BAG automation

WEITRONIK5 weighing card user and programming MANUAL

(Firmware ADD083000)

1 OPERATOR INSTRUCTIONS

1.1. GENERAL

The manual is an integral part of the system and must accompany it even in the event of transfer. For a correct relationship with the product, it is necessary to guarantee the readability and correct conservation of the manual, on the machine, also for future reference.

In case of deterioration of this document or more simply for technical and/or operational reasons, as well as for further copies, consult technical assistance directly.

Bag Automation reserves the right to make changes to the production and the manual without entailing the obligation to update the production itself and previous manuals.

The operator is obliged to carefully and fully read all the instructions contained in this manual before starting to use the machine.

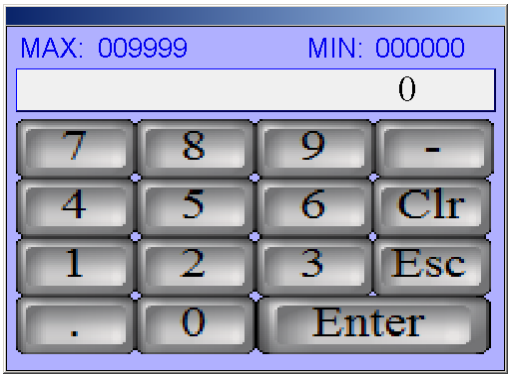
Failure to comply with the instructions contained in this document or part of them exempts the manufacturer from any liability for eventualities and/or damages caused to the machine itself, to things or to people.

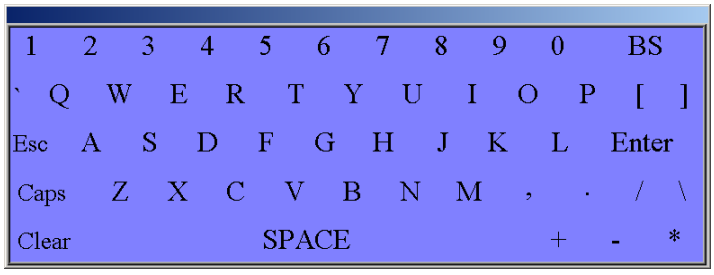
Likewise, failure to comply with the rules contained in the instruction manual will automatically void any form of warranty on the machine.

NOTE:

The weigher is equipped with a visual system that allows immediate verification of the weighing and any deviations, as well as a whole series of useful functions inserted in order to optimize the weighing process to the maximum, such as efficient management of the reaction signals addressed to the upstream machine.

The following two screens appear when it is necessary to enter parameters, for example in the case of recipes, when a field containing a value or the name of the recipe itself is pressed:





To ensure correct use of the machine, access to functions has been regulated according to a hierarchy of use corresponding to various levels: operator, technician, Superuser and Master depending on the keyword (hereinafter referred to as “password”).

1.2. INTRODUCTION.

The first screen displayed by the scale after startup is the following page on the screen:

The installed version of Display, PLC and Scale appears in the lower pane.

Press the button to check the manufacturer information page.

Press the button to access the main system control screen.

1.3. HOME PAGE (HOME 1/2, STOP).

This page shows the stand-by condition when the machine is turned on, identified by the red word "STOP":

1.3.1. WEIGHT INDICATOR:

The central gray box is the weight indicator of the Weitronik5 card, it indicates the instant weight (when the card is in STOP or during the roughing and finishing phases of the weight) or the last weighing carried out if the scale is waiting in "weighing ready" conditions.

There are also other additional indications:

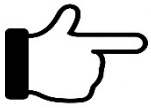
	Indication of out of tolerance (compared to NOMINAL WEIGHT)
	Instant weight
	Stable weight reading indication

1.3.2. TOUCHSCREEN COMMANDS ACTIVE ON THIS PAGE:

	Clicking on the LOGO takes you to the page with the software versions
	"STATUS BAR": in addition to viewing any alarms or anomalies, clicking on it takes you to the "ALARMS" page
	Button for modifying the recipe parameters
	Resetting the weight reading (tare) to zero
	START Scale
	STOP Scale
	Call up the "Production STATISTICS" page
	Call up the "MANUAL COMMANDS" page
	Call up the "SYSTEM Programming" page

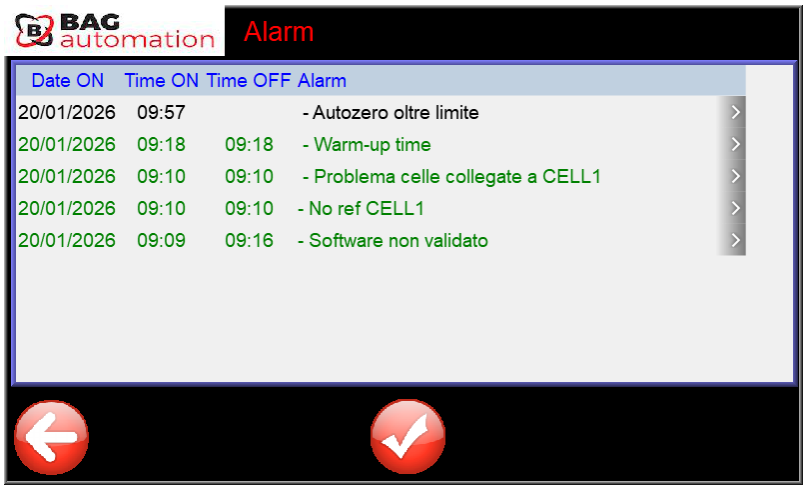
Resetting the weight reading (tare) to zero

PRESS THE  BUTTON TO START



The scale is activated only in the absence of alarms. In the event of alarms in progress it is necessary to press on the STATUS BAR to identify the problem and resolve it (see the following paragraph).

1.4. ALARMS PAGE (ALARM).



This page displays the history of the alarms in progress, some types of this list (the so-called "Warnings" or "Notices") disappear automatically when the reason for the alarm itself is no longer present, while the actual alarms must be acknowledged by pressing the RESET button (see below) otherwise the machine will NOT continue autonomously.

- Date ON: The day the alarm was activated.
- Time ON: The time the alarm is activated.
- Time OFF: The time in which the alarm stopped or was manually reset.

Alarms written in BLACK are currently active.

The alarms written in GREEN have been reset and are not currently active.

To reset the alarms press the  button

The  button allows you to return to the previously viewed screen

1.5. PRODUCTION STATISTICS

Using the button it is possible to access a large list of useful data for setting up the machine, solving any programming errors and checking the quality of production.

1.5.1. ACTIVE BUTTONS ON THESE PAGES:

	"STATUS BAR": in addition to viewing any alarms or anomalies, clicking on it takes you to the "ALARMS" page
	Return to the "Home" page
	Clears (RESET) some statistical values indicated below.
	Goes to the Gaussian graph page (Page 4/5)
	Print statistics
	Goes to the previous page
	Goes to the next page

1.6. STATISTICAL DATA PAGE (STAT 1/5).

Recipe:	Current recipe number
Last weight done:	the previous weighing
Nominal weight:	The desired target weight is programmed in the recipe.
Average lot weight:	Arithmetic mean of the weighings performed. (Resettable).
Standard deviation:	Displays the variability (dispersion) of the weighing values. A lower value indicates better accuracy. (Resettable).
Cycle totalizer:	Cycles performed after the last reset. (Resettable).
Weight totalizer:	Weight quantity totalizer. (Resettable).

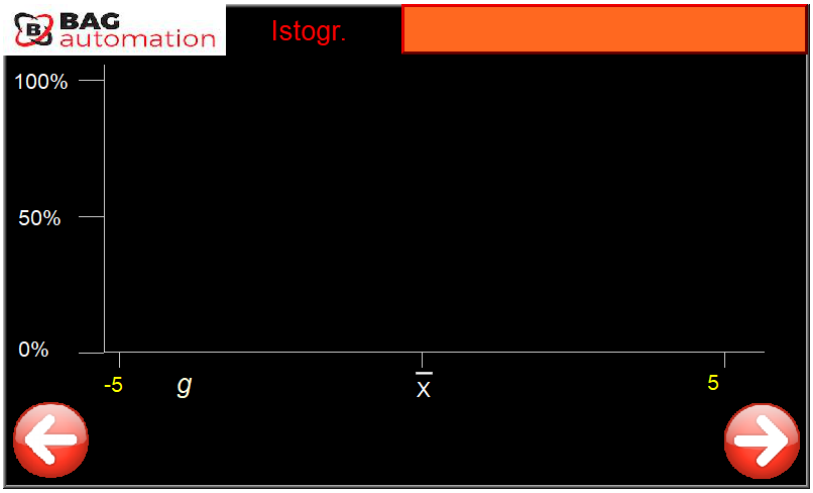
1.7. STATISTICAL DATA PAGE (STAT 2/5).

Last weight done:	The weight of the last filled bag.
Roughing percentage:	Percentage value (relative to Nominal Weight) performed at high flow rate.
Roughing time 1:	Initial fixed time (can be set on the recipe pages under the “Optional parameters” submenu) in which the weight is not controlled.
Roughing time 2:	Displays the time needed to reach the weight percentage set in the “Roughing percentage” parameter in the recipe.
Finishing time	Displays the time it took for the scale to reach the nominal weight after switching the product supply to low flow.
Cycle time	Displays the time in seconds of a complete weighing cycle.
Unloading waiting time	Displays the time the scale waited before discharging.

1.8. STATISTICAL DATA PAGE (STAT 3/5).

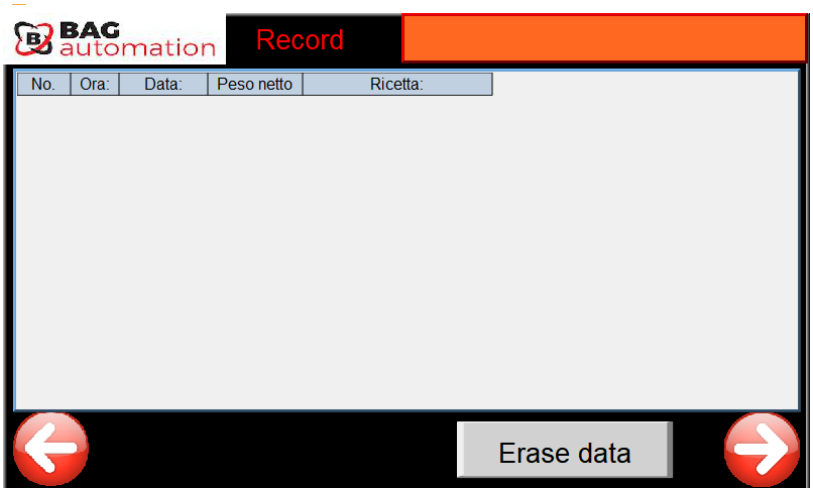
Life counter:	indicates the number of discharges carried out by the scale since the date of construction.
Calibration counter:	Number of calibrations performed over the life of the scale.
Weigher mode:	Master or Slave
Last weight done:	shows the weight of the last weighing carried out.
Weight trend:	The average error based on the arithmetic mean of the weights.
Product in flight:	(also called “tail”) The quantity of free-falling product that has yet to reach the bag at the moment the dispenser is stopped.
Hourly production:	The instantaneous speed in batches per hour of the machine.

1.9. STATISTICAL DATA PAGE (STAT 4/5).



This screen displays the Gaussian graph regarding the “normal distribution” of the weights performed by the scale. This is a statistical graph used by quality control to verify the accuracy of the scales.

1.10. STATISTICAL DATA PAGE (RECORD 5/5).



This screen displays weight history.

The history resets automatically at 0:00 every day.

The “Erase data” button allows you to delete the history of the day.

1.11. PAGES FOR MANUAL OPERATIONS (MANUAL ½).

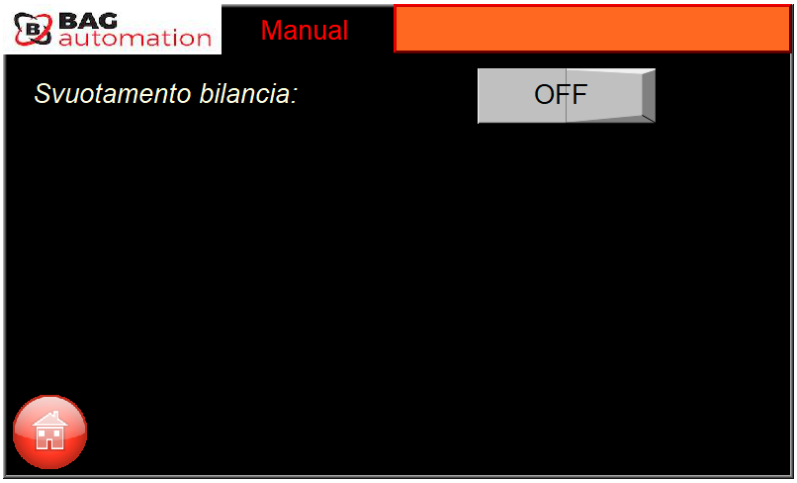
Using the button  showing a hand, a panel with rocker switches is shown that allows you to perform some manual operations for emptying, stopping and cleaning the machine in the safest and fastest way.

Enable minimum level:	Temporarily disables the minimum level sensor of the loading hopper to allow it to be completely emptied.
Run cycle and stops	The scale carries out a weighing (or completes the one in progress) and after emptying/unloading it automatically switches to stop.
Manual discharge:	Button to end the filling phase and force the bag out immediately.
Enable load management:	Activates the external product loader in the upper hopper, constantly monitoring the maximum level sensor.

TOUCHSCREEN COMMANDS ACTIVE IN THESE PAGES:

	"STATUS BAR": in addition to viewing any alarms or anomalies, clicking on it takes you to the "ALARMS" page
	Return to the "Home" page
	Goes to the next page (password required)

1.12. PAGES FOR MANUAL OPERATIONS (MANUAL 2/2).



Emptying the scale:

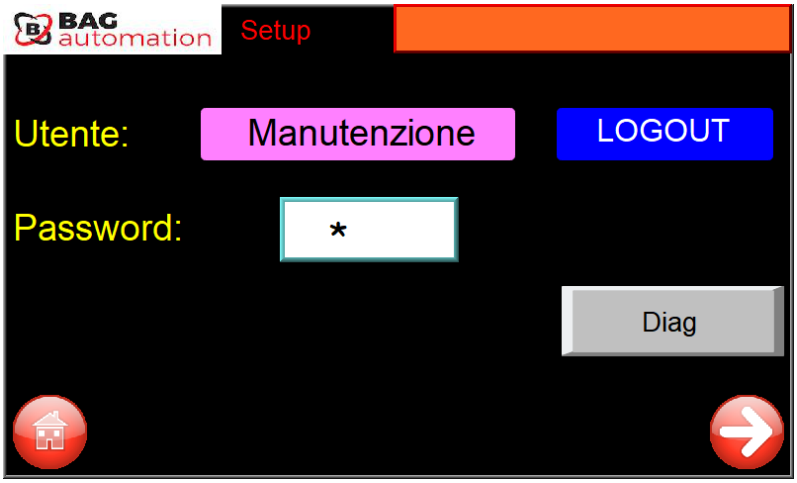
THE SELECTOR SHOWN DOWNLOADS ALL PRESENT PRODUCT AT HIGH SPEED WITHOUT ANY CONTROL

IT IS NOT RECOMMENDED TO LEAVE THE MACHINE UNATTENDED WITH "SCALE EMPTYING" ACTIVATED.

2 WEIGHING PROGRAMMING

2.1. LOGIN PAGE

Having pressed the key to access system programming, the person must identify his role, specified in the user field on a pink background, to ensure safe operation of the system.



	"STATUS BAR": in addition to viewing any alarms or anomalies, clicking on it takes you to the "ALARMS" page
	Return to the "Home" page
	Go back to the previous page
	Go to the next page

From this page you are allowed to perform these operations:

Request access at a different level by pressing the pink button

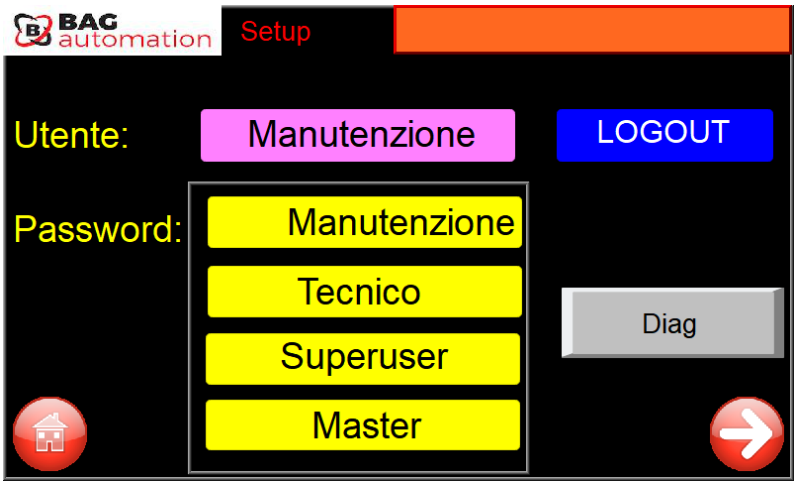
Exit each level by pressing the blue LOGOUT button
Check the electronic weighing board diagnostics by pressing the gray DIAG button.

Return to the Home page with the  button

Go to page 2 to change language, date and time with the  button

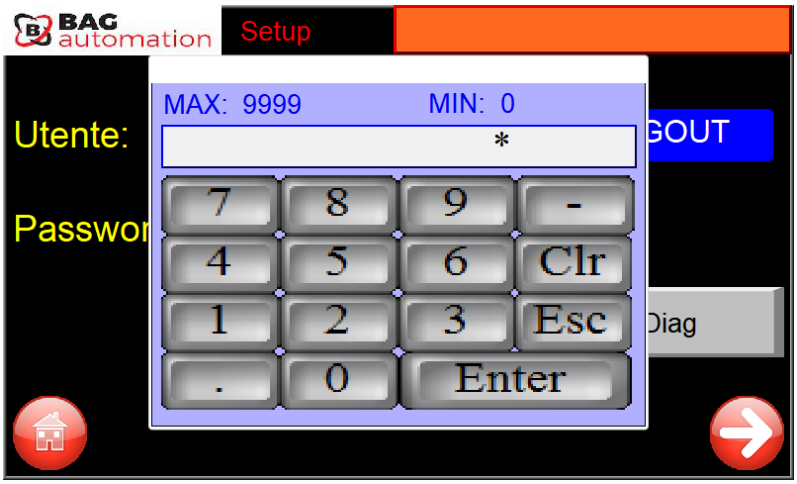
As mentioned above, it is possible to enter machine management with four different profiles, each of which can be selected by touching the user field (which in the example above contains "maintenance").

2.1.1. ACCESS TO LEVELS (SETUP 1/7).

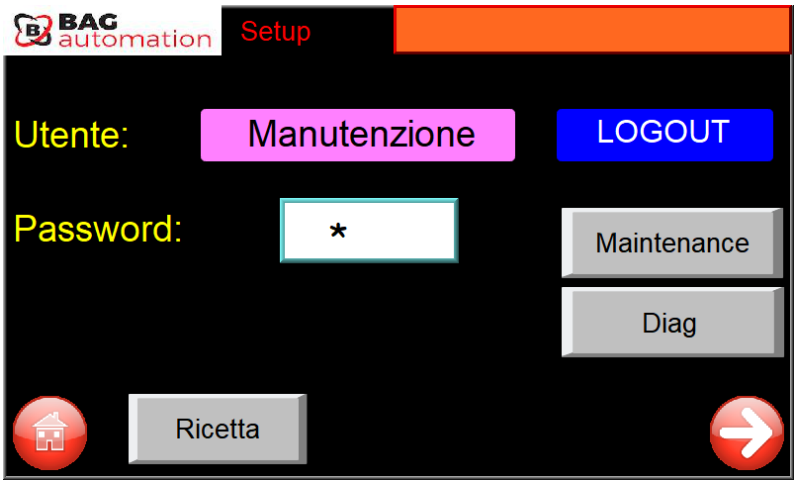


By pressing the pink button in the center of the screen a menu with selectable levels appears.

Then select the level you want to access by pressing the corresponding yellow button and select the password field to make the keyboard appear so you can enter the access code.

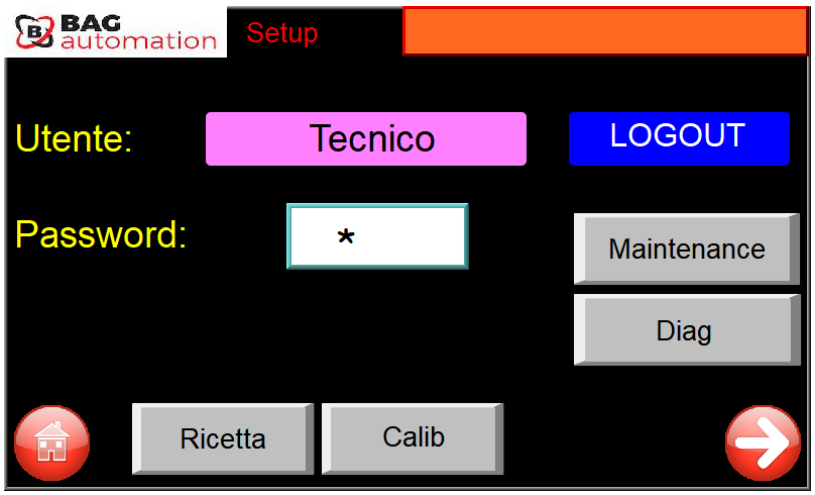


2.1.2. MAINTENANCE ACCESS PAGE (SETUP 2/7).



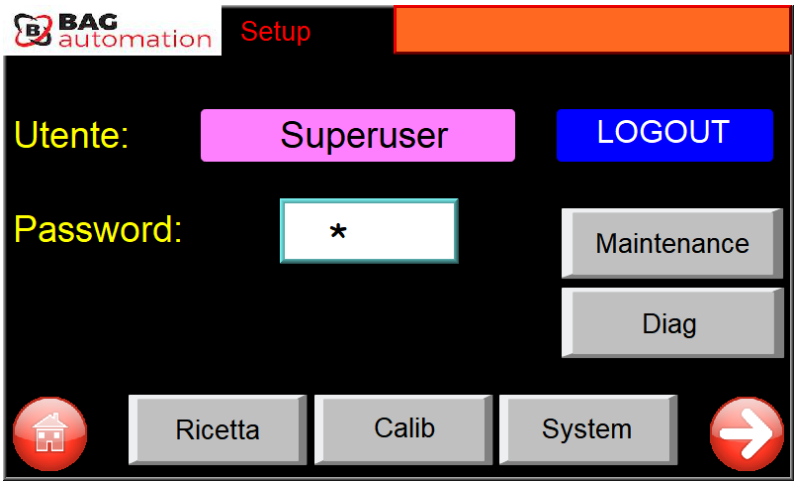
After entering the maintenance password, the Maintenance button appears where the counters that make maintenance reminders appear, furthermore it is possible to access the complete programming of the recipes by pressing the Recipe button which was not previously visible.

2.1.3. CALIBRATION ACCESS PAGE (SETUP 3/7).



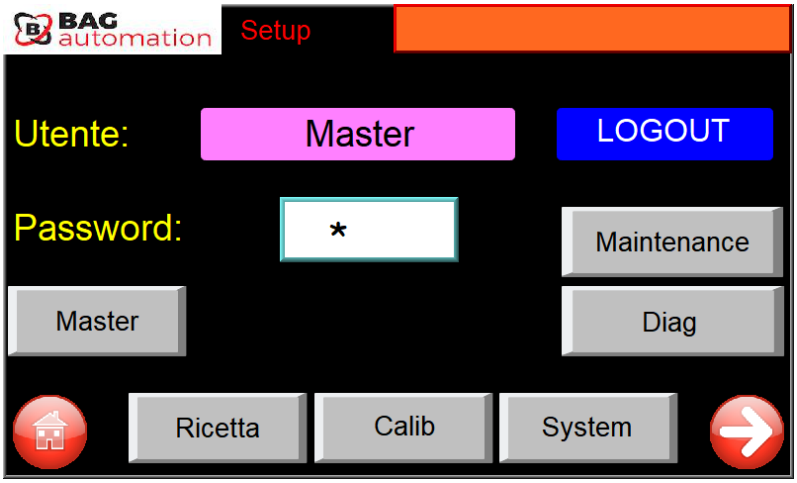
After entering the Technician password, you can access the maintenance level and weight calibration pages by pressing the Calib button.

2.1.4. SYSTEM PARAMETERS ACCESS PAGE (SETUP 4/7).



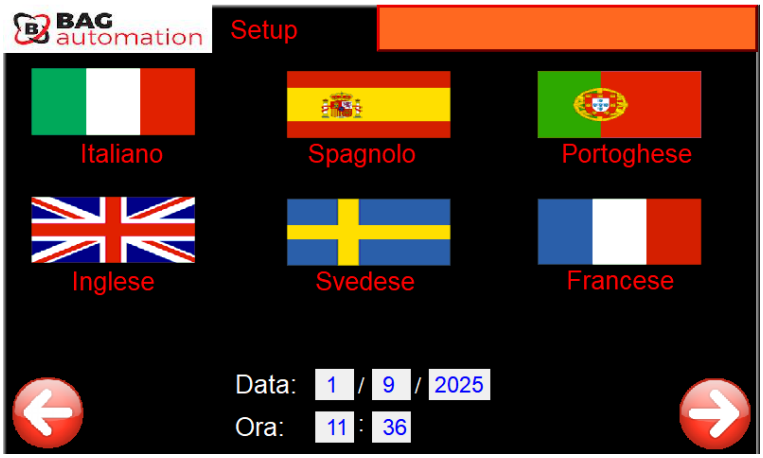
After entering the superuser password, you can access the Maintenance and Technician level pages and program the system parameters by pressing the System key.

2.1.5. MASTER PAGE (SETUP 5/7).



After entering the Master password, you can access all levels including the Master configuration, a section reserved for the manufacturer.

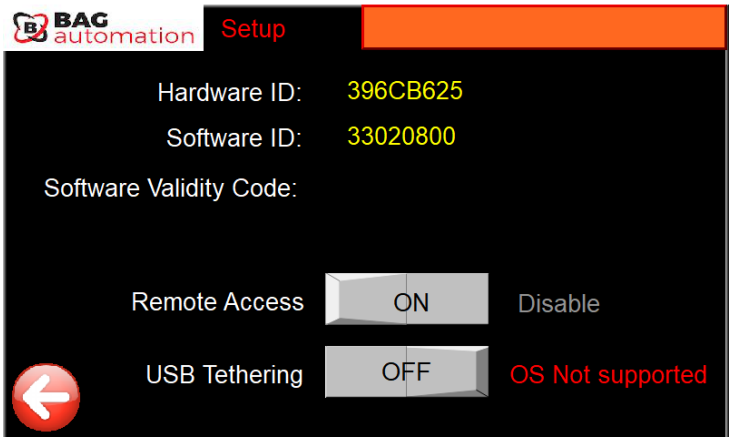
2.1.6. CHANGE LANGUAGE, DATE, TIME (SETUP 6/7).



On this page you can select the panel language and change the date and time.

The  next page recalls the validation and remote connection (teleservice) page.

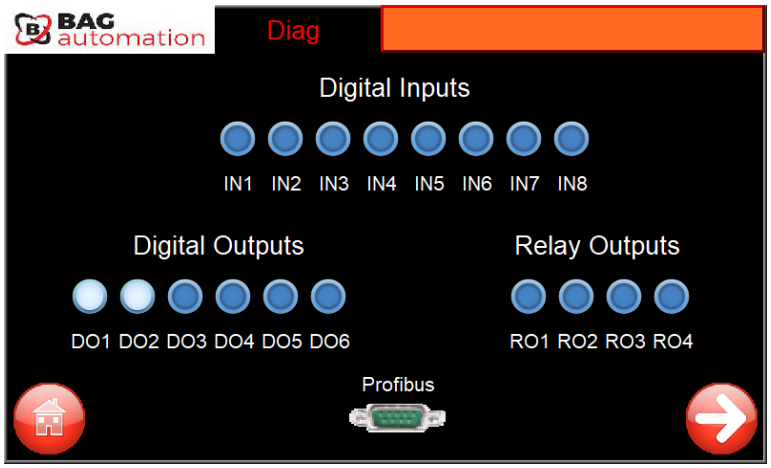
2.1.7. SOFTWARE AND TELESERVICE VALIDATION PAGE (SETUP 7/7).



The top of this screen is used to validate the card. Validation is only required the first time the card is activated to verify the combination of the card's hardware and software and must be performed by a qualified technician.

Hardware ID:	The serial number of the card.
Software ID	The code of the currently installed software
Software Validity Code:	Enter the unlock code provided by the manufacturer here.
Remote Access	The switch shown here is used to activate remote access for remote maintenance of the machine.
USB Tethering	If there is no Ethernet connection, it is possible to connect the display to an Android smartphone using the USB socket on the display

2.1.8. MOTHERBOARD DIAGNOSTIC SCREEN (DIAG 1/3).

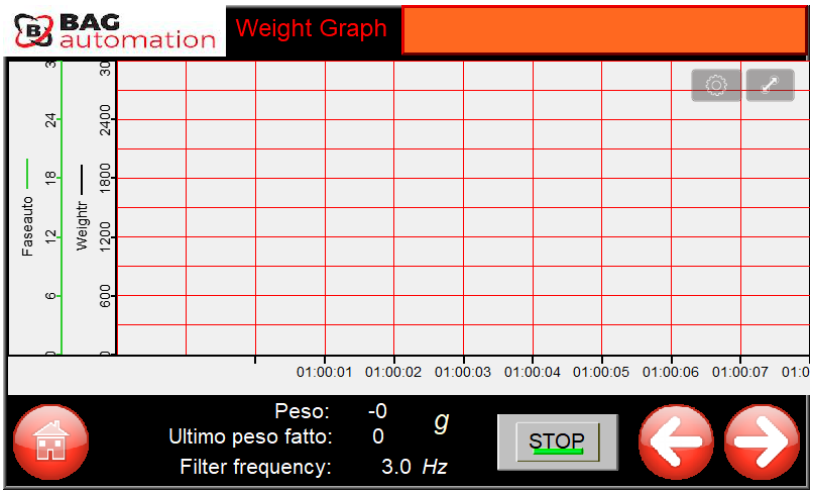


The purpose of this page is to check in real time the status of any input or output, described with a colored dot. When finished, returning to the Home screen is done by pressing the icon, while the button raises the next page.

This page allows you to check the status of inputs and outputs in real time but is for consultation only, it is NOT allowed to "force" inputs or outputs

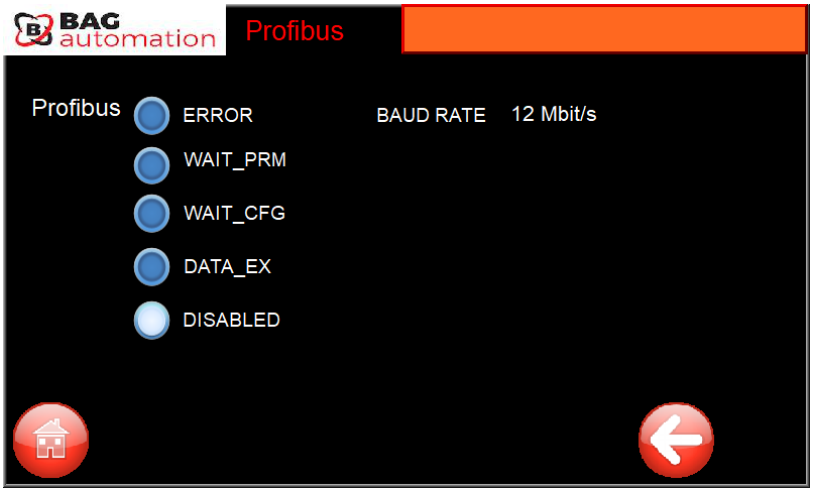
To find a correspondence between the inputs/outputs and the machine functions, refer to the electrical diagram or the input and output table relating to this firmware.

2.1.9. WEIGHT TREND GRAPH (WEIGHT GRAPH 2/3).



Through this screen it is possible to observe in the graph the value of the weights detected at each reading.

2.1.10. DIAGNOSIS OF THE PROFIBUS PROTOCOL (PROFIBUS 3/3).



Through this screen it is possible to monitor the operation of the profibus module (optional).

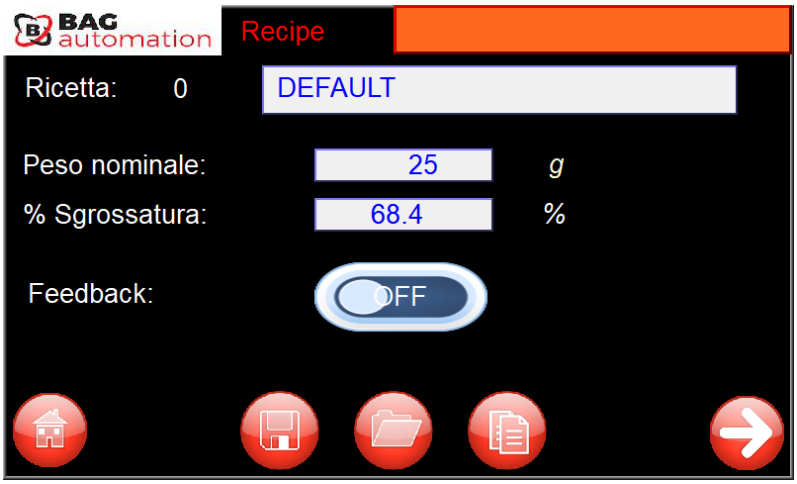
2.2. RECIPE PROGRAMMING

Access limited exclusively to page 1 is available by pressing the button on the main page, while consultation and modification of subsequent pages is permitted by accessing the recipe from the Maintenance level or higher.

TOUCHSCREEN COMMANDS ACTIVE IN THESE PAGES:

	"STATUS BAR": in addition to viewing any alarms or anomalies, clicking on it takes you to the "ALARMS" page
	Return to the "Home" page
	Save the recipe (overwrites the recipe in memory)
	Load a recipe (you are asked for the number of the desired one)
	Copy the recipe (target number is asked)
	Goes to the previous page
	Goes to the next page (not visible without password)

2.3. RECIPE – FIRST PAGE

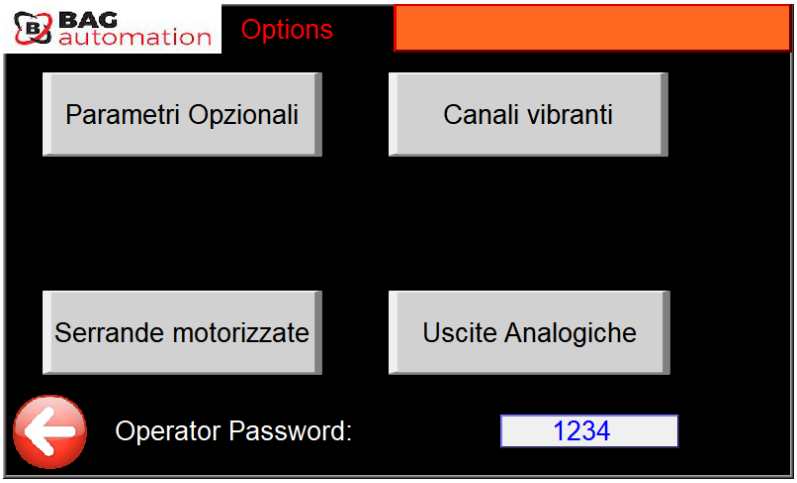


Recipe:	This field indicates the identification number of the loaded recipe and the alphanumeric name associated with it.
Nominal weight:	Enter your desired weight here.
% Roughing:	Percentage of the nominal weight that is performed in Roughing, i.e. with high flow rate dosing
Feedback	By activating Feedback, the Roughing % is dynamically modified at each cycle with the aim of obtaining a finishing time equal to the desired one (see next page).

2.4. RECIPE – SECOND PAGE (RECIPE 2/3)

Product in flight:	Parameter to correct the difference between the desired weight and the weighings actually carried out. It must be increased in the case of overweight packages and vice versa
Tolerance +:	Enter the positive tolerance threshold here as a reference to the “overload warning” alarm. This alarm inhibits unloading and requires operator intervention to continue the cycle.
Tolerance -:	Enter here the threshold above which – if the weigher has stopped prematurely – the “Topping up” mechanism is activated.
Feedback Tolerance:	Enter here the error threshold above which the Product in Flight parameter is recalculated by the scale. It is possible to disable this function by setting this field to zero.
Finishing time:	Desired duration of finishing (product dispensing at low speed). It is possible to disable this function by setting this field to zero.
Discharge time:	Duration of activation of the drain mechanism.
Speed:	This switch activates the speed mode, which increases the speed of the scale.

2.5. RECIPE – OPTIONS (RECIPE 3/3)



This page allows access to the parameterization subpages. These buttons may or may not appear based on the scale configuration set in the Master pages, for example: the ability to regulate vibrations is activated for scales equipped with vibrating feeders, in the case of a different dosing methodology in almost all cases only the “Analog Outputs” button is activated. For standardization reasons, all the options that can be activated are described in the following pages.

The parameters in this section act ONLY ON THE CURRENT RECIPE, it follows that switching from one stored recipe to another can lead to different behavior

2.5.1. OPTIONAL PARAMETERS PAGE (OPTIONS 1/3)

These parameters relate to particular setups or special functions of the scale, therefore it is advisable to contact the manufacturer before intervening on them.

Roughing time 1	During this time a dedicated digital output of the weitronik5 board is activated and the weight is NOT controlled. For special applications.
Double scale mode:	In configurations with two or more scales, the type of basket unloading changes.
Number of downloads:	It allows multiple unloads to be managed as a standard unload, sending a single end-of-unload signal to the underlying packaging machine
Tape stop delay:	The stop of the roughing delivery is delayed by the set value. For special applications.
Max level OFF time:	If the loading of the product into the hopper is managed by the scale, the delay in switching off the loading system starts from the activation of the maximum level sensor.

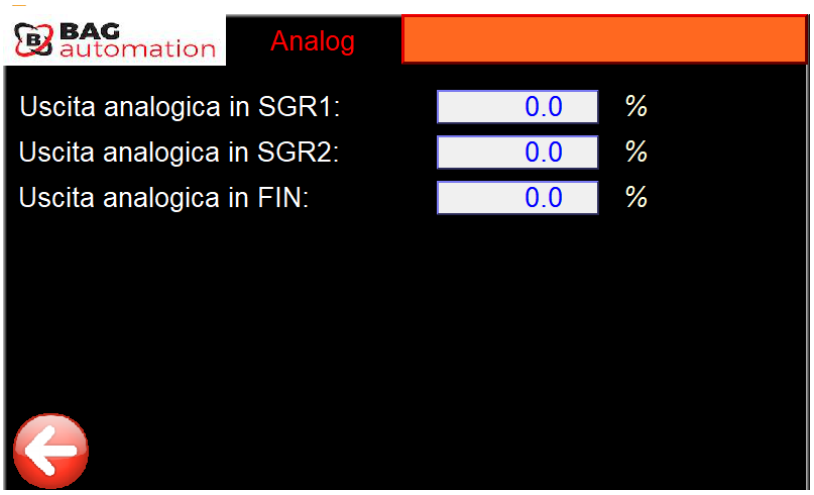
2.5.2. VIBRATION CHANNELS (OPTIONS 2/3)

This page is present only in weighers equipped with vibrating channel dosing and allows accurate adjustment of the intensity with which the channels are made to vibrate and consequently their capacity.

Roughing prefeed speed	(optional) If your weigher is equipped with pre-feed channels upstream of the standard ones and related activation photocell, this parameter controls the flow rate of the channel upstream of the roughing channel.
Finish pre-feeding speed	(optional) If your weigher is equipped with pre-feed channels upstream of the standard ones, this parameter controls the flow rate of the channel upstream of the finishing one.
Roughing speed 1	The flow rate of the roughing channel during the Roughing Time 1 period set in the “optional parameters page”
Roughing speed 2	The roughing speed
Finishing speed 1	The speed of the low flow channel during the roughing phase.
Finishing speed 2	The speed during finishing.

Allowed speeds range from 0 (stationary) to 255 (maximum speed)

2.5.3. ANALOGUE OUTPUTS



This page is present only in weighers equipped with inverter dosing and allows accurate adjustment of the speed with which the product is dosed (typically by acting on the speed of a conveyor belt or a screw).

Analog Output in Roughing1:	The rotation speed of the auger during the first coarse phase Roughing time 1 set in the “optional parameters page” (timed);
Analog Output in Roughing2:	The rotation speed of the screw or the upper feeding belt, during the coarse gravimetric phase;
Analog output in finishing:	The rotation speed of the auger or feeding belt, during the weight finishing phase.

All values above are expressed in percentages

All values from 0 (idle) to 100 (maximum speed) are allowed.

2.6. CALIBRATION PAGES.

The use of these pages is available through access to programming at Technician level, which allows you to modify recipe parameters and system calibration.

This screen gives the user the option to calibrate the load cells, if already balanced (see the second page of this section for the procedure).

2.6.1. MAIN CALIBRATION PAGE (CALIB 1/3)

As on the main page, the button located on the right of the screen is used to tare the weighing system

Sample weight:	Enter the standard weight used for calibration in this field.
Technical password:	This field allows you to change the “Technician” level password.

2.6.2. HOW TO CALIBRATE:

The following operations must be carried out by a qualified technician. Errors in this phase can lead to subsequent production of packages with non-compliant weight.

Ensure that the weighing unit is free of mechanical constraints, clean and empty.

Check that the “Sample weight” displayed on the page corresponds to the sample masses you intend to use.

Start the calibration procedure by pressing START CALIB, the following screen will be displayed:

Confirm the desire to proceed with the calibration by pressing the “Yes” button or interrupt the operation by pressing “No”.

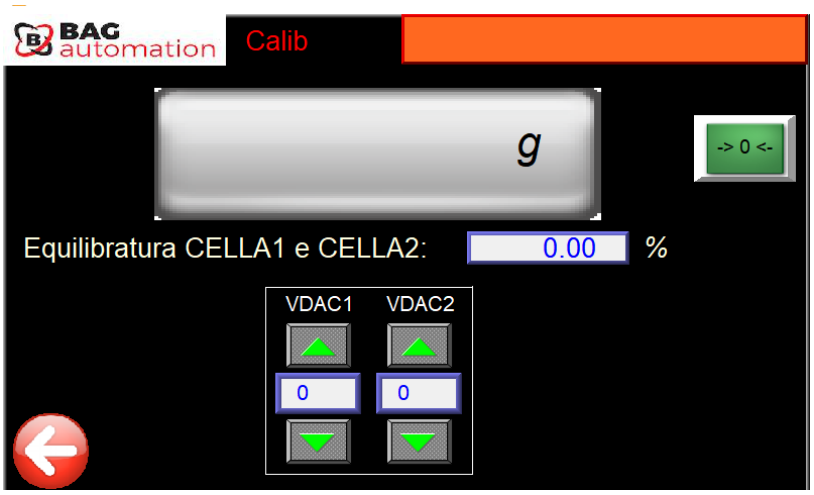
The next page is used to set the tare. Check that the weighing unit is empty and free of mechanical constraints and press the green window with the words “Empty scale?” flashing.

After a few seconds, the writing on the green band will become “enter sample weight, place the sample weight on the weighing unit and confirm by pressing the green window again, allowing the acquisition of the sample weight.

Verify that the displayed weight matches the sample weight by removing and placing the sample weight, thus completing the process.

To return to the main page, press the Home button.

2.6.3. CELL BALANCING PAGE (CALIB 3/3).



This screen provides the Technician with the ability to balance the load cells, if the group is weighed on multiple cells (*)

Note: cell1 and cell2 are references to the two inputs of the electronic weighing board, each of which hosts two load cells, cells 1, 2 are connected to Cell1 while cells 3, 4 are connected to the input of cell2.

For example, for mounting on three load cells located at 120° electrical balance in case of mechanically perfect zero must be 128 points for all VDAC with a balance of 50.0% between Cell1 and Cell2.

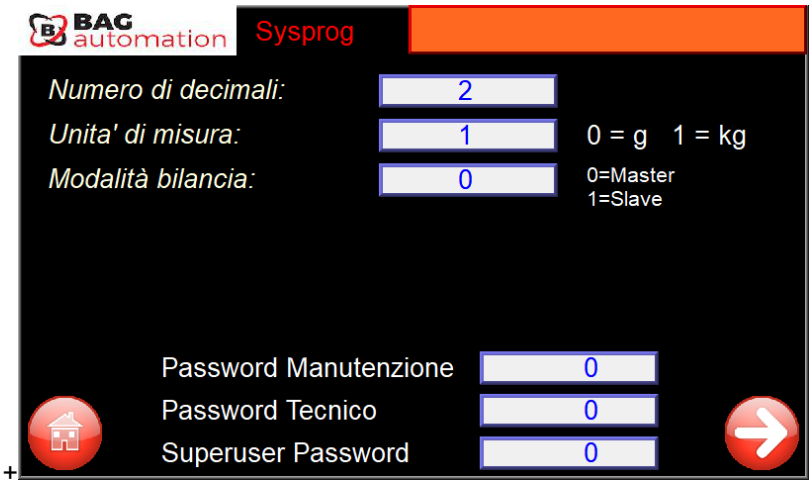
(*) In the case of a scale with only one load cell, set all VDAC to the value 128 and balancing to 100%.

2.7. SYSTEM PARAMETERS SETTING PAGES

The use of these pages is achieved through access to programming at the superuser level, which allows modification of recipe parameters, system calibration and modification of system parameters.

2.7.1. UNITS OF MEASUREMENT AND PASSWORDS (SYSPROG 1/6).

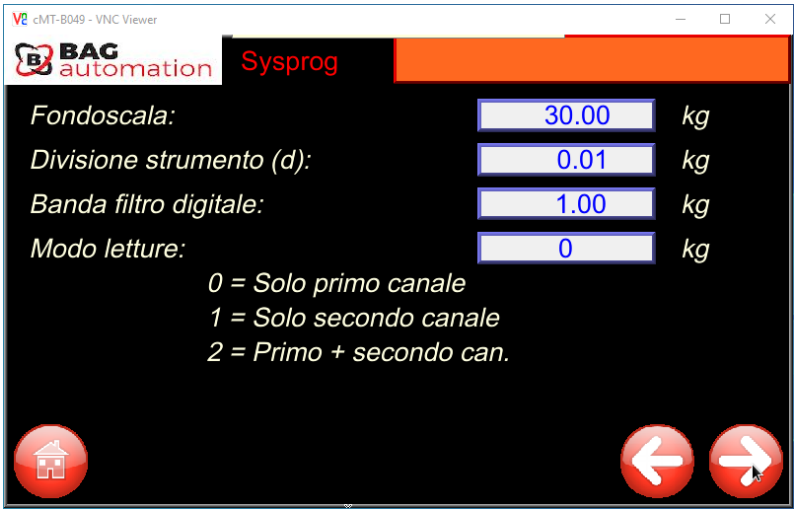
It is permitted to intervene on these parameters only after approval by the manufacturer



Number of decimals:	Place in this field the number of decimals to display on the main page;
Unit of measurement:	Select the unit to display on the main page.
Scale mode:	Select the role of this scale (i.e. master or secondary) in a multi-scale arrangement.
Maintenance Password:	(User) The password can be changed by changing this value;
Technician Password	(Technical) The password can be changed by changing this value;
Superuser password:	(Manufacturer) The password can be changed by changing this value;

2.7.2. MODIFICATION OF SYSTEM PARAMETERS (SYSPROG 2/6).

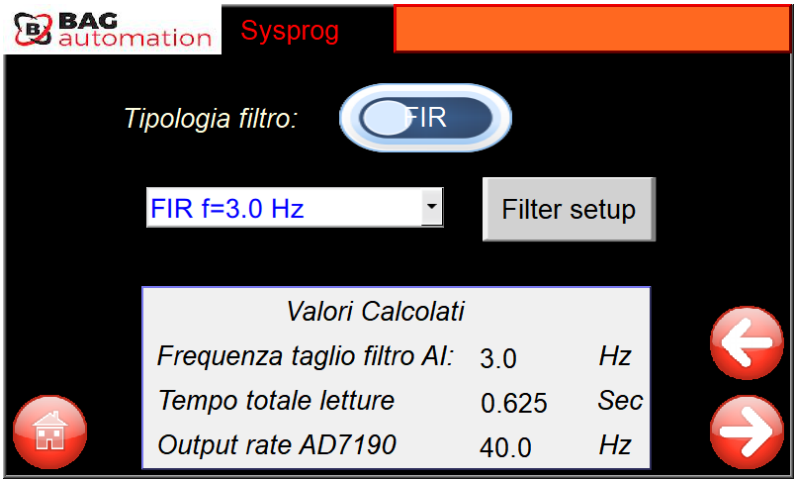
It is permitted to intervene on these parameters only after approval by the manufacturer



Full scale:	The maximum value allowed by the weighing group
Instrument division:	Value of the minimum variation displayed by the weighing instrument.
Digital filter band:	Weight interval between readings considered permissible.
Reading mode:	How to use the connectors physically installed on the electronic board.

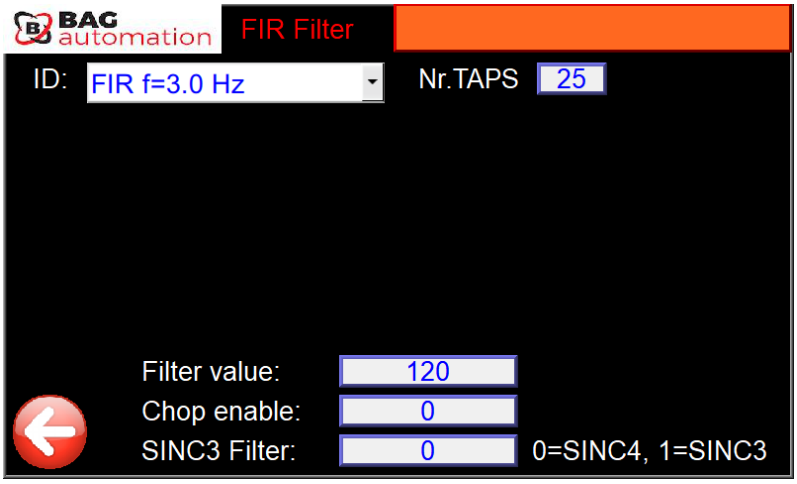
2.7.3. MODIFICATION OF SYSTEM PARAMETERS (SYSPROG 3/6).

It is permitted to intervene on these parameters only after approval by the manufacturer



Tipologia filtro:	Change the algorithm with which the weighs are analyzed by the electronic weighing board. The available options are FIR (Finite Impulse Response) and AI, the AI mode activates a secondary selector that allows you to choose the AUTO (automatic) or FIXED procedure.
FIR f=… Hz:	This drop-down menu allows you to quickly change the cutoff frequency for the FIR filter and therefore varies the system's response speed and accuracy.
Filter setup	Calls a page with other FIR filter parameters (see below)

The gray box shows the filtering values obtained with the combination of the entered parameters.



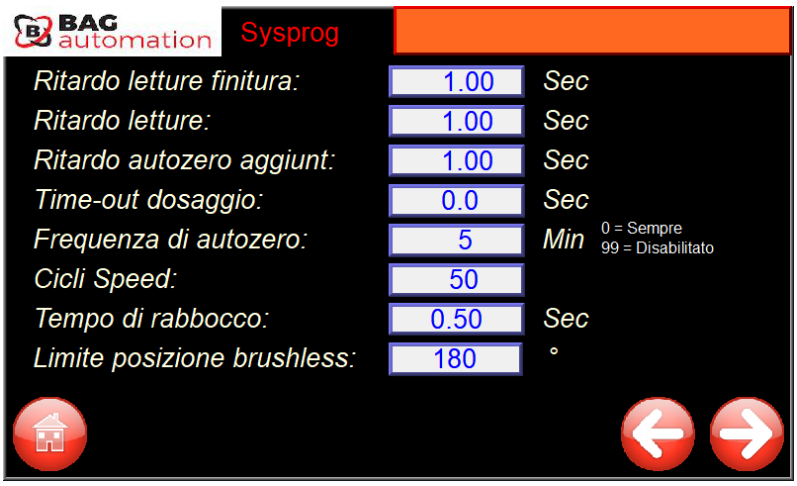
2.7.4. MODIFICATION OF SYSTEM PARAMETERS (SYSPROG 4/6).

It is permitted to intervene on these parameters only after approval by the manufacturer

Scale mode:	0 Weighing by net weight. 1 Gross weight weighing.
Basket sensors:	(opt) in the weighers in which they are present, allows you to choose whether to use the open and closed basket sensors to manage the weighing cycle or use the timers Basket closing time: (present on this page) and Unloading time: (present in the recipe)
Weight control during unloading:	Allows you to enable this feature
Gaussian class	It is used to set the histogram class in the statistics page.
Basket closing time:	The time needed for the weigher to close the basket
Queue descent time:	Delay considered sufficient to allow the product in flight to settle after the finishing stop.

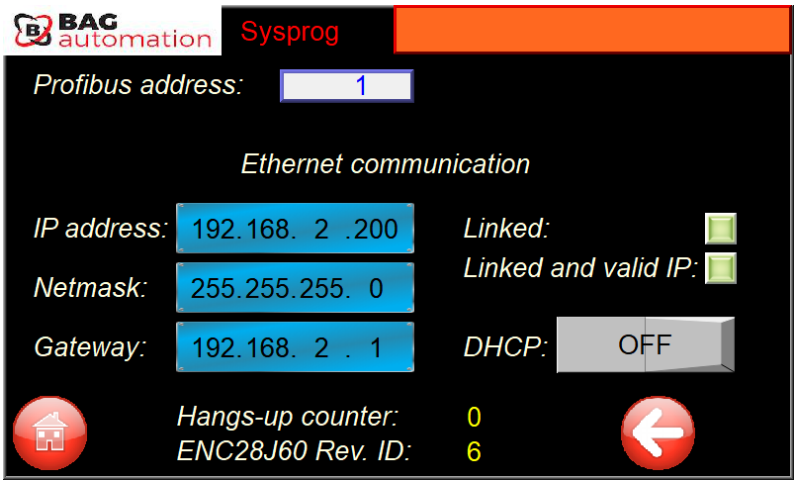
2.7.5. MODIFICATION OF SYSTEM PARAMETERS (SYSPROG 5/6).

It is permitted to intervene on these parameters only after approval by the manufacturer



Finishing readings delay:	Tempo di interdizione delle celle di carico dopo il passaggio da Sgrossatura a Finitura
Reading delay:	Settling time before acquiring the final weight.
Autozero delay added:	Additional settling time during periodic scale self-tare operations.
Dosing time-out:	Maximum time allowed for a weighing, after which the scale is stopped with the relative alarm.
Autozero frequency:	Periodicity of automatic tares: 0 Autozero is performed every cycle. XX Autozero runs every xx minutes. 99 Autozero is disabled.
Speed cycles:	Number of stable cycles necessary to activate Speed mode
Refilling time:	The duration of a top-up pulse when triggered by a “minus tolerance” event;
Brushless position limit:	(opt) Maximum opening of the motorized shutter in weighers equipped with a brusless motor in the power supply.

2.7.6. COMMUNICATION SETTINGS (SETUP 6/6)

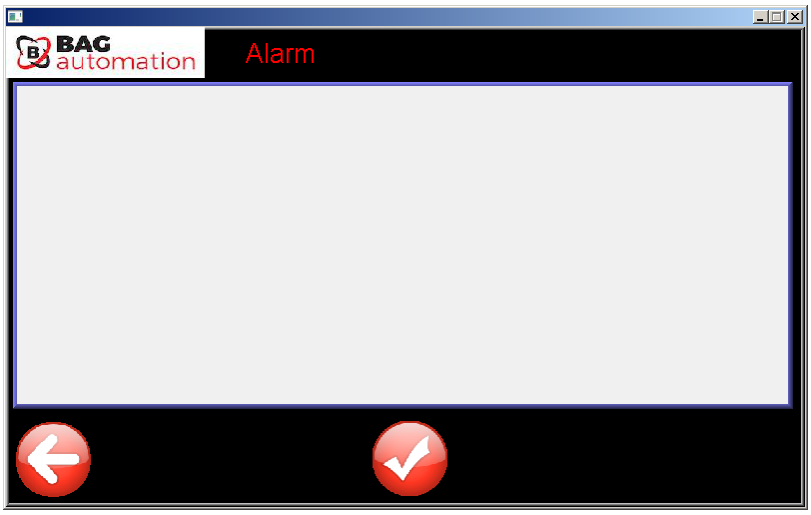


Profibus address:	Profibus address of the card (optional Profibus adapter)

The use of this page is dedicated to diagnosing the board’s communication. Internal use only.

3 LIST OF WEIGHING ALARMS

3.1. LIST OF ALARMS PAGE



This page shows the list of alarms in progress.

To reset the alarms, press the button.

3.2. ALARM TABLE:

For reasons of generalization, ALL alarms programmed on the machine are shown, including those that are linked to a different configuration.

SCHERMO	DESCRIZIONE	CONTROLLI CONSIGLIATI:
Flash memory alarm	Internal alarm of the board, appears after each reprogramming.	If it has been reprogrammed, reset the alarm, otherwise replace the electronic board.
Profibus alarm	The card does not communicate with other profibus peripherals	Problems with an electrical connection, check cables and connectors. Check the system parameters.
Overload alarm	The weight detected in the bag exceeds the maximum program limit.	Check the parameters in the recipe: % roughing, dosing speed.
Autozero beyond the limit	During an Autozero a 4% greater weight was detected compared to the previous Autozero.	Check that the weighing unit is clean, free from mechanical constraints and reset the alarm.
Brushless	The Brushless drive is in alarm.	Check the error code on the drive
Emergency	The emergency button was pressed or an emergency contact was opened.	Restore the emergency circuit to the rest position after having eliminated the problem.

Calibration error	Error during calibration.	Reset the alarm and perform a new calibration.
Firmware Update Error	An update failed.	Check the network connection, perform a new update.
Ready weighing readings unstable	Excessive weight changes detected at the end of the dosage.	Check the absence of strong vibrations, check the weighing cells.
Magnetothermal	The safety protections inside the electrical panel have tripped.	Disconnect the power, open the electrical panel door and check the status of the circuit breakers.
Maintenance required	The cycle counter has reached the preset value	Perform required maintenance. Contact the manufacturer to reset the alarm
MIN Level disabled	The minimum level has been manually disabled	
Minimum level	Scale on standby: Product in the loading hopper is low.	Check the efficiency of the sensor.
Invalid system parameters	Lack of system parameters.	Set the parameters protected by the manufacturer's password.
Unstable weight during self-tare	Weight reading during automatic tare is unstable.	Increase "Autozero delay" in system page, check for mechanical interference.
Problem with cells connected to CELL1	Anomalia dal connettore cella 1	Interruption of an electrical connection, failure of a load cell, excessive load on the cell.
Problem with cells connected to CELL2	Anomalia dal connettore cella 2	Interruption of an electrical connection, failure of a load cell, excessive load on the cell.
Hardware problem	The weighing card is faulty.	Turn off/on again. If it persists, replace the electronic board.
Recipe not stored	Error loading a recipe, which is non-existent.	Repeat the recipe loading operation with an existing one.
Basket sensors	The detection by the sensors is inconsistent.	Check the position and efficiency of the sensors.
Empty basket, recipe loading not allowed	A recipe change was attempted with a full basket.	Set the scale to "run one cycle and stop, then produce one package.
Dosing time-out	The time limit for the weighing cycle has been exceeded.	Check the product in the loading hopper and/or remove the blockage.
Warm-up time	System warm-up time.	Wait or reset the alarm
No ref CELL1	Cell connector fault 1	Interruption of an electrical connection, failure of a load cell, excessive load on the cell.
No ref CELL2	Cell connector fault 2	Interruption of an electrical connection, failure of a load cell, excessive load on the cell.
Software non validato	Internal board alarm that may appear after an update.	Contact the manufacturer for unlocking

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This manual contains 39 pages.