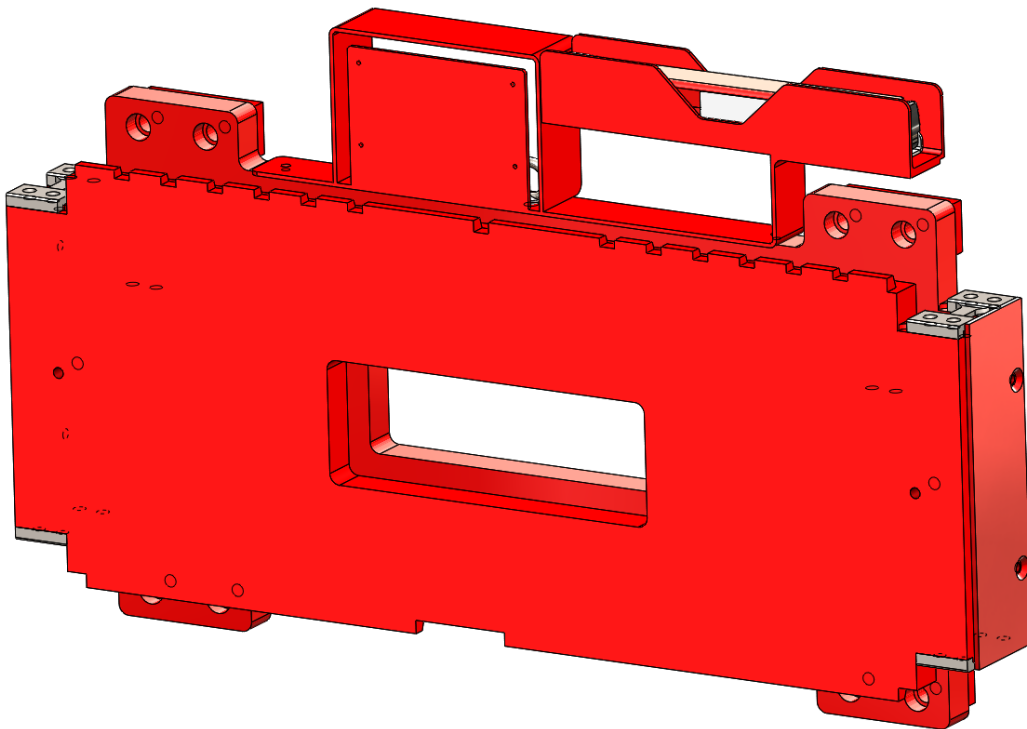




## USER MANUAL **RVL RF**



We would like to inform you about the fact that this RAVAS product is 100% recyclable on the basis that the parts are processed and disposed of in the right manner. More information can be found on our website [www.ravas.com](http://www.ravas.com).



Rev.20181008  
Printing/typographical errors and model changes reserved

#### PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

If you have any queries concerning the duration and terms of the guarantee, please contact your supplier. We would also refer you to our General Sale and Supply Conditions, which are available on request.

The manufacturer accepts no liability for any damage or injury caused by failure to follow these instructions, or from negligent operation or assembly, even if this is not expressly stated in this instruction manual.

In light of our policy of continuous improvement, it is possible that details of the product may differ from those described in this manual. For this reason, these instructions should only be treated as guidelines for the installation of the relevant product. This manual has been compiled with all due care, but the manufacturer cannot be held responsible for any consequences of errors. All rights are reserved and no part of this manual may be reproduced in any way.

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## 1. Introduction

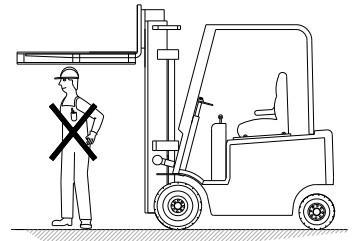
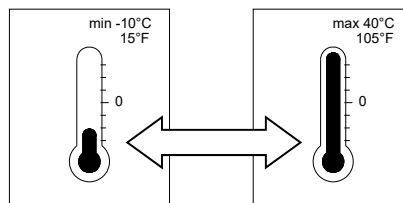
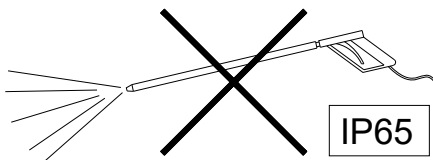
This manual describes the installation and use of the **RVL RF**. Read this manual carefully. The installer must be informed of the contents of this manual. Follow the contents of the manual precisely. Always do things in the correct order. This manual should be kept on a safe and dry place. In case of damage or loss the user may request a new copy of the manual from RAVAS.

## 2. Warnings & Safety measures

When using the **RVL RF**, please observe the instructions and guidelines contained in this manual carefully. Always perform each step in sequence. If any of the instructions are not clear, please contact RAVAS.



- All safety regulations that apply to the truck remain valid and unchanged
- No weighing operations are allowed if any persons or objects are in the vicinity; around, under or close to the load.
- RAVAS is not responsible for any physical harm done to the operator because of the presence of the indicator in the cabin.
- Any modifications done to the system must be approved in writing by the supplier, prior to any work being completed.
- It is the sole responsibility of the purchaser to train their own employees in the proper use and maintenance of this equipment.
- Do not operate this unit unless you have been fully trained in its capabilities.
- Check the accuracy of the scale on a regular basis to prevent faulty readings.
- Only trained and authorized personnel are allowed to service the scale.
- Always follow the operating, maintenance and repair instructions of this truck and ask the supplier when in doubt.
- RAVAS is not responsible for errors that occur due to incorrect weightings or inaccurate scales.



Should you have any further questions after reading this manual then you can contact us at:

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Internet: [www.ravas.com](http://www.ravas.com)

Email: [info@ravas.com](mailto:info@ravas.com)

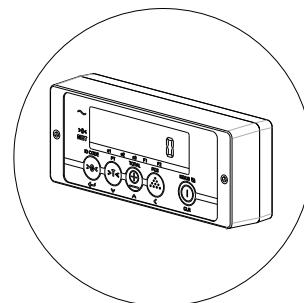
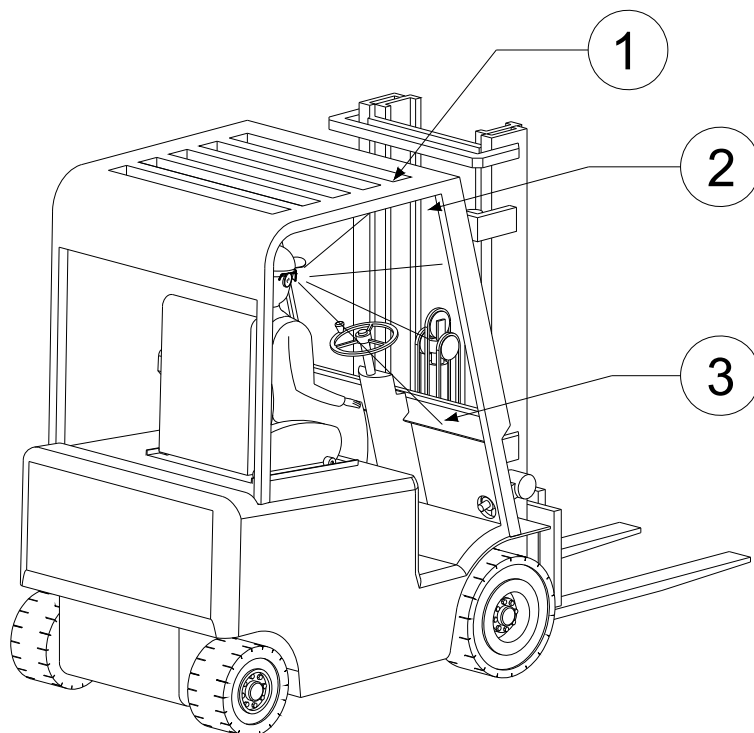
Changes reserved

## System setup

### 3.1 Installing the indicator

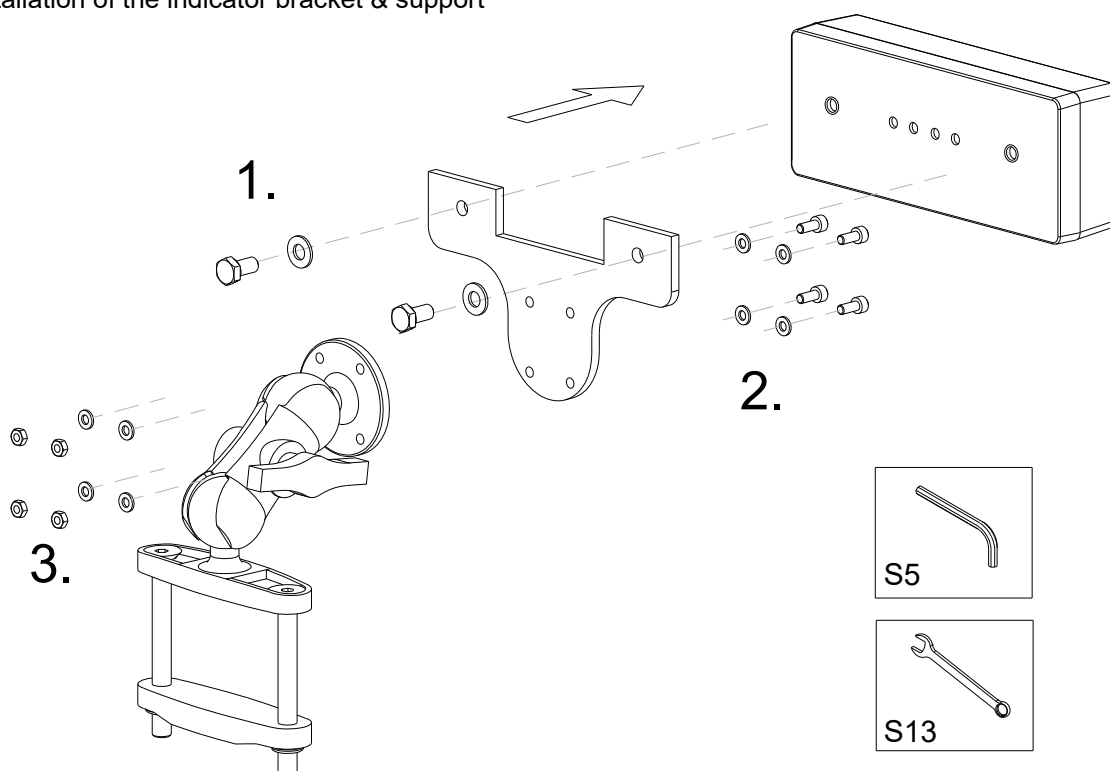
Find a suitable position for the indicator:

1. at the cabin's roof.
2. on the right side of the cabin, mounted onto a side-rail.
3. on the dashboard.



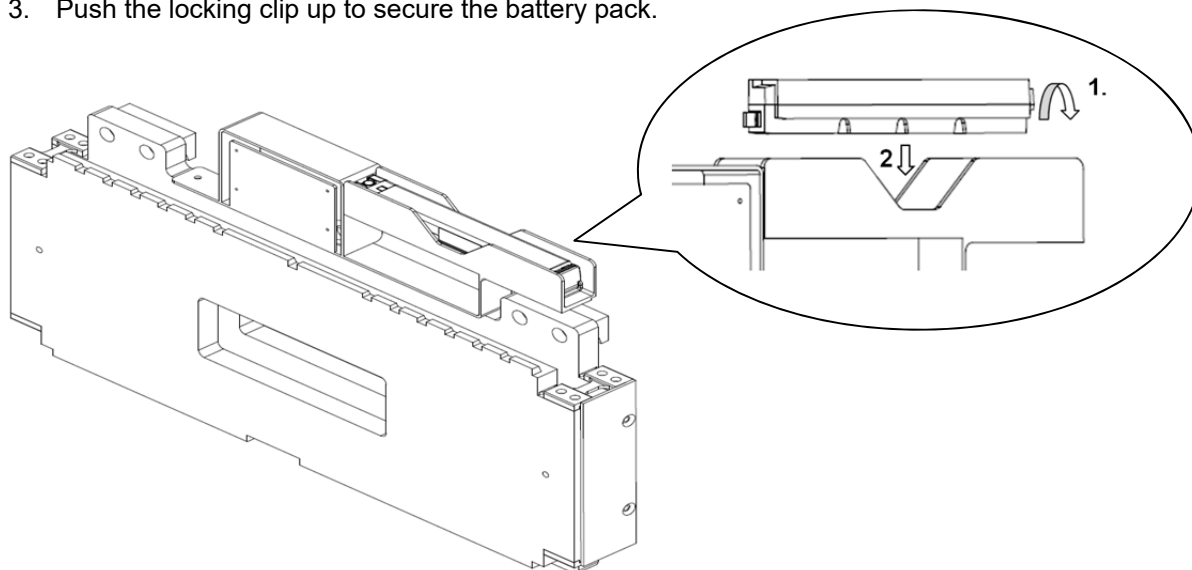
**The indicator should be easy to reach and read out!**

Installation of the indicator bracket & support

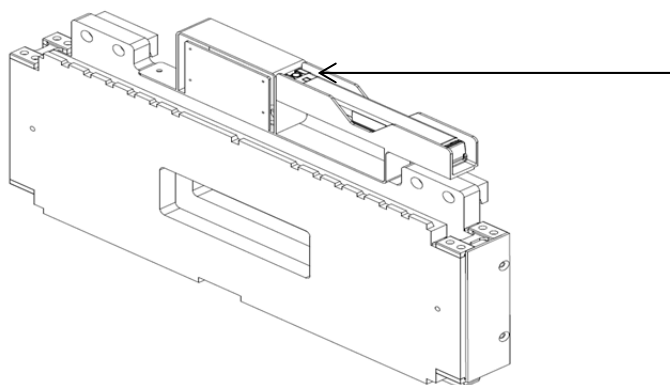


### 3.2 Placing the battery pack in the **RVL RF**

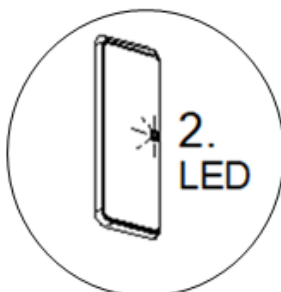
1. Release the locking clip on the battery holder.
2. Click the battery pack into the battery holder.
3. Push the locking clip up to secure the battery pack.



### 3.3 Switching on the **RVL RF**

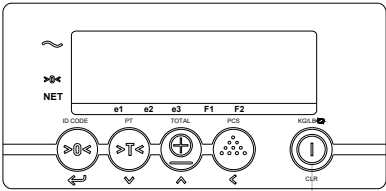


2. The blue LED on the **RVL RF** will start blinking automatically.

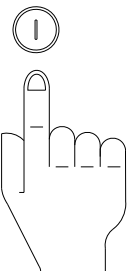


### 3.4 Switching on the indicator

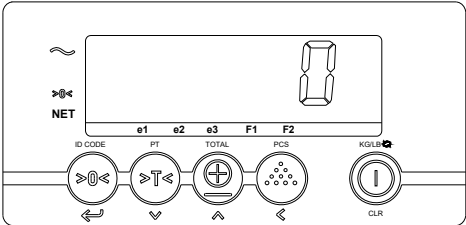
1




**Start up the indicator. Press the on/off key.**



2



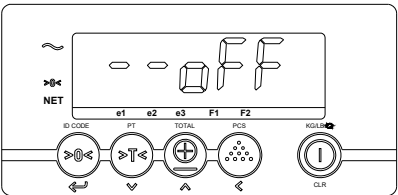
**5 sec.**



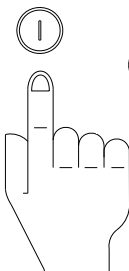
**Weigh!**

### 3.5 Switching off the system


1



**Switch off the indicator by pressing the on/off key for 3 seconds.**



**3 sec.**



## 4. Changing battery

### 4.1 Low battery indication **RVL RF**

Exchangeable battery pack supplies power to the **RVL RF**.

When the voltage level of the battery pack is running low, the low bat indicator will light up and “F1” will start blinking in the display.

The blue LED on the bluetooth module will start blinking very slowly (twice every 10 sec). The **RVL RF** will switch off automatically after 10 minutes.

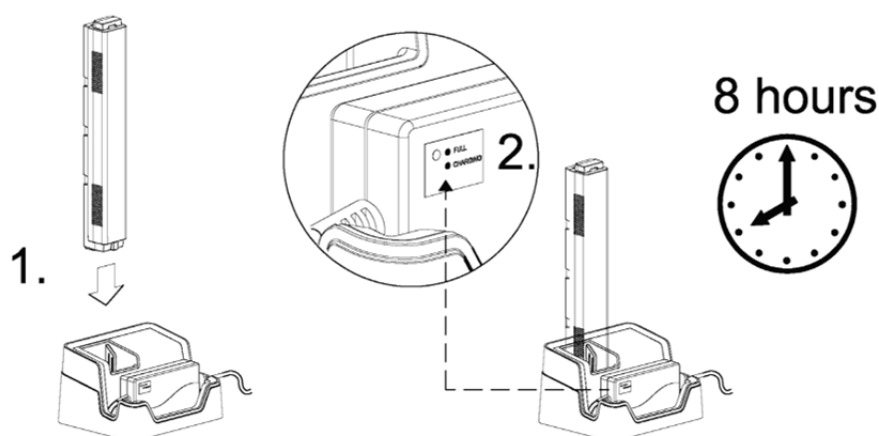
FUNCTIONALITY BLUE LED	
DURING POWERING ON	ON for 5 sec.
FULL BATTERY	<i>Blink time interval</i>
Working mode	Once every 1,5 sec.
Sleep mode	Once every 4 sec.
LOW BATTERY	
Working mode	Twice every 10 sec.
Sleep mode	Twice every 10 sec.

### 4.2 Charge the rechargeable battery pack (option)

The system is equipped with a rechargeable battery pack and a smart charger. Charge the battery for 8 hours. This will prevent loss of battery capacity.

First position the battery pack inside the charger module, then plug the adaptor into the mains voltage.

**Smart charger:** When the battery is being charged, the red LED on the charger is lit. After at least 8 hours charging, the charger shuts off and the the batterypacks are completely full. The red LED turns off and the green LED will illuminate.



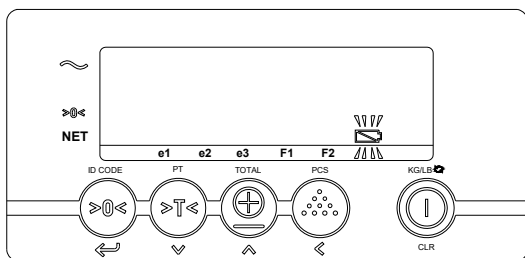
Charger unit



### 4.3 Changing the batteries of the indicator

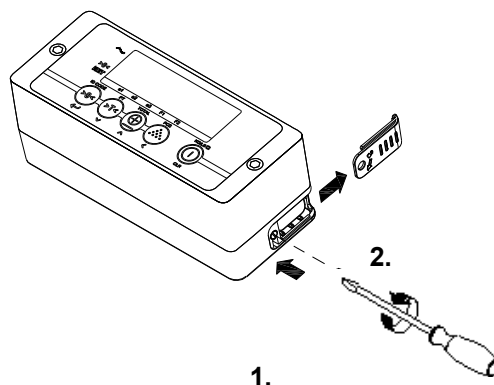
The indicator is equipped with 4 AA batteries.

1



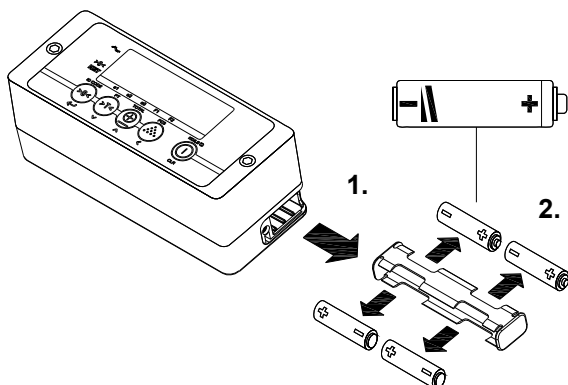
Replace batteries as soon as the low bat indicator starts blinking.

2



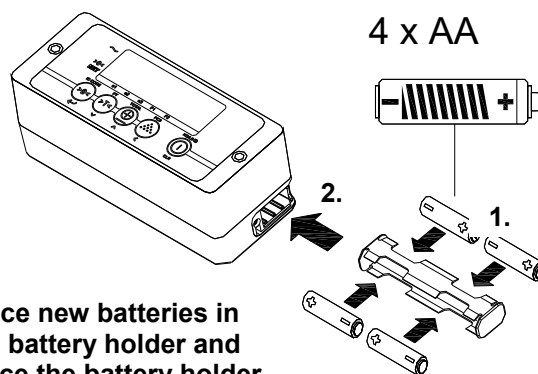
Remove the battery cover of the indicator housing by tightening the screw counter-clockwise.

3



Remove the battery holder and remove the empty batteries.

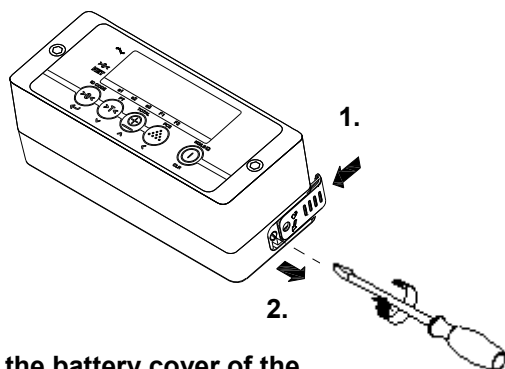
4



Place new batteries in the battery holder and place the battery holder in the housing.

Be sure the batteries are positioned correctly. Watch for the polarity!

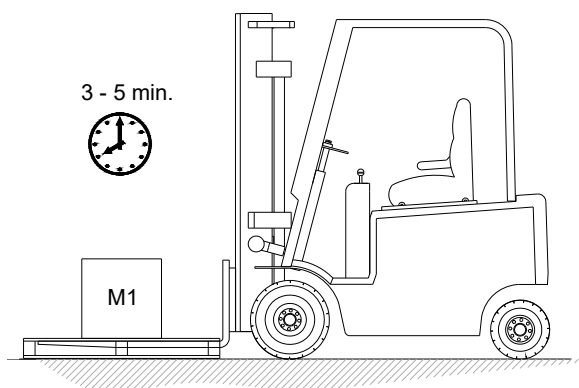
5



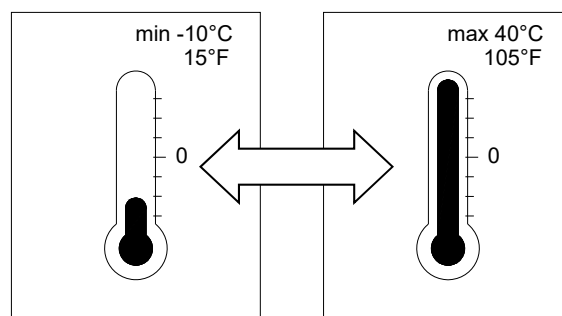
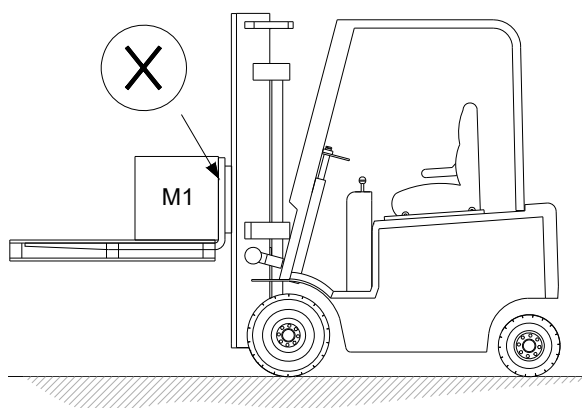
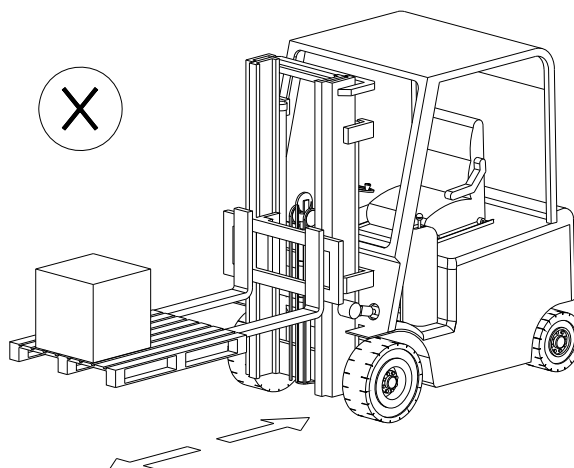
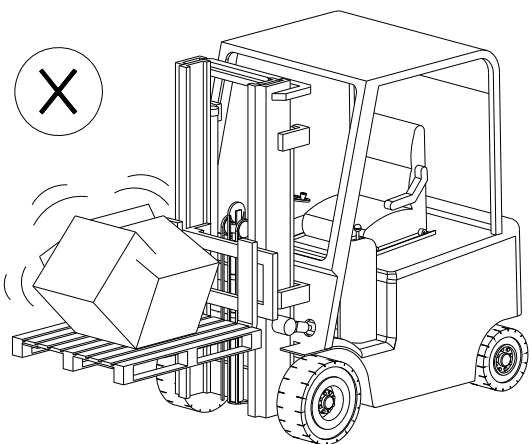
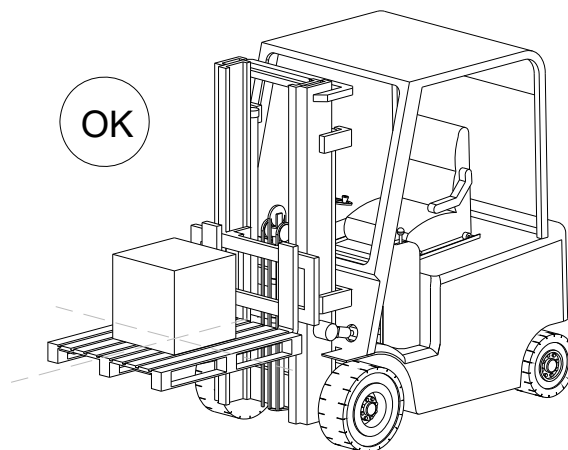
Close the battery cover of the indicator housing and lock by partly unscrew clockwise.

## 5. Use

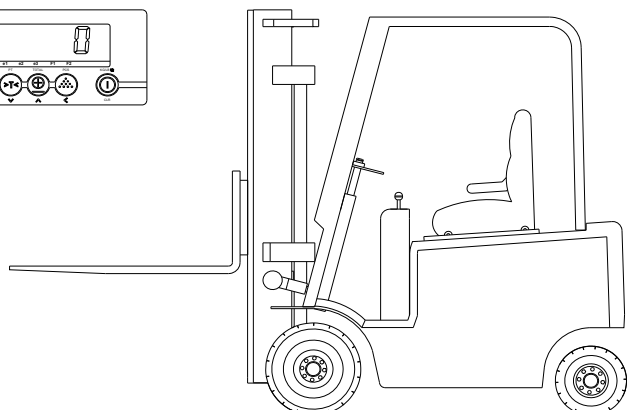
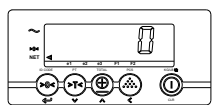
### 5.1 Use (accurate weighing)



After 3 to 5 minutes the load cells have reached the operational temperature. Don't lift loads before the zero-point correction has been executed.



### 5.1.1 Check the zero reading before each weighing

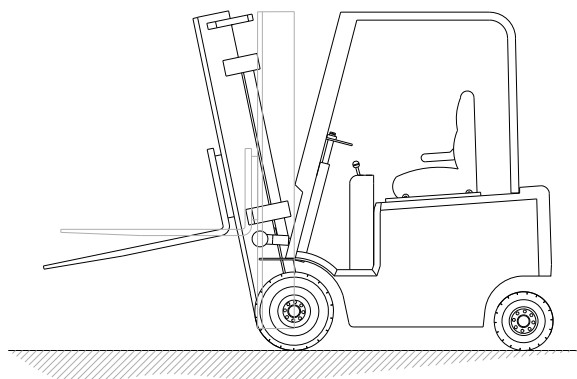
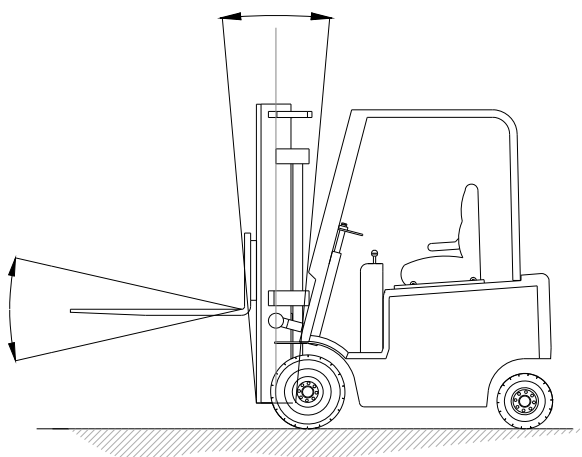


#### Check the zero reading before each weighing!

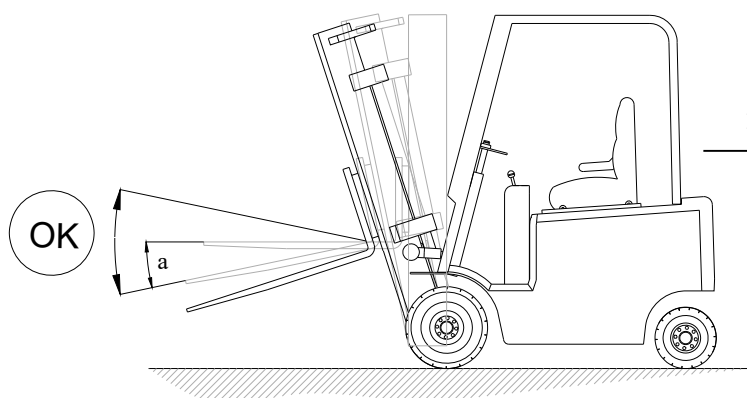
Before each weighing it is necessary to check whether the system is unloaded and free.

If the indicator does not determine the zero point automatically, it must be done manually using the  $>0<$  key.

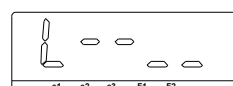
### 5.2 Level correction



**Legal for trade:**

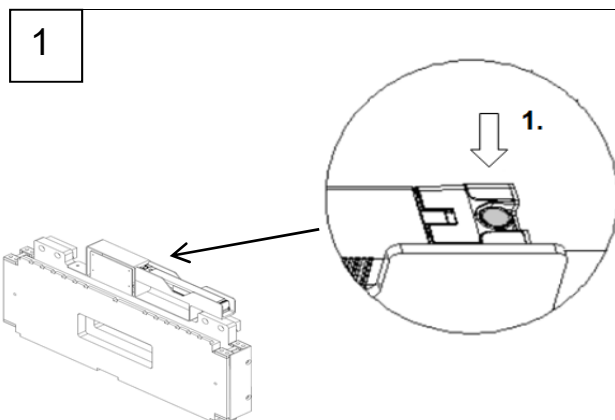


$> \alpha$

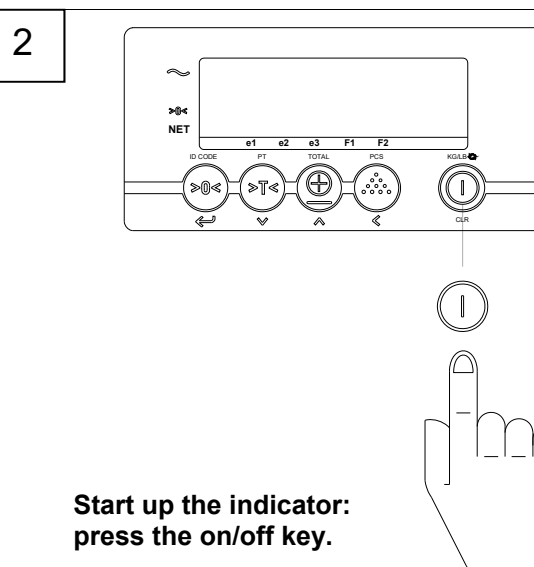


NTEP: OK if  $\alpha = \pm 5\%$  ( $3^\circ$ )  
OIML: OK if  $\alpha = \pm 2^\circ$

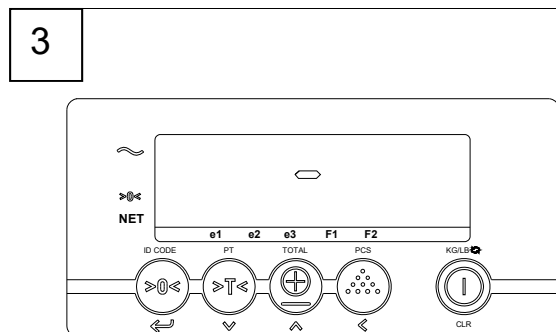
### 5.3 Establish Bluetooth communication and weigh!



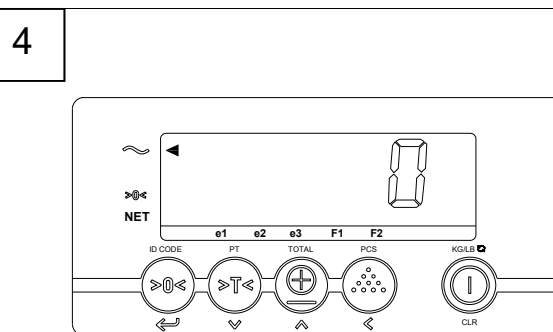
Switch on the **RVL RF**:  
press the blue button on the battery pack.



Start up the indicator:  
press the on/off key.

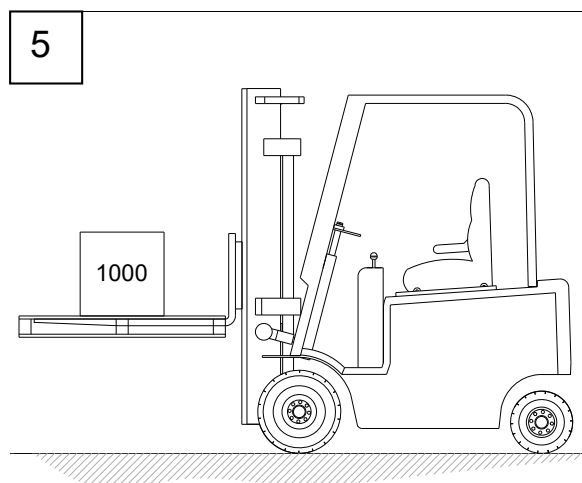


5 sec.

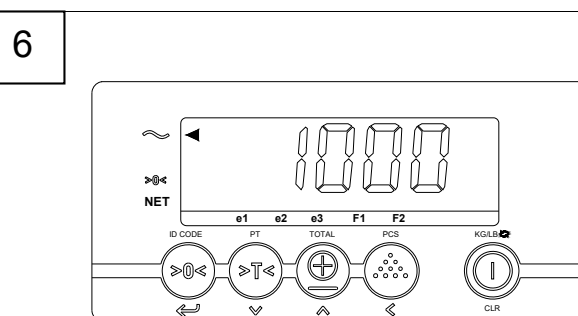


**Before each weighing: check the zero point!**

*Before each weighing it is necessary to check whether the system is unloaded and free.  
If the indicator does not determine the zero point automatically, it must be done manually using the >0< key.*



System is ready to weigh.



**Before the next weighing,  
check the zero point again.**

## 5.4 Auto shut-off indicator

**1**

2 min. **no action !**

**3**

**5**

**Indicator off**

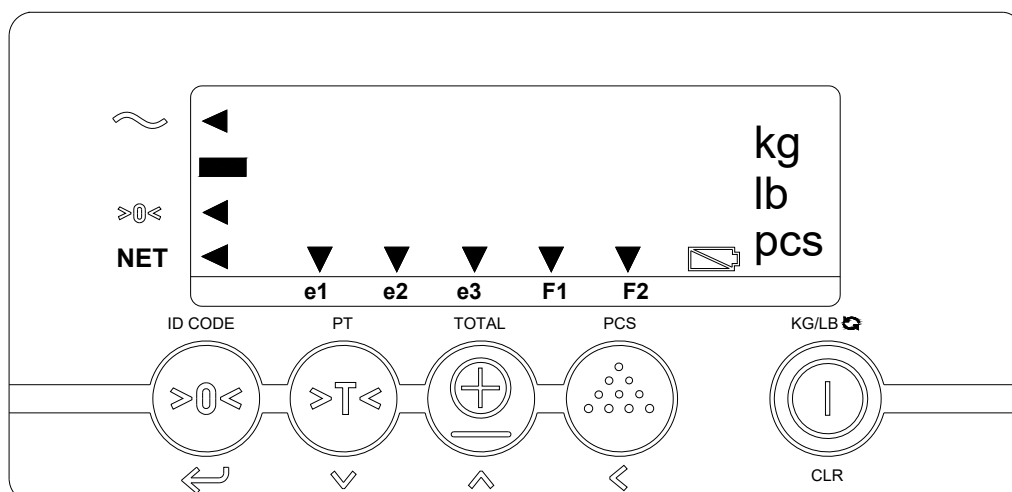
**2**

20 sec.

**Countdown starts:**  
Press any key during  
countdown to cancel  
auto-shut-off and go  
back to the weighing  
mode.

**4**

## 5.5 Indicator functions

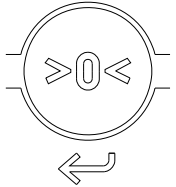
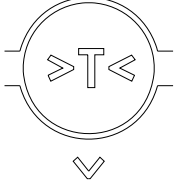
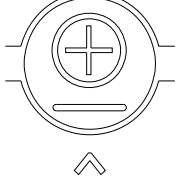
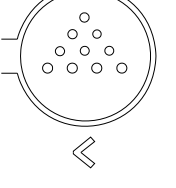

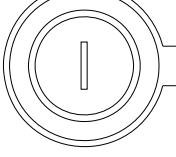


### Display Functions

		the weighing system (including load) is stable
		the weight shown is negative
<b>ZERO</b>		the weight shown is within the zero range
<b>NET</b>		the display is showing the net weight
<b>e1</b>		displayed weight is in range 1 (option multi range)
<b>e2</b>		displayed weight is in range 2 (option multi range)
<b>e2</b>		displayed weight is in range 3 (option multi range)
<b>F1</b>		Fork 1 / setpoint 1 is activated (option relay output)
<b>kg</b>		displayed weight is in kilograms
<b>lb</b>		displayed weight is in pounds
<b>pcs</b>		number displayed represent number of pieces on the scale
		low bat indicator

## Key functions

Each key has 2 operational and one entry function.

Standard function (Short key press)	Key	Special function (long key press)	Value entering function (entry mode)
zero setting	ID CODE 	code entry	enter
automatic tare	PT 	pre-set tare	decrease the value of the digit flashing
print weight and add to the total	TOTAL 	check subtotal and print total	increase the value of the digit flashing
sampling a piece weight	PCS 	enter a piece weight	shift to the next digit on the left
On switch And change to lb and kg	KG/LB   CLR	Off switch	clear entry



## Important

Operation of a key is not accepted unless the weighing system is stable (and the “load stable” pointer lights up). This means that the indicator only executes commands with a stable load.

For a detailed description of the function CODE ENTRY check our operational manual Indicator 3200 at [www.MyRAVAS.com](http://www.MyRAVAS.com).

## 5.6 Error messages

### ERROR MESSAGES

Display	Meaning	Out of error mode
Err01	Load cell signal is unstable	Automatic
Err02	Overload on full scale	Automatic after removing weight
Err03	Gross negative. This action is not allowed	Automatic
Err04	Out of zero range	Press any key
Err05	Sampling accuracy too low	Press any key
Err06	Input signal too high	Automatic after correcting input
Err08	Calibration out of range (negative)	Automatic
Err09	Calibration out of range (signal too low)	Automatic
Err10	Calibration count 2nd(3rd) point lower than count 1st(2nd) point	Automatic
Err14	Setpoint value 2 < setpoint value 1. This is not allowed	Automatic
Err97	Legal for trade version: not allowed action	When action is intended, install jumper JP1 ( attention: after this action a complete new calibration and stamping of the system is necessary )
Err98	Calibration point must be higher than previous one	Automatic
Err99	Action only allowed in start-up units	Automatic
ErrF1	Problem with fork 1 (no communication)	Restart indicator. Restart forks & indicator
ErrF2	Problem with fork 2 (no communication)	Restart indicator. Restart forks & indicator
----	Load cell signal negative	Lift up the forks from the ground
L - _	Forks are out of level (only legal-for-trade version)	Put the forks into horizontal position
ErrCS	Problem with correction sensor	Contact the RAVAS Service department
	Battery of indicator is empty	Replace the 4 AA batteries
 +F1 ▼	Battery of fork 1 is empty	Replace the D-cells in both battery packs or charge both battery packs

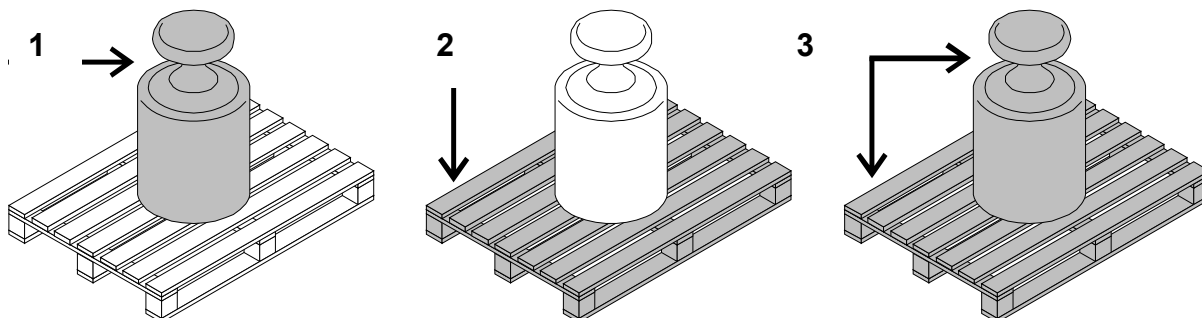
### DISPLAY MESSAGES

Display	Meaning	
BltF1	Successful Bluetooth link with fork 1	<i>No error</i>

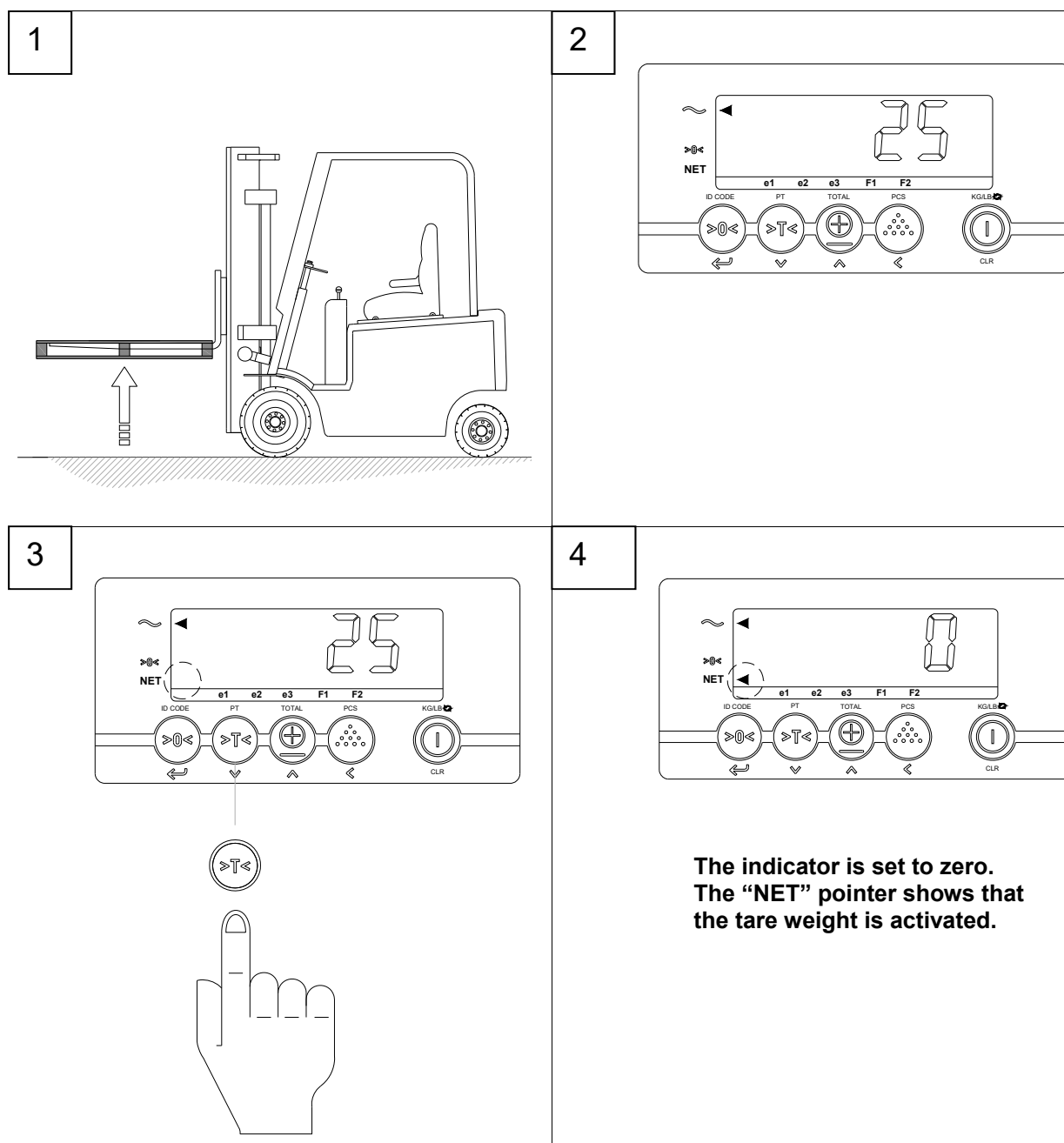


## 5.7 Net / Tare / Gross weight

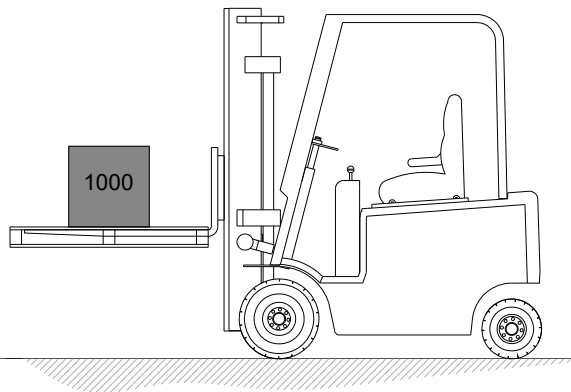
EXPLANATION:  $\text{Net}(1) + \text{Tare}(2) = \text{Gross}(3)$



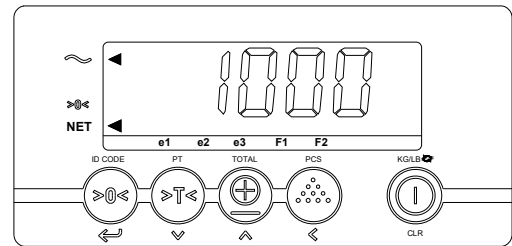
### 5.7.1 Net weighing: automatic tare



5

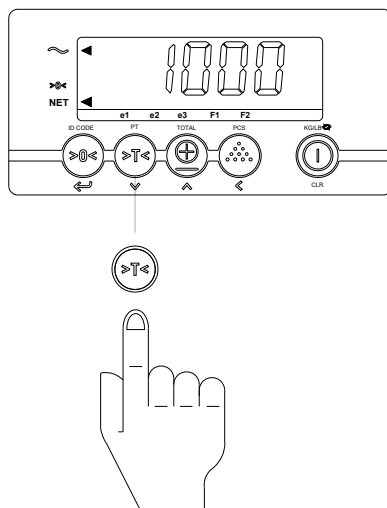


6

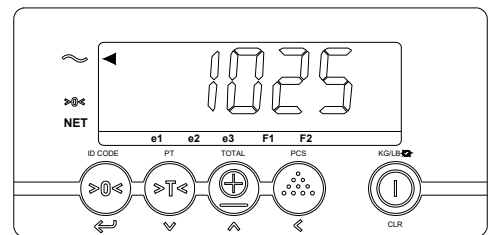


The display shows the net value of the weighed load.

7

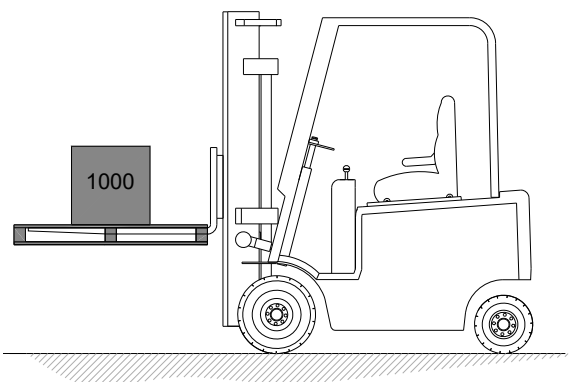


8

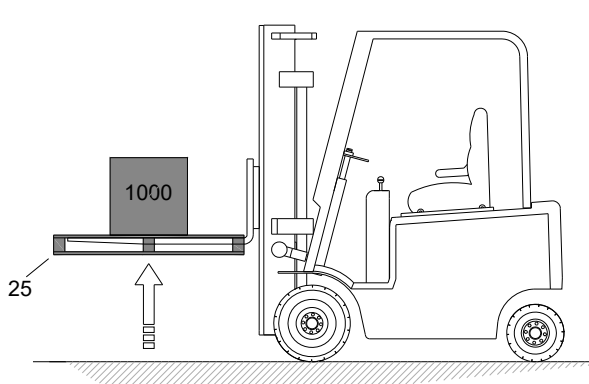
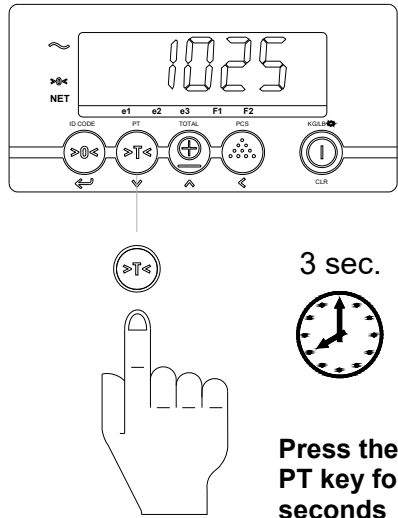
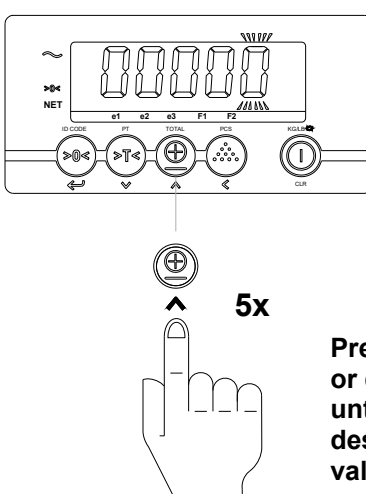
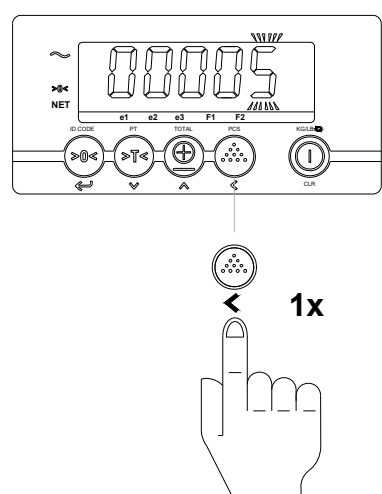
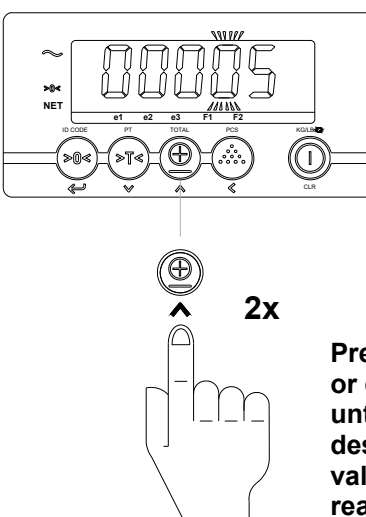
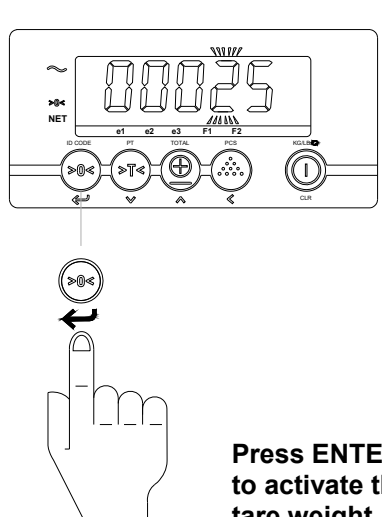


The gross weight is displayed again.

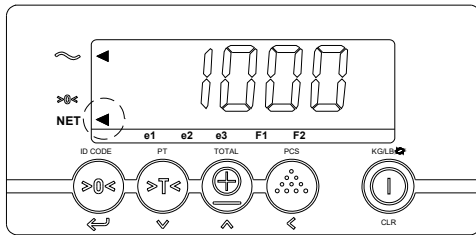
9



## 5.7.2 Net weighing: manual tare (PT)

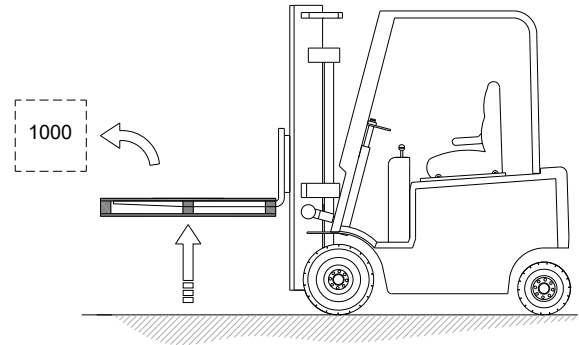
<p><b>1</b></p> 	<p><b>2</b></p>  <p>3 sec.</p> <p>Press the PT key for 3 seconds</p>
<p><b>3</b></p>  <p>5x</p> <p>Press the up or down key until the desired value is reached.</p>	<p><b>4</b></p>  <p>1x</p>
<p><b>5</b></p>  <p>2x</p> <p>Press the up or down key until the desired value is reached.</p>	<p><b>6</b></p>  <p>Press ENTER to activate the tare weight.</p>

7

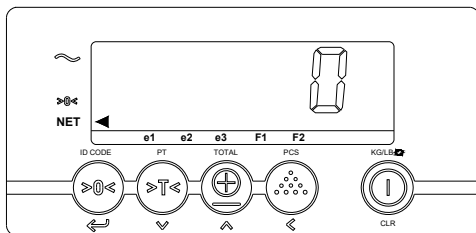


The “NET” pointer lights up

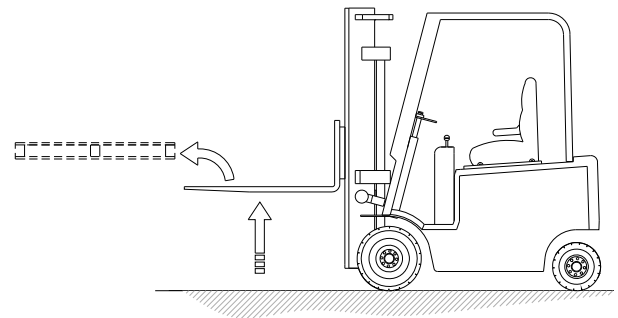
8



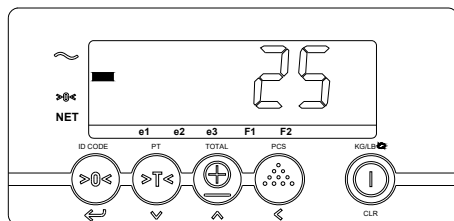
9



10

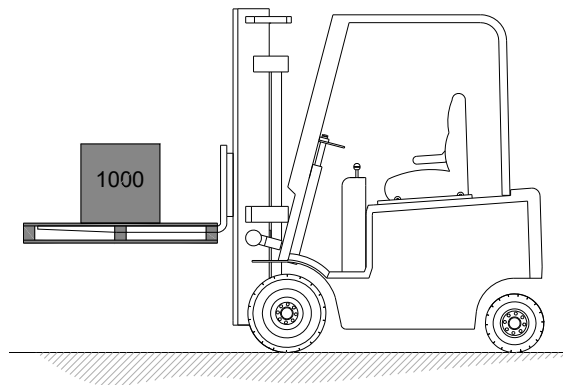


11

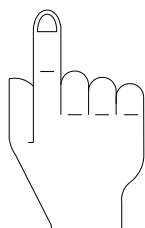
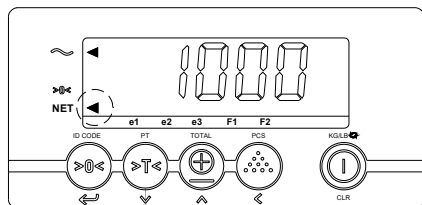


When the **RVL RF** are completely unloaded, the tare value is displayed negatively.

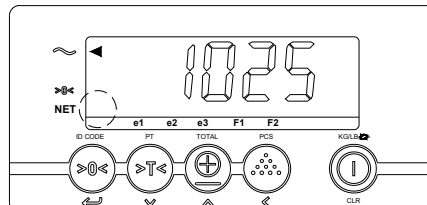
12



13

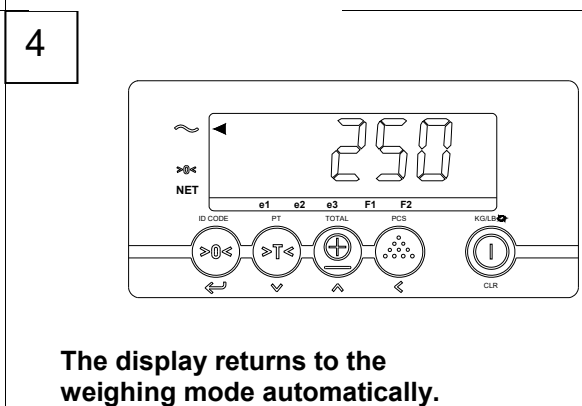
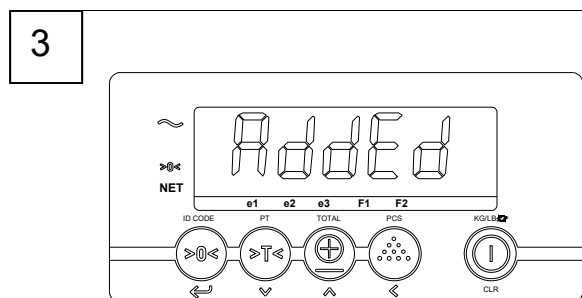
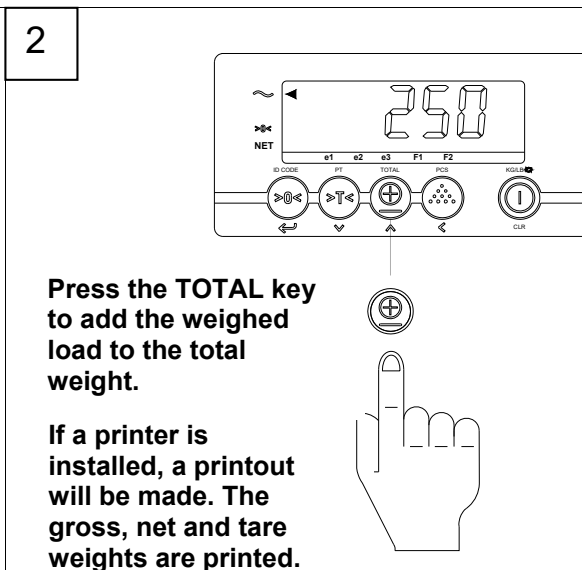
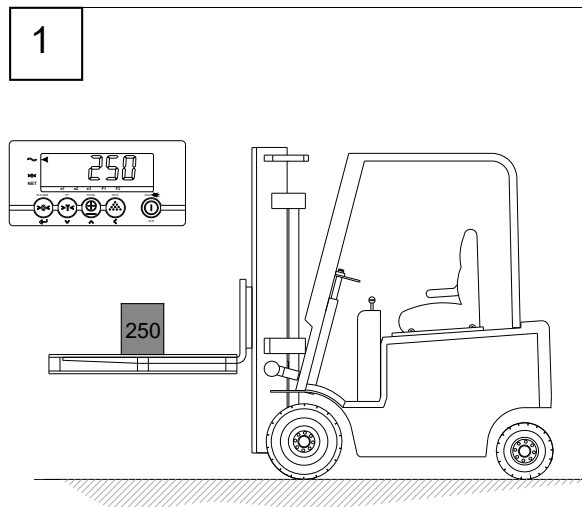


14

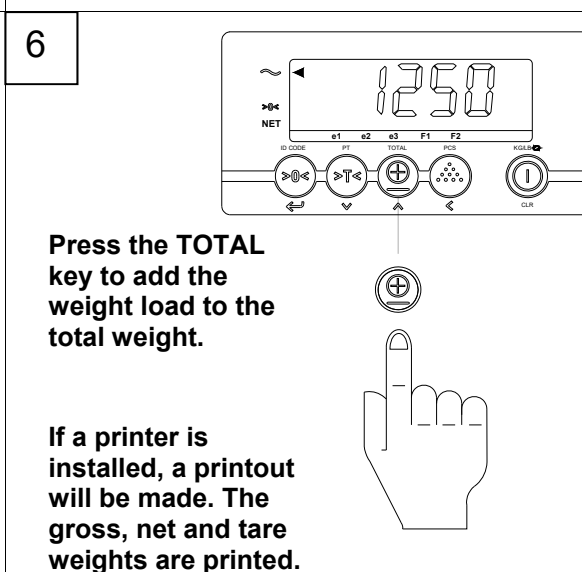
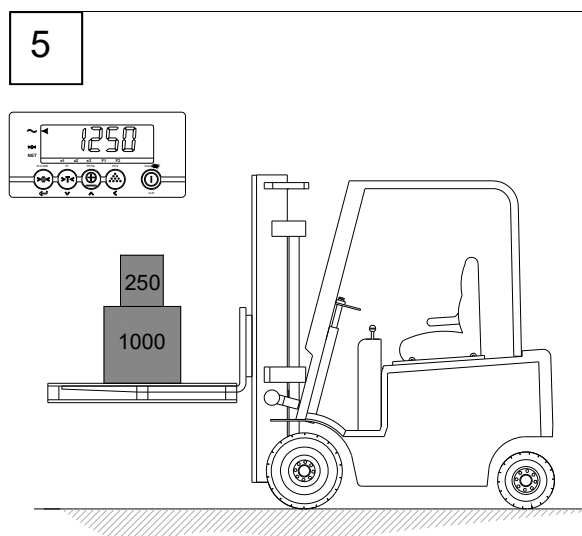


**The gross weight is displayed again.**

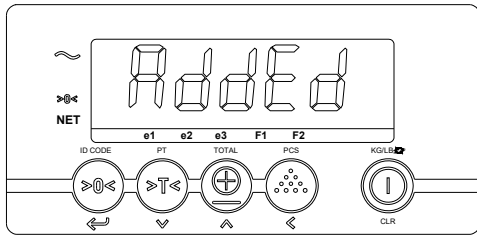
## 5.8 Adding & reset



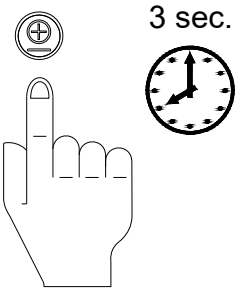
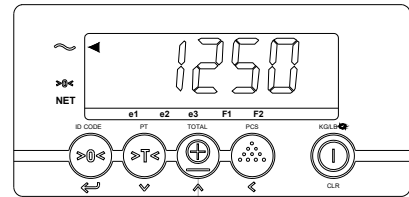
The display returns to the weighing mode automatically.



7

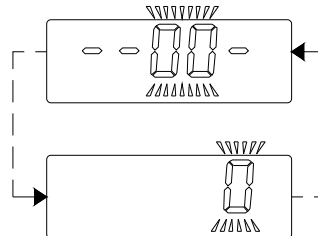
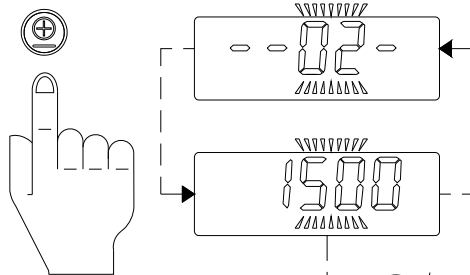


8



The subtotal  
can be checked  
by pressing the  
TOTAL key for  
3 sec.

9



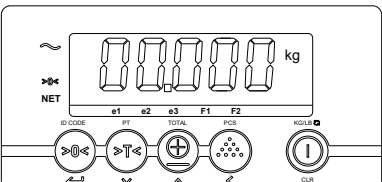
= RESET TOTAL & PRINT



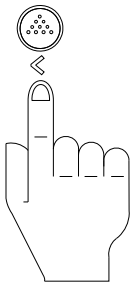
= RESET TOTAL

## 5.9 Changing the time and date (on the printout)

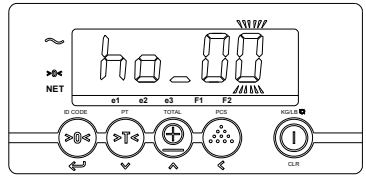
**1**



8 sec.

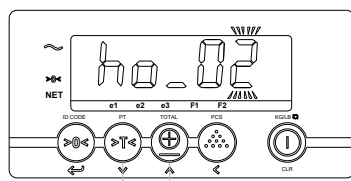


**2**

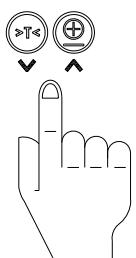


The display will show "ho\_00" or the previous hour time setting

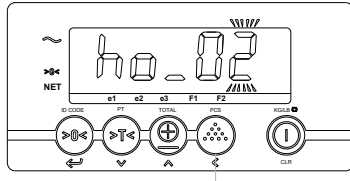
**3**



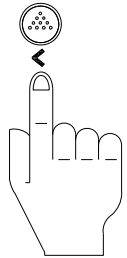
Press the up/down key until the desired value is reached.



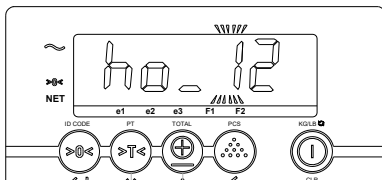
**4**



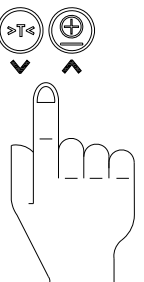
Press < to change the next digit.



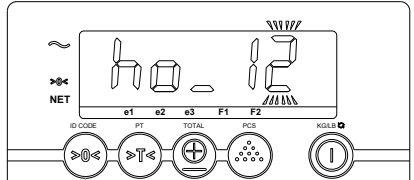
**5**



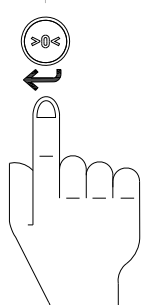
Press the up/down key until the desired value is reached.



**6**



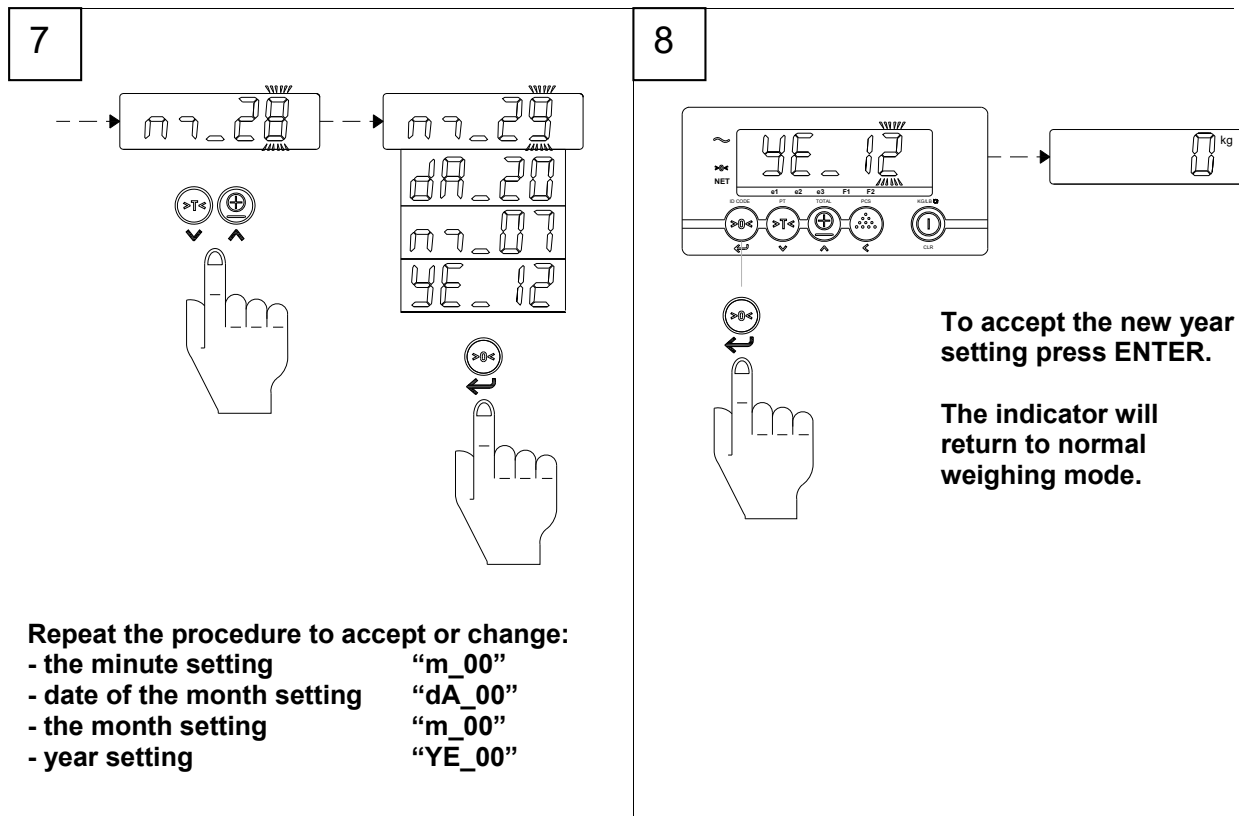
To accept the new value press ENTER.



USER MANUAL - RVL RF

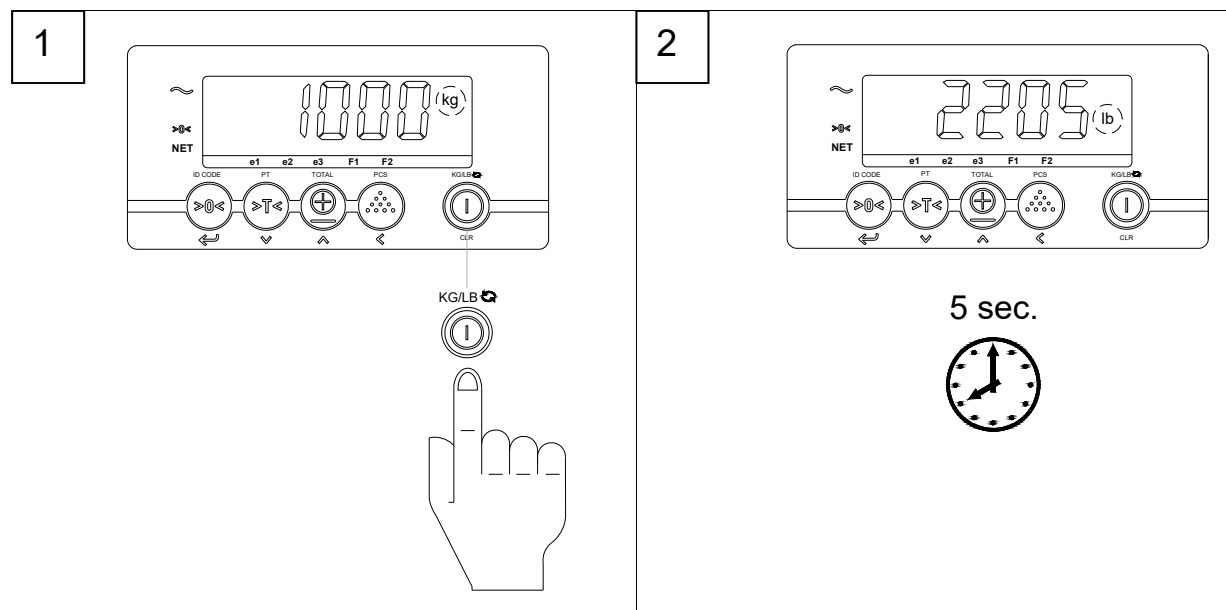
24



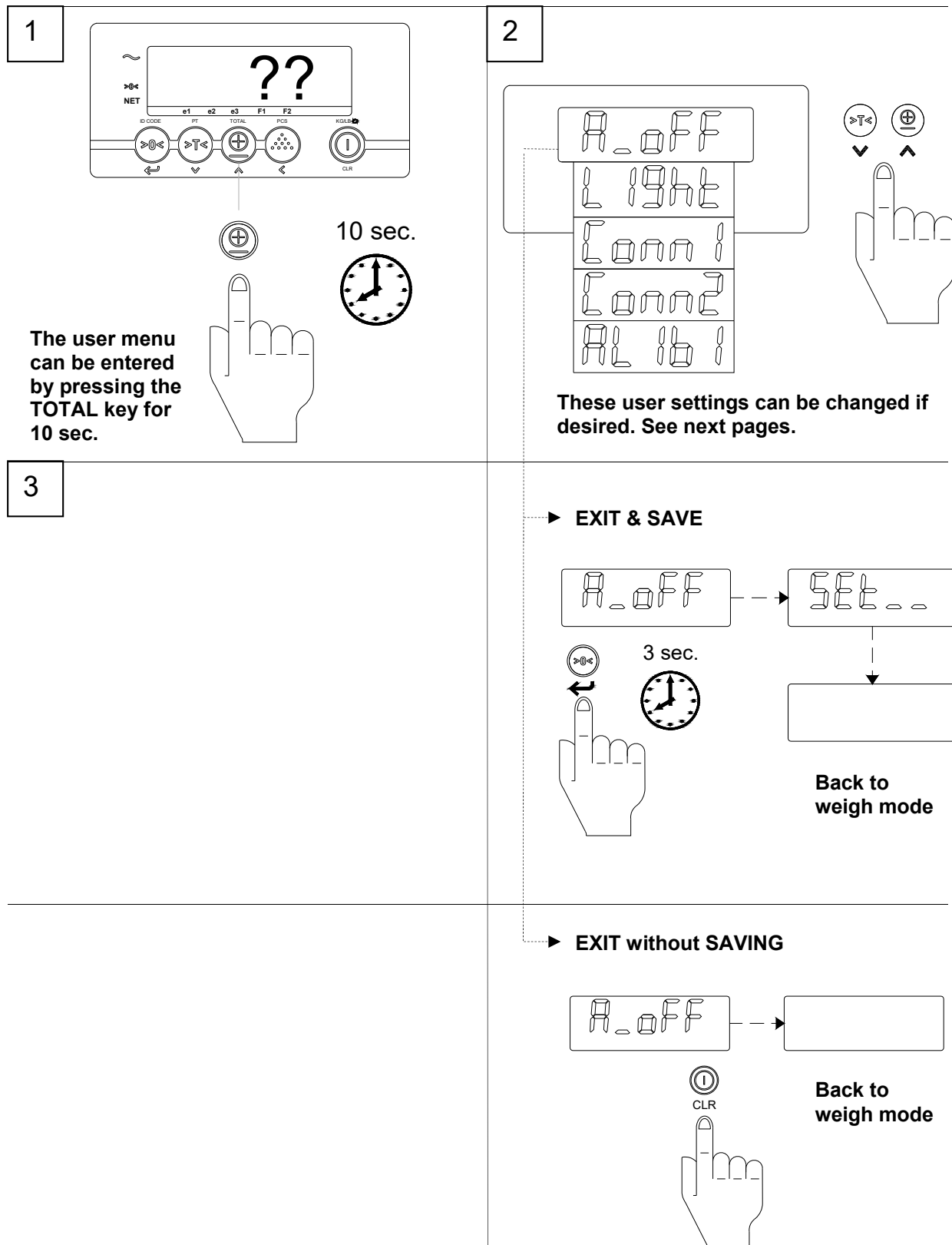


If the weighing system has been equipped with a printer, and an option board, the date and time can be printed together with the weight information.

## 5.10 KG- LB switch

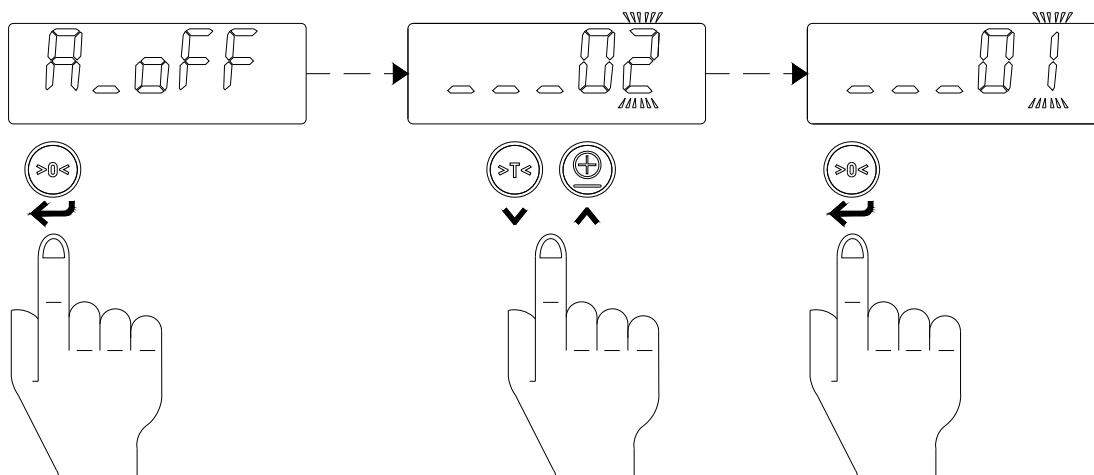


## 5.11 User settings



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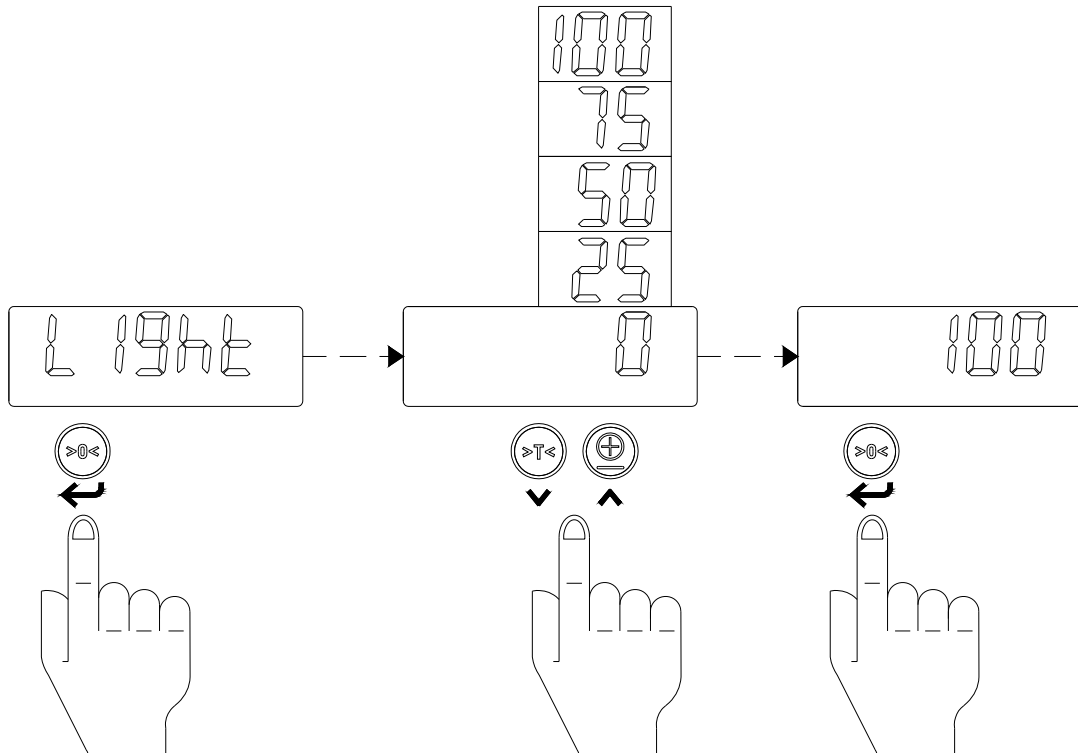
**Set the auto shut-off time indicator (delay time in minutes)**



***0 min = indicator always on***

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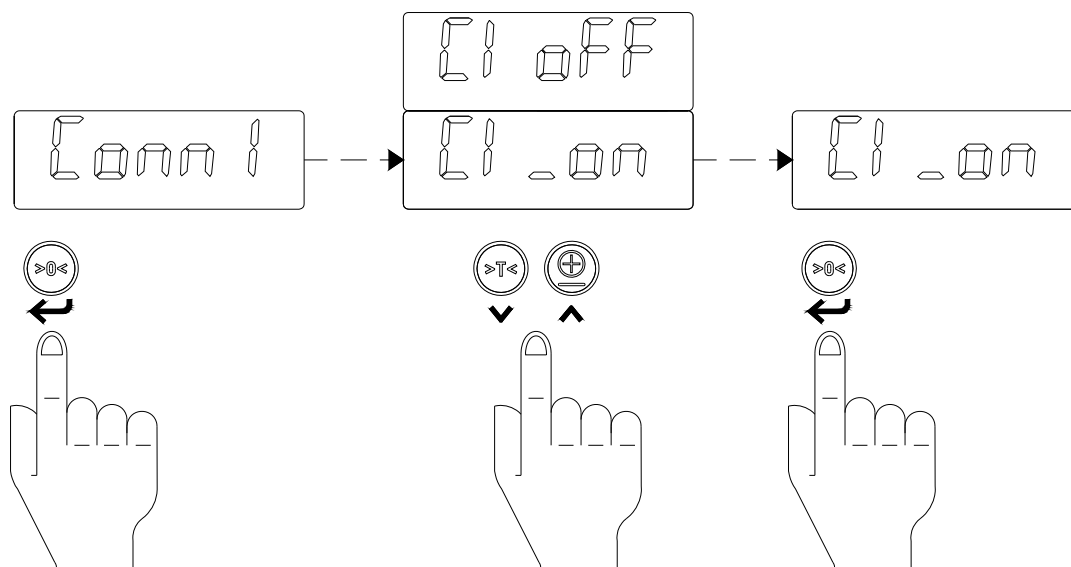
**Set backlight (intensity in %)**



***0 % = backlight off***

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### (De-) activate Com Port 1



*It is not possible to de-activate Com Port 1 for iForks*

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### (De-) activate Com Port 2

