



i•FeedGood M
Weighing System

Technical Guide
3030 Model

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General Information

Before using **i•FeedGood M** it is important to read the information provided in this Guide to avoid seriously harming yourself or damaging the scale.

Note: for further information, contact your Distributor or send a support request to the address support@labelgroup.com.

Important safety standards

- Carefully read all the documentation attached to the scale.
- Comply with all the instructions and precautions contained in this Guide.
- Only qualified personnel are authorised to assemble and commission this equipment.
- Before commissioning the scale, analyse the risks which could arise from its use, especially regarding personal safety and that of the plants.
- Disconnect the connection cables when needing to weld the mixing wagon.
To keep the welding current from crossing the load cells, short circuit the metal body of the load cells with a sufficiently large cable and place the earth clamp as close to the welding point as possible.
- Do not expose the scale into contact with aggressive chemicals or solvents that can affect plastic materials or corrode metal parts.

Disconnect the power cable in the following situations:

- If the connection cables or connectors are worn or damaged.
- If there is any liquid inside the scale, including condensation.
- If the scale case is damaged or broken.
- If the vehicle battery needs to be recharged.



This symbol indicates that, based on local laws and standards, the product must be disposed of separately from household waste. When the product can no longer be used, it must be brought to the collection spot established by local authorities. Check local standards for further information regarding waste of electronic products.

Mechanical installation

i•FeedGood M must be installed using the fixing system included in the supply. It must be installed on a flat, stable and vibration-free surface. Do not install or place the scale near heat sources or strong magnetic fields (motors, magnets, etc.).

Connections

i•FeedGood M is connected via two MS/MIL-C5015 series connectors, two M12 series connectors and a C16 series connector.

Note: before performing the connections, make sure that the scale and accessories are off.

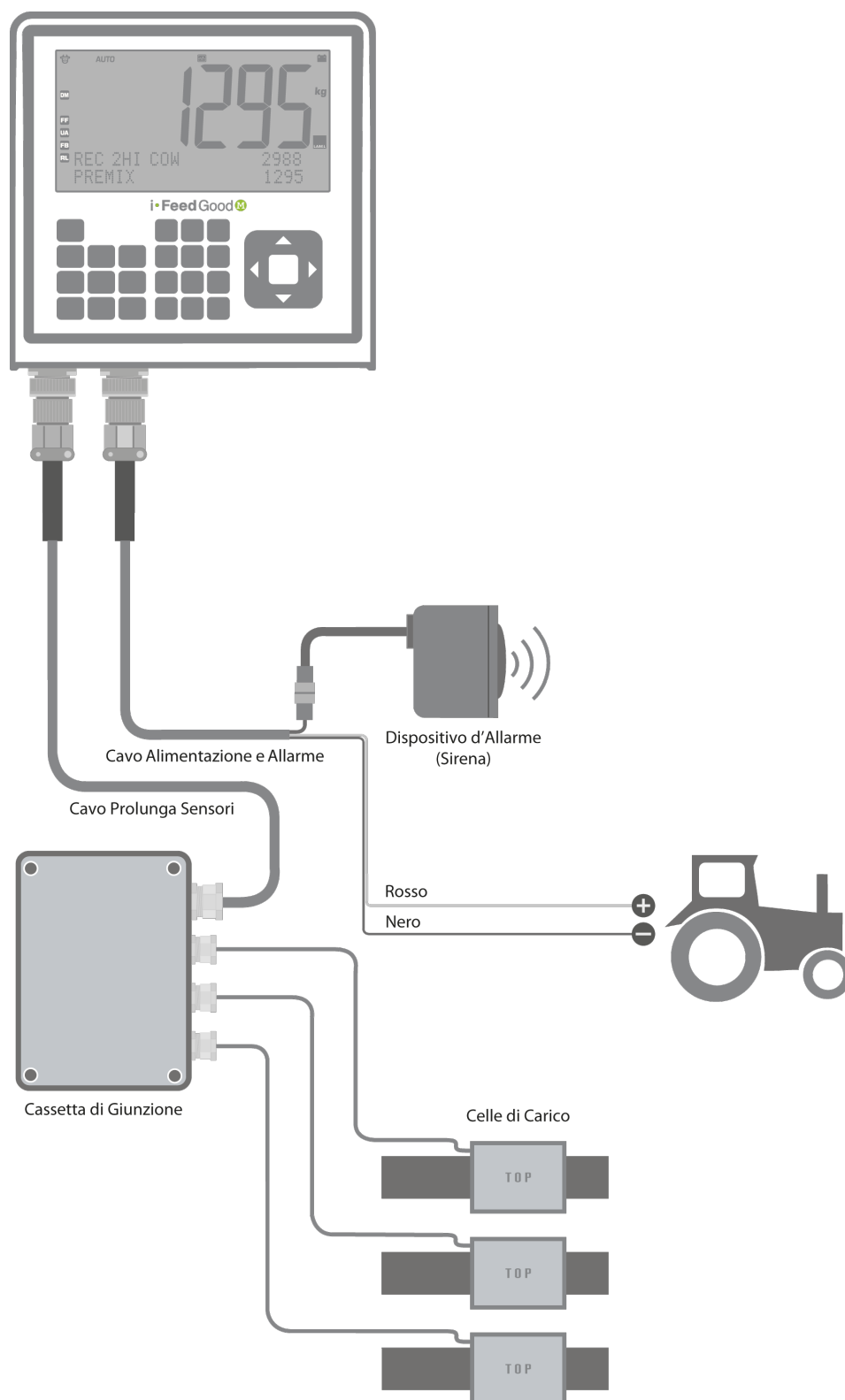
The **POWER/ALARM** connector is where power supply and the alarm device are connected. It is set up for connection of the Power and Alarm Cable which can be identified by the red tag.

The **SENSOR** connector is where the load cells are connected. It is set up for connection of the Load Cells Extension Cable identified by the blue tag.

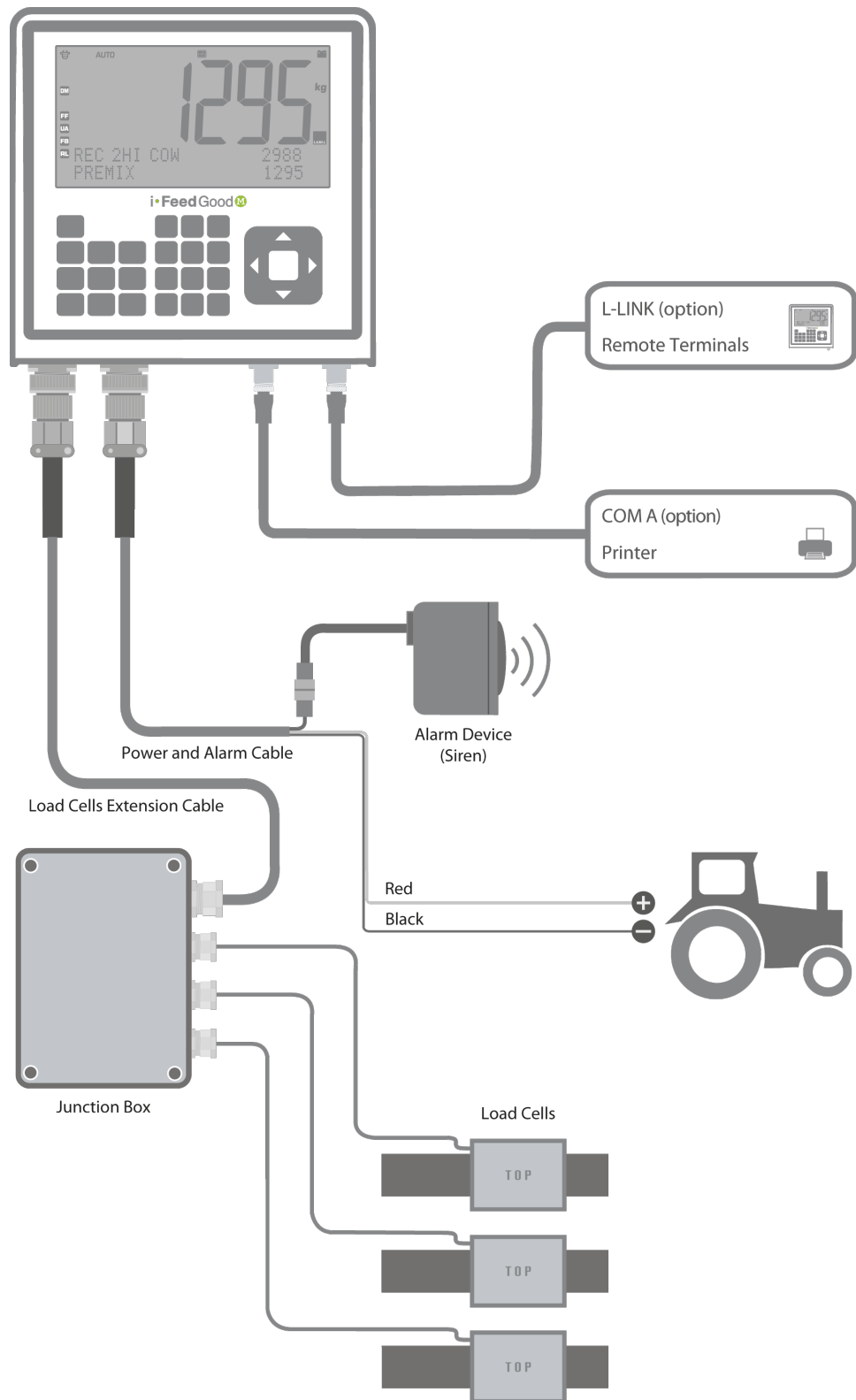
Further connectors could be present depending on the options purchased. See the documentation supplied together with the options and accessories for the connections.

Female MS/MIL-C5015 connectors			
POWER/ALARM		SENSOR	
Pin	Function	Pin	Function
A	Power Supply +	A	(S-) Signal –
B	Alarm Output +	B	(E+) Power Supply +
C	Power Supply -	C	(S+) Signal +
		D	(E-) Power Supply –
		E	(SHLD) Shield

Connection diagram base version



Connection diagram with L-Link and COM A Port



Replacing the fuse

Before replacing a fuse, it is recommended to find the probable causes which caused it to blow.

We also recommend disconnecting all cables before opening the box.

To replace the fuse, proceed as follows:

1. Get a 1,6 Amp, 5x20mm time-delay fuse.
If the scale is supplied with the **OUT** or **HEATER** connector, or at the scale are connected more than 2 L-Link Remote Terminal, get an 6,3 Amp, 5x20mm fast-acting fuse.
2. Using a Phillips N. 1 screwdriver, remove the 13 fixing screws from the rear cover.
3. Open the rear cover.
4. Identify the fuse holder on the circuit board (see photo 1).
5. Remove the fuse holder cap and replace the fuse.
6. Put the cap back on to the fuse holder and close the box making sure not to crush the connection wires.
7. Screw the 13 fixing screws back onto the rear cover.

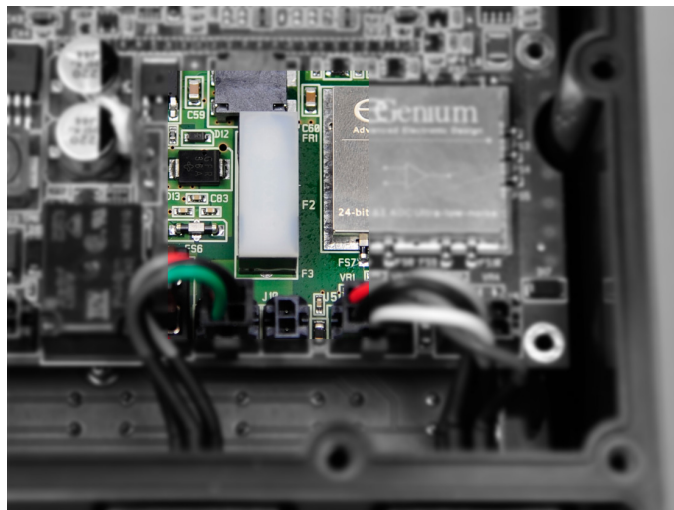


Photo 1

Maintenance

In order to prevent malfunctioning or failures, it is recommended to perform the following operations periodically:

- Check that the external power supply system to the scale works properly, also checking that the connection points have no oxidization or humidity.
- Check that the load cells have no dents. The possible presence of rust on the load cell body does not endanger its operation.
- Check that all parts of the weighing system have no dents or signs of burns.
- Check that the loaded weight corresponds with the weight displayed by the scale, loading a weight with a known value on the mixing wagon.
- Check clamping of all the screws on the parts making up the weighing system.
- Periodically clean the scale using a moist, soft and down-free cloth. Never use sprays, abrasives, solvents or sharp objects which can damage the case.
- Before cleaning the mixing wagon with high pressure water jets, disconnect the connection cables, remove the scale from the mixing wagon and protect the connectors of the connection cables from possible water infiltrations. Also pay the utmost attention not to spray the load cells, junction box, alarm devices and other accessories directly with water.

EC Declaration of Conformity

i•FeedGood M complies with the essential requirements of the Directive 2004/108/EC on Electromagnetic Compatibility as it complies with standards EN61326-1:2013, EN14982:2009 (agricultural machinery), ISO13766:2006 (earth-moving machinery), EN50498:2010 (road vehicles), ISO7637-3:2007.

If **i•FeedGood M** is not installed and used in strict compliance with the instructions provided in this Guide, it could be faulty or cause the surrounding equipment to malfunction. In any case there is no guarantee of these failures not occurring in a specific installation. Should any malfunctioning occur, contact the Customer Service which can suggest measures to be taken to eliminate the problems.

Compliance with Directives is only guaranteed when original accessories and spare parts are used. Any modifications or interventions to the scale not authorised by the manufacturer in writing could cancel its conformity to Directives and make it prohibited for use.

User Interface

To improve management of the farm and offer greater efficiency and a better quality of production to the farm manager, we have developed a new business tool, **i•FeedGood M**, which represents the state of the art with regard to weighing systems for mixing wagons. To satisfy the requirements of all farm managers, this system is offered in two versions:

i•FeedGood M 15.15 designed for basic requirements of small and medium farms.

i•FeedGood M 30.30 designed for those who want the ultimate in simplicity, but do not want to sacrifice performance.

The following Table illustrates the differences between the two models.








Functions	15.15	30.30
Maximum Number of Recipes	15	30
Max. Number of Recipe Elements	15	30
Management of the Manual Additions		✓
Management of the Feeding Clean-Ups		✓
Management of the Appetite of the Groups		✓
Unloads Adjustment Function		✓
Feeding Balancing Function		✓
Reload Function		✓
Management of Dry Matter		✓
Management of Printing		✓
Management of Usage Files		✓
4-20mA Analogical Output		✓













Display

i•FeedGood M is equipped with a brand-new 7.3" LCD screen with high contrast, large visual angle and white LED backlighting.

Icons

The display has 28 icons which guide you in using the scale.












Icon	Meaning
PROG.	Indicates that you are in Programming.
AUTO	Indicates that you are in Recipes Execution.
SET	Indicates that you are in Target Weighing.
MANUAL	Indicates that you are in Manual Weighing.
	Indicates that you are in Settings.
LOAD	Indicates that the element displayed must be executed in loading.
UNLOAD	Indicates that the element displayed must be executed in unloading.
	Indicates that a Clean-Up is displayed.
	Indicates that a Manual Adding is displayed.
	Indicates that the Jump Function is disabled on the displayed element.
	Indicates that the Ingredient displayed has the Dry Matter programmed.
	Indicates that the Group displayed has the Appetite programmed.
	Indicates that a Recipe by Animals is displayed.
















	Indicates that the Recipe displayed has the Feeding Factor programmed.
	Indicates that the Recipe displayed has the Unloads Adjustment Function enabled.
	Indicates that the Recipe displayed has the Feeding Balancing Function enabled.
	Indicates that the Recipe displayed has the Reload Function enabled.
kg lb	Indicate the Unit of Measurement of the displayed weight.
%	Indicates that the displayed value is a percentage.
	Indicates that in the view of a list, there is at least one item prior to the one displayed.
	Indicates that in the view of a list, there is at least one item following the one displayed.
	Indicates that the Alphanumerical Writing is selected.
	Indicates the status of the power supply.
	Indicates activation of the Alarm Output.
	Indicates activation of the Mixing Timer.
	Indicates that a L-Link Remote Terminal is connected to L-LINK connector.
	Indicates that the connection with a W-Link Remote Terminal is active.

Keypad

The scale is supplied with 27 mechanical keys.


Note: if you want to change the keypad type (Latin, Cyrillic), program the "Keyboard" System Preferences.

Key	Name	Function
	ON/OFF	Press to switch the scale on and off.
	RECIPES	Press to select the Recipes.
	ARCHIVES	Press to select the Ingredients and Groups.
	ANIMALS NUMBER	Press to select the first Group of Recipes selected.
	MENU	Press to select the commands and functions of the scale.
	START/ PAUSE	Press to execute the displayed Recipe. In Weighing press to enable/disable the Weight Hold Function.
	NET/ TOTAL	Press to view the Net Weight or Total Weight in Manual Weighing.
	MAN./ TARE	Press to reset the Net Weight in Manual Weighing.
	>0<	Press to execute the Zero Scale.
	OK	Press to confirm.
	ESC	Press to cancel or to go back to the previous screen.

		Press to go to the next screen.
		Press to go back to the previous screen.
		Press to select the previous item.
		Press to select the next item.
	Key 1	Press to write “space” or 1. In Manual Weighing, press to select Target Weighing. In Recipes Execution, press to execute the Weight Restore Function.
	Key 2	Press to write A, B, C, 2 (Latin keypad) or А, Б, В, Г, 2 (Cyrillic keypad). Press for modify the display backlight brightness.
	Key 3	Press to write D, E, F, 3 (Latin keypad) or Д, Е, Ё, Ж, 3, 3 (Cyrillic keypad). Press to select the Usage Files.
	Key 4	Press to write G, H, I, 4 (Latin keypad) or И, Ы, К, Л, 4 (Cyrillic keypad).
	Key 5	Press to write J, K, L, 5 (Latin keypad) or М, Н, О, П, 5 (Cyrillic keypad). Press to select the Mixing Timer.
	Key 6	Press to write M, N, O, 6 (Latin keypad) or Р, С, Т, У, 6 (Cyrillic keypad). Press to select the Date & Time.
	Key 7	Press to write P, Q, R, S, 7 (Latin keypad) or Ф, Х, Ц, Ч, 7 (Cyrillic keypad). Press to display the Power Supply of the equipment.

	Key 8	Press to write T, U, V, 8 (Latin keypad) or Ш, Щ, Ъ, Ь, 8 (Cyrillic keypad). Press to select the Settings.
	Key 9	Press to write W, X, Y, Z, 9 (Latin keypad) or Ъ, Э, Ю, Я, 9 (Cyrillic keypad). Press to enable/disable counterknives actuation.
	Key 0	Press to write 0. Press to execute printing (optional).
	Full stop Comma Minus Sign	Press to write “full stop”, “comma” or “minus sign”. Press to enable the Lubricating Timer Function (optional).
	C	Press to cancel the entered characters.

Programming alphanumerical and numerical fields

Use Alphanumerical Writing to program the alphanumerical and numerical fields. The display indicates activation of Alphanumerical Writing by switching on the icon .

Shortcut: if you need to enter a number in an alphanumerical field, keep the key pressed until the display shows the number relative to the pressed key.

Entering a new value in an alphanumerical field

1. The cursor positions itself on the first character of the field.
2. Press the alphanumerical keys to enter a character.
3. Press ◀ or ▶ to move inside the field.
4. Press **C** to cancel a character.
5. Press **OK** to confirm the entering of data.
6. Press **ESC** to cancel the entering of data.

Modifying an alphanumerical field



1. The cursor positions itself on the last character entered.
2. Press the alphanumerical keys to enter a new character.
3. Press ◀ or ▶ to move inside the field.
4. Press **C** to cancel a character.
5. Press **OK** to confirm the entering of data.
6. Press **ESC** to cancel the entering of data.

Modifying a numerical field

1. The display shows the value stored previously.
2. Press the alphanumerical keys to enter the new value.
3. Press **C** to cancel the displayed value.
4. Press **OK** to confirm the value entered.
5. Press **ESC** to cancel the value entered.

How to select an item from a list

1. Press ▲ to select the previous item, then press ► to confirm.
2. Press ▼ to select the next item, then press ► to confirm.
3. Press **OK** together with ▲ to select the first item of the list.
4. Press **OK** together with ▼ to select the last item of the list.

Note: if there are items prior to those viewed, the display shows the icon , if there are items following those viewed, the display shows the icon .

Power On



How to switch on i•FeedGood M

1. Press **ON/OFF**.
The display shows the Home Screen and the Welcome Message, then the scale selects Manual Weighing viewing the Total Weight.


i•FeedGood M is ready to execute the operations you choose.

Note: if you want the scale to switch on automatically as soon as it is powered, program the "Power On Method" System Preference.

Note: if you want the scale to switch on automatically at a set time, program the "Automatic Power On Time" System Preference.

Note: if you want to customise the Welcome Message, program the "Welcome Message" System Preference.

Note: if you want the scale to select Recipe Programming directly after the Welcome Message, program the "Activity at Power On" System Preference.

Note: during operation of the scale, keep an eye on the power supply. If the value is correct, the display shows the icon  in steady mode. For further information, see the "Power Supply" application.

2. If the Total Weight is not "0" with the mixing wagon skip empty, run the Zero Scale.

How to shut down i•FeedGood M

1. Press **ON/OFF**.

The display shows the message "Goodbye" for 3 seconds before switching the scale off.

Note: if you want the scale to shut down automatically at a set time, program the "Automatic Power Off Time" System Preference.

Note: if you want the scale to shut down automatically after a period of inactivity, program the "Power Saving" System Preference.

Note: if in the "L-Link Port" System Preference is set "Label 5 or Label 6" option, when **ON/OFF** is pressed the scale will not switch off, but go into "Standby" mode. To switch the scale off it is necessary to cut off the power supply from the key on the dashboard. For further information, contact Customer Service.

Archives



Use Archives to program the Ingredients and Groups. Group means the stable/enclosure where the weighed food is unloaded with the mixing wagon.

Note: if the printer is enabled, the Archives can be printed. For further information, see the printing examples in Annex A.

Note: you can store up to 60 different Names per Archive.

Note: if the "Scale Protect" System Preference is set at "Settings and Data", when you try to create or modify a scale element, you can be asked to enter a Password. For further information, see the "Scale Protect" System Preference.

How to show the Archives List

1. Press **ARCHIVES**.
The display shows the icon **PROG.**, the text "**FILE**" and the Archives list.


How to select an Archive

1. Press ▼ or ▲ in the Archive List to select the Archive you want to program, then press ►.
The display shows the Names stored in the selected Archive in alphabetical order.

Note: if you selected the Ingredients File, the display will show the text "**LOAD**".

Note: if you selected the Groups File, the display will show the text "**UNLOAD**".

How to create a new element/code

1. Select the Archive and then press ►.
2. Press **MENU**, select the item “NEW archive_name”, then press ►. The display shows the icon .


Note: the scale automatically show the Name “archive_name X” where X indicate the element number. If you want to delete the Name shown and program the desired Name, press **C**.


3. Enter the Name, then press **OK**.
The display shows the Name and parameters of the element/code.
4. Complete the programming by setting the optional parameters.


Note: when you create a new element, the scale sets the Jump Function according to the "Functions Default" System Preference.

How to modify an element/code

1. Select the element/code you want to modify, then press ►.
The display shows the Name and parameters of the element/code.
2. Press ▼ or ▲ to select the item you want to modify.
3. Press ► to program the selected item.

Note: the Dry Matter represents the percentage of the dry part of the Ingredient. Use this parameter to program the weight of the Ingredients of the Recipes by Animals by setting the weight only of the Dry Matter. The display will indicate that the Ingredient has Dry Matter programmed by showing the icon .

Note: the Jump Function allows you to set how to pass to the next element in Recipes Execution. The display will indicate that the element has the Jump Function disabled by showing the icon .

Note: Manual Adding means an Ingredient which is not weighed on the mixing wagon during the Recipes Execution, but is weighed separately on a precision scale before being poured into the mixing wagon skip. The display will indicate that the Ingredient has the Manual Adding parameter programmed by showing the icon .


How to eliminate an element/code

1. Select the element/code you want to eliminate.
2. Press **MENU**, select the item “DELETE archive_name”, then press ►. The display shows the message “Do you want to delete the selected Name?”. Press **OK** to eliminate the selected Name.

If the Name you are eliminating is used in at least one Recipe, the display will show the message “You cannot delete the Name because it is used in the Recipes.” for 3 seconds. To eliminate the element/code, first you must cancel it from the Recipes where it is stored.

Note: if an Ingredient/Clean-Up/Group is deleted, it will be automatically deleted in the respective Usage Files.

How to search an element/code

1. Select the Archive and then press ►.
2. Press **MENU**, select the item “FIND archive_name”, then press ►. The display shows the icon .
3. Enter the Name to be found, then press **OK**. The display shows the found Name.

Shortcut: to search for a Name quickly, press the key corresponding to the first letter of the Name you are looking for, when the display shows the list of Names.

How to print an Archive

1. Select the Archive to be printed from the Archive List.
2. Press **PRINT** (key 0).
3. Press **ESC** if you want to cancel printing. The display shows the message “Do you want to cancel printing?”. Press **OK** to cancel printing.

Recipe Programming



Use Recipe Programming to program the Recipes.

Recipe Programming can be executed in two different modes:

- For Animals.
- For Totals.

In Recipes by Animals, the Ingredients are programmed with the weight (normal or Dry) to be distributed to the individual animal (with 0.01 kg/lb resolution), while the Groups are programmed with the number of animals of the single stable.

In Recipes by Totals, the Ingredients are programmed with the total weight to be loaded, while the Groups are programmed with the total weight to be unloaded in the single stable.

Note: if the printer is enabled, the Recipes can be printed. For further information, see the printing examples in Annex A.

Note: up to 30 Recipes can be stored consisting of a maximum of 30 elements each.

Note: if the "Scale Protect" System Preference is set at "Settings and Data", when you try to create or modify a Recipe, you can be asked to enter a Password.

For further information, see the "Scale Protect" System Preference.

Note: the operation described below considers that Preferences are set with the default values.

How to view the Recipes List

1. In Manual Weighing press **RECIPES**.
The display shows the icon **PROG.**, the text “**RECIPE**” and, in alphabetical order, the names of the Recipes stored in the Archive and the relative Total Weight.



Note: if you want to view the Recipes in the order they were entered, program the "Recipes List" System Preference.

Note: to indicate that a Recipe has been executed today, the display shows the character “*” next to the name. If the Recipe has only been executed partially, the display shows the character “#”.

How to view the Content of the Recipe

1. In Manual Weighing press **RECIPES**.
The display shows the list of stored Recipes.
2. Press ▼ or ▲ to scroll the stored Recipes.
3. Press ► to view the Content of the selected Recipe.
The display shows the elements programmed in the Recipe and the relative value.

How to create a new Recipe

1. Press **MENU** in the Recipes List, select the item “NEW RECIPE”, then press ►. The display shows the items “RECIPE by ANIMALS” and “RECIPE by TOTALS”.
 2. Select the type of Recipe, then press ►.
The display shows the icon .
- Note:** the scale automatically show the Name “RECIPE X” where X indicate the Recipe number. If you want to delete the Name shown and program the desired Name, press **C**.
3. Enter the Name, then press **OK**.
The display shows the Name and parameters of the Recipe.
- Note:** the display will indicate that a Recipe by Animals is viewed by displaying the icon .
4. Complete the programming by setting the optional parameters.

Note: when you create a new Recipe, the Functions are set according to the "Functions Default" System Preference.

How to modify the Name and Parameters of the Recipe

1. Select the Recipe you want to modify.
2. Press **MENU**, select the item “MODIFY RECIPE”, then press **▶**. The display shows the Name and parameters of the Recipe.
3. Press **▼** or **▲** to select the item you want to modify.
4. Press **▶** to program the selected item.

Note: the Feeding Factor allows you to modify the weight to load/unload proportionally to the set value.


To indicate that the Feeding Factor is programmed the display shows the icon **FF**.

Note: the Unloads Adjustment Function automatically adjusts the weights to be unloaded according to the weights really loaded. To indicate that the Function is enabled the display shows the icon **UA**.


Note: the Feeding Balancing Function automatically adjusts the weight of the Ingredients/Clean-Ups to be loaded in proportion to the weight of the first Ingredient/Clean-Up loaded. As a consequence, the Groups are also adjusted proportionally to the weight of the first Ingredient/Clean-Up loaded. To indicate that the Function is enabled the display shows the icon **FB**. The Feeding Balancing Function requires a Clean-Up not weighing “0” or an Ingredient to be programmed in the first position of the Recipe. Otherwise, at the start of the Recipe Execution, the display shows “**ERR 24**” and the message “Feeding Balancing Function disabled.” for 3 seconds.

Note: at the end of the Recipe Execution, the Reload Function allows you to weigh the Ingredients/Clean-Ups which were not loaded totally, proposing the remaining amount to be weighed. To indicate that the Function is enabled the display shows the icon **RL**. The Reload Function requires that the Ingredients/Clean-Ups are programmed first in the Recipe and then the Groups. Otherwise, at the start of the Recipe Execution, the display shows “**ERR 23**” and the message “Reload Function disabled.” for 3 seconds.

How to insert an element in the Recipe

1. Select the Recipe you want to program, then press ►.
The display shows the position, Name and value of the elements programmed in the Recipe.
2. Press ▼ or ▲ to select the position where you want to insert a new element.
3. Press **MENU**, select the type of element you want to insert, then press ►.
 - If you select the item “INSERT INGREDIENT_GROUP_CLEAN-UP” the display shows the Names stored in the relative Archives. Select the Name you want to insert, then press ►. The display shows the icon . Enter the value, then press **OK**. The display shows the parameters of the inserted element. Complete the programming by setting the optional parameters.

Note: if you select “INSERT CLEAN-UP” the display shows the Names of the Groups Archive to choose to which Group associate the Clean-Up.


Note: if you inserted an Ingredient, the display shows the icon **LOAD**, if you inserted a Group the display shows the icon **UNLOAD**, if you inserted a Clean-Up the display shows the icon **A** and the character “*” before the name.
 - If you select “INSERT TIMER” the display shows the icon . Enter the value (min:s), then press **OK**. The display shows the parameters of the inserted Timer. Complete the programming by setting the optional parameters.

Note: the Mixing Timer Function allows you to program a timer in the Recipe to be used in the Recipe Execution to control the mixing time.


How to eliminate an element from the Recipe

1. Select the element you want to eliminate.
2. Press **MENU**, select the item “DELETE ELEMENT”, then press ►. The display shows the message “Do you want to delete the selected Name?”. Press **OK** to eliminate the selected Name.

How to modify the position of an element

1. Select the element you want to modify.
2. Press ►, select the item "POSITION", then press ►. The display shows the icon .
3. Set the position, then press **OK**.


How to modify the weight of Ingredients/Clean-Ups

1. Select the Ingredient/Clean-Up you want to modify.
2. Press ►, select the item "WEIGHT" or "DRY WEIGHT", then press ►. The display shows the icon .

Note: the item "DRY WEIGHT" is only present in Ingredients of Recipes by Animals and is used to program the Recipes by setting the dry part of the Ingredient.


3. Enter the value, then press **OK**.

How to modify the weight/number of animals of Groups


1. Select the Group you want to modify.
2. Press ►, select the item "WEIGHT" (in the Recipes by Totals) or the item "ANIMALS" (in the Recipes by Animals), then press ►. The display shows the icon .
3. Enter the value, then press **OK**.

Shortcut: to quickly position yourself on the first Group of Recipes selected, press **Number Animals**.

How to modify the Mixing Timer

1. Select the Mixing Timer you want to modify.
2. Press ►, select the item "TIME", then press ►. The display shows the icon .
3. Enter the value (min:s), then press **OK**.


How to modify the Dry Matter of the Ingredients


1. Select the ingredient you want to modify.
2. Press ►, select the item “DRY MATTER (%)”, then press ►. The display shows the icon .

Note: the item “DRY MATTER (%)” is only present in Ingredients of Recipes by Animals and is used to program the Recipes by setting the dry part of the Ingredient.

3. Enter the value, then press **OK**.

How to modify the Appetite of the Groups


1. Select the Group you want to modify.
2. Press ►, select the item “APPETITE (%)”, then press ►. The display shows the icon .

Note: the item “APPETITE (%)” is only present in the Groups of Recipes by Animals and is used to reduce or increase the amount of food to distribute to the Group respect to the programmed value. The display will indicate that a Group with the Appetite programmed is viewed by displaying the icon .

3. Enter the value, then press **OK**.

How to set the Jump Function

1. Select the element you want to modify.
2. Press ►, select the item “JUMP”, then press ►.
3. Press ▼ or ▲ to modify the setting, then press **OK**.


Note: the Jump Function allows you to set how to pass to the next element in Recipes Execution. The display will indicate that an element has the Jump Function disabled by showing the icon .

How to modify the Recipe Totals

Modifying the Recipe Totals allows you to increase/decrease the programmed weight of the elements proportionally to the inserted value.

1. Select the Recipe you want to modify.
2. Press **MENU**, select the item “MODIFY TOTALS”, then press **▶**. The display shows the Recipe Totals and the relative value.

Shortcut: to view the Recipe Totals quickly, press **NET/TOTAL** when the display shows the Recipes List.

3. Select the Total you want to modify, then press **▶**. The display shows the icon .
4. Enter the value, then press **OK**.

Note: modifying the Number of Animals makes it possible to increase/decrease the number of animals programmed in the Groups proportionally to the variation made.

Note: modifying the Total Weight makes it possible to increase/decrease the programmed weight of the Ingredients/Clean-Ups proportionally to the variation made.

Note: modifying the Average Weight per Animal makes it possible to increase/decrease the programmed weight of the Ingredients/Clean-Ups proportionally to the variation made.

Note: modifying the Total Dry Weight makes it possible to increase/decrease the programmed weight of the Ingredients/Clean-Ups proportionally to the variation made.


Note: modifying the Average Dry Weight per Animal makes it possible to increase/decrease the programmed weight of the Ingredients/Clean-Ups proportionally to the variation made.

Note: modifying the Total Weight Groups makes it possible to increase/decrease the programmed weight of the Groups proportionally to the variation made.

How to view the Recipe Totals

1. Select the Recipe in the Recipes List, then press **NET/TOTAL**. The display shows the Recipe Totals.
2. Press ▼ or ▲ to scroll the Recipe Totals.
3. Press **NET/TOTAL** to go back to the Recipes List.


How to duplicate a Recipe

1. Select the Recipe to duplicate.
2. Press **MENU**, select the item “DUPLICATE RECIPE”, then press ►. The display shows the icon .
3. Enter the new Name, then press **OK**.
The display shows the Name and parameters of the duplicated Recipe.

How to eliminate a Recipe

1. Select the Recipe you want to eliminate.
2. Press **MENU**, select the item “DELETE RECIPE”, then press ►. The display shows the message “Do you want to delete the selected Recipe?”. Press **OK** to eliminate the selected Recipe from the Archive.

How to search a Recipe

1. Press **MENU** in the Recipes List, select the item “FIND RECIPE”, then press ►.
The display shows the icon .
2. Enter the Name to be found, then press **OK**.
The display shows the found Name.

Shortcut: to search for a Name quickly, press the key corresponding to the first letter of the Name you are looking for, when the display shows the Recipes List.

How to print a Recipe

1. Select the Recipe to be printed from the Recipes List, then press ►.
2. Press **PRINT** (key 0).
3. Press **ESC** if you want to cancel printing.
The display shows the message “Do you want to cancel printing?”. Press **OK** to cancel printing.

How to print all the Recipes

1. Press **PRINT** (key 0) in the Recipes List.
2. Press **ESC** if you want to cancel printing.
The display shows the message “Do you want to cancel printing?”. Press **OK** to cancel printing.

Recipes Execution



Use Recipes Execution to execute a previously programmed Recipe.

Note: if the printer is enabled, weighing operations are accompanied by printing the Recipes Execution receipt. For further information, see the printing examples in Annex A.

Note: the operation described below considers that Preferences are set with the default values.

How to start execution of a Recipe

1. In Manual Weighing press **RECIPES**.
2. Press ▼ or ▲ to select the Recipe you want to execute.
3. Press **START** to confirm the start of execution.
The display shows the icon **AUTO**, the icons of the enabled Functions, the text "**START**" and the message "START EXECUTION".

Note: if the "Maximum Load" Weighing Preference is programmed, the scale controls that the Total Weight of the Recipe does not exceed the Maximum Load programmed, otherwise preventing the start execution.

Note: if the Feeding Balancing Function is enabled, the scale checks that a Clean-Up not weighing "0" or an Ingredient is programmed in the first position of the Recipe, otherwise disabling the Function.

Note: if the Reload Function is enabled, the scale checks that first the Ingredients/Clean-Ups and then the Groups are programmed in the Recipe, otherwise disabling the Function.


Load and unload

1. The display shows in sequence the Recipe Name and the Total Weight of the Recipe. If the Recipe is for Animals, the total number of Animals is also displayed. Lastly the display shows the Name of the element to be weighed and the relative value.
2. Start of weighing operations.
The display shows the weight decrease, indicating the weight still left to weigh to reach the programmed value.


Note: to execute an element other than that displayed, press ▼ or ▲ to select the next or previous element. If the Recipe has the Reload Function enabled, you can only press ▼.

Note: the Manual Adding, Clean-Ups and Mixing Timers must be executed differently than the Ingredients/Clean-Ups:


- **Manual Adding**

The Ingredient with the Manual Adding parameter enabled must be weighed separately and only afterwards poured into the mixing wagon skip. When you must load a Manual Adding, the display shows the icon , the message "Load name_Ingredient and press OK to continue." and the weight to be loaded in flashing mode. After having loaded the Ingredient, press **OK** and resume execution of the Recipe.

- **Clean-Up**

When you must load a Clean-Up, the display shows the icon  and, before viewing the weight to be loaded, the scale asks to insert the Clean-Up date. Execution of a Clean-Up with programmed weight is the same as that of an Ingredient. In the particular case of a Clean-Up without the programmed weight, the display shows the message "Load Clean-Up and press OK to continue." and the displayed weight starts from "0". After having loaded the Clean-Up, press **OK**. The scale stores the loaded weight and passes to the next element.

- **Mixing Timer**

When the scale executes a Mixing Timer, the display shows the icon  and the countdown of the programmed time.


At the end of the countdown, the display shows the message “Countdown completed.” for 3 seconds while the scale activates the Alarm Output twice. After this, execution of the Recipe resumes by displaying the next element.

Press **ESC** if you want to interrupt the countdown.

The display shows the message “Do you want to cancel the countdown? Press OK to confirm or ESC to cancel.”. If you press **OK** the display shows the message “Countdown has been cancelled.” for 3 seconds, while the scale activates the Alarm Output twice. After this, execution of the Recipe resumes by displaying the next element.

3. If during weighing operations you want to view the Total Weight, press **NET/TOTAL**.

Prealarm Threshold

1. When the weight displayed reaches 15% the programmed value (see “Prealarm” Weighing Preference), the display shows the icon  flashing, while the scale activates the Alarm Output intermittently. As weighing operations continue, the Alarm Output activates more frequently.

Note: during the Prealarm, the display shows the Name and type of the next element.

Queue Time

1. When the weight displayed is “0” or less, the Alarm Output activates for 5 seconds (see “Queue Time” Weighing Preference). If during the Queue Time the display shows a negative value, it means that an amount of food equal to the value displayed was weighed beyond the programmed value.



Note: during the Queue Time the display shows the countdown of the programmed time.

Stability check

1. If the Motion Function is enabled (see "Motion" Weighing Preference), you only pass to the next element if the displayed weight is stable when the Queue Time is up. To pass to the next element, when the weight is not stable, press **OK**.

Note: if the displayed weight is not stable when the Queue Time is up, the display shows the message "MOTION ACTIVE" until the weight becomes stable.

Passing to the next element

1. If the element has the Jump Function enabled, you pass to the next element automatically. If the Jump Function is not enabled (the display shows the icon ) , when the Queue Time is up, the display continues to show the loaded or unloaded weight or, for the Mixing Timer, the end of the countdown and the message "Press OK to continue.". In this phase the icon  flashes. Press **OK** to continue.

Weight Restore Function

1. When you need to start weighing and the viewed weight is changed respect to the programmed value, you can use the Weight Restore Function to restore the programmed value. To execute the Weight Restore Function, press **MENU**, select the item "WEIGHT RESTORE", then press **▶**. The display shows "Do you want to restore the weight? Press OK to confirm or ESC to cancel". If you press **OK** displayed weight goes back to the programmed value.

Shortcut: to quickly select the Weight Restore Function, press the key **1**.

Weight Hold Function

1. If you must move the mixing wagon during execution, press **PAUSE** to activate the Weight Hold Function. The display shows "**HOLD**" and the message "LOCKED WEIGHT". After having moved the mixing wagon, press **PAUSE** once again to resume weighing operations.

Maximum Load check

1. If the "Maximum Load" Weighing Preference is programmed, during weighing the scale checks that the programmed value is not exceeded, otherwise the display shows "**ERR 21**". For further information, see "Annex C – Error Codes".

Reload Function

1. If the Reload Function is enabled and all the Ingredients/Clean-Ups have been loaded completely, after loading the last Ingredient/Clean-Up, the display shows the message "Reload phase.", re-proposing the Ingredients/Clean-Ups which were not weighed completely and the remaining amount to be loaded.

How to interrupt execution

1. Press **ESC** if you want to interrupt execution. The display shows the message "Do you want to interrupt the execution? Press OK to confirm or ESC to cancel.". If you press **OK** the display shows the message "The execution has been interrupted." for 3 seconds.

Execution end

1. When the Queue Time of the last element is up, the display shows the message "Execution completed." and after 3 seconds the Total Weight.

Note: if you want the scale to select Recipe Programming at the end of execution, program the "Recipes Execution Activity End" System Preference.

Manual Weighing

MAN.
TARE

Use Manual Weighing to execute loads or unloads without programming any value. The possibility of viewing the Net Weight or the Total Weight allows you to weigh an unlimited number of Ingredients or to execute an unlimited number of unloads.

1. At Power On, the scale automatically selects Manual Weighing viewing the Total Weight.

Note: if you are in Recipe Programming or in Archives, press **MAN./TARE** to select Manual Weighing.

Note: the display indicates the selection of Manual Weighing by switching on the icon **MANUAL**.

Note: if the printer is enabled, press **PRINT** (key 0) to print the receipts of Manual Weighing. For further information, see the printing examples in Annex A.

Load and unload

1. Start of weighing operations.
The display shows the Net Weight or Total Weight depending on the view chosen.
2. Press **NET/TOTAL** to change the type of view.
3. Interrupt weighing operations when the displayed weight reaches the desired value.
4. Press **MAN./TARE** to reset the Net Weight.

Weight Hold Function

1. If you must move the mixing wagon during execution, press **PAUSE** to activate the Weight Hold Function. The display shows "**HOLD**" and the message "LOCKED WEIGHT". After having moved the mixing wagon, press **PAUSE** once again to resume weighing operations.

Maximum Load check

1. If the "Maximum Load" Weighing Preference is programmed, during weighing the scale checks that the programmed value is not exceeded, otherwise the display shows "**ERR 21**". For further information, see "Annex C – Error Codes".

Target Weighing



Use Target Weighing to weigh a single Ingredient or to unload a Group. By programming one value at a time, you can execute a Recipe composed of an unlimited number of Ingredients/Groups.

1. To execute the Target Weighing in Manual Weighing, press **MENU**. The display shows “**APP**”.

Shortcut: to quickly select Target Weighing in Manual Weighing, press the key **1**.

Note: to execute the Target Weighing in Recipe Programming, press **MENU**, select the item “APPLICATIONS”, then press **▶**.

2. Select the item “TARGET WEIGHING”, then press **▶**. The display shows “**SET**”, the text “TARGET” and the previously set weight.

Note: the display indicates the selection of Target Weighing by switching on the icon **SET**.

3. Enter the value, then press **OK**. The display shows “**START**” and the message “START EXECUTION” and after 3 seconds the message “Target” and the Net Weight to be weighed.


Note: if the printer is enabled, weighing operations are accompanied by printing the Target Weighing receipt. For further information, see the printing example in Annex A.

Note: the operation described below considers that Preferences are set with the default values.

Load and unload

1. Start of weighing operations.
The display shows the weight decrease, indicating the weight still left to weigh to reach the programmed value.
2. If during weighing operations you want to view the Total Weight, press **NET/TOTAL**.

Reaching set value

1. When the weight displayed reaches 15% the programmed value (see "Prealarm" Weighing Preference), the display shows the icon  flashing, while the scale activates the Alarm Output intermittently. As weighing operations continue, the Alarm Output activates more frequently. When the weight displayed is "0" or less, the Alarm Output activates for 5 seconds (see "Queue Time" Weighing Preference). If during the Queue Time the display shows a negative value, it means that an amount of food equal to the value displayed was weighed beyond the programmed value.

Note: during the Queue Time the display shows the countdown of the programmed time.

Stability check

1. If the Motion Function is enabled (see "Motion" Weighing Preference), execution only ends if the displayed weight is stable when the Queue Time is up. To end execution, when the weight is not stable, press **OK**.

Note: if the displayed weight is not stable when the Queue Time is up, the display shows the message "MOTION ACTIVE" until the weight becomes stable.

Weight Hold Function

1. If you must move the mixing wagon during execution, press **PAUSE** to activate the Weight Hold Function. The display shows "**HOLD**" and the message "LOCKED WEIGHT". After having moved the mixing wagon, press **PAUSE** once again to resume weighing operations.

Maximum Load check

1. If the "Maximum Load" Weighing Preference is programmed, during weighing the scale checks that the programmed value is not exceeded, otherwise the display shows "**ERR 21**". For further information, see "Annex C – Error Codes".

How to interrupt execution

1. Press **ESC** if you want to interrupt execution. The display shows the message "Do you want to interrupt the execution? Press OK to confirm or ESC to cancel.". If you press **OK** the display shows the message "The execution has been interrupted." for 3 seconds.

Execution end

1. When the Queue Time is up, the display shows the message "Execution completed." and after 3 seconds the Total Weight.

Zero Scale



Use the Zero Scale if the Total Weight is not "0" with the mixing wagon skip empty.

It is recommended to execute the Zero Scale with the mixing wagon empty before starting the weighing operations.

1. To execute the Zero Scale, in Manual Weighing or Recipe Programming, press **>0<**. The display shows the message "Do you want to execute the Zero Scale? Press OK to confirm or ESC to cancel."

If you press **OK** the display shows the message "Zero Scale executed correctly." for 3 seconds.

Note: if the printer is enabled, the Zero Scale receipt is printed. For further information, see the printing example in Annex A.

Applications



Use Applications to select the applications of the scale.

1. To access the Applications in Manual Weighing, press **MENU**. The display shows “**APP**”.

Note: to access the Applications in Recipe Programming, press **MENU**, select the item “**APPLICATIONS**”, then press **▶**.

2. Select the application you want to execute, then press **▶**.

Usage Files

Use Usage Files to check and to print the amount of material loaded, unloaded or recovered during the weighing operations.

1. To execute the application, select the item “**USAGE FILES**”, and then press **▶**.

The display shows the list of Usage Files.

Shortcut: to quickly select Usage Files in Manual Weighing, press the key **3**.

2. Select the Usage File you want to view, then press **▶**.

3. To print data stored in the Usage Files selected, press **PRINT** (key 0).

The display shows the message “Do you want to printing? Press OK to confirm or ESC to cancel.”.

Press **ESC** if you want to cancel printing.

The display shows the message “Do you want to cancel printing?”. Press **OK** to cancel printing.

For further information, see the printing examples in Annex A.

Note: to cancel the values stored in a Usage File, select the item “**DATE**”, then press **▶**. The display shows the message “Do you want to delete the stored data? Press OK to confirm or ESC to cancel.”. If you press **OK** the display shows the message “Deletion in progress. Wait...” and at the end the message “Deletion executed correctly.”.

Note: to cancel a single Name, select the Name you want to cancel, then press ►. The display shows the message “Do you want to delete the selected Name? Press OK to confirm or ESC to cancel.”.

If you press **OK** the Name will be eliminated from the Usage File.

Shortcut: to search for a Name quickly, press the key corresponding to the first letter of the Name you are looking for, when the display shows the list of Names.

Loads Check

Use Loads Check to view the total amount of each Ingredient loaded.

1. To execute the procedure, select the item “LOADS”, then press ►. The display shows the cancellation date and the first Ingredient stored with the relative total.
2. Press ▼ or ▲ to scroll the stored Ingredients.

Unloads Check

Use Unloads Check to view the total amount of food unloaded, divided by Group.


1. To execute the procedure, select the item “UNLOADS”, then press ►. The display shows the cancellation date and the first Group stored with the relative total.
2. Press ▼ or ▲ to scroll the stored Groups.

Clean-Ups Check

Use Clean-Ups Check to view the total amount of food recovered from the stables.


1. To execute the procedure, select the item “CLEAN-UPS”, then press ►. The display shows the cancellation date and the first Clean-Up stored with the relative total.
2. Press ▼ or ▲ to scroll the stored Clean-Ups.

Mixing Timer

Use Mixing Timer to program and execute a timer which you can use to control the mixing time of the Ingredients/Clean-Ups loaded in the mixer wagon. The display indicates that the timer is activated by switching on the icon .

1. To execute the application, select the item “TIMER”, then press **▶**. The display shows “ENTER THE TIME”.

Shortcut: to quickly select Mixing Timer in Manual Weighing, press the key **5**.

2. Press **▶** to program the time.
The display shows the icon .
3. Set the time (min:s), then press **OK**.
The display shows the countdown of the programmed time. At the end of the countdown, the display shows the message “Countdown completed.” for 3 seconds while the scale activates the Alarm Output twice.
4. Press **ESC** to interrupt the countdown.
The display shows the message “Do you want to cancel the countdown? Press OK to confirm or ESC to cancel.”. If you press **OK** the display shows the message “Countdown has been cancelled.” for 3 seconds, while the scale activates the Alarm Output twice.


Date & Time

Use Date & Time to display and set the date and time of the scale.

Note: the date format depends on the “Date Format” System Preference.



1. To execute the application, select the item “DATE & TIME”, and then press **▶**. The display shows the current date and time.

Shortcut: to quickly select Date & Time in Manual Weighing, press the key **6**.

2. Select the item you want to modify, then press **▶**.
The display shows the icon .
3. Press **◀** or **▶** to select the field you want to modify.
4. Enter the value, then press **OK**.
5. Repeat the procedure to program the other fields.

Power Supply Voltage

Use Power Supply Voltage to view the voltage with which the scale is powered.

- If the value is correct, the display shows the icon  in steady mode.
 - If the value drops below 10Vdc, the icon  starts to flash. In this case you must quickly end weighing operations and recharge the battery.
 - If the value drops below 8,5Vdc, for 5 seconds the scale shows the message “Power supply low. Shutdown in progress.” and then it shut down automatically.
 - If the value rises above 36Vdc, for 5 seconds the scale shows the message “Power supply high. Shutdown in progress.” and then it shut down automatically.
1. To execute the application, select the item “POWER SUPPLY VOLTAGE”, and then press ►. The display shows the power supply value.

Shortcut: to quickly select the Power Supply in Manual Weighing, press the key 7.

Settings



Use Settings to select the Preferences, Calibrations, Utilities and Statistics.

Note: if the "Scale Protect" System Preference is set at "Settings and Data", when you try to modify a Preference or to execute a procedure, you can be asked to enter a Password. For further information, see the "Scale Protect" System Preference.

Note: default Administrator Password is "035".

1. To access the Settings in Manual Weighing, press **MENU**.
The display shows "**APP**".

Shortcut: to quickly select Settings in Manual Weighing, press the key **8**.

Note: to access the Settings in Recipe Programming, press **MENU**, select the item "APPLICATIONS", then press **▶**.

2. Select the item "SETTINGS", then press **▶**.
The display shows "**SETUP**" and the list of Settings.
3. Select the Setting you want to modify or execute and press **▶**.

Weighing Preferences

Use Weighing Preferences to customise the weighing operation.

Note: *the default value of the Preference is highlighted in “bold”.*

Note: *default Administrator Password is “035”.*

1. To access the Weighing Preferences, select the item “WEIGHING PREFERENCES”, then press ►. The display shows “**WT**” and the list of Weighing Preferences.
2. Select the Preference you want to program, then press ►.

Weight Unit

This is for choosing the Weight Unit with which you want to display/store/print the weight.

Note: *changing the Weight Unit from kilogram to pound and vice versa, the scale recalculates the Calibration, Maximum Load and Maximum Weight Loaded values.*

Display: WEIGHT UNIT

Options: **kg**, lb.

Display Update

This is for choosing the time interval with which in Weighing you want to refresh the weight on the display.

Display: DISPLAY UPDATE

Options: 200ms, **400ms**, 600ms, 800ms, 1s.

Display Resolution

This is for choosing the Resolution with which in Weighing you want to display the weight.

- If you program "Auto 5-1", in Recipes Execution and in Target Weighing, the Resolution changes automatically from 5 to 1 in the last 50 points to weigh, while in Manual Weighing, it remains at 5.
- If you program "Auto 5-2", in Recipes Execution and in Target Weighing, the Resolution changes automatically from 5 to 2 in the last 50 points to weigh, while in Manual Weighing, it remains at 5.

Display: RESOLUTION

Options: 1, 2, 5, 10, 20, 50, 100, **Auto 5-1**, Auto 5-2.

Weight Display

This is for choosing how you want to show the weight in Recipes Execution and in Target Weighing.

- If you set "Down", the weight displayed starts from the programmed value and the value decreases as you weigh.
- If you set "Up", the weight displayed starts from "0" and the value increases as you weigh.

Display: WEIGHT DISPLAY

Options: **Down**, Up.

Prealarm

This is to enable and program the threshold which when reached, in Recipes Execution and in Target Weighing, activates the Alarm Output.

Note: to disable the Preference, set the "VALUE" field at "0".

The threshold can be intermittent or continuous.

- If you program "Intermittent", the Alarm Output is activated/deactivated with a frequency which increases proportionally as the programmed weight approaches 100%.
- If you program "Continuous", the Alarm Output is activated continuously.

The threshold can be expressed in absolute value (kg/lb) or in percentage respect to the programmed weight.

Display: PREALARM

Options:

- OUTPUT TYPE: **Intermittent** and Continuous.
- VALUE TYPE: **Percentage**, Absolute.
- VALUE: 0 ... 50 % (**15**).
0 ... 999 kg/lb (**50**).

Queue Time

This is to enable and program the time the scale requires in Weighing to pass to the next element.

Note: *the Alarm Output remains active for the whole duration of the Queue Time.*

Note: *to disable the Preference, set the value "0".*

Display: QUEUE TIME

Value: 0 ... 200 seconds (5).

Maximum Load

This is to enable and program a threshold to be used to define the Maximum Load of the mixing wagon.

Note: *to disable the Preference, set the value "0".*

Display: MAX LOAD

Value: 0 ... 99.999 kg/lb.

Automatic Tracking

This is to enable the Automatic Tracking Function which allows you to eliminate any weight variations primarily caused by variation of room temperature.

Display: AUTO. TRACKING

Options: **No**, Yes.

Weight Recovery

This is to enable the Weight Recovery Function which allows you to eliminate any weight variations detected between two consecutive Power On and primarily caused by variation of room temperature.

Display: WT. RECOVERY

Options: **No**, Yes.

Motion

This is to enable the Motion Function which requires the weight to be stable before passing to the next element or finishing execution in Weighing.

Note: *the display shows the message "MOTION ACTIVE" during the entire duration of the Motion.*

Display: MOTION

Options: **No**, Yes.

A/D Converter Filter

This is for choosing the filter you wish to use to reduce weight oscillation caused by vibrations of the mixing wagon. The efficiency of the filter goes from a minimum represented by the letter A, to a maximum represented by the letter F.

The more efficient the filter, the more slowly will the weight change on the display.

Display: ADC FILTER

Options: A, B, **C**, D, E, F.

HDW Filter

This is to enable a sophisticated algorithm able to stabilize the weight display.

Display: HDW FILTER

Options: **No**, Yes.

System Preferences

Use System Preferences to customise the scale operation.

Note: the default value of the Preference is highlighted in “bold”.

Note: the items can vary depending on the options installed.

Note: default Administrator Password is “035”.

1. To access the System Preferences, select the item “SYSTEM PREFERENCES”, then press ►. The display shows “**SYS**” and the list of System Preferences.
2. Select the Preference you want to program, then press ►.

Language

This is for choosing the language you want to use.

Display: LANGUAGE

Options: Čeština, Dansk, Deutsch, **English**, Español, Français, Italiano, Magyar, Nederlands, Polski, Português (europeo), Por.Brasil (Português do Brasil), Русский¹, Suomi, Svenska, Türkçe, 中国 (简体)², カタカナ², עברית³.

¹) RU version.

²) CJ version.

³) HE version.

Keypad (only RU version)

This is for choosing the keypad you want to use.

Display: KEYPAD

Options: **Latin**, Cyrillic.

Date Format

This is for choosing the format you want to use to display and print the date.

Display: DATE FORMAT

Options: **dd/MM/yyyy**, MM/dd/yyyy.

Decimal Separator Format

This is for choosing the format you want to use to display and print the decimal separator.

Display: DECIMAL SEP.

Options: **Comma**, Full stop.

Font Type (only CJ version)

This is for choosing the font type you want to use on the display.

Display: FONT TYPE

Options: **Bold**, Normal.

Power On Method

This is for choosing the method you want to use to switch the scale on.

Note: *always use the **ON/OFF** switch to shut down the scale.*

- If you program "Manual" the scale switches on by pressing **ON/OFF**.
- If you program "Automatic" the scale switches on automatically whenever it is powered.

Display: POWER ON

Options: **Manual**, Automatic.

Automatic Power On Time

This is to program the time you want the scale to Power On automatically.

Note: *to disable the Preference, set the value "00:00".*

Display: POWER ON TIME

Default: **00:00**.

Automatic Power Off Time

This is to program the time you want the scale to shut down automatically. At the set time, the display shows the message “Automatic shutdown in progress. Wait... Press ESC to cancel.”. If you do not press **ESC**, the scale will shut down automatically after 1 minute.

Note: to disable the Preference, set the value "00:00".

Display: POWER OFF TIME
Default: **00:00**.

Power Saving

This is to shut down the scale automatically if no key has been touched within the programmed time interval. When the programmed time has elapsed, the display shows the message “Automatic shutdown in progress. Wait... Press ESC to cancel.”. If you do not press **ESC**, the scale will shut down automatically after 1 minute.

Note: to disable the Preference, set the value "0".

Display: POWER SAVING
Value: **0** ... 240 minutes.

Display Brightness

This is for choosing the display backlight brightness.

Shortcut: to quickly modify the display backlight brightness in Manual Weighing, press the key **2**.

Display: DISPLAY BRIGHT.
Options: Low, Normal, **High**.

Activity at Power On

This is for choosing the Activity you want to view after Power On.

Display: POWER ON ACT.
Options: **Manual Weighing**, Recipe Programming.

Recipes Execution Activity End

This is for choosing the Activity you want to view at the end of the Recipe Execution.

Display: EXECUTION END

Options: **Manual Weighing**, Recipe Programming.

Recipes List

This is for choosing the order of the Recipes.

Display: RECIPES LIST

Options: **Alphabetical**, Insertion.

Functions Default

This is to program the default values of the Jump, Unloads Adjustment, Feeding Balancing and Reload Functions when you create a new Ingredient/Group or a new Recipe.

Display: FUNC. DEFAULT

Options:

- JUMP: No, **Yes**.
- UNLOADS ADJUST: **No**, Yes.
- FEED.BALANCE: **No**, Yes.
- RELOAD: **No**, Yes.

Scale Protect

This is to enable the procedure which restricts unauthorised personnel from using the scale.

If the Preference is set at "Settings":

- When you try to modify or execute a Setting, the display shows the message "Protection enabled. Enter the Password or press ESC to exit.". The Password to be entered is the one programmed in the "Administrator Password" Preference.

If the Preference is set at "Settings and Data":

- When you try to modify or execute a Setting, the display shows the message "Protection enabled. Enter the Password or press ESC to exit.". The Password to be entered is the one programmed in the "Administrator Password" Preference.
- When you try to create or modify an Archive code, create or modify a Recipe, the display shows the message "Protection enabled. Enter the Password or press ESC to exit.". The Password to be entered is the one programmed in the "Data Password" Preference. Otherwise you can also enter the Administrator Password.

Display: SCALE PROTECT

Options: None, **Settings**, Settings and Data-

Administrator Password

This is to program the Administrator Password which allows you to use all the functions of the scale when the "Scale Protect" System Preference is enabled.

Display: ADMIN PASSWORD

Default: **035**.

Data Password

This is to program the Data Password which allows you to modify Archives and Recipes when the "Scale Protect" System Preference is set at "Settings and Data".

Note: if you have forgotten the Password, enter the "Administrator" Password to restore the default Password.

Display: DATA PASSWORD

Default: **000**.

W-Link ID

This is to set the ID of the Private Radio Networks (PRN) to 2.4GHz if the scale is supplied with the "2.4GHz Wireless" option. The option is required to connect the scale to the W-Link Remote Terminal.

Note: the Preference is displayed only if the scale is supplied with the "2.4GHz Wireless" option.

Note: if several **i•FeedGood S/M/L** operate in the same area with the "2.4GHz Wireless" option installed, it is necessary to set a different ID code for each scale.

Display: W-LINK ID

Options: **1**, **2**, **3**, **4**, **5**, **6**, **7**.

L-Link Port

This is for choosing the protocol you want to use on the **L-LINK** connector of the scale (CAN-Bus).

Note: the Preference is displayed only if the scale is supplied with the "L-Link Port" option.

Note: some items are only available if the scale is supplied with options.

Note: contact Customer Service to know the parameter to be set.

Display: L-LINK

Options: **No**, L-Link, Label 1, Label 2, Label 3, Label 4, Label 5, Label 6.

4-20mA Analogue Output

This is for setting the operating parameters of the "4-20mA Analogue Output" option.

If the scale is supplied with the "4-20mA Analogue Output" option, on the Weighing it gives an analog signal proportional to the Total Weigh on the **4-20mA** connector.

Note: the Preference is only displayed if the scale is supplied with the "4-20mA Analogue Output" option.

Note: when the scale is supplied with the "4-20mA Analogue Output" option, the maximum power supply of the scale must be limited to 30Vdc.

Note: for more information refer to the documentation attached to the "4-20mA Analogue Output" option or contact the Customer Service.

Display: 4-20mA

Options:

- 4-20mA F.S.: 100 ... 99,999 kg/lb (**1,000**).
- HYSTERESIS: -1,000 ... **0**.

Welcome Message

This is to program the message you want to display at Power On. The message must have a maximum of 2 rows with 20 alphanumerical characters each.

Display: WELCOME MESS.

Default: LABEL ADVANCED SOLUTIONS

Print Header

This is to enable and program the header you want to print on the receipts. The text consists of a maximum of 4 rows with 20 alphanumerical characters each.

Note: the Preference is only displayed if the scale is supplied with the "COM A Port" option.

Note: empty rows are not printed.

Note: the prints automatically centre the text on the receipt.

Display: PRINT HEADER

Default: No text.

Print Footer

This is to enable and program the Print Footer you want to print on the receipts. The text consists of a maximum of 4 rows with 20 alphanumeric characters each.

Note: the Preference is only displayed if the scale is supplied with the "COM A Port" option.

Note: empty rows are not printed.

Note: the prints automatically centre the text on the receipt.

Display: PRINT FOOTER

Default: No text.

Inputs Setting

This is to program operation of the Remote Control and External Keyboard accessories, associating operation of the keyboard or scale functions to the 4 keys of the accessories.

Note: the Preference is only displayed if the scale is supplied with the Remote Control accessory or with the "4-Opto-Isolated Inputs" option.

Note: for more information refer to the documentation attached to the "4-Opto-Isolated Inputs" option or contact the Customer Service.

Display: INPUTS SETTING

Default:

- INPUT 1: **Up key (▲)**
- INPUT 2: **START key**
- INPUT 3: **Down key (▼)**
- INPUT 4: **MAN./TARE**

Note: the items setting are: RECIPES key, ARCHIVES key, START key, MENU key, NET/TOTAL key, MAN./TARE key, PRINT key, ESC key, >0< key, ANIMALS key, Up key (▲), Down key (▼), Left key (◀), Right key (▶), OK key, LUBRICATION key, OUT1 AST, OUT2 AST, OUT3 AST, OUT4 AST, OUT1 BST, OUT2 BST, OUT3 BST, OUT4 BST.

Power Outputs Setting

This is for choosing which functions you want to associate to the "7-Power Outputs" option.

Note: the Preference is only displayed if the scale is supplied with the "7-Power Outputs" option.

Note: for more information refer to the documentation attached to the "7-Power Outputs" option or contact the Customer Service.

Display: OUTPUTS SET.

Options: **No**, Keyboard 4-Keys.

Relay Output Setting

This is for choosing which functions you want to associate to the "Relay Output" option.

Note: the Preference is only displayed if the scale is supplied with the "Relay Output" option.

Note: for more information refer to the documentation attached to the "Relay Output" option or contact the Customer Service.

Display: RELAY OUT SET.

Options: **No**, Lubrication.

3/4-Relay Outputs Setting

This is for choosing which functions you want to associate to the "3-Relay Outputs" or "4-Relay Outputs" options.

Note: the Preference is only displayed if the scale is supplied with the "3-Relay Outputs" or "4-Relay Outputs" options.

Note: for more information refer to the documentation attached to the "3-Relay Outputs" and "4-Relay Outputs" options or contact the Customer Service.

Display: RELAY OUT SET

Options: **No**, Lubrication, Knives, Lubrication/Knives, Keyboard 4-Keys.

Counterknives Parameters Setting

This is used to programme the parameters for automatic actuation of the counterknives during the mixing wagon cutting cycle.

Note: for more information refer to the documentation attached to the “3-Relay Outputs” and “4-Relay Outputs” options or contact the Customer Service.

Note: the “COB-ID#1” item only appears if “L-Link Port” System Preference have the “Label 5 or label 6” option set.

Display: COUNTERKNIVES

Options:

- MODE: No, **Semi-automatic.**
- TIME IN(s): 1 ... 600 (**20**).
- TIME OUT(s): 1 ... 600 (**20**).
- PULSE ON(s): 1 ... 60 (**10**).
- PULSE OFF(s): 1 ... 60 (**10**).
- TOTAL TIME(min): 1 ... 90 (**20**).
- COB-ID#1: 4-character alphanumeric (**18F**).

Auxiliary Heating

This is to enable operation of the "Auxiliary Heating" option, useful when the scale is used in especially cold countries.

Note: the Preference is only displayed if the scale is supplied with the "Auxiliary Heating" option.

Display: HEATING

Options: **No**, Yes.

Scale ID

This is to assign an ID to the scale useful to identify which scale the printed data belong to.

Display: SCALE ID

Default: **NEW SCALE.**

System Info

This is to view information regarding the software version installed in the scale.

Display: SYSTEM INFO

U2 = Product Family;

Y = Major Release of Software;

XX = Minor Release of Software.

Calibrations



The scale is sold with "standard" Calibration. For its correct operation, it must be Calibrated upon installation to adapt the scale to the connected load cells. Use Calibrations to choose the Calibration you want to execute.

Note: Calibration must be executed with the weight stable and the mixing wagon level. Before performing Calibration, check that the set Weight Unit is correct.

Note: Calibration must be executed (except for Calibration with Actual Weight) with the mixing wagon empty because the scale executes the Zero Scale during Calibration.

Note: default Administrator Password is "035".


1. To access the Calibrations in Manual Weighing, press **MENU**. The display shows "**APP**".

Note: to access the Calibrations in Recipe Programming, press **MENU**, select the item "APPLICATIONS", then press **▶**.

2. Select the item "CALIBRATIONS", then press **▶**.
The display shows "**CAL.**" and the list of Calibrations.
3. Select the Calibration you want to execute, then press **▶**.

Calibration by Actual Weight

This is to calibrate the scale when the mixing wagon is full and you cannot unload it.

1. To execute the Calibration, select the item “CAL. by ACTUAL WEIGHT”, then press ►.
The display shows the message “Do you want to execute the Calibration?”.
2. Press **OK** to confirm.
The display shows the message “Enter the value.” and after 3 seconds the value of the actual weight.
3. Press ► to program the value.
The display shows the icon .
4. Set the weight, then press **OK**.
The display shows the message "Calibration in progress. Wait..." and at the end the message “Calibration executed correctly.”.

Calibration by Load Cells Code

This is to calibrate the scale when it is connected to the load cells listed in Table 1.

1. To execute the Calibration, select the item “CAL. by LOAD CELLS CODE”, then press ►.
The display shows the message “Do you want to execute the Calibration?”.
2. Press **OK** to confirm.
The display shows the message “Set the parameters and press OK.” and after 3 seconds the previously set parameters.
3. Set the load cells code, then press **OK**.
4. Set the number of load cells, then press **OK**.
5. Press **OK** to confirm the Calibration.
The display shows the message "Calibration in progress. Wait..." and at the end the message “Calibration executed correctly.”.

Calibration by Load Cells Parameters

This is to calibrate the scale when it is connected to the load cells not listed in Table 1.

1. To execute the Calibration, select the item “CAL. by PARAMETERS”, then press ►.
The display shows the message “Do you want to execute the Calibration?”.
2. Press **OK** to confirm.
The display shows the message “Set the parameters and press OK.” and after 3 seconds the previously set parameters.
3. Set the number of load cells, then press **OK**.
4. Set the capacity of the load cells, then press **OK**.
5. Set the sensitivity of the load cells, then press **OK**.
6. Press **OK** to confirm the Calibration.
The display shows the message "Calibration in progress. Wait..." and at the end the message “Calibration executed correctly.”.

Calibration by Sample Weight

This is to calibrate the scale with the maximum precision.

This Calibration can be executed in two ways:

- **With a Sample Weight.**
This is the method which achieves the maximum precision. Calibration will be ideal by using a Sample Weight at least 50% the Maximum Load of the mixing wagon.
- **With a Weight Calibrator.**
Before executing Calibration, bring the Calibrator selector to "ZERO". The value to be set with the Sample Weight is that indicated in Table 1 in the column "Calibration Value". After having set the value, move the selector of the Calibrator to "CAL"., then press **OK**.


1. To execute the Calibration, select the item "CAL. by SAMPLE WEIGHT", then press ►.
The display shows the message "Do you want to execute the Calibration?".
2. Press **OK** to confirm.
The display shows the following messages in succession "Calibration in progress. Wait...", "Zero Scale executed correctly.", "Enter the value of the Sample Weight." and after 3 seconds the Sample Weight to be set.
3. Press ► to program the value.
The display shows the icon .
4. Enter the Sample Weight value, then press **OK**.
The display shows the message "Load the Sample Weight and press OK."
5. Load the Sample Weight onto the mixing wagon, then press **OK**.
The display shows the message "Calibration in progress. Wait..." and at the end the message "Calibration executed correctly."

Table 1

Model	Load		Sens. mV/V	Calibration Value	
	kg	lbs		kg	lbs
16820008	4.100	9.039	0,960	1.068	2.354
16820009	6.100	13.448	0,940	1.622	3.577
16820010	6.100	13.448	0,940	1.622	3.577
16820020	5.000	11.023	0,770	1.623	3.579
16820028	4.100	9.039	0,960	1.068	2.354
16820029	4.100	9.039	0,960	1.068	2.354
16820030	4.100	9.039	0,960	1.068	2.354
16820037	7.500	16.535	1,160	1.616	3.564
16820045	4.100	9.039	0,960	1.068	2.354
969-0008	6.100	13.448	0,940	1.622	3.577
969-0038	5.000	11.023	0,770	1.623	3.579
969-0040	4.100	9.039	0,960	1.068	2.354
969-0064	7.500	16.535	1,160	1.616	3.564
969-0071	4.100	9.039	0,960	1.068	2.354
969-0072	4.100	9.039	0,960	1.068	2.354
969-0073	4.100	9.039	0,960	1.068	2.354
969-0086	6.100	13.448	0,940	1.622	3.577
969-0263	4.100	9.039	0,960	1.068	2.354
AD60	3.500	7.716	0,800	1.094	2.411
AD80	5.000	11.023	0,800	1.562	3.445
EEP54	4.100	9.039	0,950	1.079	2.379
ET5703	1.361	3.000	0,510	667	1.471
ET5705	5.670	12.500	0,425	3.335	7.353
ET5903	5.443	12.000	0,425	3.202	7.059
EF4100	4.100	9.039	0,950	1.079	2.379
FF2750N	2.750	6.063	0,983	700	1.542
HF5000N	5.000	11.023	0,480	2.604	5.741
JSTAR-21	8.165	18.000	0,900	2.268	5.000
LF2250N	2.250	4.960	0,907	620	1.368
LODEC	6.350	14.000	1,000	1.588	3.500
MX2500	2.500	5.512	0,800	781	1.723
MX3000	3.000	6.614	0,800	937	2.067
MX3500	3.500	7.716	0,800	1.094	2.411
MX4000	4.000	8.818	0,400	2.500	5.511
MX5000	5.000	11.023	0,400	3.125	6.890
MX7500	7.500	16.535	0,800	2.344	5.167
RF4100N	4.100	9.039	0,950	1.079	2.379
WB39501	2.250	4.960	0,907	620	1.368
WB42001	2.750	6.063	0,983	700	1.542
WB54001	4.100	9.039	0,950	1.079	2.379
WB54002	4.700	10.362	0,800	1.469	3.238
WB54003	4.100	9.039	0,950	1.079	2.379
WB54004	4.100	9.039	0,950	1.079	2.379

Model	Load		Sens. mV/V	Calibration Value	
	kg	lbs		kg	lbs
WB54005	5.700	12.556	0,480	2.969	6.545
WB54009	4.100	9.039	0,960	1.068	2.354
WB54010	4.100	9.039	0,960	1.068	2.354
WB54012	4.100	9.039	0,960	1.068	2.354
WB60001	5.700	12.556	0,700	2.036	4.488
WB60002	5.700	12.556	0,700	2.036	4.488
WB63001	5.700	12.556	0,800	1.781	3.927
WB63002	5.700	12.556	0,800	1.781	3.927
WB63003	6.100	13.448	0,940	1.622	3.577
WB63004	6.100	13.448	0,940	1.622	3.577
WB63010	5.000	11.023	0,770	1.623	3.579
WB63501	5.000	11.023	0,480	2.604	5.741
WB73004	7.500	16.535	1,160	1.616	3.564
WB80001	5.000	11.023	0,800	1.563	3.445
WB80002	5.000	11.023	0,800	1.563	3.445
WB80003	5.000	11.023	0,800	1.563	3.445
WD54	3.700	8.157	0,700	1.322	2.914
WD63	3.700	8.157	0,450	2.056	4.532

Utility



Use Utility to execute data reset and diagnostic procedures of the scale.

Note: do not shut down the scale during execution of the Utilities to avoid irreparable damage.

Note: default Administrator Password is “035”.

1. To access the Utilities in Manual Weighing, press **MENU**.
The display shows “**APP**”.


Note: to access the Utilities in Recipe Programming, press **MENU**, select the item “**APPLICATIONS**”, then press **▶**.

2. Select the item “**UTILITY**”, then press **▶**.
The display shows “**UTIL**” and the list of Utilities.
3. Select the Utility you want to execute, then press **▶**.

Setup Code

This is to automatically set the main parameters of the scale depending on make and model of the mixing wagon.

Note: *contact Customer Service to know the Code to be entered.*

1. To execute the procedure, select the item "SETUP CODE", then press ►. The display shows the previously set Code.
2. Press ► to set the Code.
The display shows the icon .
3. Set the Code, then press **OK**. The display shows the message "The Settings will be restored. Press OK to confirm or ESC to cancel.". If you press **OK** the display shows the message "Restore in progress. Wait..." and at the end the message "Operation executed correctly.". Scale settings will be reprogrammed according to the entered Code.

General Reset

This is to initialise the scale, to delete all stored data and to restore the default settings.

Note: *the procedure also initialises the date and time of the clock.*

1. To execute the procedure, select the item "GENERAL RESET", then press ►. The display shows the message "All stored data will be deleted. Press OK to confirm or ESC to cancel.". If you press **OK** the display shows the message "Restore in progress. Wait..." and at the end the message "Operation executed correctly."

Settings Reset

This is to delete the values programmed in the Settings by restoring the default settings.

1. To execute the procedure, select the item "SETTINGS RESET", then press ►. The display shows the message "The Settings will be restored. Press OK to confirm or ESC to cancel.". If you press **OK** the display shows the message "Restore in progress. Wait..." and at the end the message "Operation executed correctly."

Archives Deletion

This is to cancel all the data stored in the Archives, in the Recipes and in the Usage Files.

1. To execute the procedure, select the item “ARCHIVES DELETION”, then press ►. The display shows the message “The Archives data will be deleted. Press OK to confirm or ESC to cancel.”. If you press **OK** the display shows the message “Deletion in progress. Wait...” and at the end the message “Deletion executed correctly.”.

Formatting NANDFlash

This is to format the internal NANDFlash memory. The execution of the procedure cancels all the stored data and restores the default settings.

Note: *the procedure also initialises the date and time of the clock.*

1. To execute the procedure, select the item “NANDFlash FORMAT”, then press ►. The display shows the message “All stored data will be deleted. Press OK to confirm or ESC to cancel.”. If you press **OK** the display shows the message “Formatting in progress.. Wait...” and at the end the message “Operation executed correctly.”.

Diagnostics

This is to check correct operation of the internal and external parts of the scale through 6 different Tests.

Note: contact Customer Service in case of errors or malfunctioning.

Note: the tests can vary depending on the options installed in the scale.

1. To execute the procedure, select the item "DIAGNOSTICS", then press ►.
The display shows the list of Tests.
2. Select the Test you want to execute, then press ►.

Display

The Test verifies operation of the display by switching on all the icons and characters of the display in sequence.

Press **ESC** to exit the Test.

Keypad

The Test verifies operation of the keypad.

To verify operation of the keypad, press one key at a time (except **ON/OFF**) and make sure that the display shows the name of the pressed key. Press **OK** and **C** simultaneously to exit the Test.

Memories

The Test verifies operation of the NANDFlash memory of the scale.

1. To execute the Test, select the item "NANDFlash", then press ►.
The display shows the message "Test in progress Wait..." and at the end the message "Test executed correctly."

Note: do not interrupt execution of a Test in progress to avoid damaging the scale.

ADC

The Test verifies operation of the A/D converter of the load cells and the power supply reading.

Press **ESC** to exit the Test.

Note: *the display of unstable values indicates A/D converter malfunctioning.*

Digital Outputs

The Test verifies operation of the Alarm Out, of the outputs of the “7-Power Outputs”, “Relay Output”, “3-Relay Outputs” and “4-Relay Outputs” options, enabling the individual outputs three times. To conduct the Test, select the Test that you want to execute, then press ►. Press **ESC** to exit the Test.

Serial Lines

The Test verifies operation of the L-Link and COM A optional Ports.

To conduct the Test, select the Port you want to verify, then press ►. The display shows the message "Test in progress. Wait..." and at the end the message "Test executed correctly."

Note: *to execute the L-Link Port Test, you must have connected a CAN device to the connector.*

Note: *to execute the COM A Port test, you must have connected a RS232C Test Plug to the connector.*

Statistics



Use Statistics to display and reset data regarding use of the scale and of the mixing wagon which the scale stores automatically during operation.

1. To access the Statistics in Manual Weighing, press **MENU**. The display shows “**APP**”.

Note: to access the Statistics in Recipe Programming, press **MENU**, select the item “**APPLICATIONS**”, then press **▶**.

2. Select the item “**STATISTICS**”, then press **▶**. The display shows “**HIST**” and the list of Statistics.
3. Select the item you want to view, then press **▶**.

Note: the values displayed refer to the reset date.

Reset Date

This is to display the reset date and to reset stored data.

Note: to reset stored data, select the item "DATE RESET", then press ►. The display shows the message "Do you want to delete the stored data? Press OK to confirm or ESC to cancel.". If you press **OK** the display shows the message "Deletion in progress. Wait..." and at the end the message "Deletion executed correctly.". The execution dates of the Zero Scale and Calibration are not updated.

Note: if the "Scale Protect" System Preference is set at "Settings and Data", when you try to reset stored data, you can be asked to enter a Password. For further information, see the "Scale Protect" System Preference.

Note: default Administrator Password is "035".

Display: DATE RESET

Work Hours

This is to display the Total Time of Use of the scale.

Display: WORK HOURS

Power On Number

This is to display the number of Power On procedures executed.

Display: POWER ON NR.

Number of Recipes Executed

This is to display the number of Recipes executed.

Display: RECIPE NR.

Maximum Weight Loaded

This is to display the maximum weight loaded.

Display: MAX LOADED

Overload Number

This is to display the number of times the Maximum Load was exceeded in Weighing.

Display: OVERLOAD NR.

Zero Scale Date

This is to display the date of the last Zero Scale executed.

Display: ZERO SCALE

Calibration Date

This is to display the date of the last Calibration executed.

Display: CALIBRATION

Customisation

i•FeedGood M is enriched by a large catalogue of accessories and options allowing you to customise operation at will and to make your daily work even simpler and more organised.

Remote Terminals

i•FeedGood M can be supplied with new Remote Terminals, equipped with display and keys identical to those of the scale, to execute all the operations carried out with the scale remotely.

- **L-Link Remote Terminal**
This is connected to the optional **L-LINK** connector, available if the scale is supplied with the “L-Link Port” option, by means of a cable which can reach a total length of 100m. Up to 5 L-Link Remote Terminals can be connected to each scale.
- **W-Link Remote Terminal**
This is connected to **i•FeedGood M** via a Private Radio Network (PRN) at 2.4GHz. Easily movable and installable at different points, in order to work **i•FeedGood M** must have the “2.4GHz Wireless” option installed. There can be a maximum of 300m between the Remote Terminal and **i•FeedGood M**. The distance is affected by different environmental conditions, such as how close they are to radio towers, the presence of metal structures or objects in between **i•FeedGood M** and the W-Link Remote Terminals. Up to 5 W-Link Remote Terminals can be connected to each scale. Up to 7 **i•FeedGood S/M/L** can operate with the “2.4GHz Wireless” installed.

Printer

i•FeedGood M can be supplied with the new printers **i•Print 2** or **i•Print Mini** and execute 13 different prints. The printer is connected to the optional **COM A** connector, available if the scale is supplied with the “COM A Port” option. For further information, see the printing examples in Annex A.

Remote Control

i•FeedGood M can be controlled at a distance with a 4-key Remote Control which replicates the **i•FeedGood M** keyboard or functions.

i•FeedGood M and the Remote Control can reach a maximum distance of 100m. The maximum distance which can be reached is affected by different environmental conditions, such as how close they are to radio towers, the presence of metal structures or objects in between **i•FeedGood M** and the Remote Control.

For the Remote Control to operate, **i•FeedGood M** must have an optional board installed.

External Keyboard

i•FeedGood M can be controlled at a distance with a 4 key External Keyboard which replicates the **i•FeedGood M** keyboard or functions.

For the External Keyboard to operate, **i•FeedGood M** must have the “4-Opto-Isolated Inputs” option installed.

Auxiliary Heating

i•FeedGood M can be supplied with an auxiliary heating system, recommended when used in especially cold countries.

COM A Port option

i•FeedGood M can be supplied with an option making a RS232C Port available.

L-Link Port (CAN-Bus)

i•FeedGood M can be supplied with an optional board making a L-Link Port available.

2.4GHz Wireless (W-Link)

i•FeedGood M can be supplied with an optional board making a Private Radio Network (PRN) at 2.4GHz available.

4-20mA Analogue Output

i•FeedGood M can be supplied with an option making a 4-20mA Analogue Output available. In this case, the maximum power supply of the scale must be limited to 30Vdc.

7-Power Outputs

i•FeedGood M can be supplied with an optional board making 7 Power Outputs 0.5 Ampere each available. The maximum total current of all the outputs enabled is 3.5 Amps. The outputs are protected against short-circuit and overtemperature.

Relay Output

i•FeedGood M can have an option which provides a relay output able to supply a maximum current of 5 Ampere. The Relay Output option also offers an NPN type Optoisolated Input. The “Relay Output” option is alternative to “3-Relay Outputs” or “4-Relay Outputs” options.

3-Relay Outputs

i•FeedGood M can have an option which provides three normally open relay contacts (NO) for driving inductive load (max. 5A). The “3-Relay Outputs” option is alternative to “Relay Output” or “4-Relay Outputs” options.

4-Relay Outputs

i•FeedGood M can have an option which provides four normally open relay contacts (NO) for driving inductive load (max. 5A). The “4-Relay Outputs” option is alternative to “Relay Output” or “3-Relay Outputs” options.

4-Opto-Isolated Inputs

i•FeedGood M can be supplied with an optional board making 4 NPN Opto-Isolated Inputs available.

Annex A

Printing Examples

The following pages illustrate printing examples of Archives, Usage Files and Weighing.

Key

- 1) Indicates the Type of element (I = Ingredient, M = Ingredient with programmed Manual Adding parameter).
- 2) Indicates programming of the Jump Function (* = Programmed).
- 4) Indicates the programmed Dry Matter value.
- 5) Indicates programming of the Password (* = Programmed).
- 6) Indicate the enable Functions (S = Unloads Adjustment, B = Feeding Balancing, R = Reload).
- 8) Indicate the Type of element and programming of the Jump Function (I = Ingredient, G = Groups, A = Clean-Up, M = Ingredient with programmed Manual Adding parameter, * = Jump programmed).
- 9) Indicates the programmed value of the Parameters.
- 10) Indicates the real loaded/unloaded weight.
- 11) Indicates the deviation (calculated by finding the difference between the loaded/unloaded weight value and the programmed weight value).
- 12) Indicates the Clean-Up date.
- 13) Indicates the Number of Animals in the Group.
- 14) Indicates the programmed Appetite value of the Group.
- 15) Indicates programming of the Jump Function (J = Programmed).

Ingredients File

```
-----  
Date:                               30/01/2014  12:00  
Scale:                               NEW SCALE  
-----  
                          INGREDIENTS FILE  
-----  
Code          Type1 Jump2          Q.Wt.    DM4  
-----  
ALFALFA HAY   I          *              91,0  
CORN SILAGE   I          *              34,0  
H2O           I          *             100,0  
MINERAL       I          *              92,0  
MOLASS        M          *              77,9  
PREMIX        I          *              21,0  
-----
```

Groups File

```
-----  
Date:                               30/01/2014  12:00  
Scale:                               NEW SCALE  
-----  
                          GROUPS FILE  
-----  
Code          Jump2  
-----  
PEN1          *  
PEN2          *  
PEN3          *  
PETER         *  
THOMAS        *  
WILLER        *  
-----
```

Recipe by Animals

Date: 30/01/2014 12:00
Scale: NEW SCALE

RECIPES FILE

Recipe: REC 2 HI COW
Feeding Factor(%): 80
Function: B/⁶
Animals Number: 180
Average Wt. per Animal(kg): 27,67
Total Weight(kg): 4.980
Avg.Dry Wt. per Animal(kg): 15,13
Total Dry Weight(kg): 2.733

Code	T/Jump ⁸	Val.	D.Wt	Par. ⁹
PREMIX	I/*	15,00	3,15	21,0 ⁴
PEN1	C/*	5,00	0,55	54,7 ⁴
ALFALFA HAY	I/	10,00	9,10	91,0 ⁴
MINERAL	I/*	2,50	2,30	92,0 ⁴
MOLASS	M/*	2,08	1,62	77,9 ⁴
PEN1	G/*	180	15,13	100 ¹⁴

Recipe by Totals

Date: 30/01/2014 12:00
Scale: NEW SCALE

RECIPES FILE

Recipe: REC 2H
Feeding Factor(%): 90
Function: R⁶
Total Weight(kg): 3.848
Total Weight Groups(kg): 3.848

Code	T/Jump ⁸	Val.	TOT.Wt
CORN SILAGE	I/*	3.060	2.754
ALFALFA HAY	I/	720	648
MINERAL	I/*	270	243
MOLASS	M/*	225	203
TIMER	F/*	10:00	
WILLER	G/*	4.275	3.848

Total Usages

Date:	30/01/2014	12:00
Scale:	NEW SCALE	

TOTAL USAGES		

Date:	19/01/2014 29/01/2014	

Total Used (kg):	69.659	
Total Deviation (kg):	1.318	

Code	Weight (kg)	Deviation

ALFALFA HAY	8.858	181
CORN SILAGE	20.276	242
MINERAL	3.051	97
MOLASS	2.597	0
PREMIX	34.877	798

Unloads by Group

Date:	30/01/2014	12:00
Scale:	NEW SCALE	

UNLOADS by GROUP		

Date:	19/01/2014 29/01/2014	

Total Used (kg):	69.235	
Total Deviation (kg):	2.545	

Code	Weight (kg)	Deviation

PEN1	34.159	859
PEN3	3.461	238
PETER	8.600	472
THOMAS	7.506	375
WILLER	15.509	601

Clean-Ups by Group

Date: 30/01/2014 12:00
Scale: NEW SCALE

CLEAN-UPS by GROUP

Date: 19/01/2014 | 29/01/2014

Total Feed Refusals(kg): 1.765
Total Deviation(kg): 227

Code	Weight(kg)	Deviation
PEN1	1.459	191
WILLER	306	36

Recipes Execution by Animals

```

-----
Date:                    30/01/2014  12:00
Scale:                   NEW SCALE
-----
                        RECIPES EXECUTION
-----
Recipe:                  REC HI COW
Date:                    29/01/2014  08:44
Feeding Factor(%):      80
Function:                B/6
Animals Number:         180
-----
08:47 PREMIX            I1          1.32110    2611
                        (21,0)4
08:58 PEN1              C/J15         434          4
(28/01/2014)12      (54,7)
09:09 ALFALFA           I            910          45
                        (91,0)
09:21 MINERAL           I/J          217          2
                        (92,0)
09:29 MOLASS            M/J          180          0
                        (77,9)
09:35 PEN1              G/J          3.025        35
(180)13              (100)14
09:56 END
-----
Total Weight Loaded(kg): 3.062
Total Weight Unloaded(kg): 3.025
Total Dry Weight Loaded(kg): 1.681
Tot. Dev. Load(kg): 77
Tot. Dev. Unload(kg): 35
Total Time: 1:12
-----

```

Recipes Execution by Totals

```
-----  
Date:                30/01/2014  12:00  
Scale:                NEW SCALE  
-----  
                        RECIPES EXECUTION  
-----  
Recipe:                REC 2H  
Date:                29/01/2014  10:16  
Feeding Factor(%):    90  
Function:              R6  
-----  
10:17 CORN SILAGE    I1/J15  2.76910  1411  
10:34 ALFALFA HAY    I           652      2  
10:41 MINERAL        I/J         263      18  
10:49 MOLASS         M/J         205      0  
10:56 TIMER          F/J         10:00  
11:07 WILLER         G/J         3.861    11  
11:36 END  
-----  
Total Weight Loaded(kg):      3.889  
Total Weight Unloaded(kg):    3.861  
Tot. Dev. Load(kg):          34  
Tot. Dev. Unload(kg):        11  
Total Time:                   1:20  
-----
```

Target Weighing

```
-----  
Date:                30/01/2014  12:00  
Scale:                NEW SCALE  
-----  
                        TARGET WEIGHING  
-----  
                        Weight(kg)  Deviation  
-----  
                        1.618      18  
-----
```

Manual Weighing - Net Weight

```
-----  
Date:                               30/01/2014  12:00  
Scale:                               NEW SCALE  
-----  
                                MANUAL WEIGHING  
-----  
Net Weight (kg):                    1.470  
-----
```

Manual Weighing - Total Weight

```
-----  
Date:                               30/01/2014  12:00  
Scale:                               NEW SCALE  
-----  
                                MANUAL WEIGHING  
-----  
Total Weight (kg):                  2.988  
-----
```

Zero Scale

```
-----  
Date:                               30/01/2014  12:00  
Scale:                               NEW SCALE  
-----  
                                ZERO SCALE  
-----
```


Annex B

Technical Specifications

CPU	32-Bit ARM
NANDFlash	128MB
Operating System	Real Time
File System	FAT32 Journaled
File Encoding	UTF-8
Display	LCD 7.3" B&W
Digit	6x 9 segments H.50mm
.....	2x 24 alphanumerical characters H.10mm
Keyboard	27 mechanical keys
A/D Converter	24-Bit Sigma-Delta
A/D Converter Channels	2
Load Cells Connection	Max. 16 x 350Ohm
Ports	1x RS232C
.....	1x CAN-Bus
.....	1x PRN 2,4GHZ
.....	1x 4 - 20mA
.....	4x Opto-Isolated Inputs
.....	7x 0.5A Outputs
.....	1x 5A Output
.....	1/3x 5A Outputs
Alarm Output	Max. 0.7A
Power Supply Voltage	9 ÷ 36Vdc
Power Consumption (without accessories)	Max. 10W
Operating Temperature	-30°C ÷ +65°C
Case	ABS (V0)
Degree of Protection (EN60529)	IP68
Weight	1.8kg
Dimensions (L x W x H)	220x220x120mm

Note: some features are only available if the scale is supplied with options.

Annex C

Error Codes

ERR 1 Overrange Error

The error indicates that the A/D converter is beyond the Full-Scale.

For further information, consult the "Troubleshooting Guide" provided in the CD attached to the scale or contact Customer Service.

ERR 2 Calibration Error

The error indicates that the calculations to determine the Calibration are incorrect. Press **OK** to continue. Try repeating Calibration. Contact Customer Service if the error reappears.

ERR 3 Calibration Error

The error indicates that the weight read by the A/D converter is less than the Zero Scale. Press **OK** to continue. Try repeating Calibration. Contact Customer Service if the error reappears.

ERR 17 Data Loss

The error indicates that stored data has been lost accidentally. Press **OK** to continue. The scale automatically formats NANDFlash. All the stored data are deleted, the Preferences and Calibrations will be restored with default values. At the end of formatting, set the Preferences and execute a Calibration. For further information, contact Customer Service.

ERR 18 File System damaged

The error indicates that, following a problem with the File System of NANDFlash, the scale automatically formatted NANDFlash. Press **OK** to continue. All the stored data were deleted, the Preferences and Calibrations were restored with default values. Set the Preferences and execute a Calibration. For further information, contact Customer Service.

ERR 21 Maximum Load exceeded

The error indicates that the Total Weight loaded is higher than the Maximum Load programmed. If the "Maximum Load" Weighing Preference is programmed, during weighing the scale checks that the programmed value is not exceeded. If the limit is exceeded, the display shows "**ERR 21**" and the message "Max Load exceeded.", while the scale activates the Alarm Output intermittently. To eliminate the error condition, unload excess weight or press **OK**. Pressing **OK** interrupts weighing. Exceeding the programmed value also causes the "OVERLOAD NR." displayed in the Statistics to increase.

ERR 23 Reload Function disabled

The error indicates that in the Recipe you did not program the Ingredients/Clean-Ups first and then the Groups. For further information, see "Recipe Programming - How to modify the Name and Parameters of the Recipe".

ERR 24 Feeding Balancing Function disabled

The error indicates that in the Recipe you did not program a Clean-Up weighing other than "0" or an Ingredient as first element. For further information, see "Recipe Programming - How to modify the Name and Parameters of the Recipe".

ERR 25 Total Weight of the Recipe

The error indicates that the Total Weight of the Recipe is higher than the Maximum Load programmed. For more information, refer to the "Maximum Load" Weighing Preference on the Technical Guide.

ERR 27 Recipe Execution interrupted

The error indicates that execution of the previous Recipe interrupted due to a power failure. If you want to resume execution of the Recipe from exactly where the scale was when it powered off, press **OK**, if you do not want to resume execution press **ESC**.

ERR 29 Maximum value exceeded

The error indicates in the Usage Files the Name displayed has reached the maximum value which can be stored. To eliminate the error condition reset the Usage Files.

ERR 30 Ingredient unloading

The error indicates that an Ingredient has been unloaded.

ERR 32 Clean-Up unloading

The error indicates that a Clean-Up has been unloaded.

ERR 34 Group unloading

The error indicates that a Group has been loaded.

ERR 54 Incompatible files version

The error indicates that, following a software update, the Archive files are no longer compatible with the software version installed. Press **OK** to continue. The data stored in the Archives will be deleted.

ERR 55 Operation failed

The error indicates that the procedure did not finish correctly. Try repeating the procedure. Contact Customer Service if the error reappears.

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