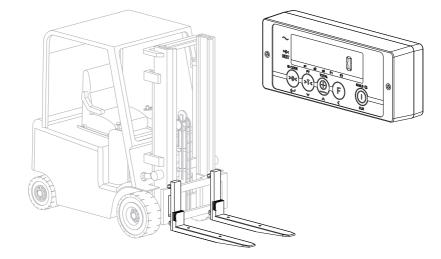


# user manual Forks-32 (XT)



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

Rev. 20191203 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

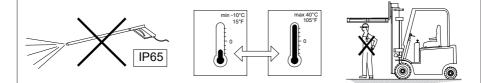
This manual describes the installation and use of the **iForks-32 (NT)**. Read this manual carefully. The installer must be informed of the contents of this manual. Always do things in the correct order. This manual should be kept on a safe and dry place. In case of damage or loss the user may request a new copy of the manual from RAVAS.

# 2. Warning & Safety measures

When using the **iForks-32 (XT)**, please observe carefully the instructions and guidelines contained in this manual. 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:

#### RAVAS USA, LLC

PO BOX 3098 Decatur, IL 62524 Phone number: Fax: www.ravas.com Changes reserved 3195 Grand Prix Drive - Ste. A Decatur, IL 62526 +1 (217) 412-1100 +1 (312) 610-5660

# 2.1 Lithium Ion Battery

### **Important Safety Information**



## DANGER

- Use the specific Li-ion charger and observe the specified charging conditions when charging the battery.
- Avoid influences of high temperature and keep away from fire.
- Do not deform, modify or disassemble the battery.
- Do not connect the (+) and (-) terminals with metal objects.
- Do not put the battery in (sea) water.
- Do not throw with the battery to avoid strong shocks.



#### WARNING

- When a battery leaks, the battery should directly be wrapped up properly and treated as recyclable resource.
- When, due to leaking from the battery, liquid gets into your eyes, immediately clean the affected area with water without rubbing your eyes, and seek medical advice immediately.
- The charging of the battery will be stopped automatically. When due to what cause the battery is not fully charged after 8 hours (LED of the charger doesn't become green), immediately unplug the battery from the holder to stop charging. Battery or charger does not work properly, exchange battery or charger.
- Storing and/or using the battery outside the given temperature range may have a negative effect on the lifetime and/or the performance of the battery.
- Do not longer use a battery with leakages, deformation or when any other abnormalities occur.
- Battery should be charged in a dry surrounding.



Charging can be carried out at any time regardless of the amount of charge remaining, but you should fully charge the battery at the following moments:

- The battery is not fully charged at the time of delivery! The battery can be used after fully charging with the specific Li-ion charger. The LED on the battery charger will become green when fully charged. Note: Before using the weighing system, be sure that the battery is fully charged.
- After the battery has become completely empty. An empty battery will break (loss of capacity) when not directly fully charged.

#### Specifications

Battery	Operating temperature range
Nominal voltage / capacity	BA-3.7V-5.2A: 5.2 Ah (used for iForks) BA-14.8V-5A: 5 Ah (used for hand pallet trucks)
Operating temperature range	During use: -10°C - +50°C During charging: 0°C - +40°C

#### Operation

#### Normal charging

- Charging takes up to 6-7 hours for a full charge (a partially discharged battery will be fully charged sooner).

- When the battery is fully charged, charger stops automatically.

- After charging, the battery should be taken out of the charger.

#### • Storing the battery

- When the weighing system is not used for a longer period, make sure the battery has approximately 70% of the battery capacity remaining. Take care not to let the battery become completely empty by charging it every 6 months.

- Store the battery separated from the weighing system in an indoor place (approx.  $+10^{\circ}C - +20^{\circ}C$ ) where it is not exposed to direct sunlight or rain.

#### Battery life

The battery is a consumable item. The battery will gradually lose its capacity for charging after repeated use and after time has passed. If the operating time that the battery can be used becomes shorter and shorter, it has probably reached the end of its life. Note: For replacement or additional battery pack, contact your distributor.

#### About used batteries

Lithium ion batteries are recyclable, valuable resources. For recycling of broken or used batteries, follow the local guidelines in your country. If you are not sure, please send back to the distributor for proper way of recycling.



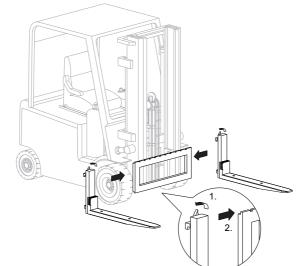
#### Disposal information for countries outside the European Union

This symbol is only valid within the European Union. Follow local regulations when disposing used batteries. If you are not sure, consult the place of purchase or a RAVAS dealer.

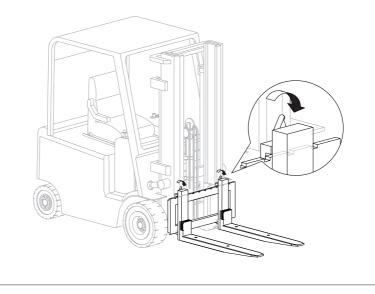
# 3. System setup

### 3.1 Installing the iForks-32 (XT)

The standard forks must be taken off the carriage plate. The **iForks-32 (XT)** are placed on the carriage plate.



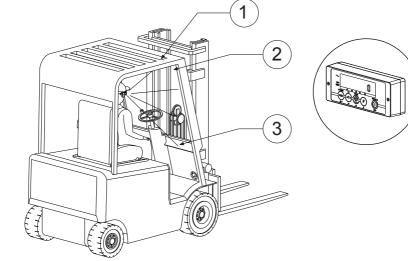
3.2 Locking the **iForks-32 (XT)** 



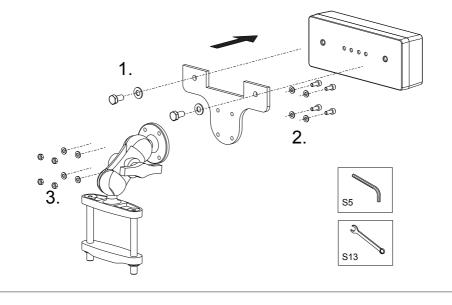
### 3.3 Installing the indicator

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.

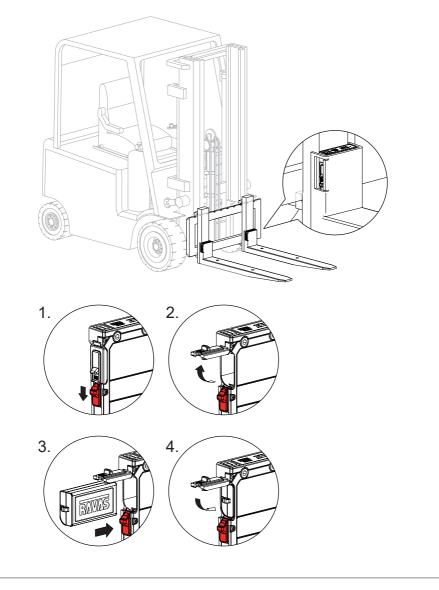


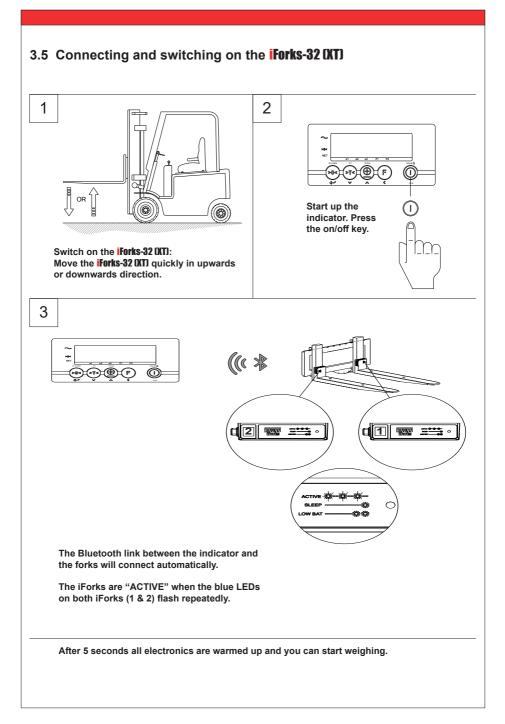
Installation of the indicator bracket & support.



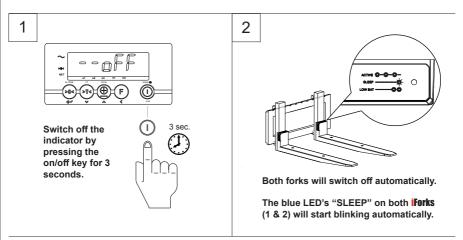
### 3.4 Placing the battery packs in the **iForks-32 (XT)**

- 1. Push the red locking clips down to unlock the battery holders.
- 2. Open the battery holders of both forks.
- Position the battery packs in the battery holders of both forks until the red locking clip shifts up again.
- 4. Close the battery holders of both forks until you hear a "click".





#### 3.6 Switching off the system

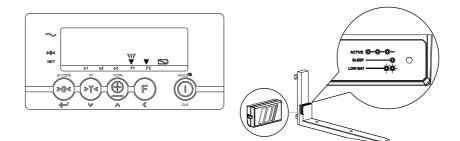


# 4. Changing batteries

### 4.1 Low battery indication **iForks-32 (XT)**

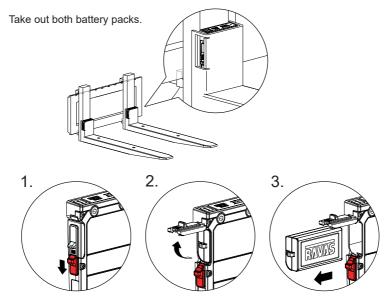
Exchangeable battery packs supply power to the iForks-32 (XT).

When the voltage level of the battery packs is running low, the low battery indicator will light up and the pointer of the relating fork - "F1", "F2" or both - will start blinking in the display. The blue LED (LOW BATTERY) on the relating fork will start blinking very slowly (twice every 10 sec). The **iForks-32 (XT)** will switch off automatically after 10 minutes.



FUNCTIONALITY BLUE	LED
DURING POWERING ON	ON for 5 sec.
FULL BATTERY	Blink time interval
Working mode	Once every 1,5 sec.
Sleep mode	Once every 12 sec.
LOW BATTERY	
Working mode	Twice every 10 sec.
Sleep mode	Twice every 10 sec.

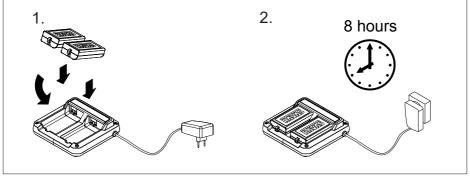
### 4.2 Changing the battery packs of the **iForks-32 (XT)**



#### 4.3 Charging the rechargeable battery packs

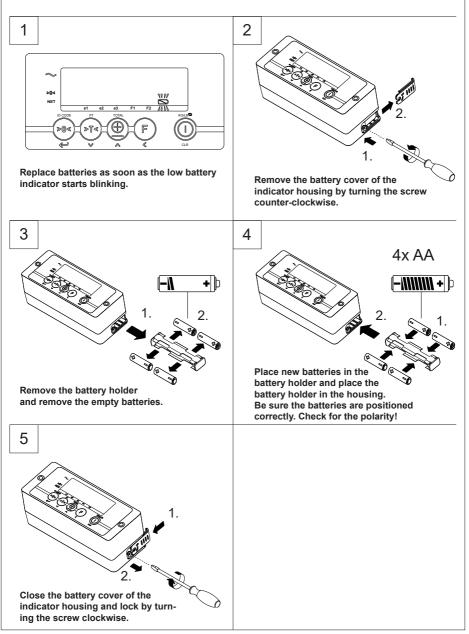
The system is equipped with rechargeable battery packs and a smart charger. After charging for at least 8 hours, the charger will shut off when the battery packs are completely full. The red LED on the adapter will change tot green once the batteries are fully charged. **NOTE:** It is not necessary to charge both batteries simultaneously. If one battery is charged at a time, the charging time will be shorter.

First position the battery packs inside the charger module, then plug the adaptors into the mains voltage.



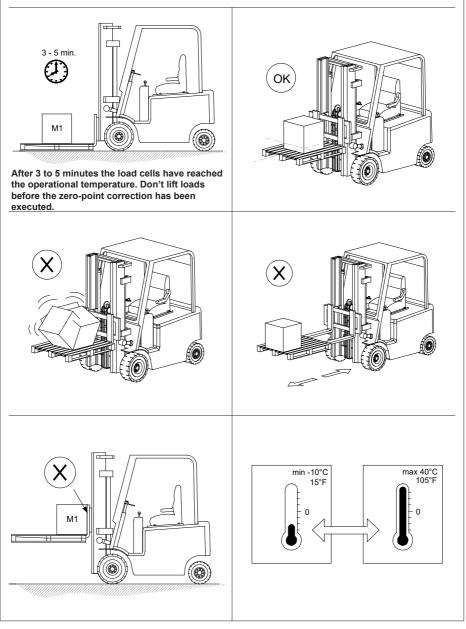
### 4.4 Changing the batteries of the indicator

As standard, the new indicator is equipped with 4 AA batteries.

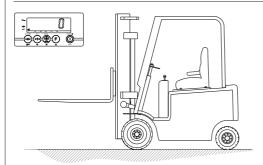


# 5. Use

### 5.1 Use (accurate weighing)



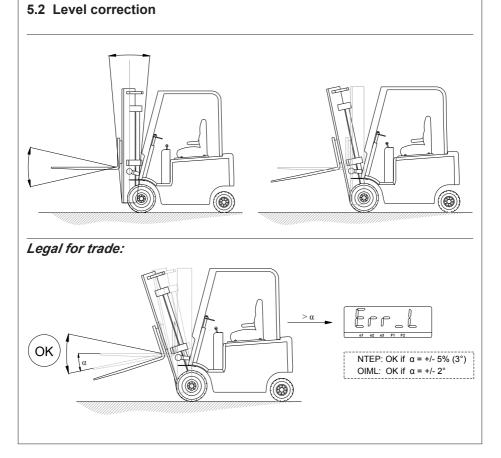
#### 5.1.1 Check the zero reading before each weighing



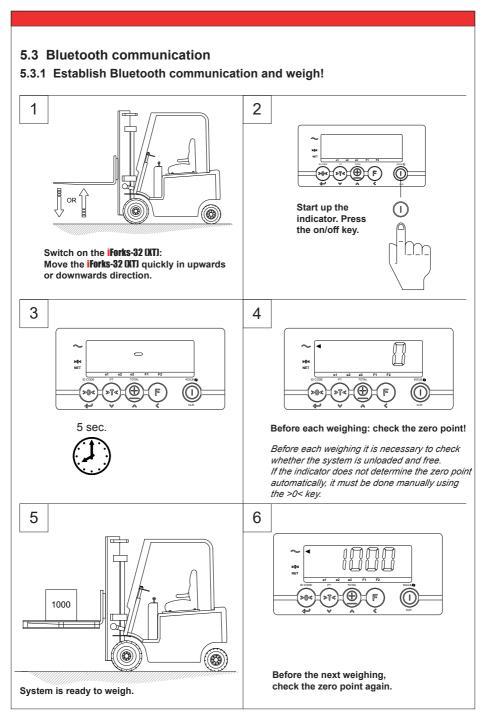
# Check the zero reading before each weighing!

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

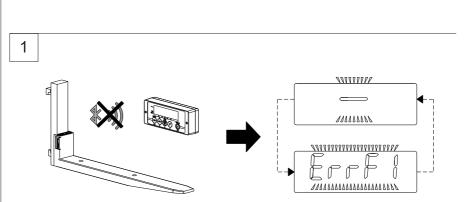
If the indicator does not determine the zero point automatically, it must be done manually using the >0< key.



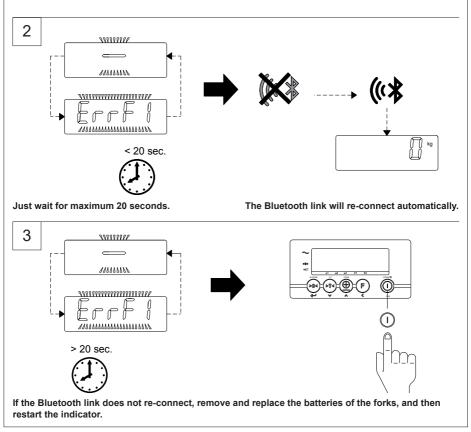
#### USER MANUAL - **iForks-32 (XT)** 16



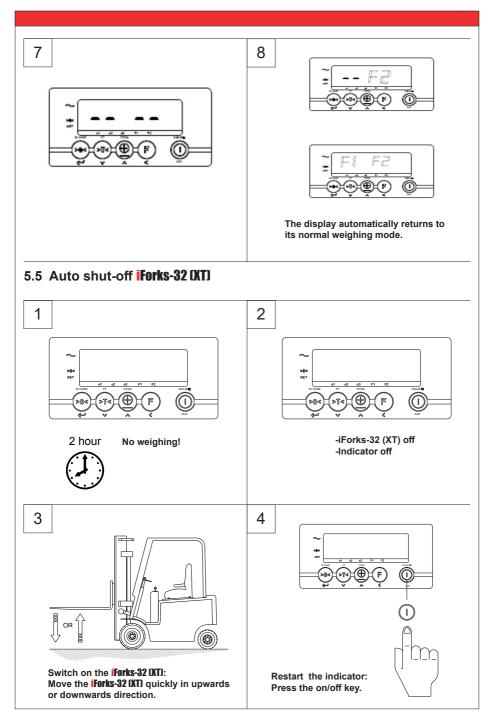
#### 5.3.2 Auto-reconnect function



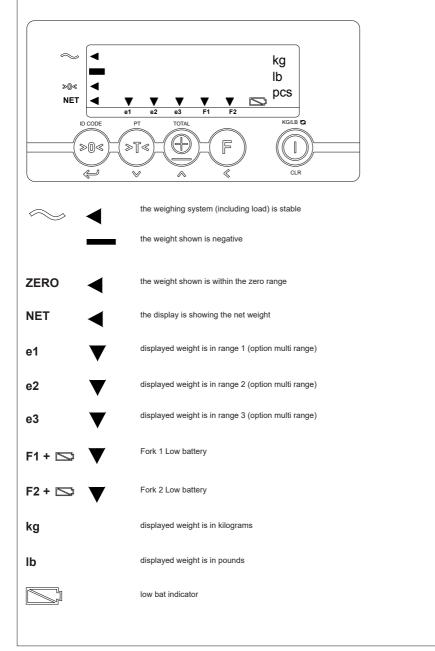
If the Bluetooth link between the indicator and forks is lost, the indicator will show this error message.



#### 5.4 Auto shut-off indicator 1 2 |∢ 20 sec. >84 NET 000 Œ F T `≥®• ⊳ĩ -2 min. No action ! Countdown starts: Press any key during countdown to \_1\_Y. cancel auto-shut-off and go back to the weighing mode. 3 4 $\bigcirc$ $\bigcirc$ >8< NET >8< $\oplus$ $( \cap$ Œ F (ī >0 ۶Ĩ >0 ⊳ໂ 5 6 $\sim$ >@≪ NET >Q4 NET T ſī >0 F F ⊳ſî \_1\_Y\_ Indicator off To activate the indicator, press the on/off key.



#### 5.6 Indicator functions



### **Key functions**

Each key has 2 operational and one entry function.

Standard function (short key press)	Кеу	Special function (long key press)	Value entering function (entry mode)
Zero setting		code entry	enter
automatic tare	PT - DT V	pre-set tare	decrease the value of the digit flashing
print weight and add to the total	TOTAL 	check subtotal and print/reset total	increase the value of the digit flashing
start special function if active	- (F) «	no function	shift to the next digit on the left
On switch And change to lb and kg	KGLB 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.

### 5.7 Error messages

ERROR MESSAGES

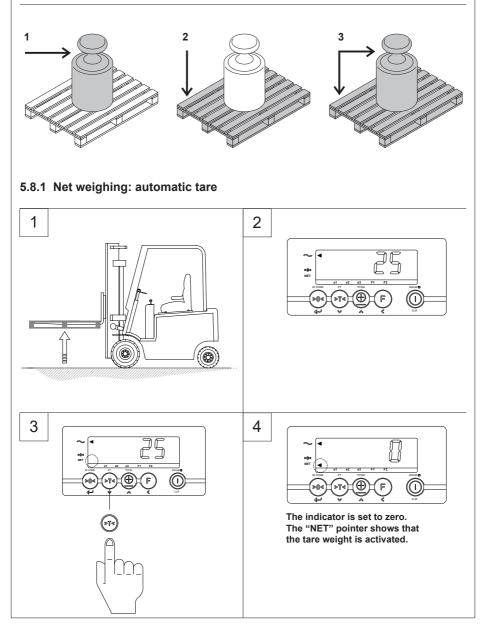
Display	Meaning	Out of error mode
Err01	Load cell signal is unstable	Automatic
Err02	Overload on full scale	Automatic after removing weight
Err03	Gross negative. This action is not allowed	Automatic
Err04	Out of zero range	Press any key
Err06	Input signal too high	Automatic after correcting input
Err08	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)	Automatic
	point	
Err14	Setpoint value 2 < setpoint value 1. This is not allowed	Automatic
CAL-J	Legal for trade version: action not allowed	When action is intended, remove 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
	Loadcell signal negative	Lift up the forks from the ground
Err_L	Forks are out of level (only legal-for-trade version)	Put the forks into horizontal position
$\square$	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
S +F2 ▼	Battery of fork 2 is empty	Replace the D-cells in both battery packs or
		charge both battery packs
tiP	too large load on tip of forks (only legal for trade version)	change load placement
SidE	too large load on one fork (only legal for trade version)	change load placement
OimL	action not allowed (only legal for trade version)	automatic
ntEP	action not allowed (only legal for trade version)	automatic
SCALL	audit trail no out of range	Contact RAVAS Service department
Er_F1	too few samples for measurement	Wait for improvement of the bluetooth connec-
		tion (try moving the mast to lower position)
Er_F2	too few samples for measurement	Wait for improvement of the bluetooth connec-
		tion (try moving the mast to lower position)
ESoFt	Wrong combination of firmwares	Contact your dealer
EConF	P96 not set	Contact your dealer

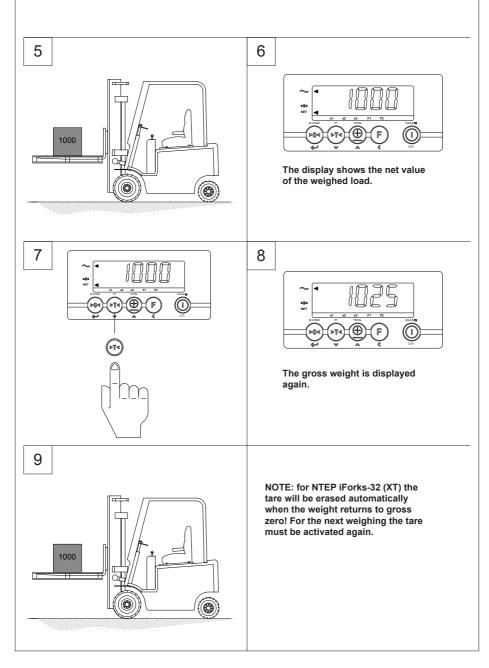
DISPLAY MESSAGES

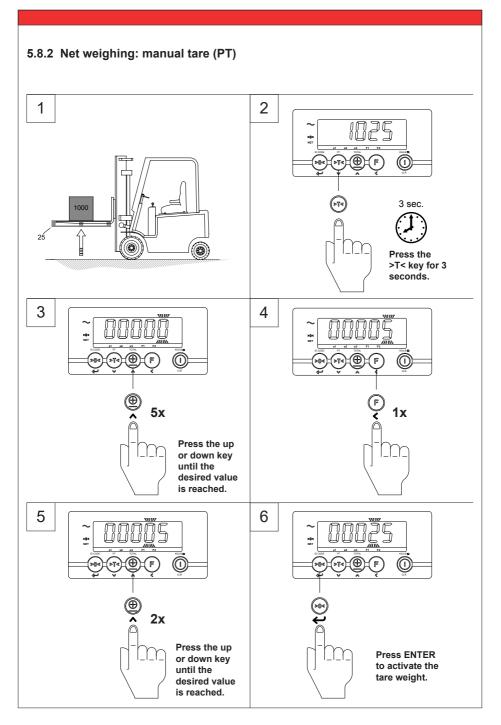
Display	Meaning	
BltF1	Successful Bluetooth link with fork 1	No error
BltF2	Successful Bluetooth link with fork 2	No error

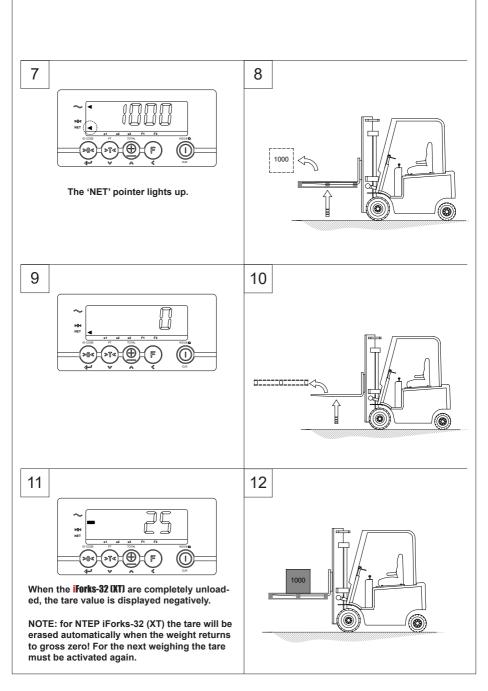
### 5.8 Net / Tare / Gross weight

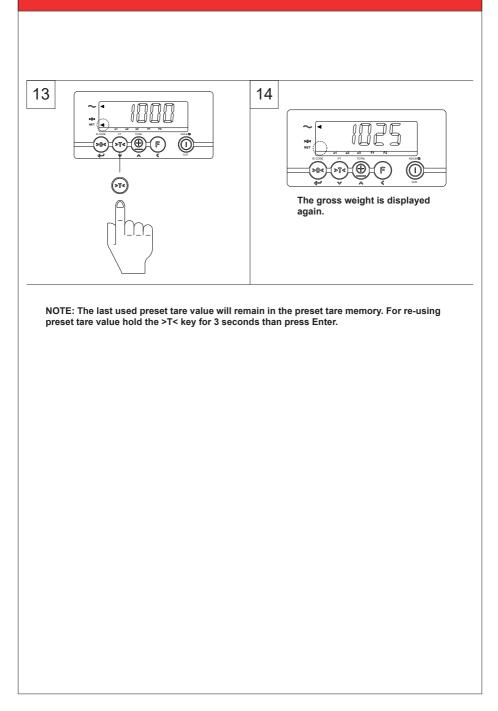
EXPLANATION: Net(1) + Tare(2) = Gross(3)



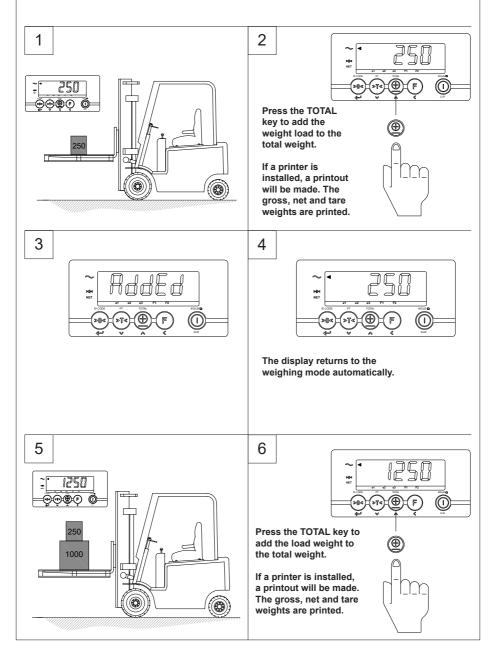


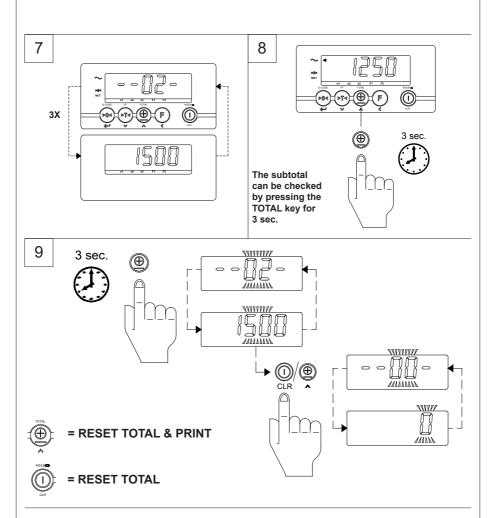




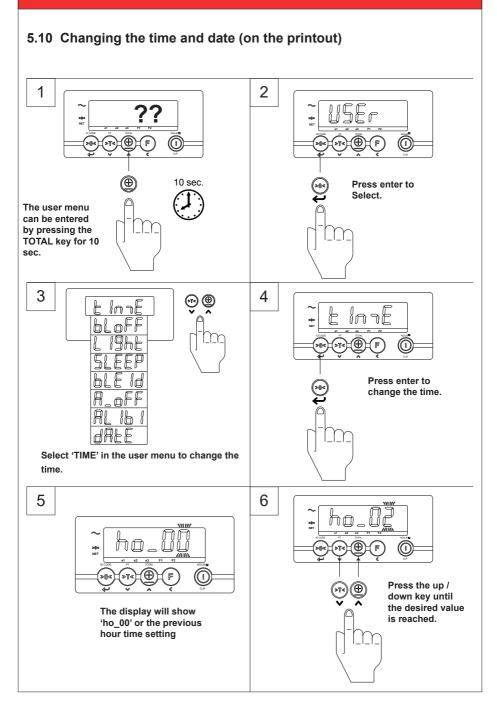


#### 5.9 Adding & reset

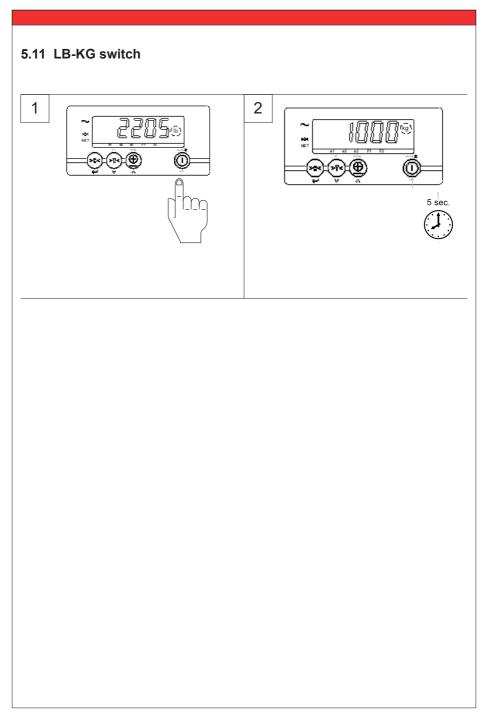




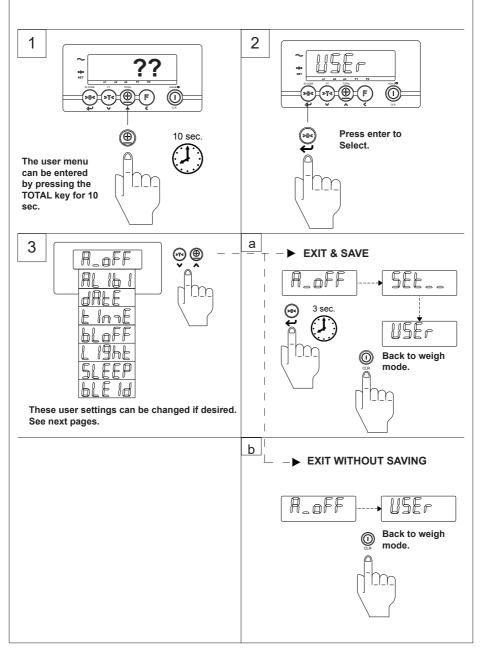
NOTE: In case the total is not manually used or reset, the system will do this automatically as soon as the total number has reached 99 or as soon as the total weight has reached a value of 99999 kg.

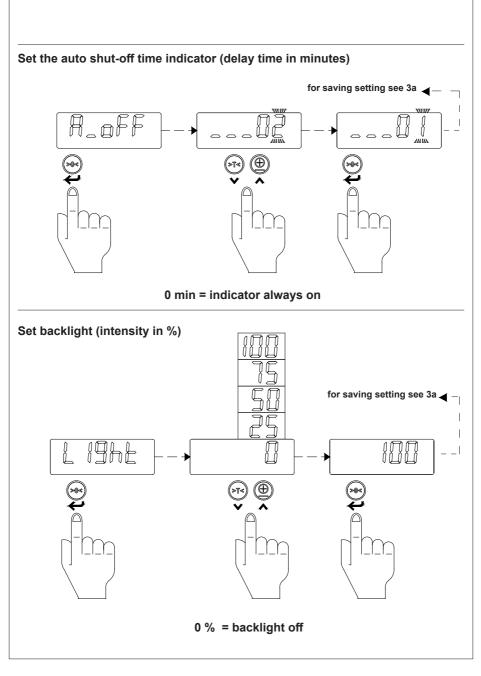


7 8 ww/ ho\_Q<u>P</u> NET 2**8**4 Ð Ð F  $\bigcirc$ ((T Press the up / Press < to change »7« ⊕ down key until the next digit. the desired value is reached. 10 9 ho\_ >@4 กา กา Ð  $\bigcirc$ >¶≪ F ₹**1** To accept the new value press enter. ) A LLY Repeat the procedure to accept or change: - the minute setting 'm\_00' 11 12 <u>SEŁ</u> F InnE F InnE >04 3 sec.  $\bigcirc$ USEr 3 sec. Back to weigh  $\bigcirc$ mode. To accept the new I\_r\_ setting press enter for 3 sec.



### 5.12 User settings

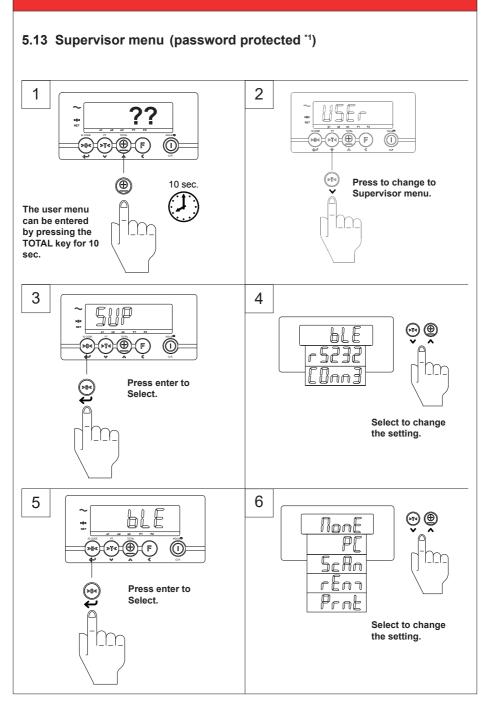


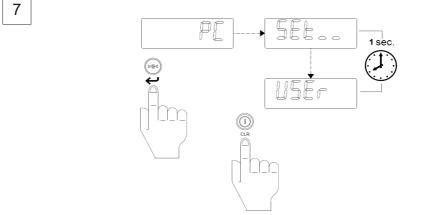


#### 5.12.1 Overview power save settings (auto shut-off)

Overview of Auto shut-off and Sleep settings. The settings mentioned below are the standard settings and advised by RAVAS for optimal use. These settings can be changed in the user menu, as described above.

		RPW-EL	RPW-EL	Auto Shut-c	ff & Sleep Sett	1182		RAVAS	RAVAS
		RPW-EL 320 6v		320 RPW-EL				RAVAS 320	320 Li
				auto on					
Options -> WiFi /	SLEEP	not possible	0	0	Options	-> WiFi /	SLEEP	0	0
RS / Bluetooth	A_OFF	not possible	0	0	RS / Bli	uetooth	A_OFF	30	30
	P60	6	FLT	FLT			P60	12	14.8
No options /	SLEEP	2	30				SLEEP	20	
Printer 6v	A_OFF	5	0		No o	otions	A_OFF	30	
<b>L</b>							l		
		iForks 6v	iForks truck	iForks				RWV-C truck	RWV-C
			supply	auto on				supply	auto on
Options -> WiFi /	SLEEP	not possible	0	0	Options	-> WiFi /	SLEEP	0	0
RS / Bluetooth		not possible	0			uetooth	A_OFF	0	
	P60	6	FLT	FLT			P60	FLT	FLT
		Ű							
No options /	SLEEP	2	20		1		ISLEEP		0
No options / Printer 6v	SLEEP A_OFF	2 5	<u>30</u> 0	0		bions	SLEEP A_OFF	0000	
	A_OFF		0 RPW-ST 320 truck	RPW-ST 320	RPW-ST- BLE 320 6v	RPW-ST- BLE 320	A_OFF RPW-ST- BLE 320		
Printer 6v	A_OFF	5 RPW-ST 320 6v	0 RPW-ST 320 truck supply	RPW-ST 320 auto on	RPW-ST- BLE 320 6v (no printer)	RPW-ST- BLE 320 truck supply	A_OFF RPW-ST- BLE 320 auto on	0	
Printer 6v	A_OFF	5 RPW-ST 320 6v not possible	0 RPW-ST 320 truck supply 0	RPW-ST 320 auto on 0	RPW-ST- BLE 320 6v (no printer) not possible	RPW-ST- BLE 320 truck supply 0	A_OFF RPW-ST- BLE 320 auto on	0	
Printer 6v	A_OFF SLEEP A_OFF	5 RPW-ST 320 6v not possible not possible	RPW-ST 320 truck supply 0 0	RPW-ST 320 auto on 0	RPW-ST- BLE 320 6v (no printer) not possible not possible	RPW-ST- BLE 320 truck supply 0 0	A_OFF RPW-ST- BLE 320 auto on	0	
Printer 6v	A_OFF SLEEP A_OFF P60	5 RPW-ST 320 6v not possible not possible 6	0 RPW-ST 320 truck supply 0 0 FLT	0 RPW-ST 320 auto on 0 0 FLT	RPW-ST- BLE 320 6v (no printer) not possible not possible 6	RPW-ST- BLE 320 truck supply 0 0 FLT	A_OFF RPW-ST- BLE 320 auto on ( (	0 0 0 1	
Printer 6v	A_OFF SLEEP A_OFF P60 SLEEP	5 RPW-ST 320 6v not possible 6 2	0 RPW-ST 320 truck supply 0 0 0 FLT 30	0 RPW-ST 320 auto on 0 0 FLT 0	RPW-ST- BLE 320 6v (no printer) not possible 6 2	RPW-ST- BLE 320 0 0 FLT 30	A_OFF RPW-ST- BLE 320 auto on ( ( C FLT ) (		
Printer 6v	A_OFF SLEEP A_OFF P60	5 RPW-ST 320 6v not possible not possible 6	0 RPW-ST 320 truck supply 0 0 FLT	0 RPW-ST 320 auto on 0 0 0 FLT 0	RPW-ST- BLE 320 6v (no printer) not possible not possible 6	RPW-ST- BLE 320 truck supply 0 0 FLT	A_OFF RPW-ST- BLE 320 auto on ( ( C FLT ) (	0 0 0 1	





\*1 The Supervisor menu is password protected since version 1.01. Earlier versions of the software are not password protected. Please contact RAVAS Service department for the password.

#### 5.14 Relay function - optional

The 3200 indicator has the possibility to setup limit values for relay settings. The different options for relay settings are:

- overload on gross weight
- overload on net weight
- dosing / filling with manual tare & start
- dosing / filling with automatic tare & start

The setup and the activation of the relay settings are explained in the service manual.

### 5.15 Alibi Memory

The indicator 3200 has the possibility of an alibi memory. The alibi memory will only be used when parameter 13 is set for OIML or NTEP. If parameter 13 is set for 'NONE' the alibi memory will remain unused.

The indicator stores every weighing in its alibi memory and adds a unique number to it. If the alibi memory is activated it will affect the RDC protocol, the PC protocol or the Printer protocol depending on the setting of parameters in the supervisor menu.

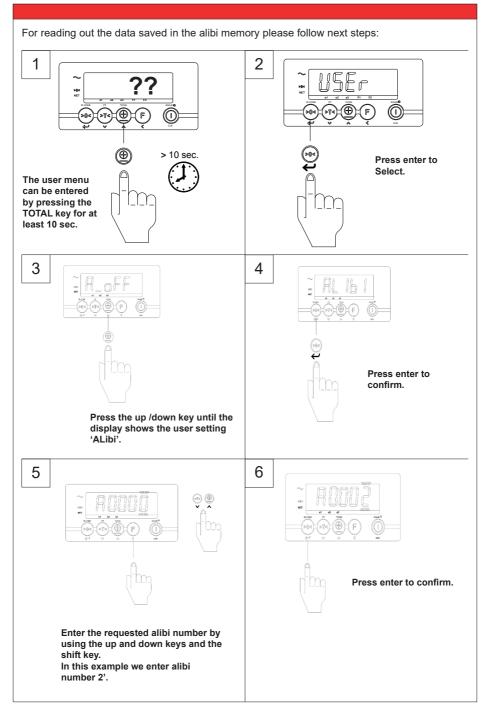
The data stored in the alibi memory are:

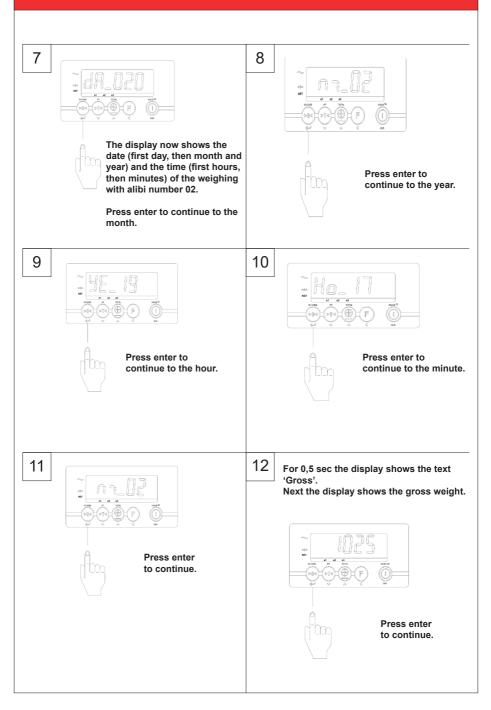
- 1. Date > this is the date in format dd\mm\yy (EU) or mm\dd\yy (US).
- 2. Time > this is the time in format hh:mm.
- Gross weight > this number always consists of 5 digits, a possible decimal point (as part of the 5 digits), the unit (kg or lb) and the positive or negative sign.
   For example: +0233.5kg or -00136.lb.
- 4. Net weight > this number always consists of 5 digits, a possible decimal point (as part of the 5 digits), the unit (kg or lb), the positive or negative sign and whether it was a calculated net or a measured net.

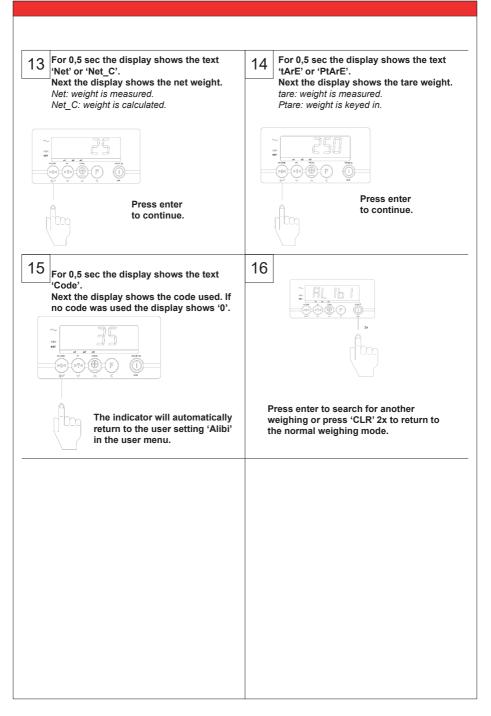
For example: +0233.5kgC or -00136.lb\_. The 'C' stands for calculated and is sent along when a preset tare value was active. If there is no preset tare value active a blanc (space) is put behind the kg (or lb).

- 5. Tare weight > this number always consists of 5 digits, a possible decimal point (as part of the 5 digits), the unit (kg or lb), the positive or negative sign and whether it was a preset tare or a measured tare. For example: +0233.5kgP or -00136.lb\_. The 'P' stands for preset tare and is sent along when a preset tare value was active. If there is no preset tare value active a blanc
- (space) is put behind the kg (or lb).6. Code > this is the 5-digit code that can be entered by keying in. If no code is activated it will show '0'.
- Alibi number > this is a 4 digit number which is generated by the indicator itself. It will start at '0001' and increase with every weighing up to '9999'. When this number is reached it will start at '0001' again.

The alibi memory is 1Mbit big. It can contain about 7000 weighings. The alibi memory works with FIFO (first in first out). When it becomes full the oldest data will be first overwritten.







# 6. RAVAS WeightsApp - applicable for the iForks-32 (XT)

With the RAVAS WeightsApp you can read the data from your mobile weighing system directly from your smartphone or tablet.

The app not only displays the weight in large digits on a smartphone or tablet, it also stores the weighed gross weights, tare weight, product code, date & time and the ID of the device or operator. The data can be sent to any email address as a CSV file, after which it can be imported in a spreadsheet program on a PC.



#### From the app you can:

- enter the ID of an operator or device
- enter tares (automatically or manually)
- zero the weighing system

Date and time are automatically generated. If your Android device has an integrated barcode scanner, you can use it to enter product IDs.

In addition the app makes it possible to download a log file from the RAVAS indicator and send it for technical analysis as a CSV file in the event of malfunctionin.

The RAVAS WeightsApp can be downloaded for free from Google Play and the Apple Store.

For instructions for the use of the RAVAS WeightsApp see www.ravas.com.