use and maintenance.

The refill key allows, among other things, to automatically recharge the machine and view the cash accounting without opening the money access door.

Easy to program through the internal menu (you can activate it using the dedicated button placed inside the door) it also allows the import and export of the configuration data via SD Card.

Swing finally has a high degree of security against lock-picking attempts or tampering. Thanks to the armored cabinet, the safety locks equipped with 12 snag points and the high security side lock, Swing withstands any break-in attempt.

Swing is available in two versions :

- with RM5 HD Comestero, Smart Hopper and Innovative Technology banknotes validator Smart Payout.
- with RM5 HD Comestero, Smart Hopper and NV11 Innovative Technology banknotes recycler.

# 3. Warnings



Read this manual carefully before installation.

Knowledge of the information and instructions of this manual is fundamental to use the product correctly. Check upon receipt that the package and the product have not been damaged during transport. Take care with the electrical connections. Faults due to failure to observe the warnings provided in this publication are not covered by warranty. Specific symbols are used in this document to highlight the situations that require special attention.

# 4. Handling and unpacking

## 4.1 Reception of packaged product

Check upon receipt that the product has not been damaged during transport. If any damage is noticed, notify the transporter immediately.

After transport the package must be intact, that is, it must not:

- Show dents, signs of shocks, deformation or breakages of the container.
- Show areas that are wet or signs that would point to the fact that the casing has been exposed to rain, frost or heat.
- Show signs of tampering.

Check that the content of the package matches the order.

After a first inspection, reinsert the machine in its packaging to move it to its final point of installation.

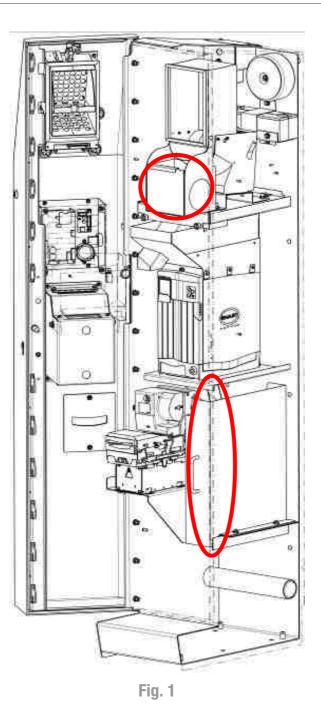
## 4.2 Handling



In order to prevent any damage to the machine, it is recommended to transport it exclusively inside its original packaging. Given the weight of the machine, this packaging is secured to a wooden pallet that makes it easier to load and unload using pallet trucks. We recommend handling Swing only by means of automatic or manual forklifts designed to handle packages.

N.B.

It is recommended, whenever you need to move the equipment, you ensure the unit with tape, the cash and the tray shown in Figure 1. This is to avoid the internal parts of Swing will be damaged or the door will be fitted.



We recommend:

- *not* to drag the machine.
- *not* to turn over or lay down the package during transportation and handling.
- *not* to bump the machine.
- not to leave the machine (even if still in its packaging) exposed to atmospheric agents.

# 4.3 Unpacking

The equipment is delivered, approved and equipped in corrugated cardboard packaging, which ensures its integrity during transport and handling. This packaging, as previously specified, is secured to a wooden pallet.



To unpack the machine we recommended to follow the instructions printed on the packaging.

Both the cardboard enclosure and the pallet are products which meet the recycling and waste disposal standards (comply with standards in force in your country).

# 4.4 Appliance identification

Figure 2 shows the identification plate bearing the main operating features and machine identification. The serial number printed in the box is especially important.

This number must always be provided when requesting assistance, spare parts, repairs or information concerning operation of the equipment.

Comesterogroup			
Gessate (MI) Italy - Tel +39 02 95781111			
www.comesterogroup.it			
Model:	swing (E		
Power: 230V / 50Hz - 1A			
Serial N°:			
2 x FUSE 1,6A T - 250 V			

**Fig. 2** 

Each device has two identification plates, one applied externally, to the rear wall of the machine, and the other applied to the inside, on the inner left side of the cabinet, as shown in the Figure 3 below, making it possible to read the serial number even if the machine is hung on a wall.



**Fig. 3** 

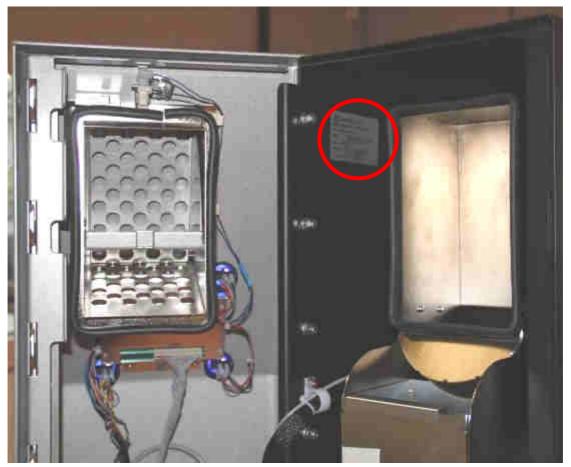


Fig. 4



The identification plate is applied to the machine and must be legible. It is prohibited to remove it or to tamper with its data. Should it be damaged or lost, ask the manufacturer to have it replaced with a new one. Remember that the warranty is linked to the identification number of the machine.

# 4.5 Name of parts

## 4.5.1 External view

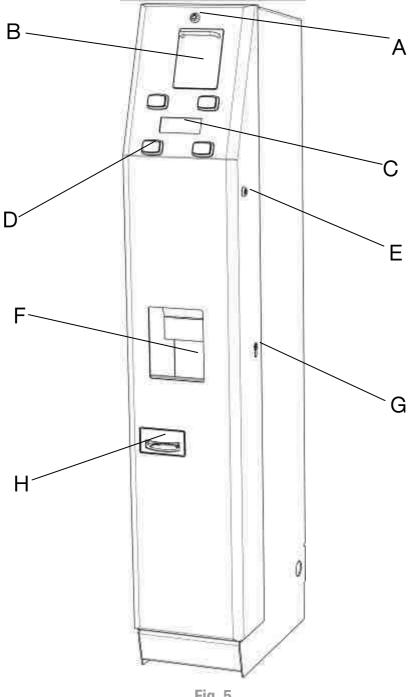


Fig. 5

- Lock to open the pivoting drawer Α.
- Swinging drawer for coin introduction Β.
- C. Display
- Selection buttons D.

- Lock for the activation of the E. external configuration menu (refill lock)
- F. Coins out
- G. Lock to open door
- Banknotes in / out Η.

### 4.5.2 Internal view with NV11

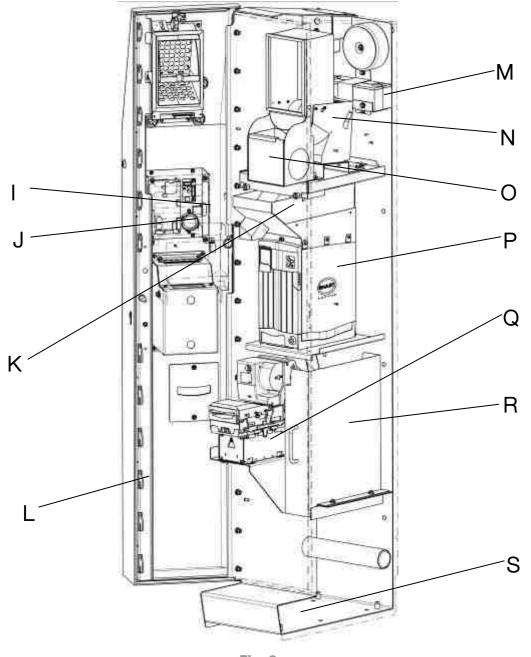
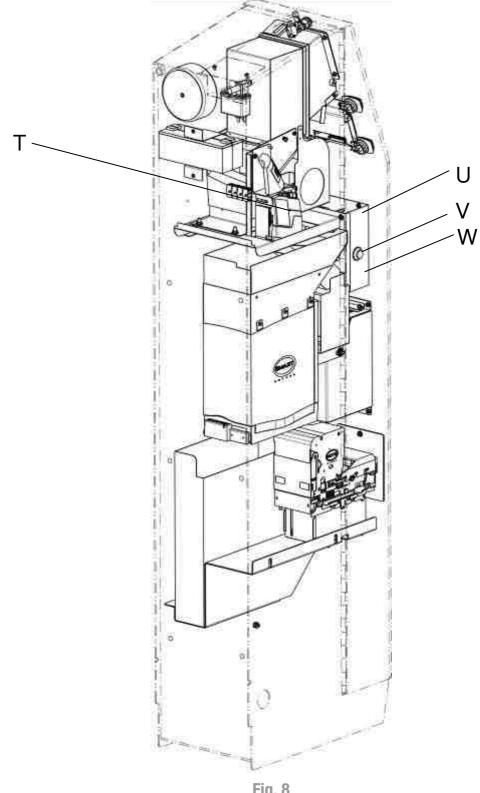


Fig. 6

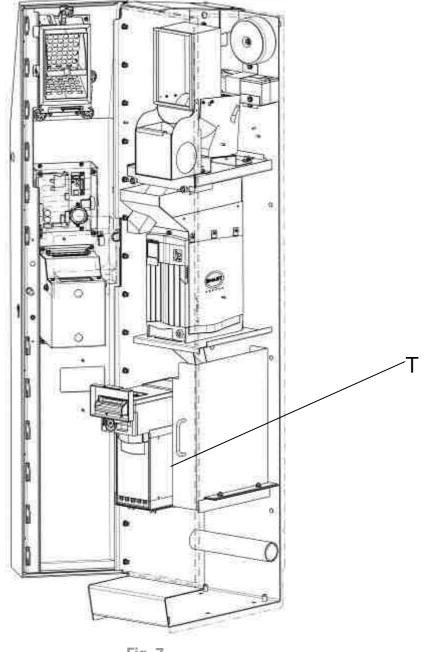
- I. Access button for the internal configuration menu
- J. Speaker
- K. Multicoin Smart Hopper extension
- L. 12-point closing system
- M. Emergency battery
- N. Single coin hopper

- O. Drawer for extraneous objects
- P. Multi coin Smart Hopper
- Q. Banknotes reader / banknotes dispenser NV11
- R. Cash
- S. Stabilizing mass compartment



- Fig. 8
- Т. Coin validator Comestero RM5 HD
- U. CPU
- V. Access button for the internal configuration menu
- W. SD Card slot

## 4.5.3 Internal view with Smart Payout



**Fig. 7** 

T. Smart Payout reader/dispenser

## 4.6 Accessories

The product includes the following accessories as per standard in the pack:

- Operating manual
- SD Card (already installed)
- Access keys for the machine internal compartment
- Access keys for the external rapid menu (refill key)
- Key to open the pivoting drawer for coins.
- 2 irremovable stickers with scratch-resistant finish containing the instructions for the swinging drawer opening
- 4 feet stand
- 1 Power cable (already installed)
- 2 fuses (to be installed).

At least two copies of keys are provided for each lock that the equipment is fitted with. We recommend arranging two sets of keys and keeping the spare ones in a safe place, which should be different from the place normally used for the service keys.

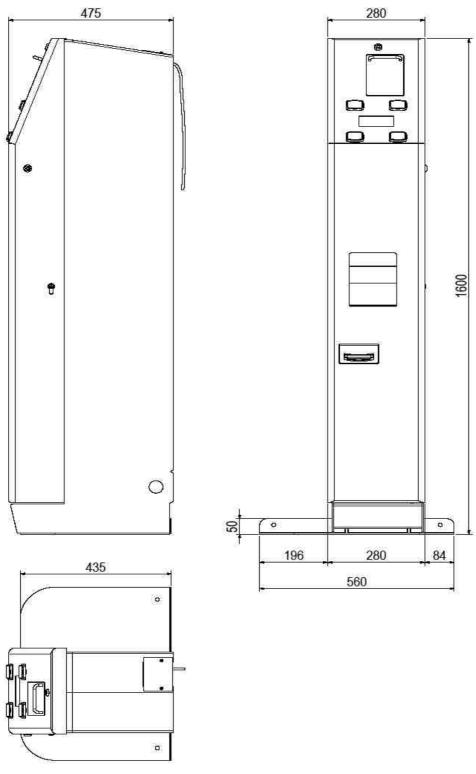
#### N.B.

We also recommend writing down the serial number engraved on each key; in this way, you can request a copy of the key from Comestero in case of lost.

# 5. Installation

# **5.1 Clearances**

Below there are views of the equipment with the clearances that must be considered when positioning and installing it.



# 5.2 Wall fastening the equipment

Because of the reduced width of the equipment, to ensure stability in all conditions, especially when the door is fully opened, it is necessary to mount the anti-tipping base supplied with the equipment.

You can avoid to mount the appropriate anti-tipping base only in the event the stability of the equipment is ensured by one of the following installation modes :

- Fasten to the wall and/or on the floor with anchors.
- Fasten to the wall and/or on the floor using the dedicated bracket (optional accessory).

### 5.2.1 How to use the anti-tipping base (accessory supplied)

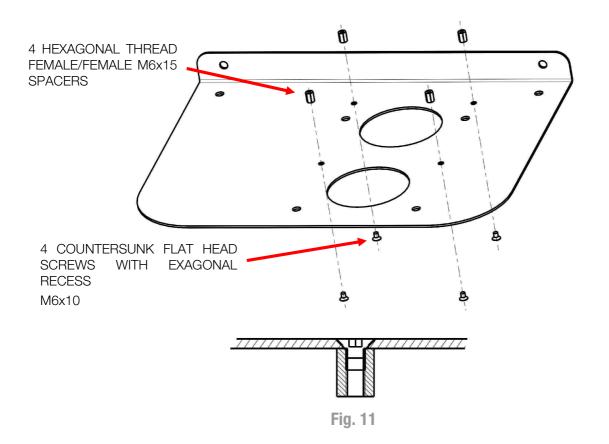
To ensure the stability of Swing it's necessary to use the specific anti-tipping base, which allows you to guarantee the stability of the equipment under all conditions, even with the door fully open.

The anti-tipping base is supplied with the equipment. The anti-tipping mounting kit includes:

- Anti-tipping base
- 4 countersunk flat head screws with hexagon recess M6x10
- 4 hexagonal thread female / female M6x15 spacers
- 4 hexagonal socket head cap screws M6x10
- 4 plain washers Ø6x18

To mount the equipment on the anti-tipping base, illustrated in the following pictures, follow the instructions below :

• Take only the anti-tipping base, place the 4 countersunk flat head screws with hexagon recess M6x10 in the dedicated holes under the base and screw the 4 hexagonal thread spacers M6x15 from the top side.



- Place the anti-tipping base where you want to install the cash-in machine.
- If you want to fasten the anti-tipping base to the floor, find some anchors adapted to its structure.
- Drill up to 6 holes in the floor and up to 2 holes in the wall in correspondence of the dedicated holes in the anti-tipping base.
- Secure the anti-tipping base on the floor by the anchors.

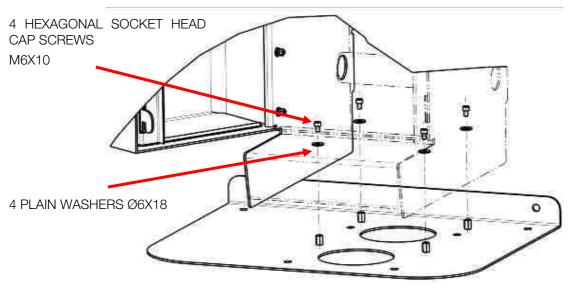
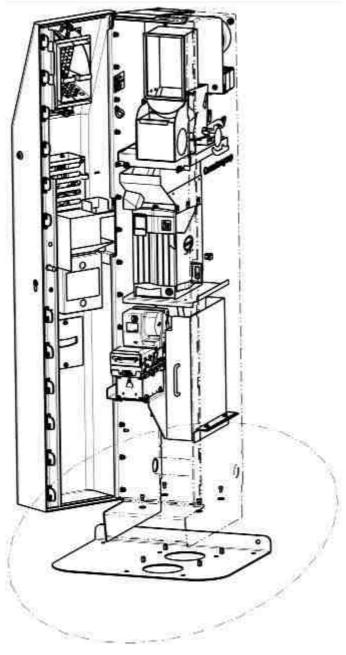


Fig. 12

• Place the equipment on the anti-tipping base.

# EN

• Secure the equipment on the anti-tipping base with the 4 screws and 4 washers supplied as shown in the following picture.





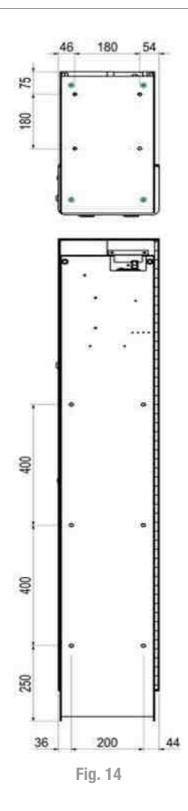
## 5.2.2 Wall and/or floor installation by means of expansion anchors

We recommend fastening the machine to the wall by means of expansion anchors.

In fact, Swing has six pre-cut holes on the back of the cabinet for fastening it to the wall and four on its base for floor installation.

Before secure Swing to the floor through the expansion anchors, make sure the retaining surface is sufficiently flat.

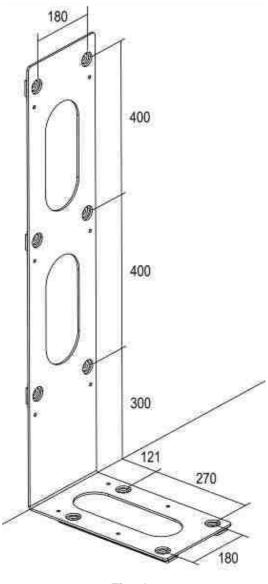
Before secure Swing to the wall through the expansion anchors, adjust the height of the feet (if present).



### 5.2.3 Wall fastening using the dedicated bracket (optional accessory)

Optional bracket is available on order, used for wall fastening.

We recommend to use this dedicate bracket, shown in Figure 15 below, to have a more secure fastening of the machine.





The floor and/or wall mounting bracket is an optional accessory and can be ordered with the following code :

Code	Description
+CM/STAFFA-SWING	BRACKET FOR FLOOR FASTENING - SWING

The bracket kit for floor and/or wall fastening includes :

- 10 socket head cap screws M8x16 UNI 5931.
- 10 plain washers for screws M8 UNI 6592.
- 1 bracket.

To mount the equipment on the bracket, as shown in Figure 16 below, respect the following guidelines, also written on the instruction sheet enclosed in the kit.

- Find anchors appropriate to the wall and/or floor structure.
- Drill up to 6 holes in the wall and/or up to 4 holes in the floor, positioned as shown in the previous Figure.
- Fasten the bracket on the wall and/or floor using the anchors.
- Lay down the equipment on the floor.
- Open the 6 pre-cut holes located on the back of the equipment using a screwdriver and a hammer.
- Place the cash-in machine on the bracket.
- Fasten the equipment to the bracket using the screws and the washers supplied (6 for the back and 4 for the bottom) as shown in the following Figure.

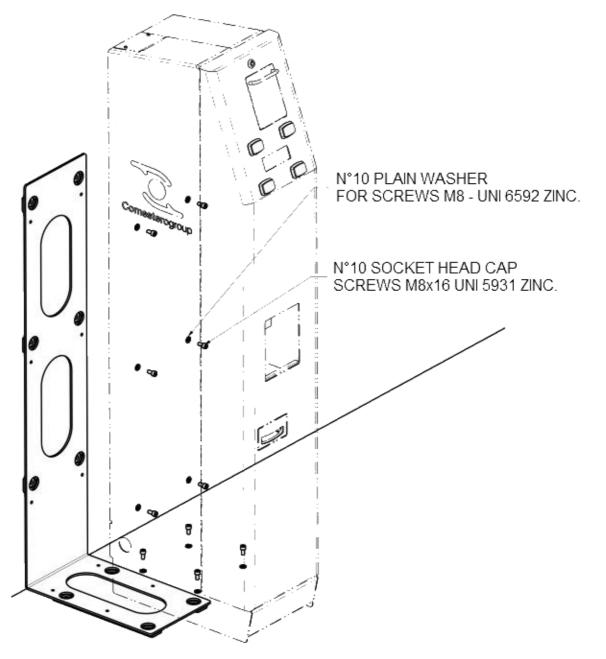


Fig. 16

29

ΕN

# 5.3 Positioning the base

Swing is fitted with four adjustable feet that allow levelling on uneven surfaces, increasing stability.

The height of the feet must be adjusted according to the characteristics of the supporting area.

# 6. Connections



Before connecting the equipment to the mains, open the machine, insert the 2 glass fuse provide in a protection bag, together with its adapter (1), and place them into sockets (2).



Fig. 17



All the electric connections of the machine have been installed except for the power supply. Before connecting the machine to the mains, make sure that the main switch, located on the rear of the machine as shown in the Figure 18 below, is OFF and in position "0".



Fig. 18



Make sure the socket to which the equipment shall be connected to is suited to the features of the equipment and protected by an adequate differential magneto-thermal switch. Connect the machine to the mains using the supplied power cable (the cable, already inserted in the main switch of the machine, is located on the back of the device).

#### **N.B.**

As for installation, please refer to the specific standard regarding protection against electrical contacts.

# 7. Starting the device

Before starting Swing, please read the following carefully.

## 7.1 How to extract and reinsert the cash

The cash of Swing is located inside the equipment and is therefore accessible only to the staff equipped with the key that opens the cabinet.



Fig. 19

The cash is made of a drawer with a handle. You can completely remove the drawer simply sliding it out.

# 7.2 How to extract banknotes from the stacker

In both versions of Swing (either with Smart Payout or NV11) open the cabinet using the special key provided.





Fig. 22

Fig. 20



• If on Swing is mounted a Smart Payout, pull forward the handle located under the dispensing/inserting bezel in order to release the stacker and pull it out.



Fig. 23

• Once the stacker is extracted, tip over the container and open the dedicated door to extract the banknotes.



Fig. 24



Fig. 25

- Then reinsert the stacker in its place making sure it is properly hooked up.
- If NV11 is mounted on Swing, please insert your finger into the front hole of the cash and push the linchpin upward, unlocking the small door.

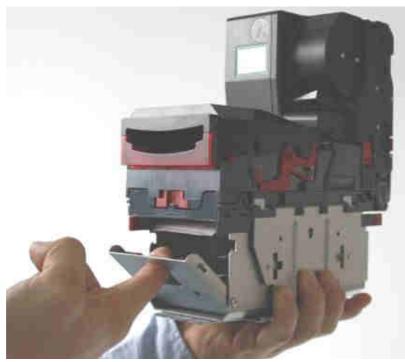


Fig. 26

• Then extract the banknotes and close the small door.



Fig. 27

# 7.3 How to empty the hoppers

To empty the hoppers select the SETU- $\rightarrow$  password- $\rightarrow$ MANU- $\rightarrow$ >> $\rightarrow$ EMPT controls on the Internal Menu, described in the next chapter dedicated to "Programming". In this way the coins contained in the hoppers will be sent to the cash point in successive steps to avoid filling it excessively and therefore making it difficult to handle.

## 7.4 How to empty the banknotes dispenser

To empty the banknotes dispenser select the SETU-) password-) MANU-)  $\rightarrow$  EMPT-) controls on the Internal Menu, described in better detail in the following chapter dedicated to "Programming". In this way the banknotes contained in the recycler (at most 70, in the event of Smart Payout, or 30, in the event of NV11) are sent to the stacker (which can contain up to 500, in the event of Smart Payout, or up to 300, in the event of NV11) and can thus be withdrawn.

## 7.5 How to load banknotes into the dispenser

Loading banknotes into the dispenser can be carried out in the following two ways, which are better described in the following chapter dedicated to "Programming" :

## 1. Automatic recharge

This type of recharging is activated through the RECH $\rightarrow$ >> options on the External Menu. Once the control has been activated, the banknotes must be inserted one at a time into the slot from the outside and are counted automatically. The recycler can contain a maximum of 70 banknotes with different denominations, in the event on the machine is mounted a Smart Payout device, or 30 banknotes with the same denominations (what you have choosen to dispense), in the event on the machine is mounted a NV11 device. The banknotes in excess and any damaged ones will be transferred to the stacker, which can contain up to 500, in the machine with Smart Payout, or 300 in the machine with NV11.

## 2. Restoring levels

This type of recharging is activated through the RECH->RIP.->>> controls on the Internal Menu. In this case, using the SET option, the user can define a total value of banknotes contained in the recycler to be restored every time you deem necessary. Once the desired level has been set, the user can restore them using the GO option. The device therefore compares the value of the banknotes contained in the recycler with the set threshold value and depending on the case sends banknotes in excess to the stacker or requests more banknotes to be inserted. The banknotes must therefore be inserted one at a time into the slot from the outside and are then counted automatically. If the set level is reached, the reader will stop accepting banknotes.

# 7.6 How to load coins into the hoppers

Loading coins into the hoppers can be carried out in the following three ways, which are better described in the following chapter dedicated to Programming:

#### 1. Automatic recharge

This type of recharging is activated through the RECH option on the External Menu. Once the control has been activated, the coins must be inserted one at a time from the outside into the swinging drawer and are counted automatically. With this method of charging, the equipment accepts a maximum of 2,700 coins of 1 Euro or 50 cents, 2,400 coins of 2 Euro or an intermediate number of mixed coins. The pieces in excess are rejected and sent to the coin out.

#### 2. Manual recharge

This type of recharge is carried out by inserting coins directly into the machine through the extension of the multicoin Smart Hoppers, preferably after having unscrewed the two stops and pulling the table that supports the hoppers forward, to facilitate the operation, as shown in the following Figure.



Before or after the insertion of coins into the equipment it is also necessary to update accounting by accessing the specific function through the RECH- $\rightarrow$ MANU

controls on the Internal Menu. In this case, using the buttons, the user must define the number of pieces that have been loaded for each type of coin based on the messages displayed on the screen. As the device can contain a maximum of 2,700 pieces of 1 Euro or 50 cents, 2,400 coins of 2 Euro or an intermediate number of mixed coins, the user must be careful not to insert a number of coins so that, in addition to the coins that are already contained in the hoppers, it exceeds the maximum amount that they can contain. If this occurs, when the user exits the Internal Menu, the device will automatically unload a number of pieces equivalent to a single emptying step of the hoppers into the cash point.

#### 3. Restoring levels

This type of recharging is activated through the RECH $\rightarrow$ RIP. controls on the Internal Menu. In this case, using the SET option, the user can define a total value of the coins contained in the hoppers to be restored every time he deems necessary. Once the desired level has been set, the user can restore it using the GO option.

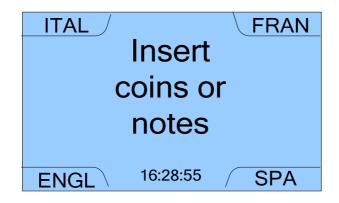
The device therefore compares the contents of the hoppers with the set threshold value and depending on the case it sends coins in excess to the cash or requests more coins to be inserted. Also in this case, the coins must be inserted from the outside into the swinging drawer and are counted automatically. If the set level is reached, the pieces in excess are rejected and sent to the coin out.

# 7.7 Basic operation

Swing is equipped with a graphic display where messages appear to guide the user through the basic operation and configuration procedures.

There are four rectangular buttons in the corners of the screen which allow the user to select the available options as he/she proceeds. Since not all four possible options are always available, the buttons are backlit only when the corresponding function is effectively available.

From the initial screen, the user can select the language which Swing will use to provide information. By pressing the button corresponding to the corner with the required language, the displayed language will change to the selected one.



Swing can change coins to banknotes as well as the reverse change from banknotes to coins. Only for banknotes Swing can also provide mixed change in a combination of coins and banknotes based on a previously set threshold level.

Also during normal operation, when coins contained in the hoppers exceed the maximum allowed, the equipment, once the change operation is complete, automatically unloads a number of pieces equal to a value of 500 Euro.

## 7.7.1 Standard change from coins to banknotes

To start changing coins into banknotes, the user must insert the coins into the swinging drawer and then close it. In this way the machine will start up and the following message will appear on the screen:



The equipment then will start to count the inserted coins and when counting is completed the total credit will appear on the screen.



At this point the user can increase the current credit by inserting more coins or convert the inserted credit into banknotes by pressing the AUTO button.

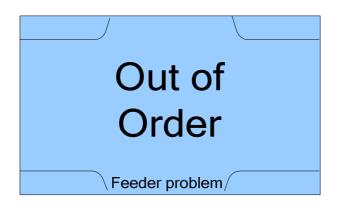
During dispensing, the banknote slot will light up and the following words will appear on the screen.



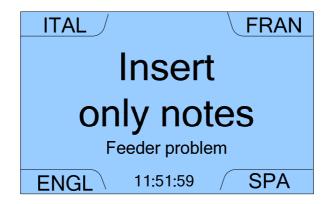
If during the count of coins a coin validator jam should occur, the machine will alert the user with the dedicated message:



After a while the previous screen is replaced by the following one, indicating only that the machine is going out of order and it will display also the problem is occured.



Finally, if the machine is turned OFF and turned back ON, the following screen appears prompting you to insert only banknotes :



Even when the banknotes finished into the equipment, on the Home screen the request of coins does not appear. You can do only a change from banknotes to coins and not viceversa.

	FRAN	
Insert		
only notes		
Notes empty		
ENGL	16:28:55 <b>SPA</b>	

In this case the possibly coins inserted into the equipment are sent directly to the coin out. If you start a change operation before the banknotes finished and the message on display appears, the equipment (in the event the banknotes are not sufficient) still tries to complete the change operation, dispensing the available banknotes and then a quantity of coins equal to the remaining credit. If despite this an overpay should occur, the machine will alert the user with a message.

10.00 pound Mark this number for request your rest
---

N.B. Attention! The number that appears on the display (for example : 0267845636) is not a phone number, but an identification code that the device associated with the specific episode of jam.

## 7.7.2 Standard change from banknotes to coins

Swing can also provide the change from banknotes to coins.

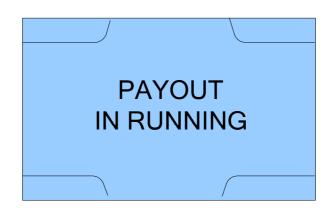
To start changing, the user must insert the banknotes into the reader one at a time. In this way the machine will start up, read the banknotes and display the total inserted credit on the screen :



EN

Also in this case the user can increase the entered credit by inserting more banknotes or convert the inserted credit into coins by pressing the AUTO button.

The machine will then make change by automatically calculating which and how many coins have to be dispensed based on the contents of the hoppers. As they are dispensed the lights located in the coin dispenser compartment will flash and the following words will appear on the screen :



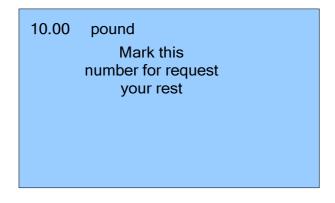
When the number of coins that can be dispensed, falls below the safety threshold (about 50 coins), the following message appears in the initial screen and the change from banknotes to coins is disabled.



The function to change banknotes to coins is disabled.

The device nevertheless completes every operation initiated prior to the appearance of the message thanks to the safety reserve of coins it contains.

Regardless of this mechanism, if an overpay should occur, the machine will alert the user with a message, like the one here below :



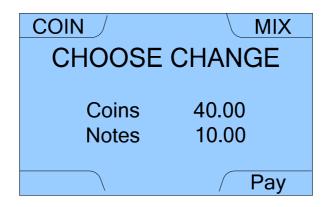
Attention! : even in this case the number that appears on the display (for example : 0267845636) is not a phone number, but an identification code that the device associated with the specific episode of overpay.

#### 7.7.3 Mixed change of banknotes to coins and banknotes

As an alternative to the standard change function it is also possible to program Swing to change banknotes only to a combination of coins and banknotes using the SETU  $\rightarrow$  password  $\rightarrow$  CONF  $\rightarrow$  SETU  $\rightarrow$  MIX controls on the Internal Menu.

In this case a threshold value is set so that :

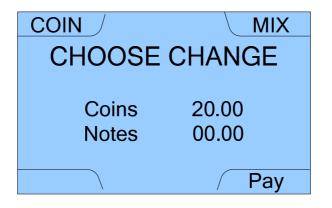
- only coins are dispensed when the amount of the inserted banknote is lower or equal than the threshold value
- coins are dispensed for a banknotes value higher than the threshold value, it appears on the display the following screen to select the standard change or mixed change.



Since it was set the mixed change, the screen proposes dispensing coins (for an amount equal to the threshold value) and then the banknotes dispense (until the return of total credit inserted).

Since the equipment is already in mixed change mode, the MIX option, although it appears, is not active on this screen, in fact the corresponding button is not lit up. The COIN option is nevertheless active, with which the user can choose to change back to standard mode and then get all the credit inserted in coins.

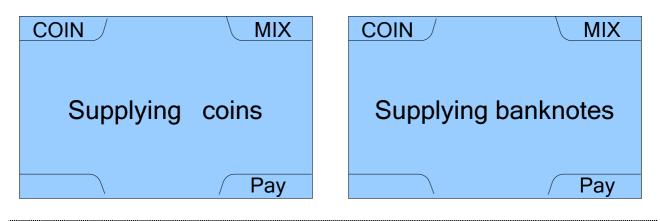
If you select COIN the following screen that offers the change in coins of all the inserted credit appears :



Since the equipment is in standard change mode, the COIN option, although it appears, is not active on this screen, in fact the corresponding button is not lit up. The MIX option is nevertheless active, with which the user can choose to change back to MIX change mode.

It is possible to start dispensing from either screen using the PAY option.

During mixed change dispensing, the following words appear respectively on the screen.



N.B. Swing is provided with an emergency battery to ensure the completion of any on-going change operation in the event of electricity outage.

# 8. Device management and programming

# 8.1 Introduction

Swing management and programming can be carried out using the buttons in the corners of the screen directly or by importing a configuration file with the SD Card (SETU  $\rightarrow$  password  $\rightarrow$  MANU  $\rightarrow$  EXP  $\rightarrow$  IMP commands on the Internal Menu).

There are two different menus, the External management Menu and the Internal programming Menu.

It is possible to access the External management Menu simply by inserting and turning the key in the lock located on the side of the device, without opening the door of the internal compartment.



Through the External management Menu it is possible to perform the following ordinary management operations on the machine:

- View the last five operations executed.
- View partial and total accounting (but not zeroing).
- Accounting view of the number of coins for each single denomination in the hopper.
- Accounting view of the number of banknotes for each single denomination in the Smart Payout.
- Automatically recharge of about 2500 mixed coins and 70 banknotes.
- Disable and enable banknotes dispensing (acceptance nevertheless continues to be carried out).
- Enabling banknotes controlled recharging function.

Whereas to access the Internal programming Menu, it is necessary open the equipment door using the dedicated key, as shown in the Figure.



Fig. 32

Now push the configuration menu start button located on the side of the CPU, as shown in the Figure 33 below.

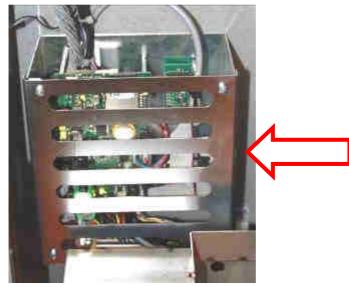


Fig. 33

Through the Internal management Menu it is possible to perform the following management and programming operations on the machine:

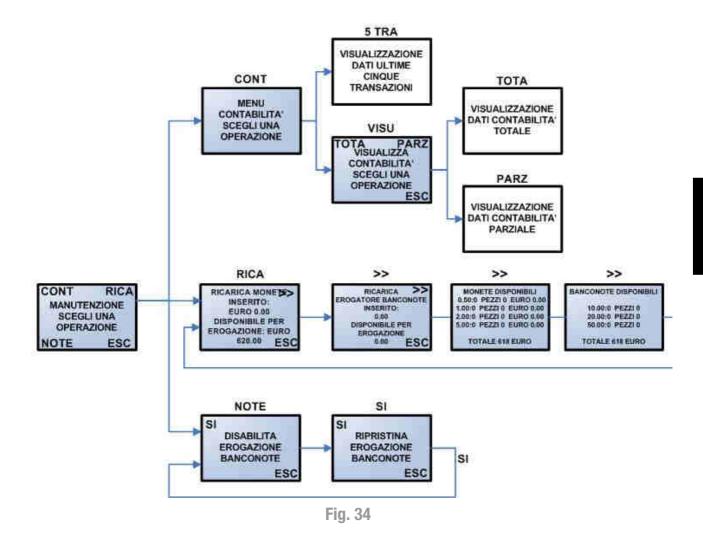
- Disabling and enabling banknotes dispensing.
- Display the alarm.
- Manual recharging of coins.
- Setting and restoring coins and banknotes levels.
- View the peripherals status.
- View, zero and export partial and total accounting data on SD Card.
- View the available memory on SD Card.
- Emptying the hopper and banknote dispenser.
- Setting time and date.
- Exporting and importing the machine configuration on SD Card.
- Restoring the default configuration.
- Enabling and disabling the acceptance of the different coins and banknotes denominations.
- Choosing the password.
- Selecting the default language.
- Selecting the standard or mixed change type.
- Viewing or deleting the overpays.

# 8.2 External Menu

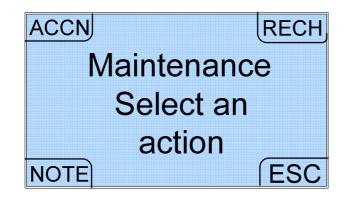
The structure of the External Menu (or Refill Menu) is illustrated in the following diagram.

The blue boxes in the diagram reproduce the pages of the device, with selectable commands located in the four corners. By selecting the available options the user can move from one menu to the next, whereas by choosing the ESC option, which is included in most menus, the user moves back by one step. The white boxes, on the other hand, describe actions that can be carried out through the sequence of commands that precede them.

The diagram can therefore be read from left to right, to identify the hierarchical structure and process of commands, and from right to left, to choose the action to be carried out and identify, by working backwards, the sequence of commands required to obtain the desired result.

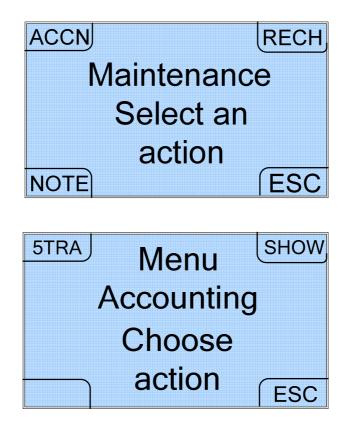


Once the External Menu access key has been inserted and turned in the lock located on the side of the device, the following initial screen will appear :



## 8.2.1 External menu - Last 5 change operations and accounting

By selecting the ACCN option on the initial screen of the External Menu, the Accounting Menu will be proposed. This allows to view the last 5 operations made on the equipment and the accounting.

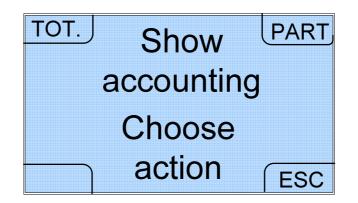


Selecting 5TRA option it's possible to display the data concerning the last 5 operations made on the device in 5 consecutive screens. In the picture here below is shown an example of the first screen.

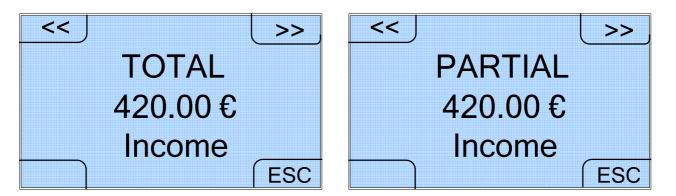
<< 20/03/2015 >>		
ICoins INotes		
IN I 0.00€I50.00€		
OUT I 10.00 € I 40.00 €		
1/5 10:48:27 ESC		

In order to scroll the screens, use the keys << and >>. You can find the page number 1/5  $\div$  5/5 on the left of the hour.

Once the SHOW option is selected, this allows the user to view (but not the editing) the total and partial accounting.



For both total or partial accounting, by passing from one screen to another using the >> and << keys, you can view : the entered and dispensed amount, contained in the cash, the not dispensed credit, the coins and banknotes contained, the inserted coins and banknotes, the dispensed coins and banknotes, the coins and banknotes contained in the cash.



The accounting screens sequence follows with :

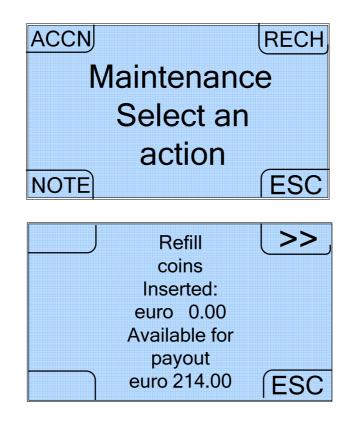
- Total / Partial in cashbox
- Total / Partial credit not delivered
- Total / Partial coins amount
- Total / Partial in note dispenser
- Total / Partial inserted coins

- Total / Partial inserted bills
- Total / Partial supplied coins
- Total / Partial supplied bills
- Total / Partial coins in cashbox
- Total / Partial notes in cashbox

The sequence is the same if you choose to display the total accounting **TOT**. or partial **PART** 

#### 8.2.2 External menu - Automatic banknote and coin recharge

By selecting the RECH option on the initial screen of the External Menu, the user accesses the first screen where coins can be automatically recharged.



Once the screen appears, if coins are inserted into the swinging drawer, the machine automatically starts counting. The screen will display the progressive increase in value as the coins are counted and finally the total inserted value. The machine accepts a maximum of 2,700 pieces of 1 Euro or 50 cents, 2,400 coins of 2 Euro or an intermediate number of mixed coins. The pieces in excess are rejected and sent to the coin dispenser.

On the other hand, by selecting the >> option, the user will access the screen for automatic banknote recharge.



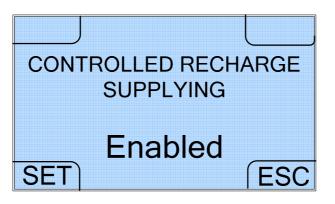
Also in this case, once the screen appears, if banknotes are inserted one at a time into the slot, the device will automatically count them.

In the machine with Smart Payout, the recycler can contain a maximum of 70 banknotes with different type of denomination set by the user. The banknotes in excess and any damaged ones will be transferred to the stacker, which can contain up to 500.

In the machine with NV11, the recycler can contain a maximum of 30 banknotes of one single denomination. The banknotes in excess, those different denomination and any damaged banknotes will be sent to the stacker, which can contain up to 300. Furthermore, by selecting the >> option the number of coins and banknotes inserted for each type of denomination will appear in two different screens

	ABI Notes available >>
Coins available	10.00: 0 20.00: 0
Type 0.50: Pz. 20 10.00 Euro Type 1.00: Pz. 32 32.00 Euro	50.00: 0
Type 2.00: Pz. 40 80.00 Euro	Botton ABI to
Total 122.00 ESC	Botton ABI to SET to enable contr. charge ESC

Pressing **ABI** a screen appears allowing you to enable or disable the controlled load of banknotes (through the **SET** key).



By selecting the >> option again, on the third and last page the user will be taken back to the initial page for coin recharge.

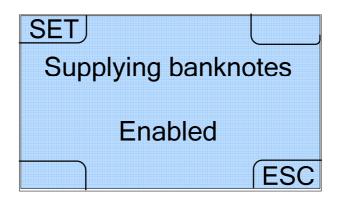
# 8.2.3 External Menu -Enable/disable banknote dispensing

By selecting the NOTE option on the initial page of the External Menu the user will access the page from where it is possible to disable banknote dispensing.

ACCN RECH	SET
Maintenance	Supplying banknotes
Select an	
action	Disabled
NOTE	ESC

By selecting the SET option followed by the ESC option, banknote dispensing is disabled. The banknotes will nevertheless be accepted by the device and deposited into the stacker. When banknote dispensing is disabled, it is necessary to disable the mixed change function as well, and enable standard change (commands SETU-)password-)CONF-)SETU-)STD-)ESC). This setting can be useful, for example, in the event there is a malfunction in circulation or dispensing of the banknotes.

Once the functions of the device have been restored, if the user wishes to re-enable banknote dispensing, he/she will be required to do the same procedure in the External Menu, viewing the page which, at this point, will appear as below :



Selecting the option SET e then the option ESC, the banknotes dispensing is reactivated.

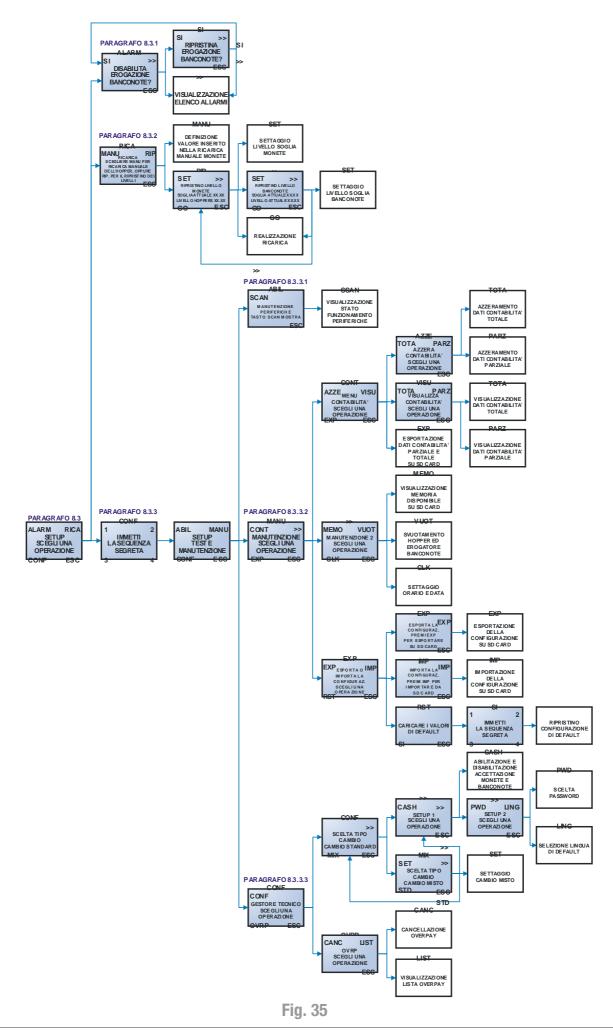
N.B. If on the equipment is installed an NV11 reader, when the banknotes dispensing is disabled and then reactivated, the banknote denomination enabled by default is 5 Euro. If you want to enable the bankonte 10 Euro (or any other denominations) you must do it with the command SETU $\rightarrow$ password $\rightarrow$ CONF $\rightarrow$ SETU $\rightarrow$ >> $\rightarrow$ CASH from the Internal menu.

# 8.3 Internal Menu

The architecture of the Internal Menu is illustrated in the following diagram.

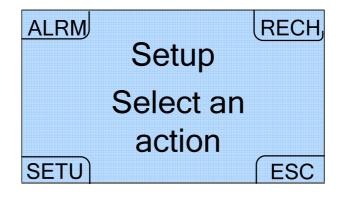
Even in this case the celestial boxes scheme reproduce the equipment screens, with the commands to select located on the four corners. Selecting the available options you can move from one menu to the next, while choosing ESC, located in most of the menu, you can move back of one step. Above each box is specified the previous menu option to select to get the screen or the action that it is represent. The white boxes instead describe the actions achievable using the command sequence that precedes them. The scheme can therefore be read from left to right, to detect the architecture and the sequence of commands, and from right to left, to make the selection of appropriate actions and identify backward the sequence of commands necessary to obtain the result desired.

On each of the main branches is finally indicated the section of this manual which describes in more detail the group of screens that follows.



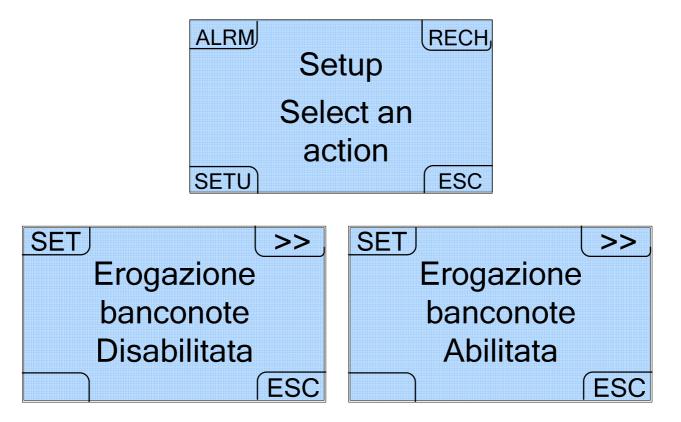
EN

Once the equipment door is opened using the dedicated key and after you have pressed the configuration button on the side of the CPU board, you will see the following initial screen where you can move to the three menus relative to : alarms, charging and configuration (the latter is accessible only through a password).



## 8.3.1 Enabling/Disabling banknote dispensing and alarm viewing

By selecting the ALRM option on the initial page of the Internal Menu, the user can access the page where it is possible to disable or enable banknotes dispensing.

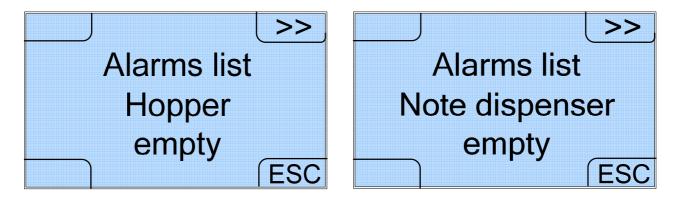


As with External Menu, even in this case, by selecting the SET option followed by the ESC option, the banknotes dispensing is enabled or disabled as required. Banknotes will nevertheless be accepted by the device and deposited into the stacker. When banknote dispensing is disabled, it is necessary to disable the mixed change function as well, and enable standard change (commands SETU-) password-) CONF-) SETU-) STD-) ESC). The banknotes dispenser can be blocked, for example, in the event there is a malfunction in circulation or dispensing of the banknotes, and it can be unlocked later when these features are restored. To

move cyclically from one of the two screens to the other one, select the button YES; to save this setting select the ESC key.

N.B. If on the equipment a NV11 reader is installed, when the banknotes dispensing is disabled and then reactivated, the banknote denomination enabled by default is 5 Euro. If you want to enable the 10 Euro bankonte (or any other denominations) you must do it with the command SETU $\rightarrow$ password $\rightarrow$ CONF $\rightarrow$ SETU $\rightarrow$ >> $\rightarrow$ CASH from the Internal menu.

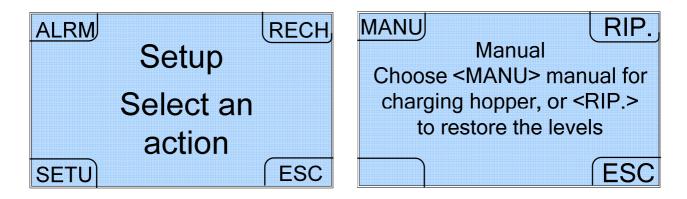
By scrolling through these pages using the >> key it is possible to know whether the hoppers and banknote dispenser are empty, like the two below :



The alarm screen is present just when the banknotes reader or the hopper is effectively empty. To move from one screen to another one, simply use the >> button.

## 8.3.2 Internal menu – Recharging

By selecting the RECH option on the initial page of the Internal Menu, you can access the menu dedicated to recharging.



As already described in sections 7.5, 7.6 and 8.2.2, the manual refill of coins and banknotes is performed by selecting the option RECH in the External Menu. The manual recharge of coins and the coins and banknotes levels restore are instead activated respectively by using the MANU and RIP. options of this Internal Menu screen.

#### 1. Manual recharge

As already described in section 7.6, the manual charging is done reversing the coins into the hopper extension. Since the device does not count the coins received with this

type of charging, you must enter the data relative to the amount introduced so that the accounting can be correctly updated.

Then selecting the option MANU in the Recharge menu, the following screen appears with which you can define the value of the coins that were loaded or you intended to manually load.

ADD MANUAL RECHARGE >> Coins 0.50 € Pcs. loaded 4 ( 2.00 €) In hopper pc. 12 ( 6.00 € ) COIN 0>1<10 100 1000 [ESC

By pressing the COIN key repeatedly, it is possible to select the denomination of the inserted coin (50 cents, 1 Euro or 2 Euro, displayed cyclically in this order), which is displayed in the second line of the page. By pressing the >> key repeatedly it is possible to select the increment value (units, tenths, hundredths, thousandths, displayed cyclically in this order), which is highlighted in the bottom line of the page. By pressing the ADD key, the number of pieces will increase by a unit, a tenth, a hundredth or a thousandth, based on the order of the selected measurement. If the ESC button has not been pressed yet, to reset an amout entered incorrectly simply select the order of size 0 in the last row, for each of the denominations of coins involved.

In this way the screen is changed as follows, and then you can select the option CANC relative to the indicated denomination of coin. It is necessary to select >> in order to scroll the order in the last line till 0. So the following screen appears:

CANC MANUAL R Coins	ECHARGE >> 0.50 €
Pcs. loaded In hopper pc.	
COIN 0>1<10 1	00 1000 ESC

Pressing the ESC button, the inserted data are saved and it's possible to come back to the previous menu.

N.B. Carefully check the values set before selecting the ESC button with which you save the entered values.

If you entered and saved the wrong amount using the ESC key, you must let off the inserted coins and make a new manual charge.

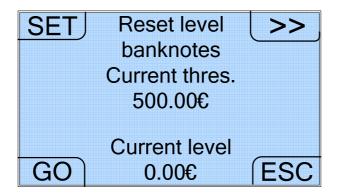
## 2. Levels Restoring

As already described in the previously sections 7.5 and 7.6, the user can define a total value of coins contained in the hoppers, or the banknotes contained into the recycler to be restored whenever deemed necessary.

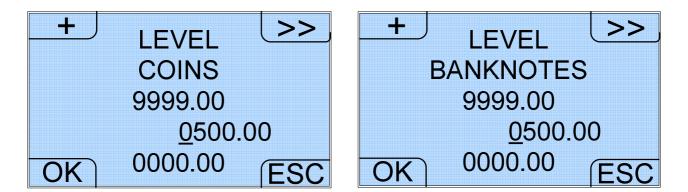
Therefore by selecting the RIP. option in the Manual menu, the following screen appears, displaying the current contents and the currently set threshold for the hoppers.



With button >> it's possible to move to the next page where the contents and the threshold setting for the banknotes validator/dispenser are shown.



On both pages, the hopper one as well as the banknotes validator/dispenser one, the SET option allows you to access threshold settings.

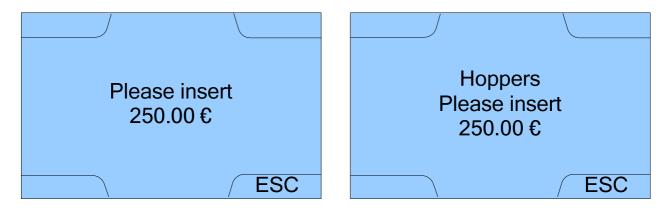


On the page regarding coin threshold settings as well as the banknote threshold page, the >> key allows the user to select the number that requires changing, the + key

allows you to increase the selected number by one unit at a time, between 0 and 9, in a cyclical manner, and the OK key allows you to confirm the setting.

While, by selecting the GO option on the Restore coin level and Restore banknote level pages, it is possible to start level restoration.

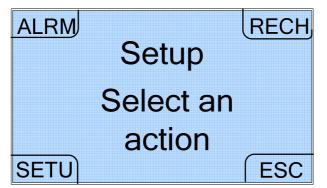
The equipment then compares the contents of the hopper and the contents of the validator/dispenser of banknotes with the set thresholds and, depending on the case, sends the coins and banknotes in excess towards the cash and the stacker or asks to insert other coins and other banknotes.



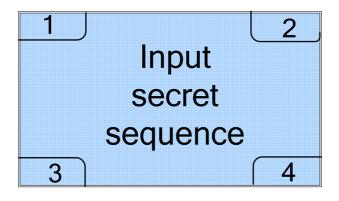
The coins must be inserted from the outside into the swinging drawer and are counted automatically. If the set threshold is met, the pieces in excess are rejected and sent to the coin dispenser. The banknotes must therefore be inserted one at a time into the slot from the outside and are then counted automatically. If the set threshold is reached, the reader will stop accepting banknotes.

## 8.3.3 Internal Menu-Setup test & maintenance

By selecting the SETU option on the initial page of the Internal Menu, first of all the following screen will be shown :



First of all the password to access the configuration menu is requested.



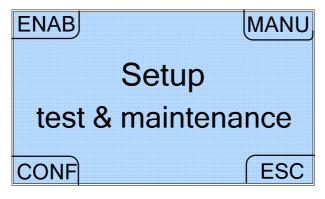
When the equipment is delivered, the factory password is active. Its value is set as 111111.

#### Attention !

In order to further increase the safety level of the machine, it is STRONGLY RECOMMENDED TO CHANGE the default password. The password should be changed often (about every 2 months).

Once you entered the configuration menu, the user can change the password through the sequence of commands : SETU  $\rightarrow$  password  $\rightarrow$  CONF  $\rightarrow$  SETU  $\rightarrow$  >>  $\rightarrow$  PWD, as described below in section 8.3.3.3.

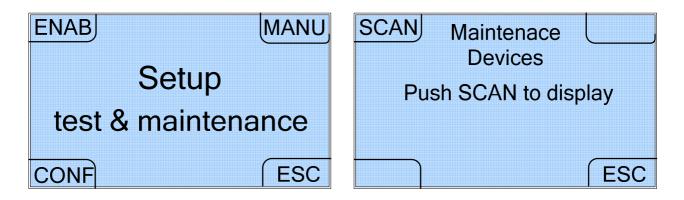
Once the password has been entered, the page regarding Setup test & maintenance menu appears :



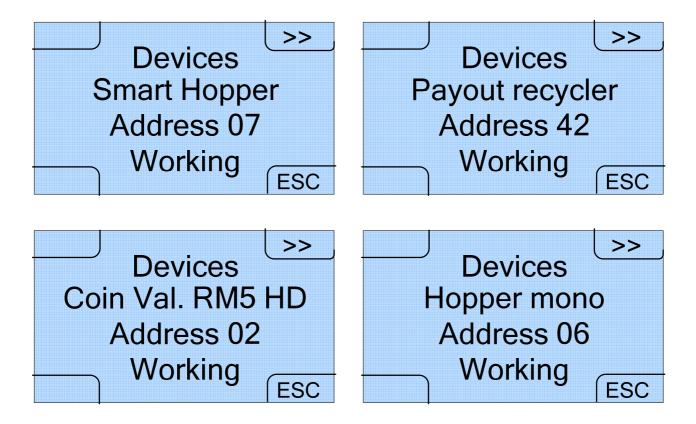
From the Setup test & maintenance menu it is possible to access the submenu regarding the peripherals status, the maintenance and configuration.

#### 8.3.3.1 Internal menu - Setup test & maintenance device status Menu

Selecting the option ENAB in the Setup Test & Maintenance menu it is possible to enter the Peripherals Maintenance menu where you can view the status of all the installed peripherals.



As suggested on the Devices Maintenance page, it is sufficient to select the SCAN option to access a series of files that displays the operating status of the various peripherals, each marked by an address (Smart Hopper address 07, Payout recycler address 42, Coin Val. RM5 HD address 02, Hopper Mono address 06).



You can move from una file to the other through the button >>. After the last file the first is shown cyclically.

#### 8.3.3.2 Internal Menu – Setup test & maintenance Accounting maintenance Menu

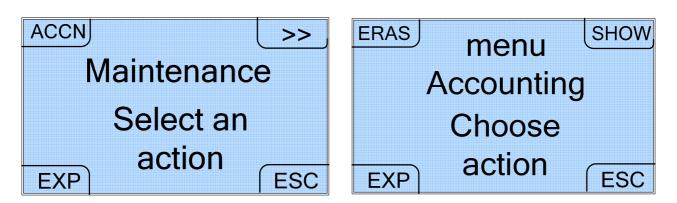
From Setup test & maintenance main screen, press the MANU button in order to perform the accounting maintenance operations and its exportation.

ENAB MANU	ACCN >>
Setup	Maintenance
test & manutenzione	Select an
CONF ESC	EXP action ESC

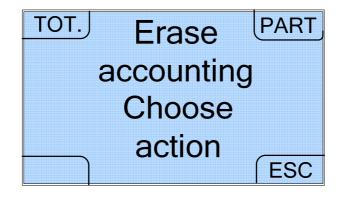
Here you can manage accounting, see the available memory on the SD Card, empty the hopper and the banknotes dispensers, set the time and date, export and import the configuration via SD Card and restore the default configuration.

#### 1. Accounting Menu

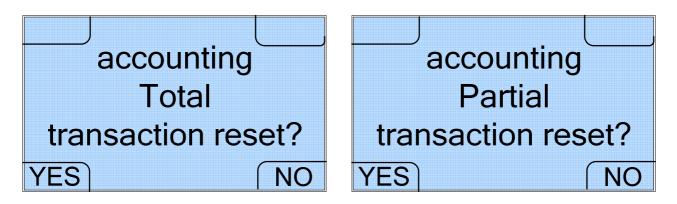
First of all selecting ACCN option you can enter the Accounting menu in which the ERAS button allows you to clear the total and partial accounting.



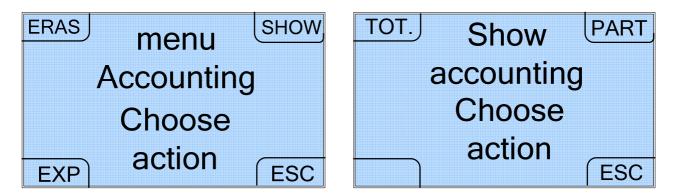
When you need, press ERAS button and the machine will display the following screen :



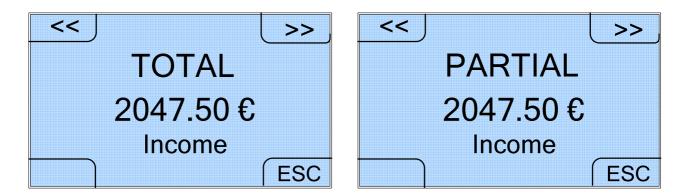
Once the type of accounting to reset to zero has been selected (TOT. button or PART. button), the machine will request you to confirm your selection:



Similarly the button SHOW allows you to displays the total or partial accounting.

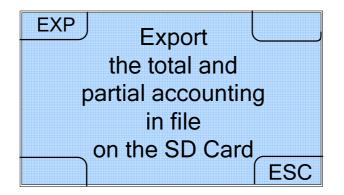


Even in this case the machine asks the user to select the type of accounting:



Both for the total and the partial accounting, moving through the screens using the buttons >> and <<, you can view, exactly like you saw into the external menu, the amounts inserted, dispensed, into the cash, the credit not dispensed, coins and banknotes contained, coins and banknotes inserted, coins and banknotes inserted, coins and banknotes into the cash.

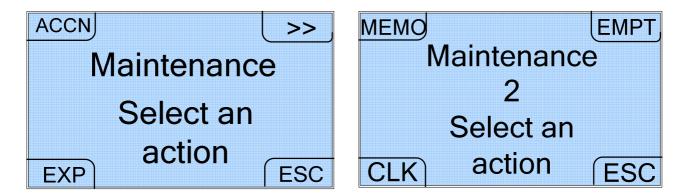
Finally selecting EXP from the maintenance menu you can export or import the SWING accounting on the SD memory card.



By selecting the EXP option again, the message "information, created file" will be put on top of the screen, and a file will be created on the SD Card containing total and partial accounting, and it can be viewed on a PC in the format of an Excel table.

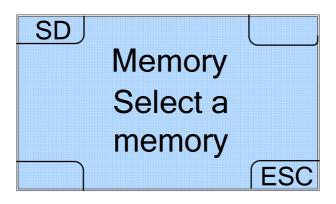
## 2. Maintenance 2

Selecting >> from the Maintenance Menu, it's possible to go to the next screen of Maintenance 2 that permits to choose between the option MEMO, EMPT and CLK.

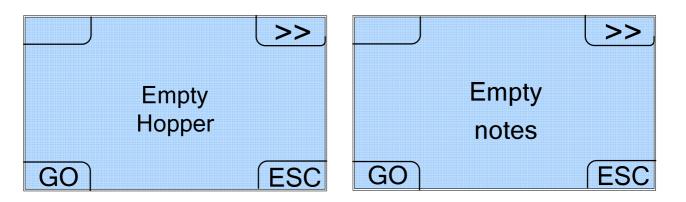


The MEMO command allows you to see the available memory on the SD card.

In fact by selecting MEMO, the page below appears and, through the SD option, it allows to display some data regarding the SD Card, including in particular the memory still available.

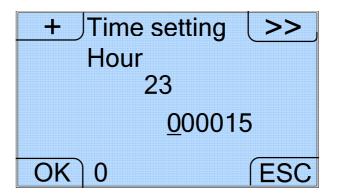


The EMPT command in the Maintenance 2 menu allows you to empty the hoppers or the banknote dispenser through two dedicated screens placed one after another, using the >> button.

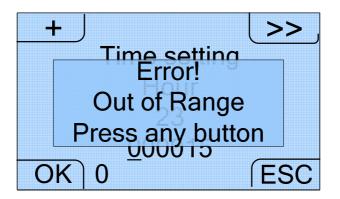


In both screens the GO option allows you to start the operation. During the emptying operation the words "Emptying......" will be put on top of the screen.

If the hoppers have been emptied, the coins they contain will be sent to the cash point. In the event of an emptying of the hopper, the coins are conveyed towards the cash. In the event of an emptying of the dispenser, the banknotes in the recycler (at most 70) are sent towards the stacker (which can contain up to 500) and can thus be taken. The CLK command of the Maintenance 2 menu finally allows you to set the hour, minute, day, month, year in four dedicated screens that appear in succession once the OK button has been selected.

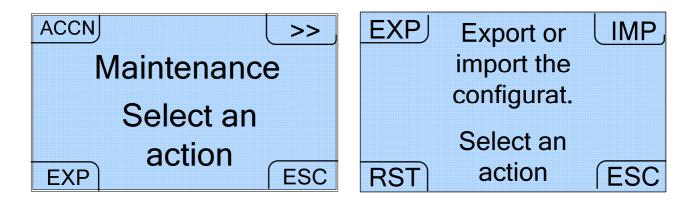


On each of the pages the >> button allows you to select the number and the + button to cyclically increase it between 0 and 9. The fifth and third line show the limits for each of the numbers to be set. In fact, in the case of hour, the set number must be between 0 and 23, in the case of minutes between 0 and 59, in the case of date between 1 and 31, in the case of the month between 1 and 12 and in the case of the year between 2008 and 2050. If you enter a number that is not included within the set limits the word "Error! Out of range. Press any key" will be put on the top of the screen.

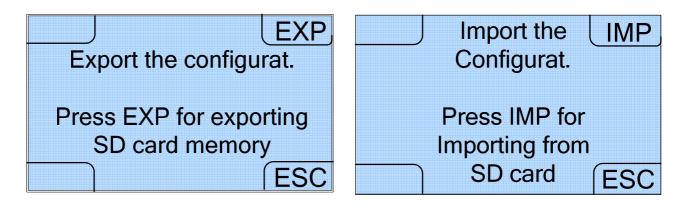


# 3. Export and Import Configuration

Selecting the option EXP in the Maintenance screen, the screen regarding the exporting and importing of the configuration appears.



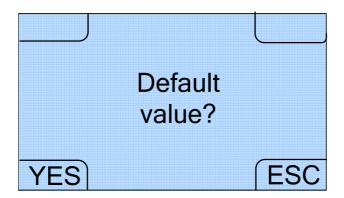
Selecting EXP or IMP the following screens will be displayed, which enable you to export the configuration set on the equipment on SD Card or import from SD Card the configuration onboard on another equipment of the same type (i.e. another Swing).



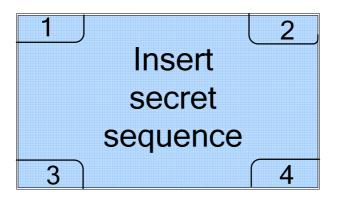
#### **ATTENTION!**

We recommend to insert the SD Card into the machine before turning it ON, because if inserted after power ON, this device is not recognized.

Selecting instead RST the screen that allows you to load the default configuration will appears.

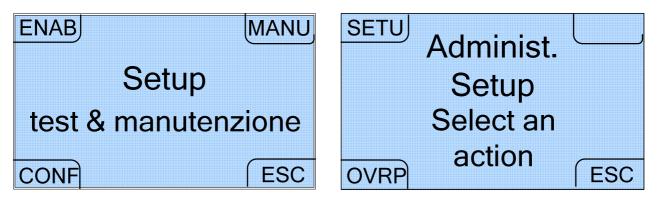


In the event you decide to proceed by selecting YES, you are prompted to enter the password for the reset, which is the same used to access the Setup test & maintenance Menu (thus 111111, the one set by default in factory).



## 8.3.3.3 Internal menu - Setup test & maintenance Administrator Setup menu

By selecting the CONF option on the Setup test & maintenance menu, you can access the Administrator Setup menu:

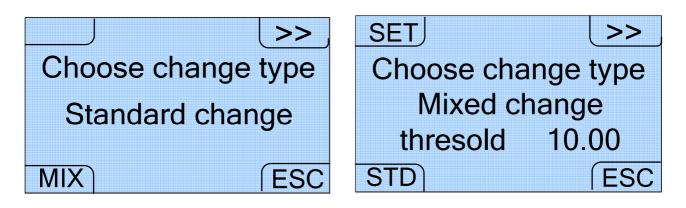


In this screen it is possible to choose the type of change (standard or mixed), enable and disable acceptance of the different denominations of coin and banknote, choose the password, select the default language and view or delete overpays.

#### 1. Choose change type

By selecting the SETU option on the Administrator Setup menu, you can access the Choose change type screen, which indicates the type of change that has been set, standard or mixed.

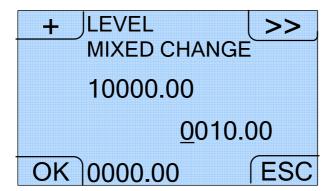
As previously explained in section 7.7 "Basic Operation", with standard change coins are changed into banknotes and viceversa banknotes are changed into coins. Mixed change, in alternative to standard change, changes only banknotes into a combination of coins and banknotes.



At the time of purchase the equipment is set with the standard type of change function, therefore the page that appears is the first one. To switch from standard-type change to mixed-type change, simple select the MIX option. Viceversa, simply select the STD option to switch from mixed change to standard change.

As already described in section 7.7, in the event of mixed change the user must set a threshold value for mixed change. If the value of the inserted banknote is lower than the threshold value, only coins will be dispensed. Whereas if the value of the inserted banknote is greater than the threshold value, coins will be dispensed for the threshold value followed by banknotes until the total amount is reached.

The SET option on the screen regarding mixed change allows the user to view the screen with the threshold setting after which mixed change is provided. With the >> button it is possible to select the number and with the "+" button it is possible to increase it by one unit between 0 and 9 in a cyclical way. The fifth and third row show the limits for the threshold to be set.

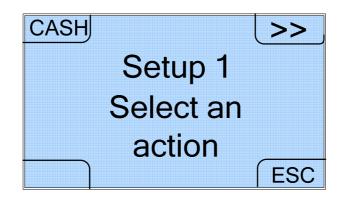


If the OK option is selected on the Level Mixed Change screen, the Choose Change Type window appears on the screen again. Whereas if the >> option is selected in one

of the two screens regarding the choice of change type, the Setup 1 screen will appear.

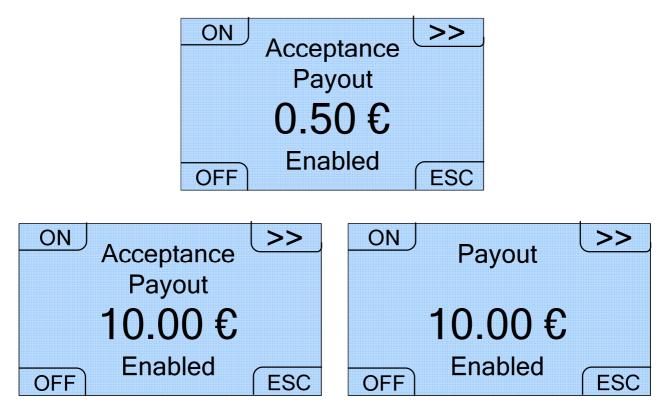
## 2. Cash

From the Setup 1 screen you can access, through the CASH button, the function where it is possible to enable and disable the different denominations of coins and banknotes or, through the button >>, you can access the Setup menu 2.



With the CASH key the user accesses a series of screens where it is possible to enable or disable the acceptance or the dispensing of the different denominations of coins and banknotes.

Use the >> key to move from one denomination to the next, whereas the ON and OFF buttons are used respectively to enable or disable.



Regarding the coins it is also possible to :

- Enable acceptance as well as dispensing of a particular coin denomination
- Disable acceptance as well as dispensing of a particular coin denomination

Therefore the acceptance and dispensing of coins are managed on the same screen.

Regarding the banknotes, if the Smart Payout is installed, it is possible to :

- Enable acceptance as well as dispensing of a particular banknote denomination
- Disable acceptance as well as dispensing of a particular banknote denomination
- Enabling acceptance and disabling the dispensing of only a specific banknote denomination

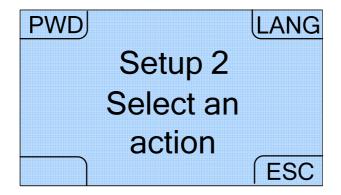
In fact, a banknote denomination can only be dispensed if its acceptance is enabled. In the event the acceptance of a banknote denomination is disabled, it is automatically disabled even dispensing. The acceptance and dispensing of banknotes are treated in distinct screens and, when acceptance is disabled, the ON and OFF buttons are not included on the screen relative to dispensing.

Regarding the banknotes, if the NV11 is installed:

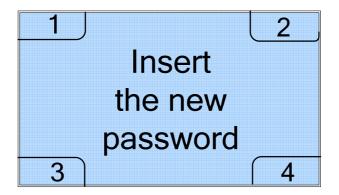
- The 10 Euro banknotes dispensing is enabled by default
- It is possible to enable the dispensing of another banknote denomination, for example the 20 Euro. In this case the previously enabled denomination is automatically disabled. Furthermore the denominations that may be in the recycler, if different from those enabled, are automatically sent to the cash.

## 3. Setup 2

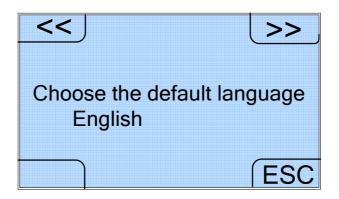
With the >> command of the Setup 1 screen, the user can enter the Setup 2 from which you can choose a new password or select the default language.



Selecting the option PWD it is possible to enter the following screen through which you can digit the numbers that compose the new password.



Using the LANG option the user accesses the four screens regarding the four selectable default languages (Italian, English, French and Spanish).



The << and >> buttons allow the user to switch from one language to another and therefore from one screen to another, while the ESC button allows the user to save the selected setting.

## 4. Overpay

With the OVRP command in the Administrator Setup menu the user can enter the OVRP (Overpay) screen from which you can view and cancel the data related to overpay (episodes of failure to change cash).



In the event the user decides to delete the list of overpayments, the equipment asks to confirm this choice prior to implementing it.



# 9. Bootloader and Firmware upgrading

This section explains how to upgrade the software on board (Bootloader and/or Firmware) of the cash-in machine Swing.



You do not need to save the configuration or the accounting before making upgrading. The procedures to upgrade the Bootloader and/or Firmware will keep unchanged both the configuration and the accounting of the machine.



Since the upgrade of the Bootloader is a delicate operation, the upgrade files will be provided only upon specific request by the customer. Call the Comestero after-sales service at the following phone number : (+39) 0295781111 to get a copy of the file.

From now on, we will suppose that the customer already has the Bootloader updgrade files and is thus able to complete the upgrade operation autonomuosly.

Swing is designed to avoid any kind of problems during the upgrade. The machine is able to perform the operation in a fast and very easy way both for the Bootloader and the Firmware.

Make sure to have at your disposal one or more of the following three alternatives before making the upgrade operation :

• One SD Card to make the upgrade of the Bootloader and/or the firmware (you can use the card already available on board the cash-in machine).



The SD Cards commercially available with same capacity have features and performances different from each other and sometime even contrasting with the declared characteristics. Therefore, to preserve the functionality and the performances of Swing, when it is necessary, use only the SD Cards approved and supplied as spare part by Comestero.

- One built-in or externally card reader connected to the PC.
- Bootloader and/or firmware upgrade files.

For more information about cash-in machine Swing, please see the dedicated support page at the address: <u>http://www.comesterogroup.com/cms/ENG/product/280-swing.html</u>



You should always upgrade the machine Upgrader and Firmware with the last release in order to benefit from the latest updates and features.

# 9.1 How to upgrade machine Bootloader



The Bootloader upgrade operation will always cause the removal of any information regarding the machine firmware. At the end of the installation process it will always be necessary to proceed with restoring the firmware version previously installed on Swing, as described later in this section.

To fully upgrade the Swing bootloader, you must perform the steps described in the following 15 easy steps.

- a) Remove the SD Card from its slot (if you don't have the card provided with the machine, you can request a new one contacting the Comestero after-sales service), and then insert it into your PC.
- b) Only if you are using the SD Card onboard the machine, please before copying the bootloader upgrade file, you must save all your data in any folder on your PC.
- c) Format the SD Card only in "FAT" mode. Other modes are not supported.
- d) Copy the 2 files you can find in the bootloader upgrade file (without rename any files and without creating any folders inside) into the SD Card.
- e) Turn OFF Swing and make sure that the master switch of the unit is in the OFF position.
- f) When the cash-in machine is turned OFF, insert the SD Card containing the bootloader upgrades inside the machine CPU slot. Always observe the orientation of the card (the side with manufacturer label facing up) and make sure to have it properly pushed towards bottom.
- g) Turn ON Swing.
- h) When the machine is turned ON, it will display a screen similar to the one shown in the Figure below. On this screen, you can always check the bootloader version (first line under the heading "Upgrader Ver 06:00:00") installed on board the cash-in machine.
- i) Press one of the four external blue button within 5 seconds to start upgrading.

Upgrader Ver. 06.00.00

Old Ver: 04.03.01 LOADER Push Button to start Upgrading 5

- j) The upgrade will start and a screen most similar to the one shown in Figure here on the right will be displayed. In this way you can always check the percentage of completion of the upgrade (indicated by the progressive advance of a counter).
- k) When the upgrade is complete, the cash-in machine will show on the screen, the message "Complete! Rebooting", as shown in the Figure here on the right.
- Now the machine will reboot. Wait for the complete rebooting process until you will see on the display the screen shown in the Figure you can see at step m) here below.
- m) At the end of upgrading, if the process has been successfully completed, the cash-in machine will show on screen the message "Complete !! 100% Pls, remove SD Card and reboot system", as shown in the Figure here on the right.

Upgrader Ver. 06.00.00

Old Ver: 04.03.01 LOADER Upgrading 10%

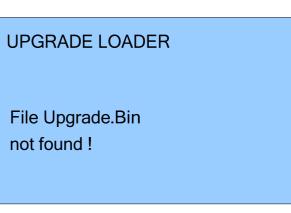
Upgrader Ver. 06.00.00

Old Ver : 04.03.01 LOADER Complete ! Rebooting

Upgrader Ver. 06.00.00 Complete !! 100%

Pls, remove SdCard and reboot system

- n) Turn OFF the machine and make sure that the main switch of the unit is in the OFF position.
- Remove the SD Card containing the bootloader upgrade from its slot and proceed with the firmware upgrade as described in the next section called "How to Upgrade machine Firmware".
- p) If you failure to restore firmware of the machine after you upgrade the bootloader, on the display you will see a message very similar to the one shown in the Figure here on the right.
- q) In this case, turn OFF the machine and insert the SD Card containing the firmware of Swing and proceed with the firmware upgrading as described in the next section.



The machine Firmware can be easily upgraded only through a SD Card and a computer connected to the Internet. The machine is designed in such a way to avoid any problem during the upgrade phase.

Please follow the 17 easy steps below to know how to upgrade your machine firmware:

- a) Remove the SD Card from its slot (if you haven't with you the card provided with the machine, you can request a new one contacting the Comestero after-sales service), and then insert it into your PC.
- b) Only if you are using the SD Card onboard the machine, please before copying the Firmware file save all your data in any folder on your PC.
- c) Format the SD Card only in "FAT" mode. Other modes are not supported.
- d) Visit the support page : <u>http://www.comesterogroup.com/cms/ENG/product/280-</u> <u>swing.html</u> to download the necessary files you need to upgrade Firmware.



In the event you have no internet access, you can request the necessary files contacting the Comestero after-sales service at the following phone number: (+39) 02 95781111.

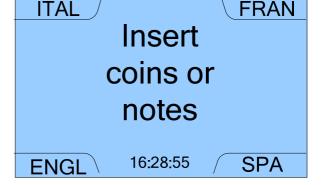
- e) Unzip the file you have just downloaded (or you received from the Comestero aftersales service) in any folder on your PC.
- f) Copy all the .bin files contained in the folder (without renaming files and without creating any folders inside) into the SD Card.
- g) Turn OFF Swing and make sure that the main switch of the unit is in the OFF position.
- h) Insert again the SD Card into its slot onboard the machine CPU. Always observe its orientation (the side with manufacturer label facing up), and make sure to have it properly pushed towards the bottom.
- i) Turn ON the machine.
- j) Once you have turned ON the machine, it will display a screen very similar to the one shown in Figure here on the right.
- k) Press any of the four external blue button within 5 seconds to start upgrading.

Upgrader Ver. 06.00.00

New ver: 04.02.01 Old ver: 04.03.01 SWING Push Button to start Upgrading 5

- I) When the upgrading start, you will see a screen very similar to the one shown in Figure here on the right. In this screen you will see also the percentage of completion of the upgrading (its progress is indicated by a progressive percentage of completion [%]) from 0% to 100%.
- m) At the end of upgrading, the cash-in machine will show on screen the message "Complete! Rebooting", as shown in the Figure here on the right.

n) After a few seconds the machine will restart automatically and will display the usual Home screen as you can see in the Figure here on the right.



Upgrader Ver. 06.00.00

New ver: 04.03.01

Upgrading 10%

**UPGRADE LOADER** 

New Ver: 04.03.01

Complete ! Rebooting

SWING

SWING

- o) Turn OFF the machine, make sure the machine main switch is in the OFF position.
- p) Remove the SD Card and insert it into a card reader connected to a computer. Delete the "ChangerMachine.bin" file and re-insert the SD Card again in its slot onto the machine.



You must delete the "ChangerMachine.bin" file from the SD Card after upgrading machine Firmware, to avoid that, every time you turn ON the machine, it automatically starts the Firmware upgrading.

<u>Never delete the files inside the SD Card, except for the .bin file</u> <u>mentioned above</u>. In this way you will preserve all previous data, for example accounting data, etc ..., you saved on the card.



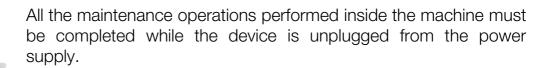
In the event you need help, or for any further problem you encounter not described in this section, please contact our after-sales service at the phone number : (+39) 02 95781111.

As an alternative you can see our online support : <u>http://www.comesterogroup.com/cms/ENG/online-support.html</u>

EN

Insert again the SD Card into the cash-in machine and turn ON Swing without pressing any button.

## **10. Care and Maintenance**





Follow the warnings carefully so that the machine is always in the best operating conditions, preventing dangerous situations or situations which would render the warranty null and void.

## **10.1 External maintenance and cleaning**

Keep the outer surfaces of the device clean. To do so it is advisable to use a cloth dampened with water or a bland detergent solution.

Do not use aggressive solvents that could damage the machine finish. Do not dip or expose the machine directly to water or liquids of any nature. Do not use water jet machinery (high-pressure washers) to clean the appliance. Periodically check the state of the machine surfaces paying special attention to the areas which, in normal operating conditions or through malice, could be hazardous for the user (sharp or ruined sheet-metal, rust, etc.).

Consult Comestero for further information and to order any part.

## **10.2 Internal maintenance and cleaning**

Clean the interior of the machine with a damp cloth with water; use compressed air only to clean electric/electronic components.

Periodically check the wiring connections and verify that the connection cables of the peripherals have no points left without insulation or parts which are too bent.

If the user notices any anomaly in the cabling or connectors, he/she must have them immediately replaced by consulting Comestero for information and to order any spare part.

#### **10.3 Idle Periods**

During brief periods of downtime (two or three days), it is advisable to turn the device OFF from the main switch located on the back side of the equipment. During long periods of downtime it is advisable to disconnect the device from the power grid by unplugging the machine from the wall socket.

Protect the machine from dust by covering it with a cloth and placing it in a dry place.

## 10.4 How to extract and reinsert the single coin hopper

In the event you need to pull out the single coin Hopper to extract a jammed coin in the coin validator infeed, proceed as below :

• Pull the foreign object collection drawer out.



Fig. 36



Fig. 37

- Unscrew the two shelf stops that support the single coin hopper.
- Pull the shelf towards you.

• Unscrew the ringed nut located under the shelf where the hopper is located.





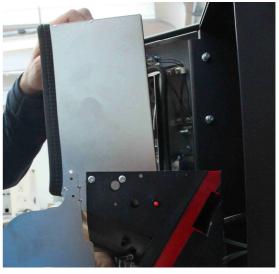


Fig. 39

• Disconnect the electrical connection located at the back of the hopper.

Begin to remove the hopper pushing

down the base plastic ringed nut to

•

detach it.



Fig. 40



Fig. 41



Fig. 42



Fig. 43

• Extract the hopper.

• Move the coin validator away from the coin duct to detach it and pull it out.

• Disconnect the coin validator electrical connection.

• Check if there are any coins stuck at the entry way of the coin and, if present any, remove them.

• Check if there is some dirt inside the coin validator that can block or slow down the the coin entrance.

N.B. You need to clean the interior of the coin validator at least once a week to avoid a loss of efficiency of the coin validator or, in extreme cases, its jam.

• Check if there are coins, foreign objects or dirt that can obstruct the coin duct entrance of the coins and if any extract them.







Fig. 45



• When relocating RM5 HD in its initial location and restoring the electrical connection, pay attention to pull back the cable, in order to avoid any obstruction into the duct.

## **10.5 How to extract and reinsert the Smart Hopper**

In the event you need to remove the Smart Hopper, follow the instruction described below. If you want to make lighter the hopper, carry out emptying before taking it out.

#### Parts List



- 1 Cover Unhook
- 2 Coins input
- 3 Coins dispenser
- 4 Led status
- 5 Unhook Handle
- 6 Security Lock



• Disconnect the Smart Hopper extension ground cable.

Fig. 47

Extract the Smart Hopper from its housing by lifting ٠ slightly the base to release it from the stop device.

Unscrew the 6 screws that connect the hopper extension.

Separate the extension from the hopper.

•

•







Fig. 49

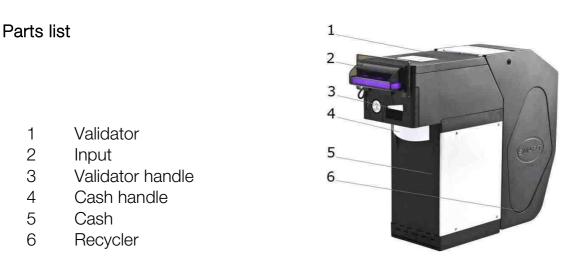


- A possible coin jam can occur on the disk sorting. Move the coins to gain access to the disk and remove the jammed coins.
- After making the necessary interventions, place back the extension on the hopper and screw the six screws. Then replace the hopper in its housing. To check that it is properly fixed, pull slightly and check that the stop device is blocking the horizontal displacement. If the hopper is not blocked, push it down until you hear the click of the ledge below that fits into the slide.

## **10.6 How to unlock Smart Payout device**

In the event of an anomaly or jamming, the reading and dispensing input lights flash with a light sequence red and blue informing the user about the problem.

If one or more banknotes are jammed inside the Smart Payout device, this can be unlocked manually using the instructions here below.



• Extract the stacker/cashbox as described in section 7.2 and verify that there are no banknotes jammed neither in its place nor inside.



Fig. 51



Fig. 52



Fig. 53



Fig. 54

- At the end of the operation place back the stacker/cashbox in its place.
- Turn OFF the cash-in machine.
- Acting on the front lever of the banknote validator, extract the reading head by sliding it forward while pushing the lever, as shown in Figure below.



Fig. 55

• Check if there are any banknotes jammed inside the head or within the transparent part of the recycle device. If there are any, please remove them.





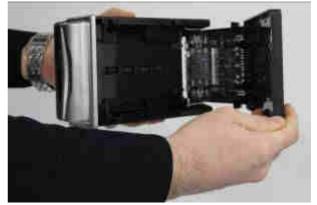






Fig. 58

• When the operation is complete, place back the reading head in place.

Where it has not been possible to extract the jammed banknotes even in this way, remove the entire device Smart Payout as described here below.

• Unscrew the four wing nuts located under the Smart Payout.



Fig. 59



Fig. 60



Fig. 61

• To intervene on the recycler you must use the Allen key, which is provided inside the Swing, secured with a plastic band on the left side of the Smart Payout and you must insert it into the holes A and B, respectively, placed on the right side, making the operations described below.





• Remove the Smart Payout from the equipment making accessible from the left side.

Slide forward the Smart Payout and disconnect the

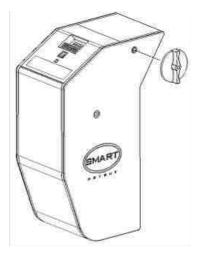
•

power supply.

EN

To manually dispense banknotes :

1. Insert the Allen key into the hole A where there is a screw that moves away the scrolling spools from each other.



2. Rotate the key in counterclockwise, till it doesn't reach completely the end of stroke (about 1/2 round).



3. Insert the Allen key into the hole B where there is the screw that acts on transaction movement.



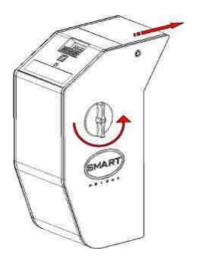
4. Rotate the key in clockwise for 4/5 rounds : the banknote will scroll inside as the arrow shows.



5. When the banknotes has been moved in the transaction mechanism, move back again the Allen key into the hole A and turn it in clockwise until it stops (about 1/2 turn) to move back the rollers in their position.



6. Move the Allen key on the hole B and turn it counterclockwise to manually dispense the banknotes contained in the area of the potential jam (about 10 rounds). In this way, the banknotes will be given back.



- 7. Insert the Allen key into the hole A and turn it counterclockwise until it stops (about  $\frac{1}{2}$  round).
- 8. At the end of the operation place back the Smart Payout and turn ON the machine. With the machine running, launch the automatic emptying of the banknotes dispenser following the instructions in section 7.4 "Emptying the banknotes dispenser", to verify the correct operation of the system.

#### 10.7 How to unlock the Smart Payout device in critical condition



Comestero assumes no responsibility for any loss of money due to the carelessness of the operator. This means that when you give the unit to the Comestero after sale service and some money remains inside the Smart Payout, Comestero cannot be held liable for any claim in the event of lack of money when the repaired unit is given back to the customer. Comestero cannot be held responsible in the event of misuse and/or wrong interpretation of the instructions present in this section. Any loss or breakage of Smart Payout components, during the operations described below due to abuse and misinterpretation of this instructions, is not attributable to Comestero. Moreover in case of first inspection and subsequent repair of the unit, our technicians should find some form of breakage or malfunction of the unit due to an incorrect interpretation of these instructions, Comestero reserves its right to charge the customer with the full cost of repair.



In the event you left money inside the Smart Payout, and you do not intend to follow the instructions below, you can send the unit to Comestero. For this reason, please <u>ALWAYS ALERT</u> <u>COMESTERO AFTER-SALES SERVICE</u>, before sending the device.

Only in the event of a "critical jam", i.e. you are unable to extract one or more banknotes from the device using all the methods described in the previous paragraphs, follow the steps below to extract them in total security. Since this procedure involves to modify an essential part of the unit (i.e. the payout tape), when done please reassemble all the parts and send the unit to Comestero for its restoring.

1. Turn OFF Swing and make sure its main switch is OFF. Then disconnect the plug from the wall.





2. Before removing the unit from the machine, completely disconnect the power and communication cable from the unit. Then disconnect the ground cable located on the side of the unit.

3. Pull the unit out from cash-in machine and lay it down gently on a stable work surface, as you can see in the Figure 64 below.

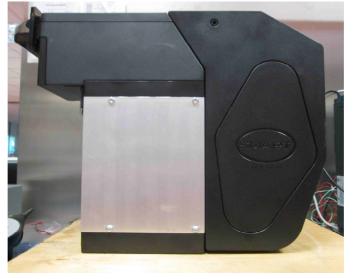


Fig. 64

4. Remove the plastic side covers, gently pulling them towards you and keeping the Smart Payout always in the vertical position (see the Figure 65 here below for details). In this way you will get a configuration very similar to the one shown in Figure 66 here below.



Fig. 65



Fig. 66

EN

5. Using a Torx screwdriver, see Figure 67 below, from both sides of the Smart Payout remove the 3 screws that hold the plastic cover back of the Payout (these are shown with a circle in Figure 68 below).





Fig. 67

Fig. 68

6. In this way you will have access to the back of the Payout unit and you will get full access to the banknote compartment, as you can see in Figure 69 below.

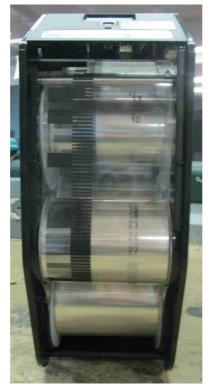


Fig. 69

- 7. Referring to the description listed in paragraph 10.6 "How to unlock Smart Payout device", insert the "Allen key" supplied with the Smart Payout into the hole B and rotate the key in clockwise for 4-5 turns. Acting manually on the tape that transports banknotes, extract them helping yourself with the hands removing those eventually jammed into the unit.
- 8. Only and exclusively in the event you are not able to extract the jammed banknotes through the procedure described so far, using a scissors, cut the tape and unroll it until its complete extension, as shown in Figure 70 below.



Fig. 70

9. Reassemble the Smart Payout parts. Specifically snap the plastic covers back (these are the items that cover the extraction compartment of the banknotes you have previously disassembled), the fixing screws and the two lateral plastic covers. Once all parts have been reassembled, send the reader to Comestero for its reparation.

#### **10.8 How to unlock the NV11 reader**

In the event of an anomaly or jam, the front of the reader and the dispenser LED flash with a light sequence that informs the user that a problem has occured. You can make a check of the possible areas of banknotes jamming following the procedure described here below.



Fig. 71

# N.B. If the banknotes reader NV11 is disassembled, the unit after reassembly must be calibrated and re-initialized.

- First of all turn OFF the equipment.
- To remove the reader-dispenser NV11 from the equipment, unscrew the four wing nuts that block the unit.

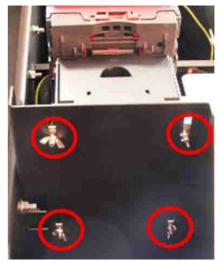


Fig. 72



Fig. 73

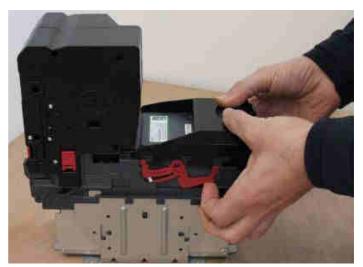


Fig. 74

• Disconnect the power supply and extract it from its place.

• Unhook the banknotes introduction bezel lifting up the red levers located on each of two sides.

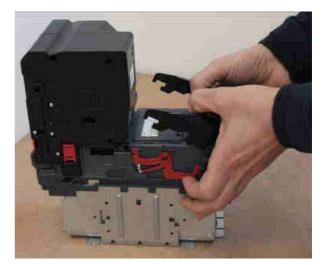


Fig. 75

Fig. 76

If the dispenser/stacker/cash recycler unit LED flashes with constant frequency of 1 ٠ flash per second, indicating that there are banknotes stuck: unlock the dispenser/stacker/cash recycler unit turning outward the two red little wings placed on both sides of the device.



Lift up the bezel upward to remove it.

Thus check that there are no banknotes

jammed at the entrance of the reading

head (which is thus accessible).

•

•







• Remove it by pulling it upward.

back side of the recycler unit.

To remove any banknotes jammed, follow the instructions described in the label located on the

• Open the recycler unit cover by pressing the buttons located on each of the two sides.











Fig. 80



Fig. 81



Any banknote jammed at this point should be visible and removable.

• If it is not possible to remove the banknotes, extract the dedicated key provided with the device (it is located in the location shown in Figure 83 below), insert it into the slot shown in Figure 84 and turn it counterclockwise to manually remove the banknotes.



Fig. 83



• Close the recycler cover.

The cover is correctly closed when you hear the sound of a "clack".

N.B. There are no useful parts inside the banknotes recycler unit. Some parts of the device are locked by compression springs that may cause injury if the equipment is disassembled.

 If any jammed foreign objects or banknotes prevent the correct operation of the reader, please separate the reader from the dispenser, as described above and push to the left the red plate to release the reader, as shown in Figure here on the right.



Fig. 85

95

 In this way you can lift up the cover of the banknotes sliding area which is thus accessible for cleaning







Fig. 87

• Gently rub the surface with a rag fluff-free cloth, moistened with a solution made of water and mild detergent.

#### N.B.

Do not use in any case products based on solvents such as alcohol, methylated spirits, petroleum, mineral spirits or PCB detergents, because they would cause permanent damage to the reader.

Pay particular attention to the lens sensors, <u>which must be dry and clean</u>. To clean the front sensor use a small soft brush or a cotton swab.

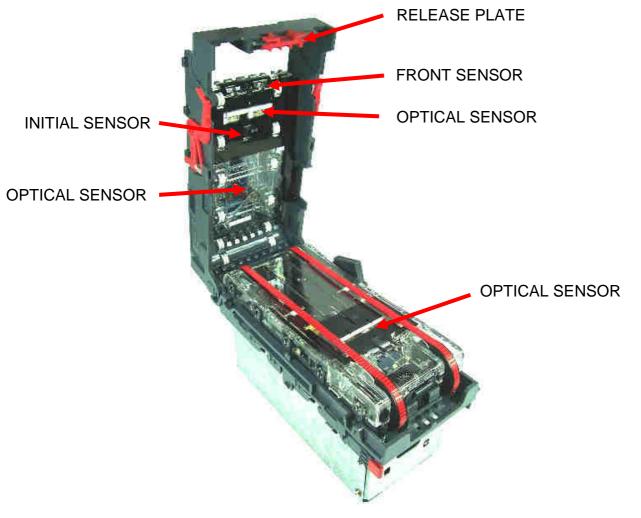
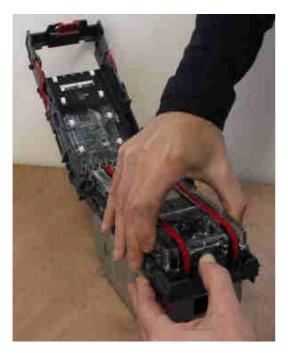


Fig. 88

• If necessary, move the black plate inwards (as shown in Figure 89 below) to unlock and remove the inside of the device.





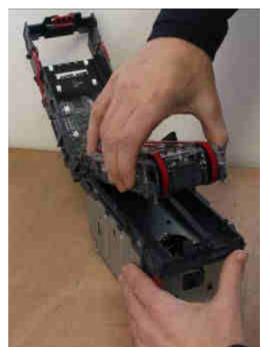


Fig. 90

• Check for banknotes jammed.



Fig. 91

N.B. Do not use in any case products based on solvents such as alcohol, methylated spirits, petroleum, mineral spirits or PCB detergents, because they would cause permanent damage to the reader.

 If the NV11 reader has been disabled because of a fault, once repositioned and restored with its electrical connection, the 5 Euro banknote is enabled by default. To enable the 10 Euro banknote dispensing or any other denomination you must thus enter into the configuration menu.

#### 10.9 Coin dispenser controller

In order to remove a jam or to do maintenance and cleaning operations, moving the peripheral from its seat, unhooking the retention handle that maintains it in position.

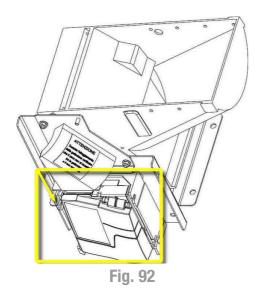




Fig. 93

To access the coins path you must open the inspection door, pressing the unhooking handle. The door comes back in its position spontaneously, pressed by the spring.



Fig. 94

Fig. 95

Fig. 96

#### **10.10 Emergency battery**

Swing is provided with an emergency battery to ensure the completion of any on-going operation in the event of electricity failure. This is useful to prevent the interruption of payout services in the event of accidental power outage or temporary blackouts.

#### **PAY ATTENTION :**

Never disconnect the emergency battery. In the event you need to replace it, please refer to qualified technician. To ensure maximum efficiency of the cash-in machine, it is recommended to replace the batteries every 3 years from the date of purchase.

# **11. Technical Assistance and diagnostics**

This section lists the anomalies that occur most frequently during use of the product and the respective corrective action, in order to avoid or reduce any downtime of the machine to a minimum.



If the problem you are encountering is not described here or should the solution not solve it, please contact Comestero after-sales service at (+39) 02 95781111.

Cause	Solution
The equipment does not turn ON or the display shows the message "battery out of order".	Make sure the cable is connected to the power supply. Make sure the main switch is in "I" position (ON). Verify the battery and the relative cable. Make sure the 2 protection fuses are not burnt.
With the NV11 reader-dispenser mounted onboard the equipment, the machine does not accept any kind of banknotes (LEDs are all turned ON on the bezel).	Check the value of the power supply, and verify that it is correct. Make sure the hopper is not empty. Make sure the cash has not reached the maximum limit of banknotes. Make sure that the required banknote denomination is enabled. Make sure there are no jammed banknotes into the reader (see paragraph 10.8 for details).
With the Smart Payout reader-dispenser mounted onboard the equipment, the machine does not accept all the banknotes.	Make sure the hopper is not empty. Make sure the cash has not reached the maximum limit of banknotes. Make sure that the required banknote denomination is enabled. Make sure there are no jammed banknotes (see section 10.6 and section 10.7 for details).

Causa	Soluzione
The equipment does not accept the inserted coins.	Check the coin validator and the hopper that feeds it, to search for any coins or objects that are getting stuck (see section 10.5 for details).
The count does not start.	Make sure some coins have not been already inserted and that the count has not been already carried out.
With the reader-recycler NV11 mounted onboard the equipment, the machine does not dispense any banknotes.	Check the value of the power supply, and verify that it is correct and the current is sufficient. Make sure there are no jammed banknotes. Make sure there are no foreign objects that can obstruct the sensors.
With the Smart Payout reader-dispenser mounted onboard the equipment, the machine does not dispense any banknotes.	Make sure that the required banknote denomination is enabled. Make sure the Smart Payout is full and properly connected to the machine. Check if there is a jam of banknotes (see section 10.6 for details).
The reader NV11 operates slowly or intermittently.	Make sure the value of the power supply is correct and the current is sufficient. Make sure there are no foreign objects nor dirt along the banknotes path. Check if there are components visibly damaged.
The NV11 motor does not stop working	Make sure there is no dirt, foreign objects or jammed banknotes along the banknotes path.
Poor banknote acceptance by the validator.	Disconnect the reader and open it. Clean the top and bottom parts of the LED sensors with a cloth damped with water. Make sure the reader is perfectly closed.

## **11.1 Diagnostic of the peripherals**

#### 11.1.1 Multi coin hopper control

The two leds, put on the right side front of the hopper, give indications on its work status.

The switch on green led flashes with 1 Hz frequency and reveals the correct function of the system.

In the event of an anomaly or jam, the different red led flash lights, revealing the possible problems that have been occurred.

The table below lists the different flash lighting codes. The flash light sequence is always repeated after short pause, and continues until the problem has been solved.

Flashes	Error indication	Solution
1 imp./sec Green light	Operation correctly	
2	Calibration Error	Turn OFF and turn ON Swing.
3	Communication Error with the machine	Turn OFF and turn ON Swing.
4	Coins Jam	Manually empty the Hopper and check the wheel on the bottom.
5	Attempted fraud or tampering	Make sure that in the outlet duct of the hopper there are no coins jammed. Turn OFF and turn ON machine.
6	Hopper system empty	Fill the hopper with coins
7	Checksum error	Turn OFF and turn ON Swing.
8	Hopper sensors not initialized	Turn OFF and turn ON Swing.
9	The Cover has been removed	Place the cover back on the hopper

#### 11.1.2 Smart Payout unit control

In the event an anomaly or jam, the reading and dispensing input lights flash with a light sequence red and blue informing the user about the problem.

One red flash followed by two blue flash lights, reveal banknote jammed.

The meaning of these flash lights is described below:

Front flashes		Error Indicator	Onerstien	
Red	Blu	Error indicator	Operation	
0	0	Nothing		
	1	Upper input cover open	Close the cover	
1	2	Banknotes jam	Inspect the banknotes path and remove the obstruction	
	3	Unit not initialized Contact tech service		
2	1	Banknotes stacker not present Insert stacker		
2	2	Jam in the stacker Inspect and remove obstruction		
	1	Firmware Error		
0	2	Communication interface Error	Install the Firmware	
3	3	Dataset Error		
	4	EEPROM Error		

Front f	flashes		Operation	
Red	Blu	Error Indicator		
	1	Low Power Supply	Question Linear to a the sec	
4	2	High Power supply	Control input voltage	
4	3	Card Error	Program the card again	
	4	Reset	Reboot switching off and access again	
5	1	Firmware not recognized	Program again	

#### 11.1.3 NV11 control

The reader of the NV11 device communicates status messages using short and long flashes from the front bezel using different combinations.

No. Long flashes	No. Short flashes	Problem	Solution
1	2	Banknotes reader jammed	Open the banknotes reader and see if there are banknotes jammed or debris covering the sensor.
	3	Unit not initialized	Contact technical support to initialize the unit again.
2	2	Cash jammed	Make sure the cash plate is free to move and the stacker mechanism is in the rest position.
	1 Firmware checks		Reload firmware on the NV11 reader.
	2	Interface checksum	Reload firmware on the NV11 reader.
3	3	EEPROM checksum	Reload firmware on the NV11 reader.
	4	Dataset checksum	Reload firmware on the NV11 reader.
	5	Incompatibile Firmware	Make sure the reader and dispenser firmware are compatible.
4	1 Voltage below 12V DC 3.5A		Make sure the supply voltage is correct.
4	2	Voltage higher than 13.2V DC 3.5A	Make sure the supply voltage is correct.

The NV11 device dispenser communicates status messages using flash with different frequencies.

Frequency flashes	Problem	Solution
Costant 1 flash per second	Transport error into the dispenser	Remove the banknote jammed into the dispenser and press the configuration button only once.
2	Software error	Reload firmware on the dispenser NV11.
3	Calibration error	Contact technical support to calibrate the unit again.
4	Diverter error	Check whether there are banknotes jammed that prevent to the diverter returning to its rest position.
5	Motor stop	Check if there are any banknotes jammed that prevent the dispenser straps to move.

#### N.B. In the event the problems persist, contact the Comestero after-sales service.

# 12. Technical data

Dimensions (lxhxw) [mm] :	280x1600x475
Weight [Kg] :	97 (empty) + 6 (anti tipping base) or 16 (clamp)
Input voltage [Vac / Hz] :	230 / 50
Nominal current [A] :	1
Absorbed power [W] :	120
Operating temperature [°C] :	5 ÷ 50
Dispensable banknotes [Euro] :	5/10/20/50/100/200/500
Dispensable coins [Euro] :	0.50/1/2
Coin Recharge Procedure :	Automatic and Manual and level restore
Banknote Recharge Procedure :	Automatic and level restore
Coin Emptying Procedure :	Automatic
Banknote Emptying Procedure :	Automatic
Coins ca	apacity
Smart Hoppers with extension :	2700 Pcs. (1,00 Euro)
Cash point :	3500 Pcs. (1,00 Euro)
Swinging drawer coin capacity :	750 Pcs. (1,00 Euro) approximately
Banknotes	capacity
Smart Payout banknote capacity [Euro] :	500 Pcs. (into the cash) + 70 (into the recycler)
NV11 banknote capacity [Euro] :	300 Pcs. (into the cash) + 30 (into the recycler)
Installed pe	eripherals
Electronic coin validator :	Comestero RM5 HD
Single coin hopper :	Azkoyen UII Plus
Banknote validator/dispenser :	Innovative Technology NV200 with Smart Payout or NV11
Coins dispenser :	Multi coin with extension Innovative Technology Smart Hopper
Default con	figuration
Coin accepted [Euro] :	0.50 - 1 - 2
Dispensable coins (hopper) [Euro] :	from 0.50 to 2
Banknotes accepted [Euro] :	from 10 to 50 (100/200/500 Euro are disabled)
Dispensable banknotes [Euro] :	from 10 to 50 (100/200/500 Euro are disabled)

# **13. Spare parts**

Perfectly identical to the parts to be replaced, our spare parts are in compliance with manufacturing specifications, and they guarantee with time optimum performance and reliability, satisfying all industry regulations for which they are designed.



For any further information about this spare parts list, please call our After-Sales service at the following telephone number: (+39) 02/95781111.

In order to provide a fastest way to search for spare parts and to facilitate the work of our technicians, it is necessary to provide the following information to the Comestero after-sales service :

- Model, type and serial number of the machine.
- Code number, name and quantity of parts you intend to order.

The following list applies to all configurations in which the Swing cash-in machine is produced and sold.

## 13.1 Swing general assembly

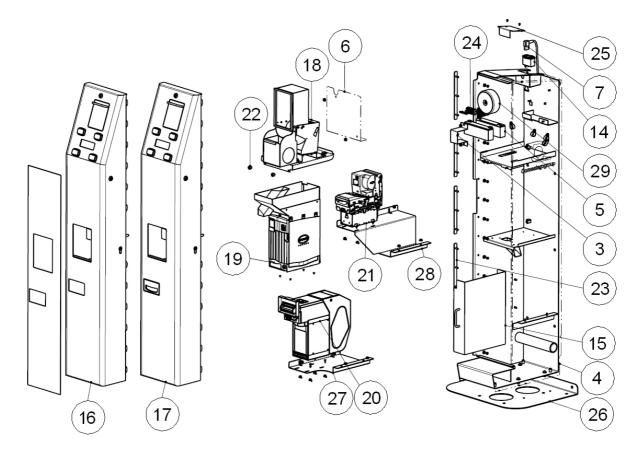


Fig. 97

POSITION	CODE	DESCRIPTION
3	1076-20-0011-A	ANGULAR FOR FIXING BATTERY
4	1078-20-0002-A	CABINET
5	30206000000007A	YUASA 12V 2,1Ah BATTERY
6	1078-20-0005-A	CARTER FOR MEDIUM VOLTAGE AREA
7	Z/X-CAVOSCK90	POWER CORD WITH SCHUKO 90° 10A PLUG
14	Z/DC-FILTRO	MAINS FILTER WITH TWO FUSES
15	1078-30-0500-A	CASH GROUP
16	1078-30-0100-A	DOOR GROUP WITH SMART PAYOUT
17	1078-30-0102-A	DOOR GROUP WITH NV11
18	1078-30-0200-A	LOADING COINS SHELF GROUP
19	1078-30-0300-A	SMART HOPPER GROUP
20	1078-30-0400-A	SMART PAYOUT GROUP
21	LS/NV11/H-300E2CCF	BANKNOTE READER NV11
22	30156000000143A	FEMALE RIBBED KNOB M5
23	1076-20-0010-A	FIXING HINGE PLATE
24	C33-M403-SI1	FUSE BOX 1 POLE WITH FIXING HOLE
25	1076-20-0056-A	SMALL DOOR TO CLOSE POWER
26	1078-20-0020-A	ANTI-CAPSIZING SUPPORT
27	1078-20-0012-A	SMART PAYOUT SUPPORT
28	1078-20-0015-A	NV11 RECYCLER SUPPORT
29	1076-40-0005	CABLED TRANSFORMER

13.2 Assembled door group (Cod. 1078-30-0100-A and 1078-30-0102-A)

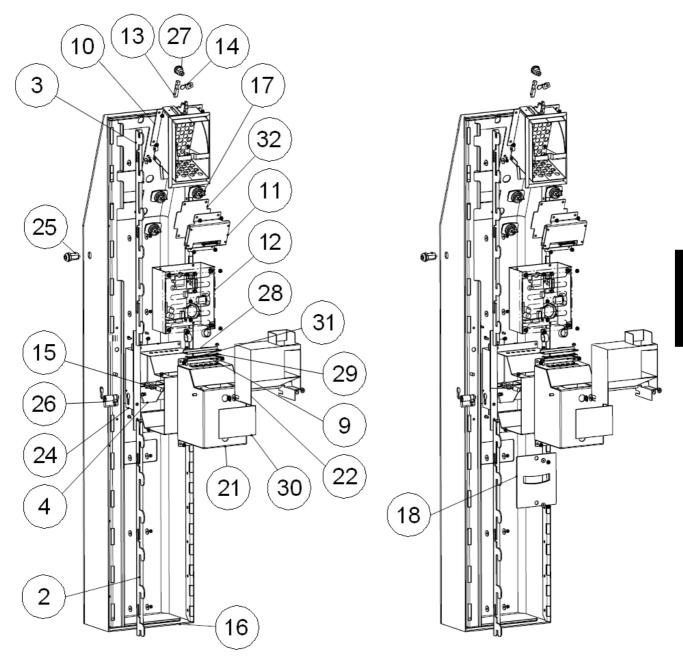
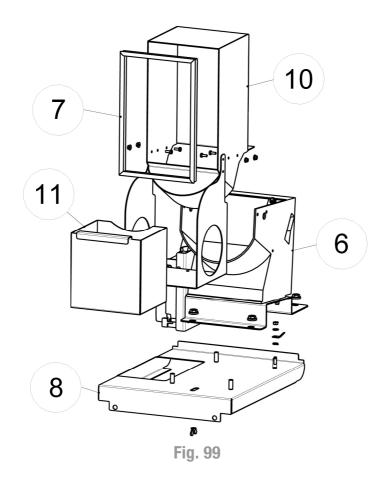


Fig. 98

POSITION	CODE	DESCRIPTION
2	1076-20-0025-B	BOTTOM BOLT
3	1076-20-0024-B	UPPER BOLT
4	1076-20-0023-A	DUCT FOR GOOD LUCK CUP
10	1078-30-0600-A	LOADING COINS SHELF GROUP
11	30-1067-05A	LCD 192X64 BLU 3,3V DISPLAY GROUP

POSITION	CODE	DESCRIPTION
12	1078-30-0700-A	CPU BOARDS GROUP
13	1078-20-0014-A	LOCKING DRAWER STAKE
14	1078-20-0013-A	STAKE FOR DRAWER CLOSING
15	1076-20-0026-A	ROD FOR DOOR CENTERING
16	1078-20-0001-A	DOOR
17	SZ/26-1338-96	RECTANGULAR 52x37 BUTTON WITH BACK LIGHT - BLUE / WHITE
18	1078-20-0010-A	BEZEL PLATE NV11
21	1076-20-0022-A	COLLECTION COMPARTMENT BOX
22	1078-20-0008-A	HOPPER COINS SLIDE
23	1076-20-0021-A	COLLECTION COMPARTMENT SLIDE
24	30137000000181A	CYLINDER INSERTING LOCK [CISA 46270- 35]
25	SSTCPKD/2	ELECTRICAL LOCK WITH PERMANENT CONTACT
26	30137000000166A	STS LOCK MOD 3953 MEGA 6 KEY (40 = 30+10)
27	SCT17KD	TUBULAR LOCKS 17 mm KD
28	1041-20-0012-A	CASH LED CLAMP
30	27-13917A	SMART HOPPER WARNING NAMEPLATE
31	C6-T-6-5-4	LITTLE TUBE external diameter 6 internal diameter 4 height = 5
32	20-13916A	GLASS FOR DISPLAY

## 13.3 Loading coins shelf (Cod. 1078-30-0200-A)



POSITION	CODE	DESCRIPTION
6	1076-30-0800-A	LOADING COINS GROUP
7	1076-20-0007-A	GASKET FOR COINS HOPPER CHANNEL STOP
8	1078-20-0006-A	LOADING COINS SHELF
10	1076-20-0006-A	HOPPER TANK FOR LOADING COINS
11	1078-20-0003-A	TANK FOR LEFTOVER COLLECTION
	GEH003000012-C	RM5 HD G - Swing

## 13.4 Loading coins group (Cod. 1076-30-0800-A)

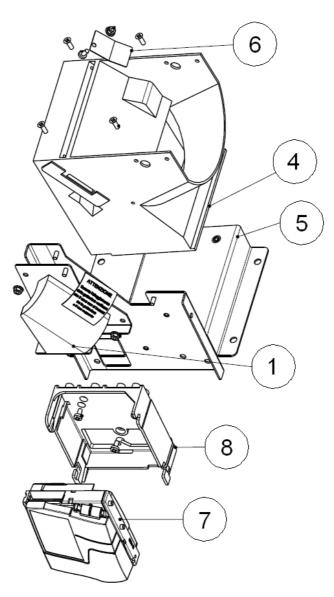


Fig. 100

POSITION	CODE	DESCRIPTION
1	20-13940-B	COINS AND TOKENS DUCT
4	CM/HOPPER/AZK-M	HOPPER AZKOYEN
5	1076-20-0005-A	FIXING PLATE COIN VALIDATOR - HOPPER
6	1076-20-0059-A	PLATE HOPPER LOADING
7	GEH003000012-C	RM5HD G – SWING
8	RMGRSUP/U/EL	"U" SUPPORT FOR COIN VALIDATOR

# 13.5 Smart Hopper group (Cod. 1078-30-0300-A)

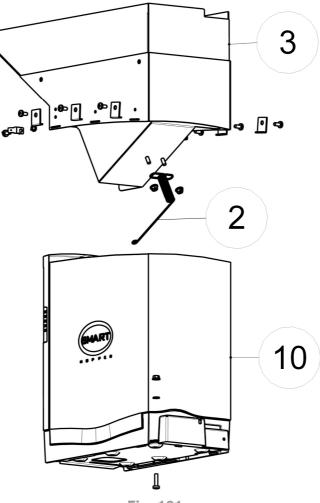


Fig. 101

POSITION	CODE	DESCRIPTION
2	1041-20-0036-A	COINS GROUND SPRING
3	1078-20-0007-A	SMART HOPPER EXTENSION
10	LS/SMARTHOPPER-LS1	SMART HOPPER "SMART COMPATIBLE"

## 13.6 Smart Payout group (Cod. 1078-30-0400-A)

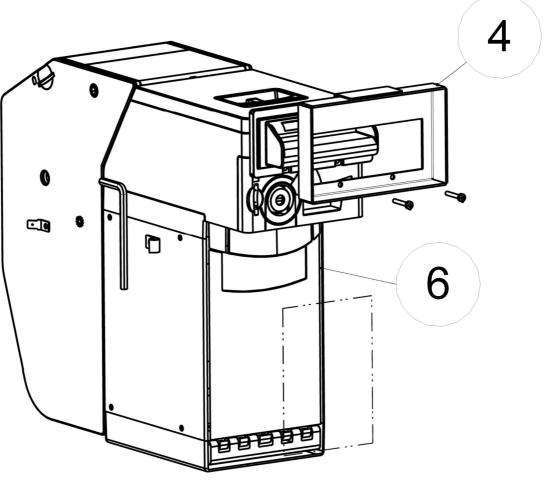


Fig. 102

POSITION	CODE	DESCRIPTION
4	1078-20-0009-A	SMART PAYOUT BEZEL PLATE
6	LS/SMARTPAYOUT-CCT	SMART PAYOUT CCTALK

# 13.7 Cash group (Cod. 1078-30-0500-A)

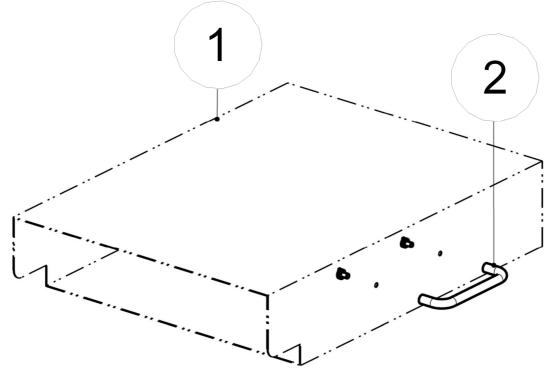


Fig. 103

POSITION	CODE	DESCRIPTION
1	1078-20-0011-A	COIN CASH
2	C6-401/2	HANDLE

### 13.8 Loading coins drawer group (Cod. 1078-30-0600-A)

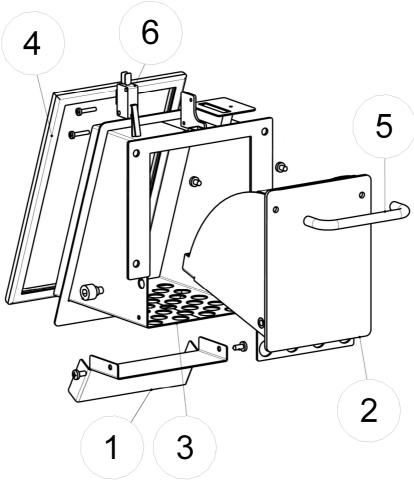
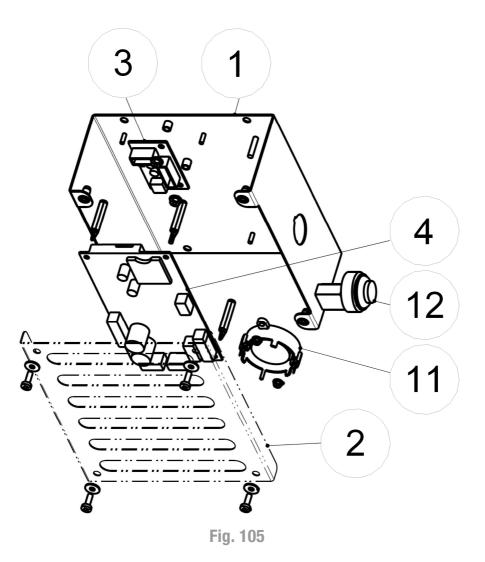


Fig. 104

POSITION	CODE	DESCRIPTION
1	1078-20-0004-A	CARTER PROTEZIONE DISPLAY
2	1076-20-0031-A	LOADING COINS DRAWER
3	1076-20-0008-A	LOADING COINS DUCT
5	C6-401/2	HANDLE
6	CP31D4FM40V101A	MICRO SWITCH

## 13.9 CPU boards group (Cod. 1078-30-0700-A)



POSITION	CODE	DESCRIPTION
1	1076-20-0018-A	CPU GROUP SUPPORT
2	1076-20-0019-A	CPU BOARD CARTER
3	20514000000120A	ASSEMBLED BOARD REGV
4	20514000000133A-SW	MCB1 REV5 ASSY3 GSM COLL BOARD FOR SWING
11	CA33KPEG182-LAV	KINGSTATE KPE-182 ALARM
12	P500/A0146/A-V	CHROMED GREEN BUTTON

### 13.10 Silkscreen and labels



Fig. 106

### 13.11 Cables

CODE	DESCRIPTION
1076-40-0003-B	Battery cable for Rock Rev. B
1076-40-0005-B	Cabled Transformer Rock REV.B

CODE	DESCRIPTION
1076-40-0006-B	ccTalk cable RM5HD Rock REV.B
1076-40-0007-B	ccTalk cable for upper hopper Rock REV.B
1078-40-0004-A	Lighting cable + Swing buttons
1076-40-0018-A	CEP frontal door Rock REV. B ground cable
1076-40-0019-A	CEP/Cass. estra. upp. REV B. ground cable
1076-40-0022-A	Smart Hopper/Payout data/power cable
1078-40-0001-A	Smart Hopper slide CEP ground cable for Swing
1078-40-0002-A	Smart Hopper slide/extension ground cable
1019-40-0009-A	EASY ADVANCE alarm cable
C4-22-11599	Filter cabinet ground cable
C4-22-13902B	Display cable for Nexus PRO
1000-40-0037-A	Cable adapter display NEXUS PRO / SWING / ROCK
1078-40-0005-A	Data + power cable Payout and Smart Hopper
1076-40-0020-A	Lower CEP/cass. estr. ground cable
1078-40-0003-A	NV11 data/power cable

# nexes

# 14.1 Wiring diagram

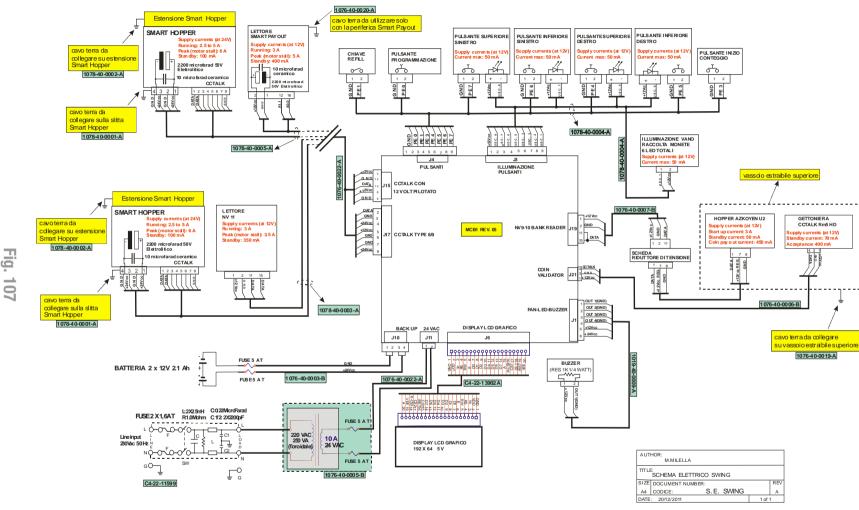


Fig.

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### 14.2 Putting device out of service and waste disposal

At the end of its life, the product must be put out of service and then sent to a waste disposal facility.

Remove the appliance from its installation site, empty the coins and remove the power cable. <u>Get in touch with Comestero by calling +39 02 95781111 to pick up machines that are no longer in use.</u>

The appliance must be disposed of as prescribed by the Legislative Decree 25/07/2005 N. 151.



To this end, we recommend reading the following very carefully.

On December 31, 2006 when Legislative Decree 25/07/2005 No.151 entered into force, precise criteria was laid down concerning Waste of Electric and Electronic Equipment (WEEE) aimed at environmental protection.

This appliance is included in the field of application of the legislative decree 151/2005 Annex 1B article 2 comma 1 being:

### 7.6 A coin / token machine

10.2 An automatic cash or vending machine

In syntheses:

- This appliance must not be disposed of as municipal waste but must be collected separately.
- The dealers will collect the used appliance free of charge to then send it to specific collection centers for proper disassembly and possible recovery of reusable materials.
- Collection centers of waste of electric and electronic equipment (WEEE) have been established. The user may hand over this used appliance to his dealer upon purchase of a new equivalent appliance.
- This appliance or parts of it can cause potentially harmful effects for the environment and human health if used improperly and if not disposed of in conformity with the present procedure due to some substances present in electronic components.
- The symbol of the crossed-off bin applied in a well-and visible manner on this appliance indicates unmistakably that the appliance was placed on the market after August 13, 2005 and must be collected separately.



Penalties foreseen in case of illegal disposal of this waste :

- 1. The distributor who, as supposed in article 6, comma 1, letter b), inappropriately does not collect, free of charge, the electric or electronic equipment, will be fined from 150 to 400 Euros, for each piece of equipment not collected or collected upon charge.
- 2. The manufacturer who does not organize the separate collection system of professional WEEE referred to in article 6 comma 3 and the collection and dispatch systems, of processing and recovering of WEEE, referred to in articles 8 comma 1 and 9 comma 1, 11 comma 1 and 12 commas 1, 2 e 3, and without prejudice, for these last operations, any agreements stipulated in compliance with article 12 comma 6, will be fined from 30,000 to 100,000 Euros.
- 3. The manufacturer who, after August 13, 2005, when placing electrical or electronic equipment on the market, does not provide an economical warranty referred to in articles 11 comma 2, or 12 comma 4, will be fined from 200 to 1,000 euros for each piece of equipment placed on the market.
- 4. The manufacturer who does not apply, in the operating instructions of the EEE, the information referred to in article 13 comma 1, will be fined from 200 to 5,000 Euros.
- 5. The manufacturer who, within one year after placing on the market any new type of EEE, does not make the information referred to in article 13 comma 3 available to reuse centers and processing and recycling facilities, will be fined from 5,000 to 30,000 Euros.
- 6. The manufacturer who, after August 13, 2005, places on the market EEE without the indication or symbol referred to in article 13, commas 4 and 5, will be fined from 200 to 1,000 Euros for each appliance placed on the market. The same fine will be applied should the aforementioned indication or symbol be incompliant with the requirements stipulated in article 13, commas 4 and 5.
- 7. The manufacturer who, without being registered at the Chamber of Commerce in compliance with article 14, comma 2, places EEE on the market, will be fined from 30,000 to 100,000 Euros.
- 8. Any manufacturer who, within the time limit established in article 13 paragraph 8 does not communicate to the National Registry concerning the disposal of EEE as stated in article 13 paragraphs 3, 4 and 5 will be subjected to the foreseen sanctions.
- 9. Without prejudice to the exceptions referred to in article 5 comma 2, whoever after July 1, 2006, places on the market new EEE containing the substances referred to in article 5, comma 1 or further substances identified in compliance with article 18, comma 1, will be fined from 50 to 500 Euros for each appliance placed on the market or from 30,000 to 100,000 Euros.



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