# Laundry One – Pay-per-Service unit for Laundrettes

**Operation manual** 

Rev. 1.03 EN





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### NOTICE

This manual has been drafted with the utmost care. Nevertheless, it is not possible to guarantee at all times the absolute correspondence of the descriptions contained therein with the actual characteristics of the product. Alberici S.p.A. declines any and all responsibility towards the User with reference to damages, losses, or claims of third parties, resulting from the use of the product or caused by incorrect interpretations of this manual. Alberici S.p.A. reserves the right to modify, without prior notice and in any way, any part of this manual and the technical specifications of this product, as part of the continuous pursuit of improvement of its products.

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# List of revisions

Revisione n°	Data	Modifica	Note
Creazione 1.00	28.05.21	Created from Manual – ITA – Laundry One	Firmware v. A1.0.1
Revisione 1.01	23.12.21	Extended functions range	Firmware v. A1.14
Revisione 1.02	28.01.22	Min. duration of activation pulse 100mse to 30 msec. Automatic reset of residual credit extended from 1 'to 2'. Programs activated from the machine: return to standby after 10' in lack of feedback signal	Firmware v. A1.15
Revisione 1.03	16.12.22	Modulo di alimentazione integrato MP1	

Dear Customer,

we would like to thank you and congratulate for your choice. We trust that you will appreciate the quality and performance of our BIG CHANGE control station.

This machine operates by cctalk protocol, the serial communication mode that provides security and precision.

Please pay careful attention to the information highlighted by the following signs:



IMPORTANT NOTICE REGARDING OPERATOR'S SAFETY AND PROPER FUNCTIONING OF THE EQUIPMENT.

IMPORTANT NOTICE REGARDING DANGERS AND RISKS DUE TO ELECTRICITY.

IMPORTANT NOTICE REGARDING DANGERS AND RISKS DUE TO HIGH TEMPERATURES.

GENERAL INFORMATION.

Please read carefully this handbook, to obtain the most from your LAUNDRY ONE Unit

# 1. Package content

La confezione contiene:

- a. The Alberici Laundry One control unit
- b. One pair of keys for the door lock
- c. The power cable (inside the cabinet coinbox)
- d. Master and Service RFID keys for ACS reader; according to order, the requested number of User keys
- e. User manual (this manual).

This product has been packed with the utmost care. If you receive it damaged or incomplete, please notify immediately your findings to the Carrier, and collect it only under conditional signature.

The packing material, wooden pallets included, must be disposed off according to your Country laws and regulations. The product itself, once dismissed, must be disposed off according to the same laws and regulations.

# 2. Product description

### 2.1 Intended use

The Laundry One unit is a centralized automatic cash kiosk for managing (up to) 12 washing machines and / or dryers, or for activating outdoor services from indoor (e.g. battery / water recharge / etc., in areas camping / ports / etc.). The various service lines can be programmed independently, with different prices and activation times. The services can be purchased either in cash or by debit / credit card, or even by an RFID key or card. It can be equipped with a fiscal printer, capable to transmit online the recorded cashed amounts. Credit can be charged to RFID Cards and Keys using the "CARD" button. The software allows to set and modify a wide range of functions, as well as to check cashed amounts and services performed, by accessing the menu from inside the machine, or by viewing it on the display when inserting the Master (or the Service) Card / key into the RFID reader. It is designed for indoor installation and operation.

It can be mounted into a wall recess, or fastened to the wall by means of the dedicated wall-mount slab.

### 2.2 Available functions

- Selection and start of the desired service among the 12 lines available, also simultaneously in operation
- Payment by cash (coins / Banknotes) with change return, or by cashless means (credit cards, debit cards, rechargeable loyalty cards)
- Accounts control on display (only through the onboard keys, or by remote keypad, or by ACS Master Key)
- Free custom-configuration (only through the onboard keys, or by remote keypad)
- (Optional) dispensing of RFID Loyalty Cards
- Courtesy print of receipt (when equipped with optional fiscal printer)
- Automatic transmission of the cash registrations (when equipped with optional fiscal printer)
- Remote monitoring and telemetry (when equipped with optional Hermes Module and subscription to Argo web portal) .

440 mm (face: 452,5) x 755 mm (face: 765,0) x 222 mm (face: 270,0)
122,00 Kg
230 Vac - 50 Hz / 340 W max
0°C ÷ +50°C, humidity min. 20% max. 85% non condensate
Indoor. Recessed into the wall, or fastened to the wall by dedicated slab
Power switching 340W RD-125
Alberici CHANGEONE CCS (Arm II) ccTalk
2 x 16 LCD blue (in-built with ChangeOne CCS pc board)
Alberici 4PR RS485, 24V ac/dc. Each module can control up to 4 x
8A / 250Vac (max 400VAC) lines
OryOne, with 300 banknotes stacker [ccTalk address: 40]
Vega-RC Twin
HopperCD Midi Discriminator ccTalk [ccTalk address: 3] (approx. 700 coins)
Alberici AL66SU ccTalk [ccTalk address: 2]
Alberici ACS Mifare® ccTalk, for RFID keys and cards
Custom VKP80III-F ETH USB RS232 CN Fiscal printer
Card Dispenser CRT-541 RS232, (capacity approx. 220 x 0,2-0,8 mm cards)
VPOS Nayax 3G EU Marshall
Alberici HERMES GPS/GSM/GPRS module (**)

### 2.3 General Specifications

Euro is the default currency. Different currencies can be set by using the Alberici Babbel software.

(\*\*) The system requires the use of an Alberici SIM B2B card, and the subscription to the ARGO web portal.

# 2.4 Reference norms

Throughout the process that led from the design of this machine to its launch on the markets, particular attention has been paid to compliance with the following directives and community standards: 2014/30/CE (ex 2004/108/CE) Directive on EM compatibility

2014/30/CE (ex 2004/108/CE) 2014/35/CE (ex 2006/95/CE) CEI EN 60335 CEI EN 55014 CEI EN 61000-3-2 e 3-3

Directive on low voltage equipments Norms regarding Safety of Electrical equipment Norms regarding immunity to electrical noise Norms regarding Electro-magnetic compatibility

# 2.5 Warnings



- 1 Comply with the instructions in this manual
- 2 Switch power off before any maintenance operation
- 3 Use only indoor and within the recommended temperature/humidity range
- 4 Do not expose the entrance of the note validator and of the coin acceptor to straight direct sunlight or strong artificial light (> 3000 lux)

5 - When in use in environments exposed to exhaust gas or smoke (from cigarettes, etc.), clean and check the components, and in particular the banknote readers, at frequent and regular intervals.

- 6 Do not expose to dust, sand, vapors, liquids, or corrosive sprays
- 7 Wipe clean by a dry piece of cloth (or slightly wet with alcohol)

8 - The note Validator might reject (or get jammed beause of) banknotes that are worn out, cut, wrinkled, crushed, stained, wet, oily or greasy, creased, or including heterogeneous materials (such as sticking tape)

9 - Clean the sensors of the banknote readers monthly, and remove the dust accumulated on the drive wheels, using a cloth or a cotton swab. Do not use alcohol, solvents, or any scratching objects.



# 3. Reception and handling

After testing, the unit and its fittings get carefully packed and separately boxed.

The box(es) get(s) secured to a wooden pallet, so as to reduce to reduce possible damages from loading/unloading and freight operations.

# 3.1 Reception

Make use of a forklift truck to move the boxes.

Before signing the reception papers, check the outer state of the boxes. Then open the boxes and check that the goods have not been damaged during transport. If any damage appears, inform the forwarder and have your complaint written on the reception papers.

Then write "with reserve of further checking" and sign it. Keep a copy signed by the forwarder.

If the unit(s) must be stored before installing it, keep it inside its box, and store it in a place protected against deep cold, heat and humidity.

# 3.2 Opening the box

It is advisable to completely unpack the machine at the place where it is to be installed.

Cut off the tightening belts (take care against possible "whip-lash") and remove nylon covers and protection films. Take out the fastening staples from the box and open it. Take care not to scratch the unit surfaces while pulling it out.

Place the unit in upright position.

Please notice: all the packing materials, wooden pallet included, must be recycled or disposed of in compliance with the existing European, National or local Regulations.

# 4. Dimensions







A'-A'': wall-fastening holes on the dedicated wall-mount slab (LD0-FM01-Z00) B x 4: fastening holes to the recess-mount frame (AA-1602)

# 5. Parts denomination

POS.	ITEM CODE	DESCRIPTION	
А	AE-0501	ON/OFF Mains switch + 6A / 230V fuse	
_	AE-0806 or	Power supply box RD-125 or	
В	A-PW0002	MP1 integrated Power Module, with Hub pcl	C
С	SH-5B21	ChangeOne CCS (Arm 2) pcb, with 2 x 16 blue display	
D	CH-CC01-0001	ACS reader for RFID cards and keys	
E - E'	PL-MR14-E600 PM-M186	13 x Round 14 illuminated pushbutton 13 x MP17, RGB-led 12V light holder	
F- F'	PL-MR33-E600 PM-M186	3 x Rect. 33 illuminated pushbutton 3 x MP17, RGB-led 12V light holder	E
G	HP-C834 o HP-Q134	HopperCD Midi Discriminator or else HopperCD Midi single denomination	١
н	LB-MU02-0004	OryOne note validator (stacker 300 banknotes) without bezel	Ν
I	GE-66SU	AL66S cctalk coin acceptor	(
J	IM-N000-0L10	Flush PP coin slot	
к	CH-EN0E-0100	RFID Cards CRT-541 dispenser 12V, RS232 (option)	
L	A-CM0058	CRT-541 interface pcb	
М	AA-0177	P4 concentrator hub pcb	
Ν	AA-1601	12P pcb for illuminated pushbuttons	
0	S-020934-000	6-blue led strip	
Р	LND-AM01-Z00	Coin box	
Q	C-070103-000	Double latch / 4-hook security lock	
R	AE-1303-0500	Custom VKP80III-F ETH USB RS232 CN fiscal printer (option)	
S	CH-CC01	Nayax VPOS 3G EU-Marshall (option)	
Т	A-CM0059	Nayax VPOS Touch Interface pcb (option)	
U	AA-0170	HERMES GSM/GPRS + GPS Module (option)	
V	AE-0103	Anti-tamper switch (option – being part of the Hermes module kit)	e
W	LND-MB05-V0L	Hopper-refill rear access plate	
Z	SH-44CN	4PR peripheral module, commanding up to RS485, service lines, 24V ac/dc	4

1 x SH-44CN module is necessary to drive from 1-to-4 service lines. 2 x SH-44CN modules are necessary to drive up to 8 service lines. 3 x SH-44CN modules are necessary to drive up to 12 service lines.

### 5.1 ANTI-NOISE FILTERS (included):



- One (1) Ferrite 145/246 OHM 100 MHZ code S-120108: place around the power supply cable, just outside the slot for the connection cables (back face of the machine).

- Two (2) ferrites 115/153 OHM 100 MHZ code S-120109: slip one around the 4PR cable just outside the slot for the connection cables (back face of the machine). Slip the other one around the opposite end of the same cable next to the 4PR module.





F - F'

D

R

С

# 6. Installation

### 6.1 Cautions and dangers to pay attention to when installing



L'installazione va eseguita da tecnici qualificati nello svolgimento delle attività di movimentazione, preparazione del sito e posizionamento, collegamento elettrico, e messa in opera.



Handle the equipment safely. Make use of safety gloves and shoes. Take care of stability, to prevent any risk of danger to people.

Keep power supply disconnected during installation and during any further maintenance or servicing. Do not modify the circuits in the unit. Any change could impair the correct functioning of the safety circuits.



The power line must comply with the CEI Norm 64-8/7. The section of the ground lead must not be smaller than the size prescribed by the CEI Norm 64-8/4. It is recommended that the line be placed under the protection of a 16A differential switch, so as to make it easy to take power off when servicing



300

С

Ζ"

80

Α"

Z'

a

A'

6.1 Mounting

# 6.2.1 Wall-mount by fixing slab



IT IS ESSENTIAL TO FASTEN THE UNIT TO AN UPRIGHT SOLID WALL. THE WALL MUST BE SOLID ENOUGH TO SUPPORT THE HANGING WEIGHT OF THE UNIT. IT IS RECOMMENDED TO MAKE USE OF THE DEDICATED SLAB (**LD0-FM01-Z00**) supplied with the machine.

- 1. Place the cabinet at the desired position.
- 2. Provide a 230v / 50 Hz/16A socket, with ON/OFF switch and fuse
- 3. Mark on the wall the spots corresponding to A', A", Z', Z", Z", and Z"" holes.
- 4. Prepare the electrical cables exit aligning with the C cut-out.
- 5. Drill two holes at approx.. 50 mm above the two spots, and slip two strong wall plugs in for  $\Phi$  12mm screws.
- 6. Fasten the support slab to the wall by  $\Phi$ 12mm screws, through its X'-X" holes.
- Fasten the cabinet to the support slab by Φ12 screws, through the 2 holes (A'-A" located on the cabinet rear upper side) and the slab 2 lower holes (Y'-Y").
- 8. Fix the unit to the wall by the Z'...Z"" holes.



### 6.2.2 Wall-mount, recessed



IF THE WALL IS NOT AS THICK AS THE CABINET (approx. 220 mm), MAKE SURE IT IS SOLID ENOUGH TO SUPPORT THE REAR OVERHANGING BURDEN OF THE UNIT WITH ITS EMBEDDING FRAME.

MAKE USE OF THE DEDICATED LAUNDRYONE EMBEDDING FRAME (AA-1602).



- Preset a 450x765 mm cut-out for housing the framebox and the unit (overall size = 449 x 764 x 209,5 mm).
- Provide a 230v / 50 Hz/16A socket, with ON/OFF switch and protection fuse
- Place the frame in the niche and detect the 4 fixing positions, corresponding to the 4 passing bars S (center distances 540 x 860 mm), in which the wall holes must be drilled.
- Drill the 4 holes for the S bars of the embedding frame.
- Push the embedding frame into the niche until the frame bezel rests against the wall.
- Standing at the wall rear side, fasten firmly the 4 bars by nuts and large washers.
- Push the cabinet inside the embedding frame until the front bezel rests against the frame bezel.
- Fasten firmly the cabinet to the embedding frame by the 4 aligned  $\Phi$ 12mm rear holes (B).
- Slip the power cable in until inside the equipment, and plug it into the mains socket above the power supply box, next to the main on/off switch (marked 0/1).

- Slip the RS485 cable in (it will provide the communication to the peripheral 4PR modules) and connect it as described in section 6.3.2.

- Draw the cables between the 4PR modules and the machines to be controlled (washing- and drying-machines). They must be connected as described in section 6.3.3.

# 6.2 Electrical connections

### 6.3.1 CcTalk connections (between the Change One main pcb and the Concentrator Hub pcb)

6.3.1.A MODELS WITH MP1 POWER MODULE AND INTEGRATED HUB PCB



6.3.1.B MODELS WITH SEPARATE POWER BOX AND HUB PCB



### 6.3.2 Connections for Fiscal Printer

The optional fiscal printer incorporates the device prescribed by the Italian fiscal regulations for the automatic transmission of payments received. It must therefore be connected to the Internet by an Ethernet cable. Alternatively, a SIM Card can be used for GSM/GPRS connection.

### 6.3.3 RS485 connections between Laundry One and Peripheral 4PR Modules

Each 4PR Module can manage up to 4 service lines (e.g. 4 washing machines, or 3 washing machines and 1 dryer, or 2 washing machines and 2 dryers ..., 4 dryers).

Each service line must be activated via the 4PR Modules. In turn, the 4PR Modules are driven by the RS485 port (green connector, 5 terminals) located on top of the power supply box, next to the main switch. The RS485 line consists of four wires: + 24V, GND, Data -, Data +.

Slip the cable through the rear cut-out available at the rear top of the cabinet.

The 4PR Modules must be connected to each other in cascade: match each module to its own serial address, e.g. : 4PR Module n°. 1 = address 0, 4PR Module n°. 2 = address 1, 4PR Module n°. 3 = address 2, and so on..... Set the address of each module by the SW1 16-position rotary switch. The rear part of the 4PR module is designed to hook onto the DIN bar always present in the commercial switchboard boxes complying with safety regulations.



The image below depicts a connection of three 4PR Modules in cascade, capable to drive up to 12 service lines: R5485 DATA -



PAY ATTENTION: terminate the bus cable on the last (or single) 4PR module, by shorting pin 4 of the "Data+" connector to the pin next to it (pin 3).

If electromagnetic noise is expected to affect the electrical system, and if the connection cable exceeds 9m-lenght or if connection breakdowns between the machine and the modules are experienced, use a shielded cable (do twist the two wires carrying the DATA+ and DATA- signals): connect the shielding sheath to the EARTH pin of the green connector

(near the machine's power button). It is not necessary to connect the sheath to the 4PR module.

### 6.3.4 Connections between the 4PR Modules and the washing/drying machines

The various service lines (eg CH1, ..., CH4) must be connected to the outputs of the relays RL1, RL2, RL3 and RL4. Such relays are located on the 4PR module (OUTPUT terminals); each relay can operate as normally closed (N.C.) or as normally open (N.O.) mode: the activation cable must then be connected between the common terminal (C) and the N.O. terminal if the machine needs a closing circuit (continuity between the wires = line active), or between the common terminal (C) and the N.C. terminal if the machine needs an opening circuit (continuity between the wires = line active). Each relay can manage to a current of up to 8A at 250VAC (max 400VAC).

If one or more lines (e.g. OUTPUT: RL3 = CH3) return a continuous "busy" signal that will stop at the end of the washing/drying cycle, the cable carrying such signal must be connected to the corresponding input (e.g. INPUT: IN3). While the relay contacts are closed (relay activated), the corresponding orange LED lights up (LED 1-4). While the busy signal is present on the input, the corresponding green LED is illuminated (LED 5-8). The duration and the price of the cycle of each machine must be set from the menu. For programs corresponding to a user with a "busy" signal, the end of program signal must be enabled (see chapter 7 and section 9.2.2.7).

NOTE: Generally, dryers do not provide the busy signal, while washing machines are designed to send it. It follows that when a dryer is running, its cycle can be extended by adding money; on the other hand, washing machines will not accept extensions of their activation time once the program has started.

However, the Installer is strongly recommended to check the type of operation required by each machine.



### 6.3.4 Installing the POS Terminal

Depending on the type of POS that the machine has been requested, the relevant interface with cable is provided among the accessories (find it inside the cashbox):



>

POS

Enabled

# 7. Starting-up

Connect the power cable and turn the main switch on (change position from 0 to 1). The unit will perform a short self-check and will go to stand-by condition.

The Laundry One is programmed, during the production final test, to operate by the settings below:

Coin acceptor AL66S	ENABLED:	€0,10 - €0,20 - €0,50 - €1,00 - €2,00
OryOne Note Validator	ENABLED:	€5,00 - €10,00 - €20,00
HopperCD Discriminator Midi (Euro fixed setting)	ENABLED:	€0,50 - €1,00 - €2,00
HopperCD single-coin Midi (for non-Euro versions)	TO BE PROGRA	MMED FROM THE DISPLAY MENU
Price and duration of the starting pulse	EMPTY ()	
End-of-cycle signal	DISABLED	
Price of RFID Card	5,00€	
PIN code	0000	
Machine Code	0	

If the unit must be used according to different settings, the factory configuration can be modified: moreover, when the Laundry One is switched on for the first time, the display will prompt you to **SET the price of the 12 programs, and the duration of each of them**.



To change the factory default configuration, follow the instructions given in chapter 9. Configuration.

It is also necessary to fill the coin hopper and, if existing, the RFID card dispenser. It is possible to fill the devices without keeping track of the amounts and quantities loaded. However, in order to maintain correct and precise accounting statistics, it is recommended to carry out the Manual Refill procedure, illustrated in section 9.2.2.4 F.

To offer customers the possibility to pay with RFID cards, and to top up the contained credit on the machine, the ACS RFID reader must be first initialized, as well as the Master/Owner card, the Manager / Operator card (this is used generally for Service operations), and the User cards to be provided to the Customers (see Section 9.2.2.4 C). If the unit includes the card dispenser, the ready-to-use User Cards can be inserted in its dispenser stacker.

In the stand-by condition, the buttons of all available programs are illuminated in blue light.

# 8. Operation

Never operate the unit when the door is open. Always disconnect the power line before opening the unit..

When switch the machine on, the display shows the following:

LAUNDRYONE CASH & WASH





If the machine is equipped with a POS terminal (Nayax, Valina, or Payter), the invitation to insert a loyalty RFID card/key or cash alternates with the following instruction:

>





When in standby, the buttons of the 12 programs and of the 3 available functions ("LANGUAGE", "CARD", "CHANGE") illuminate in blue colour.

By pressing any of the 12 program pushbuttons before inserting money, the display shows the price of the corresponding service, matching with the number of the corresponding machine that can be started: insert the necessary amount, or a loyalty RFID card containing sufficient credit (see Section 9.2.2.4 C). If, when starting the program, the required value is not reached, the display shows:





The LAUNDRY ONE is equipped with a multi-coin discriminator hopper for dispensing any changes and, if the function is enabled from the menu (see Section 9.2.2.4 N), for changing banknotes into coins.

If the hopper is empty and the change mode is enabled, the following warnings shall alternate:





and the 'CHANGE' button lits up in red light.

If the hopper is empty and the change mode is disabled, the following warnings shall alternate:



When pressing the "CARD" button, the programmed Card price is displayed (cfr. Section 9.2.2.4 E):



If the Card dispenser stacker is empty, the following warnings shall alternate:



and the 'CARD' button lits up red.

# 8.1 Purchase with cash money or with loyalty RFID Card/Key

Insert the necessary amount, or a loyalty Card or Key containing sufficient credit (see Section 9.2.2.4 C). If the price requested by the desired program is not reached, when pressing the relevant button the display shows the price to be reached and the warning that more money must be added:



If the price has been paired or exceeded, the display shows:



At the same time, the pushbuttons of all programs that can be activated by the amount introduced will light up in green colour. The "CARD" pushbutton (for loading credit on cards or RFID keys) lights up in red and gets disabled. Press the button corresponding to the desired program: it will flash yellow through the entire duration of the washing or drying cycle. If the pushbutton remains lit in still yellow light, it is necessary to press the Start button of the dryer or washing machine, or to shut its door in order to start the service cycle.

The time missing to the end of the cycle will be briefly displayed:



During the performing of the service, the display shows which program(s) is / are active:



If the machine also requires direct activation, for example that its door gets shut or its Start button is pressed, the calculation of the duration shall start from the moment in which activation takes place.

If the price of the chosen program is less than the entered amount, the leftover change will be returned in coins.

Rest:	1,00 €
Paid	0,500,40€

per Until all the change has been returned, it will not be possible to purchase another service.

While one or more programs are running, any program among the other inactive ones can be purchased and started, up to a maximum of 12 lines activated simultaneously.

*Credit accumulation*: if this function is enabled (see Section 9.2.2.8 E), while the service is in operation additional credit can be inserted; then, to extend proportionally the standard duration of the cycle, press the button of the program in progress and confirm the invitation appearing on the display :



The added amount must be equal or multiple to the service price, i.e.: service price =  $2 \in$ , credit to be added =  $2 \in$  or  $4 \in$  or  $6 \in$ , and the like.

### 8.2 Purchase with POS (credit or debit card)

Press twice the button of the desired program; the display will show:



Swipe / place the card as indicated on the POS screen: if the washer / dryer is ready to start, the relative amount is taken from the Card account, and the program button flashes yellow for the entire duration of the washing / drying cycle. If the machine also requires direct activation (still yellow light from the program pushbutton), for example that its door gets shut or its Start button is pressed, the calculation of the duration shall start from the moment in which activation takes place.

During the performing of the service, the centrifuge symbol shows on the display which program(s) is / are active:



While one or more programs are running, any program among the other inactive ones can be purchased and started, up to a maximum of 12 lines activated simultaneously.

# 8.3 Purchase of loyalty RFID CARDs

Insert money or Credit/Debit card / Loyalty Card, and press the "CARD" button: the Card will be dispensed. If change must be returned, the display shows the rest amount diminishing while it is paid out:

Rest:	5,00 €
Paid:	5,00…4,00€…

*How to recharge the Card (or a Key)*: insert cash money equal to the amount to be loaded onto the Card/Key, then remove the Card/Key. The Card/Key shall automatically retain the topped-up credit.

# 8.4 Change into coins

This function is available only if it has been enabled by the menu (cfr. Section 9.2.2.4 N). Insert money and press the 'CHANGE' button:

Credit:	10,00 €
Paid :	9,00…0,00€…

# 8.5 Change display language (Courtesy language for Users)

Press the "LANGUAGE" button to select the desired option:



After confirming the desired language, if through 60 seconds no operation is performed, the default language chosen in the Settings Menu gets automatically restored (see Section 9.2.2.10).

# 9. Set Up the machine functions by the Menu

### 9.1 Set Up Menu

During the Factory final test, the Laundry One unit is programmed to operate by the below settings:

Coin acceptor AL66S	ENABLED:	€0,10 - €0,20 - €0,50 - €1,00 - €2,00
OryOne Note Validator	ENABLED:	€5,00 - €10,00 - €20,00
HopperCD Discriminator Midi (Euro fixed setting)	ENABLED:	€0,50 - €1,00 - €2,00
HopperCD single-coin Midi (for non-Euro versions)	TO BE PROGRA	MMED FROM THE DISPLAY MENU
Price and duration of the starting pulse	EMPTY ()	
End-of-cycle signal	DISABLED	
Price of RFID Card	5,00 €	
PIN code	0000	
Machine Code	0	
Restore from Outage:	DISABLED	
Service time:	24h / 24h	
Money-Changer function:	ENABLED	

If any changes are made, it will still be possible at any time to return to the default configuration: see Section 9.2.2.5.



By creating a Backup Card (see Section 9.2.2.4 C), it is possible to save on it (export) the configuration of a Laundry One machine, and to transfer such configuration to other Laundry One units (import): see Section 9.2.2.6 and Chapter 11.

# 9.2 Setting Menu functions

### 9.2.1 SURF THE MENU

To enter the menu, press simultaneously for 5 seconds the 3 keys ("+", "-", "OK") located on the pcb behind the display, or the keys of the external keypad. To navigate the menu, use the "+" and "-" keys.



Notice: access to some sub-menus requires the Operator to enter the unit PIN code (see Section 9.2.2.7).

### 9.2.2 MENU STRUCTURE

When entering the Menu, the first available choice is the "SHOW PERIPHERAL UNITS" function. The "+" and "-" keys respectively allow forward and backward navigation. To get access to any function, press the "OK" key, then navigate it by the "+" and "-" keys. Confirm any choice by the "OK" key.

OK

+

Confirm selected item ;

modify figures or letters

modify figures or letters

Navigate the menu;

Navigate the menu:

### 9.2.2.1 SHOW PERIPHERAL UNITS

This menu allows to check the state of the PERIPHERAL UNITS in the system. The peripheral devices may be present, or absent (i.e. not connected, if physically present), or in error, or empty (e.g. Hopper and Card dispenser):



Con questa funzione si può verificare se un malfunzionamento è causato da componenti in errore o scollegati. Premendo il tasto "OK" si entra nel dettaglio: lo stato della gettoniera è il primo che viene visualizzato, es.:



To check the status of each device, press the "+" key repeatedly:



Press the "OK" key to return to the main Menu.

### 9.2.2.2 SHOW ACCOUNT RECORDS

This function allows to check the total (Total In) and the partial values (cash and cashless) of cashed and paid amounts. It is also possible to check the productivity of each Service line.



Press "OK" when in Exit to switch to the next sub-menu.

### 9.2.2.3 RESET ACCOUNTS

This function allows to cancel the account records (both paid out and cashed in) of the machine.



The first option appearing is the Reset of Total records. To reset only the Partial records, press the "+" key.

9.2.2.3A Reset Total records



For each of the 4 digits of the PIN, use "+" or "-"to highlight the wanted digit, then confirm by "OK". Once the 4<sup>th</sup> digit has been confirmed, the Reset will automatically start:



Notice: the cancellation of the Totals does not include the data relating to the Programs Counters, which must be reset via the dedicated menu item (see below: "Reset Partial Records").

### 9.2.2.3B Reset Partial records

It is possible to cancel all records in the Partial Accounts in one shot, except the ones of the Utility Counters, or each individual item can be cancelled separately (including that of the Utility Counters):

Press OK to cancel all the Partial Accounts in one shot, except the ones of the Utility Counters; else, press "+" to get access to each individual item:



(\*) when resetting this register the Counter data of all 12 programs get cancelled. It is not possible to delete the Counters of an individual Program.

(\*\*) when resetting this register, its data get transferred to the Outputs register. Therefore it will not be possible to trace back how much remained credit has not been paid by the coin hopper.

By the "+" key navigate until 'Exit', then press the "OK" to go to the next function:



### 9.2.2.4 SET UP PERIPHERAL UNITS

The



sub-menu allows to:

- A) enable the note denominations that will be accepted;
- B) enable the coin denominations that will be accepted;
- C) initialize the ACS reader and the RFID Cards / Keys (Owner/Master, Manager/Operator, User);
- D) mark the machine by a unique identifying numerical code (000-254);
- E) enter / modify the purchase price of the Cards dispensed (if the machine includes the dispenser);
- F) refill the coins into the change-returning hopper and record the refilled amount (Manual Refill);
- G) refill the Cards in the stacker of the Cards dispenser (if the machine includes the dispenser);
- H) enable/disable operation of the Card dispenser (if the machine includes the dispenser).
- I) enable and disable the POS Terminal, and choose it among Nayax, Valina, and Payter;
- L) set the value of the Bonuses in relation to the amounts loaded by the Users on their loyalty Card/Key;
- M) set the calendar date;
- N) enable the Money Change Mode, which allows the machine to change money to  $2 \in -1 \in -0.50 \in \text{coins}$ ;
- O) set up the Hermes GSM / GPS module for remote control, if present in the machine.

Press "OK" to access to the setting of banknote acceptance.

### 9.2.2.4 A: Set up the Note Validator



Press again "OK" to view the existing setting:

5	10	20	50	100
<u>OK</u>	OK	OK	NO	NO

Press "+" or "-" to change OK (=enabled denomination) to NO (=disabled denomination) or back. Confirm by "OK" to go to the next denomination. Once finished setting all the denominations in the list, the display returns to "Set Up Note Validator". Press "+" to go to:

### 9.2.2.4 B: Set up the Coin Acceptor

Set up
Coin Acceptor

Press "OK" to view the existing setting::



Press "+" or "-" to change OK (=enabled denomination) to NO (=disabled denomination) or back. Confirm by "OK" to go to the next denomination:

0,20	0,10	0,05	
<u>OK</u>	OK	NO	

Once finished setting all the denominations in the list, the display returns to "Set Up Coin Acceptor". Press "+" to move to the next function.



Before initializing the Card / Keys reader and the Cards / Keys, the owner of the Owner/Master key (generally black colour key) must:

- *i.* establish an initialization code (PIN) with 6 alphanumeric characters, write it down and keep it in a safe place, to reuse it (if necessary) later;
- ii. create and enter the machine code (see Section 9.2.2.4 F);
- iii. create and enter (see Section 9.2.2.6 Change PIN Code) the machine's 4-digit PIN code, write it down and keep it in a safe place.

All the Cards / Keys initialized on the devices that share the same PIN as the machine's PIN will be matched automatically to this machine. Therefore, they can be used only and on all such devices sharing the same PIN, while the Cards / Keys combined with other PINs will not be recognized as compatible.

Depending on whether the PIN remains the default one (0000), or whether it is set with a different combination (e.g. 1234), there will be two operation modes:

i. Machine PIN = 0000 > all Cards / Keys will have access to the services offered by the machine. ii. Machine PIN = (e.g.) 1234 > only the Cards / Keys programmed by the Owner with code 1234 will have access to the services offered by the machine(s) with code 1234.

Even when Cards / Keys are initialized with the ACR Programming Station, the PIN of the machine on which these Cards / Keys can be used must be memorized in each of them.

When accessing this submenu for the first time, the display prompts the Operator to initialize the Cashless ACS reader: confirm by the "OK" key. The display will request to enter the 6-digit password PIN.



Select the first digit using the "+" and "-", and confirm it with "OK". Repeat the operation for each of the next 5 digits.

The display will now ask to confirm the entered 6-digit code; insert it again: the initialization of the ACS Cashless reader will then be started. At the end, the display will confirm that the ACS reader is ready,



and will return to the configuration menu. It is possible, now or at a later time, to initialize the Master Card/Key, the Operator Card/Key, and / or the User (Type 1 or 2) Cards/Keys: select the "Initialize Cashless" option by the "OK" key, and insert the desired Card/Key.

Master and Manager Cards can only be created using Chip Cards CH-2N01.

User Cards and Back-up Cards can only be created from Standard Cards CH-2N02 or CH-2N03.

Initialize	"OK"	Enter PIN
Cashless	ON	

This time enter the machine PIN, that is the 4-digit code (see Section 9.2.2.6).

By pressing the "+" key, the display will prompt to choose among: Master/Owner, Operator/Manager, Type 1 User and Type 2 User, 'Back-up card', and 'Exit'; confirm the desired option by "OK", for instance:

Operator (white)	"OK"	Insert Card / Key to be initialized
---------------------	------	--

do not remove the Card / Key during the initialization process, until you read the confirmation that the Card / Key has been initialized. At this point the initialized Card / Key can be drawn out.



If (and only if) a User Card / Key has been initialized, it is possible to load it with a programmable amount:



Should the initialization function been accidentally accessed, to exit it press the "+" key until the "Exit" option is displayed, then confirm.



If the Card / Key is damaged or incompatible, the message below will appear:



### Top up credit on the User Card / Keys:

User Cards / Keys can be loaded with credit in the following ways:

- 1. By the User, from the ACS reader of the machine: insert the Card/Key into the ACS reader of the machine; insert money, and follow the instructions appearing on the display;
- 2. By the Owner/Manager: via the ACR Programming Station (K-P4N-000007, connected to PC), by using the credit loading software;
- 3. By the Owner/Manager (for keys only): using the independent Key Loader One device (TB-L6A2).



ACR Programming Station (K-P4N-000007) for RFID Cards / Keys



Key Loader One (TB-L6A2) charger for RFID Keys only

Whenever the Master Card/Key or the Manager Card/Key is inserted in the ACS Reader, it automatically downloads all the Account Records data. Each key can contain up to 10 sets of downloads, either from the same unit or from different units. These data packets can be read and stored on the PC via the ACR Programming Station (K-P4N-000007) and the corresponding Alberici ACR software.

### 9.2.2.4 D: Set up the Machine Code

The (numerical) code of the machine makes it possible to identify, among the various data packets downloaded from the Card / Key of the Master or of the Manager / Operator), to which machine a particular packet belongs.



The code can be assigned by choosing among 256 identifiers, available from 0 to 255.



By pressing the "+" key, find the number to be assigned to the machine, and confirm it by pressing "OK". By holding down the "+" key, the numbering pace accelerates: if the number sought is exceeded, go back by using the "-" key.

### 9.2.2.4 E: Set up Card purchase price

This option is available when the machine is equipped with Card Dispenser, and the latter's operation has been enabled (9.2.2.4 H):



Press the "+" key to increase the price, or the "-" key to decrease it. Each touch of the keys increases or decreases the value by € 0.50. Confirm the chosen amount by the "OK" button.



### 9.2.2.4 F: Manual Refill of Coins



Count carefully exact amount in mixed coins (€ 2 - € 1 - € 0.50) that the Discriminator hopper must be filled with, and put the coins into it. Press the "OK" button to update the recorded amount, and press the "+" button until the amount entered is reached. Each touch of the button increases the value by € 0.50. If the amount to be entered is exceeded, correct it by the "-" key. Confirm the present amount by the "OK" button.



The left side of the display shows how many coins are available in the dispenser (ex.: 125,50 €). If more are inserted to the count (ex.: 13,50 € - see right side of the display) and the add-up is confirmed:



the total amount available in the hopper gets automatically updated in the left column (e.g. € 139.00) and shown as the Coins Refill function is accessed again:



### 9.2.2.4 G: Manual Refill of Cards into the dispenser stacker

This option is available when the machine is equipped with Card Dispenser, and this one has been enabled (9.2.2.4 H):



Count exactly how many cards shall be placed in the stacker, and load them. Press the "OK" button to update the amount, athen press the "+" key until the loaded quantity is reached. Whenever touching the key, the value gets increased by 1 piece. If the amount to be entered is exceeded, correct it by the "-" key. Confirm by the "OK" button.



No. of Cards available "+"... "+" liv = 0,00 + Ref = <u>8</u>

The left side of the display shows how many Cards are available in the dispenser (ex.: 7 pieces). If more are inserted to the count (ex.: 5 pieces - see right side of the display) and the add-up is confirmed:

the total amount available in the stacker gets automatically updated in the left column (e.g. 12 pieces) and shown as the Coins Refill function is accessed again.

### 9.2.2.4 H: Enable the Card Dispenser

Enable Card Dispenser

"+"… "+"

When the machine is equipped with the card dispenser, the latter can be disabled / enabled. Should the Operator prefer not to dispense cards on certain occasions, he can disable the Dispenser from the menu, without disconnecting it.

Press "OK" to check the status of the dispenser; to change its status, press the "+" or the "-" key.



Press "OK" to confirm, then press "+" to go to the next function.

### 9.2.2.4 I: Enable / Disable the POS function



Press the "OK" key; the display will prompt to make the desired choice:



When choosing NO, the "Enable / Disable" entry shall be shown again. When choosing YES, it will be possible to select the POS Terminal model that will be used in the machine:



Confirm the desired model (ex. Nayax) by "OK" to enable it:





### 9.2.2.4 L: Bonus Cashless

It is possible to set a Bonus pattern to reward the User who recharges his loyalty Card / Key with credit:



No. of Cards available lev = 12,00 + 0,00 Press the "OK" button to display the first Bonus level in the pattern:



Set the introduced amount (e.g. 5 €) at which the Bonus starts, using the "+" key (correct with the "-" button if the desired value is exceeded). Confirm with "OK" to move on to the setting the amount of the Bonus.



Always set the Bonus to a value higher than the Price established for the washing/drying service (e.g.  $\in$  0.50). Modify by 1c (0.01  $\in$ ) steps using the "+" key (e.g.: 0.51... 0.52... 0.53... and so on).



Confirm by the "**OK**" button; the display will show the Bonus second level:



For each level to be set, repeat the procedure described for the first level. For each level that is chosen, an algorithmic calculation suggests the most likely bonus value. Such value can be then modified to the most suitable amount. If only one Bonus level is necessary, press the "+" key repeatedly to proceed through the levels (without compiling them), until the display prompts for saving or abandon the programmed pattern.



By choosing (with the "+ / -" keys) the YES option, the machine saves the new pattern.

By selecting (with the "+ / -" keys) the NO option, the display prompts to confirm that the newly set pattern must be cancelled:



After any of the two choices, the display returns to the 'Bonus Cashless' entry.

### 9.2.2.4 M: Date and Time

Date and Time

Press "OK" to modify the existing date and hour, and set by the "+ / -" buttons:





Press "OK" to save the new date and time data.

### 9.2.2.4 N: Enable/Disable Money-Change mode



To allow Users to change money, this function must be enabled. Press "OK" button to modify its status, then "+" or "-" to make your choice, and again "OK" to confirm it:



After confirming the chosen status, if the machine is equipped with the Hermes GSM/GPS Telemetry Module, the corresponding set-up entry shall be displayed (see following Section 9.2.2.4 O). If not, the 'Exit' option will appear (see Section 9.2.2.4 P).

### 9.2.2.4 O: Set up GSM/GPRS/GPS Module (only if the Hermes Module is installed)

If the GSM/GPS Hermes module is installed in the machine, the Alberici SIM BtoB card must be inserted in its SIM Card slot. A subscription to the ARGO web portal must also be subscribed in order to remotely control the machine. At start-up, set the required data inside this sub-menu:





Make use of the "+" and "-" keys to find the letter / digit, and press "OK" to confirm it; the cursor will automatically move to the next character. 16 characters are available. Upon confirmation of the last character, the entered name gets saved:



and the display proposes again to SET MACHINE NAME. Press the "+" button to go to the next entry:



When pressing "OK", the system test starts automatically, showing the verification phase and then the test result:

Modulo GSM/GPRS/GPS
Test in progress

GSM/GPRS/GPS Module in service

As the display returns to show "Module Test", press "+" to access the function where to enter (if not yet done) the User Code received when subscribing to the Argo Remote Control Portal.

•••

PLEASE NOTICE: as a standard, the user Code is already saved in the system, for it is entered during the factory test.



Should the User Code need to be changed, use the "+" and "-" keys to find the letter / digit, and "OK" to confirm it; the cursor will automatically move to the next character. 10 characters are available. Upon confirmation of the last character, the entered User Code gets saved, e.g.:



The screen will show again the 'Enter User Code' entry. Press "+" to continue:



The IMEI code is the 15-digit sequence that uniquely identifies each GSM device capable of connecting to a GSM mobile network.

Press "OK" to view the IMEI code of the Hermes module without need to physically find it on the Hermes device.

9.2.2.4 P: Exit



Press "OK" to exit the SET UP PERIPHERAL UNITS section; or press the "+" or "-" key to review or modify one or more of the settings previously made.

### 9.2.2.5 RESTORE DEFAULT CONFIGURATION

This function allows to restore the general configuration of the machine to its factory settings. It is useful, for example, if programming errors have been made:



Press the "OK" button to start the return to the original settings. éAY ATTENTION!: this is a reserved function, therefore the unit requires the PIN code: Premere il tasto "OK" per avviare l'operazione:



Make use of the "+" and "-" keys to set the first digit, then confirm it by the "OK" key. Repeat for each of the following three digits. After entering the fourth digit of the correct PIN, the reset shall start:

Default Config. restored



and the machine will go back to its stand-by condition.



WARNING: in case of reset, the system returns back to its default configuration (see sect. 9.1). The PIN code too will be reset to its default 0000 setting. Account records shall not be cancelled.

### 9.2.2.6 IMPORT SET-UP CONFIGURATION FROM BACKUP CARD/KEY

By creating a Backup Card (see Section 9.2.2.4 C), it is possible to copy on it (export) the configuration of a Laundry One machine, and then transfer such configuration by downloading (importing) it to other Laundry One unit(s): see also Chapter 11. The configuration pavailable on the Backup Card / Key can only be downloaded (imported) to the machine from the Setup Menu (this menu). The Card / Key must already be loaded with a configuration: if an empty Card / Key is used, a configuration must first be exported to the Card/Key in order to align the eeprom mapping. The configuration can only be exported via the Services Menu, which is activated automatically whenever a Backup Card / Key is inserted.



Use the "+" and / or "-" keys to set the first digit; confirm it with the "OK" key, so that the cursor will move to the second digit. Once confirmed, each digit turns into an asterisk, to preserve the secrecy of the code. Repeat the following operation for each digit. Upon confirmation of the fourth digit, the following warning appears:



Should the import fail, this warning will be displayed:

Data saving impossible

Upon successful import, this warning will be displayed:

Power the machine off and on again to save the imported set-up configuration. It is not possible to continue by any action if the machine is not turned off and on at this step.

# SUCCESSFULLY COMPLETED!

# TURN ON/TURN OFF THE MACHINE

### 9.2.2.7 CHANGE THE PIN (4 digits) of the MACHINE

The PIN code provides access to reserved data and operations. It is made up of 4 digits, whose combination allows up to 10,000 possible PIN codes.

The default PIN code is 0000. Settings in the following menus can be changed by providing the PIN code:

CHANGE PIN – RESET ACCOUNT RECORDS – RESTORE DEFAULT CONFIGURATION – RESET PROGRAMS



To change the existing PIN, press the "OK" button. The display will prompt to enter the existing PIN:



Select the first digit by using the "+" and "-" keys, and confirm it with the "OK" key. The cursor will move to the second digit. Repeat the operation for each of the next three digits.

Each character, once confirmed, turns into an asterisk, to preserve the secrecy of the code. Repeat the operation for each digit. Upon confirmation of the fourth digit, the display will ask to enter the new PIN:





When Default Configuration is restored, the PIN code too will be reset to its default (0000) setting. Therefore it will be necessary to enter it anew.

If the PIN code entered as old PIN is incorrect, the machine will allow 4 more attempts before the system gets blocked by the internal security software. In this case, as well as when the Owner cannot remember the PIN, the display will show two codes: please communicate both these codes to the manufacturer, who will issue a special PUK code; by entering this PUK code, the PIN will be reset to its default value (0000), and can therefore be re-programmed.

### 9.2.2.8 SET UP THE PROGRAMS

By this function, the following characteristics of each of the 12 available programs can be set:

- A. Duration of the activation signal of the relevant service-line (washing machine or dryer machine)
- B. Standard price (cash or credit / debit card payment) of the program
- C. Price of the same program when paying by Cashless Type 1Card / Key (Standard Card / Key)
- D. Price of the same program when paying by Cashless Type 2 Card / Key ("Premium" or "Loyalty" Card / Key)
- E. Enabling / Disabling the end-of-cycle signal (washing machine or dryer machine)
- F. Reset to zero all existing parameters for each program.



Press "OK" access Program Nr. 1:

Set up Program No. 1 Press "OK" again to start modifying the existing settings:

### A) Duration of the activation signal

This function must be used to correctly configure the duration (time length) of the activation command of the relevant service-line (washing machine or dryer machine). A different duration can be set for each program, depending on the characteristics of the machine controlled by the service-line, starting from the minimum time of 30 msec..



Press the "+" key until reaching the desired time. Each touch of the key steps up the time by 10 msec up until 100 msec. Beyond 100 msec, steps go up by 100 msec.



Use the "-" key to correct/decrease, or else confirm by "OK". Then, press "+" to save and continue.

### B) Program the standard price

This section allows to change the price set for the program, when the payment is made by cash or by POS.



Press the "+" key to increase the existing price, and the "-" key to decrease it. Each touch of the keys steps up or steps down by 0,05 €.



Confirm by the "OK" button; the next setting shall be made available.

### C) Price for payments by Type 1 Card

### Enter at least the Type 1 Card price even if same as the standard price – if not, the reader will not get enabled!

To reward the Customer who uses RFID card or key instead of cash, a favourable price can be set in this section:



Press "-" to decrease the existing price, or "+" to increase it.



Confirm the chosen amount by "OK". The next setting shall be made available.

### D) Price for payments by Type 2 Card - for "Premium" cards/Keys

To reward the Customers who use the card/keys from the loyalty ("Premium") program offered by the Owner, this section allows to set an even more favourable price than the one set for the Type 1 Card:





Confirm the set amount by "OK". The next setting shall be made available.

### E) Enable / Disable the end-of-cycle signal

This function is used to correctly interface the Laundry One with the service-line (washing machine or dryer machine), depending on whether or not the line provides the "machine busy" or "end-of-cycle" feedback (active high or low) signal.



(2) - If the credit Add-on Mode is enabled: when the User inserts cash or Card, be it before or during operation of a program, the duration of the washing (or drying) cycle will be extended in proportion to the amount introduced.

machine door!

When the Add-on Mode is enabled, if additional credit is inserted and the desired program is pressed, the display shall prompt for confirmation. To extend the duration of the current operation, please confirm within 15 seconds:



(3) - Enter and then select a custom name in the empty space provided:



**Customize Program** 

By pressing the "OK" key, the cursor moves to the first digit: using the "+" and "-" keys, find the letter (or the number, or the symbol) to be entered, and confirm it with the "OK" key. The cursor will shift to the next character. Once the last character is confirmed, the description gets saved.

It is therefore possible to choose this description instead of one of the three factory-set ones ("LINE", "WASHING MACHINE", DRYER").

Pay attention! The customized description is valid for all twelve programs; which means, it is not possible to give each program its own customized description: if you change the string in one, it is automatically changed in the others as well.

If the settings of this program need be changed too, confirm by the "OK" key and repeat steps A, B, C, D, E. If no change must be made to Program Nr. 2, press the "+" key until reaching the next program Nr. that needs be modified, or until getting to the next function (Reset Programs).

### F) Reset Programs

By this function, all existing parameters of each program can be reset to zero.



Press "OK" to start; intention requires confirmation:



Press "+" or "-" to modify No into YES or viceversa:



Confirm by "OK"; the display shall return to "Reset Programs". Press "OK" again to make the entry "Exit" available:

G) Exit



Press "OK" now to go back to SET UP PROGRAMS.

STORAGESET UPIN PROGRESSPROGRAMS

Press "+" to get access to the next function.

### 9.2.2.9 ENABLE / DISABLE RESET OF REMAINING CREDIT

When the machine cannot dispense all the returned change, the corresponding amount gets stored in its memory. If this function is disabled (default condition), the User can claim the missing amount from the Operator, or can add sufficient credit to purchase another service. The Operator would manually pay the amount, and then reset it from the Reset of Accounts / Partials Reset / / Residual Reset (Overpay) menu: see Section 9.2.2.3.

The Laundry One allows the Operator to program how to treat the Residual Credit: this can be left displayed and available for add-ons, or the function can be set so that by switching the machine off and on the remaining credit gets canceled, or it can be set so that the credit gets automatically canceled after two minutes (120 seconds) of waiting.



The reset of the remaining credit transfers its amount to the Accounts registration (Coins Out, Sect. 9.2.2.2).

### 9.2.2.10 SET UP LANGUAGE OF MENU AND MESSAGES

Press the "+" or the "-" key to navigate, and the "OK" key to confirm your choice.



The Babbel Software can be used to translate the texts of the menu messages into the local language (or into the language typical to the industry), and then to load them into the machine menu. The additional language thus created will therefore appear among those selectable by default and among those of courtesy, instead of one of those preset at the factory The Babbel Software can as well be used to change the default currency (Euro) to another currency among the available ones. See the "Babbel Software Manual" available from the website www.alberici.net.

### 9.2.2.11 EMPTY THE HOPPER

Make use of this function to empty the hopper of all its content. If the machie is equipped also with card dispenser, its stacker can be emptied as well.



If emptying the dispenser(s) is not necessary, press the "+" key and go to the Menu EXIT function. Else, confirm by "OK": the display prompts to empty the Hopper first. To empty it, confirm again.

If only the non-recognizable coins that the hopper cannot pay out must be expelled, press the "+" key and confirm:



Upon confirmation, the contents of the coin hopper are dispensed into machine collection tray. During the process, the display shows the counted amount. At the end, the display shows the dispensed total, that is, the amount that was inside the Coin Hopper.



Press the "OK" key to make the EXIT MENU entry available.

### 9.2.2.12 ENABLE / DISABLE OUTAGE RECOVERY

If power supply gets interrupted during operation, the information to complete the full cycle of the interrupted programs gets lost. Only exception are the programs relevant to the machines providing their "busy" feedback signal from door shut (see Section 9.2.2.8 E), provided that the present recovery function after blackout/outage has been previously enabled.



Outage recovery ENABLED Machine without feedback "busy" signal from door: the residual part of the cycle cannot be carried out. Machine with feedback signal: the Laundry One checks for the presence of the "busy" signal and, if so, completes the cycle regularly.

### 9.2.2.13 SETTING OF SERVICE TIME

The machine can be programmed by this function so as to provide service only within a defined time span:



Pay attention: if the start time and the end time correspond to each other (ex. 00:00 - 00:00, or 08:30-08:30, and the like), the machine services will be available 24/24 h.

### 9.2.2.14 EXIT MENU

Press "OK" now to make the machine go back, after a short wait, to the stand-by condition:



# 10. Service Menu

### 10.1 Access with Manager (or Operator) Card/Key:



Insert the Card / Key and press the "LANGUAGE" pushbutton. When one of these Cards / Keys is inserted, the keys on the back of the display get disabled, while the following pushbuttons take the "OK", "+", and "-" functions:

Remove the inserted Card / Key to exit any option of the Services menu. The services menu allows to:

- consult the Account Records and reset the registered data,
- initialize the User Cards / Keys (any of the 2 types) and the Backup Card(s).



press the "**OK**" = "**LANGUAGE**" pushbutton on the desired item to get into the details; for instance, press "**LANGUAGE**" button to watch the Accounts listings: **Total In:** 

0,00€





(\*) when resetting this log, all the data contained in it get transferred into the "Coin Out" counter. As a consequence, it will no longer be possible to track back how much remining credit has been paid manually.

Press the "**OK**" = "**LANGUAGE** button when the 'INITIALIZE CARDS/KEYS' shows. This function allows as well to determine which type of Card/Key will be created: i.e. User Type 1, User Type 2, or Backup.

# INITIALIZE CARDS / KEYS

Press the "+" = "CHANGE" button to navigate down the items, and the "-" = "CARD" to navigate them up:



If (and only if) a User Card / Key has been initialized, it is possible to load it with a programmable amount:



This function is useful when the Operator wants to load credits on the Cards that will be available for purchase from the machine dispenser:

Start-up amount		"+"…"+"	Start-up amount	"OK"
	0,00€		5,00€	

Confirm with the **OK**" = "LANGUAGE" pushbutton the amount that must be loaded, remove the Manager (or Operator) Card/Key, and insert the Card/Key that must be initialized. Once the process ends, the display will show the type of Card/Key that has been created:

>





Then prompts for a new Card/Key to be inserted.

To exit this menu, press repeatedly the "**OK**" = "**LANGUAGE**" pushbutton.

The Manager Card/Key can activate freely any of the 12 program lines.

# 10.2 Access with Backup Card/Key:

The Services Menu gets available also by inserting a Backup Card / Key; however in this case one option only is offered: exporting the configuration present on the machine to the Card / Key. It is not possible to import the configuration available from the Backup Card / Key to the machine, in order to prevent interference with any programs in operation. Import option is only allowed by accessing the Settings Menu (see Section 9.2.2.6).



Confirm by "OK" = "LANGUAGE" within 5 seconds: the display will prompt for the machine PIN (4 digits):



By the "+" = "CHANGE" and/or "-" = "CARD" buttons, set the first digit and confirm with the "OK" = "LANGUAGE" button: the cursor shall move to the second character position. Each figure, once confirmed, will change into an asterisk, to preserve the secrecy of the PIN code.

Repeat the same steps for each character. When confirming the fourth one, the following warning will appear:



It is now possible to remove the Card/Key; the system shall automatically exit the Service menu.

# 11. Messages

### 11.1 Messages on display:

The following warning:

LAUNDRY ONE OUT OF SERVICE

takes turns with the status of the peripheral devices in the unit. For instance, the following sliding messages:



mean that:

coin acceptor is not connected, note validator is in faulty condition, hopper 1 is empty ,and ACS reader is properly

working.

The warning

Credito Residuo 1,50 €

means that coins have run out during the payout. Switch power off, refill the hopper, and switch on again: the hopper shall complete the payout.

# 11.2 Code RI (RI Code) - (CPU in Control Board is blocked):

When this message appears, keep the 3 buttons ("OK", "+", and "-") behind the display pressed for 5 seconds. The 'Code RI' message means that there has been an event that makes it wise to hold the EPROM from operating. Such operation will reset the machine to its default configuration. It will then be necessary to re-program themachine settings according to the needs.

In case that the `Code RI' message pops up again after releasing the 3 keys, it means that the EPROM has been damaged: it will be necessary to replace the board.

# 11.3 Messages from the Note Validator

During operation, the number of red flashes produced by the entry bezel indicates the possible type of malfunction:

nr of red flashes	Description
1	Validator is open
2	Jammed banknote
3	Fraud attempt detected
5	Adjust optic sensors
7	Stacker full (OryOne Only)
9	Low power supply
11	Check operation of the encoder + efficiency of the validator motor
12	Check operation of the encoder + efficiency of the stacker motor (OryOne only)
14	ROM error

### Inlet bezel colour alerts

Flashing blue: means that the stacker has been removed, or its detection sensor is faulty. Solid yellow: ccTalk communication error. Check voltage level (12 or 24Vdc). Power off and on.

### 11.3.1 Fraud-fishing protection

The banknote validator is equipped with a safety device that gets activated in the event of repeated attempts at fraud (through repechage or "fishing") over a pre-defined period of time. The operation of this device can be set using the Dip-Switch SW8 to work in "soft" mode (\* DS8 = ON) or in "extended" mode (\*\* DS8 = OFF).

\* DS8 = ON: if set on "soft" anti-fraud mode, the banknote is returned at each attempt of fraud, without any light signaling, like an unknown denomination.

\*\* DS8 = OFF: if set to "extended" anti-fraud mode, the validator returns the banknote without reporting the fraud, and remains in operation. On the 3rd attempt, the reader sets automatically to warning mode and the inlet bezel flashes three times red. Power the device off and on again. The same happens on the 4th fraud attempt. On the 5th fraud attempt, the reader goes into error mode, and emits successive sequences of three yellow flashes. Please wait for automatic recovery, without turning off the unit.

# (\*) Dip-Switch SW8 ON

Any attempt at "fishing" will cause the note to be rejected, without showing any visible signal.

(**) Dip-Switch SW8 OFF				
Attempt	Validator reaction	Do as described below		
1st	Remains in service	-		
2nd	Remains in service	-		
3rd	> error (3 red flashes)	Reset (switch off then on)		
4th	> error (3 red flashes)	Reset (switch off then on)		

After the 5th fraud attempt (3 yellow flashes), it is necessary to wait for automatic restore of service. Please wait and take care not to switch the validator off.

NOTICE: no error status will be transmitted to the machine, to prevent the latter does not go out of service, and will therefore continue to maintain the other functions working.

# 12. Maintenance



WARNING! Do switch power off before opening the machine!

# 12.1 Cleaning the Note Validator

The ability of acceptance may decrease due to the accumulation of dust and cellulose dust released by banknotes during transit, or because of residues or sprays, which may spread on the detecting sensors and on transmission parts. It is therefore recommended to **clean these parts at least monthly**, as indicated below.

 Turn power off and unplug the cable from the 10pin connector interface.
 Press the yellow button C, located under the reader, to release the main body from the faceplate, and slide it backwards



2. Move the D button upward, hold it while sliding the upper cover backwards; then lift the latter up and rotate it by 180° to the right side.





- 3. Gently wipe the sensors with a clean, lint-free tissue, or with a cotton swab, or with a small sponge, possibly moistened with *isopropyl alcohol*.
- 4. Completely remove the dust and residues from the 4 silicone rollers, and from the 4 elastic matching wheels which are located in the lower surface of the upper lid. To remove the most stubborn dirt from rollers and wheels, use *isopropyl alcohol*.



### PAY ATTENTION!

do not use organic detergents (ex. alcohol, thinners or petrol). Use only isopropyl alcohol.

- A. Sensors
  - B. Drive rollers
  - C. Elastic matching wheels

# 12.2 Clearing banknote jams

CAUTION! Turn power off before opening the upper lid.

Open the top cover by pressing D, and pull out the stuck banknote (as well as any other objects that may hinder the transit).



# 12.3 Cleaning the Discriminator Hopper

Clean the disk of the Hopper Discriminator II every 100.000 pay-outs, by jets of pressurized air.

The sloped shape of the optic sensor housing prevents the dirt from building up, so reducing theneed to clean it too frequently. Whenever cleaning the disc, clean also the output optic sensor.

Check that the reservoir and the disc do not contain debris or bent / warped coins, and always remove them, since they can obstruct the output or the rotation, hamper the hopper operation or damage its parts, as well as thwart its performance.

To clean the Hopper, pull up its flap, and blow dry pressurized air onto the disc parts and thesensors slots (accessible through the coin pits), as well as through the coin outlet slot.

CAUTION: if any parts need to be dismounted for deeper cleansing or other maintenance operations, please send the Hopper Discriminator II to Alberici S.p.A., that will properly carry out the necessary service repairs, cleaning and updating.



# 13. Disposal of the product



# WARNING! DISPOSE OF ACCORDING TO THE GOVERNING LAW IN YOUR COUNTRY! Ref.: Directive 2002/96/EC

This equipment may not be treated as household waste. Instead, it must be handed over to the applicable collection point for the recycling of electric and electronic equipment. By ensuring that this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact the Dealer where this product has been purchased.

# 14. Terms of Guarantee

The manufacturer will fix malfunctions arising from production faults in this machine or parts of it within 12 months from the date of sale.

All communications referring to guarantee repairs or replacements must be accompanied by the product serial number and the copy of the sale invoice.

To obtain your guarantee repair, please send the part to the Dealer where you purchased the machine, together with the following documents:

- copy of the sale invoice
- delivery note stating "returned for guarantee repair"
- detailed report of the problem found and the circumstances in which it occurs.

Before sending the product, please get in touch with your Dealer or with Alberici S.p.a. (+39 051 944300); very

malfunctions can be fixed via a simple phone call, saving you costs and time.

Alberici S.p.a. will verify that warranty is applicable, i.e. that problem is not caused by:

- transport damages
- damages from incorrect installation or wrong configuration
- installation in premises or areas not complying with the prescribed safety requirements
- intentional or unwilled tampering
- wrong or careless use or maintenance
- non-compliance with precautions prescribed (see Chapter 4. Caution)
- natural disasters, vandalisms, intentional or unintentional damage

Guarantee is considered automatically expired if outer and inner labels are missing. Transport costs of repaired products are at the Customer's charge.

# 15. Customer Service

Alberici S.p.a. will be pleased to offer all the necessary information on use, ordinary maintenance and technical service. Please call (+39) 051 944300 and specify if your request concerns information on use or technical support.

REF.	DPT	. COD.	DESCRIZIONE	DESCRIPTION
1		A-TB0009	Assemblato mobile (senza periferiche)	Unit core assembly (w/o Per. Units)
2		LND-AC01-V0L	Piastra fissaggio a parete per LaundryOne	LaundryOne wall-fixing slab
ß		AA-1602	Telaio incasso a muro	Wall mounting frame
	4a	AA-0170	Modulo Hermes GPRS-GSM modello a Disco	GPRS-GSM Hermes Module Kit - Disk Aerial model
	4b	AA-0171	Modulo Hermes Wi-Fi modello a Disco	Wi-Fi Hermes Module Kit - Disk Aerial model
K	4c	AA-0172	Modulo Hermes GPRS-GSM-GPS / Wi-Fi modello a Disco	GPRS-GSM-GPS / Wi-Fi Module Kit - Disk Aerial model
4	4d	AA-0173	Modulo Hermes GPRS-GSM modello a Pinna	GPRS-GSM Hermes Module Kit - Pin Aerial model
	4e	AA-0174	Modulo Hermes Wi-Fi modello a Pinna	Wi-Fi Hermes Module Kit - Pin Aerial model
	4f	AA-0175	Modulo Hermes GPRS-GSM-GPS / Wi-Fi modello a Pinna	GPRS-GSM-GPS / Wi-Fi Module Kit - Pin Aerial model
5		A-TB0008	Assemblato alimentatore LaundryOne	LaundryOne power unit
9		GE-66SU	Gettoniera elettronica AL66 S ccTalk mod.	AL66 S electronic coin acceptor ccTalk mod.
7		LND-AM01-Z00	Cassetta monete Laundry One	LaundryOne coin box
00		IM-N000-0L10	Introduzione moneta PP	PP inner bracket for coin acceptor
6		SH-5B21	Scheda elettronica ChangeOne CCS (display blu 2x16)	CCS electronic control board (2x16 blue display)
10		CH-CC01-0001	Lettore ACS di tessere e chiavette RFID	ACS rw module for cards and RFID keys
11		HP-C834	Hopper Discriminator II MIDI ccTalk	Hopper Discriminator II MIDI ccTalk
12		LB-MU02-0004	Lettore banconote OryOne UN1 con stacker da 300 banconote	OryOne UN1 note validator with 300 banknotes stacker
13		CH-EN0E-0100	Erogatore di tessere	Card dispenser
14		A-CM0058	Scheda interfaccia per erogatore CRT-541	Interface p.c. board for CRT-541 dispenser
15		AE-1303-0500	Stampante fiscale	Fiscal printer
16		AA-0177	Concentratore P4	Harness hub P4
17		AA-1601	Scheda 12P per pulsanti	12P Hub-pcb for pushbuttons
18		PL-MR14-1600	Pulsante luminoso miniatura Piano 14	Illuminated push-button Flat miniature 14
19		PM-M186	Portamicro mini elettronico L.E.D. RGB	RGB L.E.D. mini electronic socket
20		AE-0103	Pulsante anti-tamper	Anti-tamper pushbutton
21		C-070103-000	Serratura centrale a doppio catenaccio	Main lock (straight latch)
22		LND-SP09-Z00	Supporto CRT-541 per LaundryOne	CRT-541 bracket for LaundryOne
23		C-140102	Terminale POS	POS terminal
24		SH-44CN	Scheda servizi 4PR necessaria ogni 4 dispositivi da attivare	Service board 4PR required every 4 devices to be activated
7	25a	S-051301-000	Grafica adesiva standard	Standard adhesive artwork
C7	25b	S-051301-P00	Grafica adesiva personalizzata	Custom-made adhesive artwork

# 16. Spare Parts



# herici

# DICHIARAZIONE DI CONFORMITÀ DIRETTIVA 2014 / 35 / UE - DIRETTIVA 2014 / 30 / UE

La ditta Alberici S.p.A., avente sede in via Ca' Bianca, 421, 40024 Castel San Pietro Terme (BO) – Italia,

### DICHIARA

Che il sistema classificato nella famiglia di prodotto apparecchio elettrico d'uso domestico e similare - Cassa automatica centralizzata, identificato univocamente da:

Modello	Configurazione	Opzioni	Tipo	Matricola/Seriale
LAUNDRY ONE	□ AL66 - OryOne - Lettore ACR - Hopper Discriminatore	<ul> <li>Erogatore Card</li> <li>Stampante fiscale</li> <li>Modulo Hermes GSM</li> </ul>	□ Incasso a muro □ A parete	

Essendo realizzato conformemente al modello prototipo campione denominato LAUNDRY ONE in configurazione AL66 - OryOne - Lettore ACR - Hopper Discriminatore, avente matricola nº 0000 (prototipo), finito di testare positivamente ai fini EMC e LVD con rif. al rapporto(8015-1/757) 8015-1 CE-Laundry One.docx) il 31-03-2021 dalla SL snc, avente sede legale e operativa in via Birbanteria, 2, 40055 Castenaso (BO), Italia, risulta essere conforme a quanto previsto dalle seguenti direttive comunitarie:

a)	leı	norme armonizzate (per i punti applicabili):	
	-	CEI EN 55014-1 (CEI 110-1);	- CEI EN 61000-3-3 (CEI 110-28);
	-	CEI EN 55014-2 (CEI 210-47);	- CEI EN 61000-4-2 (CEI 210-34);
	-	CEI EN 55022 (CEI 110-5);	- CEI EN 61000-4-3 (CEI 210-39);
	- (	CEI EN 55024 (CEI 210-49);	- CEI EN 61000-4-4 (CEI 210-35);
		CEI EN 60065 (CEI 92-1);	- CEI EN 61000-4-5 (CEI 110-30);
	- 3	CEI EN 60335-1: 2013-05 (CEI 61-150);	- CEI EN 61000-4-11 (CEI 110-29);
	-///	CEI EN 60335-2-82: 2005-08 (CEI 61-226);	- CEI EN 61000-6-1 (CEI 210-64);
	(-	CEI EN 60950-1 (CEI 74-2);	- CEI EN 62233 (CEI 61-251).
	-	CEI EN 61000-3-2 (CEI 110-31);	

In conformità ai requisiti essenziali di sicurezza della Direttiva Bassa Tensione: b)

- 2014/35/UE del 26 Febbraio 2014;
- L. 791 del 18 Ottobre 1977 e s.m.
- in conformità ai requisiti essenziali di sicurezza della Direttiva Compatibilità Elettromagnetica: c)
  - 2014/30/UE del 26 Febbraio 2014;
  - D.Lgs. 194 del 06 Novembre 2007.

che conferiscono la presunzione di conformità alla Direttiva 2014/30/UE

Castel San Pietro Terme (BO), Italia lì,\_

Il Presidente

Alberici S.P.A. Progettazione e produzione sistemi di pagamento, accessori per videogames e vending machines Via Ca' Bianca, 421, 40024 Castel San Pietro Terme (BO), Italia Telefono:+39-(0)51-944300 r.a. Fax:+39-(0)51-944594 - P.Iva:00627531205 E-mail: info@alberici.net - Url: http://www.alberici.net



	NOTICE	
equip	oment described a	Alberici S.p.A. reserves the right to change the features and the specifications to the tany time and without notice, in the pursuit of the incessant improvement of its products.



Via Ca' Bianca 421 40024 Castel San Pietro Terme (BO) – ITALY Progettazione e produzione di sistemi di pagamento, accessori per videogames e macchine vending Design and manufacture of payment systems, accessories for videogames and vending machines

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