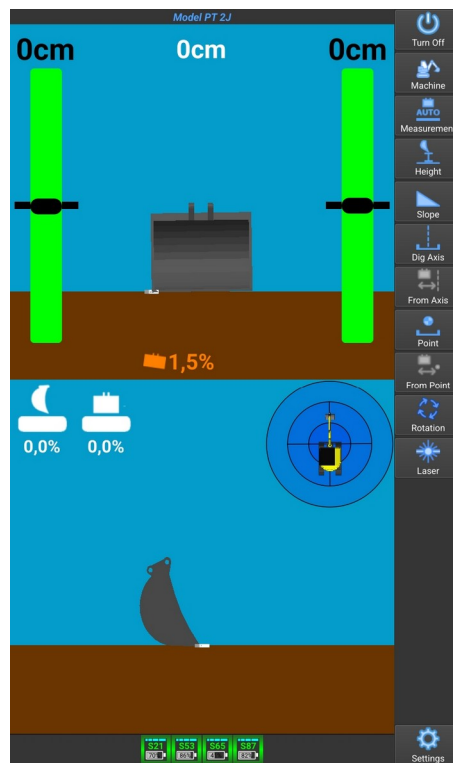
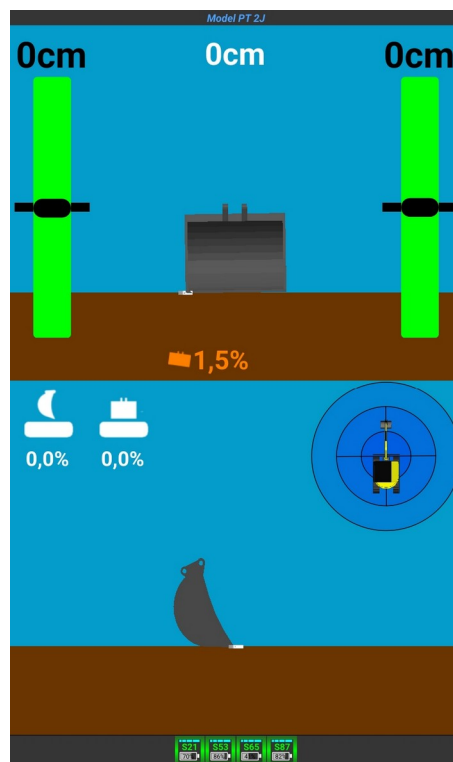


BlueDig – user interface

After launching the application, the main screen appears with a navigation bar on the right-hand side.



The navigation bar is visible for 5 seconds and then disappears, allowing better use of the screen area.



To bring up the navigation bar again, tap the screen anywhere.

9. Measurement line from the measurement point in space to the measurement point on the bucket cutting edge
10. Measurement point in space
11. Arrow indicating the vertical distance of the bucket cutting edge measurement point from the excavation plane
12. Arrow indicating the distance of the bucket cutting edge measurement point from the excavation axis
13. Value of the distance of the bucket cutting edge measurement point from the excavation axis
14. Value of the inclination angle of the bucket cutting edge relative to the horizontal plane
15. Indicator of the longitudinal slope setting of the excavation plane
16. Indicator of the transverse slope setting of the excavation plane
17. Laser detection indicator
18. Sensor-to-laser distance hint
19. Vertical speed indicator of the sensor during laser search
20. Indicator of the angular position of the excavation axis in the top view
21. Indicator of the angular position of the measurement point in space in the top view
22. Angular value of the distance between the boom axis and the excavation axis
23. Left-side view of the bucket
24. Value of the straight-line distance between the bucket cutting edge measurement point and the measurement point in space
25. Angular value of the inclination from horizontal of the line connecting the bucket cutting edge measurement point with the measurement point in space
26. Status of sensors connected to the system

Description of the laser line search status indicator



Search active, distance between the laser line and the sensor unknown



Search running, distance of laser line to sensor estimated based on previous detection.



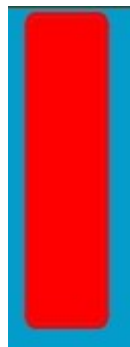
Search active, laser detected but calibration not performed; the laser sensor is approximately 2 cm below the laser line. Raise the boom upward to detect the laser line.



Search active, laser detected but calibration not performed; the laser sensor is approximately 8 cm above the laser line. Lower the boom to detect the laser line.

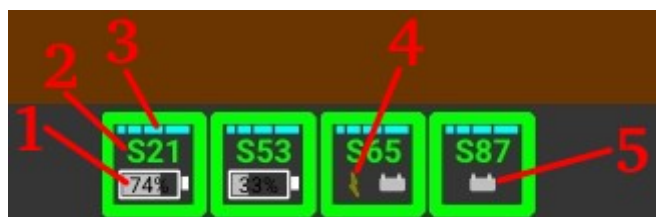


Vertical laser sensor speed proper



Vertical laser sensor speed too high.

Description of the sensor status bar



1. Battery power supply. Battery charge level.
2. Sensor name
3. Sensor signal strength
4. USB power supply, battery charging
5. USB power supply, battery fully charged

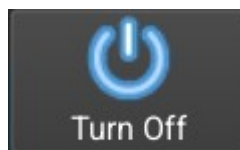
A green frame indicates that the sensor is connected; red indicates no connection to the sensor.
A green sensor name (e.g. S21) indicates that the sensor is ready; red indicates that the sensor is not ready; orange indicates that the sensor is invalid.

Sensor connection messages

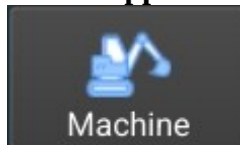
In the event of a significant communication problem with the sensors, an error screen is displayed.



Description and meaning of the buttons on the navigation bar:

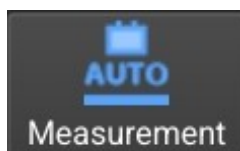


Exit the application.



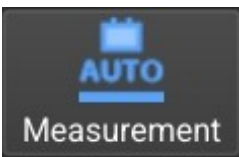
Machine configuration.

Pressing this button opens the machine configuration menu, where you can manage configurations, create and delete configurations, and select which one is currently in use.

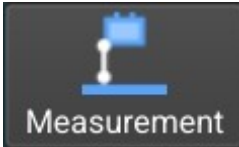


Selection of the measurement point on the cutting edge.

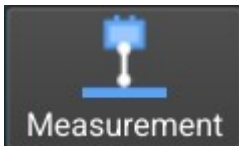
Pressing this button cycles through the selected bucket measurement point; this is also indicated by a change in the button icon.



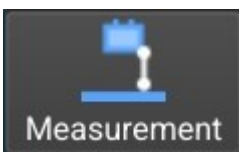
Automatic measurement. The measurement point is automatically set to the lowest point of the cutting edge at a given moment.



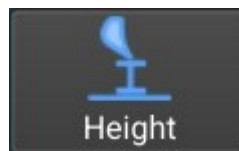
Measurement from the left end of the cutting edge.



Measurement from the center of the cutting edge.

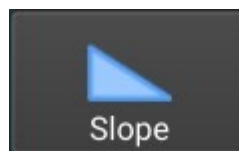


Measurement from the right end of the cutting edge.



Setting the height

Pressing this button opens the menu where the current height of the cutting edge above the defined excavation plane is set.



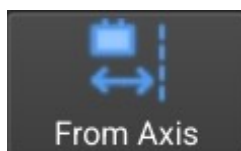
Setting the slope

Pressing this button opens the menu where the inclination of the defined excavation plane is set, for excavation with slopes.



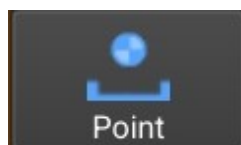
Setting the excavation axis

Pressing this button sets the excavation axis along the current position of the boom. By holding the button for at least 2 seconds the display of the excavation axis is disabled.



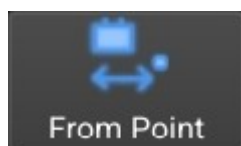
Measuring the distance from the excavation axis

Pressing this button enables or disables the measurement of the distance between the blade's measuring point and the excavation axis. The button is only active when the excavation axis is set.



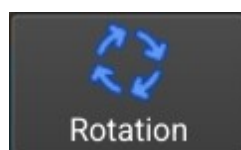
Sets the measuring point

Pressing this button sets a measuring point in space at the current blade measuring point. To turn off the measuring point display, hold the button for at least 2 seconds.



Starts measurements from the measurement point

Pressing this button enables or disables measurements from the measurement point in space to the measurement point on the bucket blade. The button is only active when a measurement point is set.



Rotation calibration

Pressing this button opens the gyroscope calibration menu.

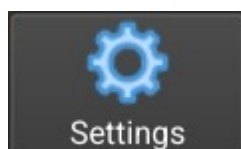


Work with laser

Pressing this button for the first time opens the menu used for laser operation.

After the first laser search is started, each subsequent short press of this button triggers a quick laser search.

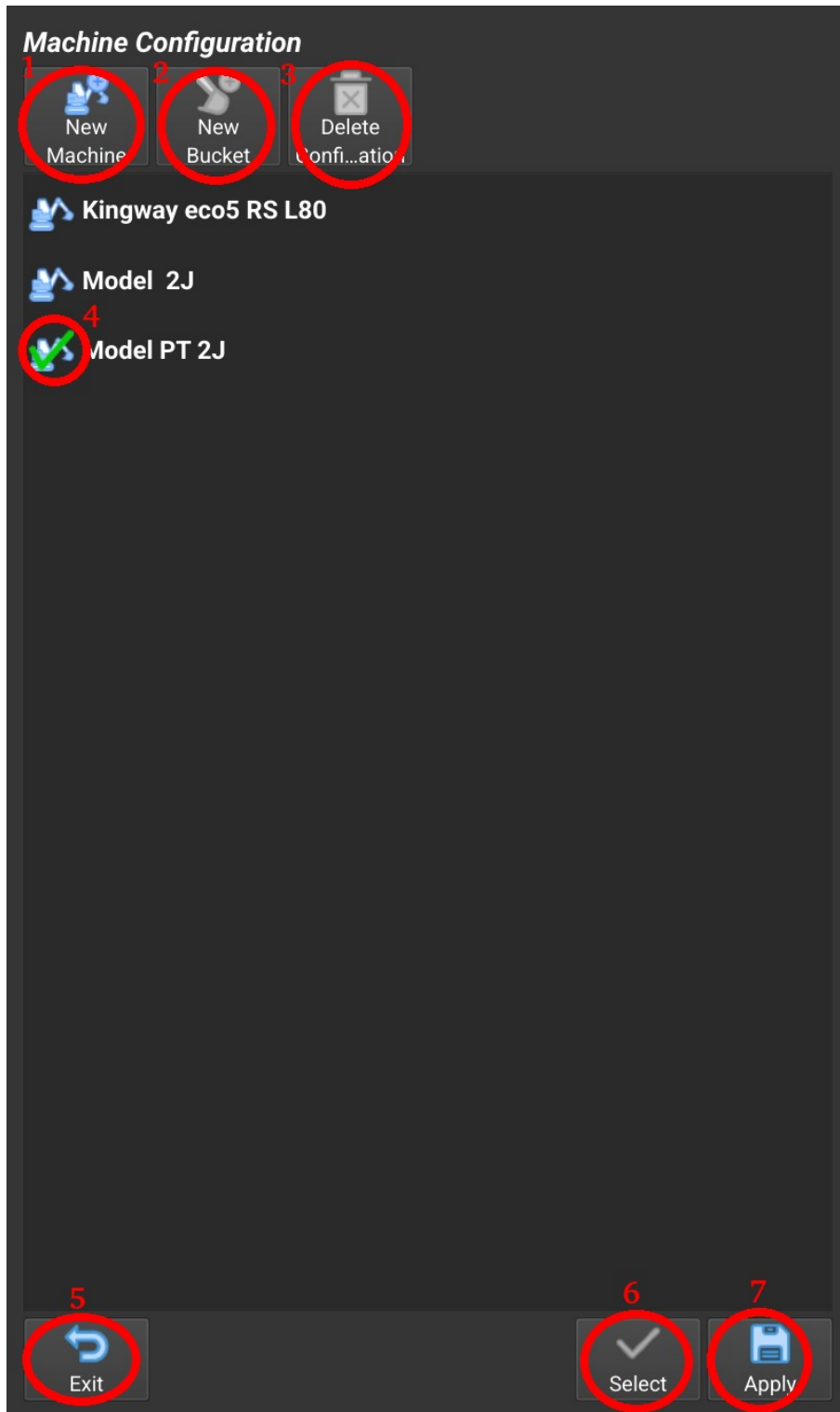
To re-enter the laser operation menu, press and hold this button for at least 2 seconds.



Application settings

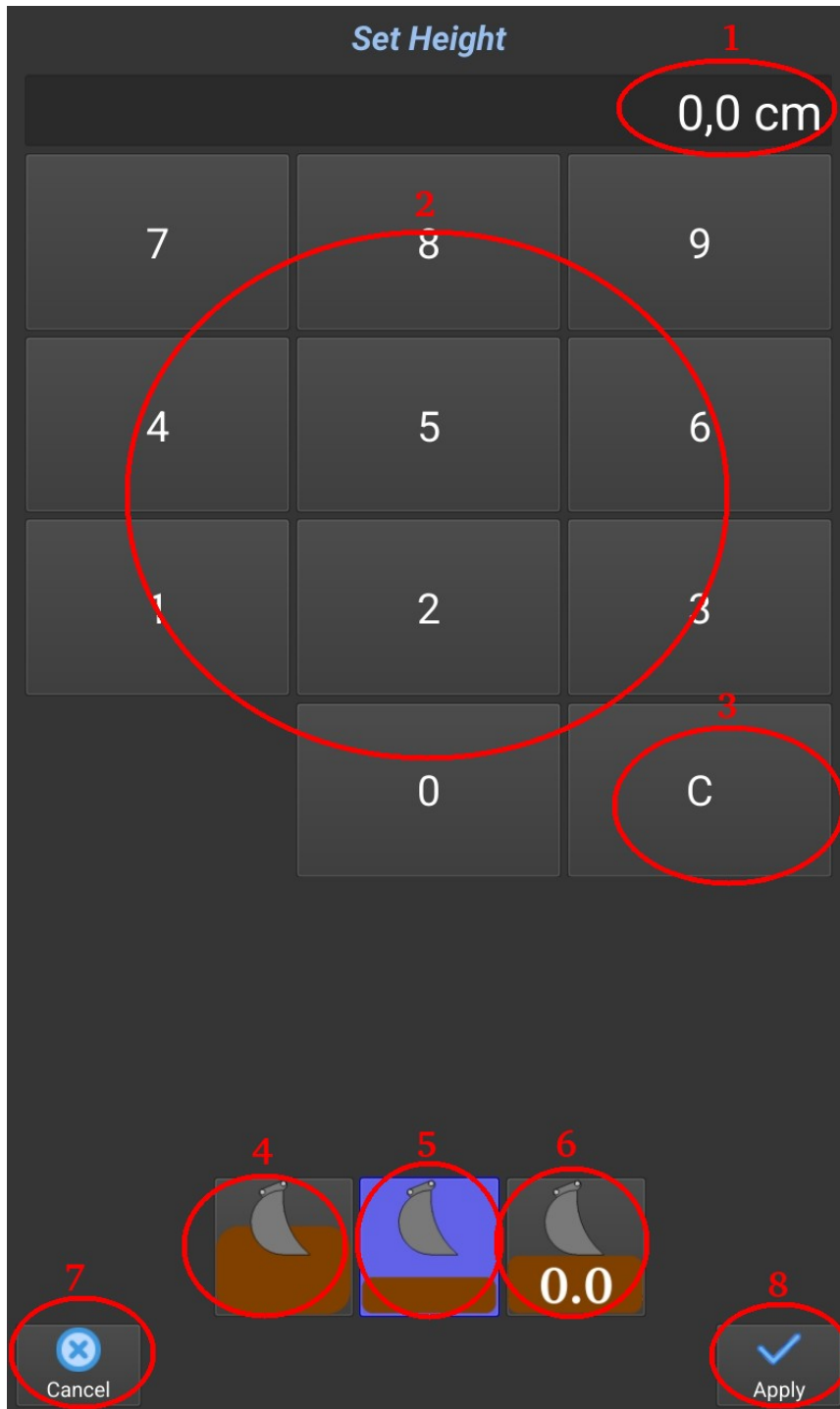
Pressing this button opens the application settings menu.

Description of the Machine Configuration menu:



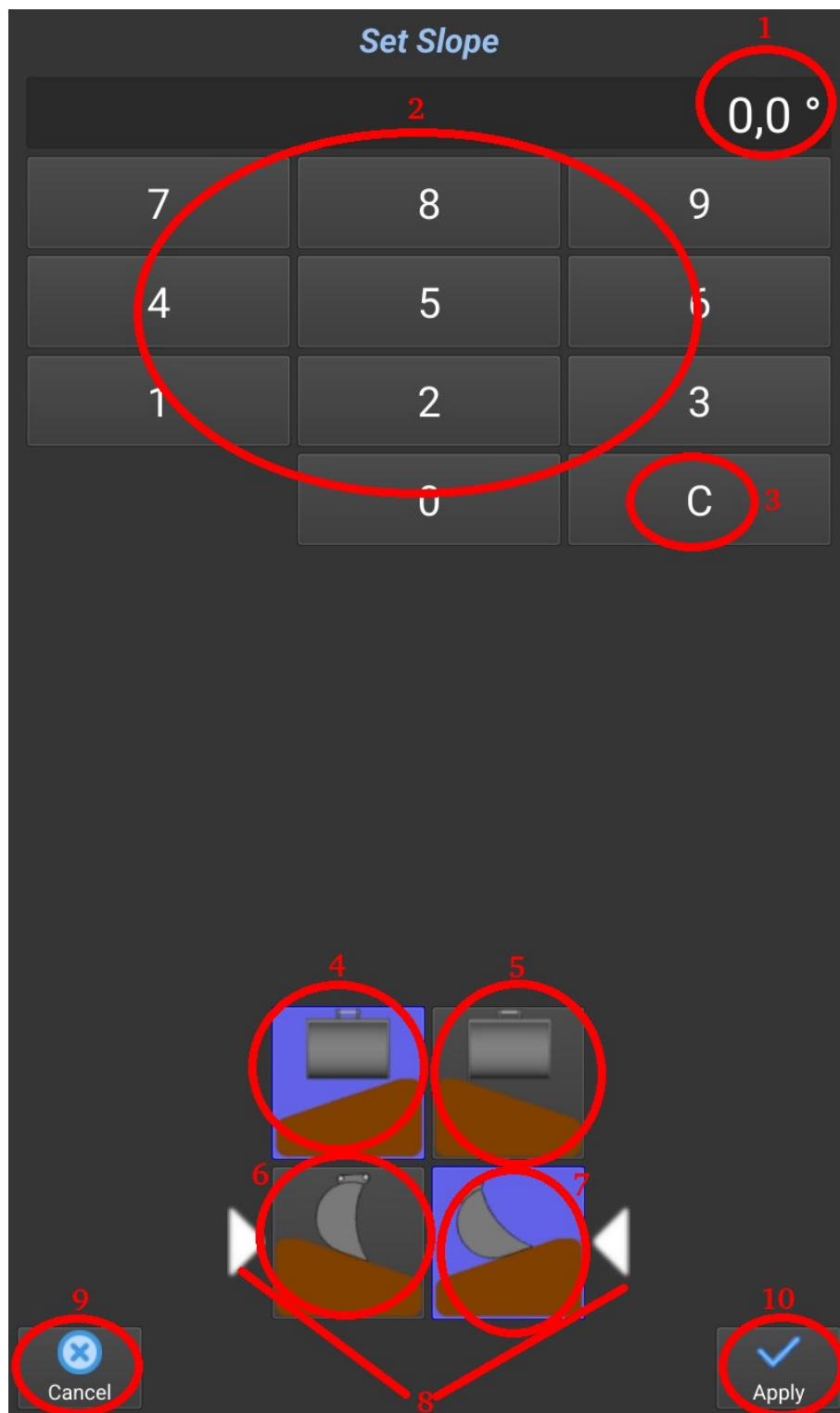
1. Launches the new configuration wizard
2. Launches the new bucket wizard for an existing configuration (active after selecting a configuration from the list)
3. Deletes the selected machine configuration (active after selecting a configuration from the list)
4. Configuration currently selected for use
5. Return to the main screen
6. Select the highlighted configuration for use
7. Apply the selected configuration and return to the main screen

Description of the excavation height setting screen



1. Set height value
2. Numeric keypad for entering the set height value
3. Key for clearing the entered value
4. The current bucket position is below the expected excavation plane height (negative height)
5. The current bucket position is above the expected excavation plane height (positive height)
6. Quickly set the height to 0.0 for the current bucket position.
7. Cancel and return to the main screen
8. Apply the height and return to the main screen

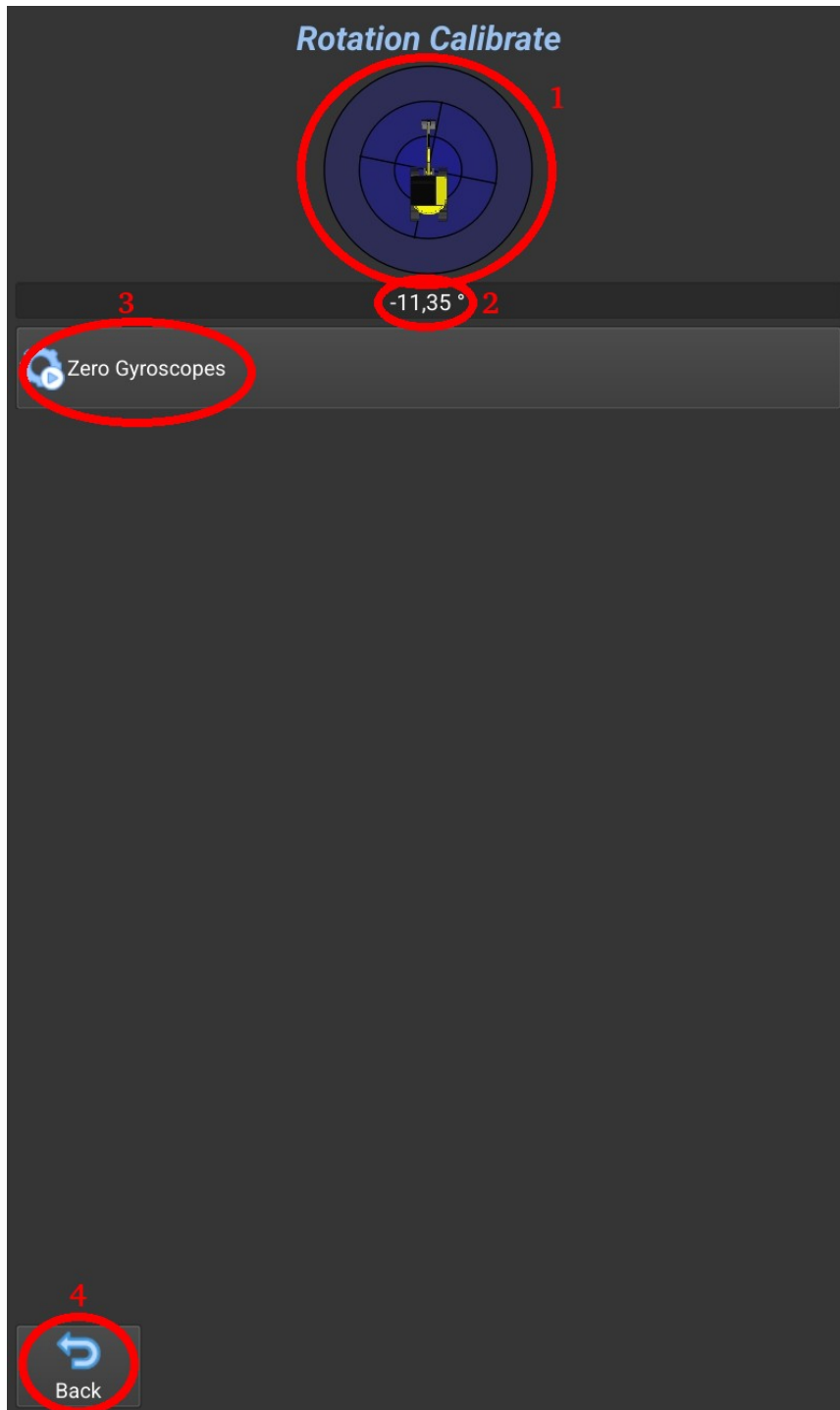
Description of the excavation plane inclination setting screen



1. Set slope value in the currently active units
2. Numeric keypad for entering the set slope value
3. Key for clearing the entered value
4. Transverse slope to the left of the excavation axis
5. Transverse slope to the right of the excavation axis
6. Longitudinal slope toward the operator
7. Longitudinal slope away from the operator

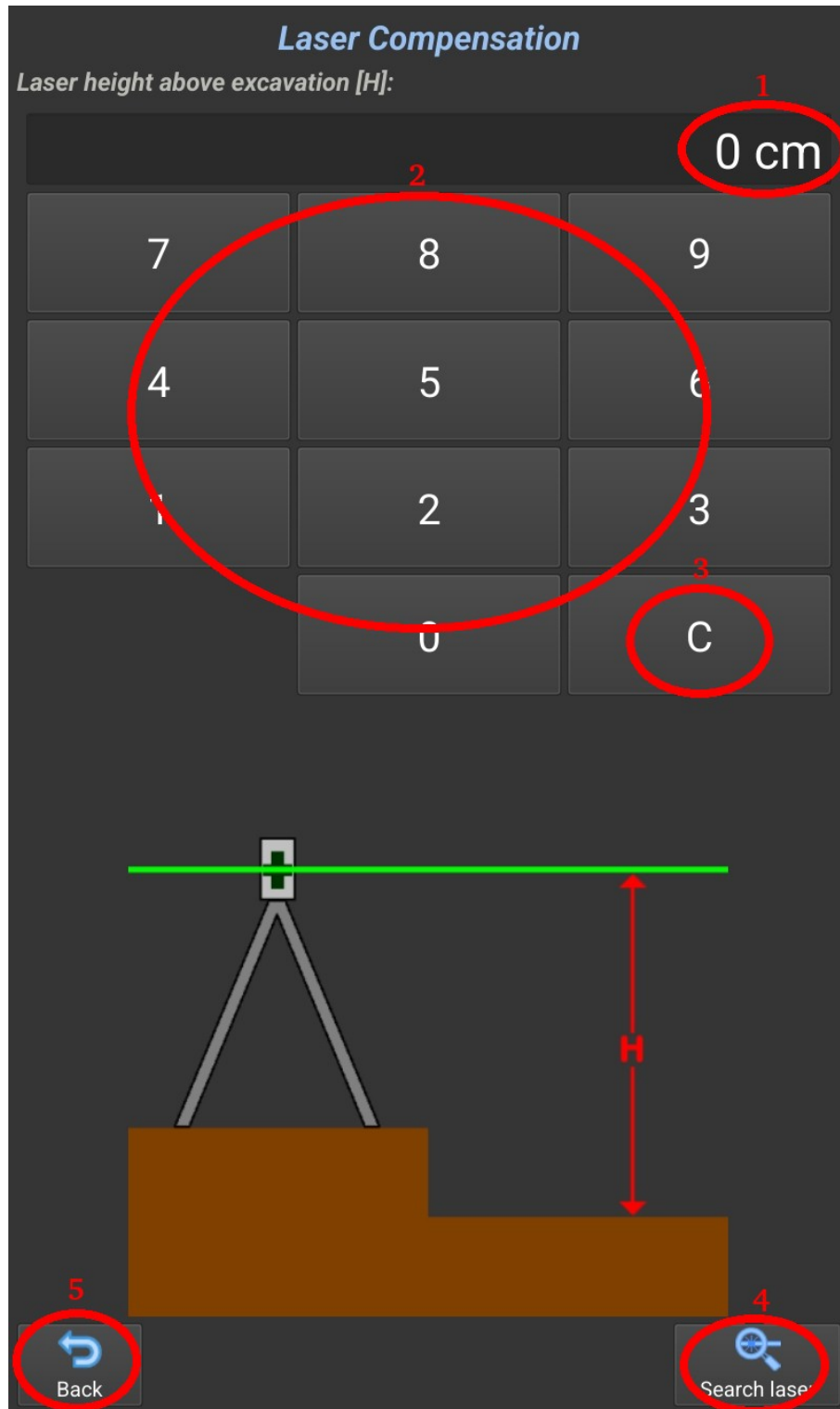
8. Arrows indicating which slope value is currently being edited (longitudinal or transverse)
9. Cancel and return to the main screen
10. Apply the slope value and return to the main screen

Description of the rotation calibration screen



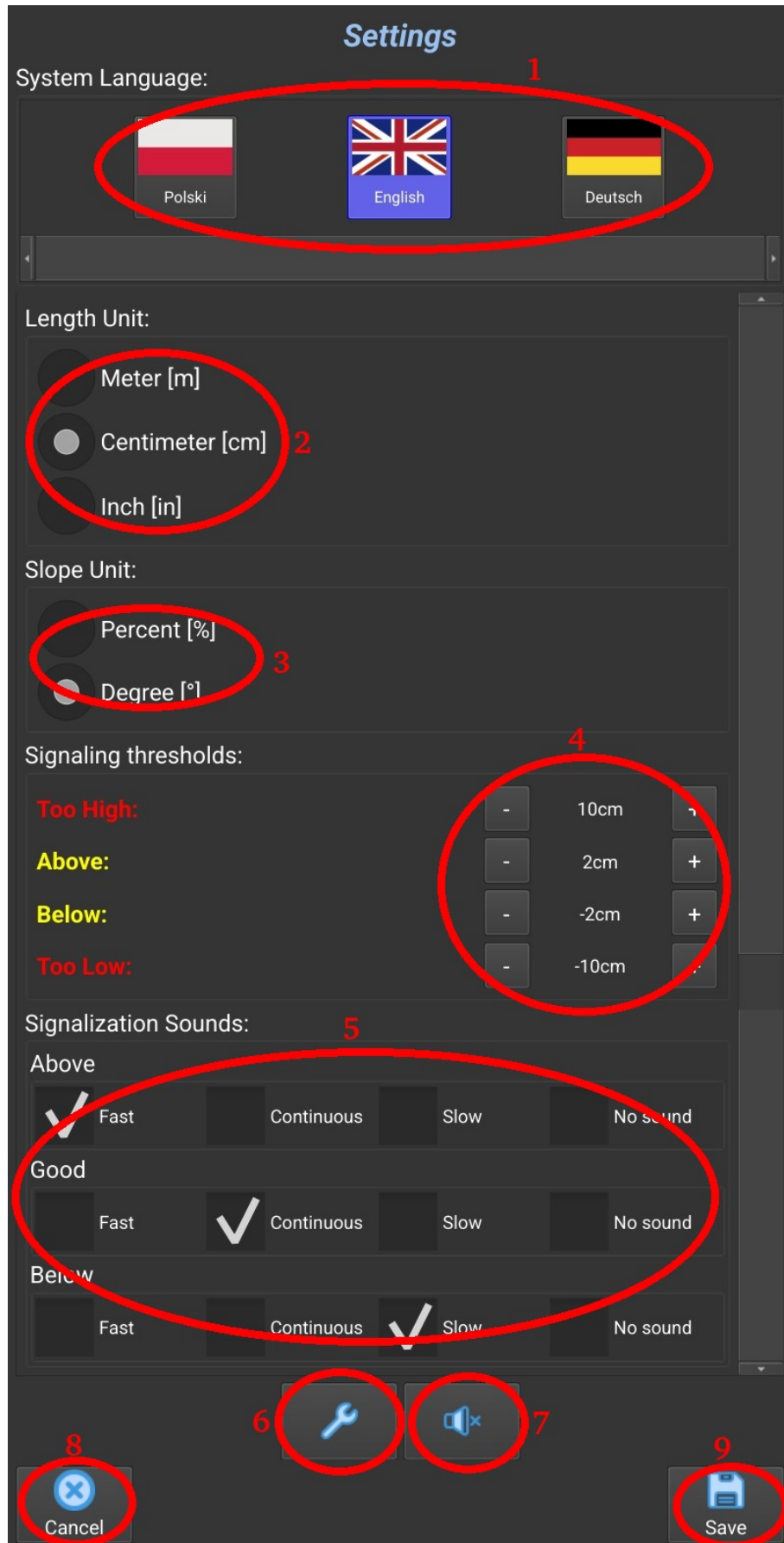
1. Graphical indicator of the excavator boom rotation in the horizontal plane
2. Digital indicator of the excavator boom rotation angle in the horizontal plane
3. Button to start gyroscope calibration
Gyroscope calibration should be performed if it is observed that the machine rotation angle has excessive drift and changes rapidly even when the machine is stationary.
4. Return to the main screen

Description of the laser compensation screen



1. Distance value of the laser line from the expected excavation plane
2. Numeric keypad for entering the distance value
3. Key for clearing the entered value
4. Start laser line search (a highlighted button indicates that the search is active)
5. Return to the main screen

Description of the application settings screen



1. User interface language
2. Length/distance units used in the application
3. Unit for entering slope values in the application
4. Height signalization threshold settings

From the **Too High** upward value and the **Too Low** downward value, the height indicator is shown in red



From the **Above** value up to the **Too High** value and from the **Below** value down to the **Too Low** value, the height indicator is shown in yellow

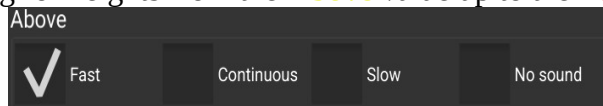


For values greater than **Below** and less than **Above** the indicator is shown in green.

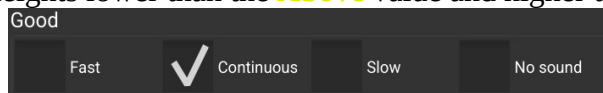


5. Height signalization sound type settings

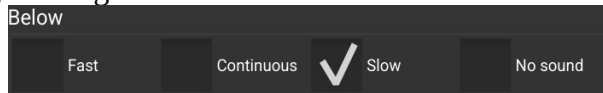
Sound setting for heights from the **Above** value up to the **Too High** value



Sound setting for heights lower than the **Above** value and higher than the **Below** value



Sound setting for heights from the **Below** value down to the **Too Low** value



6. Service menu (not available to standard users)
7. Enable/disable audible signaling
8. Cancel settings and return to the main screen
9. Save settings and return to the main screen