

# USER MANUAL FORKS-52 (XT)



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More information can be found on our website: www.ravas.com

Rev. 20211115

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|---|
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#### 1. Introduction

This manual describes the installation and use of the **iForks-52 (XT)**. 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.

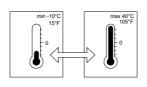
# 2. Warning & Safety measures

When using the **iForks-52 (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:

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# 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.



#### WARNING

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

| Nominal voltage / capacity  | BA-3.7V-5.2A: 5.2 Ah                                      |
|-----------------------------|---|
| Operating temperature range | During use: -10°C - +50°C<br>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°C +20°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.



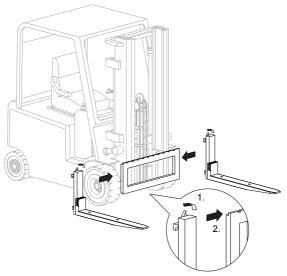
#### Disposal information for countries outside the European Union

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.

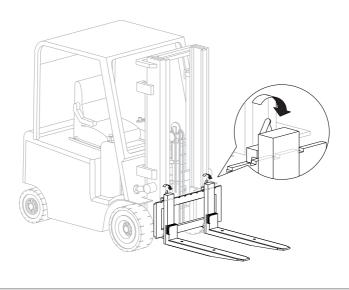
# 3. System setup

## 3.1 Installing the **iForks-52 (XT)**

The standard forks must be taken off the carriage plate. The **iForks-52 (XT)** are placed on the carriage plate.



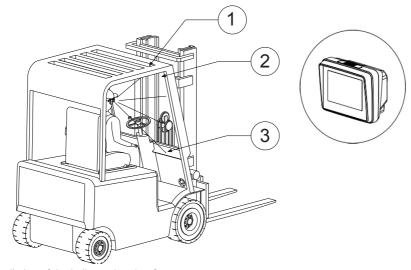
# 3.2 Locking the **iForks-52 (XT)**



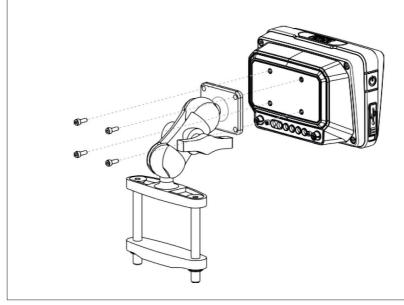
# 3.3 Installing the indicator

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.

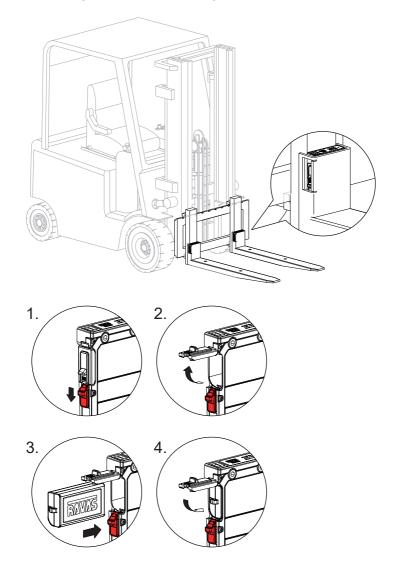


Installation of the indicator bracket & support.

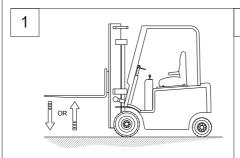


## 3.4 Placing the battery packs in the **Forks-52 (XT)**

- 1. Push the red locking clips down to unlock the battery holders.
- 2. Open the battery holders of both forks.
- 3. 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".



## 3.5 Connecting and switching on the iForks-52 (XT)

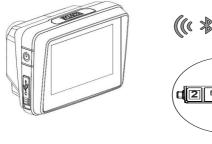


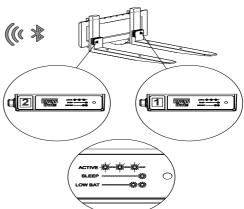
Switch on the **iForks-52 (XT)**: Move the **iForks-52 (XT)** quickly in upwards or downwards direction.

On/ Off switch

Switch on the indicator by pressing the On/Off button.

3





- The Bluetooth link between the indicator and the forks will connect automatically.
- The forks are 'ACTIVE' when the blue LEDs on both iForks (1 & 2) flash repeatedly.
- After 5 seconds all electronics are warmed up and you can start weighing.

**NOTE:** When the forks are not powered on, the indicator will show the following text messages repeatedly: "Initializing..." and "Transmitters powered?".

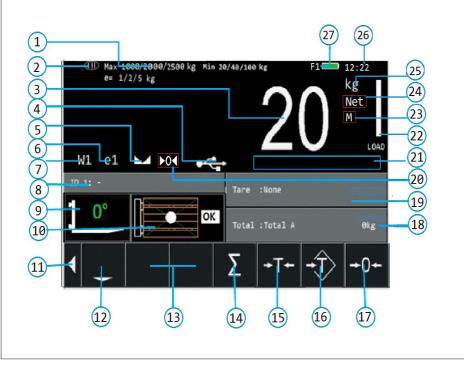
Make sure you have powered on the transmitter modules. Also check the batteries!

## 4. Use

## 4.1 Indicator functions



# **4.2 Display Functions**



## 4.2 Display Functions

| No. | Functionality / Description | Remark  |
|-----|-----------------------------|---|
| 1   | Electronic typeplate        | Shows the min., max. and divisions                          |
| 2   | Approved class III symbol   | Only visible when OIML or NTEP approved                     |
| 3   | Weight display              | For divisions <1 the decimal point is active                |
| 4   | USB symbol*1                | Only visible if USB connection is active                    |
| 5   | Stable weight symbol        | Visible if weight is stable                                 |
| 6   | Range pointer               | Shows the active range                                      |
| 7   | Scale pointer               | Shows which scale is active (e.g. reference scale)          |
| 8   | Identification code label   | For more ID's click on this field                           |
| 9   | Mast tilting position       | For OIML/NTEP this is limited (degrees become red)          |
| 10  | Gravity pointer mass        | Shows 'TIP' or 'SIDE' if gravity point is too far off       |
| 11  | Show/hide function buttons  | For bigger weight display choose 'hide'                     |
| 12  | Select next button row      | Also used for going to the user mode                        |
| 13  | Empty button fields         | For more functions see user menu                            |
| 14  | Summation button            | For adding a weight to a total                              |
| 15  | Tare button                 | Tares out the present weight and returns NET weight         |
| 16  | Preset tare button          | Opens the preset tare input field                           |
| 17  | Zero button                 | Sets the present weight to zero (only for small deviations) |
| 18  | Total register label        | For more totals click on this field                         |
| 19  | Tare code label             | For more tare codes click on this field                     |
| 20  | Zero pointer                | Only active if within zero range                            |
| 21  | Message line                | Error messages are displayed here                           |
| 22  | Load bar                    | Indication of the present load on the scale                 |
| 23  | Memory active               | Indication that a total memory is used                      |
| 24  | Net pointer                 | Only active if a net value is displayed                     |
| 25  | Units                       | KG or LB units are displayed here                           |
| 26  | Time                        | hh:mm   |
| 27  | Battery status symbol       | Displays the status of F1, F2 and indicator in a sequence   |

<sup>\*1:</sup> The USB icon is determined at powering up the indicator.



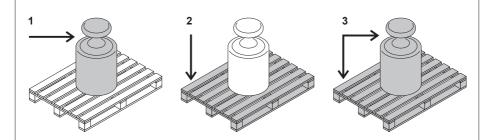
Powered up in 'DEVICE' mode. In this mode it is possible to read and write to a USB stick.



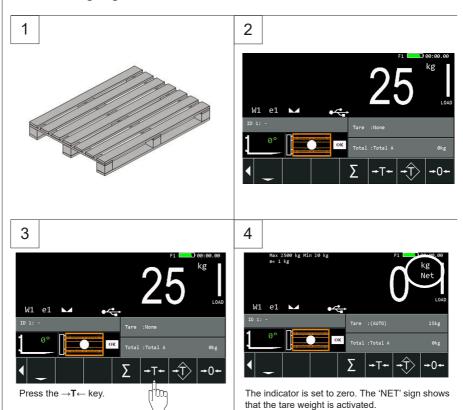
Powered up in 'HOST' mode. In this mode it is possible to update firmware via a PC connection (only for RAVAS technicians). If powered up in host mode it will stay in this mode until the indicator has been powered down again.

## 4.3 Net / Tare / Gross weight

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

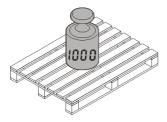


## 4.3.1 Net weighing: automatic tare



'Tare:25kg' shows the tare weight.

5



6



The display shows the net value of the load weight.

7

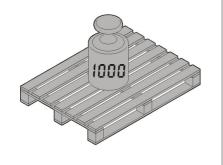


8



The gross weight is displayed again.

9



NOTE: for OIML approved iForks-52 (XT) the tare will be erased automatically when the weight returns to gross zero! For the next weighing the tare must be activated again.

## 4.3.2 Net weighing: manual tare (PT)





Press the TARE field.

2



A pop-up screen appears. Select the desired Preset Tare field.

3



If the preset tare you select is empty you have to enter the tare value. Confirm with 'Enter'.

4



Name your Preset Tare value (max. 14 characters).

5



The 'NET' sign shows that the tare weight is activated. 'Tare: Euro pallet 25kg' shows the tare weight.

6 Pick up the load.



The indicator now shows the NET weight.

## 4.4 Net weighing: Reset Tare (two ways)

## 4.4.1 option 1





# 2



The indicator is back in the weighing mode and is ready for the next weighing. NET sign is gone. In the tare field 'None' is active.

#### **NOTE**

For OIML approved iForks-52 (XT) the tare will be erased automatically when the weight returns to gross zero! For the next weighing the tare must be activated again.

## 4.4.2 option 2





Press the preset tare button.

# 2



Select > none.

#### 4.5 Activate and edit ID code

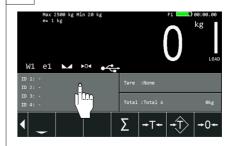
The RAVAS 5200 allows you to enter up to 4 ID codes which will be visible on the printout or when used with data communication.

1



Press the 'ID 1' field.

2



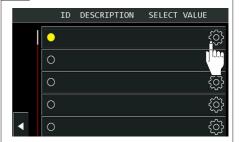
The ID field will show the 4 ID-codes. Press the ID field again.

3



On the left side of the button you can activate the ID fields (only the active ID fields will be visible on the printout).

4



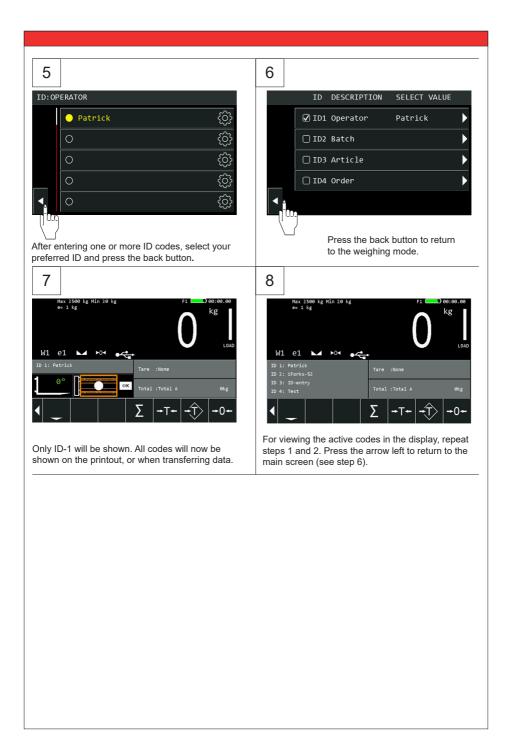
If you press on the right side of the button an ID entry field pops up, which allows you to select one of the 10 preset ID codes.

Note: they must be named first on a new system. To change a name, press the settings symbol.

5

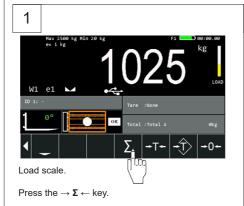


Enter ID code or name (max. 14 characters).



## 4.6 Adding, print, clear memory & send data

## 4.6.1 Add weight to subtotal





The weight is added.



The weight has been added to the selected total memory.

#### 4.6.2 Change active total memory





Select your preferred total memory.

#### 4.6.3 Print single weight



Load scale.



3



The indicator is now printing.



The weight is printed and the indicator is ready for the next weighing.

#### 4.6.4 Send WiFi



Press the WiFi button.



The indicator is sending.

3



If this is shown, the connection is lost. The weight will be stored in the memory and sent automatically once the connection is recovered.

4



It is not possible to send the same weight result twice.

#### 4.6.5 Edit, clear and print total registers

1



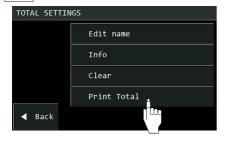
Press the total field.

2



Select the total memory you want to print or clear and press the settings symbol.

3



Press Print Total to get a total print out of the selected total register. 4



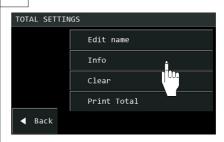
The indicator is printing your receipt.

5



If you want to reset the active total memory after printing, press 'OK'.

6



Get detailed information about the selected total register.

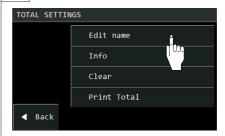
Press 'Info'.

7



Press Clear if you wish to erase all information in this total register. Or go back if you don't wish to change the register.

8



Change the name of the selected total register.

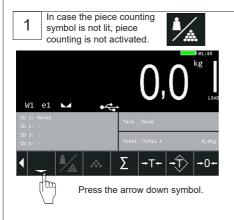
9



You can edit the name (max. 14 characters), press 'Enter' if you are finished.

## 4.7 Piece counting

#### 4.7.1 Activate piece count function



2



The 'basic weight' symbol is green. This means that piece counting has not been activated.



3



Press the 'pcs symbol'. This symbol now turns green, to indicate that piece counting is activated.

4



The 'pcs'-symbol has turned green, to indicate that piece counting is activated.

The display will automatically return to the start screen.

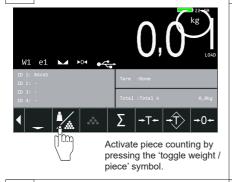


#### NOTE

If a units toggle switch is activated in the menu bar, it will not be possible to use it in the piece counting mode. The toggle switch will be grey instead of white. Return back to the basic weighing mode if you want to use the units toggle switch.

#### 4.7.2 Enter piece weight manually

1



For entering the piece weight manually or calculating the weigth via reference scale press (piece counting)



3



4



Enter the piece weight and confirm with Enter.

5



The weight per piece is now shown in the display.

6 Pick up load.



The number of pieces are shown in the display.



8



The total weight is shown in the display.

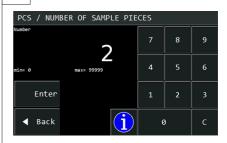
#### 4.7.3 Calculate piece weight

Repeat step 1 and 2 of chapter 4.7.1.



Select 'Sample PCS weight-W1(MAIN)'.

2



Enter the number of pieces that will be added or removed from the scale, e.g. 2. Confirm with 'Enter'.

Note: the weight difference should be at least 5 - 10 kg.

3



Add or remove the given number of pieces from the load. Then confirm with 'OK'.

4



Automatically the weight per piece is calculated (see in the display on the left).

## 4.8 Data storage on USB stick

1



After completing your weighings, press the  $\rightarrow \Sigma$   $\leftarrow$  key to save all data on the indicator.

2



After saving the weighing data, place a USB stick in the indicator.

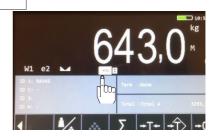
Before inserting the stick please read the notes written at 4.8.3!

3

#### NOTES:

- 1) Make sure the stick is empty or does not contain former weighing data information!
- 2) Insert the stick only when the indicator is turned on!
- Indicator only works with USB stick format FAT32.

4



Once the connection is made, a white image of the USB stick will pop-up on the display.

5

The data transfer will start automatically. As long as the image of the USB stick is green, data are being transferred. Once the image is white again, the transfer has finished.

**NOTE:** The initialization of the USB port is always done at powering up the indicator.



If the USB icon is shown as a USB-stick, the USB port is defined as 'device'.



f the USB icon is shown as a USB-connection, the USB port is defined as host for PC connections. It will keep the setting until the system is powered off and on again. 6

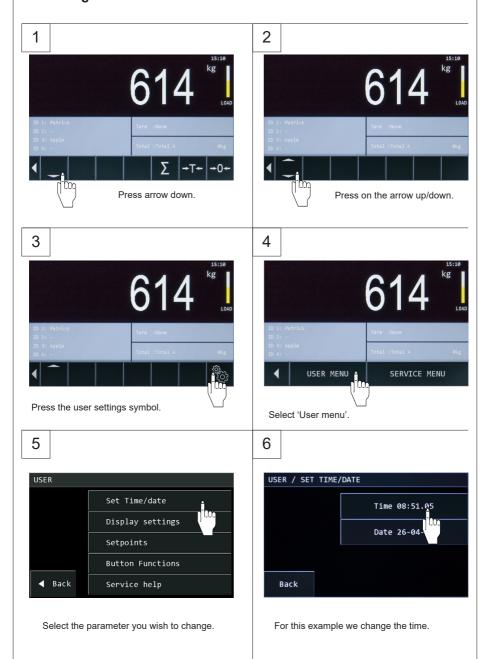
2019-2-11 13-2
RAVAS WLAN connector .NET tool-20161... 12-1
Ravas5200 USB 12-1
Storage 6-5-

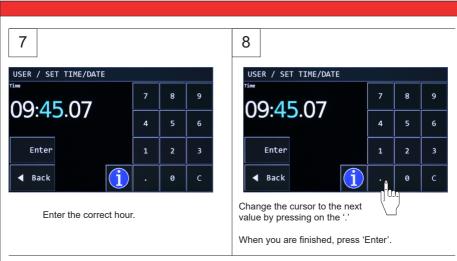
WLANConnector

When the USB stick is connected to your PC, the data file is displayed.

7-4-

## 4.9 Change the time and date

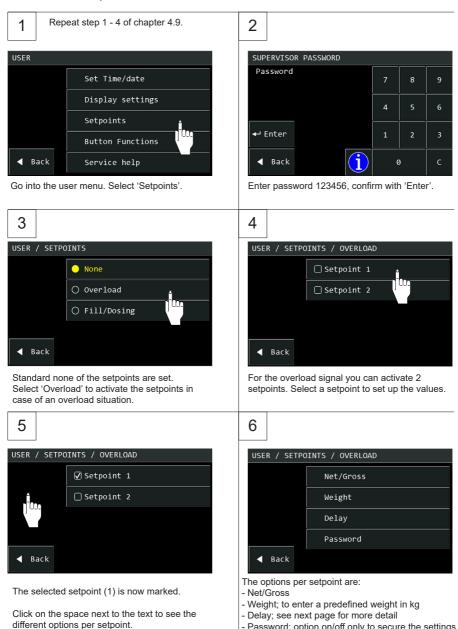




To return to the normal weighing mode, press the 'Back' button twice.

## 4.10 Enter setpoints

#### 4.10.1 Enter setpoints for overload



- Password; option on/off only to secure the settings.

7



To set up conditions for the delay option select 'Delay'.

8

#### NOTE:

After you have defined the overload weight, you can use the option of delay to define the number of seconds the overload weight is shown on the display before any output signal becomes active.

For example, when you set the delay to 3 seconds, the overload signal becomes active after the overload weight has been displayed for 3 seconds.

9



Enter the number of seconds of the time of delay and confirm with Enter.

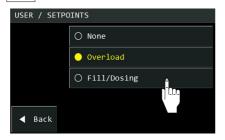
10



Press 'Back'.

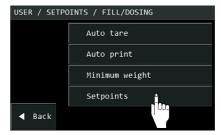
## 5.13.1 Enter setpoints for filling/dosing

1



The setpoints for overload are entered. Select 'Fill/dosing' to enter these setpoints.

2



To automate the start and stop function of the fill/dosing you can set different values. E.g. the setpoints.

3 4 USER / SETPOINTS / FILL/DOSING / SETPOINTS USER / SETPOINTS / FILL/DOSING / SETPOINTS ☐ Setpoint 1 ✓ Setpoint 1 ☐ Setpoint 2 ☐ Setpoint 2 **◀** Back **◀** Back The selected setpoint (1) is now marked. For the fill/dosing conditions you can activate 2 setpoints. Select a setpoint to set up the values. Click on the space next to the text to reveal multiple options per setpoint. 5 6 USER / SETPOINTS / FILL/DOSING / SETPOINTS / SETPOINT 1 USER / SETPOINTS / FILL/DOSING / SETPOINTS / SETPOINT 1 / WEIGHT Setpoint kg Net/Gross Weight Enter **◀** Back **◀** Back You can choose for Net/Gross or enter a Enter the number of kilograms and confirm with predefined weight. Select 'Weight' to do that. Enter. 7 USER / SETPOINTS / FILL/DOSING / SETPOINTS / SETPOINT 1 Net/Gross Weight **◀** Back For setpoint 2 you can choose from the same values.

## 4.11 Button functions

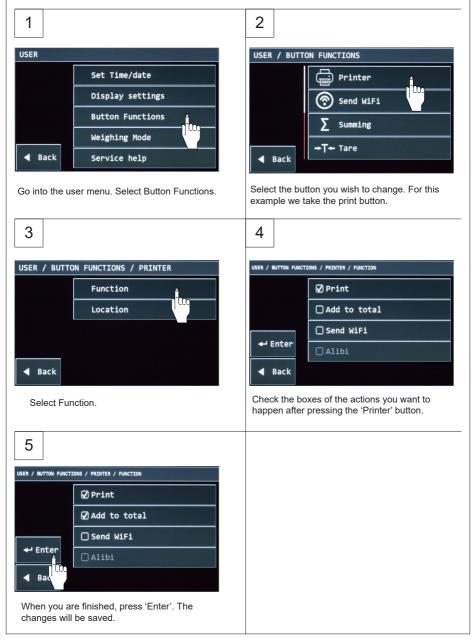
The indicator 5200 contains 24 different button functions. For some of these buttons you can adapt both function and location. For the majority you can only change the location.

|              | Reset to default All buttons are reset to the default settings of the user |
|--------------|--|
|              | Printer function and location  |
| <b>®</b>     | Send WiFi<br>function and location   |
| Σ            | Summing function and location  |
| →T←          | Tare location only   |
| <b>→</b> (T) | PTare location only  |
| <b>→0</b> ←  | Zero<br>location only  |
| ID1          | ID1 Scan<br>location only  |
| ID2          | ID2 Scan<br>location only  |
| ID3          | ID3 Scan<br>location only  |
| ID4          | ID4 Scan<br>location only  |
| PT1          | PT1 Scan<br>location only  |

| PT2   | PT2 Scan<br>location only   |
|-------|---|
|       | Toggle weight/piece<br>location only  |
| *     | Reference weight location only  |
| basic | Weighing mode<br>location only  |
| pcs   | Piece count mode location only  |
| 4     | Scale selection<br>location only  |
| S     | Toggle unit location only   |
| stp1  | Setpoint 1<br>location only   |
| stp2  | Setpoint 2<br>location only   |
|       | Start dosing location only  |
| 0     | Stop dosing location only   |
|       | Reset to factory All buttons are reset to the default settings of the factory |

## 4.12 Change button functions & positions

# 4.12.1 Change button function



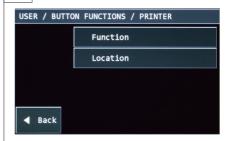
#### 4.12.2 Change button position

1



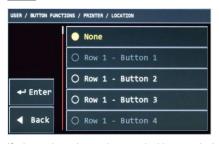
You can also change the location of the buttons. To hide buttons that are not used and get frequently used buttons to a better location.

2



Go to button functions in the user menu. Select the button you wish to move. Printer button for this example.

3



If a button is not in use, because in this example the printer is installed after delivery. The default location is None.

4



Select the row and button position on which the printer button should be located. Save changes by pressing 'Enter'.

5



The printer button is now present on button row 1.

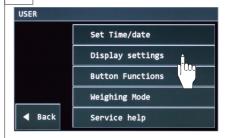
## 4.13 Show/hide buttons on startup

1



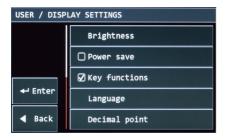
Default on start-up the buttons are always present at the bottom of the display. By pressing on the 'c' they can be hidden. But the next time you switch on the indicator they are back. Follow the following steps if you wish to always hide the buttons.

2



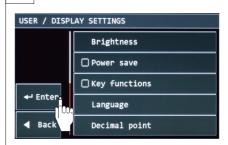
Go into the user menu. Select 'Display settings'.

3



The checkbox for 'Key Functions' is checked, meaning the buttons are always present.

4



Uncheck the box to hide the buttons on start-up. Press 'Enter' to save the changes.

5

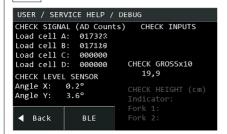


## 4.14 Debug mode for user

The 5200 indicator has the possibility to check the input values of the load cells and the angle position of the iForks. Also it is possible to check the Bluetooth communication between the indicator and the iForks. This could be helpful information in case of connection problems.

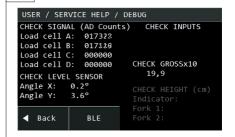


7



Check the load cell signals [AD-counts] and the level sensor [grades].

8



Press 'BLE'.

9



This table shows you all information regarding the Bluetooth connection.

- Press 'REFRESH' to get an updated table.
- Press 'Clear' to reset all values in the table to [0].
- Press 'BACK' to return to the previous screen.

#### Note:

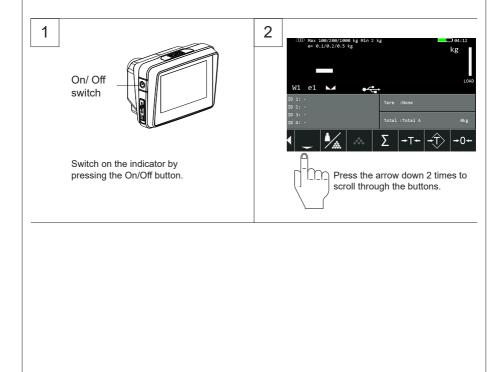
After each refresh the channels will differ because the Bluetooth is continuously hopping to another channel to maintain the best possible connection.

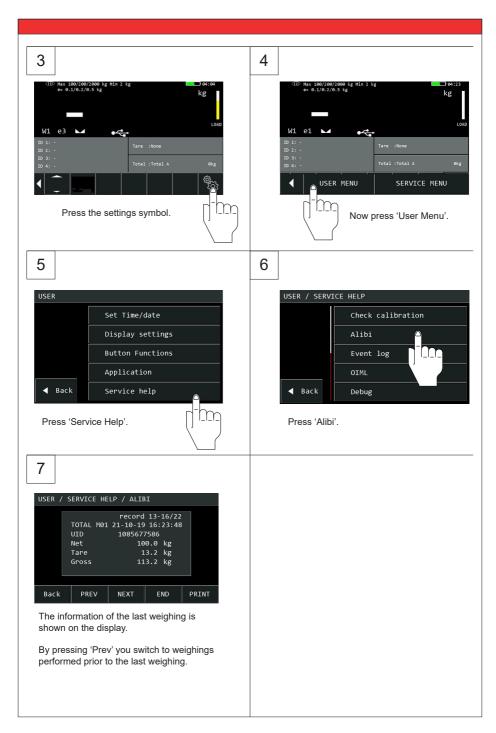
## 4.15 Alibi memory

The 5200 indicator has the possibility of an alibi memory. The indicator stores every weighing in its alibi memory and adds a unique number to it.

The data stored in the alibi memory are:

- 1. Date > this is the date in format dd\mm\yy (EU).
- 2. Time > this is the time in format hh:mm.
- 3. Gross weight > displays the gross weight. For example: 233.5 kg or 136,5 lb.
- 4. Net weight > displays the net weight. For example: 233.5 kg or 136,5 lb.
- 5. Tare weight > displays the tare weight. For example: 233.5 kg or 136,5 lb.
- UID Code / Alibi number > this is a 10 digit number which is generated by the indicator itself.

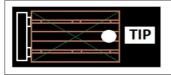




# 5. Warnings and error messages

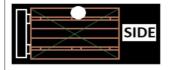
## 5.1 Tip and side load warnings

The 5200 indicator has some practical safety warnings to help the driver pick up loads safely and prevent accidents. The tip en side load warnings are mentioned in a special pictogram in the left lower corner of the screen. The explanation is as follows:



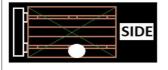
#### Tip Load

the center of gravity of the present load on the scale is concentrated too much on the tip of the forks. Try to replace the load or try picking it up from the other side. It is always better to have the center of gravity more towards the truck side than towards the tip side of the forks.



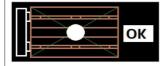
#### Side Load

the center of gravity of the present load on the scale is concentrated too much on the left side of the forks. Try to replace the load or try picking it up from another side. It is always better to have the center of gravity more towards the truck side than towards the left (or right) side of the forks.



#### Side Load

the center of gravity of the present load on the scale is concentrated too much on the right side of the forks. Try to replace the load or try picking it up from another side. It is always better to have the center of gravity more towards the truck side than towards right (or left) side of the forks.



#### Side Load

the center of gravity of the present load on the scale is correct.

#### 5.2 Mast position

To get a better idea of the horizontal position of the forks, the 5200 indicator shows a picture of the forks with an angle. This will help the driver to place pallets into a rack more safely. The explanation is as follows:



#### Tilted mast backward is 5°

In case the angle is mentioned in red, it means that you have a legal for trade unit and therefore you are limited in displaying and using the weight for printing and/or transmissions. In that case the weight will not be displayed unless you tilt the mast the opposite direction within the boundaries of the limits.



#### Tilted mast forward is 5°

In case the angle is mentioned in red, it means that you have a legal for trade unit and therefore you are limited in displaying and using the weight for printing and/or transmissions. In that case the weight will not be displayed unless you tilt the mast the opposite direction within the boundaries of the limits.



#### Mast is horizontal

This is the perfect position for accurate weight readings and also for placing the goods in a rack.

# 5.3 Error messages

Error messages will be displayed in the message line (21).

| Error message         | Solution   |
|-----------------------|--|
| Weight not stable     | Weight needs to be stable to perform this action.  |
| Forks overloaded      | Remove weight from the forks.  |
| Not allowed           | The performed action is not allowed due to restrictions.   |
| Out of zero range     | Make sure the truck is unloaded while setting a new zero.  |
| Load cell overloaded  | Use other capacity load cells or load cells with less signal.  |
| Negative weight       | The signal at this calibration point is lower than expected. Increase the weight.  |
| Signal too low        | Not enough signal difference to make a reliable calculation.   |
| Cal. point too low    | Make sure this calibration point is higher than previous one.  |
| Bad calibration       | No calibration has been saved. Perform a new calibration.  |
| Charge battery F1!    | Battery of fork module 1 is critically low and needs to be charged. You will risk losing data or not being able to perform a weighing if ignored.                              |
| Charge battery F2!    | Battery of fork module 2 is critically low and needs to be charged. You will risk losing data or not being able to perform a weighing if ignored.                              |
| Charge battery Ind.!  | Battery of indicator is critically low and needs to be charged. You will risk losing data or not being able to perform a weighing if ignored.                                  |
| No signal F1          | No communication possible between fork module 1 and indicator because of signal loss.  |
| No signal F2          | No communication possible between fork module 2 and indicator because of signal loss.  |
| Bad signal F1         | Try to improve communication by replacing the indicator or shifting fork 1.  |
| Bad signal F2         | Try to improve communication by replacing the indicator or shifting fork 2.  |
| Not level             | Forks are tilted too far to get an accurate reading. Make sure the mast of the truck is within vertical tolerance.   |
| OIML not allowed      | Performed action is not allowed because of OIML restrictions.  |
| NTEP not allowed      | Performed action is not allowed because of NTEP restrictions.  |
| OIML Cal. locked      | Calibration or parameter settings are locked due to OIML restrictions.  Contact your dealer/supplier.  |
| NTEP Cal. locked      | Calibration or parameter settings are locked due to NTEP restrictions.  Contact your dealer/supplier.  |
| Low battery indicator | Warning that the battery of the indicator is running low. You might consider charging the battery.   |
| Low battery F1        | Warning that the battery of fork module 1 is running low. You might consider charging the battery.   |
| Low battery F2        | Warning that the battery of fork module 2 is running low. You might consider charging the battery.   |
| Load not centered     | Centre point of gravity of the load is too far off which could cause dangerous situations and inaccurate readings. Replace the load in opposite position of the gravity point. |

| Error message             | Solution  |
|---------------------------|---|
| Transmission error        | No ACK received from RDC application or other communication failure.          |
| Database full             | Database for saving RDC weighing is full. Go to a point where the WLAN        |
|                           | connection is guaranteed to be able to delete the saved weighing and          |
|                           | empty the database. If the RDC application is not used, change the            |
|                           | setting in the user menu.   |
| Underload                 | Negative gross load. Lift the forks from the floor.                           |
| FRAM error                | There is an error with the FRAM. Contact your dealer/supplier.                |
| Only in default units     | The action performed is not allowed during the units switch mode. Tap         |
|                           | on the button 'units switch' first or wait until the units switch back to the |
|                           | original units automatically (after 3 seconds).                               |
| Configuration error       | There is a problem with the configuration of the hardware. Most likely to     |
|                           | happen after a spare part replacement. Contact your dealer/supplier.          |
| Wrong firmware F1         | The software in the fork module 1 is not in correspondence with the           |
|                           | firmware release of the indicator. Contact your dealer/supplier.              |
| Wrong firmware F2         | The software in the fork module 2 is not in correspondence with the           |
|                           | firmware release of the indicator. Contact your dealer/supplier.              |
| Height sensor error       | The output of the height sensor of the fork modules differ too much.          |
|                           | Contact your dealer/supplier.   |
| G-sensor error            | The output of the G-sensor of the fork modules differ too much.               |
|                           | Contact your dealer/supplier.   |
| Data mismatch             | The Master module receives corrupted data. Contact your supplier/             |
|                           | dealer.   |
| Invalid TAC code          | The TAC code entered is incorrect.  |
| Invalid CAL code          | The CAL code entered is incorrect.  |
| Retry                     | Incorrect backup restore action or calibration action.                        |
| Tare already active       | There is already a tare value active. Delete the old tare first.              |
| Preset tare invalid       | The preset tare value entered is not valid.                                   |
| Invalid input             | The input is not valid.   |
| Calibration error         | Something is wrong in the calibration. Perform a new calibration after        |
|                           | doing a reset.  |
| Ind. power too low!       | Indicator power is so low that proper functioning of the system is no         |
|                           | longer guaranteed. The system will automatically switch off after 10          |
|                           | seconds.  |
| Reset                     | Reboot or reset is being performed.   |
| BLT-Master Connect Failed | Bluetooth master module not installed or defect.                              |
| 2011                      |   |
|                           |   |
|                           |   |
|                           |   |
|                           |   |

#### 6. Maintenance

The maintenance guidelines for normal forks apply to the forks of the mobile weighing system.

#### Main guidelines:

- The weighing system meets up to the protection class IP65. This means that dust or
  moisture (rain or water beam from all sides), will not influence the operation of the
  electronics. However, high-pressure cleansing in combination with warm water or
  chemical cleansers will lead to the entry of moisture and therefore negatively
  influence the operation of the system.
- Only specialists may undertake any welding. This is to avoid damage to electronics and load cells.
- · All safety regulations that apply to the forklift 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;
- 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 the forklift truck and ask the supplier when in doubt;
- RAVAS is not responsible for errors that occur due to incorrect weighing or inaccurate scales

# 7. RAVAS WeightsApp

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 malfunctioning.

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.