



# HB100

Quick guide

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**LINAK**®   
WE IMPROVE YOUR LIFE

# We improve your life

Linear actuator movement might be the simplest movement in the world. And yet, perfecting something simple is one of the hardest challenges.

Since LINAK® founder, Bent Jensen, came up with the idea for the first electric actuator in order to help a friend in a wheelchair, every engineer and specialist employed by LINAK has aimed to solve real-life challenges for real people.

To this day, our motto; 'We Improve Your Life' is reflected in everything we do. Whether we engage in product development, operation or implementation of technology, we always look for ways to make it easier for our customers to enter into collaborations and partnerships with us and to ultimately improve the lives and working conditions of end users.

Our solutions move people – their work and their lives. We Improve Your Life!

# HB100 Weighing Solution

The HB100 is an intelligent hand control with the LINAK® Weighing Solution and many other features. It offers a 2.4" colour display with a full navigation menu keypad, thus allowing the display to be dynamic without physically having to change the hand control.

The HB100 will automatically scan the system and only show the features available to create a user-friendly experience.

## Table of contents

Overview.....	4
General menu description.....	5
Main menu.....	5
List menu.....	5
Edit mode.....	6
Pop-ups.....	6
Scale.....	7
Out Of Bed.....	8
Lights.....	9
Settings.....	9
Feature descriptions.....	10
Scan system.....	10
Error list.....	11



# Functionality

On the first HB100 start-up, and subsequently each time the power supply has been disconnected, an automatic scan of the systems starts after which the HB100 is then ready for use. The scan ensures that only connected devices are visible on the display. The blue focusing colour indicates the screen area that is currently selected.

## Header:

The header contains an icon, a headline of the current menu, and an up/down arrow showing if more items are hidden below or above what is shown in the main area. When nothing is hidden, the arrows are faded. The header is always visible.

## Infoline:

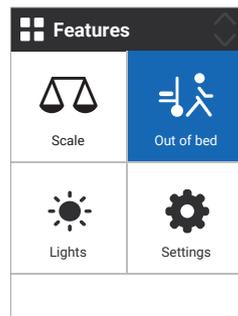
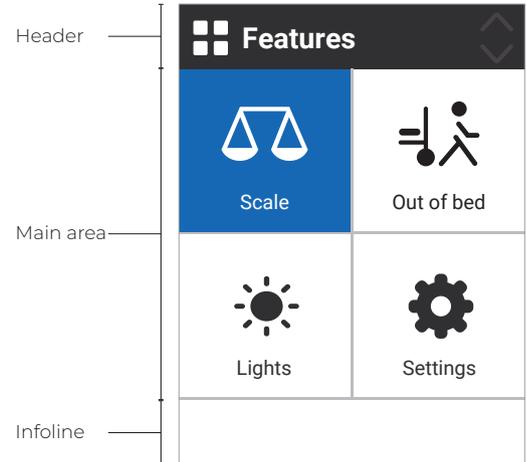
The infoline is used to give the user information about the feature without having to enter the menu. The far left side of the infoline is used to show notifications and errors. The infoline is always visible.

## Main area:

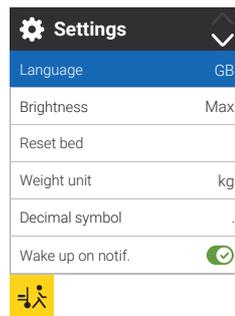
The main area has four different views:

1. Main menu (tiles)
2. List menu
3. Selection list
4. Pop-ups

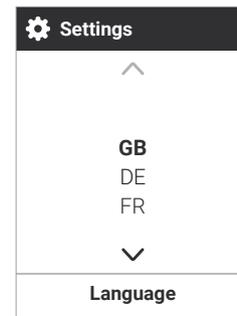
Mind that the different views are examples and not inter-connected.



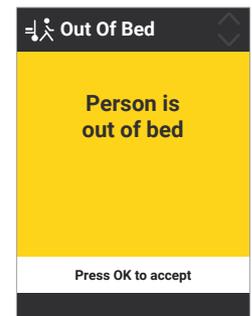
Main menu example



List menu example with notification



Selection list example

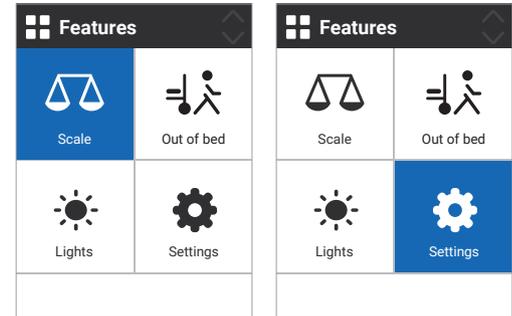


Pop-up example

# General menu description

## Main menu

The main menu is divided into four tiles and can be navigated by the arrow keys. It can contain from 1 to X tiles, but only four can be seen at a time. If some features are hidden, they can be accessed by pressing the down key twice or more.

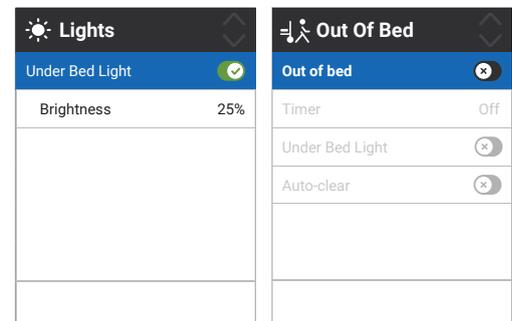


Main menu with Scale tile selected

Main menu with Settings tile selected

## List menu

The list menu can have from 1 to 6 visible items at a time. List items can have two main functions: toggle (e.g. on/off) and go to Edit mode (e.g. a timer). Some features need to be turned on before other settings can be set. When the feature is off, list items will be in a greyed-out state and cannot be accessed.

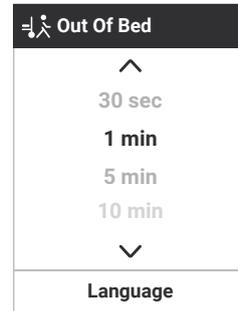


List menu with 2 items

List menu with disabled list items

## Edit mode

The Edit mode is accessed through the List menu. The list will focus on the selected item and is navigated by using the up/down arrow keys. Press OK to confirm choices or BACK to leave the menu without saving.



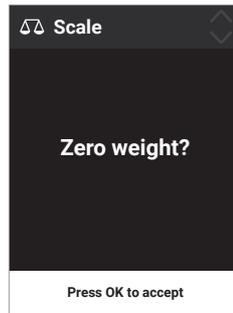
Edit mode with more than 4 entries

## Pop-ups

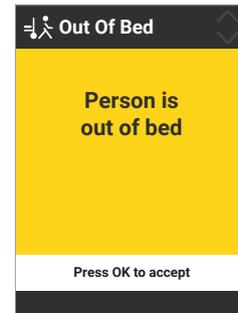
Pop-ups occur when the user needs to take action.

There are three pop-up types.

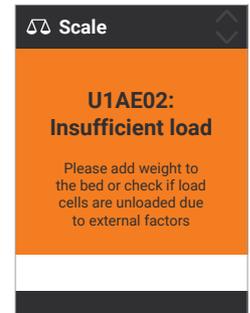
1. **User instructions:** These are messages to the user, asking him/her to wait or accept certain changes.
2. **Notifications:** Notification pop-ups occur when you enter a menu with a notification.
3. **Errors:** The error pop-up will be shown when an error/user error occurs.



User instruction: Confirm that you want to zero the weight.



Notification: Confirm that you have seen the notification.



Error: User error, add weight to the bed or check for external factors.

## Scale

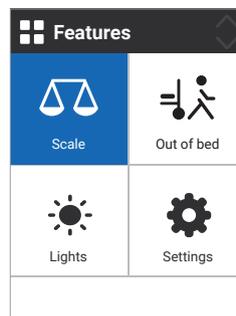
The Scale feature is used to monitor the patient weight. The Scale menu itself is a special list menu view with focus on showing the patient weight. The list contains up to four items, depending on calibration.

- **Scale on/off:** Turns the feature on or off.
- **Zero:** Zeroes the bed. The bed can only be zeroed if the weight is below 50 kg (This value can be changed when calibrating the bed)
- **Auto-compensate:** Is used to add/remove items from the bed, such as a new pillow or equipment, without impacting the patient weight.
- **High precision:** Only accessible if the calibration is made with a value other than 100 g precision (e=0,1). Pressing the high precision will show a 100 g weight for 5 seconds and then return to showing for instance 500 g again.

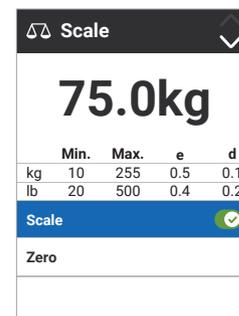
The marking plate shows the range in which the Scale will measure and if it supports kilograms and pounds. Values are determined by the QLCI2 and how it is calibrated.

Min.: Minimum weight to be measured  
Max.: Maximum weight to be measured  
e: Weight resolution  
d: Detailed weight resolution (only visible when e≠d)

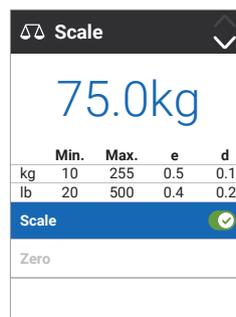
To use the Scale feature, a QLCI2 must be connected to the system.



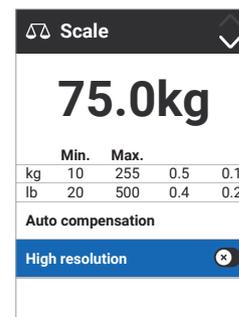
Main menu with Scale tile selected



Scale menu



An unstable weight is displayed with a light blue font.

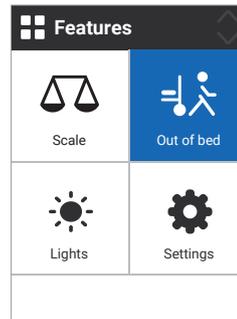


Full marking plate with kg and lb support. Calibrated with e = 0.5 kg

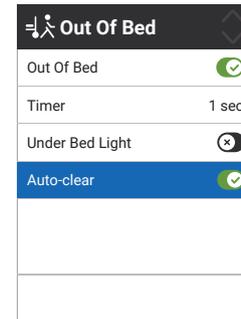
## Out Of Bed

The Out of Bed feature is used to set what happens when the patient leaves the bed. The Out Of Bed menu contains up to six items, depending on connected accessories.

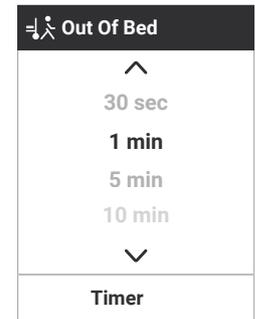
- **Out Of Bed on/off:** Turns the feature on or off.
- **Timer:** The timer determines how much time will pass after the person has left the bed and a notification appears and/or a signal is sent via a gateway.
- **Under Bed Light:** Possible to toggle between on/off. Activates when the patient leaves the bed and requires an Under Bed Light.
- **Auto-clear:** Possible to decide if the Out Of Bed notification should be removed automatically when the patient returns to the bed.  
The default setting is on.



Main menu with Out Of Bed tile selected.

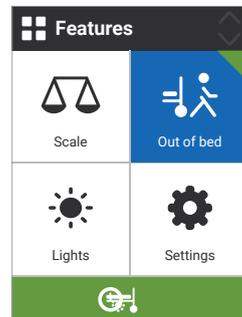


Out Of Bed menu.

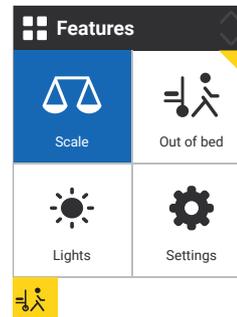


The timer to send a gateway signal can be set in values from 1 second to 60 minutes.

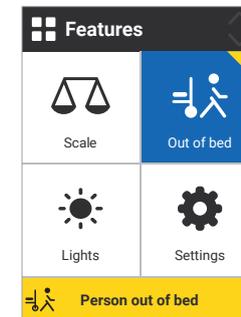
To use the Out Of Bed feature, the system requires a QLCI2 with 4 third party load cells.



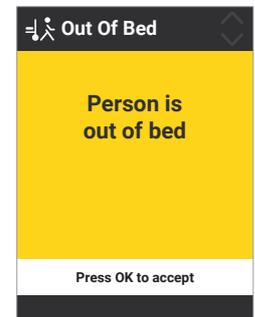
When selecting the OOB tile, the infoline will show if the timer and/or a light is enabled.



When the patient leaves the bed, a notification icon will appear (regardless of the menu item currently selected).



When selecting the Out Of Bed tile, the infoline will show the notification content.



When entering the menu, you need to accept the notification. If auto-clear is enabled, this is not shown if the patient has returned to bed.

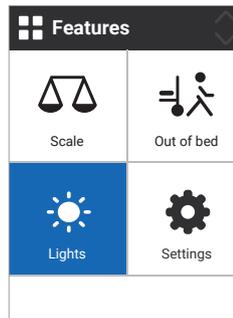
## Lights

It is possible to connect 3 different lights:

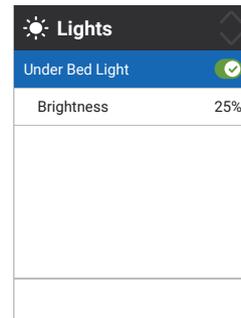
- **Under Bed Light:** Toggle on/off and dimming. Requires an Under Bed Light.

## Settings

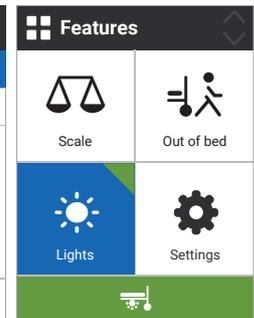
- **Language:** Choose system language. (English, German, French, Spanish, Danish, Portuguese and Chinese)
- **Brightness:** choose the display brightness level (Min., Mid., Max.)
- **Reset bed:** This is used to reset the bed to defaults when there is a new patient in the bed.
- **Weight unit:** Choose kilograms or pounds. The list item is only visible if the calibration supports pounds.
- **Decimal symbol:** Choose between a comma or dot.
- **Gateway signal:** Choose how the gateway signal is sent, either pulse or follow. In case of an event using the gateway, such as a person leaving the bed with Out Of Bed active: Pulse: Sends a signal via the gateway and shuts off. Will send a new signal when the person returns to bed. Follow: Will keep sending a signal as long as the person is out of bed.
- **Wake up on notification:** HB100 can wake up, in case a new notification occurs.
- **Advanced:** It is possible to modify the advanced settings under this setting.
  - Factory reset: Use this to reset all the settings to factory defaults.
  - Scan system: Use this to perform a manual scan for the connected devices and enable/disable them if needed.
  - About: It is possible to see the HB100 and QLC12 SW numbers/versions. In addition to that, a verification of the scale system is done here too.



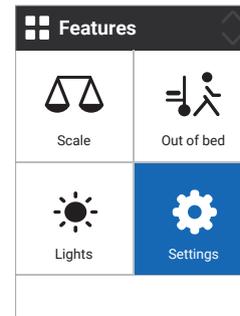
Main menu with Lights tile selected.



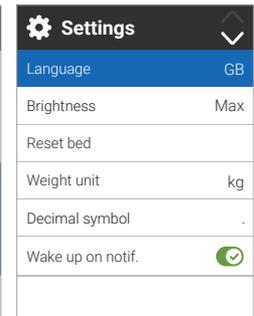
The Under Bed Light is turned on.



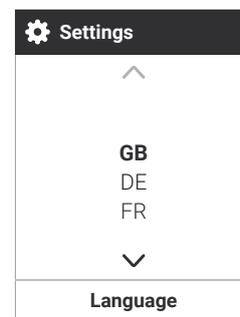
In the main menu you can see which lights are currently turned on.



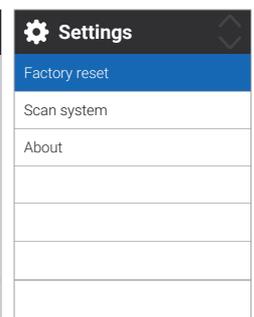
Main menu with Settings tile selected



Settings list menu



Choose language



The About section

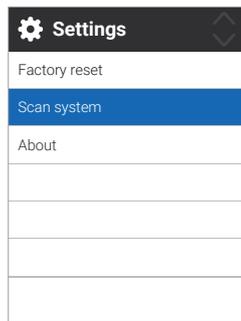
# Feature descriptions

## Scan system

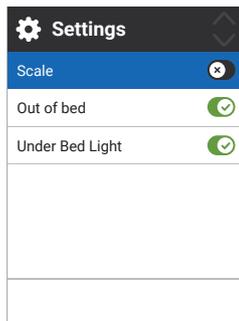
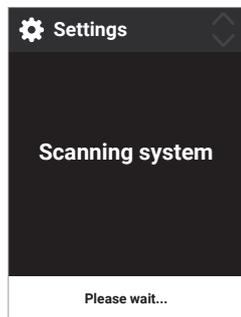
With the scan system functionality, it is possible to have a HB100 equipped with software for all LINAK® features and only show the ones connected to the system.

The Scan system function is placed under Settings - Advanced.

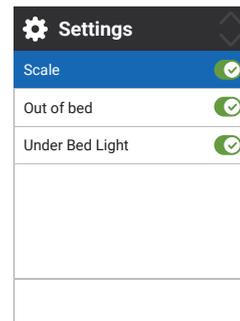
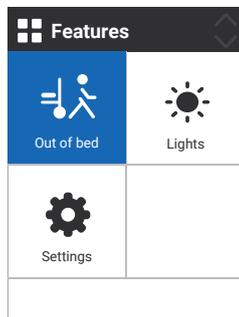
This means that it is possible to have the same HB100 for two different beds. The HB100 can scan the system and will only show the features connected.



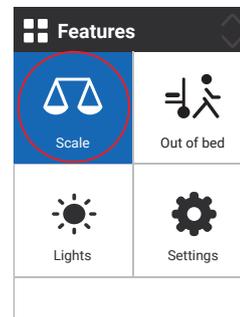
When you enter the Scan system, HB100 will scan the system. This may take a minute.



If for instance you want to disable Scale, navigate to Scale and press OK. Then press BACK to leave the menu. Scale is now invisible in the main menu.



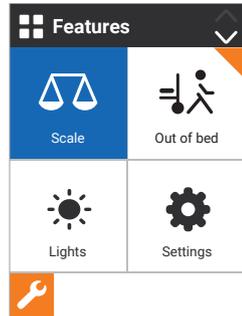
If you want Scale to be visible again, simply enable it in Scan system.



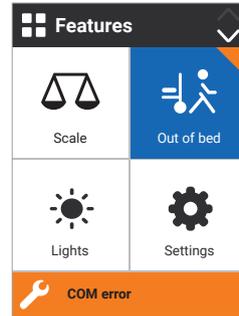
## Error list

If an error occurs, the system will disable the related function/-s and show an error describing what is wrong and what can be done to correct it. 'User errors' are mistakes made by the user.

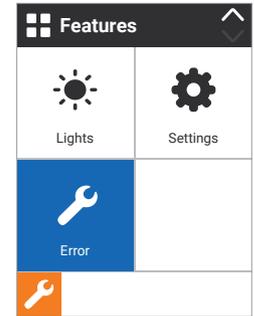
For instance putting too much weight on the bed will cause the weight go out of range. These errors will not be shown in the error list.



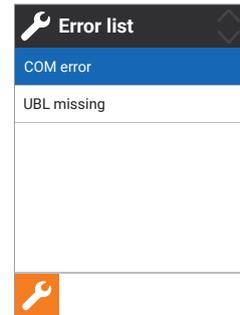
Out Of Bed error. The error icon will appear in the bottom left corner.



If you navigate to the affected feature, an error code will be shown.



The Error list menu will become visible at the bottom of the main menu.



If there are multiple errors, they will be shown in list form.



A short error description.

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