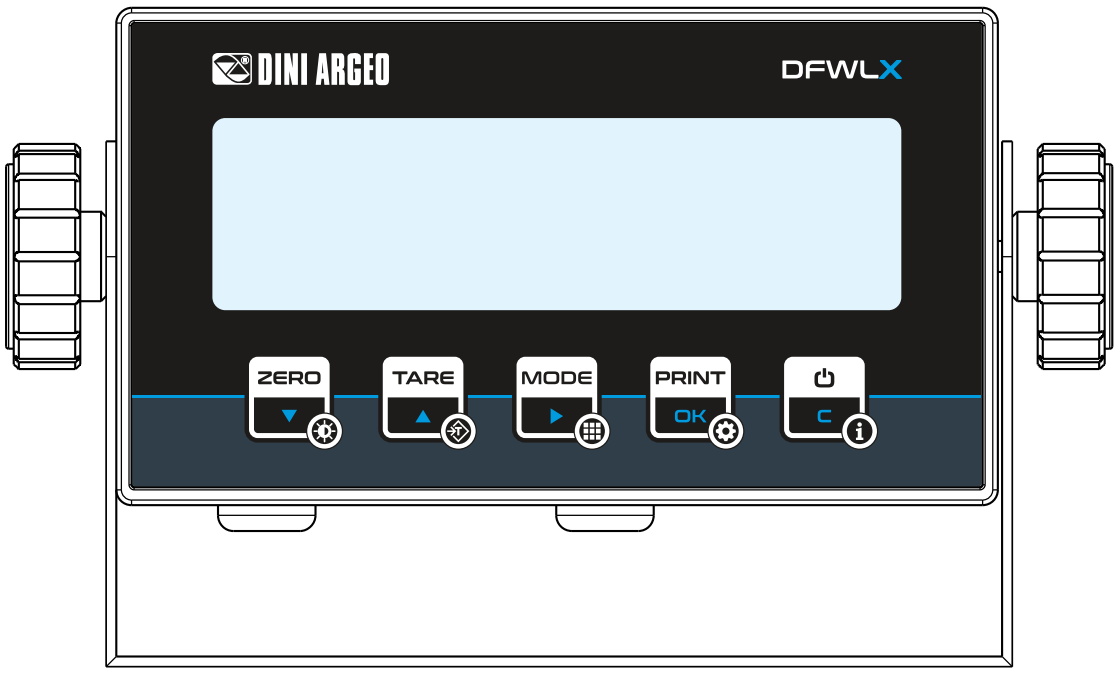
DINI ARGEO
Scales - Weighing systems

DFWLX SERIES

USER MANUAL ENGLISH



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INTRODUCTION

The purpose of this manual is to familiarise the user with the different operating modes, key functions and display annunciators.

Carefully follow the instructions when configuring the instrument, as to do otherwise could jeopardise proper scale operation.
In addition to conventional scale features, the instrument offers extra user features such as converting the units of measurement converting net weight/gross weight, gross weight or net weight setpoint, approved weight transmission to PC with alibi memory, +/- check weighing, sample weight percentage, weighing accumulator, piece counting. These features make it suitable both for industrial use as well as for legal use with third parties and in trade, meeting the most up to date needs for transmission and data printing via bidirectional serial ports.

This manual was written with the utmost care but we always welcome feedback on any inaccuracies you may find.

Manuals are available for download from www.diniargeo.com.

WARNING

For more warranty information see www.diniargeo.com. Any attempt to repair or modify the unit could expose the user to the risk of electrical shock and will render all warranty conditions null.
All problems with the unit or the system must be communicated to the manufacturer or the dealer where which it was purchased. The instrument is insulated between the dangerous voltage area and the parts that are accessible to the user.

- Follow all warnings and instructions indicated on or in the hardware.
- Disconnect power before opening the instrument.
- Do not expose the instrument to direct sunlight or sources of heat.
- Set or secure the indicator and the platform on a base with no vibrations.
- All the indicator connections must be made respecting the applicable standards in the installation area and environment.
- Do not install in environments with the risk of explosion.
- Do not submerge the instrument in liquid

Whatever is not explicitly described in this manual is to be considered improper use of the equipment.

Product Disposal:



The crossed out wheelie bin symbol on the product shows that it must be brought to appropriate separate waste collection centres at the end of its life cycle or returned to the dealer when purchasing a new equivalent product. Proper separate collection to then send the product to recycling contributes to preventing possible negative effects on the environment and to health and promotes recycling. Users who dispose of the product illegally shall face administrative sanctions as provided for by law.

Battery Disposal:
Dispose of batteries at appropriate waste collection centers at the end of their life cycle in accordance with local laws and regulations. Batteries and rechargeable batteries may contain harmful substances that should not be disposed of in household waste. Batteries may contain harmful substances including but not limited to: cadmium (Cd), lithium (Li), mercury (Hg) or lead (Pb). Users who dispose of batteries illegally shall face administrative sanctions as provided by law.
WARNING: Risk of fire and explosion. Do not burn, crush, disassemble or short-circuit batteries.

Important: All included batteries included intended for sale in the EU market are classified as "Portable Batteries for General Use" and comply with European Battery Regulation (EU) 2023/1542.

CLEANING

Cleaning the instrument may need to occur depending on the installation environment.

NOTE: The DFWXL is IP65 rated and compatible with most wash down environments.

To clean the instrument:

1. Power off the indicator and unplug the power cable.
2. Use soft cleaning cloth or brush to wipe away large debris.
3. Clean the indicator with mild detergent and a soft cloth.

WARNING:

- **Disconnect power cable from outlet and protect plug.**
- **Do not use solvents, alcohol-based or harsh chemical cleaners.**
- **Do not use abrasive brushes (for example, steel pads, wire brushes, scrapers)**
- **Tighten all cable glands.**
- **Ensure plugs/caps are in cable glands grips that are not used.**
- **Periodically check the integrity of all seals and grommets.**

INSTALLATION

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POWER SUPPLY VIA BATTERY 9

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INSTALLATION

See DFWLX Technical manual for wiring and installation information.

NOTE: Direct sunlight may damage the DFWLX display, ensure the instrument avoids direct sunlight.

POWER SUPPLY VIA MAINS

Every DFWLX range indicator is equipped with a specific power cable. The safety standards must be respected when connecting the unit to the 110/240V mains, including the use of a “clean” line with no disturbances or interferences caused by other electronic equipment. If there is an internal rechargeable battery, it is charged automatically.

POWER SUPPLY VIA BATTERY

Batteries are included with the DFWLXB.

Internal battery charge level indicator


Charged battery


Low battery

The LoW.bAtt message precedes automatic instrument power off.

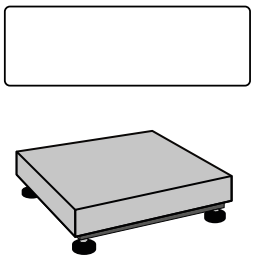
Battery charging indicator



NOTES:
Recharge the battery when the indicator displays 1 segement.
The battery recharges in approximately 2 hours.
The battery charging indicator only displays if the indicator is powered on.
If the indicator will not be used, recharge the battery once every three months.

POWER ON

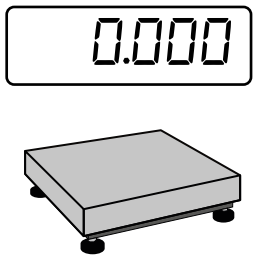
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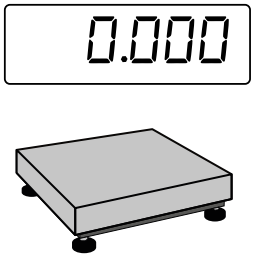
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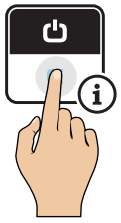
NOTE: A DIP switch configuration can cause the DFWLX to automatically turn on when it receives power. This configuration is typically used in customer applications that control the flow of power to the instrument with the mains circuit breaker. In such cases, power on the instrument at the circuit breaker or equivalent.

POWER OFF

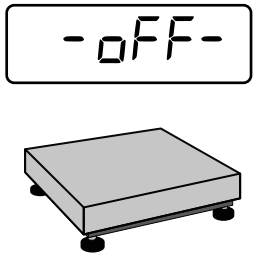
1



2



3



NOTE: A DIP switch configuration will cause the DFWLX to automatically power on when it receives power. This configuration is typically used in customer applications that control the flow of power to the instrument with the mains circuit breaker. In such cases, power off the instrument from the circuit breaker or equivalent.

SAVING BATTERY POWER

The instrument is equipped with battery power saving functions designed to increase operating time (see bAtt in DFWLX Technical Manual).

AUTOMATIC POWER OFF

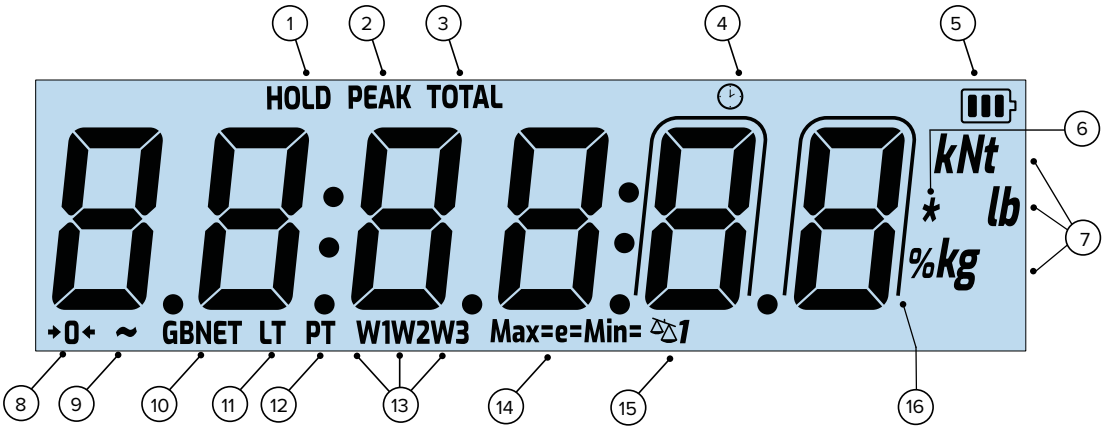
This function activates when the scale is completely unloaded and has not been used for a set amount of time *(default 5 minutes)*. (see AutoFF in Technical manual).

DISPLAY AND KEYBOARD

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DISPLAY



NUMBER	SYMBOL	DESCRIPTION
1	**PEAK**	Indicates that Peak mode is activated.
2	**HOLD**	Indicates that Hold mode is activated.
3	**TOTAL**	Indicates that Totalization mode is active and at least one weight is included.
4	🕒	Active during the configuration of the date and time.
5	🔋	Displays the current battery level. =Battery is Full =Battery has 2/3 capacity = Battery has 1/3 capacity =Battery is low and needs to be charged
6	*	Displays when a key is pressed. In some operating modes, it indicates that a specific function is active. For example, in CONVER mode, indicates that FrEE factor conversion is enabled.
7	**kN** ... **kg**	Represents a unit of measurement: **kN** = kn (kilonewtons) **N** = N (newton) **t** = T (tonnes) **lb** = lb (pounds) **g** = g (grams) **kg** = kg (kilograms)
8	→0←	The scale is unloaded and at zero (gross).
9	~	The weight is unstable.
10	**GBNET**	**GB** = The weight displayed is Gross/Brutto/Brut **NET** = The weight displayed is net. There is a saved tare.

NUMBER	SYMBOL	DESCRIPTION
11	**LT**	A locked tare is active. ***NOTE: Not visible when tArE is configured as to Unlocked.***
12	**PT**	A preset tare (manual tare) is active.
13	**W1 W2 W3**	Displays the active range of weighing.
14	**Max=** **Min=** **e=**	**Max=** Maximum Capacity **Mix=** Maximum Capacity **e=** Divisions
15	**1**	Displays the active scale.
14		The weight is displayed in high resolution.

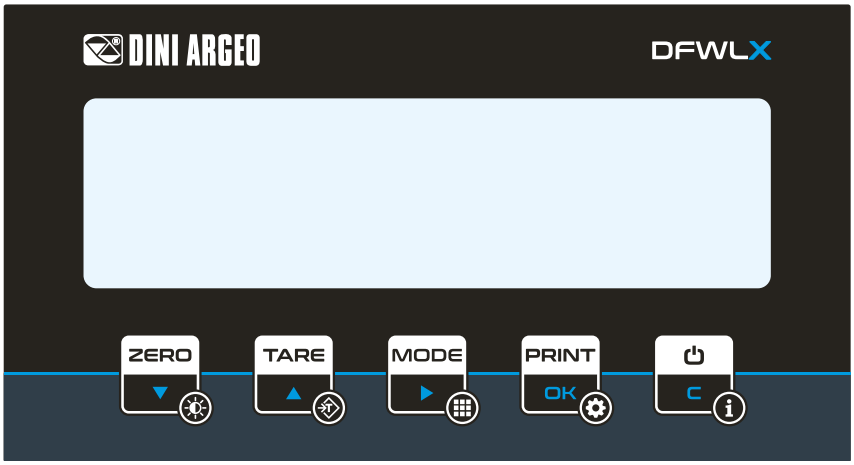
LETTERS:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	b	C	d	E	F	G	h	i	J	K	L	n	n	o	P	q	r	S	t	u	U	W	H	y	Z

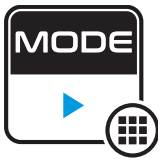
NUMBERS:

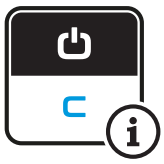
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

KEYPAD



Operation Keys

KEY	DESCRIPTION
	Short Press: Zeros the weight on the scale within 2% of full scale capacity. Long Press: Opens brightness configuration. Parameter/Menu: Navigates down in menus, parameters or parameter values.
	Short Press: Manually adds a tare to the scale from the currently weighed object. When a tare is active, the NET annunciator appears on the screen. Long Press: Sets preset tare. Parameter/Menu: Navigates up in menus, parameters or parameter values.
	Short Press: Performs function mode action. Long Press: • Press for 2 for set function mode parameter. • Press for 4 seconds to enter Function mode menu. • Press for 10 seconds to enable/disable Function mode configuration. Parameter/Menu: Navigates right in numeric fields. Long and short presses vary depending on the current function mode.
	Short Press: Activates print function or totalizes weight in totAL/FormUL mode. Long Press: • Press for 2 for function mode configuration. • Press for 4 seconds to Open user indicator configuration. • Press for 10 to enable/disable the User menu. Parameter/Menu: • Confirms the selected menu/parameter. • At save prompt, confirms saving.

KEY	DESCRIPTION
	Short Press: Clears tare or peak Long Press: • Press for 2 seconds to power indicator off or on. • Press for 4 seconds to view indicator information. Parameter/Menu: • Returns to previous menu without saving. • At save prompt, cancels without saving.

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PRINTING 23

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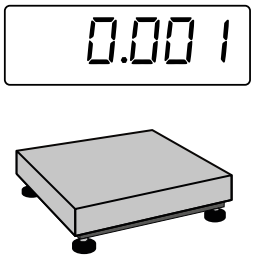
ZERO

The Zero key is one of the most frequently used indicator keys. It manually resets the current stable weight to a maximum of ± 2% of total scale capacity (by default). The maximum percentage may be increased for scales that are not legal for trade in the Technical menu (see 0.PErC parameter in the DFWLX Technical Manual).

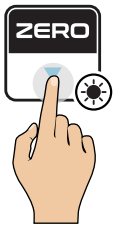
Zero Scale

Sets the current gross weight to zero, provided the amount of weight to be removed or added is within the specified zero range and the scale is not in motion.

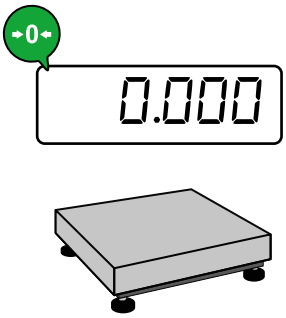
1



2



3



Automatic Zero During Scale Initialization

The indicator has an automatic function that zeros the scale upon initialization to ensure the correct empty scale weighment after the scale is turned on.

Not Approved scale (Not legal for trade)

- At initialization a stable weight is within ± 10% of the total scale capacity is detected and then zeroed.
- If the weight is not within ± 10% of the total scale capacity or unstable, indicator attempts zeroing for several seconds. Display shows the current weight alternating with the message “Zero”. If zeroing can not be performed, the indicator displays the current weight.

Approved scale (Legal for trade)

- At start-up a weight within ± 10% of the capacity and stable is detected, it will be zeroed.
- If the weight is not within this tolerance or unstable, display shows the real time weight alternating the message “Zero” until the zeroing conditions are not detected.

NOTE: See on.2Ero parameter in the DFWLX Technical Manual for more information.

Zero Tracking Function

The indicator has a Zero Tracking function that resets unexpected zero micro-variations due to temperature changes, residue on the platform, etc.

Zero tracking works on approved (legal for trade) and internal use (not legal for trade) configurations. Zero tracking resets micro weight-variations within half a scale division, stable for at least one second.

NOTE: See 0.trh parameter in the DFWLX Technical Manual for more information.

TARE

Available Tare Functions

The instrument provides various tare functions:
• “Locked” tare (standard factory configuration).
• “Unlocked” tare: automatically deleted every time the scale is unloaded. Useful in preventing errors when the tare is different for every weighment.
• Tare acquired automatically by the scale. Tare is only acquired if there is no other saved tare value.
• Tare function disabled.

To customize the tare function, enter the tArE section in the configuration menu (see page 74 and 74) or through shortcuts.

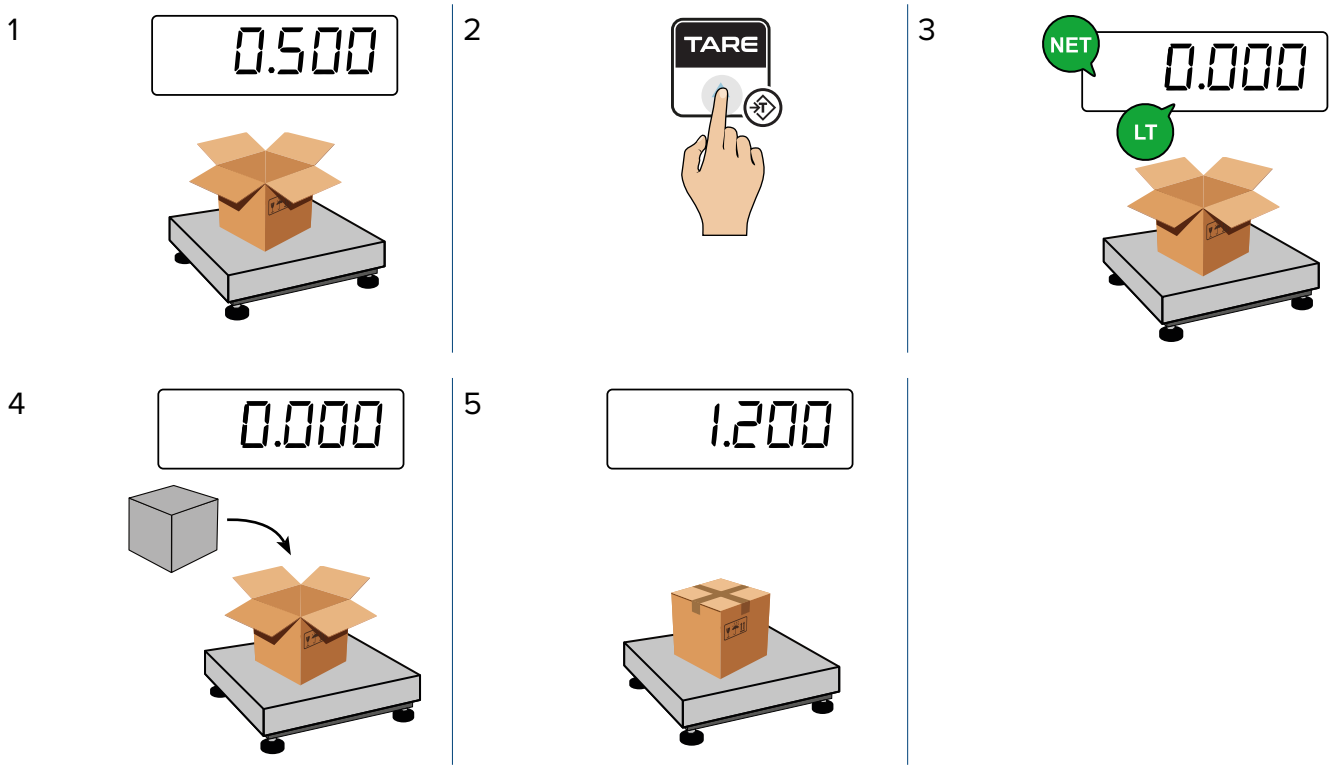
Tare Requirements

• Semiautomatic tare can only be performed if the weight is stable
• A tare can only be performed with positive weight.
• If the indicator is legal for trade and the tare is not been disabled (LoCK = oFF) it is not possible to set LoCK/unLoCK (see page **21**).
• Tare is possible on for the entire scale range (0 through full scale capacity)

Semiautomatic Tare

The semiautomatic tare performs a tare with a value of the weight on the scale.





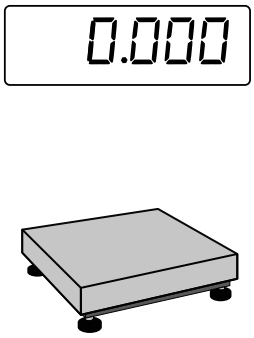
Preset Tare

The preset tare inserts a user configured numeric weight value as the tare.

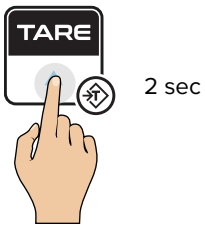


Set Preset Tare with Shortcut

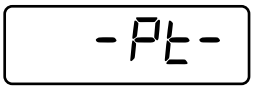
1



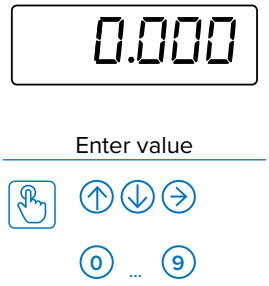
2



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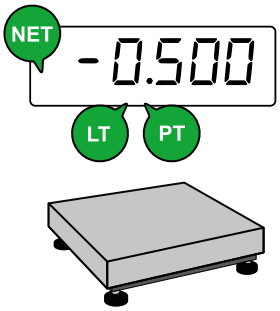
4



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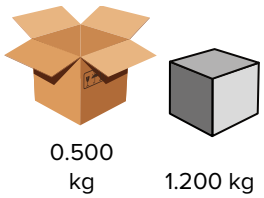


6



7

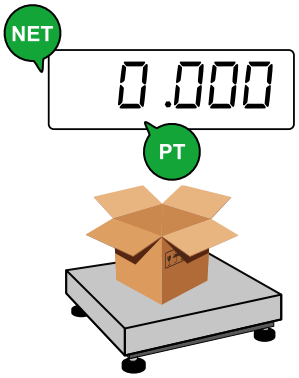




Cancel Preset Tare/Tare

Cancel a preset tare by pressing ⊏ or by changing the preset value to 0. The example below demonstrates how to change the preset tare value to 0 by pressing ⊏.

1



2



3

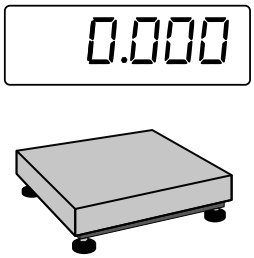


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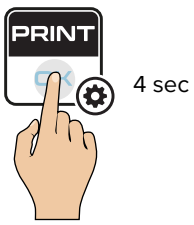


Automatic Tare Deletion or Disable Tare

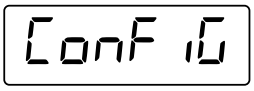
1



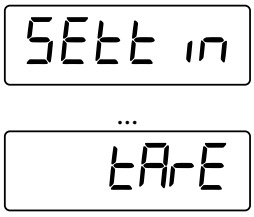
2



3



4



Set the parameter



5



6



Set the parameter

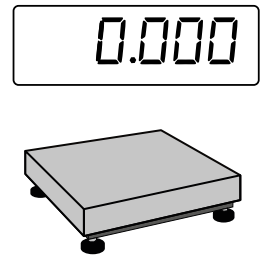


7 Exit User menu and save (see page 62).

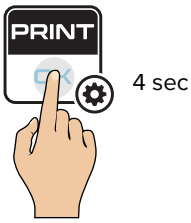
LoCh = Automatic deletion disabled
unLoCh = Automatic deletion enabled: the tare will be deleted automatically when unloaded
oFF = All tare functions disabled

Automatic Tare

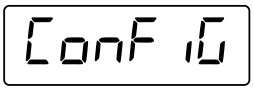
1



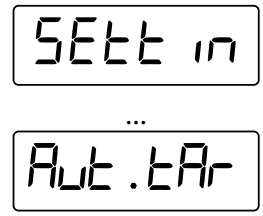
2



3



1

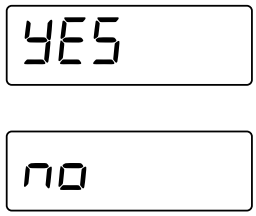


Set the parameter

2



3



Set the parameter

4 Exit User menu and save (see page 62).

Aut.tAr = The tare automatically activates when the gross weight is 0 and then weight is placed on the scale.

NOTE: After an automatic tare occurs, semi-automatic tare are then available

Tare Unlock and Automatic Tare can be used together to have the tare activated and cancelled just adding / removing weight on the scale. For example:

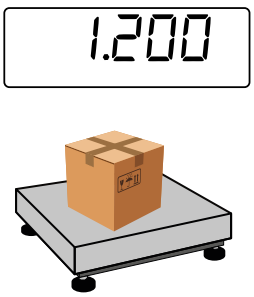
1. *Put empty container on the scale, it will be automatically tared*
2. *Load weight into the container and read the weight (*)*
3. *Remove the full container from the scale, the tare will be automatically cancelled*

(*) Meanwhile, it is possible to perform other operations (for example totalization)

PRINTING

Printout

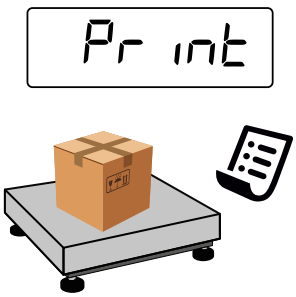
1



2



3



Printout rules:

- If Reactivation is configured as 2Ero, the measured weight must return to zero before the indicator is able to print.
- If Reactivation is configured as inSt, the measured weight must be different from the configured number of division before the indicator is able to print.
- Negative weights are not printable.
- Weights must be stable.

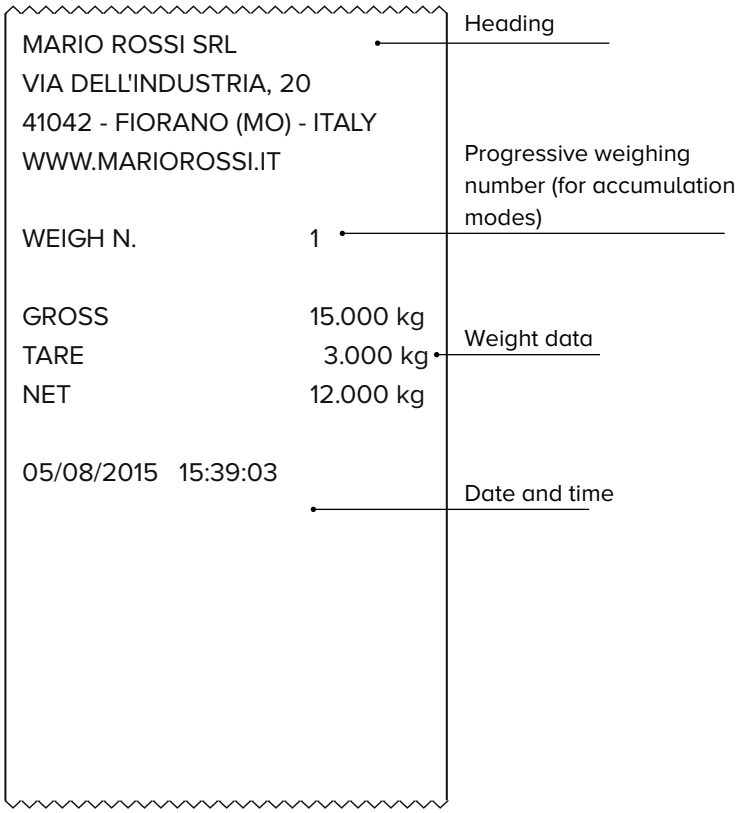
NOTE: See the DFWLX Technical manual for more information about the rEACt parameter.

Customisable Printouts

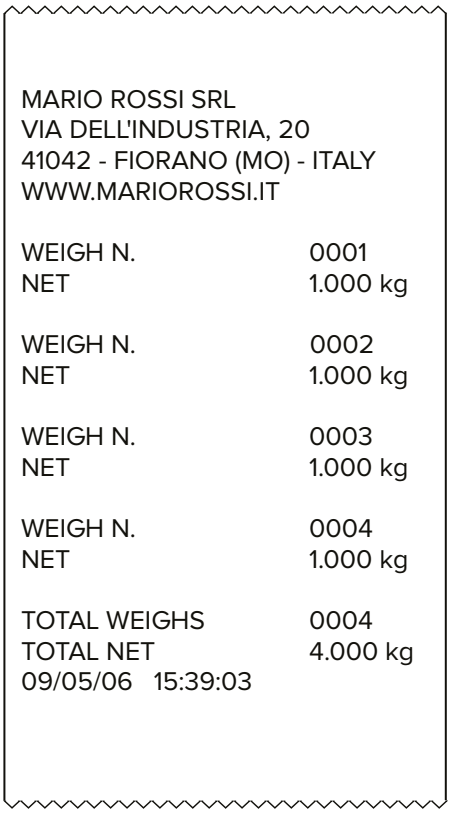
If the instrument is equipped with a printer, the ticket headers can be customised with DiniTools. The follow displays an example:

Customising printouts requires advanced configuration.

Example of ticket/label



Example of packing list



HIGH RESOLUTION

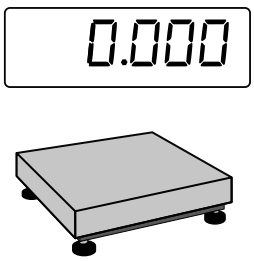
When x10 mode is enabled, the scale display shows the weight with 10 times (x10) the resolution. For example, If a scale is calibrated as 3000g\1g, the increased resolution (x10) function changes the resolution to 3000g\ 0.1g.

Increased resolution (x10) remains enabled when the scale is power cycled.
When increased resolution (x10) is enabled, all functions except ZERO, TARE and PT are deactivated.
To switch between increased resolution (x10) and standard resolution, press the **MODE** key.
If any function key is pressed, PrEc . 10 displays.

When increased resolution (x10) is disabled, any function that was previously active is retrieved.

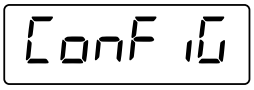
NOTE: If scale is approved (legal for trade):
- *Increased resolution (X10) stays for 5 seconds and then automatically disappears.*
- *Printouts are disabled*

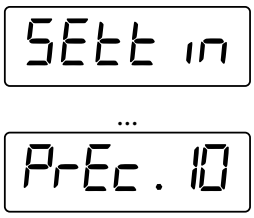
Configure Increased Resolution

1 

2 

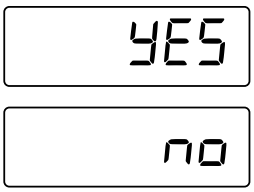
4 sec

3 

4 

Set the parameter

5 

6 

Set the parameter

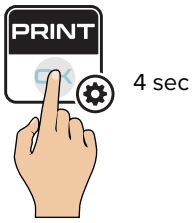
7 Exit User menu and save (see page 62).

SETTING DATE AND TIME

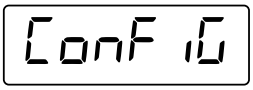
1



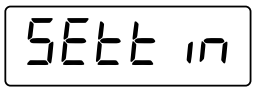
2



3



4



...



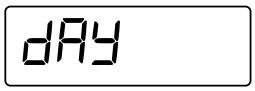
Set the parameter



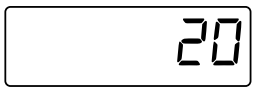
5



6



7



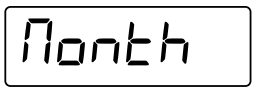
Set the parameter



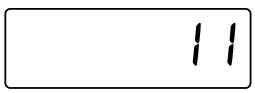
8



9



10



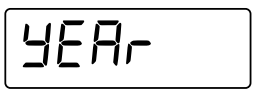
Set the parameter



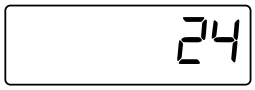
11



12



13



Set the parameter



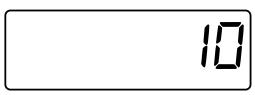
14



15



16



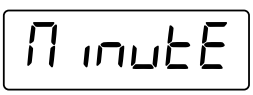
Set the parameter



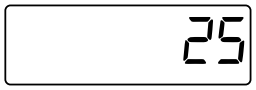
17



18



19



Set the parameter



20



21 Exit User menu and save (see page 62).

NOTE: This function requires a real-time clock (included with Alibi).
For information about setting the date and time, see page 75.

ALIBI MEMORY

Alibi memory is an option card installed in the weight indicator that may be included as standard or optional depending on indicator model. In legal for trade applications, Alibi memory performs it main function, storing/tracing weighment data before sending it to a PC or Printer. When Alibi memory is installed, it automatically activates.

The weighment ID code is expressed as Re-write number - Weightment number. The rewrite number is a 5-digit number that ranges from 0 to 00255, and indicates the number of complete rewrites of the alibi memory. The weighment number is a 6-digit number that ranges from 0 to 131071, and indicates the weighment number in the current alibi memory rewrite. When a weighment is stored, the weighment ID number is incremented by 000001, and when it reaches the value 131071, it restarts from 000000 and the rewrite number increments by 00001.

For example: 00001 - 000021.

For each weighment registered, a unique ID code is assigned. Data stored for each weighment includes:

- Gross weight
- Tare weight
- Unit of measure
- Scale Number
- Traceability ID code

NOTE: See the DFWLX Technical manual for more information about the AL ıb ı parameter.

Weighment Storage

A weighment is stored when either occurs:

- When the PID serial storage serial command is received.
- After the **PRINT** button is pressed, the indicator prints or totalizes gross weight, tare, net weight, and unique weight ID code via serial connection to PC or printer.
- If the indicator is legal for trade.

```
ALIBI ID 00000-000037
WEIGHING NR.  0000014
GROSS         0.200 kg
TARE          0.000 kg
NET           0.200 kg
05/02/025 18:09:59
```

The storage of the weighment through the PID serial command is possible for all stable weights from 0 to full scale, with an approved instrument or unapproved instrument.

In case that these conditions are not observed:

- In response to the PID serial command “NO” displays instead of the ID.
- Transmission does not occur when or **PRINT** buttons are pressed.

If the weight is not valid, “NO ALIBI” is printed.

For more information about the PID command, see the DFWX Serial Protocol Manual.

Weighment Reading

It is possible to read the weighments in the Configuration menu via the RL ıb ı parameter with the Alibi ID number.

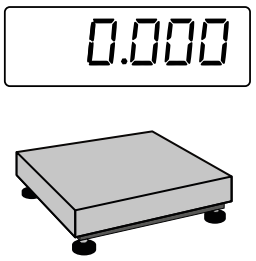
NOTE: See the DFWLX Technical manual for more information about the RL ıb ı parameter.

CONFIGURE BACKLIGHT

The indicator's backlight may be configured to determine when illumination occurs or its brightness. Depending on application it may be desirable to limit the frequency of activation or brightness when operating from the battery.

Backlight Activity Setup

1

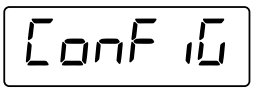


2

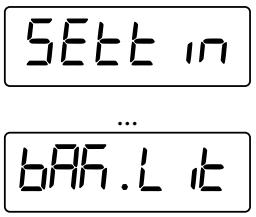


4 sec

3



4

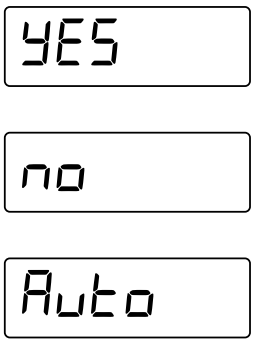


Set the parameter

5



6



Set the parameter

7 Optional for Auto parameter



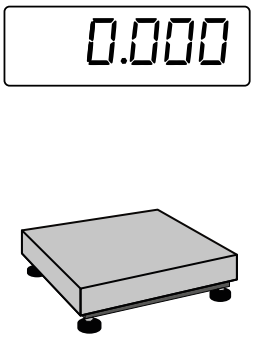
Set the parameter

8 Exit User menu and save (see page 62).

NOTE: For information about bAC.L it parameters, see page 69.

Backlight Brightness

1

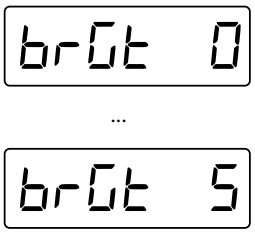


2



4 sec

3



Set the parameter



4

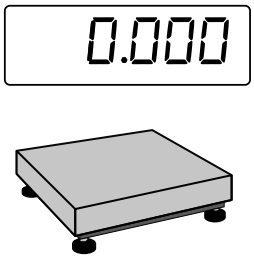


AUTOMATIC POWER OFF

To preserve the battery charge, the automatic power-off function turns off the scale when not in use for a set amount of time. For more information about the AutoFF see *DFWLX Technical manual*.

How Automatic Power Off Functions

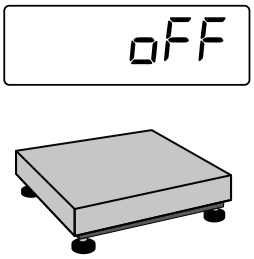
1



2

The scale powers off when time duration configured in the AutoFF parameter expires.

3



FUNCTION MODE SELECTION

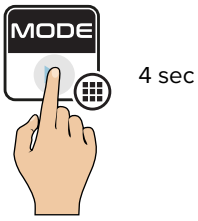
The indicator contains a variety of functions that are accessed from the Function menu though the Mode button. Each Function mode provides for specific scenarios.

Accessing Function Modes

1



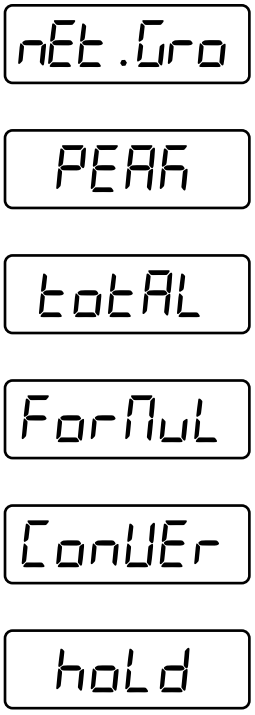
2



3



4



Select the Function mode



5



Press OK to continue.

NET AND GROSS WEIGHT EXCHANGE

INTRODUCTION 34

ENABLE NET AND GROSS EXCHANGE FUNCTION MODE 34

EXCHANGE BETWEEN NET WEIGHT AND GROSS WEIGHT 35

INTRODUCTION

The nEt .Gro conversion function changes between net weight and gross weight. .
The annunciators indicates gross weight is enabled with “G”, net weight with “NET” annunciators.

ENABLE NET AND GROSS EXCHANGE FUNCTION MODE

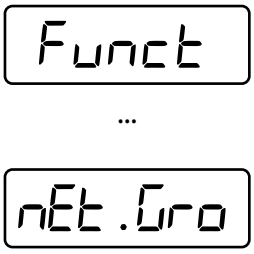
Enable Conversion Function

1



4 sec

2



Set the parameter

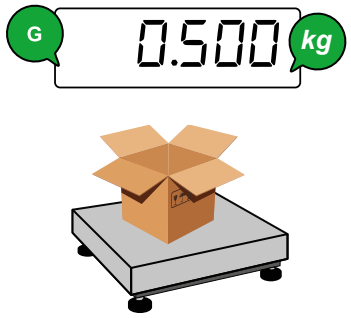


3



EXCHANGE BETWEEN NET WEIGHT AND GROSS WEIGHT

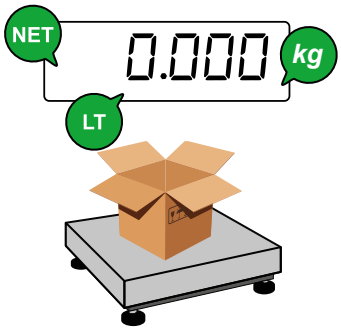
1



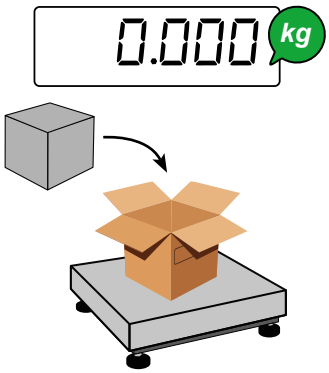
2



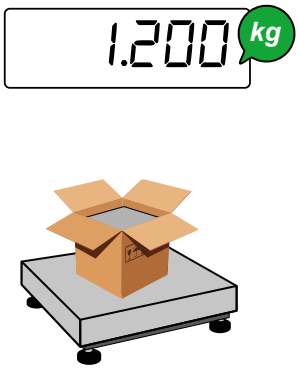
3



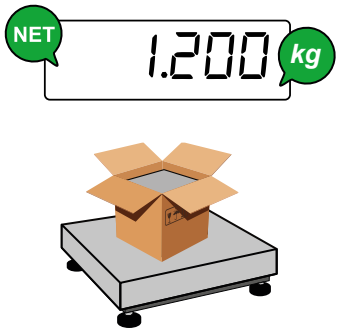
1



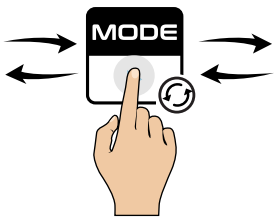
2



1

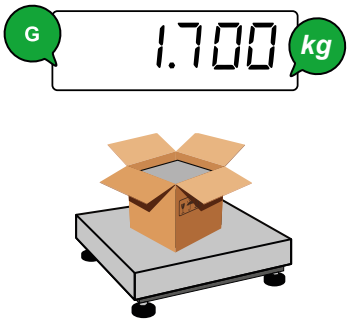


2



Convert from net weight to gross weight at any time.

3



If there is a tare weight, the gross weight is displayed for 2 seconds. While the gross weight is displayed, printing is not possible.

PEAK FUNCTION

PEAK 37

ENABLE PEAK FUNCTION 37

PEAK FUNCTION 38

PEAK

The Peak function only displays the heaviest measured weight.

NOTE: The peak is measured in weight (g, kg, lb, t) or newtons (N, kN) (page 64). Number of decimals (page 64) and division is configurable (page 65).

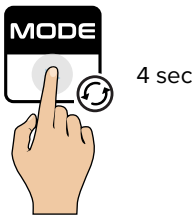
NOTE: Weight data can be automaticaly sent to a connected computer when it is stabile. Set the serial port Mode to Stable paramater. For more information, see the DFWLX technical manual.

ENABLE PEAK FUNCTION

1



2



3



4



5

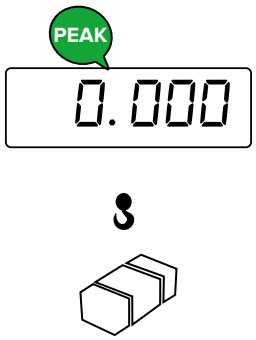


PEAK FUNCTION

Peak Function Operation

NOTE: Peak is lost if indicator is powered off.

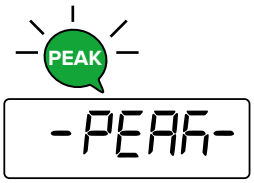
1



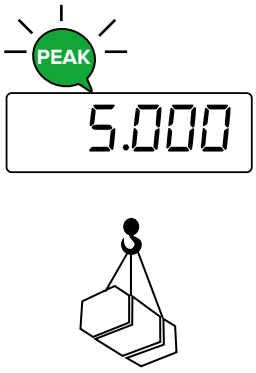
2



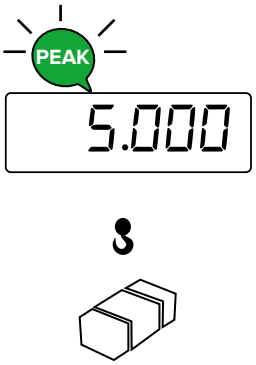
3



4



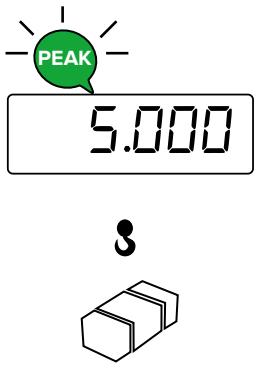
5



Reset Peak Function

NOTE: Also resets if indicator is powered off.

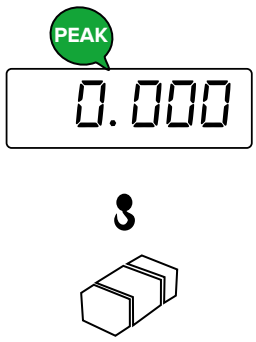
1



2



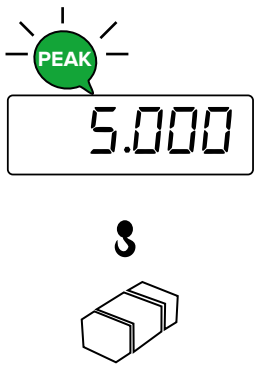
3



Disable Peak Function

NOTE: Also resets if indicator is powered off.

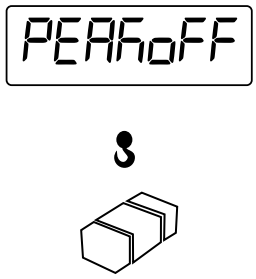
1



2



3



TOTALIZATION MODE

INTRODUCTION 41

TOTALIZATION RULES 41

TOTALIZATION SETUP AND OPERATION 44

TOTALIZATION PROCESS 46

INTRODUCTION

This section describes totalization configuration and operation.
Totalization allows several weights to be added together and calculate a cumulative total. There are three types of totalization:

- Horizontal totalization (totAL)
- Formulation/Vertical Totalization (FormuL)

It is possible to see the number of weighments and the temporary total at any time during processing. There are several different parameters that can be configured to change how totalization operates.

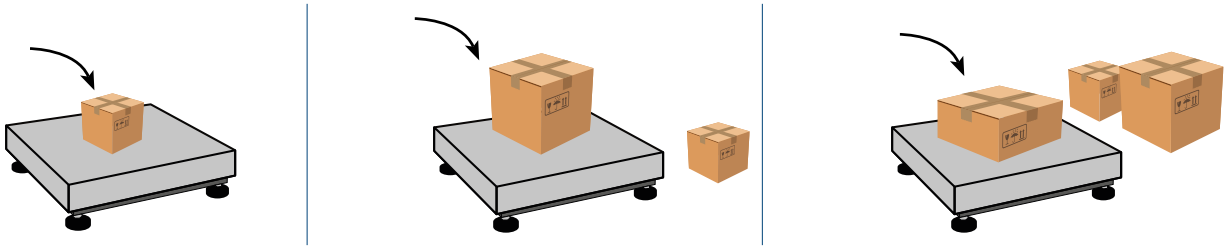
TOTALIZATION RULES

- After the first totalization the weight must be reactivated (see paragraph “Totalization reactivation”)
- It is not possible to totalize if the gross weight is ≤ 0
- It is not possible to totalize if the net weight is ≤ 0 (except for unloading totalization)
- It is not possible to totalize if the weight in unstable (~)
- If Counting or Conversion mode is active, the total is calculated in the primary unit of the scale (g / kg / lb / t)
- If the Albi memory is installed, the totalization also saves the weigh data in the alibi memory
- It the Check weighing mode is active, totalization is only possible if the weight is in tolerance

totAL Horizontal Loading Totalization

The horizontal totalization consists of loading the object on the scale, executing totalization, and then unloading the object.

NOTE: The total can exceed the maximum scale capacity since only one object at a time is loaded.

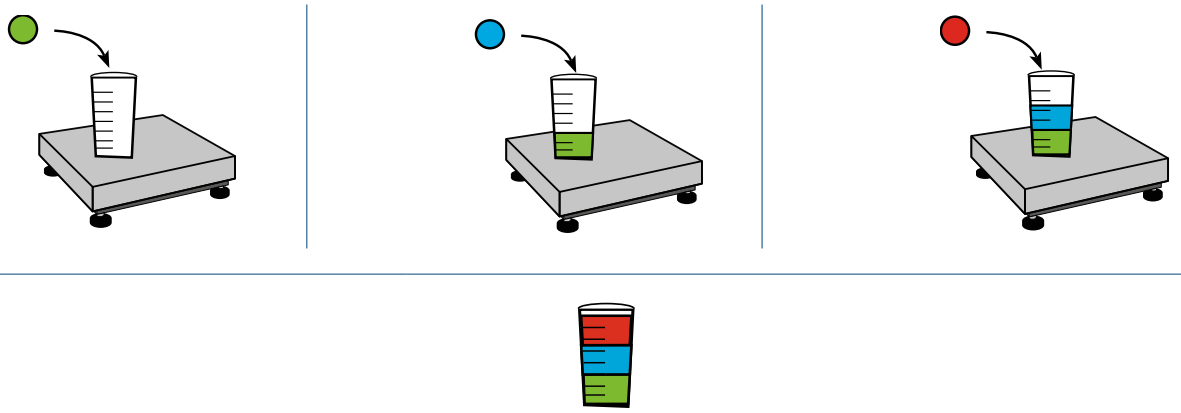




ForMuL Vertical Loading Totalization

The vertical totalization (formulation) operation consists of loading the first object/ingredient on the scale, executing totalization, and then repeating the process until all object/ingredient are loaded and the total weight is measured. Unloading the scale occurs at the end of the process.

NOTE: The total cannot exceed the maximum scale capacity since at the end of the process, all objects (plus a possible tare) are loaded on the scale at the same time

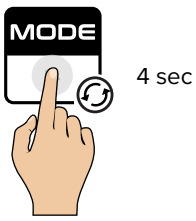


Enable Totalisation Function

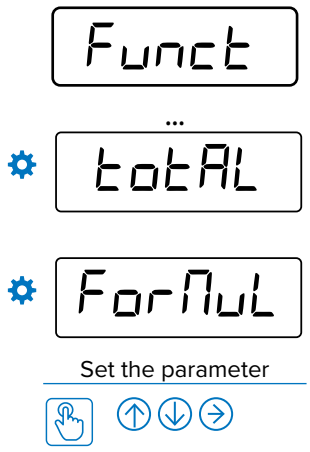
1



2



3



4



5



Totalisation Parameters

1

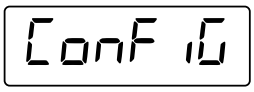


2

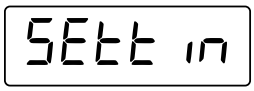


4 sec

3



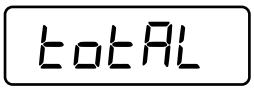
4



5



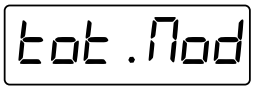
6



7



8

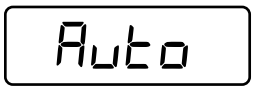


9



10





Set the parameter



11

Exit User menu and save (see page 62).

TOTALIZATION SETUP AND OPERATION

Totalization type (tot .tYPE) and Totalization mode (tot .Mod), are frequently combined in a variety of ways to operate in a specific totalization process. This section identifies combinations of (tot .tYPE and tot .Mod) that are frequently used and their operation.

Vertical Totalization

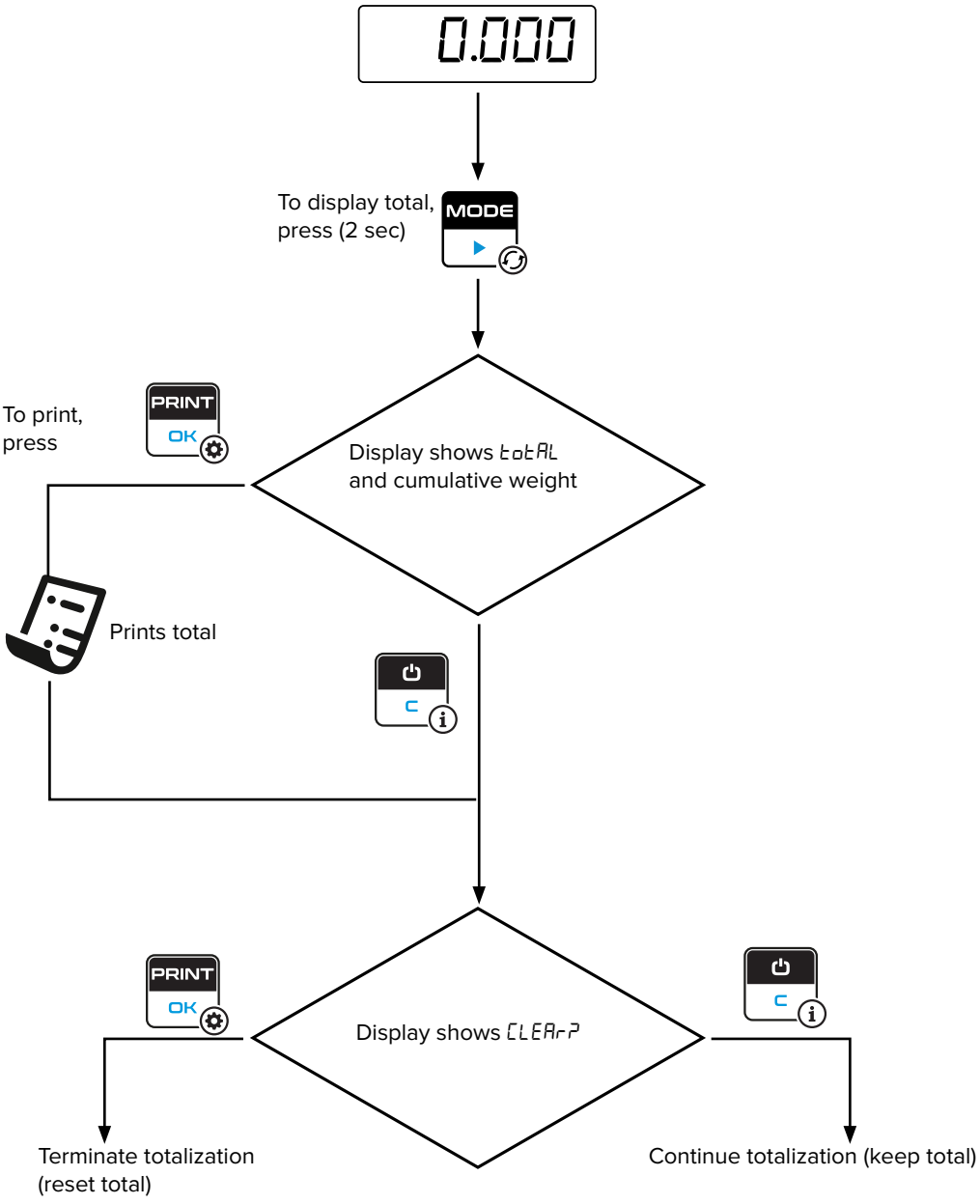
FUNCTION	CONFIGURATION	SETTINGS	SCALE OPERATION PROCEDURE
Manual Loading Vertical Totalization	FunCt	FormuL	1. Load the empty tare (if required). 2. Press **TARE** (if required) . 3. Load the weight. 4. Press **Print** to totalize and performs tare automatically. 5. If a printer is configured, the totalization for the weighment prints. 6. Repeat steps 3 and 4.
	TOT.TYPE	Loading	
	TOT.MOD	Manual	
Manual Unloading VerticalTotalization	FunCt	FormuL	1. Put the full container on the scale. 2. Press **TARE**. 3. Unload the object / quantity. 4. Press **Print**, the indicator will totalize the removed weight. 5. If a printer is configured, the totalization for the weighment prints. 6. Repeat steps 3 and 4.
	TOT.TYPE	Unloading	
	TOT.MOD	Manual	
Automatic Loading Vertical Totalization	FunCt	FormuL	1. Load the weight. 2. The scale automatically totalizes and performs tare automatically. 3. If a printer is configured, the totalization for the weighment prints. 4. Repeat step 3.
	TOT.TYPE	Loading	
	TOT.MOD	Automatic	
Automatic Unloading Vertical Totalization	FunCt	FormuL	1. Load the weight. 2. Press **TARE**. 3. Unload the object / quantity. 4. The scale automatically totalizes and performs tare automatically. 5. If a printer is configured, the totalization for the weighment prints. 6. Repeat step 3.
	TOT.TYPE	Unloading	
	TOT.MOD	Automatic	

Horizontal Totalization

FUNCTION	CONFIGURATION	SETTINGS	SCALE OPERATION PROCEDURE
Manual Loading Horizontal Totalization	FunCt	totAL	1. Load the weight. 2. Press **Print**. 3. Unload the weight. 4. Repeat steps 1 through 3.
	TOT.TYPE	Loading	
	TOT.MOD	Manual	
Manual Unloading Horizontal Totalization	FunCt	totAL	1. Put the full container on the scale. 2. Press **TARE**. 3. Unload the object / quantity. 4. Press **Print**, the indicator will totalize the removed weight. 5. If a printer is configured, the totalization for the weighment prints. 6. Repeat step 3.
	TOT.TYPE	Unloading	
	TOT.MOD	Manual	
Automatic Loading Horizontal Totalization	FunCt	totAL	1. Load the weight. 2. The scale automatically totalizes. 3. If a printer is configured, the totalization for the weighment prints. 4. Unload the weight. 5. Repeat step 1 through 4.
	TOT.TYPE	Loading	
	TOT.MOD	Automatic	
Automatic Unloading Horizontal Totalization	FunCt	totAL	1. Put the full container on the scale. 2. Press **TARE**. 3. Unload the object / quantity. 4. If the weight is stable, the scale totalizes automatically. 5. If a printer is configured, the totalization for the weighment prints. 6. Repeat step 3.
	TOT.TYPE	Unloading	
	TOT.MOD	Automatic	

TOTALIZATION PROCESS

The following flow chart demonstrates how to view, print and terminate totalization.



WEIGHT CONVERSION

INTRODUCTION 48

WEIGHT CONVERSION FUNCTION 48

INTRODUCTION

The conversion function converts the current weight to a configured weight.

Conversion Rules:

- The secondary unit is printed as follow:
  - kg ▶ lb
  - kg ▶ Newton
  - t ▶ Kilonewton
  - Free factor ▶ 0.000
- If the indicator is legal for trade, the secondary unit (-b, N, *) is only shown for 5 seconds.
- If free factor = 1.00000, when **MODE** key is pressed, the icon of the primary unit blinks but no conversion is performed.
- If free factor = 0.00000, when **MODE** key is pressed, the display shows "Er .FACt".

Number of decimals (page 64) and division is configurable (page 65).

WEIGHT CONVERSION FUNCTION

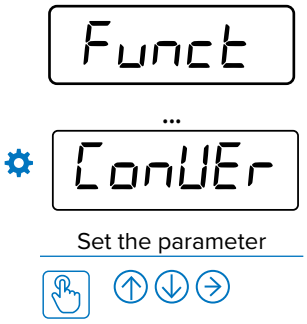
Enable Conversion Function

1



4 sec

2

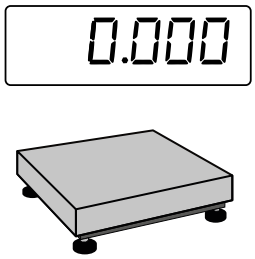


3

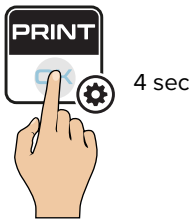


Configure Conversion Unit of Measure

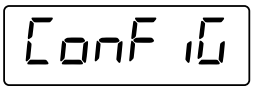
1



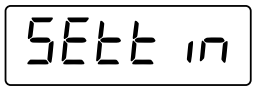
2



3



4



Set the parameter



5



6



7



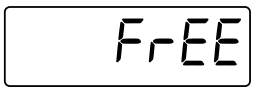
8

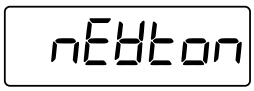


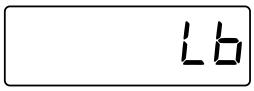
9



10







Set the unit of measurement



11

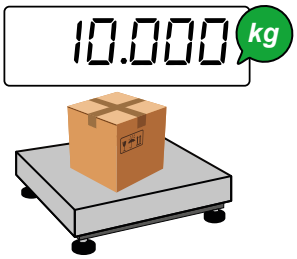


12

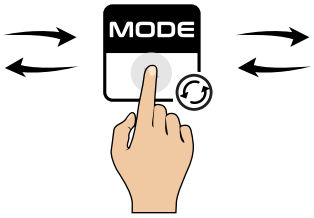
Exit User menu and save (see page 63).

Operation

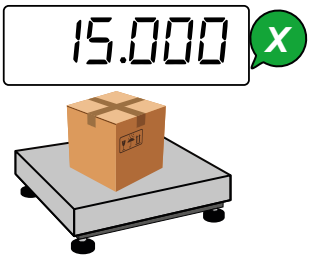
1



2



3

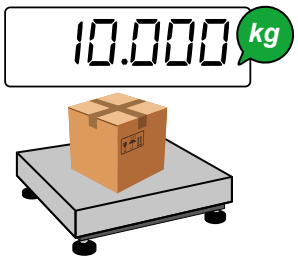


*Free conversion units are shown as *, while other conversion units use standard units of measure (kg, kN, lb, N, t).*

Free Weight Configuration Parameters

The free weight conversion is calculated by multiplying the measured weight with by a user configured value.

1



2



2 sec

3



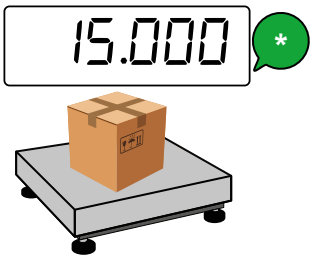
Set the parameter



4



5



HOLD FUNCTION

HOLD 52

ENABLE HOLD FUNCTION 52

HOLD OPERATION 53

RESET HOLD 54

HOLD

The Hold function displays a user selected weight until it is canceled or the indicator is powered off.

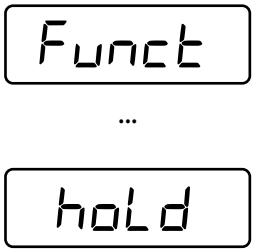
ENABLE HOLD FUNCTION

1



4 sec

2



Set the parameter



3

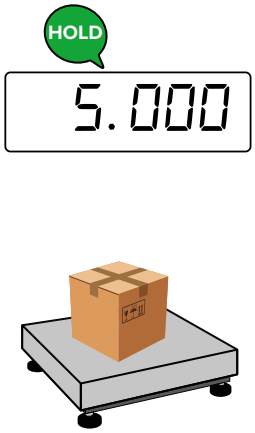


HOLD OPERATION

The HOLD annunciator displays when Hold mode is enabled, and flashes when the function is active. In addition, hold resets if the indicator is powered off.

1 Enable the Hold function.

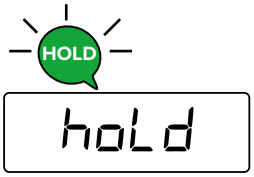
2



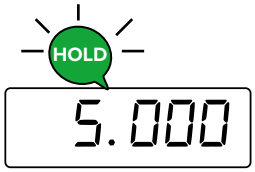
3



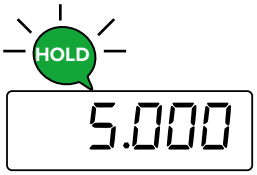
4



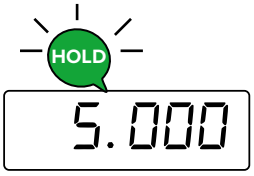
5



6



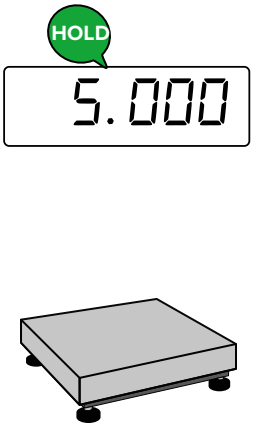
7



RESET HOLD

NOTE: The Hold function resets if the indicator is powered off.

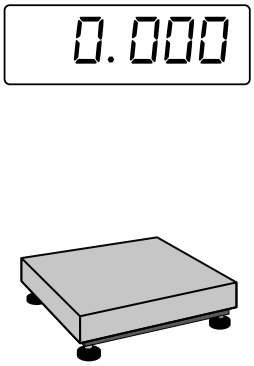
1



2



3



ANIMAL WEIGHING

INTRODUCTION 56

ENABLE ANIMAL WEIGHING 56

ANIMAL WEIGHING 57

ANIMAL WEIGHING COMBINED WITH HOLD FUNCTION 58

INTRODUCTION

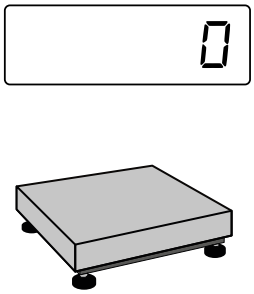
The indicator provides a special filter for weighing animals. The filter provides a modified hold function that will momentarily hold animals weight. Fore advanced operation, the animal Filter can be combined with any Function mode.

NOTE: Weight data can be automaticaly sent to a connected computer when it is stabile. Set the serial port Mode to Stable paramater. For more information, see the DFWX and DFWXS Tecnical Manual.

NOTE: For information about animal configurable parameters, see **71.**

ENABLE ANIMAL WEIGHING

1

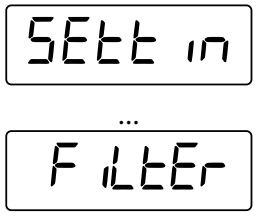


2



4 sec

3



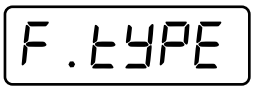
Set the parameter



4



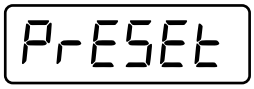
5



6



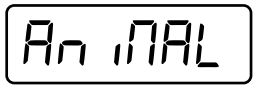
7



8



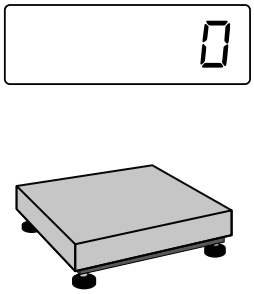
9



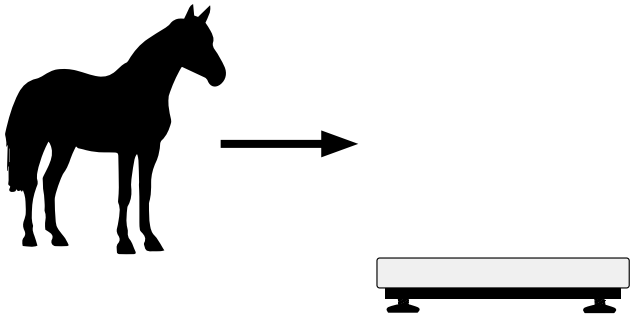
10 Exit User menu and save (see page 62).

ANIMAL WEIGHING

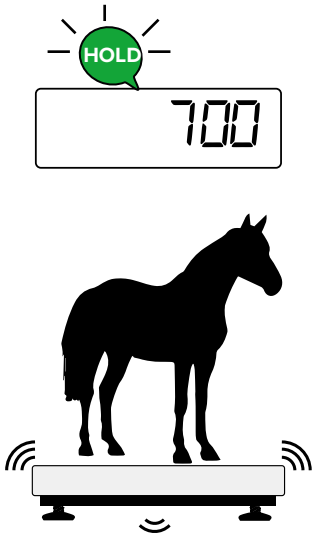
1



2



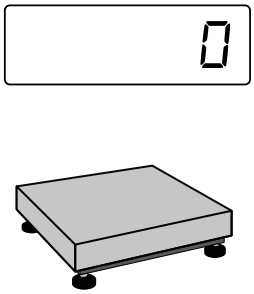
3



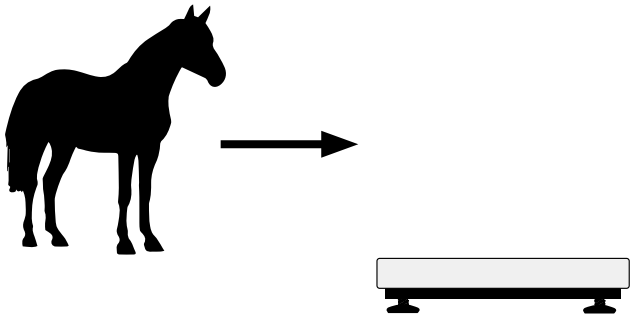
ANIMAL WEIGHING COMBINED WITH HOLD FUNCTION

The animal weighing function can be combined with the HOLD function to provide an additional manual hold function.
For information about the *hoLd* function, see (page **51**).

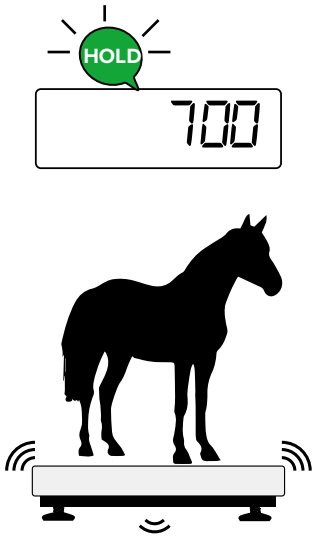
1



2



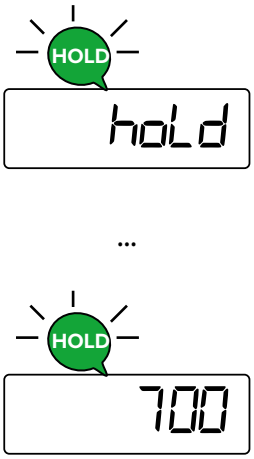
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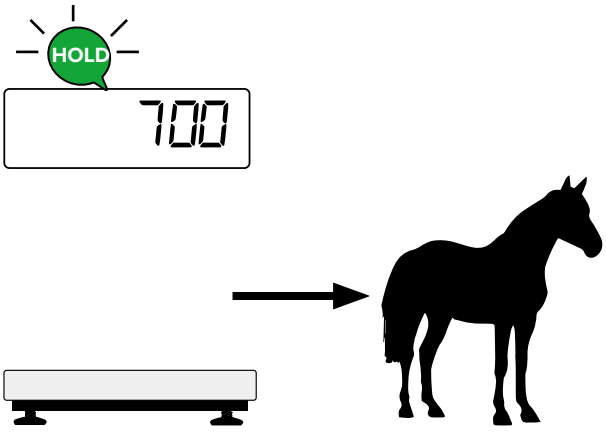
4



5



6



METROLOGICAL INFORMATION

INTRODUCTION 60

SERIAL NUMBER 60

METROLOGICAL FIRMWARE 60

INFORMATION 60

IDENTIFICATION OF METROLOGICAL SOFTWARE 61

INTRODUCTION

THE DFWLX is an indicator can be approved for legal for trade applications.

SERIAL NUMBER

The SN identifies the instrument. If the instrument is part of a system with one or more platforms, the SN identifies the whole system. The serial number is located on the product label attached to the rear cover of the indicator.



METROLOGICAL FIRMWARE

The metrological firmware is indicated on the Evaluation Certificate.

The indicator shows the metrological firmware as the first value during slow start-up (pressing **ZERO** during start-up).

INFORMATION



Press to see metrological information of the scale.

For each weighing range (W1, W2, W3) the display shows:

- Capacity (Max)
- Min (Min)
- Division (e)

NOTE: The display shows “e”, instead of “d”, even if the indicator is not legal for trade.

NOTE: The following illustration is an example, actual values vary.

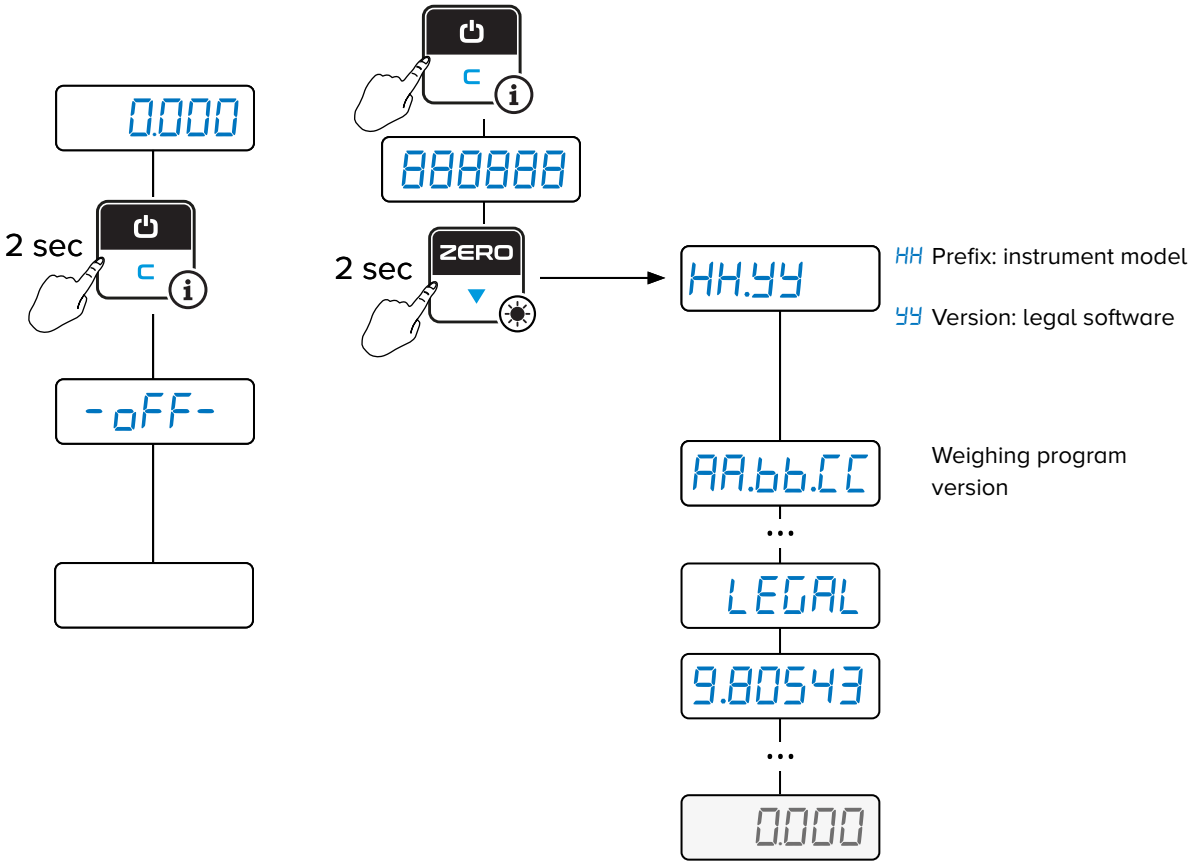


IDENTIFICATION OF METROLOGICAL SOFTWARE

View Metrological Information

1. Turn off the scale

2. Follow the procedure:



Item	Description
HH.YY	xx = Prefix: instrument model yy = Version: legal software
AA.bb.CC	Weighing program version
dFWLH	Product name
-I- 1.10	Hardware identification (for manufacturer purposes)
HHHHH.H	Calibration parameters: Capacity and resolution
hirES or LEGAL	Hires = internal use configuration Legal = legal for trade configuration
9.HHHHHH	Gravity acceleration value in use

CONFIGURATION MENU

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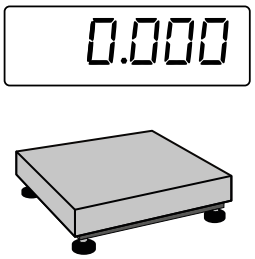
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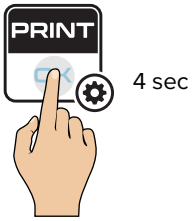
diAG - DIAGNOSTICS 76

HOW TO ACCES THE CONFIGURATION MENU

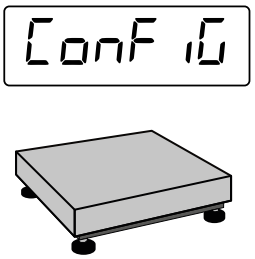
1



2



3



HOW TO EXIT AND SAVE CONFIGURATION MENU CHANGES

1



Press ⊏ until SAVE? displays.

2



3



MENU

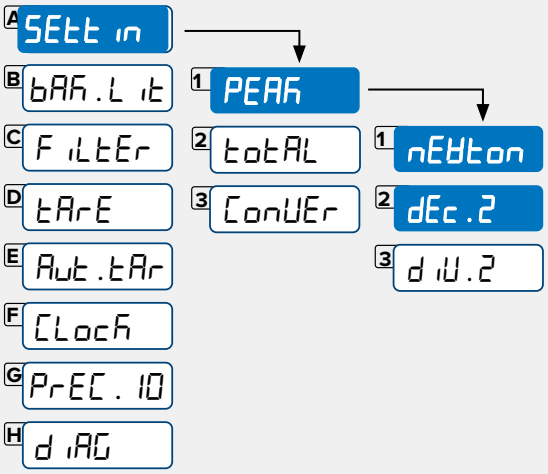
How to enter



4 sec

How to browse

= ▲
= ▼
= OK
= C



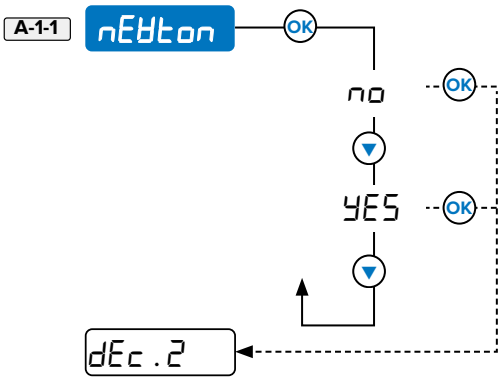
SEtt in - SETTINGS

NOTE: Parameters that are available in the Settings menu are determined based on which function mode is enabled. For example, if the Total function mode is enabled, the Total menu appears.

PEAK - PEAK

nEWton - Newton unit for secondary unit of measure

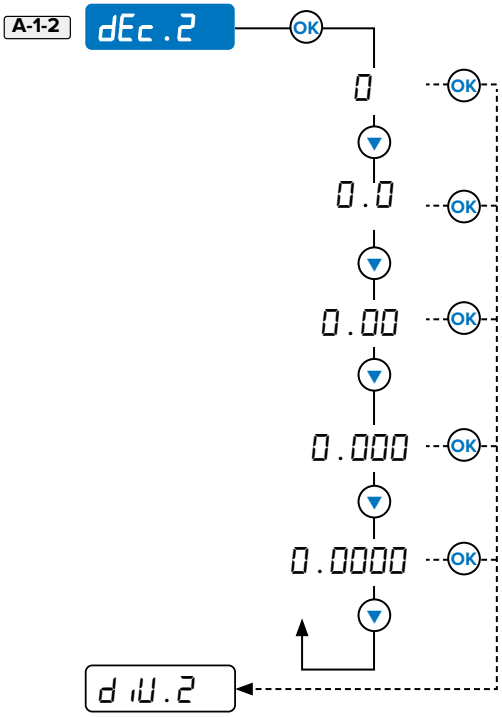
Configures if the Peak function uses newtons for the secondary unit of measure.



dEc.2 - DECIMAL CONFIGURATION NEWTONS (ONLY IF NEWTON = YES)

Only visible if nEWton = YES.

Configures decimals quantity for secondary unit of measure.



DINI ARGEO Scales - Weighing systems

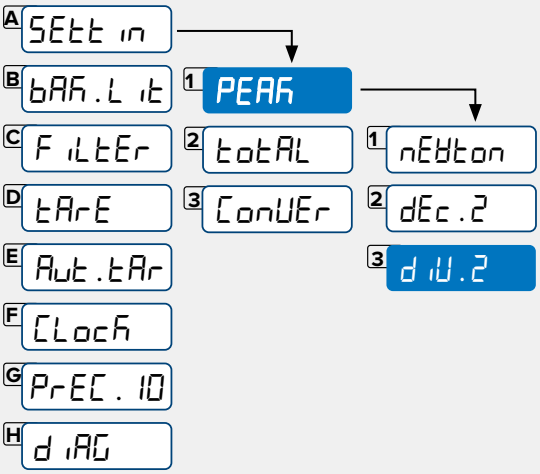
MENU

How to enter

PRINT 4 sec

How to browse

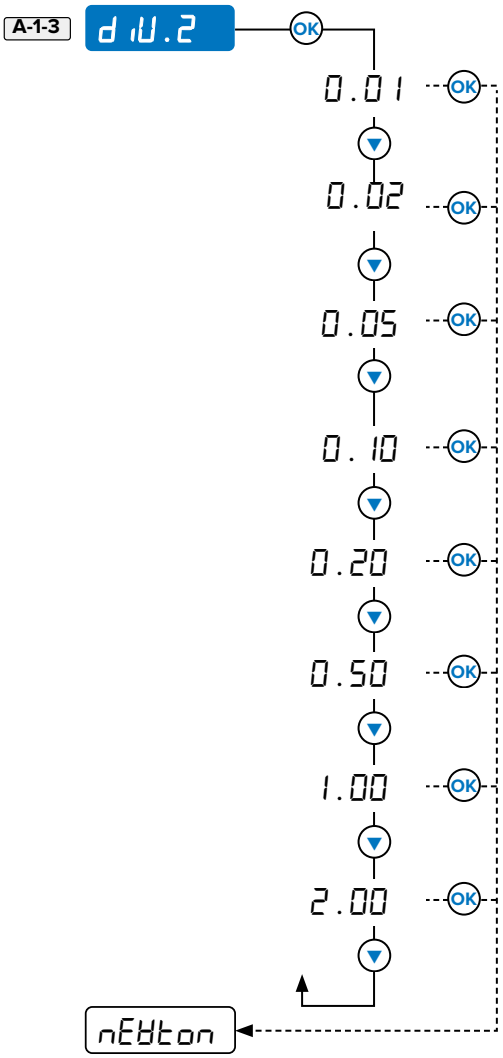
= ▲
= ▼
= OK
= C



d iU.2 - DIVISION CONFIGURATION NEWTONS (ONLY IF NEWTON =YES)

Only visible if nEWton = YES.

Configures the divisions for the secondary unit of measure.



DINI ARGEO Scales - Weighing systems

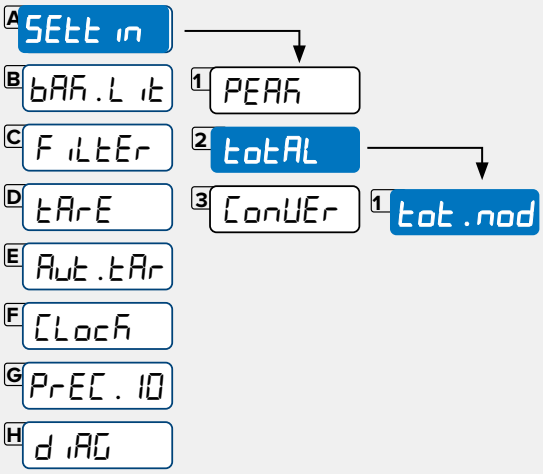
MENU

How to enter

PRINT 4 sec

How to browse

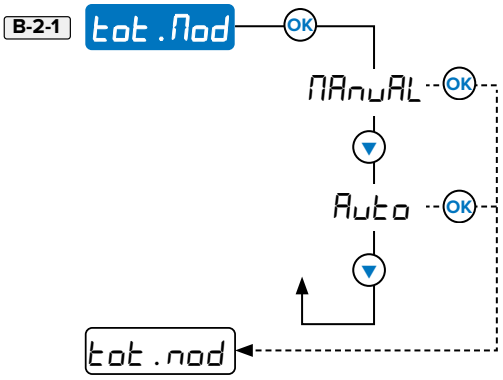
= ▲
= ▼
= OK
= C



totAL - TOTALIZATION

tot.Mod - TOTALIZATION MODE

Configures how weighments are added to the totalization value.



Press **PRINT** to add a weight to the total.

Automatically adds the weight when it is stable

DINI ARGEO Scales - Weighing systems

MENU

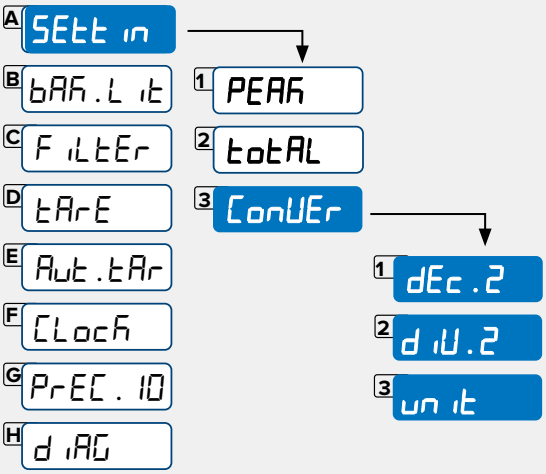
How to enter



4 sec

How to browse

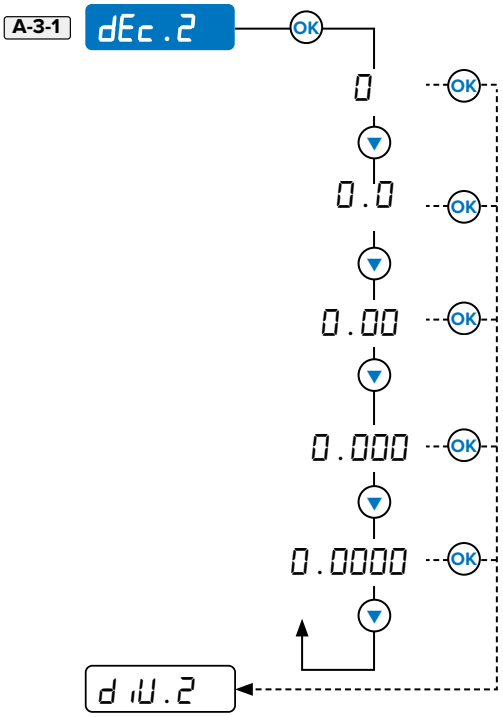
= ▲
= ▼
= OK
= C



ConVEr - Conversion

dEc.2 - Decimal for quantity for secondary unit of measure

Configures decimals quantity for secondary unit of measure.



DINI ARGEO
Scales - Weighing systems

MENU

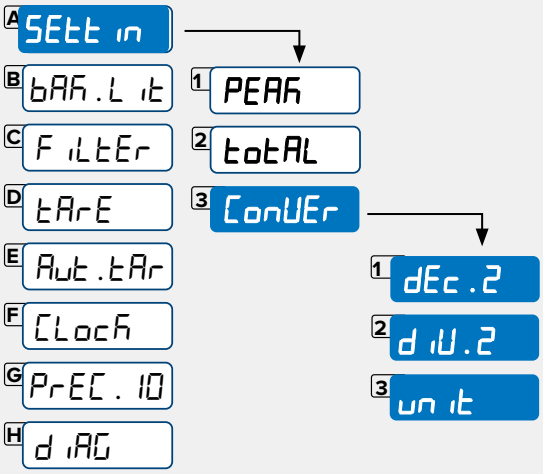
How to enter



4 sec

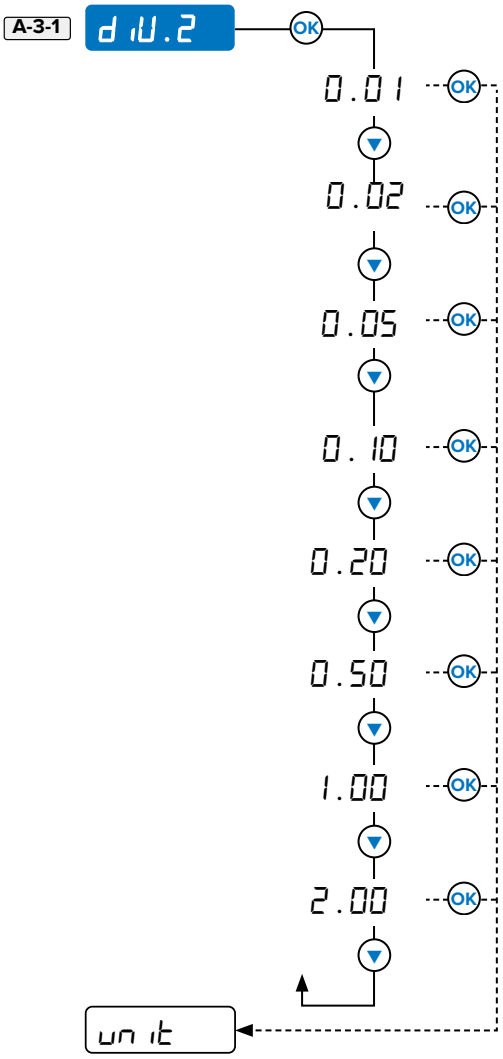
How to browse





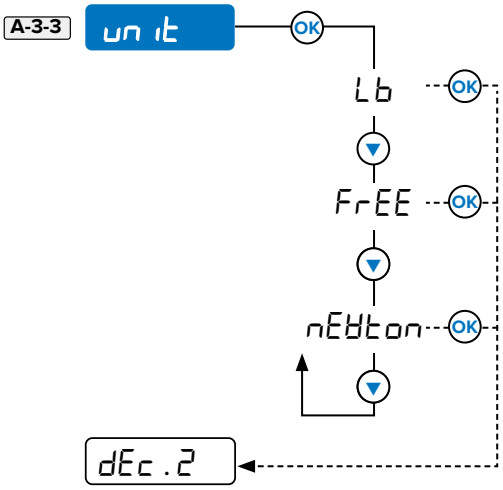
d iU.2 - DIVISIONS FOR CONVERSION

Configures the divisions for the secondary unit of measure.



un it - UNITS OF MEASURE FOR CONVERSION

Configures the units of measure for the secondary weight.



MENU

How to enter



4 sec

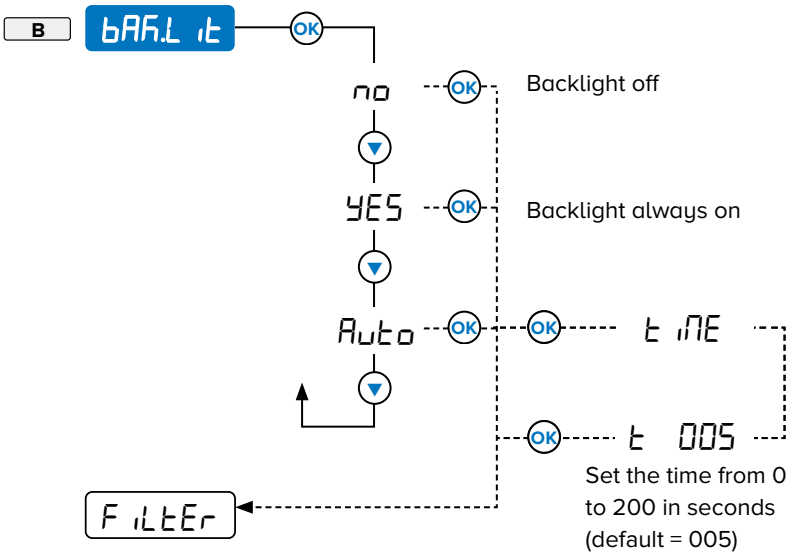
How to browse

= ▲
= ▼
= OK
= C

A SEtt in
B bAR.L it
C F iLtEr
D tArE
E Aut.tAr
F CLocK
G PrEC. 10
H d iAG

bAR.L it - BACKLIGHT

Configures how the backlight operates.



Set the time from 0 to 200 in seconds (default = 005)

The backlight turns off after the set time of inactivity.

DINI ARGEO Scales - Weighing systems

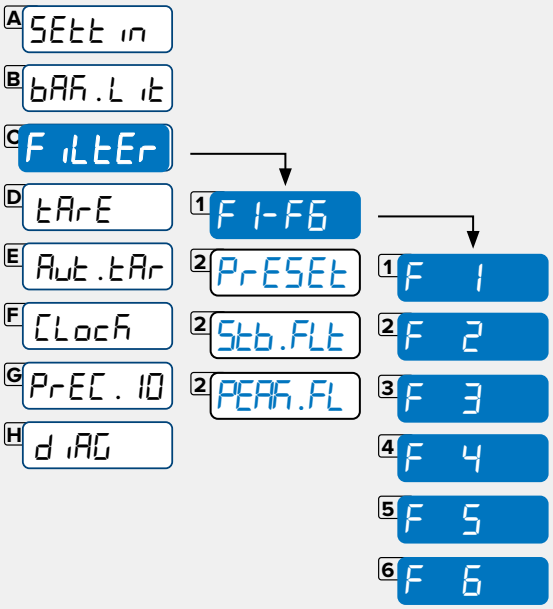
MENU

How to enter

PRINT 4 sec

How to browse

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= ▼
= OK
= C



F iLtEr - WEIGHING FILTERS

F 1 - F6 - WEIGHING FILTERS

To change the responsiveness of the scale.
This is useful to adjust the scale according to your needs.

M *With an approved instrument, it is not possible to change the filter.*

"F 6" represents the lowest filtering incidence.
By increasing the incidence, the weight becomes more stable.
It is advisable to carry out several weighing operations by changing the incidence until the best compromise between responsiveness and stability is achieved.

C-1-1	F 1	Filter at 6 Hz.	
C-1-2	F 2	Filter at 12 Hz.	
C-1-3	F 3	Filter at 25 Hz. M	**Standard filter for legal for trade configurations.**
C-1-4	F 4	Filter at 50 Hz. M	
C-1-5	F 5	Filter at 100 Hz. M	
C-1-6	F 6	Filter at 200 Hz. M	

NOTE: Filters F 3 through F 6 are filters suitable for legal for trade applications.
M

MENU

How to enter

PRINT 4 sec

How to browse

= ▲
= ▼
= OK
= C

- A SEtt in
- B bAR.L it
- C F iLtEr
  - 1 F 1-F6
  - 2 PrESEt
    - 1 PL.PR.hr
    - 2 PL.PR.St
    - 3 PL.PR.FS
    - 4 doSAGE
    - 5 An iMAL
  - 3 Stb.FLt
  - 4 PEAR.FL
- D tArE
- E Aut.tAr
- F CLocK
- G PrEC. 10
- H d iAG

PrESEt - PRESET FILTERS

When enabled, preset Filters automatically set additional specific parameters. The purpose of PL.PR (Place and Pick) presets are to facilitate high speed weighing situations for bench or floor scales; by combing high speed display reactions with a high resistance to disturbances and vibrations.

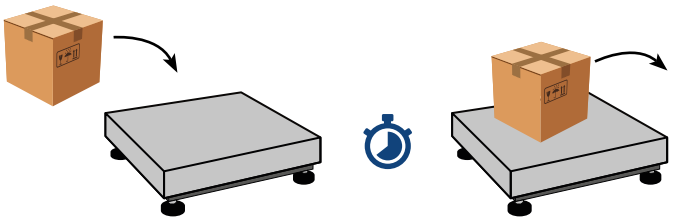
In addition, the preset doSAGE filter always includes these parameters to facilitate stable and fast dosing.

The preset filters combine stability filters (PEAR.FL, t.M.Stb, Stb.FLt, OtrR, OtrR.SP) with the XSpeedTool's parameters.

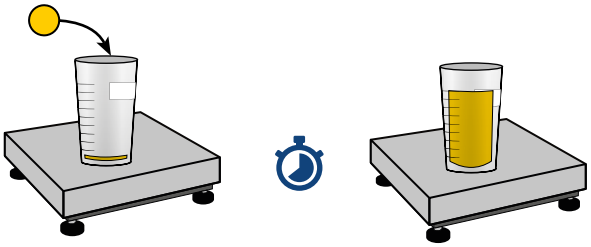
C-2-1 PL.PR.hr — Filter at 100 Hz. Place and pick high resolution.

C-2-2 PL.PR.St — Filter at 200 Hz. **Place and pick standard. This the standard filter for non legal for trade configurations.**

C-2-3 PL.PR.FS — Filter at 400 Hz. Place and pick fast



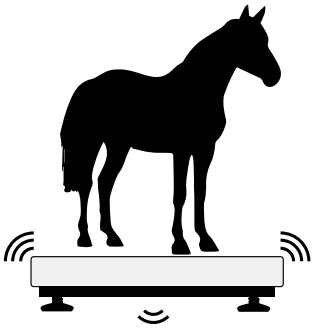
C-2-4 doSAGE — Filter at 200 Hz. Stable fast filter with a high refresh rate of display



The Animal filter holds the weight of an animal based on division and time PEAR.FL and HSPEEd parameters. The purpose of the filter is to capture the weight of an animal that is moving.

NOTE: To increase measurement accuracy, increase the time duration in the PR.LR.tM parameter. To operate faster, decrease the time duration in PR.LR.tM parameter (increase the PR.LR.tM division band). Increasing the speed will reduce the weighment accuracy.

C-2-5 An iMAL



DINI ARGEO Scales - Weighing systems

The following table, details the parameters that are automatically set when a preset filter is selected:

PRESET FILTER	PARAMETER COFIGURATION
PL.PK.HR (Place and Pick High Resolution)	StbtN: 1000
	Min.UAr: 50
	OtrH: 1d
	OtrL.SPd: 220
	tN.Stb: 150
	XSpeedTool Parameters: • Rate: 100 Hz • FINE: 0.05 (9)
PL.PK.ST (Place and Pick Standard)	Stb.tN: 1000
	Min.UAr: 50
	OtrH: 1d
	OtrL.SPd: 250
	tN.Stb: 150
	XSpeedTool Parameters: • Rate: 200 Hz • FINE: 0.06 (9)
PL.PK.FS (Place and Pick Fast)	Stb.tN: 1000
	Min.UAr 50
	OtrH: 1d
	OtrL.SPd: 220
	tN.Stb: 150
	XSpeedTool Parameters: • Rate: 400 Hz • FINE: 0.08 (9)
DOSAGE	OtrH: 1d
	OtrL.SPd: 250
	tN.Stb: 150
	XSpeedTool Parameters: • Rate: 200 Hz • FINE: 0.07 (9)
ANIMAL	PA.LA.dU: 02
	PA.LA.tN: 1.00
	PA.diU: 100
	PA.bn.dU: 50
	PA.tiME: 1.00
	XSpeedTool Parameters: • Rate: 50Hz • FINE: 0.10 (9)

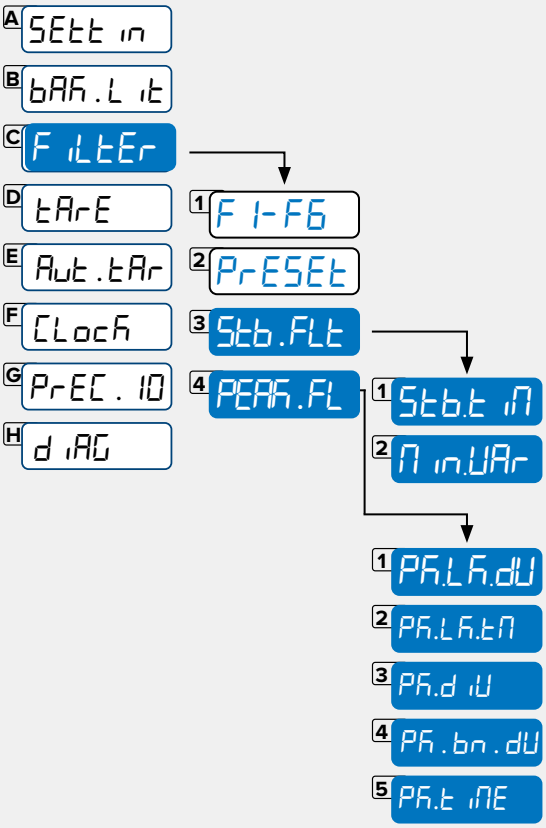
MENU

How to enter

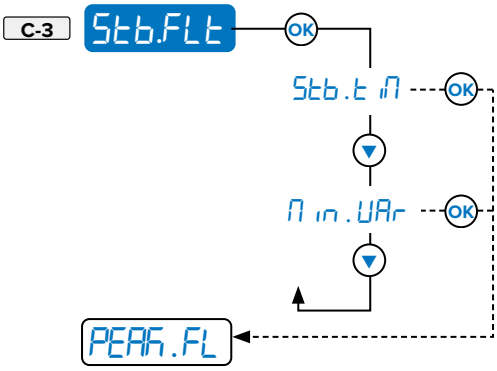
PRINT 4 sec

How to browse

= ▲
= ▼
= OK
= C

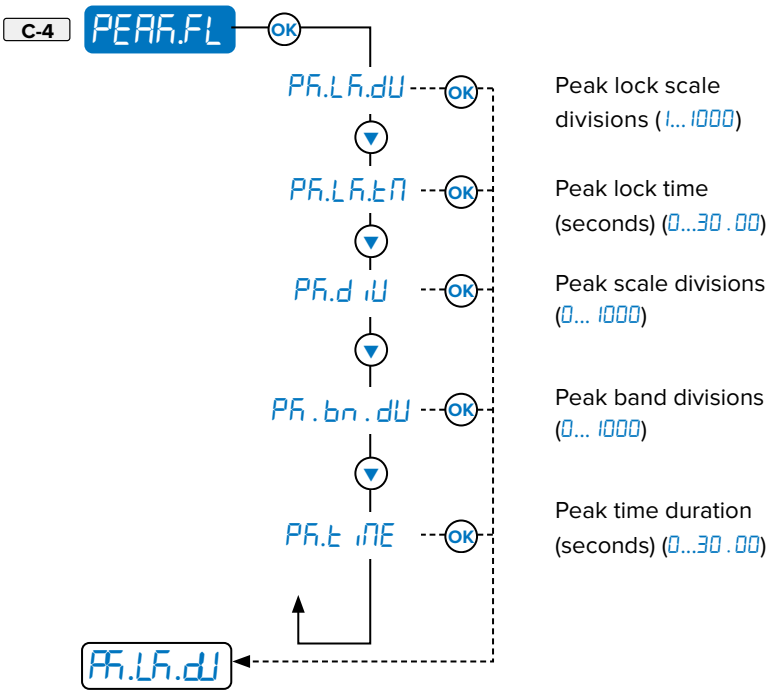


Stb.FLt - STABILITY FILTER (Internal Use Only)



Stability filter locks the weight if it oscillates around a value set in Min.UAr for the time set in Stb.t in. The weight unlocks if the value increases/decreases greater than the divisions set in Min.UAr.
To disable, set as 0.

PEAK.FL - ANTI-PEAK FILTER (Internal Use Only)



PK.LK.tM, PK.d iU, PK.bn.dU, PK.bn.dU, PK.t iME visible if PK.LK.dU = 1 - 1000

Filter that eliminates vibration and sudden weight peaks (for example, shocks or falling material).

- If the weight oscillates for the division set in PK.LK.dU and the time set in PK.LK.tM, it locks.
- The weight must stay in the division band set in PK.bn.dU to be stable. If it exceeds the band for a greater amount of time than PK.t iME, it is unstable and unlocks.
- If the weight exceeds the value set in PK.bn.dU, it is unstable and unlocks.

DINI ARGEO Scales - Weighing systems

MENU

How to enter

PRINT 4 sec

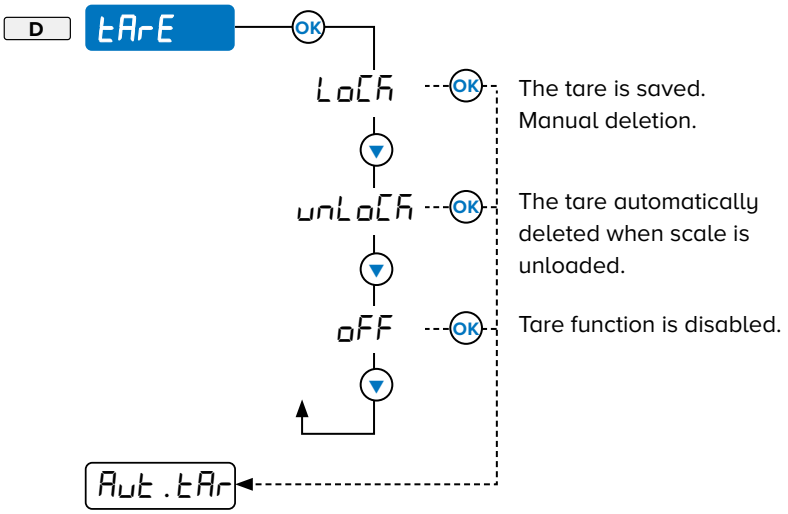
How to browse

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= ▼
= OK
= C

A SEtt in
B bAR.L it
C F iLtEr
D tArE
E Aut.tAr
F CLocK
G PrEC. 10
H d iAG

tArE - TARE

Configures how the tare operates.

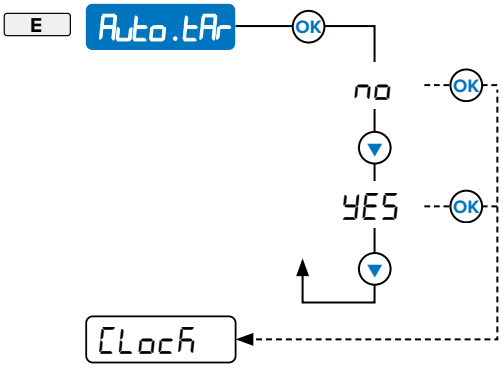


Aut.tAr - AUTOMATIC TARE

Tare automatically occurs when the weight is stable:

- If rEACt ▶ inSt ▶ n.d iUS is configured, the minimum tare must be equal or greater than the set divisions.
- If rEACt ▶ 2Ero is set, no minimum value is required.

NOTE: See the DFWLX Technical manual for more information about the rEACt parameter.



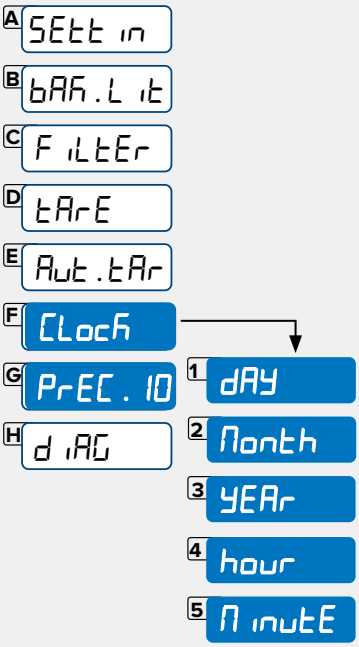
MENU

How to enter

PRINT 4 sec

How to browse

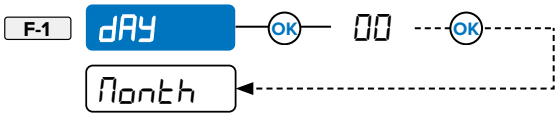
= ▲
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= OK
= C



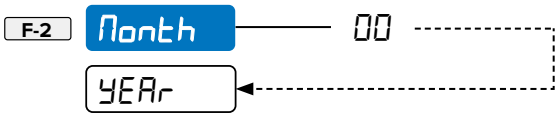
CLoCC - DATE AND TIME (B + F)

Sets the indicator date and time.

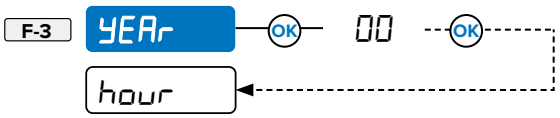
Day



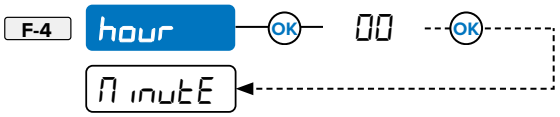
Month



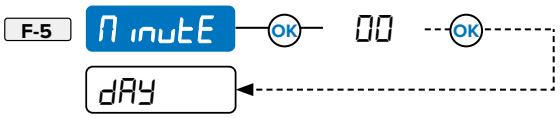
Year



Hour

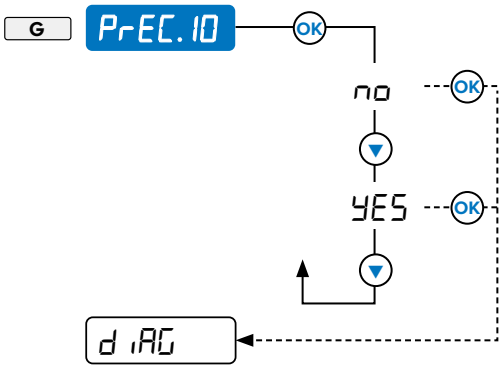


Minute



PrEC. 10 - HIGH RESOLUTION READING DIVISION

Displays the weight with ten times greater resolution



DINI ARGEO Scales - Weighing systems

MENU

How to enter



4 sec

How to browse

= ▲
= ▼
= OK
= C

A SEtt in
B bAR.L it
C FiLtEr
D tArE
E Aut.tAr
F CLocK
G PrEC.10
H diAG

diAG - DIAGNOSTICS

H diAG — OK

Reserved for manufacturer use.

DINI ARGEO Scales - Weighing systems

FAQ

Frequently Asked Questions

PRINT 78
ACCUMULATION 78
TARE 78
WEIGHING 79

PRINT

The scale does not print

- Another printout is already in progress (bUSY)
- Make sure there is a roll in the printer
- The printer does not switch on
- The weight is unstable (UnStAb)
- The net or gross weight is negative or is insufficient for printing (LoW)
- Underload or overload (------ o ------) (Un.oVEr)
- The scale was not loaded after the last printing (no.0.Un5)
- You are trying to print a non-approved weight

ACCUMULATION

The scale does not accumulate

- Make sure there is a roll in the printer
- The printer does not switch on
- The weight is unstable (UnStAb)
- The net or gross weight is negative (LoW)
- Underload o overload (------ o ------) (Un.oVEr)
- The scale was not unloaded after the last printing (no.0.Un5)
- The weight is insufficient for weighing (LoW)
  - less than the configured value in rEACt ▶ InSt ▶ n.d iU5 (see page 74)
  - less than “Min” for the approved products (shown on the measuring plate)

TARE

The scale does not tare

- The weight is unstable (UnStAb)
- The gross weight is negative (LoW)
- The weight is insufficient
- The weight exceeds the maximum capacity
- The tare function has been deactivated (see page 74)
- In the event of manual tare, the value exceeds the maximum capacity

WEIGHING

The scale does not switch on

- Make sure the power cable is connected properly
- Connect the battery charger and try again. If the instrument continues to malfunction, contact the dealer.

The scale switches off suddenly

- Automatic switching off active
- Low battery
- Battery failure
- Power supply line failure

The scale is not reactive

- One of the available energy saving modes has been activated
- An unsuitable weighing filter has been selected

The scale display switches off and displays a dot

- Stand-by mode is active: press a key to reactivate weighing.
- Energy saving mode is active: contact the dealer for further details.

The scale displays a permanent "2Ero" message

- The scale is unable to automatically reset the weight because it exceeds the maximum resettable weight at switch-on.
- Unload the scale and try again. If the scale continues to have the same problem even when there is nothing on it, contact the dealer.

The weight is unstable

- Check the active weighing filter (see page 70).
- If the support surface is subjected to vibrations from machinery or moving vehicles, move the scale onto another surface and try again.

ERROR MESSAGES

MESSAGE	DESCRIPTION	SOLUTION
buSY	Another printout is already in progress	Wait for the printout in progress to be finished and try again.
unStAb	The weight is unstable	Check the weighing filter (see page 70). If the support surface is subjected to vibrations from machinery or moving vehicles, move the scale onto another surface and try again.
LoW	The net or gross weight is negative or insufficient for printing	Add weight and try again.
un.oUEr	Underload o overload (_____ o ⁻⁻⁻⁻⁻)	Restore a valid weight condition. If the problem persists, contact customer service.
no.0.unS	The scale was not unloaded after the last printing	Completely unload the scale, making sure the →0← light comes on. Reload the weight and try again.
Err.Not	The weight is unstable	Wait for stability (the ~ light) and try again.
Error	In piece counting mode, the weight is insufficient for proper sampling.	Add more pieces and try again.

NOTES

This publication, or portions thereof, may not be duplicated without written permission from the Manufacturer. All information contained in this manual is based on the data available at the time of its publication; the Manufacturer reserves the right to make changes to its products at any time without notice and without incurring any penalty. We therefore recommend that you always check for any updates.

The individual in charge of the scale operation must ensure that all safety regulations in force in the country of use are applied, ensuring that the appliance is used in accordance with the purpose it is intended for and to avoid any danger for the user.

The Manufacturer declines any liability arising from any weighing operation errors.

NOTES

DINI ARGEO
Scales - Weighing systems

HEAD OFFICE
Via Della Fisica, 20
41042 Spezzano di Fiorano, Modena - Italy
Tel. +39.0536 843418 - Fax. +39.0536 843521
info@diniargeo.com

SERVICE ASSISTANCE
Via Dell'Elettronica, 15
41042 Spezzano di Fiorano, Modena - Italy
Tel. +39.0536 921784 - Fax. +39.0536 926654
service@diniargeo.com

Stamp of the authorized service center

The information in this document is approximate and can be subject to variations without prior notice by Dini Argeo, with respect of the norms in force. The official technical data is available in the updated version on the **www.diniargeo.com** website or by contacting the Dini Argeo Customer Service.

DFWLX_01.10_26.4_EN_U
Rev. B 23.4.2026